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12 UNITED STATES DISTRICT COURT
13 NORTHERN DISTRICT OF CALIFORNIA
14 SAN FRANCISCO DIVISION

15 VICKY MALDONADO AND JUSTIN CARTER,
16 individually and on behalf of themselves and all
others similarly situated,

17 Plaintiffs,

18 v.

19 APPLE INC., APPECARE SERVICE
20 COMPANY, INC., AND APPLE CSC, INC.

21 Defendants.
22
23

No. 3:16-cv-04067-WHO

Related Case:
English v. Apple Inc., et al.
Case No. 3:14-cv-01619-WHO

PLAINTIFFS' NOTICE OF MOTION
AND AMENDED MOTION FOR CLASS
CERTIFICATION AND
MEMORANDUM OF POINTS
AND AUTHORITIES

Hearing: May 15, 2019
Time: 2:00 p.m.
Judge: William H. Orrick
Courtroom: 2, 17th Floor

NOTICE OF MOTION AND AMENDED MOTION FOR CLASS CERTIFICATION

TO DEFENDANT AND ITS ATTORNEYS OF RECORD:

PLEASE TAKE NOTICE THAT on May 15, 2019, at 2:00 p.m., or as soon thereafter as the matter may be heard, in the United States District Court for the Northern District of California, San Francisco Courthouse, 450 Golden Gate Avenue, 17th Floor, Courtroom 2, before the Honorable William H. Orrick, Plaintiffs will, and hereby do, move the Court for an order under Fed. R. Civ. P. 23(a) and (b)(3) certifying the following Class:

All individuals who purchased AppleCare or AppleCare+, either directly or through the iPhone Upgrade Program, on or after January 1, 2009, and received a remanufactured replacement Device.

Plaintiffs move to appoint Vicky Maldonado and Justin Carter as class representatives.

Plaintiffs also move under Fed. R. Civ. P. 23(g) to appoint Steve Berman of Hagens Berman Sobol Shapiro LLP as Lead Class Counsel for the proposed Class.

This Motion is based on this Notice of Motion and Amended Motion, the accompanying Memorandum of Points and Authorities, and the Declaration of Steve W. Berman in Support of Plaintiffs' Amended Motion for Class Certification and exhibits thereto.

DATED: February 28, 2019

Respectfully submitted by,

HAGENS BERMAN SOBOL SHAPIRO LLP

By: /s/ Steve W. Berman

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TABLE OF CONTENTS

Page

1

2

3 I. INTRODUCTION 1

4 II. SUMMARY OF EVIDENCE COMMON TO EACH CLASS MEMBER 2

5 A. Apple sells extended warranties. 2

6 B. Apple’s replacement devices are mainly remanufactured devices. 3

7 C. Apple maintains return rate and [REDACTED] data. 5

8 D. Plaintiffs will use common evidence to prove Apple’s remanufactured devices
[REDACTED] than new devices and therefore are not “new or equivalent
to new.” 7

9 E. Apple’s testing only tests functional performance and does not test for [REDACTED]
[REDACTED] 9

10 F. Apple gives Plaintiffs remanufactured devices. 13

11 III. THE PROPOSED CLASS MEETS THE RULE 23 CERTIFICATION
REQUIREMENTS 15

12 A. The Class is identifiable. 15

13 B. The Class meets the Rule 23(a) requirements. 16

14 1. The Class is sufficiently numerous..... 16

15 2. Plaintiffs’ and Class members’ claims share common questions of fact
and law, satisfying Rule 23(a)(2). 16

16 3. Plaintiffs’ claims are typical of the Class’s claims, satisfying Rule
23(a)(3). 17

17 4. Adequacy of representation is satisfied under Rule 23(a)(4). 18

18 C. The Class meets the requirements of Rule 23(b). 19

19 1. Common questions of law and fact concerning liability predominate
over questions affecting only individual Class members. 19

20 a. Breach of contract claim..... 20

21 b. Song-Beverly claim 22

22 c. Magnuson-Moss Warranty Act claim 22

23 d. UCL claims..... 23

24 e. Plaintiffs can establish a method for calculating damages for
the Class..... 24

25 2. A class action is the superior method of adjudication. 25

26 IV. CONCLUSION 25

27

28

TABLE OF AUTHORITIES

Page(s)

Cases

1

2

3

4 *Amchem Prod., Inc. v. Windsor*,
521 U.S. 591 (1997)19

5

6 *Amgen Inc. v. Conn. Ret. Plans & Trust Funds*,
568 U.S. 455 (2013)15

7 *CDF Firefighters v. Maldonado*,
70 Cal. Rptr. 3d 667 (2008).....20

8

9 *Ehret v. Uber Techs., Inc.*,
148 F. Supp. 3d 884 (N.D. Cal. 2015).....23

10 *Ellis v. Costco Wholesale Corp.*,
657 F.3d 970 (9th Cir. 2011)15, 18

11

12 *Farar v. Bayer AG*,
No. 14-CV-04601-WHO, 2017 WL 5952876 (N.D. Cal. Nov. 15, 2017)15

13

14 *Frlekin v. Apple Inc.*,
309 F.R.D. 518 (N.D. Cal. 2015)18

15

16 *Hanlon v. Chrysler Corp.*,
150 F.3d 1011 (9th Cir. 1998)17, 19

17 *Just Film, Inc. v. Buono*,
847 F.3d 1108 (9th Cir. 2017)24

18

19 *Long v. Graco Children’s Prod. Inc.*,
No. 13-CV-01257-WHO, 2013 WL 4655763 (N.D. Cal. Aug. 26, 2013)22

20 *Mass. Mut. Life Ins. Co. v. Super. Ct.*,
119 Cal. Rptr. 2d 190 (Ct. App. 2002), *as modified on denial of reh’g* (May 29,
21 2002).....23

22 *Meyer v. Portfolio Recovery Assocs., LLC*,
707 F.3d 1036 (9th Cir. 2012)17

23

24 *Pirozzi v. Apple, Inc.*,
966 F. Supp. 2d 909 (N.D. Cal. 2013).....23

25

26 *Tietsworth v. Sears*,
720 F. Supp. 2d 1123 (N.D. Cal. 2010).....23

27

28 *Tyson Foods, Inc. v. Bouaphakeo*,
136 S. Ct. 1036 (2016)19

1 *Wal-Mart Stores, Inc. v. Dukes*,
 2 564 U.S. 338 (2011)16

3 *Wolin v. Jaguar Land Rover N. Am., LLC*,
 4 617 F.3d 1168 (9th Cir. 2010).....16, 17, 25

5 *Wolph v. Acer Am. Corp.*,
 6 272 F.R.D. 477 (N.D. Cal. 2011)15, 16

7 *Zinser v. Accufix Research Inst., Inc.*,
 8 253 F.3d 1180 (9th Cir. 2001), opinion amended on denial of reh’g,
 9 273 F.3d 1266 (9th Cir. 2001).....15, 25

10 **Statutes**

11 15 U.S.C. § 2302(a)(13)22

12 Cal. Civ. Code § 1791(o).....22

13 Cal. Civ. Code § 179422

14 Cal. Civ. Code § 1794.4(c)(6)22

15 **Other Authorities**

16 Fed. R. Civ. P. 2315

17 Fed. R. Civ. P. 23(a).....15, 16

18 Fed. R. Civ. P. 23(a)(1)1

19 Fed. R. Civ. P. 23(a)(2)1, 16

20 Fed. R. Civ. P. 23(a)(3)1, 17

21 Fed. R. Civ. P. 23(a)(4)1, 18

22 Fed. R. Civ. P. 23(b)(3)1, 2, 19

23 Fed. R. Civ. P. 23(b).....15, 19

24 Fed. R. Civ. P. 30(b)(6)6

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1 **MEMORANDUM OF POINTS AND AUTHORITIES**

2 **I. INTRODUCTION**

3 This case involves Apple Inc.’s decision to breach its promises to all consumers who
4 purchased AppleCare or AppleCare+ and who received a remanufactured device.¹ Apple sells
5 extended warranties on its popular iPhones and iPads called AppleCare and AppleCare+. These
6 programs promised all consumers that if their device is defective or becomes damaged, they would
7 receive a replacement device that is “new or equivalent to new in performance and reliability.” But
8 Apple does not honor this promise to anyone who receives a replacement device because Apple
9 provides replacement devices that are not equivalent to new in performance and reliability. [REDACTED]

10 [REDACTED] meaning they contain used parts.

11 [REDACTED]
12 [REDACTED] And Apple has no reliable or sound basis to promise “new or equivalent
13 to new” as its [REDACTED]

14 [REDACTED]
15 Plaintiffs seek certification under Fed. R. Civ. P. 23(b)(3). Rule 23(a)(1)’s numerosity
16 requirement is present because the Class has millions of readily identifiable members. Rule
17 23(a)(2) is satisfied as common questions of law and fact readily arise from Apple’s uniform
18 contract promise and breach of it, and from Apple’s uniform misrepresentations of material fact.
19 Under Rule 23(a)(3), Plaintiffs’ claims are typical of the claims of all Class members, because each
20 Plaintiff and member of the Class purchased AppleCare/AppleCare+ and were provided a
21 replacement device that was not new or equivalent to new. And Rule 23(a)(4)’s adequacy of
22 representation requirement is fulfilled, because the interests of Plaintiffs and the Class do not
23

24 ¹ Plaintiffs will refer to Apple Inc. as “Apple” in this Motion. Plaintiffs’ suit is against Apple,
25 AppleCare Service Company, Inc., and Apple CSC Inc. In purchasing AppleCare/AppleCare+, a
26 customer enters into a service contract with AppleCare Service Company (operating as Apple CSC
27 in Texas), a wholly owned subsidiary of Apple, with Apple as the contract administrator. First
28 Amended Complaint (“FAC”) ¶¶ 11, 37, 50, Nov. 14, 2016, ECF No. 45; Apple’s Answer to FAC
29 (“Answer”) ¶¶ 11, 37, 50, Apr. 5, 2017, ECF No. 69.

² Declaration of Robert Bardwell (“Bardwell Decl.”) attaching Expert Report at Ex. A;
Declaration of Michael Pecht (“Pecht Decl.”) attaching Expert Report at Ex. A

1 conflict, and Plaintiffs are represented by well-qualified counsel who are diligently prosecuting the
2 Class claims.

3 Rule 23(b)(3) certification is warranted because common issues of law or fact predominate.
4 Plaintiffs will prove their case with common evidence that as to each class member: (1) Apple
5 promised “equivalent to new devices”; (2) their devices were made with used parts;

6 (3) [REDACTED]
7 [REDACTED] and (4) as a result, none of the remanufactured devices Class members
8 receive are new or equivalent to new. As to the superiority prong of Rule 23(b)(3), each Class
9 member has a claim too small to litigate individually. No consumer can prove this case without the
10 pooling of resources offered by the class-action mechanism.

11 II. SUMMARY OF EVIDENCE COMMON TO EACH CLASS MEMBER

12 A. Apple sells extended warranties.

13 Apple is the manufacturer and seller of smartphones and tablets, known as iPhones and
14 iPads. Those devices come with a one-year Limited Warranty providing that when a device is
15 defective, Apple will replace the device with one “formed from new and/or previously used parts
16 that are equivalent to new in performance and reliability.”³ In 2009, Apple began selling an
17 extended warranty called “AppleCare.” AppleCare is a two-year service contract that covers
18 hardware, specifically defects in “materials and workmanship.”⁴ Apple sold AppleCare to cover
19

20 _____
21 ³ FAC ¶ 29; Declaration of Michella Kras (“Kras Decl.”) attaching copies of the Limited
22 Warranties at Ex. A. Unless otherwise noted, all “Ex.” numbers refer to Exhibits attached to the
23 Declaration of Steve W. Berman in Support of Plaintiffs’ Motion for Class Certification, filed
24 herewith.

25 ⁴ FAC ¶ 33. AppleCare Terms and Conditions (APL-MLDND0_00001158-66) § 3.1 (Ex. 1);
26 AppleCare+ Terms and Conditions (APL-MLDND0_00000055-65) §§ 3.1, 3.2 (Ex. 2). Apple has
27 issued multiple versions of AppleCare/AppleCare+ that apply to the Class. Plaintiffs are attaching
28 exemplars of the AppleCare and AppleCare+ Terms and Conditions. Apple has agreed that that all
versions of AppleCare and AppleCare+ contain the following quoted language: If “a defect in
materials and workmanship has arisen in the Covered [iPhone or iPad] . . . Apple will . . .
exchange the [iPhone or iPad] with a replacement product that is new or equivalent to new in
performance and reliability.” Apple has agreed that that all versions of AppleCare+ contain the
following quoted language: If an iPhone or iPad “has failed due to accidental damage from the
handling . . . Apple will . . . exchange the Covered [iPhone or iPad] with a replacement product that

1 iPhones from 2009 to 2011 and iPads from 2010 to 2011.⁵ The AppleCare contract promises all
 2 Class members that if a device is defective, Apple will “exchange the [iPhone/iPad] with a
 3 replacement product that is new or equivalent to new in performance and reliability” at no cost.⁶ In
 4 late 2011, Apple unveiled a second warranty program, AppleCare+.⁷ AppleCare+ has the same
 5 two-year warranty for hardware defects as Apple uniformly promises all class members to
 6 “exchange the Covered [iPhone/iPad] with a replacement product that is new or equivalent to new
 7 in performance and reliability.”⁸ AppleCare+ also has an accidental damage provision and
 8 promises to “exchange the Covered [iPhone/iPad] with a replacement product that is new or
 9 equivalent to new in performance and reliability”⁹ In contrast to its Limited Warranty, Apple
 10 omits any reference to “used parts” when describing replacement devices in AppleCare and
 11 AppleCare+.¹⁰ Apple charged its customers between \$69 and \$199¹¹ for AppleCare/AppleCare+.¹²

12 **B. Apple’s replacement devices are [REDACTED].**

13 While Apple promises to replace its iPhones and iPads with ones that are “new or
 14 equivalent to new in performance and reliability,”¹³ it does not do so. Apple’s replacement
 15 devices—[REDACTED]¹⁴—fall into one of three categories: new, reclaimed, or

16 _____
 17 is new or equivalent to new in performance and reliability.” Plaintiffs are able to produce all
 18 version of the AC/AC+ contracts if required by the Court.

19 ⁵ FAC ¶ 34; Answer ¶ 34.

20 ⁶ FAC ¶¶ 38, 43; AppleCare (APL-MLDND0_00001158-66) § 3.1 (Ex. 1).

21 ⁷ FAC ¶ 46; Answer ¶ 46.

22 ⁸ FAC ¶¶ 52, 62; AppleCare+ (APL-MLDND0_00000055-65) §§ 3.1, 3.2 (Ex. 2).

23 ⁹ FAC ¶¶ 53, 62; AppleCare+ (APL-MLDND0_00000055-65) §§ 3.1, 3.2 (Ex. 2).

24 ¹⁰ AppleCare (APL-MLDND0_00001158-66) § 3.1 (Ex. 1); AppleCare+ (APL-
 25 MLDND0_00000055-65) §§ 3.1, 3.2 (Ex. 2).

26 ¹¹ FAC ¶¶ 45, 66; Answer ¶¶ 45, 66; AppleCare+ current pricing on Apple’s website at
 27 <https://www.apple.com/search/Applecare?page=1&sel=accessories&src=serp> (last visited Feb. 22,
 28 2019).

¹² Plaintiffs will refer to AppleCare and AppleCare+ as “AC/AC+” in this Motion.

¹³ The contractual promise at issue here is “equivalent to new in performance and reliability,”
 but for the purposes of this Motion, Plaintiffs sometimes shorten this term to “equivalent to new.”

¹⁴ Plaintiffs use the term “replacement device” throughout this Motion, which has the same
 meaning as what Apple refers to as a [REDACTED] Lanigan Dep. 31:25-32:8, Jan. 11, 2019
 (“Lanigan Dep”) (Ex. 3).

1 remanufactured.¹⁵ The new replacement devices are built in Apple factories with all new parts and
2 then packaged without accessories to be used as service stock.¹⁶ The reclaimed replacement
3 devices are brand new devices returned within fourteen days of purchase for a refund.¹⁷
4 Remanufactured replacement devices are devices built in Apple factories using a mix of used and
5 new parts.¹⁸ Because of their [REDACTED] and because Apple distributes
6 millions of these devices to AC/AC+ purchasers, *remanufactured* iPhones and iPads are the focus
7 of Plaintiffs' claims.

8 [REDACTED]
9 [REDACTED]
10 [REDACTED]²⁰ [REDACTED]
11 [REDACTED]
12 [REDACTED]²¹
13 [REDACTED]
14 [REDACTED] The used parts Apple puts in

16 _____
17 ¹⁵ Apple's Resps. and Objs. to Pls.' First Set of Non-Uniform Interrogs. at Resp. to Interrog.
15, July 28, 2017 (Ex. 4).

18 ¹⁶ Apple at times provides new devices as replacements, particularly after a device's
19 introduction because there are no devices to remanufacture at that point. Those devices are not
20 included in the Class. *Id.*

21 ¹⁷ *Id.* [REDACTED]
22 [REDACTED] Apple's Highly Confidential and Restricted Access Suppl. Resps. and Objs. to Pls.' Non-
23 Uniform Interrog. No. 7, Feb. 2, 2018 (Ex. 5).

24 ¹⁸ Apple's Resps. and Objs. to Pls.' First Set of Non-Uniform Interrogs. at Resp. to Interrog.
25 15, July 28, 2017 (Ex. 4).

26 ¹⁹ *Id.*; Apple's Highly Conf. Suppl. Resps. and Objs. to Pls.' First Set of Non-Uniform
27 Interrogs. at Resp. to Interrog. No. 4, Feb. 2, 2018 (Ex. 6).

28 ²⁰ Apple's Resps. and Objs. to Pls.' First Set of Non-Uniform Interrogs. at Resp. to Interrog.
No. 4, July 28, 2017 (Ex. 4); Fu Dep. 18:24-19:8, 19:12-15, Jan. 8, 2019 ("Fu Dep.") (Ex. 7);
Lanigan Dep. 41:21-24 (Ex. 3).

²¹ [REDACTED] Lanigan Dep. 24:3-25:16 (Ex. 3).

²² Apple's Highly Confidential Suppl. Resps. and Objs. to Pls.' First Set of Non-Uniform
Interrogs. at Resp. to Interrog. Nos. 4, 15, Feb. 2, 2018 (Ex. 6).

1 remanufactured devices [REDACTED]
 2 [REDACTED]
 3 [REDACTED]
 4 [REDACTED]
 5 [REDACTED]
 6 [REDACTED]
 7 [REDACTED]
 8 [REDACTED]
 9 [REDACTED]
 10 [REDACTED]
 11 [REDACTED]
 12 [REDACTED]

13 **C. Apple maintains [REDACTED] and [REDACTED] data.**

14 Apple tracks both [REDACTED] and [REDACTED] for its devices. For *every* device Apple sells
 15 or issues as a replacement, [REDACTED]

16 [REDACTED]

19 _____
 20 ²³ *Id.* at Resp. to Interrog. 15; Fu Dep. 19:20-20:1 (Ex. 7); Lanigan Dep. 21:25-22:6 (Ex. 3).

21 ²⁴ [REDACTED] Fu Dep. 44:3-5 (Ex. 7); Lanigan Dep. 66:20-22 (Ex. 3).

22 ²⁵ Apple’s Highly Confidential Suppl. Resps. and Objs. to Pls.’ First Set of Non-Uniform
 Interrog. at Resp. to Interrog. 6, Feb. 2, 2018 (Ex. 6).

23 ²⁶ Fu Dep. 42:8-43:4 (Ex. 7); Lanigan Dep. 24:17-25, 33:3-20 (Ex. 3).

24 ²⁷ Fu Dep. 43:5-14 (Ex. 7); Lanigan Dep. 71:23-72:4, 73:2-16 (Ex. 3).

25 ²⁸ Fu Dep. 42:20-43:4 (Ex. 7); Lanigan Dep. 33:3-20 (Ex. 3).

26 ²⁹ Apple’s Highly Confidential Suppl. Resps. and Objections to Plaintiffs’ First Set of Non-
 Uniform Interrogatories at Resp. to Interrog. 6, Feb. 2, 2018 (Ex. 6); Fu Dep. 29:25-30:8, 96:6-14,
 97:5-8 (Ex. 7); Lanigan Dep. 55:11-17, 56:9-16 (Ex. 3).

27 ³⁰ Apple’s Highly Confidential Suppl. Resps. and Objections to Plaintiffs’ First Set of Non-
 Uniform Interrogatories at Resp. to Interrog. 9, Feb. 2, 2018 (Ex. 6); Lanigan Dep. 62:9-19, 63:3-
 15, 65:4-66:8 (Ex. 3).
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[REDACTED]

³¹ Deposition of Avijit Sen 36:6-16, 37:24-39:3, 44:10-46:15, 68:6-22, 80:15-22, Oct. 9, 2018 (“Sen Dep.”) (Ex. 8); Lanigan Dep. 38:2-9.

³² Sen Dep. 36:6-16, 80:15-22 (Ex. 8).

³³ *Id.* 80:15-22, 88:14-19; Lanigan Dep. 91:18-24 (Ex. 3).

³⁴ Fu Dep. 164:23-165:4, 165:18-166:5, 166:15-17 (Ex. 7); Lanigan Dep. 103:17-104:20, 123:11-18 (Ex. 3).

³⁵ Lanigan Dep. 36:11-18 (Ex. 3). [REDACTED] *Id.* at 38:2-9, 39:12-21.

³⁶ Lanigan Dep. at 90:15-91:24, 97:7-11; Lanigan Dep. Ex. 56 (APL-MLDND0_00013487-530) (Ex. 9).

³⁷ Lanigan Dep. Ex. 56, at 13497 (APL-MLDND0_00013487-530) (Ex. 9).

³⁸ *Id.* [REDACTED] Lanigan Dep. 108:6-109:8 (Ex. 3).

³⁹ Lanigan Dep. 91:3-6 (Ex. 3); Lanigan Dep. Ex. 56, at 13497 (APL-MLDND0_00013487-530) (Ex. 9).

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[REDACTED]

D. Plaintiffs will use common evidence to prove Apple’s remanufactured devices

[REDACTED]

Plaintiffs will use Apple’s [REDACTED] show on a classwide basis that Apple’s remanufactured devices [REDACTED]

[REDACTED]

⁴⁰ *Id.* at 101:4-12 (Ex. 3).

⁴¹ *Id.* at 106:13-16 (Ex. 3).

⁴² Lanigan Dep. Ex. 56, at 13497 (APL-MLDND0_00013487-530) (Ex. 9).

⁴³ Sen Dep. 36:6-16, 45:5-21 (Ex. 8); Lanigan Dep. 102:1-103:9 (Ex. 3).

⁴⁴ Lanigan Dep. 109:20-110:2, 141:15-25 (Ex. 3).

⁴⁵ *Id.* at 109:20-110:2, 118:24-119:8 (Ex. 3).

⁴⁶ Fu Dep. 36:8-23, 115:15-17 (Ex. 7); Lanigan Dep. 139:1-18 (Ex. 3).

⁴⁷ Lanigan Dep. 139:19-141:25 (Ex. 3). Apple has not produced its [REDACTED] to Plaintiffs, but if the class is certified, they will ask Apple to produce that data to analyze whether it establishes, on a classwide basis, a significant difference between new and remanufactured devices.

⁴⁸ Lanigan Dep. Ex. 56, at 13497 (APL-MLDND0_00013487-530) (Ex. 9).

1 Dr. Robert Bardwell, a statistical expert with a PhD in mathematics, [REDACTED]
2 [REDACTED]
3 [REDACTED]
4 [REDACTED]
5 [REDACTED]
6 [REDACTED]

7 [REDACTED], Dr. Bardwell determined:
8 • [REDACTED]
9 [REDACTED]
10 [REDACTED]
11 • [REDACTED]
12 [REDACTED]
13 [REDACTED]
14 [REDACTED]
15 [REDACTED]
16 [REDACTED]
17 [REDACTED]

19 ⁴⁹ Declaration of Robert Bardwell (“Bardwell Decl.”) attaching Expert Report at Ex. A. [REDACTED]
20 [REDACTED] *Id.* Ex. A, at 16-18.

21 ⁵⁰ The data Apple provided is essentially a subset of Apple’s [REDACTED].

22 ⁵¹ APL-MLDND0-00005561 (Ex. 10); APL-MLDND0-00005565 (Ex. 11). Apple also
23 produced the [REDACTED] for new devices that were sold with AC/AC+.

24 ⁵² APL-MLDND0-00005561 (Ex. 10); APL-MLDND0-00005565 (Ex. 11).

25 ⁵³ Dr. Bardwell’s analysis focuses on [REDACTED] to correct for two censoring issues
26 he describes in his report. Bardwell Decl. Ex. A, at 13-14.

27 ⁵⁴ *Id.* Ex. A, at 8-9. [REDACTED]
28 [REDACTED]

⁵⁵ *Id.* Ex. A, at 9.

⁵⁶ *Id.* Ex. A, at 10-11 Tables 1 and 2.

⁵⁷ *Id.* Ex. A, at 12.

1 [REDACTED]
2 [REDACTED]
3 Dr. Bardwell was limited in his analysis because of the way the data was produced by
4 Apple.⁵⁹ By providing data [REDACTED] Dr. Bardwell could not apply additional statistical
5 techniques to address all censoring issues as described in his report.⁶⁰ With Apple's [REDACTED]
6 [REDACTED], Dr. Bardwell will be able to provide a
7 [REDACTED] for the Class and correct for censored (missing) data.⁶¹ But even using Dr.
8 Bardwell's initial approach, Plaintiffs can show that across the Class, [REDACTED]
9 [REDACTED]

10 **E.** [REDACTED]
11 [REDACTED]

12 To prove contract compliance with its promises, Apple relies on its belief that its
13 remanufactured devices are equivalent to new because they pass the same qualification and testing
14 standards as new devices.⁶² Apple admits that its uniform testing procedures [REDACTED]
15 [REDACTED]⁶³ Apple's performance tests
16 [REDACTED]
17 [REDACTED], which could
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20

21 ⁵⁸ *Id.* Ex. A, at 12.

22 ⁵⁹ The parties agreed to limited data production in anticipation of mediation. Kras Decl. ¶ 5.

23 ⁶⁰ Bardwell Decl. Ex. A, at 14-15.

24 ⁶¹ *Id.* Ex. A, at 16-18.

25 ⁶² Apple's Highly Conf. and Restricted Access Suppl. Resps. and Objs. to Pls.' First Set of
26 Non-Uniform Interrogs. at Resp. to Interrog. No. 7, Feb. 2, 2018 (Ex. 5); Apple's Highly
27 Confidential and Supplemental Resps. and Objs. to Pls.' First Set of Non-Uniform Interrogs. at
28 Resp. to Interrog. 4, Feb. 2, 2018 (Ex. 6); Fu Dep. 21:20-24, 22:24-23:4, 24:12-15, 90:25-91:13
(Ex. 7); Lanigan Dep. 126:17-22 (Ex. 3).

⁶³ [REDACTED] Fu Dep. 23:5-11 (Ex. 7); Lanigan Dep.
40:16-41:24, 128:8-12 (Ex. 3).

1 affect the performance of the device.⁶⁴ Apple admits it does not [REDACTED]
 2 [REDACTED].⁶⁵
 3 [REDACTED]
 4 [REDACTED]
 5 [REDACTED]
 6 [REDACTED]
 7 [REDACTED]
 8 [REDACTED]
 9 [REDACTED]
 10 [REDACTED]
 11 [REDACTED]
 12 [REDACTED]
 13 [REDACTED]
 14 [REDACTED]
 15 [REDACTED]
 16 [REDACTED]

18 ⁶⁴ Apple admits its performance testing [REDACTED] Fu Dep. 22:18-23:4, 35:23-36:7
 19 (Ex. 7); Lanigan Dep. 40:16-41:24, 130:12-23 (Ex. 3); Declaration of Michael Pecht (“Pecht
 20 Decl.”) attaching Expert Report at Ex. A.

21 ⁶⁵ Lanigan Dep. 133:9-22 (Ex. 3).

22 ⁶⁶ Fu Dep. 25:17-26:1, 34:3-6 (Ex. 7); Lanigan Dep. 49:12-50:15, 53:8-15 (Ex. 3); Pecht Decl.
 Ex. A.

23 ⁶⁷ [REDACTED] Fu Dep.
 24 24:18-25:6, 160:8-162:23 (Ex. 7); Lanigan Dep. 46:6-47:23 (Ex. 3).

25 ⁶⁸ Fu Dep. 25:17-26:1, 34:3-6 (Ex. 7); Lanigan Dep. 49:12-50:15, 53:8-15 (Ex. 3).

26 ⁶⁹ Lanigan Dep. 129:23-130:23, 133:9-22, 134:16-19 (Ex. 3).

27 ⁷⁰ Fu Dep. 25:21-26:1 (Ex. 7); Lanigan Dep. 46:6-47:23, 49:12-50:15 (Ex. 3).

28 ⁷¹ Fu Dep. 27:5-15, 30:17-31:6, 31:19-32:17 (Ex. 7); Lanigan Dep. 55:11-17, 56:9-16 (Ex. 3).

⁷² Fu Dep. 27:5-15, 30:17-31:6, 31:19-32:17 (Ex. 7).

⁷³ *Id.* at 27:5-15, 30:17-31:6, 31:19-32:17 (Ex. 7); Lanigan Dep. 55:11-17, 56:9-16 (Ex. 3).

1 Dr. Bardwell will show that Apple's [REDACTED]

2 [REDACTED]
3 [REDACTED]
4 [REDACTED]
5 [REDACTED]
6 [REDACTED]
7 [REDACTED]
8 [REDACTED]
9 [REDACTED]⁷⁶

10 Plaintiff's expert, Dr. Michael Pecht, who holds a Ph.D. in engineering mechanics,
11 reviewed Apple's testing protocols and procedures and determined Apple cannot represent that
12 remanufactured devices equal new in performance and reliability.⁷⁷ Dr. Pecht determined:

- 13 • Devices containing salvaged (used) components can never be as reliable as devices
14 containing new components because they were subject to load conditions, meaning
15 remanufactured devices can never be equivalent to new in reliability. The load
16 conditions are also likely to diminish the performance of the device.⁷⁸
- 17 • Apple's testing is insufficient for Apple to represent that remanufactured devices are
18 equivalent to new devices in reliability.⁷⁹

19 Reliability is the probability that a product will properly perform its intended functions over
20 time.⁸⁰ Electronic parts and products wear out over time.⁸¹ An electronic part begins to degrade

22 _____
23 ⁷⁴ Bardwell Decl. Ex. A, at 18.

24 ⁷⁵ *Id.*

25 ⁷⁶ *Id.* Ex. A, at 19.

26 ⁷⁷ Pecht Decl. Ex. A, at 10-13.

27 ⁷⁸ *Id.* Ex. A, at 13.

28 ⁷⁹ *Id.*

⁸⁰ *Id.* Ex. A, at 10.

⁸¹ *Id.*

1 once it is manufactured.⁸² Load or stress conditions, such as operational wear and tear, thermal
2 changes, humidity, dust, and shock (e.g., dropping), will cause degradation.⁸³ These load
3 conditions can cause damage to parts and components, which may not be seen by the naked eye or
4 by normal functional or performance testing, but it will reduce the life span of the product.⁸⁴

5 Every iPhone or iPad used by a consumer was subjected to some load conditions.⁸⁵ These
6 load conditions occur as the result of simply operating the device and will vary depending on
7 numerous factors—how long the device was used, how much it was used, what were the
8 temperature changes of the device, how the device battery was charged/discharged, how often it
9 was dropped, and how much dust or moisture was introduced into the device.⁸⁶ [REDACTED]

10 [REDACTED]⁸⁷

11 The impact of these load conditions, [REDACTED] is
12 considerable. [REDACTED]

13 [REDACTED]⁸⁸ For example, [REDACTED]

14 [REDACTED]

15 [REDACTED]⁸⁹ [REDACTED]

16 [REDACTED]⁹⁰

17 Remanufactured devices containing these used components likewise will pass a functional test, but

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⁸² *Id.*

⁸³ *Id.*

⁸⁴ *Id.*

⁸⁵ *Id.* Ex. A, at 11.

⁸⁶ *Id.*

⁸⁷ Fu Dep. 25:17-26:1, 34:3-6, 160:8-162:23 (Ex. 7); Lanigan Dep. 46:6-47:23, 49:12-50:15, 53:8-15 (Ex. 3).

⁸⁸ Pecht Decl. Ex. A, at 11.

⁸⁹ *Id.* Ex. A, at 11-12.

⁹⁰ *Id.*

1 are not as reliable and will have a shorter life span.⁹¹ The load conditions are also likely to diminish
2 the performance of the device.⁹²

3 Apple admits that repeated load conditions use up the life of a device, meaning they cannot
4 equal new in reliability [REDACTED]

5 [REDACTED]
6 [REDACTED]⁹⁵ Yet every remanufactured device will have
7 components subjected to some level of these same load conditions.⁹⁶ [REDACTED]

8 [REDACTED]
9 [REDACTED]
10 [REDACTED]⁹⁸ Yet,
11 despite this known degradation of reclaimed components in its remanufactured devices, [REDACTED]

12 [REDACTED]
13 **F. Apple gives Plaintiffs remanufactured devices.**

14 Plaintiff Justin Carter purchased an iPhone 6+ on April 16, 2015, for \$849.00 and
15 AppleCare+ for \$99.00.⁹⁹ In July 2016, he called Apple to report the battery issues and it sent him
16 a replacement iPhone 6+ under his AppleCare+ warranty. After using his first replacement device
17 for a few months, Carter continued to have battery issues with his replacement iPhone, which he
18 reported to Apple. Apple sent Carter a second replacement iPhone 6+ on October 28, 2016, under
19 his AppleCare+ warranty. Before using his second replacement iPhone, Carter had the phone

20 _____
21 ⁹¹ *Id.*

22 ⁹² *Id.* Ex. A, at 13.

23 ⁹³ *Id.* Ex. A, at 12.

24 ⁹⁴ Fu Dep. 25:17-26:1, 34:3-6, 160:8-162:23 (Ex. 7); Lanigan Dep. 46:6-47:23, 49:12-50:15,
25 53:8-15 (Ex. 3).

26 ⁹⁵ Fu Dep. 25:17-26:1, 34:3-6, 160:8-162:23 (Ex. 7); Lanigan Dep. 46:6-47:23, 49:12-50:15,
27 53:8-15 (Ex. 3).

28 ⁹⁶ Pecht Decl. Ex. A, at 11-12.

⁹⁷ Lanigan Dep. 67:6-18, 68:10-69:4 (Ex. 3).

⁹⁸ Pecht Decl. Ex. A, at 12.

⁹⁹ Carter's facts are set forth in the FAC at ¶¶ 100-121, ECF No. 45.

1 professionally inspected. Carter's second replacement iPhone6+ was bent, had dented and
2 scratched internal parts and components, including a dented loud speaker. The rear camera on the
3 second replacement iPhone6+ appeared to have been removed for inspection and/or service. The
4 rear camera flex cable had a hand engraved marking on it, resembling a "1." The charging dock
5 flex cable and headphone jack on Carter's second replacement iPhone6+ looked like they had been
6 replaced and/or serviced. Carter briefly used this iPhone but continued to have battery issues.
7 Carter again called Apple and reported he was having ongoing battery issues with his replacement
8 device. Apple sent Carter a third replacement iPhone6+ on November 4, 2016, under his
9 AppleCare+ warranty. Carter once again had the iPhone6+ professionally inspected before opening
10 the box. The third iPhone 6+ had similar issues to the second iPhone6+, in that it was slightly bent
11 and had a few small scratches on the interior of the device. Because the third replacement
12 iPhone6+ did not appear to be new, he returned it to Apple without using it.¹⁰⁰ Carter's first two
13 replacement iPhones were remanufactured.¹⁰¹

14 Plaintiff Vicky Maldonado purchased a fourth generation iPad on September 8, 2013, for
15 \$829 and AppleCare+ for \$99.¹⁰² On May 8, 2015, Maldonado took her iPad to an Apple store
16 because it was constantly restarting. An Apple employee suggested replacing the iPad under
17 AppleCare+, giving her a replacement iPad. Maldonado continued to have issues with the
18 replacement iPad, as it would restart several times a day. On May 22, 2015, Maldonado took her
19 replacement iPad back to the Apple store. An Apple employee again suggested the replacing the
20 iPad under her AppleCare+, giving her a second replacement iPad. Both of Maldonado's
21 replacement iPads were remanufactured.¹⁰³

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25 ¹⁰⁰ Apple has since determined that Carter's third replacement iPhone was new. Letter from
26 Purvi Patel, Mar. 22, 2017 (Ex. 12).

27 ¹⁰¹ *Id.*

28 ¹⁰² Maldonado's facts are set forth in the FAC at ¶¶ 85-99, ECF No. 45.

¹⁰³ Letter from Purvi Patel, Mar. 22, 2017 (Ex. 12).

1 **III. THE PROPOSED CLASS MEETS THE RULE 23 CERTIFICATION**
 2 **REQUIREMENTS**

3 Plaintiffs must demonstrate that “each of the four requirements of Rule 23(a) and at least
 4 one of the requirements of Rule 23(b)” have been met. *Zinser v. Accufix Research Inst., Inc.*, 253
 5 F.3d 1180, 1186 (9th Cir. 2001), opinion amended on denial of reh’g, 273 F.3d 1266 (9th Cir.
 6 2001). “Any doubts regarding the propriety of class certification generally should be resolved in
 7 favor of certification.” *Wolph v. Acer Am. Corp.*, 272 F.R.D. 477, 481 (N.D. Cal. 2011).

8 Although the Court’s “class-certification analysis must be ‘rigorous’ and may ‘entail some
 9 overlap with the merits of plaintiff’s underlying claim,’ . . . Rule 23 grants courts no license to
 10 engage in free-ranging merits inquiries at the certification stage.” *Amgen Inc. v. Conn. Ret. Plans*
 11 *& Trust Funds*, 568 U.S. 455, 465–66 (2013) (quoting *Wal-Mart Stores, Inc. v. Dukes*, 564 U.S.
 12 338, 351 (2011)). So “[m]erits questions may be considered to the extent—but only to the extent—
 13 that they are relevant to determining whether the Rule 23 prerequisites for class certification are
 14 satisfied.” *Id.* at 1195; *see also Ellis v. Costco Wholesale Corp.*, 657 F.3d 970, 983 n.8 (9th Cir.
 15 2011) (it is inappropriate to “determine whether class members could actually prevail on the merits
 16 of their claims”).

17 **A. The Class is identifiable.**

18 The proposed Class definition provides “objective criteria” to identify its members. *See*
 19 *Farar v. Bayer AG*, No. 14-CV-04601-WHO, 2017 WL 5952876, at *13 (N.D. Cal. Nov. 15,
 20 2017). “While ascertainability may factor into evaluation of a proposed definition of a class, the
 21 Ninth Circuit has never adopted an ascertainability requirement.” *Id.* (citing *Briseno v. ConAgra*
 22 *Foods, Inc.*, 844 F.3d 1121, 1124 n.4 (9th Cir. 2017)).

23 The Class is defined as,

24 All individuals who purchased AppleCare or AppleCare+, either directly or through
 25 the iPhone Upgrade Program, on or after January 1, 2009, and received a
 remanufactured replacement Device.

26 This definition is straightforward, requiring only that a consumer purchased AC/AC+ and
 27 received a replacement device with used parts, which would be limited to remanufactured devices.
 28 Class members are readily ascertainable through Apple’s records. [REDACTED]

[REDACTED]

[REDACTED]¹⁰⁵

B. The Class meets the Rule 23(a) requirements.

1. The Class is sufficiently numerous.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]¹⁰⁷ [REDACTED]

[REDACTED] Plaintiffs can establish numerosity. *See Wolph*, 272 F.R.D. at 483 (finding one million class members meets numerosity).

2. Plaintiffs’ and Class members’ claims share common questions of fact and law, satisfying Rule 23(a)(2).

Rule 23(a)(2) requires the existence of “questions of law or fact common to the class.” “Commonality exists where class members’ ‘situations share a common issue of law or fact, and are sufficiently parallel to insure a vigorous and full presentation of all claims for relief.’” *Wolin v. Jaguar Land Rover N. Am., LLC*, 617 F.3d 1168, 1172 (9th Cir. 2010) (citation omitted). “That common contention, moreover, must be of such a nature that it is capable of classwide resolution—which means that determination of its truth or falsity will resolve an issue that is central to the validity of each one of the claims in one stroke.” *Dukes*, 564 U.S. at 350. “Rule 23(a)(2) has been construed permissively. All questions of fact and law need not be common to satisfy the rule. The existence of shared legal issues with divergent factual predicates is sufficient, as is a common core

¹⁰⁴ Apple’s Highly Confidential Suppl. Resps., and Objs. to Interrog. Nos. 16-18, at Resp. to Interrog. 16-17, Jan. 30, 2018 (Ex. 13); Apple’s Highly Confidential and Restricted Access Suppl. Resps. and Objs. to Interrog. Nos. 19-20, Jan. 30, 2018 (Ex. 14).

¹⁰⁵ Lanigan Dep. 61:10-13 (Ex. 3).

¹⁰⁶ Apple’s Highly Confidential Supplemental Resps. and Objs. to Pls.’ First Set of Non-Uniform Interrog. Nos. 16-18 at Resp. to Interrog. 16, Jan. 30, 2018, (Ex. 13). [REDACTED]

[REDACTED]

¹⁰⁷ *Id.* at Resp. to Interrog. 18.

1 of salient facts coupled with disparate legal remedies within the class.” *Hanlon v. Chrysler Corp.*,
 2 150 F.3d 1011, 1019 (9th Cir. 1998).

3 Commonality is satisfied here. Plaintiffs and all Class members purchased AC/AC+ for
 4 their iPhones and iPads, Apple promised them all replacement devices “new or equivalent to new
 5 in performance and reliability”, and they all received remanufactured devices that Plaintiffs claim
 6 are not equivalent to new. The common question across all of Plaintiffs’ claims is whether Apple’s
 7 remanufactured devices are equivalent to new in performance or reliability. On the breach of
 8 contract claim, common questions include whether remanufactured devices’ [REDACTED]
 9 [REDACTED] establishes those devices are not equivalent to new; whether Apple must
 10 employ [REDACTED] to assess whether remanufactured devices are equivalent to new; and
 11 whether passing Apple’s [REDACTED] proves that remanufactured devices are
 12 equivalent to new. Plaintiffs’ warranty and UCL claims likewise present common questions,
 13 including whether Apple’s promise to provide equivalent to new devices was a misrepresentation;
 14 whether a reasonable consumer would have been deceived by Apple’s misrepresentations; and
 15 whether Apple’s conduct constitutes an unfair or unlawful business practice. The controlling law is
 16 also common to the Class because AC/AC+ contracts dictate that “the laws of the State of
 17 California govern [AC/AC+] Plans purchased in the United States.”¹⁰⁸

18 **3. Plaintiffs’ claims are typical of the Class’s claims, satisfying Rule 23(a)(3).**

19 “The purpose of the typicality requirement is to assure that the interest of the named
 20 representative aligns with the interests of the class.” *Wolin*, 617 F.3d at 1175 (citation omitted).
 21 Plaintiffs’ claims “are ‘typical’ if they are reasonably co-extensive with those of absent class
 22 members; they need not be substantially identical.” *Meyer v. Portfolio Recovery Assocs., LLC*,
 23 707 F.3d 1036, 1042 (9th Cir. 2012) (citation omitted). Typicality is readily satisfied in cases like
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 25

26 ¹⁰⁸ FAC ¶ 20, ECF No. 45; AppleCare Terms and Conditions (APL-MLDND0_00001158-66)
 27 § 11(xii) (Ex. 1); AppleCare+ Terms and Conditions § 11(xiv) (APL-MLDND0_00000055-65)
 28 (Ex. 2). Apple has agreed that, pending a full review of its AC/AC+ contracts, it will not dispute
 the cited language is in all of the AC/AC+ contracts. Plaintiff can produce all copies of AC/AC+ if
 required by the Court.

1 this one, where all Class members have suffered a “similar injury . . . and that injury is due to the
2 same conduct” of the defendant. *Frlekin v. Apple Inc.*, 309 F.R.D. 518, 522 (N.D. Cal. 2015).

3 Plaintiffs have no individual claims that differ from the Class’s claims. Plaintiffs both
4 purchased an AppleCare+ warranty that promises to provide them replacement devices equivalent
5 to new in performance and reliability. Plaintiffs both received remanufactured devices. To prove
6 their devices were not equivalent to new, Plaintiffs will show that Apple uses common,
7 standardized testing procedures and those procedures are insufficient to warrant that
8 remanufactured devices are equivalent to new. Plaintiffs will use [REDACTED] to prove
9 their claims, which will show that remanufactured devices [REDACTED]
10 [REDACTED]. Plaintiffs will show that Apple refuses to consider these [REDACTED]
11 [REDACTED] to ensure their devices are equivalent to new. A reasonable jury could
12 conclude, based on this evidence, that remanufactured devices are not equivalent to new. Like
13 Plaintiffs, all Class members purchased AC/AC+, so they all were made the same promise,
14 received the same legal rights, and are entitled to the same performance under the contract. They
15 all received the same type of remanufactured device from Apple, which produces those devices to
16 exacting specifications, each designed to be built and tested to meet the same specifications as any
17 other. Plaintiffs will use the common evidence to prove their claims and the Class’s claims.
18 Plaintiffs meet the typicality requirement.

19 **4. Adequacy of representation is satisfied under Rule 23(a)(4).**

20 Plaintiffs and their counsel meet the adequacy requirements. “To determine whether named
21 plaintiffs will adequately represent a class, courts must resolve two questions: ‘(1) do the named
22 plaintiffs and their counsel have any conflicts of interest with other class members and (2) will the
23 named plaintiffs and their counsel prosecute the action vigorously on behalf of the class?’” *Ellis*,
24 657 F.3d at 985 (quoting *Hanlon*, 150 F.3d at 1020). Adequacy depends on an “absence of
25 antagonism” and a “sharing of interest” between class representatives and absentee class members.
26 *Id.* The Plaintiffs’ interests, as proposed Class representatives, are aligned with those of the Class,
27 and there are no conflicts or antagonism—they have suffered the same economic loss when they
28 purchased AC/AC+ and were given the same remanufactured replacement devices. Plaintiffs have

1 also fulfilled their duties to the Class and will continue to fulfill their duties. Both Carter and
 2 Maldonado responded to Apple’s discovery requests, sat for depositions, and have no interests
 3 adverse to the Class. Plaintiffs have adequately prosecuted their cases.

4 Hagens Berman Sobol Shapiro LLP is adequate counsel. Hagens Berman has extensive
 5 experience in complex and class-action litigation, including consumer-protection class actions,
 6 which stem from a full range of deceptive, unfair, and fraudulent business practices.¹⁰⁹

7 **C. The Class meets the requirements of Rule 23(b).**

8 **1. Common questions of law and fact concerning liability predominate**
 9 **over questions affecting only individual Class members.**

10 Certification is warranted under Rule 23(b)(3) because “the questions of law or fact
 11 common to members of the class predominate over any questions affecting only individual
 12 members,” and “a class action is superior to other available methods for the fair and efficient”
 13 settlement of the controversy. Plaintiffs can meet both factors.

14 “The Rule 23(b)(3) predominance inquiry tests whether proposed classes are sufficiently
 15 cohesive to warrant adjudication by representation.” *Amchem Prod., Inc. v. Windsor*, 521 U.S. 591,
 16 623 (1997). Predominance assumes Plaintiffs established commonality and “focuses on the
 17 relationship between the common and individual issues.” *Hanlon*, 150 F.3d at 1022.

18 “An individual question is one where ‘members of a proposed class will need to present
 19 evidence that varies from member to member,’ while a common question is one where ‘the same
 20 evidence will suffice for each member to make a prima facie showing [or] the issue is susceptible
 21 to generalized, class-wide proof.’” *Tyson Foods, Inc. v. Bouaphakeo*, 136 S. Ct. 1036, 1045 (2016)
 22 (citation omitted). “When ‘one or more of the central issues in the action are common to the class
 23 and can be said to predominate, the action may be considered proper under Rule 23(b)(3) even
 24 though other important matters will have to be tried separately, such as damages or some
 25 affirmative defenses peculiar to some individual class members.’” *Id.* (citation omitted). Common
 26 issues predominate here.

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 28 ¹⁰⁹ Firm Resume (Ex. 15).

1 **a. Breach of contract claim**

2 Plaintiffs can prove on a classwide basis that Apple breached its contracts with consumers.
3 “A cause of action for breach of contract requires proof of the following elements: (1) existence of
4 the contract; (2) plaintiff’s performance or excuse for nonperformance; (3) defendant’s breach; and
5 (4) damages to plaintiff as a result of the breach.” *CDF Firefighters v. Maldonado*, 70 Cal. Rptr. 3d
6 667, 679 (2008), as modified on denial of reh’g (Feb. 5, 2008). Plaintiffs can use common proof to
7 meet all four elements.

8 AC/AC+ warranties constitute contracts between Apple and its customers. Plaintiffs and the
9 Class performed their obligations under the contract by paying Apple for AC/AC+. Apple
10 promised Plaintiffs, and other customers who purchased AC/AC+, that it would provide them with
11 replacement devices that were new or equivalent to new in performance and reliability. Apple
12 breached its contracts by failing to deliver new or equivalent to new replacement devices,
13 specifically by delivering remanufactured devices. Both Carter and Maldonado received
14 remanufactured devices.

15 Plaintiffs will use common evidence to prove Apple breached its contracts by providing
16 remanufactured devices that are not equivalent to new. Using Apple’s ██████████ Plaintiffs
17 will prove that Apple’s remanufactured iPhones ██████████
18 ██████████ and remanufactured iPads ██████████
19 ██████████¹¹⁰ Because every class member received a remanufactured device, their device is
20 ██████████ And remanufactured devices can never be
21 equivalent to new because they contain used parts that have been subject to load conditions.¹¹¹
22 Regardless of what Apple claims it does to test these remanufactured devices, they are not
23 equivalent to new. Equivalent is defined as “corresponding or virtually identical especially in effect
24 or function.”¹¹² The ██████████ will show that remanufactured devices are not virtually
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26 ¹¹⁰ Bardwell Decl. Ex. A, at 8-9.

27 ¹¹¹ Pecht Decl. Ex. A, at 10-13.

28 ¹¹² Meriam Webster, equivalent, <https://www.merriam-webster.com/dictionary/equivalent> (last visited February 25, 2019).

1 identical and do not function the same as new devices. These [REDACTED] will establish a breach of
2 Apple's obligation to provide its customers with devices equivalent to new.

3 Plaintiffs will also show that, on a classwide basis, Apple did not evaluate whether the
4 replacement devices they provide to consumers are equivalent to new. Apple does not [REDACTED]
5 [REDACTED] to ensure
6 remanufactured devices are equivalent to new.¹¹³ Remanufactured devices must meet only a
7 [REDACTED]
8 [REDACTED]
9 [REDACTED].¹¹⁴ Plaintiffs will show that Apple's failure to evaluate the reliability and
10 performance of their replacement devices is a breach of their AC/AC+ contracts with the Class.

11 As further common evidence of Apple's breach, Plaintiffs will show that Apple, in
12 describing AC/AC+ replacement devices, used broader language than that in its Limited Warranty.
13 In its Limited Warranty, Apple states it will replace a device with one "formed from new and/or
14 previously used parts that are equivalent to new in performance and reliability."¹¹⁵ Conversely, in
15 describing replacements under AC/AC+, Apple promises those devices are "new or equivalent to
16 new in performance and reliability," omitting any reference to used or refurbished parts, indicating
17 that AC/AC+ customers would be receiving a superior product, certainly something superior to a
18 replacement device that would be made of "used" parts.¹¹⁶ [REDACTED]

19 [REDACTED]
20 [REDACTED].¹¹⁷ A reasonably jury could find that Apple's conduct injured Plaintiffs and
21 the Class because they did not receive what they were promised under the contract.

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23 ¹¹³ Fu Dep. 68:2-9, 68:19-70:3, 71:18-23, 71:24-72:16, 93:19-94:2, 106:18-107:14, 110:2-7,
24 111:1-24, 112:2-25, 164:23-165:4, 165:18-166:5, 166:15-17 (Ex. 7); Lanigan Dep. 109:20-110:2,
119:1-8, 123:11-18, 129:23-130:23, 133:9-22, 134:16-19 (Ex. 3); Pecht Decl. Ex. A.

25 ¹¹⁴ Fu Dep. 25:17-26:1, 34:3-6, 160:8-162:23 (Ex. 7); Lanigan Dep. 126:7-127:5, 128:8-12,
129:23-130:23, 133:9-25, 134:16-19 (Ex. 3).

26 ¹¹⁵ FAC ¶ 29; Kras Decl. Ex. A (Apple Limited Warranties).

27 ¹¹⁶ FAC ¶¶ 38, 52-53; AppleCare Terms and Conditions (APL-MLDND0_00001158-66) § 3.1
(Ex. 1); AppleCare+ Terms and Conditions (APL-MLDND0_00000055-65) §§ 3.1, 3.2 (Ex. 2).

28 ¹¹⁷ Lanigan Dep. 24:3-25:16 (Ex. 3).

1 **b. Song-Beverly claim**

2 Plaintiffs will prove on a classwide basis that Apple violated its obligations in the AC/AC+
3 service contracts as required by the Song-Beverly Consumer Warranty Act. Under the Song-
4 Beverly Act, AC/AC+ are “service contracts,” Cal. Civ. Code § 1791(o). As service contracts,
5 AC/AC+ must explain the steps Apple will take to carry out its obligations under the contract. Cal.
6 Civ. Code § 1794.4(c)(6). AC/AC+ sets forth Apple’s obligations in promising Plaintiffs and the
7 Class it would replace their devices with ones that are new or equivalent to new in performance
8 and reliability. Plaintiffs and the class were “damaged by [Apple’s] failure to comply with any
9 obligation under . . . [the] service contract . . .” Cal. Civ. Code § 1794. By giving Plaintiffs and the
10 Class remanufactured devices, Apple did not comply with the promised obligation.

11 Plaintiffs will present common evidence—the contracts—to show Apple established
12 specific obligations and failed to comply with those promises. Nowhere in AC/AC+ did Apple
13 explain the steps they would take to ensure that replacement devices were equivalent to new, that
14 the replacement devices would be remanufactured or contain used parts, that [REDACTED]
15 [REDACTED] and that Apple [REDACTED]¹¹⁸
16 Plaintiffs can use common evidence to show Apple did not comply with the terms of AC/AC+.

17 **c. Magnuson-Moss Warranty Act claim**

18 The Magnuson-Moss Warranty Act provides a cause of action for any consumer damaged
19 by the failure of a warrantor or service contractor to comply with a warranty or service contract.
20 15 U.S.C. § 2302(a)(13). “The substantive elements are the same under the Song-Beverly Act and
21 Magnuson-Moss Act.” *Long v. Graco Children’s Prod. Inc.*, No. 13-CV-01257-WHO, 2013 WL
22 4655763, at *13 (N.D. Cal. Aug. 26, 2013) (quoting *Birdsong v. Apple, Inc.*, 590 F.3d 955, 958 n.2
23 (9th Cir.2009)) “[D]isposition of the state law warranty claims determines the disposition of the
24 Magnuson-Moss Act claims.” *Id.* (quoting *Clemens v. DaimlerChrysler*, 534 F.3d 1017, 1022

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28 ¹¹⁸ AppleCare Terms and Conditions (APL-MLDND0_00001158-66) § 3.1 (Ex. 1);
AppleCare+ Terms and Conditions (APL-MLDND0_00000055-65) §§ 3.1, 3.2 (Ex. 2).

1 (9th Cir.2008)). Because Plaintiffs have common evidence to prove their Song-Beverly claim, they
 2 can establish a violation of the Magnuson-Moss Warranty Act.

3 **d. UCL claims**

4 The UCL prohibits “practices which are unlawful, unfair or fraudulent.” *Ehret v. Uber*
 5 *Techs., Inc.*, 148 F. Supp. 3d 884, 895 (N.D. Cal. 2015) (quoting *In re Tobacco II Cases*, 207 P.3d
 6 20, 29 (Cal. 2009)). “UCL plaintiffs must point to a misrepresentation with particularity and plead
 7 that the misrepresentation ‘was an immediate cause of the injury-producing conduct, but not
 8 necessarily the sole or even the predominant or decisive factor.’” *Pirozzi v. Apple, Inc.*, 966 F.
 9 Supp. 2d 909, 920 (N.D. Cal. 2013) (quoting *In re Tobacco II Cases*, 207 P.3d at 39). A UCL
 10 violation is shown if “‘members of the public are likely to be deceived’” by the misrepresentation.
 11 *Ehret*, 148 F. Supp. 3d at 895 (quoting *Pulaski & Middleman, LLC v. Google, Inc.*, 802 F.3d 979,
 12 985 (9th Cir. 2015)). “California courts have repeatedly held that relief under the UCL is available
 13 without individualized proof of deception, reliance and injury.” *Mass. Mut. Life Ins. Co. v. Super.*
 14 *Ct.*, 119 Cal. Rptr. 2d 190, 193 (Ct. App. 2002), *as modified on denial of reh’g* (May 29, 2002).

15 If Plaintiffs present evidence that remanufactured devices are not equivalent to new,
 16 Apple’s promise, made to every Class member, to provide equivalent to new devices is a
 17 misrepresentation under the UCL.

18 Plaintiffs can prove, on a classwide basis, a violation of the unfairness prong of the UCL.
 19 “An act or practice is unfair if the consumer injury is substantial, is not outweighed by any
 20 countervailing benefit to consumers or to competition, and is not an injury the consumers
 21 themselves could reasonably have avoided.” *Tietsworth v. Sears*, 720 F. Supp. 2d 1123, 1137 (N.D.
 22 Cal. 2010) (quoting *Daugherty v. Am. Honda Motor Co.*, 51 Cal. Rptr. 118, 129 (Ct. App.2006)).
 23 The Court found that Plaintiffs could establish a violation by showing Apple’s “challenged
 24 business practice is ‘immoral, unethical, oppressive, unscrupulous or substantially injurious to
 25 consumers[.]’” Order on Motion to Dismiss at 12, ECF. No. 64 (quoting *Herskowitz v. Apple Inc.*,
 26 12-cv-02131-LHK, 940 F. Supp. 2d 1131, 1146 (N.D. Cal. 2013) (citations omitted)). Here,
 27 Plaintiffs can establish, with classwide evidence, that remanufactured devices are not equivalent to
 28 new in performance and reliability. Every class member who received a remanufactured device did

1 not receive the benefit of the bargain with Apple, which this Court has already determined would
2 constitute substantial harm.¹¹⁹

3 Plaintiffs will prove, on a classwide basis, Apple violated the unlawful prong of the UCL as
4 well, with their Magnuson-Moss and Song-Beverly claims. Because Plaintiffs can prove their
5 Magnuson-Moss claims and Song-Beverly claims on a classwide basis, as established above, they
6 can similarly establish their UCL claim under the unlawful prong. Plaintiffs can show that Apple's
7 conduct was unlawful, entitling them to recovery under the UCL.

8 **e. Plaintiffs can establish a method for calculating damages for the Class.**

9 At the class-certification stage, Plaintiffs need only show that “damages can be determined
10 without excessive difficulty and attributed to their theory of liability” *Just Film, Inc. v. Buono*,
11 847 F.3d 1108, 1121 (9th Cir. 2017). Plaintiffs have retained Dr. Lance Kaufman, an economist
12 with a Ph.D. in economics, to determine the methodology he would use to calculate classwide
13 damages. Dr. Kaufman could use one of two approaches to calculate damages. Dr. Kaufman, using
14 Apple's own sales data or publicly available data, can calculate the difference between the market
15 values of new devices and remanufactured devices.¹²⁰ [REDACTED]

16 [REDACTED]
17 [REDACTED]¹²¹ Based on Apple's current pricing, certified refurbished devices sell for fifteen to
18 thirty-three percent discount to new products.¹²² Using pricing data for these devices, Dr. Kaufman
19 can calculate the difference between the cost of a new device and a remanufactured device on a
20 classwide basis.¹²³ Because the retail price difference may vary over time, Dr. Kaufman would
21 calculate the price difference at the time each replacement device was received for all replacement
22 devices received.¹²⁴ In support of this methodology, independent research shows that consumers
23

24 ¹¹⁹ Order on Motion to Dismiss at 12, March 2, 2017, ECF No. 64.

25 ¹²⁰ Declaration of Lance Kaufman (“Kaufman Decl.”) attaching Expert Report at Ex. A.

26 ¹²¹ Lanigan Dep. 23:12-24:7, 24:17-25, 25:9-26:3 (Ex. 3).

27 ¹²² Kaufman Decl. Ex. A, at 6-9.

28 ¹²³ *Id.* Ex. A, at 6.

¹²⁴ *Id.* Ex. A, at 7.

1 value remanufactured devices less than new devices, because of their lower perceived reliability.¹²⁵

2 Dr. Kaufman could also calculate rescission damages—return of the cost of AC/AC+.¹²⁶
 3 With more granular data from Apple, including the exact number of AC/AC+ plans sold where a
 4 consumer received a remanufactured replacement device, and the model of the covered device, or
 5 the cost of each plan, Dr. Kaufman can determine each Class member’s actual damages and
 6 aggregate damages for the Class.¹²⁷

7 **2. A class action is the superior method of adjudication.**

8 “[T]he purpose of the superiority requirement is to assure that the class action is the most
 9 efficient and effective means of resolving the controversy.” *Wolin*, 617 F.3d at 1175 (citation
 10 omitted). The cost of AC/AC+ is too low to incentivize many class members to litigate their claims
 11 individually and supports concentrating the claims in a single forum. This is especially true here
 12 given the high cost of marshaling the evidence (expert and otherwise) necessary to litigate the
 13 claims at issue, and the disparity in resources between the typical class member and a well-funded,
 14 litigation-savvy defendant like Apple. Certification conserves both individual and judicial
 15 resources. The extent and nature of any similar litigation—also favors class certification. This is
 16 the only class action involving these specific issues. Manageability focuses on whether “the
 17 complexities of class action treatment outweigh the benefits of considering common issues in one
 18 trial....” *Zinser*, 253 F.3d at 1192 (citation omitted).

19 Here, Plaintiffs foresee no serious manageability problems and none that, assuming class
 20 members could uncover their harm, make millions of individual actions a better alternative.
 21 Plaintiffs have satisfied the superiority requirement.

22 **IV. CONCLUSION**

23 Plaintiffs respectfully request this Court certify the proposed Class, appoint the named
 24 Plaintiffs as class representatives, and appoint their counsel as Class Counsel.

26 ¹²⁵ *Id.* Ex. A, at 5.

27 ¹²⁶ *Id.* Ex. A, at 8-9.

28 ¹²⁷ *Id.*

1 DATED: February 28, 2019

Respectfully submitted by,

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11 [Additional Counsel on Signature Page]

12 UNITED STATES DISTRICT COURT
13 NORTHERN DISTRICT OF CALIFORNIA
14 SAN FRANCISCO DIVISION

15 VICKY MALDONADO AND JUSTIN CARTER,
16 individually and on behalf of themselves and all
others similarly situated,

17 Plaintiffs,

18 v.

19 APPLE INC., APPLCARE SERVICE
20 COMPANY, INC., AND APPLE CSC, INC.

21 Defendants.
22

No. 3:16-cv-04067-WHO

Related Case:
English v. Apple Inc., et al.
Case No. 3:14-cv-01619-WHO

**DECLARATION OF STEVE BERMAN IN
SUPPORT OF PLAINTIFFS' AMENDED
MOTION FOR CLASS CERTIFICATION**

Hearing: May 15, 2019
Time: 2:00 p.m.
Judge: William H. Orrick
Courtroom: 2, 17th Floor

1 I, Steve W. Berman, do hereby declare as follows:

2 1. I am an attorney duly licensed to practice before all of the courts of the State of
3 Washington, and I have been admitted *pro hac vice* in this Court. I am the managing partner of
4 Hagens Berman Sobol Shapiro LLP, and have appeared in this case as one of the counsel of record
5 for Plaintiffs in the above-entitled action. I have personal knowledge of the matters stated herein
6 and, if called upon, I could and would competently testify thereto.

7 2. I submit this declaration on behalf of Plaintiffs in support of their Amended Motion
8 for Class Certification.

9 3. Attached hereto as Exhibit 1 is a true and correct copy of a document Bates-
10 numbered APL-MLDND0_00001158-66, produced in the above-captioned action.

11 4. Attached hereto as Exhibit 2 is a true and correct copy of a document Bates-
12 numbered APL-MLDND0-000055-65, produced in the above-captioned action.

13 5. Attached hereto as Exhibit 3 are true and correct copies of excerpts of the deposition
14 transcript of Michael Lanigan, dated January 11, 2019.

15 6. Attached hereto as Exhibit 4 is a true and correct copy of Apple Inc.'s Responses
16 and Objections to Plaintiffs' First Set of "Non-Uniform" Interrogatories, dated July 28, 2017.

17 7. Attached hereto as Exhibit 5 is a true and correct copy of Apple's Highly
18 Confidential and Restricted Access Supplemental Responses and Objections to Plaintiffs'
19 Non-Uniform Interrogatory No. 7, dated February 2, 2018.

20 8. Attached hereto as Exhibit 6 is a true and correct copy of Apple, Inc.'s Highly
21 Confidential Supplemental Responses and Objections to Plaintiffs' First Set of "Non-Uniform"
22 Interrogatories (Interrogatory Nos. 4, 6, 9, 10, 11, and 15), dated February 2, 2018.

23 9. Attached hereto as Exhibit 7 are true and correct copies of excerpts of the deposition
24 transcript of Jason Fu, dated January 8, 2019.

25 10. Attached hereto as Exhibit 8 are true and correct copies of excerpts of the deposition
26 transcript of Avijit Sen, dated October 9, 2018.

1 11. Attached hereto as Exhibit 9 is a true and correct copy of document Bates-numbered
2 APL-MLDNDO-00013487-530, produced in the above-captioned action (Exhibit 56 to the
3 deposition of Michael Lanigan, dated January 11, 2019).

4 12. Attached hereto as Exhibit 10 is a true and correct copy of a document Bates-
5 numbered APL-MLDNDO-00005561, produced in the above-captioned action.

6 13. Attached hereto as Exhibit 11 is a true and correct copy of a document Bates-
7 numbered APL-MLDNDO-00005565, produced in the above-captioned action.

8 14. Attached hereto as Exhibit 12 is a true and correct copy of a letter from Purvi G.
9 Patel, dated March 22, 2017.

10 15. Attached hereto as Exhibit 13 is a true and correct copy of Apple, Inc.'s Highly
11 Confidential Supplemental Responses and Objections to Plaintiffs' First Set of "Non-Uniform"
12 Interrogatories (Interrogatory Nos. 16-18), dated January 30, 2018.

13 16. Attached hereto as Exhibit 14 is a true and correct copy of Defendant Apple Inc.'s
14 Highly Confidential and Restricted Access Supplemental Responses and Objections to Plaintiffs'
15 First Set of "Non-Uniform" Interrogatories (Interrogatory Nos. 19-20), dated January 30, 2018.

16 17. Attached hereto as Exhibit 15 is a true and correct copy of the Hagens Berman
17 Sobol Shapiro LLP firm resume dated February 13, 2019.

18 I declare under penalty of perjury under the laws of the United States of America that the
19 foregoing is true and correct.

20 Executed this 28th day of February, 2019, at Seattle, Washington.

21
22 /s/ Steve W. Berman

23 Steve W. Berman
24
25
26
27
28

EXHIBIT 1

AppleCare Protection Plan for iPad

How Consumer Rights Affect this Plan

FOR CONSUMERS IN JURISDICTIONS WHO HAVE THE BENEFIT OF CONSUMER PROTECTION LAWS OR REGULATIONS, THE BENEFITS CONFERRED BY THE ABOVE MENTIONED PLAN ARE IN ADDITION TO ALL RIGHTS AND REMEDIES PROVIDED UNDER SUCH LAWS AND REGULATIONS. NOTHING IN THIS PLAN SHALL PREJUDICE CONSUMER RIGHTS GRANTED BY APPLICABLE MANDATORY LAWS, INCLUDING CONSUMER'S RIGHT TO THE REMEDIES UNDER STATUTORY WARRANTY LAW AND TO SEEK DAMAGES IN THE EVENT OF TOTAL OR PARTIAL NON-PERFORMANCE OR INADEQUATE PERFORMANCE BY APPLE OF ANY OF ITS CONTRACTUAL OBLIGATIONS.

1. The Plan. This service contract governs the hardware service and technical support provided to you by Apple under the above-mentioned plan (the "Plan") for the Apple branded product and the accessories contained in its original packaging ("Covered Equipment") listed on your proof of coverage document ("Plan Confirmation").

2. When Coverage Begins and Ends.

Coverage begins when you purchase the Plan and ends on the date specified in your Plan Confirmation ("Coverage Period"). To obtain your Plan Confirmation register your Covered Equipment and your Plan's registration number ("Plan Agreement Number") with Apple. If auto-registration is available, your sales receipt will be your Plan Confirmation. The terms of this Plan, the original sales receipt for your Plan and the Plan Confirmation are each part of your service contract. The price of the Plan is contained in the original sales receipt. The hardware service and technical support coverage provided by the Plan is additional to the coverage provided by the manufacturer's hardware warranty and complimentary technical support.

3. What is Covered?

3.1 Hardware Service

If during the Coverage Period, you submit a valid claim by notifying Apple that (i) a defect in materials and workmanship has arisen in the Covered Equipment or, (ii) the capacity of the Covered Equipment's battery to hold an electrical charge has depleted fifty (50%) percent or more from its original specifications, Apple will either (a) repair the defect at no charge, using new or refurbished parts that are the equivalent to new in performance and reliability, or (b) exchange the Covered Equipment with a replacement product that is new or equivalent to new in performance and reliability and is functionally equivalent to the original product. If Apple exchanges the Covered Equipment, the original product becomes Apple's property and the replacement product is your property, with coverage for the remaining period of the plan.

3.2 Covered Equipment

In addition to the Apple-branded product and accessories contained in the original packaging, "Covered Equipment" includes an AirPort Extreme Card, an AirPort Express or AirPort Extreme Base Station, and Time Capsule, if used with the Covered Equipment and originally purchased by you no earlier than two years before the Covered Equipment purchase.

3.3 Technical Support

During the Coverage Period, Apple will provide you with access to telephone and web-based technical support resources. Technical support may include assistance with installation, launch, configuration, troubleshooting, and recovery (except for data recovery), including storing, retrieving, and managing files; interpreting system error messages; and determining when hardware service is required. Apple will provide support for the then-current version of the supported software, and the prior Major Release. For purposes of this section, "Major Release" means a significant version of software that is commercially released by Apple in a release number format such as "1.0" or "2.0" and which is not in beta or pre-release form. The scope of technical support provided to you will vary according to your Plan.

3.4 Scope of Technical Support

Under the Plan, Apple will provide technical support for the Covered Equipment, iPad OS (“iOS”) and software applications that are pre-installed with the Covered Equipment (both referred to as “Consumer Software”) and connectivity issues between the Covered Equipment and a “Supported Computer”, meaning a computer that meets the Covered Equipment’s connectivity specifications.

4. What is not Covered?

4.1 Hardware Service. Apple may restrict service to the Covered Equipment’s original country of purchase. The Plan does not apply to:

- (i) Installation, removal or disposal of the Covered Equipment, or provision of equipment while the Covered Equipment is being serviced;
- (ii) Damage caused by (a) a product that is not the Covered Equipment, (b) accident, abuse, misuse, liquid contact, fire, earthquake or other external causes, (c) operating the Covered Equipment outside the permitted or intended uses described by the manufacturer, or (d) service (including upgrades and expansions) performed by anyone who is not a representative of Apple or an Apple Authorized Service Provider (“AASP”);
- (iii) Covered Equipment with a serial number that has been altered, defaced or removed, or has been modified to alter its functionality or capability without the written permission of the manufacturer;
- (iv) Covered Equipment that has been lost or stolen. This Plan only covers Covered Equipment that is returned to Apple in its entirety;
- (v) Cosmetic damage to the Covered Equipment including but not limited to scratches, dents and broken plastic on ports;
- (vi) Preventative maintenance on the Covered Equipment; or
- (vii) Defects caused by normal wear and tear or otherwise due to normal aging of the product;

4.2 Technical Support. The Plan does not include:

- (i) Your use of the iOS and Consumer Software as server-based applications;
- (ii) Issues that could be resolved by upgrading software to the then current version;
- (iii) Third-party products or their effects on or interactions with the Covered Equipment, the iOS or Consumer Software;
- (iv) Your use of a computer or operating system that is unrelated to Consumer Software or connectivity issues with the Covered Equipment;
- (v) Apple software other than the iOS or Consumer Software, as covered under the Plan;
- (vi) iOS software or any Apple-branded software designated as “beta”, “prerelease,” or “preview” or similarly labeled software; or
- (vii) Damage to, or loss of any software or data residing or recorded on the Covered Equipment. Recovery and reinstallation of software programs and user data are not covered under this Plan.

5. How to Obtain Service and Support?

You may obtain hardware services and technical support by accessing the Apple website (www.apple.com/support) or calling the telephone number listed below. If calling, an Apple technical support representative will answer, request your Plan Agreement Number or Covered Equipment serial number, before providing assistance. Keep your Plan Confirmation document and the original sales receipt for your Covered Equipment and your Plan, as it will be required if there is any question as to your product’s eligibility for coverage.

6. Hardware Service Options.

6.1 Apple will provide hardware services through one or more of the following options:

(i) Carry-in service. Return the Covered Equipment to an Apple-owned retail store or an AASP location offering carry-in service. Service will be performed at the location, or the store may send the Covered Equipment to an Apple repair service (“ARS”) location to be repaired or replaced. Once you are notified that service is complete, you will promptly retrieve the Covered Equipment.

(ii) Mail-in service. If Apple determines that your Covered Equipment is eligible for mail-in service, Apple will send you prepaid way bills (and if you no longer have the original packaging, Apple may send you packaging material) and you will ship the Covered Equipment to an ARS location in accordance with Apple’s instructions. Once service is complete, the ARS location will return the Covered Equipment or a replacement product to you. Apple will pay for shipping to and from your location if all instructions are followed.

(iii) Express replacement or do-it-yourself (“DIY”) parts service. Express replacement is available for certain Covered Equipment products, and DIY parts service is available for many Covered Equipment parts, allowing you to service your own product. If DIY parts service is available in the circumstances, the following process will apply.

(a) Service where Apple requires return of the replaced product or part. Apple may require a credit card authorization as security for the retail price of the replacement product or part and applicable shipping costs. If you are unable to provide credit card authorization, service may not be available to you and Apple will offer alternative arrangements for service. Apple will ship a replacement product or part to you with installation instructions, if applicable, and any requirements for the return of the replaced product or part. If you follow the instructions, Apple will cancel the credit card authorization, so you will not be charged for the product or part and shipping to and from your location. If you fail to return the replaced product or part as instructed or return a replaced product or part that is ineligible for service, Apple will charge the credit card for the authorized amount.

(b) Service where Apple does not require return of the replaced product or part. Apple will ship you free of charge a replacement product or part accompanied by instructions on installation, if applicable, and any requirements for the disposal of the replaced product or part.

(c) Apple is not responsible for any labor costs you incur relating to express replacement or DIY parts service. Should you require further assistance, contact Apple at the telephone number listed below.

6.2 Apple reserves the right to change the method by which Apple may provide repair or replacement service to you, and your Covered Equipment’s eligibility to receive a particular method of service. Service will be limited to the options available in the country where service is requested. Service options, parts availability and response times may vary according to country. You may be responsible for shipping and handling charges if the Covered Equipment cannot be serviced in the country it is in. If you seek service in a country that is not the country of purchase, you will comply with all applicable import and export laws and regulations and be responsible for all custom duties, V.A.T. and other associated taxes and charges. For international service, Apple may repair or exchange defective products and parts with comparable products and parts that comply with local standards.

7. Your Responsibilities

To receive service or support under the Plan, you agree to comply with the following:

(i) Provide your Plan Agreement Number and a copy of your Plan’s original proof of purchase, if requested;

(ii) Provide information about the symptoms and causes of the issues with the Covered Equipment;

(iii) Respond to requests for information, including but not limited to the Covered Equipment serial number, model, version of the operating system and software installed, any peripherals devices connected or installed on the Covered Equipment, any error messages displayed, actions taken before the Covered Equipment experienced the issue and steps taken to resolve the issue;

(iv) Follow instructions Apple gives you, including but not limited to refraining from sending Apple products and accessories that are not subject to repair or replacement service and packing the Covered Equipment in accordance with shipping instructions;

(v) Update software to currently published releases prior to seeking service; and

(vi) Make sure to backup software and data residing on the Covered Equipment. DURING APP FOR IPAD SERVICE, APPLE WILL DELETE THE CONTENTS OF THE IPAD AND REFORMAT THE STORAGE MEDIA. Apple will return your iPad or provide a replacement iPad as the iPad was originally configured, subject to applicable updates. Apple may install iOS updates as part of hardware service that will prevent the iPad from reverting to an earlier version of the iOS. Third party applications installed on the iPad may not be compatible or work with the iPad as a result of the iOS update. You will be responsible for reinstalling all other software programs, data and passwords.

8. Limitation of Liability

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, APPLE AND ITS EMPLOYEES AND AGENTS WILL UNDER NO CIRCUMSTANCES BE LIABLE TO YOU OR ANY SUBSEQUENT OWNER FOR ANY INDIRECT OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO COSTS OF RECOVERING, REPROGRAMMING, OR REPRODUCING ANY PROGRAM OR DATA OR THE FAILURE TO MAINTAIN THE CONFIDENTIALITY OF DATA, ANY LOSS OF BUSINESS, PROFITS, REVENUE OR ANTICIPATED SAVINGS, RESULTING FROM APPLE'S OBLIGATIONS UNDER THIS PLAN. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, THE LIMIT OF APPLE AND ITS EMPLOYEES AND AGENT'S LIABILITY TO YOU AND ANY SUBSEQUENT OWNER ARISING UNDER THE PLAN SHALL NOT EXCEED THE ORIGINAL PRICE PAID FOR THE PLAN. APPLE SPECIFICALLY DOES NOT WARRANT THAT (i) IT WILL BE ABLE TO REPAIR OR REPLACE COVERED EQUIPMENT WITHOUT RISK TO OR LOSS OF PROGRAMS OR DATA, (ii) MAINTAIN THE CONFIDENTIALITY OF DATA, OR (iii) THAT THE OPERATION OF THE PRODUCT WILL BE UNINTERRUPTED OR ERROR-FREE.

FOR CONSUMERS IN JURISDICTIONS WHO HAVE THE BENEFIT OF CONSUMER PROTECTION LAWS OR REGULATIONS, THE BENEFITS CONFERRED BY THIS PLAN ARE IN ADDITION TO ALL RIGHTS AND REMEDIES PROVIDED UNDER SUCH LAWS AND REGULATIONS. TO THE EXTENT THAT LIABILITY UNDER SUCH LAWS AND REGULATIONS MAY BE LIMITED, APPLE'S LIABILITY IS LIMITED, AT ITS SOLE OPTION, TO REPLACE OR REPAIR OF THE COVERED EQUIPMENT OR SUPPLY OF THE SERVICE. SOME STATES OR PROVINCES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO SOME OR ALL OF THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.

9. Cancellation

You may cancel this Plan at any time for any reason. If you decide to cancel either call Apple at the telephone number below, or send or fax written notice with your Plan Agreement Number to AppleCare Administration, P.O. Box 149125, Austin, TX 78714-9125, U.S. (fax number 916-405-3973). A copy of the Plan's original proof of purchase must accompany your notice. Unless local law provides otherwise, if you cancel within thirty (30) days of your Plan's purchase, or receipt of these Terms and Conditions, whichever occurs later, you will receive a full refund less the value of any service provided under the Plan. If you cancel more than thirty (30) days after your receipt of this Plan, you will receive a pro rata refund of the original purchase price, based on the percentage of unexpired Coverage Period from the Plan's date of purchase, less (a) a cancellation fee of twenty-five (\$25) dollars or ten percent (10%) of the pro-rata amount, whichever is less, and (b) the value of any service provided to you under the Plan. Unless applicable local law provides otherwise, Apple may cancel this Plan for fraud or material misrepresentation. Unless applicable local law provides otherwise, Apple may also cancel this Plan if service parts for the Covered Equipment become unavailable, upon thirty (30) days' prior written notice. If Apple cancels this Plan for the unavailability of service parts, you will receive a pro-rata refund for the Plan's unexpired term.

10. Transfer of Plan

(i) With Transfer of Covered Equipment to New Owner. Subject to the restrictions set forth below, you may make a one-time permanent transfer of all of your rights under the Plan to another party, provided that: (a) the transfer includes a copy of the Plan's original proof of purchase, the Plan's Confirmation and all of the Plan's packaging material, including printed materials and these Terms

and Conditions; (b) you notify Apple of the transfer by sending, faxing or e-mailing notice of transfer to Apple Inc., ATTN: Agreement Administration, MS: 217-AC, 2511 Laguna Blvd, Elk Grove, CA 95758, U.S., fax number 916-405-3655 or agmts_transfer@apple.com, respectively, and (c) the party receiving the Plan accepts the Terms and Conditions of the Plan. When notifying Apple of the transfer of the Plan, you must provide the Plan Agreement Number, the serial number of the Covered Equipment being transferred, a copy of the Plan's original proof of purchase and the name, address, telephone number and email address of the new owner.

(ii) With Transfer From Original Covered Equipment to New Covered Equipment You may make a one time, permanent transfer of the coverage under the Plan to a new Apple product that is owned and purchased by you within thirty (30) days of the Covered Equipment purchase. The new product must be eligible for coverage under the Plan and at the time of transfer both products must be covered under the manufacturer's one (1) year limited warranty. Apple will issue a Plan Confirmation for the new product, which will then become the Covered Equipment. When notifying Apple of the transfer, you must provide the Plan Agreement Number, the serial numbers and Proof of Purchase of the products being transferred by sending or faxing, where available, notice of transfer to Apple as set forth in the section immediately above.

11. General Terms

(i) Apple may subcontract or assign performance of its obligations to third parties but shall not be relieved of its obligations to you in doing so.

(ii) Apple is not responsible for any failures or delays in performing under the Plan that are due to events outside Apple's reasonable control.

(iii) You are not required to perform preventative maintenance on the Covered Equipment to receive service under the Plan.

(iv) This Plan is offered and valid only in the fifty states of the United States of America, the District of Columbia and Canada. This Plan is not offered to persons who have not reached the age of majority. This Plan may not be available in all states or provinces, and is not available where prohibited by law.

(v) In carrying out its obligations Apple may, at its discretion and solely for the purposes of monitoring the quality of Apple's response, record part or all of the calls between you and Apple.

(vi) You agree that any information or data disclosed to Apple under this Plan is not confidential or proprietary to you. Furthermore, you agree that Apple may collect and process data on your behalf when it provides service. This may include transferring your data to affiliated companies or service providers in accordance with the Apple Customer Privacy Policy.

(vii) Apple has security measures, which should protect your data against unauthorized access or disclosure as well as unlawful destruction. You will be responsible for the instructions you give to Apple regarding the processing of data, and Apple will seek to comply with those instructions as reasonably necessary for the performance of the service and support obligations under the Plan. If you do not agree with the above or if you have questions regarding how your data may be impacted by being processed in this way, contact Apple at the telephone numbers provided.

(viii) **Apple will protect your information in accordance with Apple Customer Privacy Policy available at URL www.apple.com/legal/warranty/privacy. If you wish to have access to the information that Apple holds concerning you or if you want to make changes, access URL www.apple.com/contact/myinfo to update your personal contact preferences or you may contact Apple at URL www.apple.com/privacy/contact.**

(ix) The terms of the Plan, including the original sales receipt of the Plan and the Plan Confirmation, prevail over any conflicting, additional, or other terms of any purchase order or other document, and constitute your and Apple's entire understanding with respect to the Plan.

(x) You must purchase and register the Plan while your Apple-branded product is within Apple's One Year Limited warranty. Apple is not obligated to renew this Plan. If Apple does offer a renewal, it will determine the price and terms.

(xi) There is no informal dispute settlement process available under this Plan.

(xii) For Plans sold in the United States, "Apple" is **AppleCare Service Company, Inc.** an Arizona corporation with offices at c/o Apple, 1 Infinite Loop, (MS: 3-MAL) Cupertino, CA 95014 doing business in the state of Texas as Apple CSC, Inc., and the obligations of such Plans are backed by the full faith and credit of the provider, AppleCare Service Company, Inc. For Plans sold in Canada, "Apple" is Apple Canada Inc., with offices at 7495 Birchmount Road, Markham, Ontario, L3R 5G2, Canada. Apple Canada Inc. is the legal and financial obligor for Plans sold in Canada.

(xiii) The Administrator for Plans sold in the United States is Apple Inc. a California corporation with its registered office at 1 Infinite Loop, Cupertino, California 95014 (the "Administrator"). The Administrator is responsible for the collection and transfer to AppleCare Service Company, Inc. of the purchase price for the Plan and for the administration of claims under the Plan.

(xiv) Except where prohibited by law, the laws of the State of California govern Plans purchased in the United States. Except where prohibited by law, the laws of the province of Ontario govern Plans purchased in Canada. If the laws of any jurisdiction where this Plan is purchased are inconsistent with these terms, including the jurisdictions of Arizona, Florida, Georgia, Nevada, Oregon, Vermont, Washington, Wisconsin and Wyoming, the laws of that jurisdiction will control.

(xv) Support services under this Plan may be available in English and French only.

(xvi) There is no deductible payment due in respect of a claim made under this Plan.

(xvii) The Plan will not be cancelled due to pre-existing conditions in the Covered Equipment that are eligible for service under the Plan.

12. Country, Province and State Variations

The following country, province and state variations will control if inconsistent with any other provisions of this Plan:

12.1 Canada

Quebec Residents

The laws of the Province of Quebec will govern this Plan and any disputes arising under it. The section "Limitation of Liability" is not applicable to residents of Quebec.

12.2 United States

Alabama, California, Hawaii, Maryland, Minnesota, Missouri, New Mexico, Nevada, New York, South Carolina, Texas, Washington and Wyoming Residents

If you cancel this Plan pursuant to these Terms and Conditions, and we fail to refund the purchase price to you within thirty (30) days for California, New York, Missouri and Washington residents, within forty-five (45) days for Alabama, Hawaii, Maryland, Minnesota, Nevada, South Carolina, Texas and Wyoming residents, and within sixty (60) days for New Mexico residents, we are required to pay you a penalty of 10% per month for the unpaid amount due and owing to you. The right to cancel and receive this penalty payment only applies to the original owner of the Agreement and may not be transferred or assigned. The obligations of the provider under this service contract are backed by the full faith and credit of the provider, AppleCare Service Company, Inc.

California Residents

If you cancel within thirty (30) days of your Plan receipt, you will receive a full refund less the value of any service provided under the Plan.

Colorado Residents

Notice: This Plan is subject to the Colorado Consumer Protection Act or the Unfair Practices Act, Articles 1 and 2 of Title 6, CRS.

Connecticut Residents

The expiration date of the Plan will automatically be extended by the period that the Covered Equipment is in Apple's custody while being serviced. Resolution of Disputes: Disputes may be resolved by arbitration. Unresolved disputes or complaints may be mailed, with a copy of this Plan, to State of Connecticut, Insurance Dept., P.O. Box 816, Hartford, CT 06142-0846, Attn: Consumer Affairs.

Florida Residents

The laws of the State of Florida will govern this Plan and any disputes arising under it. The rate charged for the contract is not subject to regulation by the Florida Office of Insurance Regulation.

Michigan Residents

If performance of the service contract is interrupted because of a strike or work stoppage at the company's place of business, the effective period of the service contract shall be extended for the period of the strike or work stoppage.

Nevada Residents

Cancellations: No Plan that has been in effect for at least 70 days may be canceled by the provider before the expiration of the agreed term or one year after the effective date of the Plan, whichever occurs first, except on the following grounds:

- a. Failure by the holder to pay an amount due;
- b. Conviction of the holder of a crime which results in an increase in the service required;
- c. Discovery of fraud or material misrepresentation by the holder in obtaining the Plan, or in presenting a claim for service thereunder;
- d. Discovery of an act or omission by the holder, or a violation by the holder of any condition of the Plan, which occurred after the effective date of the Plan and which substantially and materially increases the service required under the Plan;
- e. A material change in the nature or extent of the required service or repair which occurs after the effective date of the Plan and which causes the required service or repair to be substantially and materially increased beyond that contemplated at the time that the Plan was issued or sold.

Grounds for cancellation; date cancellation effective. No cancellation of a service contract may become effective until at least 15 days after the notice of cancellation is mailed to the holder.

Cancellation of contract; Refund of purchase price; cancellation fee.

(i) If Apple cancels this Plan, Apple shall refund to Nevada consumers the portion of the purchase price that is unearned. Apple may deduct any outstanding balance on your account from the amount of the purchase price that is unearned when calculating the amount of the refund. If Apple cancels a contract pursuant to NRS 690C.270, it may not impose a cancellation fee.

(ii) Except as otherwise provided in this section, a Nevada resident who is the original purchaser of this Plan, who submits to Apple a request in writing to cancel the Plan in accordance with the terms of the Plan, shall receive a refund of the portion of the Plan's purchase price that is unearned and Apple will not deduct the value of any service provided.

(iii) If you request the cancellation of this Plan after the first thirty (30) days of the Plan term, Apple may impose the cancellation fee described in the Plan, but will not deduct the value of any service provided.

(iv) When Apple calculates the amount of a refund pursuant to subsection (ii), it may deduct from the portion of the purchase price that is unearned: (a) any outstanding balance on the account; and (b) any cancellation fee imposed pursuant to this Plan.

AppleCare Service Company, Inc. backs this Plan for Nevada residents by its full faith and credit.

No prior approval for goods or services covered under the Plan is necessary.

New Hampshire Residents

In the event you do not receive satisfaction under this contract, you may contact the New Hampshire insurance department, by mail at State Of New Hampshire Insurance Department, 21 South Fruit Street, Suite 14, Concord NH 03301, or by telephone, via Consumer Assistance, at 800-852-3416.

New Mexico Residents

Cancellations: No Plan that has been in effect for at least 70 days may be canceled by the provider before the expiration of the agreed term or one year after the effective date of the Plan, whichever occurs first, except on the following grounds:

- a. Failure by the holder to pay an amount due;
- b. Conviction of the holder of a crime which results in an increase in the service required;
- c. Discovery of fraud or material misrepresentation by the holder in obtaining the Plan, or in presenting a claim for service thereunder;
- d. Discovery of an act or omission by the holder, or a violation by the holder of any condition of the Plan, which occurred after the effective date of the Plan and which substantially and materially increases the service required under the Plan;
- e. A material change in the nature or extent of the required service or repair which occurs after the effective date of the Plan and which causes the required service or repair to be substantially and materially increased beyond that contemplated at the time that the Plan was issued or sold.

North Carolina Residents

The purchase of this Plan is not required either to purchase or to obtain financing for computer equipment. Apple Inc. will not cancel this plan **EXCEPT** for failure to pay the purchase price for the Plan.

Oregon Residents

In the event you do not receive satisfaction under this contract, you may contact the Oregon Department of Consumer and Business Services by mail at the Department of Consumer and Business Services, Oregon Insurance Division, 350 Winter Street NE, Salem, OR 97301; or by telephone via Consumer Advocacy, at 888-877-4894.

South Carolina Residents

Unresolved complaints or Plan regulation questions may be addressed to the South Carolina Department of Insurance, P.O. Box 100105, Columbia, South Carolina 29202-3105, Tel: 1-800-768-3467.

Tennessee Residents

This Plan shall be extended as follows: (1) the number of days the consumer is deprived of the use of the product because the product is in repair; plus two (2) additional workdays.

Texas Residents

The provider may cancel this Plan with no prior notice for non-payment, misrepresentation or a substantial breach of a duty by the holder relating to the Covered Equipment or its use. Unresolved complaints or Contract regulation questions may be addressed to the TX Dept. of Licensing and Regulation, P.O. Box 12157, Austin, TX 78711, U.S.

Wisconsin Residents

THIS WARRANTY IS SUBJECT TO LIMITED REGULATION BY THE OFFICE OF THE COMMISSIONER OF INSURANCE.

If you cancel within thirty (30) days of your Plan's purchase, or receipt of these Terms and Conditions, whichever occurs later, you will receive a full refund. If you cancel more than thirty (30) days after your receipt of the Plan, you will receive a pro-rata refund of the original purchase price, based on the percentage of unexpired Coverage Period, less a cancellation fee of twenty-five (\$25 USD) dollars or ten percent (10%) of the pro-rata amount, whichever is less. No deduction shall be made from the refund for the cost of any service received. Apple will not cancel this plan **EXCEPT** for failure to pay the purchase price for the plan. If Apple cancels the Plan, you will receive a pro-rata refund for the Plan's unexpired term.

Wyoming Residents

If Apple cancels this Plan, Apple will mail to you written notice of the cancellation at your last known address contained in Apple's records no less than ten (10) days prior to the effective cancellation date. The prior written notice will contain the effective date of cancellation and the

reasons for cancellation. Apple is not obligated to provide prior notice if cancellation is due to nonpayment of the Plan, a material misrepresentation by you to Apple, a substantial breach of your duties under the Plan or a substantial breach of your duties relating to the Covered Equipment or its use.

Disputes arising under this Plan may be settled in accordance with the Wyoming Arbitration Act.

Telephone Numbers

In the U.S:

800-APL-CARE (800-275-2273)

Seven days a week

8:00 A.M. to 8:00 P.M. central time*

In Canada:

800-263-3394

Seven days a week

9:00 A.M. to 9:00 P.M. eastern time*

* Telephone numbers and hours of operation may vary and are subject to change. You can find the most up-to-date local and international contact information at www.apple.com/contact/phone_contacts.html. Toll-free numbers are not available in all countries.

081811 NA APP iPad English v1.3

EXHIBIT 2

Terms and Conditions

AppleCare+ for iPhone

AppleCare+ for iPad

AppleCare+ for iPod

How Consumer Rights Affect This Plan

THE BENEFITS CONFERRED BY THIS PLAN ARE IN ADDITION TO ALL RIGHTS AND REMEDIES PROVIDED UNDER CONSUMER PROTECTION LAWS AND REGULATIONS. THIS PLAN SHALL NOT PREJUDICE THE RIGHTS GRANTED BY APPLICABLE CONSUMER LAW, INCLUDING THE RIGHT TO RECEIVE REMEDIES UNDER STATUTORY WARRANTY LAW AND TO SEEK DAMAGES IN THE EVENT OF THE NON-PERFORMANCE BY APPLE OF ANY OF ITS CONTRACTUAL OBLIGATIONS.

1. The Plan

This service contract governs the hardware service and technical support provided to you by Apple under the above-mentioned plans (each referred to herein as the “Plan”) for an Apple-branded iPhone, iPad or iPod and the accessories contained in its original packaging (“Covered Device”) listed on your proof of coverage document (“Plan Confirmation”). Apple will also provide hardware service and technical support coverage for an AirPort Express or an AirPort Extreme Base Station, and an AirPort Time Capsule product (“iPad Connectivity Device”) if the iPad Connectivity Device is used with an iPad covered under the AppleCare+ for iPad and purchased no earlier than two years before the covered iPad . (For purposes of this service contract, the Covered Device and, if applicable, the iPad Connectivity Device is known collectively as the “Covered Equipment”).

2. When Coverage Begins and Ends

Coverage begins when you purchase the Plan. Coverage ends twenty-four (24) months from the date of retail purchase of your original Covered Device (“Plan Term”). Your Plan Confirmation will be provided to you at or about the time of purchase or sent to you automatically thereafter. The terms of this Plan, the original sales receipt for your Plan and the Plan Confirmation are each part of your service contract. To obtain a copy of your Plan Confirmation, follow the instructions and enter your Covered Device’s serial number at www.apple.com/support/applecare/view. You can find the price of the Plan on the original sales receipt. Coverage under this Plan is additional to the coverage provided under applicable mandatory laws, the manufacturer’s hardware warranty and complimentary technical support.

3. What is Covered?

3.1 Hardware Service

If during the Plan Term, you submit a valid claim by notifying Apple that (i) a defect in materials and workmanship has arisen in the Covered Equipment, or (ii) the capacity of the Covered Equipment’s battery to hold an electrical charge has depleted fifty (50%) percent or more from its original specifications, Apple will either (a) repair the defect at no charge, using new parts or parts that are equivalent to new in performance and reliability, or (b) exchange the Covered Equipment, with a replacement product that is new or equivalent to new in performance and reliability. All replacement products provided under this Plan will at a minimum be functionally equivalent to the original product. If Apple exchanges the Covered Equipment, the original product becomes Apple’s property and the replacement product is your property, with coverage for the remaining period of the Plan.

3.2 Accidental Damage from Handling

If during the Plan Term you submit a valid claim notifying Apple that the Covered Device has failed due to accidental damage from handling (“ADH”), Apple will, subject to the service fee described below, either (i) repair the defect using new or refurbished parts that are equivalent to new in performance and reliability, or (ii) exchange the Covered Device with a replacement product that is new or equivalent to new in performance and reliability (both individually known as a “Service Event”). **ADH coverage will expire and all of Apple’s obligations to you under this section 3.2 will be fulfilled in its entirety before the end of the Plan Term when Apple, as a result of ADH claims, has provided to you two (2) Service Events.** ADH coverage only applies to an operational or mechanical failure caused by an accident from handling that is the result of an unexpected and unintentional external event (e.g. drops and liquid contact) that arises from your normal daily usage of the Covered Device as intended for such Covered Device. ADH coverage does not include (a) protection against normal wear and tear, theft, misplacement, reckless, abusive, willful or intentional conduct associated with handling and use of the Covered Device, (b) protection against any other act or result not covered by the Plan, as described in Section 4.2 below, or (c) any resultant damage to the Covered Device that arises from one or more conditions described in Section 3.2(a) or (b). Apple may ask you to provide an explanation of where and when the accident occurred with a detailed description of the actual event. Apple will deny your claim if you fail to pay the service fee or fail to provide information relating to the accident when asked.

- Under AppleCare+ for iPhone, you will pay a \$79 (U.S.) dollar service fee plus applicable tax for each ADH claim.
- Under AppleCare+ for iPad, you will pay a \$49 (U.S.) dollar service fee plus applicable tax for each ADH claim.
- Under AppleCare+ for iPod, you will pay a \$29 (U.S.) dollar service fee plus applicable tax for each ADH claim.

3.3 Technical Support

During the Plan Term, Apple will provide you with access to telephone and web-based technical support resources. Your complimentary technical support ends ninety (90) days after the Covered Equipment’s date of original purchase. Technical support may include assistance with installation, launch, configuration, troubleshooting, and recovery (except for data recovery), including storing, retrieving, and managing files; interpreting system error messages; and determining when hardware service is required or ADH coverage may be applicable. Apple will provide support for the then-current version of the supported software, and the prior Major Release. For purposes of this section, the term “Major Release” means a significant version of software that is commercially released by Apple in a release number format such as “1.0” or “2.0” and which is not in beta or pre-release form.

3.4 Scope of Technical Support

Under the Plan, Apple will provide technical support for the following:

- (i) Covered Equipment,
- (ii) Operating system (“OS”) and software applications that are pre-installed with the Covered Equipment (“Consumer Software”),
- (iii) Apple-branded software applications that are designed to operate with the Covered Equipment, including but not limited to Keynote, Pages, Numbers, iPhoto, iMovie and GarageBand (also referred to as “Consumer Software”), and
- (iv) Connectivity issues between the Covered Equipment and a Supported Computer. A “Supported Computer” means a computer that meets the Covered Equipment’s connectivity specifications and runs an operating system supported by the Covered Equipment.

4. What is not Covered?

4.1 Hardware Service and ADH Coverage Area

Under AppleCare+ for iPhone and AppleCare+ for iPad, Apple may restrict hardware service and ADH coverage to the country where the Covered Device was originally purchased.

4.2 Hardware Coverage and ADH Coverage

- (i) The Plan does not apply to installation, removal or disposal of the Covered Equipment, or provision of equipment while the Covered Equipment is being serviced.
- (ii) The Plan does not apply to damage caused by (a) a product that is not the Covered Equipment, (b) abuse, misuse, fire, earthquake or other external causes except as described in section 3.2 above, (c) operating the Covered Equipment outside the permitted or intended uses described by the manufacturer, or (d) service performed by anyone who is not a representative of Apple or an Apple Authorized Service Provider ("AASP").
- (iii) The Plan does not apply to a product with a serial number that has been altered, defaced or removed, or has been modified to alter its functionality or capability without the written permission of the manufacturer.
- (iv) The Plan does not apply to Covered Equipment that has been lost or stolen. This Plan only applies to Covered Equipment returned to Apple in its entirety.
- (v) The Plan does not apply to cosmetic damage to the Covered Equipment, including but not limited to scratches and dents that do not otherwise affect the functionality of the Covered Equipment.
- (vi) The Plan does not apply to preventative maintenance on the Covered Equipment.
- (vii) The Plan does not apply to defects caused by normal wear and tear or which is otherwise due to normal aging of the product, and
- (viii) The Plan does not apply to a pre-existing condition on any Covered Equipment if you purchased the Plan after you purchased the Covered Equipment.

Important: Do not open the Covered Equipment, as damage caused as a result of opening the equipment is not covered by this Plan. Only Apple or an authorized service provider should perform service on the Covered Equipment.

4.3 Technical Support

- (i) The Plan does not include Technical Support for your use of the OS and Consumer Software as server-based applications.
- (ii) The Plan does not include Technical Support for issues that could be resolved by upgrading software to the then current version.
- (iii) The Plan does not include Technical Support for third-party products or their effects on or interactions with the Covered Equipment, the OS or Consumer Software.
- (iv) The Plan does not include Technical Support for your use of a computer or operating system that is not related to Consumer Software or to connectivity issues with the Covered Equipment.
- (v) The Plan does not include Technical Support for Apple software other than the OS or Consumer Software, as covered under the Plan.
- (vi) The Plan does not include Technical Support for OS software or any Apple-branded software designated as "beta," "prerelease," or "preview" or similarly labeled software, and
- (vii) The Plan does not include Technical Support for damage to, or loss of any software or data that was residing or recorded on the Covered Equipment. The Plan does not cover the recovery or reinstallation of software programs and user data.

5. How to Obtain Service and Support?

You may obtain hardware services, which include those relating to ADH coverage and technical support. To obtain such services or support, please access the Apple website (www.apple.com/support/country) or call the telephone number listed below. If you call, you will need to give the Apple technical support representative who answers your call the Plan Agreement Number or Covered Equipment serial number before you can receive assistance. You need to keep your Plan Confirmation document and the original sales receipt for your Covered Equipment and your Plan, as it will be required if there is any question as to your Covered Equipment's eligibility for coverage.

6. Service Options

6.1 Apple will provide hardware services to you through one or more of these options:

- (i) Carry-in service. Carry-in service is available for most Covered Equipment products. Return the Covered Equipment to an Apple-owned retail store location or to an AASP that offers carry-in service. Service will be performed for you at the store, or the store may send the Covered Equipment to an Apple repair service ("ARS") site for service. Once you are notified that service is complete, you will promptly retrieve the Covered Equipment.
- (ii) Mail-in service. Direct mail-in service is available for most Covered Equipment products. If Apple determines that your Covered Equipment is eligible for mail-in service, Apple will send you prepaid way bills (and if you no longer have the original packaging, packaging material) and you will ship the Covered Equipment to an ARS site in accordance with Apple's instructions. Once service is complete, the ARS site will return the Covered Equipment to you. Apple will pay for shipping to and from your location if you follow all instructions.
- (iii) Express Replacement Service ("ERS") or do-it-yourself ("DIY") parts service. ERS is available for certain Covered Equipment products. DIY parts service is available for many Covered Equipment parts or accessories, and this will allow you to service your own Covered Equipment. If ERS or DIY parts service is available in the circumstances, the following process will apply.
 - (a) Service where Apple requires return of the replaced Covered Equipment or part. Apple may require a credit card authorization to serve as security for the retail price of the replacement Covered Equipment or part and applicable shipping costs. If you are not able to provide credit card authorization, service may not be available to you and Apple will offer an alternative arrangement for service. Apple will ship a replacement Equipment or part to you with installation instructions, if such are applicable, and any requirements for the return of the replaced Covered Equipment or part. If you follow the instructions, Apple will cancel the credit card authorization, so you will not be charged for the Covered Equipment or part and shipping to and from your location. If you fail to return the replaced Covered Equipment or part as instructed or return a replaced Covered Equipment or part that is ineligible for service, Apple will charge the credit card for the authorized amount.
 - (b) Service where Apple does not require return of the replaced product or part. Apple will ship you free of charge a replacement product or part accompanied by instructions on installation, if applicable, and any requirements for the disposal of the replaced product or part.
 - (c) Apple is not responsible for any labor costs you incur in respect to ERS or DIY parts service. Should you require further assistance, you should contact Apple at the telephone number listed below.

6.2 Apple reserves the right to change the method by which Apple may provide repair or replacement service to you, and your Covered Equipment's eligibility to receive a particular method of service. Service will be limited to the options available in the country where you request service. Service options, parts availability and response times may vary according to country. If service is not available for the Covered Equipment in a country that is not the country of purchase, you may be responsible for shipping and handling charges to facilitate service to a country where service is available. If you seek service in a country that is not the country of purchase, you will comply with all applicable import and export laws and regulations and be responsible for all custom duties, V.A.T. and other associated taxes and charges. For international service, Apple may repair or exchange products and parts with comparable products and parts that comply with local standards.

7. Your Responsibilities

To receive service or support under the Plan, you agree to comply with each of the terms listed below.

- (i) You will provide your Plan Agreement Number and a copy of your Plan's original proof of purchase, if requested.
- (ii) You will provide information about the symptoms and causes of the issues with the Covered Equipment.
- (iii) You will respond to requests for information, including but not limited to the Covered Equipment serial number, model, version of the operating system and software installed, any peripherals devices

connected or installed on the Covered Equipment, any error messages displayed, the actions which were taken before the Covered Equipment experienced the issue and the steps taken to resolve the issue.

- (iv) You will follow instructions Apple gives you, including but not limited to refraining from sending Apple products and accessories that are not subject to repair or replacement service and packing the Covered Equipment in accordance with shipping instructions.
- (v) You will update software to currently published releases prior to seeking service.
- (vi) You will make sure to back up software and data residing on the Covered Equipment. DURING HARDWARE SERVICE, APPLE WILL DELETE THE CONTENTS OF THE COVERED EQUIPMENT AND REFORMAT THE STORAGE MEDIA. Apple will return your Covered Equipment or provide a replacement as the Covered Equipment was originally configured, subject to applicable updates. Apple may install OS updates as part of hardware service that will prevent the Covered Equipment from reverting to an earlier version of the OS. Third party applications installed on the Covered Equipment may not be compatible or work with the Covered Equipment as a result of the OS update. You will be responsible for reinstalling all other software programs, data and passwords.

8. Limitation of Liability

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, APPLE AND ITS EMPLOYEES AND AGENTS WILL UNDER NO CIRCUMSTANCES BE LIABLE TO YOU OR ANY SUBSEQUENT OWNER OF THE COVERED EQUIPMENT FOR ANY INDIRECT OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO COSTS OF RECOVERING, REPROGRAMMING, OR REPRODUCING ANY PROGRAM OR DATA OR THE FAILURE TO MAINTAIN THE CONFIDENTIALITY OF DATA, ANY LOSS OF BUSINESS, PROFITS, REVENUE OR ANTICIPATED SAVINGS, RESULTING FROM APPLE'S OBLIGATIONS UNDER THIS PLAN. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, THE LIMIT OF APPLE AND ITS EMPLOYEES AND AGENT'S LIABILITY TO YOU AND ANY SUBSEQUENT OWNER ARISING UNDER THE PLAN SHALL NOT EXCEED THE ORIGINAL PRICE PAID FOR THE PLAN. APPLE SPECIFICALLY DOES NOT WARRANT THAT (i) IT WILL BE ABLE TO REPAIR OR REPLACE COVERED EQUIPMENT WITHOUT RISK TO OR LOSS OF PROGRAMS OR DATA, (ii) IT WILL MAINTAIN THE CONFIDENTIALITY OF DATA, OR (iii) THAT THE OPERATION OF THE PRODUCT WILL BE UNINTERRUPTED OR ERROR-FREE.

FOR CONSUMERS IN JURISDICTIONS WHO HAVE THE BENEFIT OF CONSUMER PROTECTION LAWS OR REGULATIONS, THE BENEFITS CONFERRED BY THIS PLAN ARE IN ADDITION TO ALL RIGHTS AND REMEDIES PROVIDED UNDER SUCH LAWS AND REGULATIONS. TO THE EXTENT THAT LIABILITY UNDER SUCH LAWS AND REGULATIONS MAY BE LIMITED, APPLE'S LIABILITY IS LIMITED, AT ITS SOLE OPTION, TO REPLACE OR REPAIR OF THE COVERED EQUIPMENT OR SUPPLY OF THE SERVICE. SOME STATES OR PROVINCES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO SOME OR ALL OF THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.

9. Cancellation

You may cancel this Plan at any time for any reason. If you decide to cancel this Plan, you may call Apple at the telephone number below to do so, or you may send or fax written notice with your Plan Agreement Number to AppleCare Administration, P.O. Box 149125, Austin, TX 78714-9125, U.S. (fax number 916-405-3973). You must send a copy of the Plan's original proof of purchase with your notice. Unless local law provides otherwise, if you cancel within thirty (30) days of your Plan's purchase, or receipt of this Plan, whichever occurs later, you will receive a full refund less the value of any service provided under the Plan. If you cancel more than thirty (30) days after your receipt of this Plan, you will receive a pro rata refund of the original purchase price. The pro rata refund is based on the percentage of unexpired Plan Term from the Plan's date of purchase, less (a) a cancellation fee of twenty-five (\$25) dollars or ten percent (10%) of the pro-rata amount, whichever is less, and (b) the value of any service provided to you under the Plan. Unless applicable local law provides otherwise, Apple may cancel this Plan for fraud or material misrepresentation. Unless applicable local law provides otherwise, Apple may also cancel this Plan if service parts for the Covered Equipment are not available, upon thirty (30) days prior written notice. If Apple cancels this Plan for the unavailability of service parts, you will receive a pro-rata refund for the Plan's unexpired term.

10. Transfer of Plan

Subject to the restrictions set forth below, you may make a one-time permanent transfer of all of your rights under the Plan to another party, provided that: (a) you transfer to the other party the original proof of purchase, the Plan's Confirmation, the Plan's printed materials and this service contract; (b) you notify Apple of the transfer by sending, faxing or e-mailing notice of transfer to Apple Inc., ATTN: Agreement Administration, MS: 217-AC, 2511 Laguna Blvd, Elk Grove, CA 95758, U.S., fax number 916-405-3655 or agmts_transfer@apple.com, respectively, and (c) the other party accepts the terms of this service contract. When notifying Apple of the transfer, you must provide the Plan Agreement Number, the serial number of the Covered Equipment, and the name, address, telephone number and email address of the new owner.

11. General Terms

- (i) Apple may subcontract or assign performance of its obligations to third parties but shall not be relieved of its obligations to you in doing so.
- (ii) Apple is not responsible for any failures or delays in performing under the Plan that are due to events outside Apple's reasonable control.
- (iii) You are not required to perform preventative maintenance on the Covered Equipment to receive service under the Plan.
- (iv) This Plan is offered and valid only in the fifty states of the United States of America and the District of Columbia and all provinces and territories of Canada. Persons who have not reached the age of majority may not purchase this Plan. This Plan may not be available in all states of the United States and in all provinces and territories of Canada, and is not available where prohibited by law.
- (v) In carrying out its obligations Apple may, at its discretion and solely for the purposes of monitoring the quality of Apple's response, record part or all of the calls between you and Apple.
- (vi) You agree that any information or data disclosed to Apple under this Plan is not confidential or proprietary to you. Furthermore, you agree that Apple may collect and process data on your behalf when it provides service. This may include transferring your data to affiliated companies or service providers in accordance with the Apple Customer Privacy Policy.
- (vii) Apple has security measures, which should protect your data against unauthorized access or disclosure as well as unlawful destruction. You will be responsible for the instructions you give to Apple regarding the processing of data, and Apple will seek to comply with those instructions as reasonably necessary for the performance of the service and support obligations under the Plan. If you do not agree with the above or if you have questions regarding the processing of your data, contact Apple at the telephone numbers provided.
- (viii) Apple will protect your information in accordance with Apple Customer Privacy Policy available at <http://www.apple.com/legal/internet-services/privacy>. If you wish to have access to the information that Apple holds concerning you or if you want to make changes, access URL www.apple.com/contact/myinfo to update your personal contact preferences or you may contact Apple at URL www.apple.com/privacy/contact.
- (ix) The terms of the Plan, including the original sales receipt of the Plan and the Plan Confirmation, shall prevail over any conflicting, additional, or other terms of any purchase order or other document, and constitute your and Apple's entire understanding with respect to the Plan.
- (x) Apple is not obligated to renew this Plan. If Apple does offer to renew this Plan, it will determine the price and terms.
- (xi) There is no informal dispute settlement process available under this Plan.
- (xii) "Apple" is AppleCare Service Company, Inc., an Arizona corporation with its registered office at c/o CT Corporation System, 2394 East Camelback Road, Phoenix, Arizona 85016, doing business in the state of Texas as Apple CSC, Inc., for Plans sold in the United States. The obligations of all Plans sold in the United States are backed by the full faith and credit of the provider, AppleCare Service Company, Inc. "Apple" is Apple Canada Inc., with offices at 7495 Birchmount Road, Markham, Ontario, L3R 5G2, Canada for Plans sold in Canada. Apple Canada Inc. is the legal and financial obligor for Plans sold in Canada.

- (xiii) The Administrator is Apple Inc. (the "Administrator" TDLR License #300), a California corporation with its registered office at 1 Infinite Loop, Cupertino, California 95014. The Administrator is responsible for the collection and transfer to AppleCare Service Company, Inc. of the purchase price for the Plan and for the administration of claims under the Plan.
- (xiv) Except where prohibited by law, the laws of the State of California govern Plans purchased in the United States. The laws of the province of Ontario govern Plans purchased in Canada except where prohibited by law. If these terms are inconsistent with the laws of any jurisdiction where you purchase this Plan, including the laws of Arizona, Florida, Georgia, Nevada, Oregon, Vermont, Washington, Wisconsin and Wyoming, then the laws of that jurisdiction will control.
- (xv) Support services under this Plan may be available in English and French only.

12. Country, Province and State Variations

One or more of the terms that appear below may apply to the Plan. The terms below may vary from one or more of the terms that appear above this section. The following country, province or state variations will control if inconsistent with any other provisions of this Plan:

12.1 Canada

In Canada, the service fee for each ADH Claim as described in section 3.2 is (i) seventy-nine (CDN\$79) Canadian dollars plus applicable tax for AppleCare+ for iPhone, (ii) forty-nine (CDN\$49) Canadian dollars plus applicable tax for AppleCare+ for iPad, and (iii) twenty-nine (CDN\$29) Canadian dollars plus applicable tax for AppleCare+ for iPod. The cancellation fee described in section 9 is twenty-five (CDN\$25) Canadian dollars or ten percent (10%) of the pro-rata amount, whichever is less.

Quebec Residents

The laws of the Province of Quebec will govern this Plan and any disputes arising under it. The section "Limitation of Liability" is not applicable to residents of Quebec.

12.2 United States

Alabama, California, Hawaii, Maryland, Minnesota, Missouri, New Mexico, Nevada, New York, South Carolina, Texas, Washington and Wyoming Residents.

If you purchased the Plan in one of these states, this term applies to the Plan.

If you cancel this Plan pursuant to these terms and conditions, and Apple fails to refund the purchase price to you within the time period specified below Apple will pay you a penalty of 10% per month for the unpaid amount due and owing. For California, New York, Missouri and Washington residents Apple will provide a refund within 30 days. For Alabama, Hawaii, Maryland, Minnesota, Nevada, South Carolina, Texas and Wyoming residents Apple will provide a refund within 45 days. For New Mexico residents, Apple will provide a refund within 60 days. The right to cancel and receive this penalty payment only applies to the original owner of the Agreement and may not be transferred or assigned. The obligations of the provider under this service contract are backed by the full faith and credit of the provider, AppleCare Service Company, Inc.

California Residents

If you purchased the Plan in this state, this term applies to the Plan.

If you cancel the Plan within thirty (30) days of your Plan receipt, you will receive a full refund less the value of any service provided under the Plan.

Colorado Residents

If you purchased the Plan in this state, this term applies to the Plan.

Notice: This Plan is subject to the Colorado Consumer Protection Act or the Unfair Practices Act, Articles 1 and 2 of Title 6, CRS.

Connecticut Residents

If you purchased the Plan in this state, this term applies to the Plan.

The expiration date of the Plan will automatically be extended by the period that the Covered Equipment is in Apple's custody while it is being serviced. Resolution of Disputes: Disputes may be resolved by arbitration. Unresolved disputes or complaints may be mailed, with a copy of this Plan, to State of

Connecticut, Insurance Dept., P.O. Box 816, Hartford, CT 06142-0846, Attn: Consumer Affairs.

Florida Residents

If you purchased the Plan in this state, this term applies to the Plan.

The laws of the State of Florida will govern this Plan and any disputes arising under it. The rate that is charged for this Plan is not subject to regulation by the Florida Office of Insurance Regulation. No cancellation fee will be imposed in the event of a cancellation.

Michigan Residents

If you purchased the Plan in this state, this term applies to the Plan.

If performance of the service contract is interrupted because of a strike or work stoppage at the company's place of business, the effective period of the service contract shall be extended for the period of the strike or work stoppage.

Nevada Residents

If you purchased the Plan in this state, this term applies to the Plan.

Cancellations: No Plan that has been in effect for at least 70 days may be canceled by the provider before the expiration of the agreed term or one year after the effective date of the Plan, whichever occurs first, except on the following grounds:

- a. Failure by the holder to pay an amount due;
- b. Conviction of the holder of a crime, which results in an increase in the service required;
- c. Discovery of fraud or material misrepresentation by the holder in obtaining the Plan, or in presenting a claim for service thereunder;
- d. Discovery of an act or omission by the holder, or a violation by the holder of any condition of the Plan, which occurred after the effective date of the Plan and which substantially and materially increases the service required under the Plan;
- e. A material change in the nature or extent of the required service or repair which occurs after the effective date of the Plan and which causes the required service or repair to be substantially and materially increased beyond that contemplated at the time that the Plan was issued or sold.

Grounds for cancellation; date cancellation effective. No cancellation of a service contract may become effective until at least 15 days after the notice of cancellation is mailed to the holder.

Cancellation of contract; refund of purchase price; cancellation fee:

- (i) If Apple cancels this Plan, Apple shall refund to Nevada consumers the portion of the purchase price that is unearned. Apple may deduct any outstanding balance on your account from the amount of the purchase price that is unearned when calculating the amount of the refund. If Apple cancels a contract pursuant to NRS 690C.270, it may not impose a cancellation fee.
- (ii) Except as otherwise provided in this section, a Nevada resident who is the original purchaser of this Plan, who submits to Apple a request in writing to cancel the Plan in accordance with the terms of the Plan, shall receive a refund of the portion of the Plan's purchase price that is unearned and Apple will not deduct the value of any service provided.
- (iii) If you request the cancellation of this Plan after the first thirty (30) days of the Plan term, Apple may impose the cancellation fee described in the Plan, but will not deduct the value of any service provided.
- (iv) When Apple calculates the amount of a refund pursuant to subsection (ii), it may deduct from the portion of the purchase price that is unearned (a) any outstanding balance on the account and (b) any cancellation fee imposed pursuant to this Plan. AppleCare Service Company, Inc. backs this Plan for Nevada residents by its full faith and credit.

No prior approval for services or goods covered under the Plan is necessary.

Tax is not applicable in the state of Nevada on the service fee for ADH claims.

New Hampshire Residents

If you purchased the Plan in this state, this term applies to the Plan.

In the event you do not receive satisfaction under this contract, you may contact the New Hampshire

insurance department, by mail at State of New Hampshire Insurance Department, 21 South Fruit Street, Suite 14, Concord NH 03301, or by telephone, via Consumer Assistance, at 800-852-3416.

New Mexico Residents

If you purchased the Plan in this state, this term applies to the Plan.

Cancellations: No Plan that has been in effect for at least 70 days may be canceled by the provider before the expiration of the agreed term or one year after the effective date of the Plan, whichever occurs first, except on the following grounds:

- a. Failure by the holder to pay an amount due;
- b. Conviction of the holder of a crime, which results in an increase in the service required;
- c. Discovery of fraud or material misrepresentation by the holder in obtaining the Plan, or in presenting a claim for service thereunder;
- d. Discovery of an act or omission by the holder, or a violation by the holder of any condition of the Plan, which occurred after the effective date of the Plan and which substantially and materially increases the service required under the Plan; or
- e. A material change in the nature or extent of the required service or repair which occurs after the effective date of the Plan and which causes the required service or repair to be substantially and materially increased beyond that contemplated at the time that the Plan was issued or sold.

North Carolina Residents

If you purchased the Plan in this state, this term applies to the Plan.

The purchase of this Plan is not required either to purchase or to obtain financing for the Covered Equipment. Apple Inc. will not cancel this Plan EXCEPT for failure to pay the purchase price for the Plan.

Ohio Residents

If you purchased the Plan in this state, this term applies to the Plan.

Although this service contract is not an insurance policy, the obligations for claims hereunder for Plans sold in Ohio are insured by Illinois National Insurance Co., with an address of 180 Maiden Lane 25th Floor, New York, NY 10038 (Phone Number: 1-800-250-3819). With any correspondence, please provide your phone number and case number, if applicable. You are entitled to make a direct claim against the insurance company if Apple fails to provide service pursuant to a claim sixty (60) days after Apple's receipt of your claim.

Oregon Residents

If you purchased the Plan in this state, this term applies to the Plan.

In the event you do not receive satisfaction under this contract, you may contact the Oregon Department of Consumer and Business Services by mail at the Department of Consumer and Business Services, Oregon Insurance Division, 350 Winter Street NE, Salem, OR 97301; or by telephone via Consumer Advocacy, at 888-877-4894.

South Carolina Residents

If you purchased the Plan in this state, this term applies to the Plan.

You may address any unresolved complaints or Plan regulation questions to the South Carolina Department of Insurance, P.O. Box 100105, Columbia, South Carolina 29202-3105, Tel: 1-800-768-3467.

Tennessee Residents

If you purchased the Plan in this state, this term applies to the Plan.

The Plan Term of this Plan shall be extended the number of days you are deprived of the use of the product because the product is in repair plus two (2) additional workdays.

Texas Residents

If you purchased the Plan in this state, this term applies to the Plan.

The provider may cancel this Plan with no prior notice for non-payment, misrepresentation or a substantial breach of a duty by the holder relating to the Covered Equipment or its use. You may address any unresolved complaints or contract regulation question to the TX Dept. of Licensing and Regulation, P.O. Box 12157, Austin, TX 78711, U.S.

The Administrator in Texas is Apple Inc., TDLR License. #300.

Wisconsin Residents

If you purchased the Plan in this state, this term applies to the Plan.

THIS WARRANTY IS SUBJECT TO LIMITED REGULATION BY THE OFFICE OF THE COMMISSIONER OF INSURANCE.

If you cancel this Plan within thirty (30) days of your Plan's purchase, or receipt of these Terms and Conditions, whichever occurs later, you will receive a full refund. If you cancel this Plan more than thirty (30) days after your receipt of the Plan, you will receive a pro-rata refund of the original purchase price, based on the percentage of the unexpired Plan Term, less a cancellation fee of twenty-five (\$25 USD) dollars or ten percent (10%) of the pro-rata amount, whichever is less. No deduction shall be made from the refund for the cost of any service received. Apple will not cancel this Plan EXCEPT for failure to pay the purchase price for the Plan. If Apple cancels the Plan, you will be paid a pro-rata refund for the Plan's unexpired term.

Wyoming Residents

If Apple cancels this Plan, Apple will mail to you written notice of the cancellation at your last known address contained in Apple's records. Apple will mail this written notice to you no less than ten (10) days prior to the date when the cancellation will take effect. This written notice to you will contain the date when the cancellation will take effect and the reasons for the cancellation. Apple is not obligated to provide prior notice if cancellation is due to nonpayment of the Plan, a material misrepresentation by you to Apple, a substantial breach of your duties under the Plan or a substantial breach of your duties relating to the Covered Equipment or its use.

Disputes that arise under this Plan may be settled in accordance with the Wyoming Arbitration Act.

Telephone Numbers

United States

800-APL-CARE (800-275-2273)

7:00 A.M. to 10:15 P.M. central time*

Seven days a week

Canada

800-263-3394

8:00 A.M. to 8:15 P.M. central time*

Seven days a week

* Telephone numbers and hours of operation may vary and are subject to change. You can find the most up-to-date local and international contact information at www.apple.com/contact/phone_contacts.html. Toll-free numbers are not available in all countries.

www.apple.com

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EXHIBIT 3

FILED UNDER SEAL

EXHIBIT 4

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10 Attorneys for Defendant
APPLE INC.

11 UNITED STATES DISTRICT COURT
12 NORTHERN DISTRICT OF CALIFORNIA
13 SAN FRANCISCO DIVISION
14

15 VICKY MALDONADO AND JUSTIN
16 CARTER, individually and on behalf of
17 themselves and all others similarly situated,

18 Plaintiff,

19 v.

20 APPLE INC., APPECARE SERVICE
COMPANY, INC., and APPLE CSC INC.,

21 Defendants.
22

Case No. 3:16-cv-04067-WHO

Related Case:

English v. Apple Inc. et al.

Case No. 3:14-cv-01619-WHO

**DEFENDANT APPLE INC.’S
RESPONSES AND OBJECTIONS TO
PLAINTIFFS’ FIRST SET OF
“NON-UNIFORM” INTERROGATORIES**

Complaint Filed: July 20, 2016

Trial Date: December 10, 2018

23 PROPOUNDING PARTY: Plaintiffs VICKY MALDONADO and JUSTIN CARTER

24 RESPONDING PARTY: Defendant APPLE INC.

25 SET NO.: ONE
26

27 **CONTAINS INFORMATION DESIGNATED CONFIDENTIAL AND
28 HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY**

1 Pursuant to Federal Rules of Civil Procedure 26 and 33, Defendant Apple Inc. hereby
2 objects and responds to Plaintiffs Vicky Maldonado and Justin Carter's First Set of "Non-
3 Uniform" Interrogatories, dated May 31, 2017. The responses to Interrogatory Nos. 6, 7, 8, 14,
4 and 17 contain information designated "CONFIDENTIAL" or "HIGHLY CONFIDENTIAL –
5 ATTORNEYS' EYES ONLY" pursuant to the terms of the Stipulated Protective Order entered
6 on April 3, 2017 (ECF No. 68) and should be treated as confidential pursuant to the terms of the
7 order.

8 PRELIMINARY STATEMENT

9 Apple has not yet completed its investigation in this matter. Apple's objections and
10 responses are based only upon such information and documents as are currently available and
11 specifically known to Apple, upon Apple's information and belief, and upon Apple's current
12 understanding of the facts and Plaintiffs' claims. As discovery in this action proceeds, Apple
13 anticipates that it may discover additional or different documents or information. Without in any
14 way obligating itself to do so, Apple reserves the right to amend, modify, supplement, clarify, or
15 further explain its response at any time in the future, and to make any use of, or to introduce at
16 any hearing or trial, documents or information discovered after Apple's initial response or
17 production.

18 In responding to the Interrogatories, Apple does not concede the relevancy, materiality, or
19 admissibility of the subject matter to which the Interrogatories refer. Apple's response to the
20 Interrogatories is made subject to, and without waiving or intending to waive, any objections as to
21 the competence, relevance, materiality, privileged nature, or admissibility as evidence or for any
22 other purpose, of the response given herein, or of the subject matter thereof, in any proceeding.

23 Subject to the foregoing, Apple objects and responds to the Interrogatories as follows:

24 GENERAL OBJECTIONS

25 The following general objections are stated with respect to each definition and
26 Interrogatory, and are incorporated by reference into the specific objections stated below:

27 1. Apple objects to the Definitions, Instructions, and Interrogatories to the extent that
28 they purport to impose burdens on Apple that are inconsistent with or not otherwise authorized by

1 the Federal Rules of Civil Procedure, Federal Rules of Evidence, the Local Rules of the Court, or
2 any applicable Standing Order or other order of the Court.

3 2. Apple objects to the Interrogatories as premature and unduly burdensome to the
4 extent they seek information that is not tethered to the issues to be litigated at class certification.
5 Apple further objects on the ground that such Interrogatories do not comport with the Court's
6 directive that the parties focus discovery on class certification issues.

7 3. Apple objects to the Interrogatories the extent they seek information that is outside
8 the relevant period or beyond the geographic scope for the case. Unless otherwise specified,
9 Apple will produce responsive, non-privileged documents from July 20, 2012 to the present
10 limited to the United States.

11 4. Apple objects to Definition 1 ("YOU" and "YOUR") in that it purports to include
12 Apple Inc., AppleCare Service Company, Inc., and Apple CSC Inc. and "its present or former
13 officers, directors, attorneys, agents, subsidiaries, divisions, sister corporations, affiliates, holding
14 companies, employees, contractors, agents, whether actual, apparent or otherwise of each, and
15 any entities that merged to form Apple Inc., Applecare [*sic*] Service Company, Inc., and Apple
16 CSC Inc., and any of their officers, directors, attorneys, agents, subsidiaries, divisions, sister
17 corporations, affiliates, holding companies, employees, contractors, or agents, whether actual,
18 apparent or otherwise of each," thereby making the Interrogatories vague, ambiguous, overbroad,
19 unduly burdensome, and disproportionate to the needs of the case. Apple is responding to the
20 Interrogatories on its own behalf.

21 5. Apple objects to Definition 3 ("COMPLAINT") as vague and ambiguous in that it
22 purports to include "any amended complaints." Apple will treat the term "COMPLAINT" as
23 meaning the operative First Amended Complaint (ECF No. 45), of which only the following
24 claims remain: Counts I, II, and III for breach of contract and alleged violations of Magnuson-
25 Moss and Song-Beverly against AppleCare Service Co., Inc., and Count VI for alleged violation
26 of the UCL unlawful and unfair prongs.

27 6. Apple objects to Definition 11 ("APPLECARE") on the grounds that it seeks
28 information that is not relevant, reasonably calculated to lead to the discovery of admissible

1 evidence, or proportional to the needs of the case, including because (i) it seeks information
2 regarding AppleCare Protection Plan and iPods, which no Plaintiff purchased and (ii) it is
3 overbroad as to time.

4 7. Apple objects to Definition **12** (“APPLECARE+”) on the grounds that it is
5 overbroad, unduly burdensome, and seeks information that is not relevant, reasonably calculated
6 to lead to the discovery of admissible evidence, or proportional to the needs of the case, including
7 because (i) it seeks information regarding AppleCare+ for iPod, which no Plaintiff purchased, and
8 (ii) it is overbroad as to time. Apple will treat the term “APPLECARE+” as referring to
9 AppleCare+ plans for iPhone and iPad sold from July 20, 2012 through the present.

10 8. Apple objects to Definition **13** (“DEVICE”) on the grounds that it is overbroad,
11 unduly burdensome, and purports to encompass information that is not relevant, reasonably
12 calculated to lead to the discovery of admissible evidence, or proportional to the needs of the
13 case. Apple will treat the term “DEVICE” as referring to iPhones and iPads only.

14 9. Apple objects to Definition **14** (“REPLACEMENT DEVICE”) on the grounds that
15 it is overbroad, unduly burdensome, and seeks information that is not relevant, reasonably
16 calculated to lead to the discovery of admissible evidence, or proportional to the needs of the
17 case, including because (i) it seeks information regarding the AppleCare Protection Plan and
18 iPods, which no Plaintiff purchased and (ii) it is overbroad as to time. Apple further objects to
19 the definition on the grounds that it is vague and ambiguous, including with respect to the phrase
20 “that was replaced.” Apple will treat the term “REPLACEMENT DEVICE” as referring to an
21 iPhone or an iPad that was provided as a whole unit replacement under AppleCare+ plans for
22 iPhone and iPad sold from July 20, 2012 through the present.

23 10. Apple objects to Definition **15** (“LOAD CONDITIONS”) on the grounds that it is
24 vague, ambiguous, overbroad, unduly burdensome, and disproportionate to the needs of the case.

25 11. Apple objects to the Interrogatories to the extent that they seek information or
26 documents protected from discovery by the attorney-client privilege, the attorney work product
27 doctrine, or any other applicable privilege, policy, or immunity. Any inadvertent disclosure shall
28 not be deemed a waiver of any applicable privilege, policy, or immunity.

1 12. Apple objects to the Interrogatories to the extent that they seek disclosure of
2 commercially sensitive or proprietary business or trade secret information.

3 13. Apple objects to the Interrogatories to the extent that they seek information that, if
4 disclosed, would violate the privacy right of any person.

5 **RESPONSES TO INTERROGATORIES**

6 **INTERROGATORY NO. 1:**

7 IDENTIFY the types of DEVICES YOU use as REPLACEMENT DEVICES under
8 APPLECARE and APPLECARE+, for example whether those DEVICES are new, refurbished,
9 remanufactured, or reclaimed.

10 **RESPONSE TO INTERROGATORY NO. 1:**

11 There are three types of iPhones and iPads that are provided to customers as replacements
12 under AppleCare+: (1) new units; (2) remanufactured units; and (3) reclaimed units. Each of
13 these types of replacements has been tested to ensure that they meet Apple's high standards. New
14 units are made of entirely new parts, and therefore are exactly the same as the iPhones and iPads
15 Apple sells as new in Apple-branded boxes. Remanufactured units are assembled using the same
16 manufacturing process as new iPhones or iPads, and could contain both new parts and recovered
17 parts that have been extensively tested. Reclaimed units are iPhones or iPads that are either
18 unused stock from Apple retail stores or are so-called "buyer's remorse" iPhones or iPads that
19 customers returned undamaged to Apple within fourteen (14) days of purchase. These
20 (essentially new) reclaimed units undergo a testing and screening process before they are
21 approved for use as replacement devices under AppleCare+. No "refurbished" devices are
22 provided to customers as replacements under AppleCare+. A "refurbished" device is a device
23 that Apple separately sells as "certified refurbished," and therefore has no bearing on the issues to
24 be litigated in this action.

25 Apple otherwise objects to this Interrogatory for the following reasons. Apple objects to
26 this Interrogatory and the defined terms "DEVICES," "REPLACEMENT DEVICES,"
27 "APPLECARE," and "APPLECARE+" on the grounds that they seek information that is not
28 relevant, reasonably calculated to lead to the discovery of admissible evidence, or proportional to

1 AppleCare+ for iPod, which no Plaintiff purchased. Apple objects to this Interrogatory on the
2 grounds that it seeks information that is not relevant, reasonably calculated to lead to the
3 discovery of admissible evidence, or proportional to the needs of the case, including because it
4 seeks information regarding a service plan that no Plaintiff purchased and regarding same-unit
5 repairs, which no Plaintiff obtained. Apple further objects to this Interrogatory to the extent it
6 seeks information protected by the attorney-client privilege or attorney work product doctrine.
7 Apple is providing the information set forth above subject to the terms of the Stipulated
8 Protective Order entered on April 3, 2017 (ECF No. 68). Apple further objects to this
9 Interrogatory on the grounds that it is overbroad as to time, and undefined and therefore
10 overbroad as to geographic scope.

11 **INTERROGATORY NO. 15:**

12 IDENTIFY the supply chains for REPLACEMENT DEVICES.

13 **RESPONSE TO INTERROGATORY NO. 15:**

14 There are three types of iPhones and iPads that are provided to customers as replacements
15 under AppleCare+: (1) new units; (2) remanufactured units; and (3) reclaimed units. New units
16 are made of entirely new parts and are assembled using the same contract manufacturers,
17 production lines, and manufacturing process as the iPhones and iPads Apple sells as new in
18 Apple-branded boxes, and therefore are exactly the same as the iPhones and iPads Apple sells as
19 new in Apple-branded boxes. Remanufactured units are assembled using the same contract
20 manufacturers, production lines, and manufacturing process as the iPhones and iPads Apple sells
21 as new in Apple-branded boxes, and could contain both new parts and recovered parts that have
22 been extensively tested. Reclaimed units are iPhones or iPads that are either unused stock from
23 Apple retail stores or are so-called “buyer’s remorse” iPhones or iPads that customers returned
24 undamaged to Apple within fourteen (14) days of purchase.

25 Apple otherwise objects to this Interrogatory for the following reasons. Apple objects to
26 this Interrogatory and the defined term “REPLACEMENT DEVICES” on the grounds that they
27 seek information that is not relevant, reasonably calculated to lead to the discovery of admissible
28 evidence, or proportional to the needs of the case, including because they seek information

1 regarding iPods, which no Plaintiff purchased. Apple further objects to this Interrogatory on the
2 grounds that it is vague and ambiguous, including as to the term “supply chains.” Apple
3 interprets “supply chains” to mean the sources for and types of replacement devices provided
4 under AppleCare+. Apple further objects to this Interrogatory on the grounds that it is undefined
5 and therefore overbroad as to geographic scope. Apple further objects to this Interrogatory on the
6 grounds that it is premature and unduly burdensome because it seeks information that is not
7 tethered to the issues to be litigated at class certification, and therefore violates the Court’s
8 directive that the parties focus discovery on class certification issues. Apple further objects to
9 this Interrogatory because it seeks disclosure of commercially sensitive or proprietary business or
10 trade secret information. Apple further objects to this Interrogatory on the grounds that it is
11 overbroad as to time, and undefined and therefore overbroad as to geographic scope.

12 **INTERROGATORY NO. 16:**

13 IDENTIFY the number of APPLECARE and APPLECARE+ service plans YOU have
14 sold.

15 **RESPONSE TO INTERROGATORY NO. 16:**

16 Apple objects to this Interrogatory and the defined terms “APPLECARE” and
17 “APPLECARE+” on the grounds that they seek information that is not relevant, reasonably
18 calculated to lead to the discovery of admissible evidence, or proportional to the needs of the
19 case, including because they seek information regarding the AppleCare Protection Plan and
20 AppleCare+ for iPod, which no Plaintiff purchased. Apple further objects to this Interrogatory
21 because it seeks disclosure of commercially sensitive or proprietary business or trade secret
22 information; Apple provides the information set forth above subject to the terms of the Stipulated
23 Protective Order entered on April 3, 2017 (ECF No. 68). Apple further objects to this
24 Interrogatory on the grounds that it is overbroad as to time, and undefined and therefore
25 overbroad as to geographic scope.

26 **INTERROGATORY NO. 17:**

27 IDENTIFY the number of DEVICES that YOU have replaced under APPLECARE and
28 APPLECARE+.

1 **INTERROGATORY NO. 20:**

2 IDENTIFY the failure rate of refurbished, remanufactured, and reclaimed DEVICES.

3 **RESPONSE TO INTERROGATORY NO. 20:**

4 Apple otherwise objects to this Interrogatory for the following reasons. Apple objects to
5 this Interrogatory and the defined term “DEVICES” on the grounds that they seek information
6 that is not relevant, reasonably calculated to lead to the discovery of admissible evidence, or
7 proportional to the needs of the case, including because they seek information regarding iPods,
8 which no Plaintiff purchased. Apple further objects to this Interrogatory on the grounds that it is
9 vague, ambiguous, and is disproportionate to the needs of the case, including as to the terms
10 “failure rate” and “refurbished.” In the ordinary course of business (and for the purposes of this
11 Interrogatory), Apple uses the term “refurbished” to refer to a device that Apple separately sells
12 as “certified refurbished,” and therefore has no bearing on the issues to be litigated in this action.
13 Apple further objects to this Interrogatory on the grounds that it is premature and unduly
14 burdensome because it seeks information that is not tethered to the issues to be litigated at class
15 certification, and therefore violates the Court’s directive that the parties focus discovery on class
16 certification issues. Apple further objects to this Interrogatory because it seeks disclosure of
17 commercially sensitive or proprietary business or trade secret information. Apple further objects
18 to this Interrogatory on the grounds that it is overbroad as to time, and undefined and therefore
19 overbroad as to geographic scope.

20
21 Dated: July 28, 2017

MORRISON & FOERSTER LLP

22
23 By: _____

Margaret E. Mayo

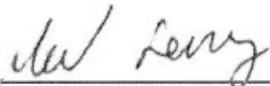
*Attorneys For Defendants
AppleCare Service Company, Inc.
and Apple CSC Inc.*

VERIFICATION

1
2 I, Michael Lanigan, am an employee of Defendant Apple Inc., a party to this action. I am
3 authorized to execute this verification on behalf of Defendant Apple Inc. I have read Defendant
4 Apple Inc.'s Responses to Plaintiffs' Vicky Maldonado and Justin Carter's First Set of Non-
5 Uniform Interrogatories, and declare that, based on reasonable inquiry and with the assistance of
6 employees at Apple Inc., the facts set forth in the Responses to Interrogatory Nos. 1, 3, 4, 5, 6, 7,
7 8, 12, and 15 are true and correct to the best of my knowledge and belief.

8
9 I declare under penalty of perjury under the laws of the United States of America that the
10 foregoing is true and correct.

11 Executed this 28th day of July, 2017, at Cupertino, California.

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17 _____
18 Michael Lanigan
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VERIFICATION

1
2 I, Jackie Healy, am an employee of Defendant Apple Inc., a party to this action. I am
3 authorized to execute this verification on behalf of Defendant Apple Inc. I have read Defendant
4 Apple Inc.'s Responses to Plaintiffs' Vicky Maldonado and Justin Carter's First Set of Non-
5 Uniform Interrogatories, and declare that, based on reasonable inquiry and with the assistance of
6 employees at Apple Inc., the facts set forth in the Response to Interrogatory No. 17 is true and
7 correct to the best of my knowledge and belief.
8

9 I declare under penalty of perjury under the laws of the United States of America that the
10 foregoing is true and correct.

11 Executed this 28th day of July, 2017, at Cupertino, California.

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13 
14 Jackie Healy
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**CERTIFICATE OF SERVICE
(Fed. Rule Civ. Proc. Rule 5(b))**

I declare that I am employed with the law firm of Morrison & Foerster LLP, whose address is 425 Market Street, San Francisco, CA 94105. I am not a party to the within cause, and I am over the age of eighteen years.

I further declare that on the date hereof I served a copy of:

**DEFENDANT APPLE INC.'S RESPONSES TO PLAINTIFFS'
FIRST SET OF NON-UNIFORM INTERROGATORIES**

BY ELECTRONIC SERVICE [Fed. Rule Civ. Proc. Rule 5(b)] by electronically mailing a true and correct copy through Morrison & Foerster LLP's electronic mail system to the email address(es) set forth below, or as stated on the attached service list per agreement in accordance with Federal Rules of Civil Procedure rule 5(b)

on the following by placing a true copy thereof enclosed in a sealed envelope addressed as follows for collection and mailing at Morrison & Foerster LLP, 425 Market Street, San Francisco, CA 94105, in accordance with Morrison & Foerster's ordinary business practices:

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Renee Kennedy
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Email: Kennedyrk22@gmail.com

I declare under penalty of perjury that the above is true and correct.

Executed at San Francisco, California, this 28th day of July, 2017.

Lisa Flores
(typed)

Lisa Flores
(signature)

EXHIBIT 5

FILED UNDER SEAL

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10 Attorneys for Defendant
APPLE INC.

11 UNITED STATES DISTRICT COURT
12 NORTHERN DISTRICT OF CALIFORNIA
13 SAN FRANCISCO DIVISION
14

15 VICKY MALDONADO AND JUSTIN
16 CARTER, individually and on behalf of
17 themselves and all others similarly situated,

18 Plaintiff,

19 v.

20 APPLE INC., APPECARE SERVICE
COMPANY, INC., and APPLE CSC INC.,

21 Defendants.
22

Case No. 3:16-cv-04067-WHO

Related Case:

English v. Apple Inc. et al.

Case No. 3:14-cv-01619-WHO

**DEFENDANT APPLE INC.’S HIGHLY
CONFIDENTIAL AND RESTRICTED
ACCESS SUPPLEMENTAL RESPONSE
AND OBJECTIONS TO PLAINTIFFS’
FIRST SET OF “NON-UNIFORM”
INTERROGATORIES
(INTERROGATORY NO. 7)**

Complaint Filed: July 20, 2016

Trial Date: December 10, 2018

24 PROPOUNDING PARTY: Plaintiffs VICKY MALDONADO and JUSTIN CARTER

25 RESPONDING PARTY: Defendant APPLE INC.

26 SET NO.: ONE
27

28 **CONTAINS INFORMATION DESIGNATED
HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY AND RESTRICTED ACCESS**

1 Pursuant to Federal Rules of Civil Procedure 26 and 33, Defendant Apple Inc. hereby
2 serve these supplemental objections and response to Plaintiffs Vicky Maldonado and Justin
3 Carter’s First Set of “Non-Uniform” Interrogatories, dated May 31, 2017. The supplemental
4 response to Interrogatory No. 7 contains information designated “HIGHLY CONFIDENTIAL –
5 ATTORNEYS’ EYES ONLY” pursuant to the terms of the Stipulated Protective Order entered
6 on April 3, 2017 (ECF No. 68), and “RESTRICTED ACCESS” pursuant to Defendants’
7 agreement with Hagens Berman Sobol Shapiro LLP as memorialized in emails exchanged on
8 December 21 and 22, 2017, and should be treated as confidential pursuant to the terms of the
9 order and agreement.

10 **PRELIMINARY STATEMENT**

11 Apple has not yet completed its investigation in this matter. Apple’s objections and
12 responses are based only upon such information and documents as are currently available and
13 specifically known to Apple, upon Apple’s information and belief, and upon Apple’s current
14 understanding of the facts and Plaintiffs’ claims. As discovery in this action proceeds, Apple
15 anticipates that it may discover additional or different documents or information. Without in any
16 way obligating itself to do so, Apple reserves the right to amend, modify, supplement, clarify, or
17 further explain its response at any time in the future, and to make any use of, or to introduce at
18 any hearing or trial, documents or information discovered after Apple’s initial response or
19 production.

20 In responding to the Interrogatories, Apple does not concede the relevancy, materiality, or
21 admissibility of the subject matter to which the Interrogatories refer. Apple’s response to the
22 Interrogatories is made subject to, and without waiving or intending to waive, any objections as to
23 the competence, relevance, materiality, privileged nature, or admissibility as evidence or for any
24 other purpose, of the response given herein, or of the subject matter thereof, in any proceeding.

25 **GENERAL OBJECTIONS**

26 The following general objections are stated with respect to each definition and
27 Interrogatory, and are incorporated by reference into the specific objections stated below:
28

1 1. Apple objects to the Definitions, Instructions, and Interrogatories to the extent that
2 they purport to impose burdens on Apple that are inconsistent with or not otherwise authorized by
3 the Federal Rules of Civil Procedure, Federal Rules of Evidence, the Local Rules of the Court, or
4 any applicable Standing Order or other order of the Court.

5 2. Apple objects to the Interrogatories as premature and unduly burdensome to the
6 extent they seek information that is not tethered to the issues to be litigated at class certification.
7 Apple further objects on the ground that such Interrogatories do not comport with the Court's
8 directive that the parties focus discovery on class certification issues.

9 3. Apple objects to the Interrogatories the extent they seek information that is outside
10 the relevant period or beyond the geographic scope for the case. Unless otherwise specified,
11 Apple will produce responsive, non-privileged documents from July 20, 2012 to the present
12 limited to the United States.

13 4. Apple objects to Definition 1 ("YOU" and "YOUR") in that it purports to include
14 Apple Inc., AppleCare Service Company, Inc., and Apple CSC Inc. and "its present or former
15 officers, directors, attorneys, agents, subsidiaries, divisions, sister corporations, affiliates, holding
16 companies, employees, contractors, agents, whether actual, apparent or otherwise of each, and
17 any entities that merged to form Apple Inc., Applecare [*sic*] Service Company, Inc., and Apple
18 CSC Inc., and any of their officers, directors, attorneys, agents, subsidiaries, divisions, sister
19 corporations, affiliates, holding companies, employees, contractors, or agents, whether actual,
20 apparent or otherwise of each," thereby making the Interrogatories vague, ambiguous, overbroad,
21 unduly burdensome, and disproportionate to the needs of the case. Apple is responding to the
22 Interrogatories on its own behalf.

23 5. Apple objects to Definition 3 ("COMPLAINT") as vague and ambiguous in that it
24 purports to include "any amended complaints." Apple will treat the term "COMPLAINT" as
25 meaning the operative First Amended Complaint (ECF No. 45), of which only the following
26 claims remain: Counts I, II, and III for breach of contract and alleged violations of Magnuson-
27 Moss and Song-Beverly against AppleCare Service Co., Inc., and Count VI for alleged violation
28 of the UCL unlawful and unfair prongs.

1 **HIGHLY CONFIDENTIAL—ATTORNEYS’ EYES ONLY—RESPONSE TO**
2 **INTERROGATORY NO. 7:**

3 With respect to remanufactured iPhones and iPads, before any non-new part is used in a
4 remanufacturing line, the part undergoes stringent failure analysis and other testing, including
5 [REDACTED]. After
6 assembly, each and every remanufactured iPhone and iPad is inspected and tested before it is
7 approved for use as a replacement device under AppleCare+. Apple further refers to the
8 confidential/highly confidential information contained in the deposition of Michael Lanigan,
9 including Exhibit Nos. 133 and 134, taken in *English v. Apple Inc. et al.*, Case No. 3:14-cv-
10 01619-WHO.

11 Reclaimed iPhones and iPads undergo a testing and screening process before they are
12 approved for use as replacement devices under AppleCare+. Specifically, reclaimed devices first
13 undergo a stringent cosmetic inspection. If an iPhone or iPad fails the cosmetic inspection, it fails
14 out of the testing process and is not used for AppleCare+ service stock. If an iPhone passes the
15 cosmetic inspection, it undergoes a comprehensive series of functional tests, including testing the
16 following: [REDACTED]

17 [REDACTED] If an iPad
18 passes the cosmetic inspection, it undergoes a comprehensive series of functional tests, including
19 testing the following: [REDACTED]

20 [REDACTED]
21 [REDACTED] Apple further refers to (i) the
22 confidential/highly confidential information contained in the transcript and Exhibit No. 130 to the
23 deposition of Michael Lanigan, taken on May 8, 2015 in *English v. Apple Inc. et al.*, Case No.
24 3:14-cv-01619-WHO, and (ii) the documents Apple has agreed to produce in response to Request
25 for Production No. 12.

26
27 Apple otherwise objects to this Interrogatory for the following reasons. Apple objects to
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1 this Interrogatory and the defined term “DEVICE” on the grounds that they seek information that
2 is not relevant, reasonably calculated to lead to the discovery of admissible evidence, or
3 proportional to the needs of the case, including because they seek information regarding iPods,
4 which no Plaintiff purchased. Apple further objects to this Interrogatory on the grounds that it is
5 vague, ambiguous, overbroad, and disproportionate to the needs of the case, including as to the
6 term “refurbished.” In the ordinary course of business (and for the purposes of this
7 Interrogatory), Apple uses the term “refurbished” to refer to a device that Apple separately sells
8 as “certified refurbished,” and therefore has no bearing on the issues to be litigated in this action.
9 Apple further objects to this Interrogatory on the grounds that it requires a compilation of
10 information Apple has already produced (*see* the confidential/highly confidential information
11 contained in the deposition of Michael Lanigan, including Exhibits 130, 133-134, taken in
12 *English v. Apple Inc. et al.*, Case No. 3:14-cv-01619-WHO). Apple further objects to this
13 Interrogatory on the grounds that it is premature and unduly burdensome because it seeks
14 information that is not tethered to the issues to be litigated at class certification, and therefore
15 violates the Court’s directive that the parties focus discovery on class certification issues. Apple
16 further objects to this Interrogatory because it seeks disclosure of commercially sensitive or
17 proprietary business or trade secret information; Apple provides the information set forth above
18 subject to the terms of the Stipulated Protective Order entered on April 3, 2017 (ECF No. 68).
19 Apple further objects to this Interrogatory on the grounds that it is overbroad as to time, and
20 undefined and therefore overbroad as to geographic scope.

21 **RESTRICTED ACCESS AND HIGHLY CONFIDENTIAL—ATTORNEYS’ EYES**
22 **ONLY—SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 7:**

23 Remanufactured iPhones and iPads contain new parts and non-new parts. 
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1 [REDACTED]
2 [REDACTED] See, e.g., APL-MLDND0_00002571-APL-
3 MLDND0_00002572 and other [REDACTED] in Apple's "HIGHLY CONFIDENTIAL-
4 ATTORNEYS' EYES ONLY" and "RESTRICTED ACCESS" document productions.

5 Fully-assembled remanufactured iPhones and iPads likewise undergo the same testing and
6 are subject to the same high quality standards as iPhones and iPads that Apple sells as new in
7 Apple-branded boxes. Apple conducts a comprehensive series of tests that cover all product
8 functionality on both remanufactured iPhones and iPads. [REDACTED]

9 [REDACTED]
10 [REDACTED]
11 [REDACTED]
12 Apple further refers Plaintiffs to APL-MLDND0_00002515-APL-MLDND0_00002535,
13 which has been marked as "HIGHLY CONFIDENTIAL—ATTORNEYS' EYES ONLY" and
14 "RESTRICTED ACCESS," as an example of the quality standards applicable to both new and
15 non-new parts (specifically, the speaker for the iPhone 6 Plus).

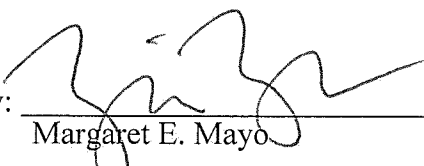
16 Apple further refers Plaintiffs to APL-MLDND0_00002536 through APL-
17 MLDND0_00002572 and APL-MLDND0_00002842 through APL-MLDND0_00003542,
18 which have been marked as "HIGHLY CONFIDENTIAL—ATTORNEYS' EYES ONLY" and
19 "RESTRICTED ACCESS," for information regarding the testing that is performed on incoming
20 iPhones and iPads from which certain parts are recovered to be used in remanufactured iPhones
21 or iPads.

22 Apple otherwise objects to this Interrogatory for the following reasons. Apple objects to
23 this Interrogatory and the defined term "DEVICE" on the grounds that they seek information that
24 is not relevant, reasonably calculated to lead to the discovery of admissible evidence, or
25 proportional to the needs of the case, including because they seek information regarding iPods,
26 which no Plaintiff purchased. Apple further objects to this Interrogatory on the grounds that it is
27 vague, ambiguous, overbroad, and disproportionate to the needs of the case, including as to the
28 term "refurbished." In the ordinary course of business (and for the purposes of this

1 Interrogatory), Apple uses the term “refurbished” to refer to a device that Apple separately sells
2 as “certified refurbished,” and therefore has no bearing on the issues to be litigated in this action.
3 Apple further objects to this Interrogatory on the grounds that it requires a compilation of
4 information Apple has already produced (*see* the confidential/highly confidential information
5 contained in the deposition of Michael Lanigan, including Exhibits 130, 133-134, taken in
6 *English v. Apple Inc. et al.*, Case No. 3:14-cv-01619-WHO). Apple further objects to this
7 Interrogatory on the grounds that it is premature and unduly burdensome because it seeks
8 information that is not tethered to the issues to be litigated at class certification, and therefore
9 violates the Court’s directive that the parties focus discovery on class certification issues. Apple
10 further objects to this Interrogatory because it seeks disclosure of commercially sensitive or
11 proprietary business or trade secret information; Apple provides the information set forth above
12 subject to the terms of the Stipulated Protective Order entered on April 3, 2017 (ECF No. 68).
13 Apple further objects to this Interrogatory on the grounds that it is overbroad as to time, and
14 undefined and therefore overbroad as to geographic scope.

15
16 Dated: February 2, 2018

MORRISON & FOERSTER LLP

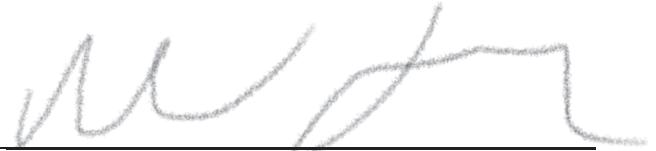
17
18 By: 
19 Margaret E. Mayo
20 *Attorneys For Defendants*

VERIFICATION

1
2 I, Michael Lanigan, am an employee of Defendant Apple Inc., a party to this action. I am
3 authorized to execute this verification on behalf of Defendant Apple Inc. I have read Defendant
4 Apple Inc.'s Supplemental Responses to Interrogatory Nos. 4, 6, 7, 9, 10, 11, and 15 of Plaintiffs'
5 Vicky Maldonado and Justin Carter's First Set of Non-Uniform Interrogatories, and declare that,
6 based on reasonable inquiry and with the assistance of employees at Apple Inc., the facts set forth
7 in the Responses to Interrogatory Nos. 4, 6, 7, 9, 10, 11, and 15 are true and correct to the best of
8 my knowledge and belief.
9

10 I declare under penalty of perjury under the laws of the United States of America that the
11 foregoing is true and correct.

12 Executed this 2nd day of February, 2018, at Cupertino, California.

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16 Michael Lanigan
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**CERTIFICATE OF SERVICE
(Fed. Rule Civ. Proc. Rule 5(b))**

I declare that I am employed with the law firm of Morrison & Foerster LLP, whose address is 425 Market Street, San Francisco, CA 94105. I am not a party to the within cause, and I am over the age of eighteen years.

I further declare that on the date hereof I served a copy of:

**DEFENDANT APPLE INC.'S HIGHLY CONFIDENTIAL
AND RESTRICTED ACCESS SUPPLEMENTAL RESPONSE
AND OBJECTIONS TO PLAINTIFFS' FIRST SET OF
"NON-UNIFORM" INTERROGATORIES
(INTERROGATORY NO. 7)**

BY ELECTRONIC SERVICE [Fed. Rule Civ. Proc. Rule 5(b)] by electronically mailing a true and correct copy through Morrison & Foerster LLP's electronic mail system to the email address(es) set forth below per agreement in accordance with Federal Rules of Civil Procedure rule 5(b)

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I declare under penalty of perjury that the above is true and correct.

Executed at San Francisco, California, this 2nd day of February, 2018.

Lisa Flores
(typed)

Lisa Flores

(signature)

EXHIBIT 6

FILED UNDER SEAL

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10 Attorneys for Defendant
APPLE INC.

11 UNITED STATES DISTRICT COURT
12 NORTHERN DISTRICT OF CALIFORNIA
13 SAN FRANCISCO DIVISION
14

15 VICKY MALDONADO AND JUSTIN
16 CARTER, individually and on behalf of
17 themselves and all others similarly situated,

18 Plaintiff,

19 v.

20 APPLE INC., APPECARE SERVICE
COMPANY, INC., and APPLE CSC INC.,

21 Defendants.
22

Case No. 3:16-cv-04067-WHO

Related Case:

English v. Apple Inc. et al.

Case No. 3:14-cv-01619-WHO

**DEFENDANT APPLE INC.’S HIGHLY
CONFIDENTIAL SUPPLEMENTAL
RESPONSES AND OBJECTIONS TO
PLAINTIFFS’ FIRST SET OF
“NON-UNIFORM” INTERROGATORIES
(INTERROGATORY NOS. 4, 6, 9, 10, 11,
AND 15)**

Complaint Filed: July 20, 2016

Trial Date: December 10, 2018

24 PROPOUNDING PARTY: Plaintiffs VICKY MALDONADO and JUSTIN CARTER

25 RESPONDING PARTY: Defendant APPLE INC.

26 SET NO.: ONE
27

**CONTAINS INFORMATION DESIGNATED
HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY**
28

1 Pursuant to Federal Rules of Civil Procedure 26 and 33, Defendant Apple Inc. hereby
2 serve these supplemental objections and responses to Plaintiffs Vicky Maldonado and Justin
3 Carter’s First Set of “Non-Uniform” Interrogatories, dated May 31, 2017. The responses and/or
4 supplemental responses to Interrogatory Nos. 4, 6, 9, 15 contain information designated
5 “HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY” pursuant to the terms of the
6 Stipulated Protective Order entered on April 3, 2017 (ECF No. 68) and should be treated as
7 confidential pursuant to the terms of the order.

8 PRELIMINARY STATEMENT

9 Apple has not yet completed its investigation in this matter. Apple’s objections and
10 responses are based only upon such information and documents as are currently available and
11 specifically known to Apple, upon Apple’s information and belief, and upon Apple’s current
12 understanding of the facts and Plaintiffs’ claims. As discovery in this action proceeds, Apple
13 anticipates that it may discover additional or different documents or information. Without in any
14 way obligating itself to do so, Apple reserves the right to amend, modify, supplement, clarify, or
15 further explain its response at any time in the future, and to make any use of, or to introduce at
16 any hearing or trial, documents or information discovered after Apple’s initial response or
17 production.

18 In responding to the Interrogatories, Apple does not concede the relevancy, materiality, or
19 admissibility of the subject matter to which the Interrogatories refer. Apple’s response to the
20 Interrogatories is made subject to, and without waiving or intending to waive, any objections as to
21 the competence, relevance, materiality, privileged nature, or admissibility as evidence or for any
22 other purpose, of the response given herein, or of the subject matter thereof, in any proceeding.

23 GENERAL OBJECTIONS

24 The following general objections are stated with respect to each definition and
25 Interrogatory, and are incorporated by reference into the specific objections stated below:

26 1. Apple objects to the Definitions, Instructions, and Interrogatories to the extent that
27 they purport to impose burdens on Apple that are inconsistent with or not otherwise authorized by
28

1 the Federal Rules of Civil Procedure, Federal Rules of Evidence, the Local Rules of the Court, or
2 any applicable Standing Order or other order of the Court.

3 2. Apple objects to the Interrogatories as premature and unduly burdensome to the
4 extent they seek information that is not tethered to the issues to be litigated at class certification.
5 Apple further objects on the ground that such Interrogatories do not comport with the Court's
6 directive that the parties focus discovery on class certification issues.

7 3. Apple objects to the Interrogatories the extent they seek information that is outside
8 the relevant period or beyond the geographic scope for the case. Unless otherwise specified,
9 Apple will produce responsive, non-privileged documents from July 20, 2012 to the present
10 limited to the United States.

11 4. Apple objects to Definition 1 ("YOU" and "YOUR") in that it purports to include
12 Apple Inc., AppleCare Service Company, Inc., and Apple CSC Inc. and "its present or former
13 officers, directors, attorneys, agents, subsidiaries, divisions, sister corporations, affiliates, holding
14 companies, employees, contractors, agents, whether actual, apparent or otherwise of each, and
15 any entities that merged to form Apple Inc., Applecare [*sic*] Service Company, Inc., and Apple
16 CSC Inc., and any of their officers, directors, attorneys, agents, subsidiaries, divisions, sister
17 corporations, affiliates, holding companies, employees, contractors, or agents, whether actual,
18 apparent or otherwise of each," thereby making the Interrogatories vague, ambiguous, overbroad,
19 unduly burdensome, and disproportionate to the needs of the case. Apple is responding to the
20 Interrogatories on its own behalf.

21 5. Apple objects to Definition 3 ("COMPLAINT") as vague and ambiguous in that it
22 purports to include "any amended complaints." Apple will treat the term "COMPLAINT" as
23 meaning the operative First Amended Complaint (ECF No. 45), of which only the following
24 claims remain: Counts I, II, and III for breach of contract and alleged violations of Magnuson-
25 Moss and Song-Beverly against AppleCare Service Co., Inc., and Count VI for alleged violation
26 of the UCL unlawful and unfair prongs.

27 6. Apple objects to Definition 13 ("DEVICE") on the grounds that it is overbroad,
28 unduly burdensome, and purports to encompass information that is not relevant, reasonably

1 calculated to lead to the discovery of admissible evidence, or proportional to the needs of the
2 case. Apple will treat the term “DEVICE” as referring to iPhones and iPads only.

3 7. Apple objects to Definition **14** (“REPLACEMENT DEVICE”) on the grounds that
4 it is overbroad, unduly burdensome, and seeks information that is not relevant, reasonably
5 calculated to lead to the discovery of admissible evidence, or proportional to the needs of the
6 case, including because (i) it seeks information regarding iPods, which no Plaintiff purchased and
7 (ii) it is overbroad as to time. Apple further objects to the definition on the grounds that it is
8 vague and ambiguous, including with respect to the phrase “that was replaced.” Apple will treat
9 the term “REPLACEMENT DEVICE” as referring to an iPhone or an iPad that was provided as a
10 whole unit replacement under AppleCare+ plans for iPhone and iPad sold from July 20, 2012
11 through the present.

12 8. Apple objects to Definition **15** (“LOAD CONDITIONS”) on the grounds that it is
13 vague, ambiguous, overbroad, unduly burdensome, and disproportionate to the needs of the case.

14 9. Apple objects to the Interrogatories to the extent that they seek information or
15 documents protected from discovery by the attorney-client privilege, the attorney work product
16 doctrine, or any other applicable privilege, policy, or immunity. Any inadvertent disclosure shall
17 not be deemed a waiver of any applicable privilege, policy, or immunity.

18 10. Apple objects to the Interrogatories to the extent that they seek disclosure of
19 commercially sensitive or proprietary business or trade secret information.

20 11. Apple objects to the Interrogatories to the extent that they seek information that, if
21 disclosed, would violate the privacy right of any person.

22 **RESPONSES TO INTERROGATORIES**

23 **INTERROGATORY NO. 4:**

24 EXPLAIN and IDENTIFY the manufacturing process of a remanufactured DEVICE.

25 **RESPONSE TO INTERROGATORY NO. 4:**

26 The remanufactured iPhones or iPads provided as replacements under AppleCare+ are
27 assembled using the same contract manufacturers, production lines, and manufacturing process as
28 the iPhones and iPads Apple sells as new in Apple-branded boxes.

1 Apple otherwise objects to this Interrogatory for the following reasons. Apple objects to
2 this Interrogatory and the defined term “DEVICE” on the grounds that they seek information that
3 is not relevant, reasonably calculated to lead to the discovery of admissible evidence, or
4 proportional to the needs of the case, including because they seek information regarding iPods,
5 which no Plaintiff purchased. Apple further objects to this Interrogatory on the grounds that it is
6 vague, ambiguous, overbroad, and disproportionate to the needs of the case, including as to the
7 term “manufacturing process.” Apple interprets “manufacturing process” to mean the highly
8 confidential and technical process by which the component parts of an iPhone or iPad are
9 assembled into a whole device, the specifics of which have no bearing on the issues to be litigated
10 in this action. Apple further objects to this Interrogatory on the grounds that it is premature and
11 unduly burdensome because it seeks information that is not tethered to the issues to be litigated at
12 class certification, and therefore violates the Court’s directive that the parties focus discovery on
13 class certification issues. Apple further objects to this Interrogatory because it seeks disclosure of
14 commercially sensitive or proprietary business or trade secret information. Apple further objects
15 to this Interrogatory on the grounds that it is overbroad as to time, and undefined and therefore
16 overbroad as to geographic scope.

17 **HIGHLY CONFIDENTIAL—ATTORNEYS’ EYES ONLY—SUPPLEMENTAL**
18 **RESPONSE TO INTERROGATORY NO. 4:**

19 The remanufactured iPhones or iPads provided as replacements under AppleCare+ and
20 iPhones and iPads that Apple sells as new in Apple-branded boxes (referred to as “finished
21 goods”) are assembled using the same contract manufacturers and undergo the same testing.
22 They are also assembled using the same production lines with the same steps apart from some
23 minor, non-substantive differences that may apply to certain device models.

24 These non-substantive differences in the manufacturing and remanufacturing lines could
25 include:

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- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

Apple otherwise objects to this Interrogatory for the following reasons. Apple objects to this Interrogatory and the defined term “DEVICE” on the grounds that they seek information that is not relevant, reasonably calculated to lead to the discovery of admissible evidence, or proportional to the needs of the case, including because they seek information regarding iPods, which no Plaintiff purchased. Apple further objects to this Interrogatory on the grounds that it is vague, ambiguous, overbroad, and disproportionate to the needs of the case, including as to the term “manufacturing process.” Apple interprets “manufacturing process” to mean the highly confidential and technical process by which the component parts of an iPhone or iPad are assembled into a whole device, the specifics of which have no bearing on the issues to be litigated in this action. Apple further objects to this Interrogatory on the grounds that it is premature and unduly burdensome because it seeks information that is not tethered to the issues to be litigated at class certification, and therefore violates the Court’s directive that the parties focus discovery on class certification issues. Apple further objects to this Interrogatory because it seeks disclosure of commercially sensitive or proprietary business or trade secret information; Apple provides the information set forth above subject to the terms of the Stipulated Protective Order entered on April 3, 2017 (ECF No. 68). Apple further objects to this Interrogatory on the grounds that it is overbroad as to time, and undefined and therefore overbroad as to geographic scope.

1 **INTERROGATORY NO. 6:**

2 IDENTIFY which components or parts in a refurbished, remanufactured, or reclaimed
3 DEVICE may be used or refurbished.

4 **HIGHLY CONFIDENTIAL—ATTORNEYS’ EYES ONLY—RESPONSE TO**
5 **INTERROGATORY NO. 6:**

6 Of the three types of devices provided as replacements under AppleCare+, only
7 remanufactured iPhones and iPads have recovered (or non-new) parts. [REDACTED]

8 [REDACTED]
9 [REDACTED]
10 [REDACTED]

11 [REDACTED] The exact
12 parts that may be recovered vary depending on the iPhone or iPad model. Each of these parts
13 undergoes stringent failure analysis and other testing before it is used in a remanufactured device.
14 After assembly, each and every remanufactured iPhone and iPad is inspected and tested to before
15 it is approved for use as a replacement device under AppleCare+.

16 Apple otherwise objects to this Interrogatory for the following reasons. Apple objects to
17 this Interrogatory and the defined term “DEVICE” on the grounds that they seek information that
18 is not relevant, reasonably calculated to lead to the discovery of admissible evidence, or
19 proportional to the needs of the case, including because they seek information regarding iPods,
20 which no Plaintiff purchased. Apple further objects to this Interrogatory on the grounds that it is
21 vague, ambiguous, and overbroad, including as to the terms “refurbished” and “used.” Apple
22 interprets “refurbished” to mean a device that Apple separately sells as “certified refurbished,”
23 and “used” as it is commonly understood; “refurbished” and “used” devices have no bearing on
24 the issues to be litigated in this action. Apple further objects to this Interrogatory on the grounds
25 that it is premature and unduly burdensome because it seeks information that is not tethered to the
26 issues to be litigated at class certification, and therefore violates the Court’s directive that the
27 parties focus discovery on class certification issues. Apple further objects to this Interrogatory
28 because it seeks disclosure of commercially sensitive or proprietary business or trade secret

1 information; Apple provides the information set forth above subject to the terms of the Stipulated
2 Protective Order entered on April 3, 2017 (ECF No. 68). Apple further objects to this
3 Interrogatory on the grounds that it is overbroad as to time, and undefined and therefore
4 overbroad as to geographic scope.

5 **HIGHLY CONFIDENTIAL—ATTORNEYS’ EYES ONLY—AMENDED AND**
6 **SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 6:**

7 As detailed in Apple’s original response to this Interrogatory, [REDACTED]

8 [REDACTED]
9 [REDACTED]
10 All non-new parts are subject to the same high quality standards as new parts.
11 [REDACTED]
12 [REDACTED]
13 [REDACTED]
14 [REDACTED]

15 Apple otherwise objects to this Interrogatory for the following reasons. Apple objects to
16 this Interrogatory and the defined term “DEVICE” on the grounds that they seek information that
17 is not relevant, reasonably calculated to lead to the discovery of admissible evidence, or
18 proportional to the needs of the case, including because they seek information regarding iPods,
19 which no Plaintiff purchased. Apple further objects to this Interrogatory on the grounds that it is
20 vague, ambiguous, and overbroad, including as to the terms “refurbished” and “used.” Apple
21 interprets “refurbished” to mean a device that Apple separately sells as “certified refurbished,”
22 and “used” as it is commonly understood; “refurbished” and “used” devices have no bearing on
23 the issues to be litigated in this action. Apple further objects to this Interrogatory on the grounds
24 that it is premature and unduly burdensome because it seeks information that is not tethered to the
25 issues to be litigated at class certification, and therefore violates the Court’s directive that the
26 parties focus discovery on class certification issues. Apple further objects to this Interrogatory
27 because it seeks disclosure of commercially sensitive or proprietary business or trade secret
28 information; Apple provides the information set forth above subject to the terms of the Stipulated


1 Protective Order entered on April 3, 2017 (ECF No. 68). Apple further objects to this
2 Interrogatory on the grounds that it is overbroad as to time, and undefined and therefore
3 overbroad as to geographic scope.

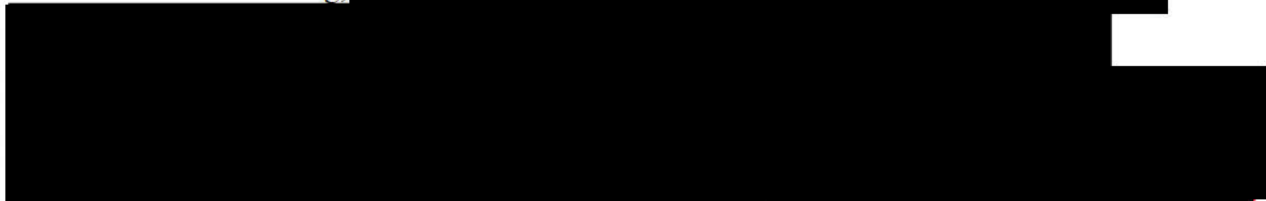
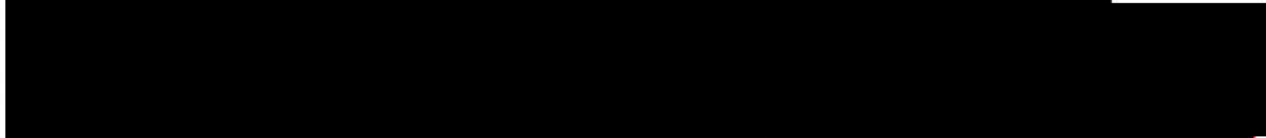
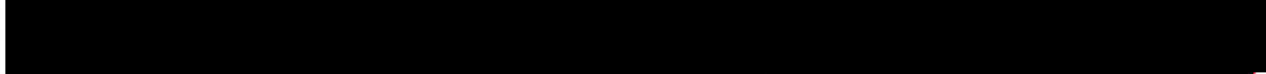
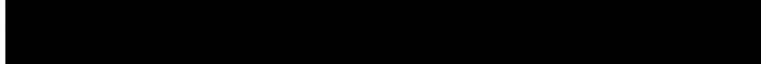
4 **INTERROGATORY NO. 9:**

5 IDENTIFY the LOAD CONDITIONS that YOU collect or monitor on DEVICES or their
6 distinct parts, which are used to make refurbished, remanufactured, or reclaimed
7 REPLACEMENT DEVICES.

8 **HIGHLY CONFIDENTIAL—ATTORNEYS’ EYES ONLY—RESPONSE TO**
9 **INTERROGATORY NO. 9:**

10 Apple does not collect data on “load conditions,” as that term is defined by Plaintiffs (“the
11 use, operating, or environmental conditions of a DEVICE, including, but not limited to,
12 temperature, humidity, contaminates, dust, shock, vibrations, electrostatic discharge, electrostatic
13 overstress, mechanical loads (bending, warpage, torsion), thermo-mechanical strains, radiation, or
14 power cycling conditions”), of returned iPhones or iPads or the component parts recovered from
15 those iPhones or iPads that are used in remanufactured iPhones or iPads provided under
16 AppleCare+. Apple does, however, subject recovered parts to testing, as discussed in Apple’s
17 responses to Interrogatory No. 7.

18 Further answering, 

19 
20 
21 
22  Apple further refers Plaintiffs to its

23 Supplemental Response to Interrogatory No. 7.

24 Apple otherwise objects to this Interrogatory and the defined terms “DEVICES” and
25 “REPLACEMENT DEVICES” on the grounds that they seek information that is not relevant,
26 reasonably calculated to lead to the discovery of admissible evidence, or proportional to the needs
27 of the case, including because they seek information regarding iPods, which no Plaintiff
28 purchased. Apple further objects to this Interrogatory on the grounds that it is vague, ambiguous,

1 overbroad, and disproportionate to the needs of the case, including as to the terms “LOAD
2 CONDITIONS” and “refurbished.” In the ordinary course of business (and for the purposes of
3 this Interrogatory), Apple uses the term “refurbished” to refer to a device that Apple separately
4 sells as “certified refurbished,” and therefore has no bearing on the issues to be litigated in this
5 action. Apple further objects to this Interrogatory on the grounds that it is premature and unduly
6 burdensome because it seeks information that is not tethered to the issues to be litigated at class
7 certification, and therefore violates the Court’s directive that the parties focus discovery on class
8 certification issues. Apple further objects to this Interrogatory because it seeks disclosure of
9 commercially sensitive or proprietary business or trade secret information; Apple provides the
10 information set forth above subject to the terms of the Stipulated Protective Order entered on
11 April 3, 2017 (ECF No. 68). Apple further objects to this Interrogatory on the grounds that it is
12 overbroad as to time, and undefined and therefore overbroad as to geographic scope.

13 **INTERROGATORY NO. 10:**

14 IDENTIFY any testing YOU perform to assess the LOAD CONDITIONS on DEVICES
15 or their distinct parts, which are used to make refurbished, remanufactured, or reclaimed
16 REPLACEMENT DEVICES.

17 **RESPONSE TO INTERROGATORY NO. 10:**

18 Apple refers to its Response and Supplemental Response to Interrogatory No. 7 regarding
19 the testing performed on non-new parts that are used in remanufactured iPhones or iPads
20 provided under AppleCare+.

21 Apple otherwise objects to this Interrogatory and the defined terms “DEVICES” and
22 “REPLACEMENT DEVICES” on the grounds that they seek information that is not relevant,
23 reasonably calculated to lead to the discovery of admissible evidence, or proportional to the needs
24 of the case, including because they seek information regarding iPods, which no Plaintiff
25 purchased. Apple further objects to this Interrogatory on the grounds that it is vague, ambiguous,
26 overbroad, and disproportionate to the needs of the case, including as to the terms “LOAD
27 CONDITIONS” and “refurbished.” In the ordinary course of business (and for the purposes of
28 this Interrogatory), Apple uses the term “refurbished” to refer to a device that Apple separately

1 certification issues. Apple further objects to this Interrogatory because it seeks disclosure of
2 commercially sensitive or proprietary business or trade secret information. Apple further objects
3 to this Interrogatory on the grounds that it is overbroad as to time, and undefined and therefore
4 overbroad as to geographic scope.

5 **INTERROGATORY NO. 15:**

6 IDENTIFY the supply chains for REPLACEMENT DEVICES.

7 **RESPONSE TO INTERROGATORY NO. 15:**

8 There are three types of iPhones and iPads that are provided to customers as replacements
9 under AppleCare+: (1) new units; (2) remanufactured units; and (3) reclaimed units. New units
10 are made of entirely new parts and are assembled using the same contract manufacturers,
11 production lines, and manufacturing process as the iPhones and iPads Apple sells as new in
12 Apple-branded boxes, and therefore are exactly the same as the iPhones and iPads Apple sells as
13 new in Apple-branded boxes. Remanufactured units are assembled using the same contract
14 manufacturers, production lines, and manufacturing process as the iPhones and iPads Apple sells
15 as new in Apple-branded boxes, and could contain both new parts and recovered parts that have
16 been extensively tested. Reclaimed units are iPhones or iPads that are either unused stock from
17 Apple retail stores or are so-called “buyer’s remorse” iPhones or iPads that customers returned
18 undamaged to Apple within fourteen (14) days of purchase.

19 Apple otherwise objects to this Interrogatory for the following reasons. Apple objects to
20 this Interrogatory and the defined term “REPLACEMENT DEVICES” on the grounds that they
21 seek information that is not relevant, reasonably calculated to lead to the discovery of admissible
22 evidence, or proportional to the needs of the case, including because they seek information
23 regarding iPods, which no Plaintiff purchased. Apple further objects to this Interrogatory on the
24 grounds that it is vague and ambiguous, including as to the term “supply chains.” Apple
25 interprets “supply chains” to mean the sources for and types of replacement devices provided
26 under AppleCare+. Apple further objects to this Interrogatory on the grounds that it is undefined
27 and therefore overbroad as to geographic scope. Apple further objects to this Interrogatory on the
28 grounds that it is premature and unduly burdensome because it seeks information that is not

1 tethered to the issues to be litigated at class certification, and therefore violates the Court’s
2 directive that the parties focus discovery on class certification issues. Apple further objects to
3 this Interrogatory because it seeks disclosure of commercially sensitive or proprietary business or
4 trade secret information. Apple further objects to this Interrogatory on the grounds that it is
5 overbroad as to time, and undefined and therefore overbroad as to geographic scope.

6 **HIGHLY CONFIDENTIAL—ATTORNEYS’ EYES ONLY—SUPPLEMENTAL**
7 **RESPONSE TO INTERROGATORY NO. 15:**

8 [REDACTED]
9 [REDACTED]
10 [REDACTED]
11 [REDACTED]

12 Apple otherwise objects to this Interrogatory for the following reasons. Apple objects to
13 this Interrogatory and the defined term “REPLACEMENT DEVICES” on the grounds that they
14 seek information that is not relevant, reasonably calculated to lead to the discovery of admissible
15 evidence, or proportional to the needs of the case, including because they seek information
16 regarding iPods, which no Plaintiff purchased. Apple further objects to this Interrogatory on the
17 grounds that it is vague and ambiguous, including as to the term “supply chains.” Apple
18 interprets “supply chains” to mean the sources for and types of replacement devices provided
19 under AppleCare+. Apple further objects to this Interrogatory on the grounds that it is undefined
20 and therefore overbroad as to geographic scope. Apple further objects to this Interrogatory on the
21 grounds that it is premature and unduly burdensome because it seeks information that is not
22 tethered to the issues to be litigated at class certification, and therefore violates the Court’s
23 directive that the parties focus discovery on class certification issues. Apple further objects to

24 ///
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1 this Interrogatory because it seeks disclosure of commercially sensitive or proprietary business or
2 trade secret information; Apple provides the information set forth above subject to the terms of
3 the Stipulated Protective Order entered on April 3, 2017 (ECF No. 68). Apple further objects to
4 this Interrogatory on the grounds that it is overbroad as to time, and undefined and therefore
5 overbroad as to geographic scope.

6
7 Dated: February 2, 2018

MORRISON & FOERSTER LLP

8
9 By: 
10 Margaret E. Mayo

Attorneys For Defendants

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VERIFICATION

I, Michael Lanigan, am an employee of Defendant Apple Inc., a party to this action. I am authorized to execute this verification on behalf of Defendant Apple Inc. I have read Defendant Apple Inc.'s Supplemental Responses to Interrogatory Nos. 4, 6, 7, 9, 10, 11, and 15 of Plaintiffs' Vicky Maldonado and Justin Carter's First Set of Non-Uniform Interrogatories, and declare that, based on reasonable inquiry and with the assistance of employees at Apple Inc., the facts set forth in the Responses to Interrogatory Nos. 4, 6, 7, 9, 10, 11, and 15 are true and correct to the best of my knowledge and belief.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed this 2nd day of February, 2018, at Cupertino, California.

Michael Lanigan

**CERTIFICATE OF SERVICE
(Fed. Rule Civ. Proc. Rule 5(b))**

I declare that I am employed with the law firm of Morrison & Foerster LLP, whose address is 425 Market Street, San Francisco, CA 94105. I am not a party to the within cause, and I am over the age of eighteen years.

I further declare that on the date hereof I served a copy of:

**DEFENDANT APPLE INC.'S HIGHLY CONFIDENTIAL
SUPPLEMENTAL RESPONSES AND OBJECTIONS TO
PLAINTIFFS' FIRST SET OF "NON-UNIFORM"
INTERROGATORIES (INTERROGATORY NOS. 4, 6, 9, 10,
11, AND 15)**

BY ELECTRONIC SERVICE [Fed. Rule Civ. Proc. Rule 5(b)] by electronically mailing a true and correct copy through Morrison & Foerster LLP's electronic mail system to the email address(es) set forth below per agreement in accordance with Federal Rules of Civil Procedure rule 5(b)

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Renee Kennedy
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Friendswood, Texas 77546
Email: Kennedyrk22@gmail.com

I declare under penalty of perjury that the above is true and correct.

Executed at San Francisco, California, this 2nd day of February, 2018.

Lisa Flores
(typed)

Lisa Flores
(signature)

EXHIBIT 7

FILED UNDER SEAL

EXHIBIT 8

FILED UNDER SEAL

1 UNITED STATES DISTRICT COURT
2 NORTHERN DISTRICT OF CALIFORNIA
3 SAN FRANCISCO DIVISION
4 -----X
5 VICKY MALDONADO AND JUSTIN : No. 3:16-cv-04067-WHO
6 CARTER, individually and on :
7 behalf of themselves and all :
8 others similarly situated, :
9 Plaintiffs, :
10 v. :
11 APPLE INC., APPECARE SERVICE :
12 COMPANY, INC., AND APPLE CSC :
13 INC., :
14 Defendants. :
15 -----X
16
17 ** HIGHLY CONFIDENTIAL - ATTORNEYS' EYES ONLY **
18
19 VIDEOTAPED DEPOSITION OF AVIJIT SEN
20 Redwood City, California
21 Tuesday, October 9, 2018
22 10:00 a.m.
23 Job No.: 209319
24 Pages: 1 - 147
25 Reported By: Charlotte Lacey, RPR, CSR No. 14224

1 VIDEOTAPED DEPOSITION OF AVIJIT SEN, held at the
2 offices of MORRISON & FOERSTER LLP, 755 Page Mill Road,
3 Redwood City, California

4

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7 Pursuant to notice, before Charlotte Lacey,
8 Certified Shorthand Reporter, in and for the State of
9 California.

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1 A. P P E A R A N C E S

2 ON BEHALF OF PLAINTIFFS VICKY MALDONADO AND JUSTIN

3 CARTER:

4 ROBERT B. CAREY, ESQUIRE

5 MICHELLA A. KRAS, ESQUIRE

6 HAGENS BERMAN SOBOL SHAPIRO, LLP

7 11 West Jefferson Street, Suite 1000

8 Phoenix, Arizona 85003

9 (602) 840-5900

10 ON BEHALF OF DEFENDANTS APPLE:

11 PURVI G. PATEL, ESQUIRE

12 ASHLEY NAKAMURA, ESQUIRE

13 MORRISON & FOERSTER LLP

14 707 Wilshire Boulevard

15 Los Angeles, California 90017

16 (213) 892-5296

17 -and-

18 PAMI VYAS, ESQUIRE

19 APPLE

20 One Infinite Loop, MS 169-2NYJ

21 Cupertino, California 95014

22 (408) 974-5252

23 ALSO PRESENT:

24 John Torreano, Videographer

25

1 INDEX

2 WITNESS PAGE

3 AVIJIT SEN

4 Examination by Mr. Carey 7

5

6

7

8

9

10 INDEX OF EXHIBITS

11 EXHIBITS DESCRIPTION PAGE

12 Exhibit 37 Plaintiffs' First Amended Notice of 25

13 Video Deposition of Defendants

14 Apple Inc., AppleCare Service

15 Company, Inc., and Apple CSC Inc.

16 Pursuant to Rules 30(b)(6), 30(b)(2)

17 and 34 of the Federal Rules of Civil

18 Procedure

19 Exhibit 38 Defendants Apple Inc., AppleCare 26

20 Service Company, Inc., and Apple

21 CSC Inc.'s Objections and Responses

22 to Plaintiffs' Rule 30(b)(6) Topic

23 Nos. 30-33 and 42

24 Exhibit 39 Letter from Morrison Foerster dated 32

25 9/27/2018

- 1 Exhibit 40 Defendant Apple Inc.'s Highly 36
- 2 Confidential and Restricted Access
- 3 Supplemental Responses and
- 4 Objections to Plaintiffs' First Set
- 5 of "Non-Uniform" Interrogatories
- 6 (Interrogatory Nos. 19-20)

[Redacted content consisting of 16 horizontal bars, each with a black segment on the left and a light red segment on the right, indicating confidential and restricted access information.]

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1 PROCEEDINGS

2 THE VIDEOGRAPHER: Good morning. We are now
3 on the record. Here begins media number 1 in the
4 videotaped deposition of Avijit Sen in the matter of
5 Maldonado versus Apple Incorporated venued in the
6 Northern District Court of California in the
7 San Francisco Division, case number 3:16-CV-04067-WHO.

8 Today's date is September 9th, 2018 -- excuse
9 me -- October 9th, 2018, and the time on the video
10 monitor is 10 a.m. Your videographer today is John
11 Torreano representing on behalf of Planet Depos.

12 This video deposition is taking place at
13 Morrison & Foerster LLP at 755 Page Mill Road in Palo
14 Alto, California, ZIP Code 94304.

15 Would counsel please voice identify themselves
16 and state whom they represent in this action.

17 MR. CAREY: Rob Carey and Michella Kras on
18 behalf of plaintiff.

19 MS. PATEL: Purvi Patel on behalf of
20 defendant, Apple.

21 MS. VYAS: Pami Vyas for Apple.

22 THE VIDEOGRAPHER: The court reporter today is
23 Charlotte Lacey representing on behalf of Planet Depos.

24 If there are no stipulations or comments from
25 counsel, then would the court reporter please administer

- 1 the oath to the witness.
- 2 AVIJIT SEN,
- 3 the witness herein, having been first duly sworn, was
- 4 examined and testified as follows:
- 5 THE VIDEOGRAPHER: Please begin, Counsel.
- 6 MR. CAREY: Thank you.
- 7 EXAMINATION
- 8 BY MR. CAREY:
- 9 Q. Sir, could you state your name and spell it
- 10 for the record.
- 11 A. Sure. My name is Avijit Sen. The first name
- 12 is spelled A-v-i-j-i-t; last name is Sen, S-e-n.
- 13 Q. Have you ever had your deposition taken
- 14 before?
- 15 A. Yep.
- 16 Q. How many times?
- 17 A. Once.
- 18 Q. When was that?
- 19 A. Three or four years ago.
- 20 Q. Was it on behalf of Apple?
- 21 A. Yes.
- 22 Q. And what was -- so you did it as a part of
- 23 your employment?
- 24 A. Yeah.
- 25 Q. Okay.

[REDACTED]

10 Q. Okay. And that would be true for iPad and
11 iPhones?
12 A. Yes.
13 Q. For any data you have, essentially --
14 MS. PATEL: Vague and ambiguous.
15 Q. -- for device data?

[REDACTED]

17 Q. Okay.
18 MR. CAREY: 40.
19 (Deposition Exhibit 40 was marked for
20 identification.)
21 THE WITNESS: Thank you.
22 Q. Sir, if you could look at Exhibit 40 and just
23 tell me if you've seen it before.
24 A. Yes, I've seen this document before.
25 Q. All right. Did you help prepare it?

1 A. No. I didn't write -- I didn't write it, but
2 my team supplied some of the data -- supplied the data
3 in the exhibit.

4 Q. Okay. So Exhibit -- you're referring to
5 Exhibit A and -- I think it's Exhibit A and B. Let me
6 look.

7 Exhibit A and Exhibit B on the back are the
8 tables that were provided by you for your team?

9 A. Yes. Correct.

10 Q. All right. If you could look on page 4 of the

12 make sure we're --

13 THE WITNESS: Oh, thank you.

14 MS. PATEL: You're welcome.

15 Q. -- both on the same page here.

16 A. Uh-huh.

20 A. In the -- so I'll elaborate a little bit and

21 kind of describe this --

22 Q. Sure.

23 A. -- the easiest way I can.

[REDACTED]

8 Q. Okay.

[REDACTED]

11 Q. So it's essentially -- correct me if I'm wrong

12 on this.

13 A. Uh-huh.

[REDACTED]

19 Q. I'm -- let me rephrase that --

20 A. Yeah.

21 Q. -- because that's not what I'm saying.

[REDACTED]

24 A. Uh-huh.

[REDACTED]

[Redacted]

4 Q. Right.

[Redacted]

6 Q. Okay. But that's --

[Redacted]

9 Q. Right.

[Redacted]

14 A. Correct, yeah.

[Redacted]

[REDACTED]

2 Q. Can you look at Exhibit A of -- well,

3 Exhibit A or Exhibit 40?

4 A. Exhibit A of -- exhibit okay.

5 MS. PATEL: That being part 1.

6 MR. CAREY: Yeah.

7 A. Yeah.

[REDACTED]

9 A. Uh-huh.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

17 is that --

18 A. Uh-huh.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[Redacted text block containing multiple lines of blacked-out content]

[Redacted text block containing multiple lines of blacked-out content, organized into two sections: a top section with yellow highlights and a bottom section with pink highlights.]

[Redacted text block containing multiple lines of blacked-out content, organized into two main sections: a top section with pink highlights and a bottom section with yellow highlights.]

[REDACTED]

5 (Deposition Exhibit 44 was marked for
6 identification.)

7 Q. Okay. I'm handing you Exhibit 44. Could you
8 take a look at that and tell me -- I know it's long, but
9 just if you could see if you recognize it.

10 A. Yes, I recognize it.

11 Q. Okay. And is this something that you or your
12 team prepared?

13 A. Yes, it is.

14 Q. And what does this represent?

15 **A. This -- let me just look at something. Then**

16 **I'll tell you which -- which cut of the data this is.**

[REDACTED]

[Redacted text block containing multiple lines of blacked-out content with red and yellow highlights]

HIGHLY CONFIDENTIAL - ATTORNEYS' EYES ONLY


Transcript of Avijit Sen
Conducted on October 9, 2018

147

1 CERTIFICATE OF SHORTHAND REPORTER

2
3 I, Charlotte Lacey, the officer before whom the
4 foregoing deposition was taken, do hereby certify that
5 the foregoing transcript is a true and correct record of
6 the testimony given; that said testimony was taken by me
7 stenographically and thereafter reduced to typewriting
8 under my direction; that reading and signing was not
9 requested; and that I am neither counsel for, related
10 to, nor employed by any of the parties to this case and
11 have no interest, financial or otherwise, in its
12 outcome.

13
14 IN WITNESS WHEREOF, I have hereunto subscribed my
15 hand this 11th day of October, 2018.

16
17
18 
19 Charlotte Lacey, RPR, CSR #14224

No. 209319

Re: Deposition of **Avijit Sen**
Date: 10/9/2018
Case: Maldonado, et al. -v- Apple, Inc., et al.
Return to: transcripts@planetdepos.com

Page	Line	Correction/Change and Reason
Through	out	"AppleCare Plus" should be "AppleCare+"
110	1	"AppleCare and Apple PC Plus devices" should be "AppleCare+ and APP devices"
121	25	"CSE factory record" should be "CSD factory record"
132	13-14	"13-week dispatch accumulative" should be "13-week cumulative dispatch"

(Date)

(Signature)

No. 209319

Re: Deposition of **Avijit Sen**
Date: 10/9/2018
Case: Maldonado, et al. -v- Apple, Inc., et al.
Return to: transcripts@planetdepos.com

ACKNOWLEDGMENT OF DEPONENT

I, Avijit Sen, do hereby acknowledge that I have read and examined the foregoing testimony, and the same is a true, correct and complete transcription of the testimony given by me and any corrections appear on the attached Errata sheet signed by me.

October 31, 2018

(Date)



(Signature)

EXHIBIT 9

FILED UNDER SEAL

EXHIBIT 10

FILED UNDER SEAL

EXHIBIT 11

FILED UNDER SEAL

EXHIBIT 12

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March 22, 2017

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Re: *Maldonado, et al. v. Apple Inc., et al.*, N.D. California Case No. 3:16-cv-04067

Dear Counsel:

Consistent with the parties' discussions and the Joint Case Management Statement, we write to provide information regarding whether the replacement devices that form the basis of Plaintiffs' claims were "new" or "remanufactured."

"New" devices are made of entirely new parts, and therefore are the same as the devices Apple sells as new in Apple-branded boxes in its retail stores. "Remanufactured" devices are assembled using the same manufacturing process as new devices, and contain both new parts and recovered parts that have been extensively tested.

Plaintiff Vicky Maldonado

- The replacement iPad provided on or about May 8, 2015, Serial Number F6QPH026F18G, was remanufactured.
- The replacement iPad provided on or about May 22, 2015, Serial Number F6QPH02KF18G, was remanufactured.

MORRISON | FOERSTER

Plaintiffs' Counsel
March 22, 2017
Page Two

Plaintiff Justin Carter

- The replacement iPhone provided on or about July 11, 2016, Serial Number F9CRT08CG5QL, was remanufactured.
- The replacement iPhone provided on or about October 28, 2016, Serial Number F9CSC0TNG5QL, was remanufactured.
- The replacement iPhone provided on or about November 4, 2016, Serial Number DTRSG0D5G5QL, was new.

Now that discovery has commenced, we assume you will provide in good faith the information Defendants requested in my December 19, 2016 letter so that the parties can have a productive meet and confer. For convenience, those requests are set forth below:

1. The manner in which Carter learned of this lawsuit, including the date as well as name of the person who first spoke with Carter regarding this lawsuit (even if that person was not an attorney), as well as the name of the attorney(s) who first spoke with Carter and the date of that contact;
2. The nature of the “professional inspections” that took place, including the dates they occurred, a description of each step of the “inspections,” whether any written protocol was followed, the name(s) of any and all individuals who conducted or were present at the inspections (in person or via electronic means), and the manner in which the “inspections” were documented;
3. Disclosure of any other inspections or testing performed on any of Carter’s replacement iPhones or any of Plaintiff Vicky Maldonado’s replacement iPads.

Please provide the above information as well as any further response to the December 19 letter by March 29, 2017.

Sincerely,



Purvi G. Patel

cc: P. Prevolos, M. Mayo

EXHIBIT 13

FILED UNDER SEAL

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10 Attorneys for Defendant
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11 UNITED STATES DISTRICT COURT
12 NORTHERN DISTRICT OF CALIFORNIA
13 SAN FRANCISCO DIVISION
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15 VICKY MALDONADO AND JUSTIN
16 CARTER, individually and on behalf of
17 themselves and all others similarly situated,

18 Plaintiff,

19 v.

20 APPLE INC., APPECARE SERVICE
COMPANY, INC., and APPLE CSC INC.,

21 Defendants.
22

Case No. 3:16-cv-04067-WHO

Related Case:

English v. Apple Inc. et al.

Case No. 3:14-cv-01619-WHO

**DEFENDANT APPLE INC.’S HIGHLY
CONFIDENTIAL SUPPLEMENTAL
RESPONSES AND OBJECTIONS TO
PLAINTIFFS’ FIRST SET OF
“NON-UNIFORM” INTERROGATORIES
(INTERROGATORY NOS. 16-18)**

Complaint Filed: July 20, 2016

Trial Date: December 10, 2018

24 PROPOUNDING PARTY: Plaintiffs VICKY MALDONADO and JUSTIN CARTER

25 RESPONDING PARTY: Defendant APPLE INC.

26 SET NO.: ONE

27 **CONTAINS INFORMATION DESIGNATED**
28 **HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY**

1 Pursuant to Federal Rules of Civil Procedure 26 and 33, Defendant Apple Inc. hereby
2 serve these supplemental objections and responses to Plaintiffs Vicky Maldonado and Justin
3 Carter’s First Set of “Non-Uniform” Interrogatories, dated May 31, 2017. The responses and/or
4 supplemental responses to Interrogatory Nos. 16, 17, and 18 contain information designated
5 “HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY” pursuant to the terms of the
6 Stipulated Protective Order entered on April 3, 2017 (ECF No. 68) and should be treated as
7 confidential pursuant to the terms of the order.

8 PRELIMINARY STATEMENT

9 Apple has not yet completed its investigation in this matter. Apple’s objections and
10 responses are based only upon such information and documents as are currently available and
11 specifically known to Apple, upon Apple’s information and belief, and upon Apple’s current
12 understanding of the facts and Plaintiffs’ claims. As discovery in this action proceeds, Apple
13 anticipates that it may discover additional or different documents or information. Without in any
14 way obligating itself to do so, Apple reserves the right to amend, modify, supplement, clarify, or
15 further explain its response at any time in the future, and to make any use of, or to introduce at
16 any hearing or trial, documents or information discovered after Apple’s initial response or
17 production.

18 In responding to the Interrogatories, Apple does not concede the relevancy, materiality, or
19 admissibility of the subject matter to which the Interrogatories refer. Apple’s response to the
20 Interrogatories is made subject to, and without waiving or intending to waive, any objections as to
21 the competence, relevance, materiality, privileged nature, or admissibility as evidence or for any
22 other purpose, of the response given herein, or of the subject matter thereof, in any proceeding.

23 GENERAL OBJECTIONS

24 The following general objections are stated with respect to each definition and
25 Interrogatory, and are incorporated by reference into the specific objections stated below:

26 1. Apple objects to the Definitions, Instructions, and Interrogatories to the extent that
27 they purport to impose burdens on Apple that are inconsistent with or not otherwise authorized by
28

1 the Federal Rules of Civil Procedure, Federal Rules of Evidence, the Local Rules of the Court, or
2 any applicable Standing Order or other order of the Court.

3 2. Apple objects to the Interrogatories as premature and unduly burdensome to the
4 extent they seek information that is not tethered to the issues to be litigated at class certification.
5 Apple further objects on the ground that such Interrogatories do not comport with the Court's
6 directive that the parties focus discovery on class certification issues.

7 3. Apple objects to the Interrogatories the extent they seek information that is outside
8 the relevant period or beyond the geographic scope for the case. Unless otherwise specified,
9 Apple will produce responsive, non-privileged documents from July 20, 2012 to the present
10 limited to the United States.

11 4. Apple objects to Definition 1 ("YOU" and "YOUR") in that it purports to include
12 Apple Inc., AppleCare Service Company, Inc., and Apple CSC Inc. and "its present or former
13 officers, directors, attorneys, agents, subsidiaries, divisions, sister corporations, affiliates, holding
14 companies, employees, contractors, agents, whether actual, apparent or otherwise of each, and
15 any entities that merged to form Apple Inc., Applecare [*sic*] Service Company, Inc., and Apple
16 CSC Inc., and any of their officers, directors, attorneys, agents, subsidiaries, divisions, sister
17 corporations, affiliates, holding companies, employees, contractors, or agents, whether actual,
18 apparent or otherwise of each," thereby making the Interrogatories vague, ambiguous, overbroad,
19 unduly burdensome, and disproportionate to the needs of the case. Apple is responding to the
20 Interrogatories on its own behalf.

21 5. Apple objects to Definition 3 ("COMPLAINT") as vague and ambiguous in that it
22 purports to include "any amended complaints." Apple will treat the term "COMPLAINT" as
23 meaning the operative First Amended Complaint (ECF No. 45), of which only the following
24 claims remain: Counts I, II, and III for breach of contract and alleged violations of Magnuson-
25 Moss and Song-Beverly against AppleCare Service Co., Inc., and Count VI for alleged violation
26 of the UCL unlawful and unfair prongs.

27 6. Apple objects to Definition 11 ("APPLECARE") on the grounds that it seeks
28 information that is not relevant, reasonably calculated to lead to the discovery of admissible

1 evidence, or proportional to the needs of the case, including because (i) it seeks information
2 regarding iPods, which no Plaintiff purchased and (ii) it is overbroad as to time.

3 7. Apple objects to Definition **12** (“APPLECARE+”) on the grounds that it is
4 overbroad, unduly burdensome, and seeks information that is not relevant, reasonably calculated
5 to lead to the discovery of admissible evidence, or proportional to the needs of the case, including
6 because (i) it seeks information regarding AppleCare+ for iPod, which no Plaintiff purchased, and
7 (ii) it is overbroad as to time. Apple will treat the term “APPLECARE+” as referring to
8 AppleCare+ plans for iPhone and iPad sold from July 20, 2012 through the present.

9 8. Apple objects to Definition **13** (“DEVICE”) on the grounds that it is overbroad,
10 unduly burdensome, and purports to encompass information that is not relevant, reasonably
11 calculated to lead to the discovery of admissible evidence, or proportional to the needs of the
12 case. Apple will treat the term “DEVICE” as referring to iPhones and iPads only.

13 9. Apple objects to Definition **14** (“REPLACEMENT DEVICE”) on the grounds that
14 it is overbroad, unduly burdensome, and seeks information that is not relevant, reasonably
15 calculated to lead to the discovery of admissible evidence, or proportional to the needs of the
16 case, including because (i) it seeks information regarding iPods, which no Plaintiff purchased and
17 (ii) it is overbroad as to time. Apple further objects to the definition on the grounds that it is
18 vague and ambiguous, including with respect to the phrase “that was replaced.” Apple will treat
19 the term “REPLACEMENT DEVICE” as referring to an iPhone or an iPad that was provided as a
20 whole unit replacement under AppleCare+ plans for iPhone and iPad sold from July 20, 2012
21 through the present.

22 10. Apple objects to the Interrogatories to the extent that they seek information or
23 documents protected from discovery by the attorney-client privilege, the attorney work product
24 doctrine, or any other applicable privilege, policy, or immunity. Any inadvertent disclosure shall
25 not be deemed a waiver of any applicable privilege, policy, or immunity.

26 11. Apple objects to the Interrogatories to the extent that they seek disclosure of
27 commercially sensitive or proprietary business or trade secret information.
28

1 12. Apple objects to the Interrogatories to the extent that they seek information that, if
2 disclosed, would violate the privacy right of any person.

3 **RESPONSES TO INTERROGATORIES**

4 **INTERROGATORY NO. 16:**

5 IDENTIFY the number of APPLECARE and APPLECARE+ service plans YOU have
6 sold.

7 **HIGHLY CONFIDENTIAL—ATTORNEYS’ EYES ONLY—RESPONSE TO**
8 **INTERROGATORY NO. 16:**

9 Based on Apple’s investigation to date:

- 10
- [REDACTED] AppleCare+ plans for iPhone were sold in the United States between July 20, 2012 and June 30, 2017 under which a replacement iPhone was provided on or before June 30, 2017;
 - [REDACTED] AppleCare Protection Plans for iPhone were sold in the United States between July 20, 2012 and June 30, 2017 under which a replacement iPhone was provided on or before June 30, 2017;
 - [REDACTED] AppleCare+ plans for iPad were sold in the United States between July 20, 2012 and June 30, 2017 under which a replacement iPad was provided on or before June 30, 2017; and
 - [REDACTED] AppleCare Protection Plans for iPad were sold in the United States between July 20, 2012 and June 30, 2017 under which a replacement iPad was provided on or before June 30, 2017.

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17 Apple otherwise objects to this Interrogatory and the defined terms “APPLECARE” and
18 “APPLECARE+” on the grounds that they seek information that is not relevant, reasonably
19 calculated to lead to the discovery of admissible evidence, or proportional to the needs of the
20 case, including because they seek information regarding the AppleCare Protection Plan for iPod
21 and AppleCare+ for iPod, which no Plaintiff purchased. Apple further objects to this
22 Interrogatory because it seeks disclosure of commercially sensitive or proprietary business or
23 trade secret information; Apple provides the information set forth above subject to the terms of
24 the Stipulated Protective Order entered on April 3, 2017 (ECF No. 68). Apple further objects to
25 this Interrogatory on the grounds that it is overbroad as to time, and undefined and therefore
26 overbroad as to geographic scope.

1 **INTERROGATORY NO. 17:**

2 IDENTIFY the number of DEVICES that YOU have replaced under APPLECARE and
3 APPLECARE+.

4 **HIGHLY CONFIDENTIAL—ATTORNEYS’ EYES ONLY—RESPONSE TO**
5 **INTERROGATORY NO. 17:**

6 Based on Apple’s investigation to date, [REDACTED] replacement iPhones were provided
7 pursuant to AppleCare+ plans for iPhone that were sold in the United States between July 20,
8 2012 and June 30, 2017. Based on Apple’s investigation to date, [REDACTED] replacement iPads were
9 provided pursuant to AppleCare+ plans for iPad that were sold in the United States between
10 July 20, 2012 and June 30, 2017.

11 Apple otherwise objects to this Interrogatory for the following reasons. Apple objects to
12 this Interrogatory and the defined terms “DEVICES,” “APPLECARE,” and “APPLECARE+” on
13 the grounds that they seek information that is not relevant, reasonably calculated to lead to the
14 discovery of admissible evidence, or proportional to the needs of the case, including because they
15 seek information regarding the AppleCare Protection Plan, AppleCare+ for iPod, and iPods,
16 which no Plaintiff purchased. Apple further objects to this Interrogatory because it seeks
17 disclosure of commercially sensitive or proprietary business or trade secret information; Apple
18 provides the information set forth above subject to the terms of the Stipulated Protective Order
19 entered on April 3, 2017 (ECF No. 68). Apple further objects to this Interrogatory on the grounds
20 that it is overbroad as to time, and undefined and therefore overbroad as to geographic scope.

21 **HIGHLY CONFIDENTIAL—ATTORNEYS’ EYES ONLY—SUPPLEMENTAL**
22 **RESPONSE TO INTERROGATORY NO. 17:**

23 Based on Apple’s investigation to date:

- 24
- [REDACTED] replacement iPhones were provided on or before June 30, 2017 pursuant to AppleCare+ plans for iPhone that were sold in the United States between July 20, 2012 and June 30, 2017;
 - [REDACTED] replacement iPhones were provided on or before June 30, 2017 pursuant to AppleCare Protection Plans for iPhone that were sold in the United States between July 20, 2012 and June 30, 2017;
- 27

- 1 • [REDACTED] replacement iPads were provided on or before June 30, 2017 pursuant to
2 AppleCare+ plans for iPad that were sold in the United States between July 20,
2012 and June 30, 2017; and
- 3 • [REDACTED] replacement iPads were provided on or before June 30, 2017 pursuant to
4 AppleCare Protection Plans for iPad that were sold in the United States between
July 20, 2012 and June 30, 2017.

5 Apple otherwise objects to this Interrogatory for the following reasons. Apple objects to
6 this Interrogatory and the defined terms “DEVICES,” “APPLECARE,” and “APPLECARE+” on
7 the grounds that they seek information that is not relevant, reasonably calculated to lead to the
8 discovery of admissible evidence, or proportional to the needs of the case, including because they
9 seek information regarding the AppleCare Protection Plan for iPod, AppleCare+ for iPod, and
10 iPods, which no Plaintiff purchased. Apple further objects to this Interrogatory because it seeks
11 disclosure of commercially sensitive or proprietary business or trade secret information; Apple
12 provides the information set forth above subject to the terms of the Stipulated Protective Order
13 entered on April 3, 2017 (ECF No. 68). Apple further objects to this Interrogatory on the grounds
14 that it is overbroad as to time, and undefined and therefore overbroad as to geographic scope.

15 **INTERROGATORY NO. 18:**

16 IDENTIFY the number of REPLACEMENT DEVICES that are new versus refurbished,
17 remanufactured, or reclaimed.

18 **RESPONSE TO INTERROGATORY NO. 18:**

19 Apple is investigating whether it is able to determine the types of replacement iPhones
20 and iPads (i.e., new, remanufactured, or reclaimed) customers received under AppleCare+ plans
21 sold in the United States from July 20, 2012 to the present. Apple will meet and confer with
22 Plaintiffs regarding appropriate next steps once Apple’s investigation is complete.

23 Apple otherwise objects to this Interrogatory for the following reasons. Apple objects to
24 this Interrogatory and the defined term “REPLACEMENT DEVICES” on the grounds that they
25 seek information that is not relevant, reasonably calculated to lead to the discovery of admissible
26 evidence, or proportional to the needs of the case, including because they seek information
27 regarding iPods, which no Plaintiff purchased. Apple further objects to this Interrogatory on the
28 grounds that it is vague, ambiguous, overbroad and unduly burdensome, including as to the term

1 “refurbished.” In the ordinary course of business (and for the purposes of this Interrogatory),
 2 Apple uses the term “refurbished” to refer to a device that Apple separately sells as “certified
 3 refurbished,” and therefore has no bearing on the issues to be litigated in this action. Apple
 4 further objects to this Interrogatory because it seeks disclosure of commercially sensitive or
 5 proprietary business or trade secret information; any information Apple provides in response to
 6 this Interrogatory will be subject to the terms of the Stipulated Protective Order entered on April
 7 3, 2017 (ECF No. 68). Apple further objects to this Interrogatory on the grounds that it is
 8 overbroad as to time, and undefined and therefore overbroad as to geographic scope.

9 **HIGHLY CONFIDENTIAL—ATTORNEYS’ EYES ONLY—SUPPLEMENTAL**
 10 **RESPONSE TO INTERROGATORY NO. 18:**

11 Based on Apple’s investigation to date:

- 12 • Of the iPhones that have been provided to customers as service replacements in the
 13 United States as of January 19, 2018, Apple’s records show that [REDACTED] were
 14 new, [REDACTED] were remanufactured, and [REDACTED] were reclaimed. With respect to
 15 [REDACTED] iPhones that have been provided to customers as service
 16 replacements in the United States as of January 19, 2018, Apple is unable to determine at this time whether they are new, remanufactured, or reclaimed.
- 17 • Of the [REDACTED] iPhones identified in Apple’s Highly Confidential Supplemental
 18 Response to Interrogatory No. 17, Apple’s records show that [REDACTED] were new,
 19 [REDACTED] were remanufactured, and [REDACTED] were reclaimed. With respect to
 20 [REDACTED] of the [REDACTED] iPhones identified in Apple’s Highly Confidential
 21 Supplemental Response to Interrogatory No. 17, Apple is unable to determine at this time whether they are new, remanufactured, or reclaimed.
- 22 • Of the iPads that have been provided to customers as service replacements in the
 23 United States as of January 19, 2018 Apple’s records show that [REDACTED] were new,
 24 [REDACTED] were remanufactured, and [REDACTED] were reclaimed. With respect to
 25 [REDACTED] iPads that have been provided to customers as service replacements in the
 26 United States as of January 19, 2018, Apple is unable to determine at this time
 27 whether they are new, remanufactured, or reclaimed.
- 28 • Of the [REDACTED] iPads identified in Apple’s Highly Confidential Supplemental
 Response to Interrogatory No. 17, Apple’s records show that [REDACTED] were new,
 [REDACTED] were remanufactured, [REDACTED] were reclaimed. With respect to [REDACTED] of
 the [REDACTED] iPads identified in Apple’s Highly Confidential Supplemental
 Response to Interrogatory No. 17, Apple is unable to determine at this time
 whether they are new, remanufactured, or reclaimed.

25 Apple otherwise objects to this Interrogatory for the following reasons. Apple objects to
 26 this Interrogatory and the defined term “REPLACEMENT DEVICES” on the grounds that they
 27 seek information that is not relevant, reasonably calculated to lead to the discovery of admissible
 28

1 evidence, or proportional to the needs of the case, including because they seek information
2 regarding iPods, which no Plaintiff purchased. Apple further objects to this Interrogatory on the
3 grounds that it is vague, ambiguous, overbroad and unduly burdensome, including as to the term
4 “refurbished.” In the ordinary course of business (and for the purposes of this Interrogatory),
5 Apple uses the term “refurbished” to refer to a device that Apple separately sells as “certified
6 refurbished,” and therefore has no bearing on the issues to be litigated in this action. Apple
7 further objects to this Interrogatory because it seeks disclosure of commercially sensitive or
8 proprietary business or trade secret information; any information Apple provides in response to
9 this Interrogatory will be subject to the terms of the Stipulated Protective Order entered on
10 April 3, 2017 (ECF No. 68). Apple further objects to this Interrogatory on the grounds that it is
11 overbroad as to time, and undefined and therefore overbroad as to geographic scope.

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Dated: January 30, 2018

MORRISON & FOERSTER LLP

By: 
Margaret E. Mayo

Attorneys For Defendants

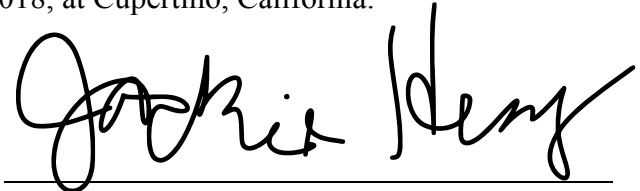
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VERIFICATION

I, Jackie Healy, am an employee of Defendant Apple Inc., a party to this action. I am authorized to execute this verification on behalf of Defendant Apple Inc. I have read Defendant Apple Inc.'s Supplemental Responses to Interrogatory Nos. 16 and 17 of Plaintiffs' Vicky Maldonado and Justin Carter's First Set of Non-Uniform Interrogatories, and declare that, based on reasonable inquiry and with the assistance of employees at Apple Inc., the facts set forth in the Supplemental Responses to Interrogatory Nos. 16 and 17 are true and correct to the best of my knowledge and belief.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed this 16th day of January, 2018, at Cupertino, California.



Jackie Healy

VERIFICATION

1
2 I, Matthew Foster, am an employee of Defendant Apple Inc., a party to this action. I am
3 authorized to execute this verification on behalf of Defendant Apple Inc. I have read Defendant
4 Apple Inc.'s Supplemental Responses to Interrogatory Nos. 18, 19, and 20 of Plaintiffs' Vicky
5 Maldonado and Justin Carter's First Set of Non-Uniform Interrogatories, and declare that, based
6 on reasonable inquiry and with the assistance of employees at Apple Inc., the facts set forth in the
7 Responses to Interrogatory Nos. 18, 19, and 20 are true and correct to the best of my knowledge
8 and belief.
9

10 I declare under penalty of perjury under the laws of the United States of America that the
11 foregoing is true and correct.

12 Executed this 30th day of January, 2018, at Cupertino, California.

13
14 

15 _____
16 Matthew Foster
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**CERTIFICATE OF SERVICE
(Fed. Rule Civ. Proc. Rule 5(b))**

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I declare that I am employed with the law firm of Morrison & Foerster LLP, whose address is 425 Market Street, San Francisco, CA 94105. I am not a party to the within cause, and I am over the age of eighteen years.

I further declare that on the date hereof I served a copy of:

**DEFENDANT APPLE INC.'S HIGHLY CONFIDENTIAL
SUPPLEMENTAL RESPONSES AND OBJECTIONS TO
PLAINTIFFS' FIRST SET OF "NON-UNIFORM"
INTERROGATORIES (INTERROGATORY NOS. 16-18)**

BY ELECTRONIC SERVICE [Fed. Rule Civ. Proc. Rule 5(b)] by electronically mailing a true and correct copy through Morrison & Foerster LLP's electronic mail system to the email address(es) set forth below per agreement in accordance with Federal Rules of Civil Procedure rule 5(b)

on the following:

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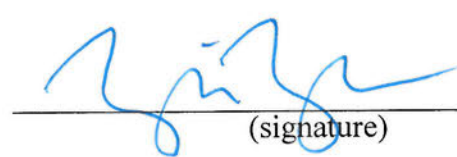
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Email: Kennedyrk22@gmail.com

I declare under penalty of perjury that the above is true and correct.

Executed at San Francisco, California, this 30th day of January, 2018.

Margaret E. Mayo
(typed)



(signature)

EXHIBIT 14

FILED UNDER SEAL

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10 Attorneys for Defendant
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11 UNITED STATES DISTRICT COURT
12 NORTHERN DISTRICT OF CALIFORNIA
13 SAN FRANCISCO DIVISION
14

15 VICKY MALDONADO AND JUSTIN
16 CARTER, individually and on behalf of
17 themselves and all others similarly situated,

18 Plaintiff,

19 v.

20 APPLE INC., APPECARE SERVICE
COMPANY, INC., and APPLE CSC INC.,

21 Defendants.
22

Case No. 3:16-cv-04067-WHO

Related Case:

English v. Apple Inc. et al.

Case No. 3:14-cv-01619-WHO

**DEFENDANT APPLE INC.'S HIGHLY
CONFIDENTIAL AND RESTRICTED
ACCESS SUPPLEMENTAL RESPONSES
AND OBJECTIONS TO PLAINTIFFS'
FIRST SET OF "NON-UNIFORM"
INTERROGATORIES
(INTERROGATORY NOS. 19-20)**

Complaint Filed: July 20, 2016

Trial Date: December 10, 2018

24 PROPOUNDING PARTY: Plaintiffs VICKY MALDONADO and JUSTIN CARTER

25 RESPONDING PARTY: Defendant APPLE INC.

26 SET NO.: ONE
27

28 **CONTAINS INFORMATION DESIGNATED
HIGHLY CONFIDENTIAL – ATTORNEYS' EYES ONLY AND RESTRICTED ACCESS**

1 Pursuant to Federal Rules of Civil Procedure 26 and 33, Defendant Apple Inc. hereby
2 serve these supplemental objections and responses to Plaintiffs Vicky Maldonado and Justin
3 Carter's First Set of "Non-Uniform" Interrogatories, dated May 31, 2017. The responses and/or
4 supplemental responses to Interrogatory Nos. 19 and 20 contain information designated
5 "HIGHLY CONFIDENTIAL – ATTORNEYS' EYES ONLY" pursuant to the terms of the
6 Stipulated Protective Order entered on April 3, 2017 (ECF No. 68), and "RESTRICTED
7 ACCESS" pursuant to Defendants' agreement with Hagens Berman Sobol Shapiro LLP as
8 memorialized in emails exchanged on December 21 and 22, 2017, and should be treated as
9 confidential pursuant to the terms of the order and agreement.

10 PRELIMINARY STATEMENT

11 Apple has not yet completed its investigation in this matter. Apple's objections and
12 responses are based only upon such information and documents as are currently available and
13 specifically known to Apple, upon Apple's information and belief, and upon Apple's current
14 understanding of the facts and Plaintiffs' claims. As discovery in this action proceeds, Apple
15 anticipates that it may discover additional or different documents or information. Without in any
16 way obligating itself to do so, Apple reserves the right to amend, modify, supplement, clarify, or
17 further explain its response at any time in the future, and to make any use of, or to introduce at
18 any hearing or trial, documents or information discovered after Apple's initial response or
19 production.

20 In responding to the Interrogatories, Apple does not concede the relevancy, materiality, or
21 admissibility of the subject matter to which the Interrogatories refer. Apple's response to the
22 Interrogatories is made subject to, and without waiving or intending to waive, any objections as to
23 the competence, relevance, materiality, privileged nature, or admissibility as evidence or for any
24 other purpose, of the response given herein, or of the subject matter thereof, in any proceeding.

25 GENERAL OBJECTIONS

26 The following general objections are stated with respect to each definition and
27 Interrogatory, and are incorporated by reference into the specific objections stated below:
28

1 1. Apple objects to the Definitions, Instructions, and Interrogatories to the extent that
2 they purport to impose burdens on Apple that are inconsistent with or not otherwise authorized by
3 the Federal Rules of Civil Procedure, Federal Rules of Evidence, the Local Rules of the Court, or
4 any applicable Standing Order or other order of the Court.

5 2. Apple objects to the Interrogatories as premature and unduly burdensome to the
6 extent they seek information that is not tethered to the issues to be litigated at class certification.
7 Apple further objects on the ground that such Interrogatories do not comport with the Court's
8 directive that the parties focus discovery on class certification issues.

9 3. Apple objects to the Interrogatories the extent they seek information that is outside
10 the relevant period or beyond the geographic scope for the case. Unless otherwise specified,
11 Apple will produce responsive, non-privileged documents from July 20, 2012 to the present
12 limited to the United States.

13 4. Apple objects to Definition 1 ("YOU" and "YOUR") in that it purports to include
14 Apple Inc., AppleCare Service Company, Inc., and Apple CSC Inc. and "its present or former
15 officers, directors, attorneys, agents, subsidiaries, divisions, sister corporations, affiliates, holding
16 companies, employees, contractors, agents, whether actual, apparent or otherwise of each, and
17 any entities that merged to form Apple Inc., Applecare [*sic*] Service Company, Inc., and Apple
18 CSC Inc., and any of their officers, directors, attorneys, agents, subsidiaries, divisions, sister
19 corporations, affiliates, holding companies, employees, contractors, or agents, whether actual,
20 apparent or otherwise of each," thereby making the Interrogatories vague, ambiguous, overbroad,
21 unduly burdensome, and disproportionate to the needs of the case. Apple is responding to the
22 Interrogatories on its own behalf.

23 5. Apple objects to Definition 3 ("COMPLAINT") as vague and ambiguous in that it
24 purports to include "any amended complaints." Apple will treat the term "COMPLAINT" as
25 meaning the operative First Amended Complaint (ECF No. 45), of which only the following
26 claims remain: Counts I, II, and III for breach of contract and alleged violations of Magnuson-
27 Moss and Song-Beverly against AppleCare Service Co., Inc., and Count VI for alleged violation
28 of the UCL unlawful and unfair prongs.

1 6. Apple objects to Definition **11** (“APPLECARE”) on the grounds that it seeks
2 information that is not relevant, reasonably calculated to lead to the discovery of admissible
3 evidence, or proportional to the needs of the case, including because (i) it seeks information
4 regarding iPods, which no Plaintiff purchased and (ii) it is overbroad as to time.

5 7. Apple objects to Definition **12** (“APPLECARE+”) on the grounds that it is
6 overbroad, unduly burdensome, and seeks information that is not relevant, reasonably calculated
7 to lead to the discovery of admissible evidence, or proportional to the needs of the case, including
8 because (i) it seeks information regarding AppleCare+ for iPod, which no Plaintiff purchased, and
9 (ii) it is overbroad as to time. Apple will treat the term “APPLECARE+” as referring to
10 AppleCare+ plans for iPhone and iPad sold from July 20, 2012 through the present.

11 8. Apple objects to Definition **13** (“DEVICE”) on the grounds that it is overbroad,
12 unduly burdensome, and purports to encompass information that is not relevant, reasonably
13 calculated to lead to the discovery of admissible evidence, or proportional to the needs of the
14 case. Apple will treat the term “DEVICE” as referring to iPhones and iPads only.

15 9. Apple objects to Definition **14** (“REPLACEMENT DEVICE”) on the grounds that
16 it is overbroad, unduly burdensome, and seeks information that is not relevant, reasonably
17 calculated to lead to the discovery of admissible evidence, or proportional to the needs of the
18 case, including because (i) it seeks information regarding iPods, which no Plaintiff purchased and
19 (ii) it is overbroad as to time. Apple further objects to the definition on the grounds that it is
20 vague and ambiguous, including with respect to the phrase “that was replaced.” Apple will treat
21 the term “REPLACEMENT DEVICE” as referring to an iPhone or an iPad that was provided as a
22 whole unit replacement under AppleCare+ plans for iPhone and iPad sold from July 20, 2012
23 through the present.

24 10. Apple objects to the Interrogatories to the extent that they seek information or
25 documents protected from discovery by the attorney-client privilege, the attorney work product
26 doctrine, or any other applicable privilege, policy, or immunity. Any inadvertent disclosure shall
27 not be deemed a waiver of any applicable privilege, policy, or immunity.
28

1 11. Apple objects to the Interrogatories to the extent that they seek disclosure of
2 commercially sensitive or proprietary business or trade secret information.

3 12. Apple objects to the Interrogatories to the extent that they seek information that, if
4 disclosed, would violate the privacy right of any person.

5 **RESPONSES TO INTERROGATORIES**

6 **INTERROGATORY NO. 19:**

7 IDENTIFY the failure rate of new DEVICES.

8 **RESTRICTED ACCESS AND HIGHLY CONFIDENTIAL—ATTORNEYS' EYES**
9 **ONLY—SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 19:**

10 Apple does not maintain “failure rates” as Plaintiffs define the term. Rather, Apple has
11 access to field data from which it can derive [REDACTED] rates. For
12 purposes of this Interrogatory response, [REDACTED]

13 [REDACTED]
14 [REDACTED]
15 rates, however, are not failure rates. Apple cannot isolate the “failure rate” using field data
16 because factors other than hardware “failure” (e.g., software issues, connectivity issues)
17 sometimes influence returns of service iPhones and iPads. For example, if a customer is
18 experiencing connectivity issues due to lack of service near his home and receives a service
19 replacement, the customer could continue to experience the same issues with the replacement.
20 Apple limits its response to this Interrogatory to new iPhones and iPads provided as service
21 replacements.

22 The [REDACTED] rates (as defined above) for new and reclaimed (combined) iPhones and iPads,
23 by model, provided to customers as service replacements in the United States are set forth in
24 **Exhibit A** hereto, which has been designated as “HIGHLY CONFIDENTIAL—ATTORNEYS’
25 EYES ONLY” and “RESTRICTED ACCESS.”

26 Additionally, the [REDACTED] rates (as defined above) for the new iPhones and iPads identified
27 in Apple’s Highly Confidential Supplemental Response to Interrogatory No. 18, by model, are set
28

1 forth in **Exhibit B** hereto, which has been designated as “HIGHLY CONFIDENTIAL—
2 ATTORNEYS’ EYES ONLY” and “RESTRICTED ACCESS.”

3 Apple otherwise objects to this Interrogatory for the following reasons. Apple objects to
4 this Interrogatory and the defined term “DEVICES” on the grounds that they seek information
5 that is not relevant, reasonably calculated to lead to the discovery of admissible evidence, or
6 proportional to the needs of the case, including because they seek information regarding iPods,
7 which no Plaintiff purchased. Apple further objects to this Interrogatory on the grounds that it is
8 vague, ambiguous, and is disproportionate to the needs of the case, including as to the term
9 “failure rate.” Apple further objects to this Interrogatory on the grounds that it is premature and
10 unduly burdensome because it seeks information that is not tethered to the issues to be litigated at
11 class certification, and therefore violates the Court’s directive that the parties focus discovery on
12 class certification issues. Apple further objects to this Interrogatory because it seeks disclosure of
13 commercially sensitive or proprietary business or trade secret information. Apple further objects
14 to this Interrogatory on the grounds that it is overbroad as to time, and undefined and therefore
15 overbroad as to geographic scope.

16 **INTERROGATORY NO. 20:**

17 IDENTIFY the failure rate of refurbished, remanufactured, and reclaimed DEVICES.

18 **RESTRICTED ACCESS AND HIGHLY CONFIDENTIAL—ATTORNEYS’ EYES**
19 **ONLY—SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 20:**

20 Apple does not maintain “failure rates” as Plaintiffs define the term. Rather, Apple has
21 access to field data from which it can derive [REDACTED] rates. For
22 purposes of this Interrogatory response, [REDACTED]
23 [REDACTED]
24 [REDACTED]

25 rates, however, are not failure rates. Apple cannot isolate the “failure rate” using field data
26 because factors other than hardware “failure” (e.g., software issues, connectivity issues)
27 sometimes influence returns of service iPhones and iPads. For example, if a customer is
28

1 experiencing connectivity issues due to lack of service near his home and receives a service
2 replacement, the customer could continue to experience the same issues with the replacement.

3 The [REDACTED] rates (as defined above) for new and reclaimed (combined) and
4 remanufactured iPhones and iPads, by model, provided to customers as service replacements in
5 the United States are set forth in **Exhibit A** hereto, which has been designated as “HIGHLY
6 CONFIDENTIAL—ATTORNEYS’ EYES ONLY” and “RESTRICTED ACCESS.”

7 Additionally, the [REDACTED] rates (as defined above) for the remanufactured and reclaimed
8 iPhones and iPads identified in Apple’s Highly Confidential Supplemental Response to
9 Interrogatory No. 18, by model, are set forth in **Exhibit B** hereto, which has been designated as
10 “HIGHLY CONFIDENTIAL—ATTORNEYS’ EYES ONLY” and “RESTRICTED ACCESS.”

11 Apple otherwise objects to this Interrogatory for the following reasons. Apple objects to
12 this Interrogatory and the defined term “DEVICES” on the grounds that they seek information
13 that is not relevant, reasonably calculated to lead to the discovery of admissible evidence, or
14 proportional to the needs of the case, including because they seek information regarding iPods,
15 which no Plaintiff purchased. Apple further objects to this Interrogatory on the grounds that it is
16 vague, ambiguous, and is disproportionate to the needs of the case, including as to the terms
17 “failure rate” and “refurbished.” In the ordinary course of business (and for the purposes of this
18 Interrogatory), Apple uses the term “refurbished” to refer to a device that Apple separately sells
19 as “certified refurbished,” and therefore has no bearing on the issues to be litigated in this action.
20 Apple further objects to this Interrogatory on the grounds that it is premature and unduly
21 burdensome because it seeks information that is not tethered to the issues to be litigated at class
22 certification, and therefore violates the Court’s directive that the parties focus discovery on class

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certification issues. Apple further objects to this Interrogatory because it seeks disclosure of commercially sensitive or proprietary business or trade secret information. Apple further objects to this Interrogatory on the grounds that it is overbroad as to time, and undefined and therefore overbroad as to geographic scope.

Dated: January 30, 2018

MORRISON & FOERSTER LLP

By: 
Margaret E. Mayo

Attorneys For Defendants

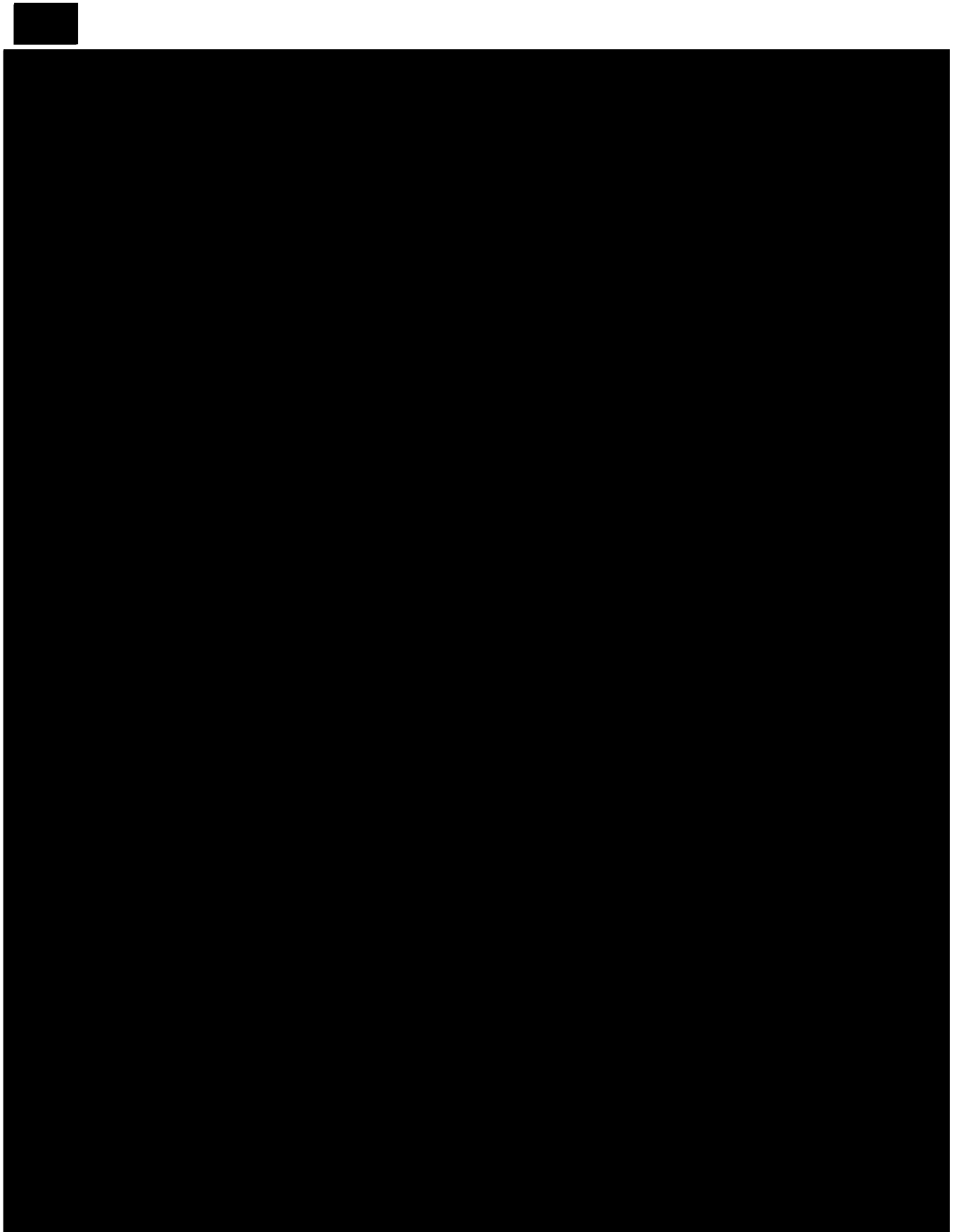
HIGHLY CONFIDENTIAL—ATTORNEYS' EYES ONLY
RESTRICTED ACCESS

EXHIBIT A

**Defendant Apple Inc.'s Highly Confidential and Restricted Access Supplemental Responses
and Objections to Plaintiffs' First Set of "Non-Uniform" Interrogatories,
dated January 30, 2018**

[REDACTED]

HIGHLY CONFIDENTIAL—ATTORNEYS' EYES ONLY
RESTRICTED ACCESS



HIGHLY CONFIDENTIAL—ATTORNEYS' EYES ONLY
RESTRICTED ACCESS



HIGHLY CONFIDENTIAL—ATTORNEYS’ EYES ONLY
RESTRICTED ACCESS

EXHIBIT B

**Defendant Apple Inc.’s Highly Confidential and Restricted Access Supplemental Responses
and Objections to Plaintiffs’ First Set of “Non-Uniform” Interrogatories,
dated January 30, 2018**

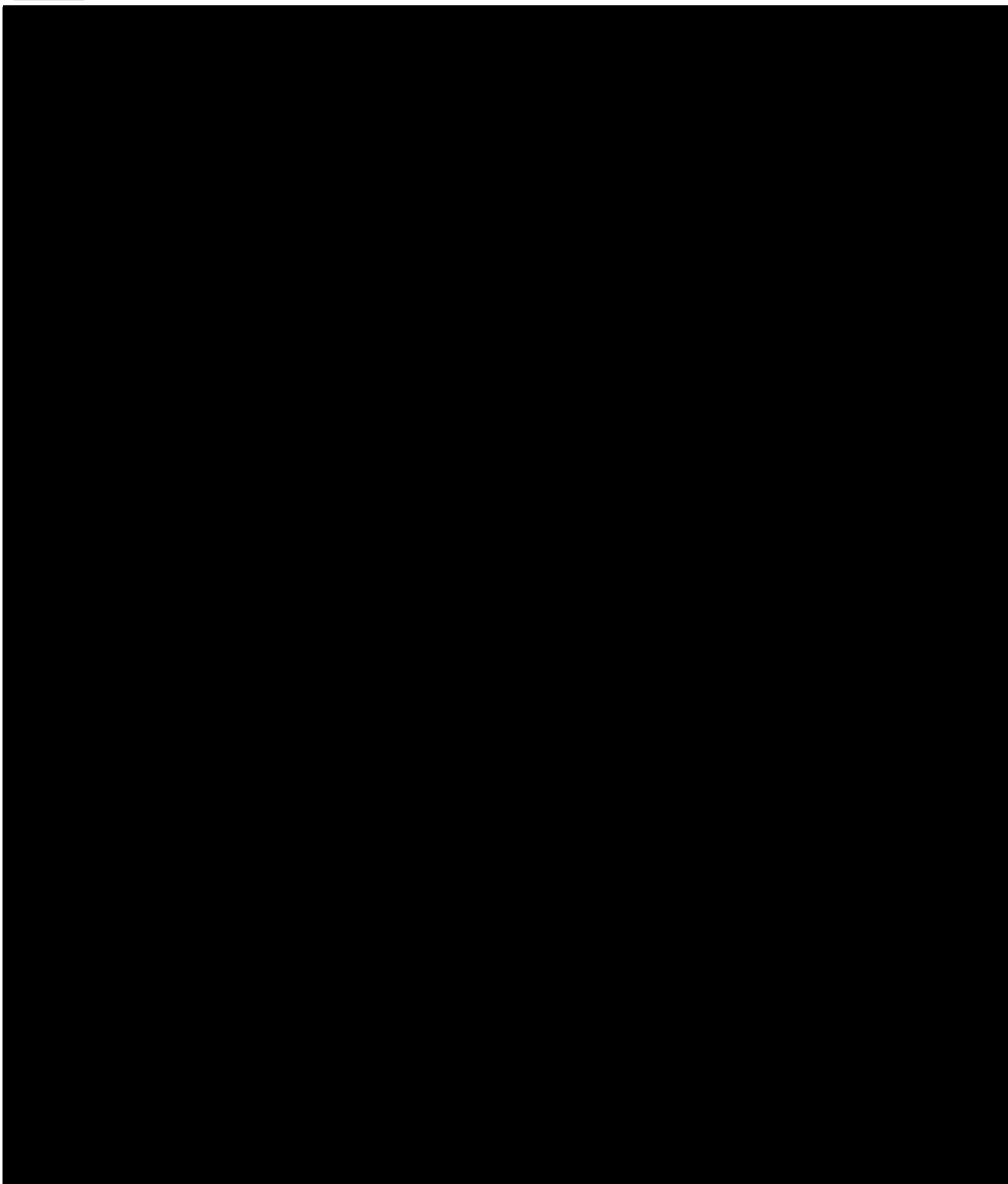
[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

HIGHLY CONFIDENTIAL—ATTORNEYS' EYES ONLY
RESTRICTED ACCESS



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VERIFICATION

I, Matthew Foster, am an employee of Defendant Apple Inc., a party to this action. I am authorized to execute this verification on behalf of Defendant Apple Inc. I have read Defendant Apple Inc.'s Supplemental Responses to Interrogatory Nos. 18, 19, and 20 of Plaintiffs' Vicky Maldonado and Justin Carter's First Set of Non-Uniform Interrogatories, and declare that, based on reasonable inquiry and with the assistance of employees at Apple Inc., the facts set forth in the Responses to Interrogatory Nos. 18, 19, and 20 are true and correct to the best of my knowledge and belief.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed this 30th day of January, 2018, at Cupertino, California.



Matthew Foster

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**CERTIFICATE OF SERVICE
(Fed. Rule Civ. Proc. Rule 5(b))**

I declare that I am employed with the law firm of Morrison & Foerster LLP, whose address is 425 Market Street, San Francisco, CA 94105. I am not a party to the within cause, and I am over the age of eighteen years.

I further declare that on the date hereof I served a copy of:

**DEFENDANT APPLE INC.'S HIGHLY CONFIDENTIAL
AND RESTRICTED ACCESS SUPPLEMENTAL
RESPONSES AND OBJECTIONS TO PLAINTIFFS' FIRST
SET OF "NON-UNIFORM" INTERROGATORIES
(INTERROGATORY NOS. 19-20)**

BY ELECTRONIC SERVICE [Fed. Rule Civ. Proc. Rule 5(b)] by electronically mailing a true and correct copy through Morrison & Foerster LLP's electronic mail system to the email address(es) set forth below per agreement in accordance with Federal Rules of Civil Procedure rule 5(b)

on the following:

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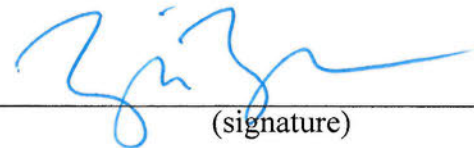
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I declare under penalty of perjury that the above is true and correct.

Executed at San Francisco, California, this 30th day of January, 2018.

Margaret E. Mayo
(typed)



(signature)

EXHIBIT 15



HAGENS BERMAN



EXPERIENCE.
INNOVATION.
RESULTS.





Hagens Berman is a national leader in class-action litigation driven by a team of legal powerhouses. With a tenacious spirit, we are motivated to make a positive difference in people's lives.

Table of Contents

INTRODUCTION

The Firm4
 Locations5

PRACTICE AREAS

Anti-Terrorism9
 Antitrust10
 Automotive - Non-Emissions Cases13
 Automotive - Emissions Litigation15
 Civil and Human Rights17
 Consumer Protection - General Class Litigation ..18
 Consumer Protection - Drug and Supplement
 Litigation20
 Employment Litigation23
 Environmental Litigation25
 Governmental Representation27
 Intellectual Property29
 Investor Fraud - Individual and Class Action
 Litigation31
 Investor Fraud - Institutional Investor Portfolio
 Monitoring and Recovery Services33
 Personal Injury and Abuse34
 Sports Litigation35
 Whistleblower Litigation38

APPELLATE VICTORIES

Strengthening Consumer Law42

MANAGING PARTNER

Steve W. Berman 44

PARTNER, EXECUTIVE COMMITTEE MEMBER

Thomas M. Sobol 49
 Anthony D. Shapiro 52
 Robert B. Carey 54

PARTNER

Leonard W. Aragon57
 Lauren Guth Barnes 58
 Ian M. Bauer 61
 Jeniphr A.E. Breckenridge 63
 Elaine T. Byszewski 64
 Jennifer Fountain Connolly 66
 Elizabeth A. Fegan 68
 Jeff D. Friedman 70
 Kristen A. Johnson72
 Reed R. Kathrein74
 Daniel J. Kurowski77
 Thomas E. Loeser79
 Robert F. Lopez81
 Barbara Mahoney 83
 Sean R. Matt 85
 Martin D. McLean87
 David P. Moody 88
 David S. Nalven 89
 Christopher A. O'Hara 90
 Matthew F. Pawa 91
 Shana E. Scarlett93
 Craig R. Spiegel 94
 Ronnie Seidel Spiegel 95
 Shayne C. Stevenson 96
 Michael W. Stocker 99
 Andrew M. Volk102
 Garth Wojtanowicz103
 Jason A. Zweig104

SENIOR COUNSEL

Kevin K. Green106
 Anne F. Johnson109

OF COUNSEL

Gregory T. Arnold 110
 Karl Barth 113
 Molly A. Booker 114
 Mark S. Carlson 115
 Jeannie Evans 117
 Philip J. Graves 118
 John D. Jenkins120
 Wesley Kelman 121
 Michella A. Kras 122
 Benjamin A. Krass 123
 Kristen McCulloch 125
 James J. Nicklaus 126
 Ed Notargiacomo 127
 Jerrod C. Patterson128
 Greer N. Shaw 131
 Nick Styant-Browne 133
 Hannah Schwarzschild 134
 Nathaniel A. Tarnor 135

ASSOCIATE

Hannah Brennan 136
 Dawn Cornelius 138
 John DeStefano 139
 Steve W. Fimmel 141
 Rachel E. Fitzpatrick 142
 Catherine Y.N. Gannon 143
 Anthea D. Grivas 144
 Ben Harrington 146
 Jeffrey A. Lang 147
 Kristie A. LaSalle 148
 Jessica R. MacAuley 149
 Rio Pierce 150
 Christopher R. Pitoun 151
 Benjamin J. Siegel 152
 Emilee Sisco 153
 Danielle Smith 154
 Shelby R. Smith 155
 Zoran (Zoki) Tasic 156
 Jessica Thompson 157
 Breanna Van Engelen 159
 Mark Vazquez 160
 Bradley J. Vettraino 161
 Ted Wojcik 162

INTRODUCTION

The Firm

Hagens Berman Sobol Shapiro LLP was founded in 1993 with one purpose: to help victims with claims of fraud and negligence that adversely impact a broad group. The firm initially focused on class action and other types of complex, multi-party litigation, but we have always represented plaintiffs/victims. As the firm grew, it expanded its scope while staying true to its mission of taking on important cases that implicate the public interest. The firm represents plaintiffs including investors, consumers, inventors, workers, the environment, governments, whistleblowers and others.

We are one of the nation's leading class-action law firms and have earned an international reputation for excellence and innovation in groundbreaking litigation against large corporations.

OUR FOCUS. Our focus is to represent plaintiffs/victims in product liability, tort, antitrust, consumer fraud, securities and investment fraud, employment, whistleblower, intellectual property, environmental, and employee pension protection cases. Our firm is particularly skilled at managing multi-state and nationwide class actions through an organized, coordinated approach that implements an efficient and aggressive prosecutorial strategy to place maximum pressure on defendants.

WE WIN. We believe excellence stems from a commitment to try each case, vigorously represent the best interests of our clients, and obtain the maximum recovery. Our opponents know we are determined and tenacious and they respect our skills and recognize our track record of achieving top results.

WHAT MAKES US DIFFERENT. We are driven to return to the class every possible portion of its damages—our track record proves it. While many class action or individual plaintiff cases result in large legal fees and no meaningful result for the client or class, Hagens Berman finds ways to return real value to the victims of corporate fraud and/or malfeasance.

A NATIONWIDE REACH. The scope of our practice is truly nationwide. We have flourished through our network of offices in ten cities across the United States, including Seattle, Boston, Chicago, Los Angeles, New York, Phoenix, San Francisco, San Diego and Washington, D.C. Our reach is not limited to the cities where we maintain offices. We have cases pending in courts across the country, with substantial activity in California, New York, Washington, Arizona and Illinois.

INTRODUCTION

Locations

SEATTLE

1301 Second Avenue, Suite 2000
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(206) 623-0594 fax

BERKELEY

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(510) 725-3001 fax

BOSTON

55 Cambridge Parkway, Suite 301
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(617) 482-3700 phone
(617) 482-3003 fax

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Newton Centre, MA 02459
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(617) 641-9551 fax

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(602) 840-3012 fax

SAN DIEGO

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(619) 929-3340 phone

WASHINGTON, D.C.

1701 Pennsylvania Ave. NW, Suite 200
Washington, D.C. 20006
(202) 248-5403 phone
(202) 580-6559 fax

“...the track record of Hagens Berman[’s] **Steve Berman is... impressive**, having racked... a \$1.6 billion settlement in the Toyota Unintended Acceleration Litigation and a substantial number of really outstanding big-ticket results. ”

– Milton I. Shadur, Senior U.S. District Judge, naming Hagens Berman Interim Class Counsel in Stericycle Pricing MDL

“ Class counsel has **consistently demonstrated extraordinary skill and effort**. ”

– U.S. District Judge James Selna, Central District of California, *In re Toyota Motor Corp. Unintended Acceleration Marketing, Sales Practices and Products Liability Litigation*

“ Berman is considered **one of the nation’s top class-action lawyers**. ”

– Associated Press

Elite Trial Lawyers

The National Law Journal

The Plaintiffs’ Hot List: The Year’s Hottest Firms

The National Law Journal

Most Feared Plaintiffs Firms

Law360

“ **Landmark consumer cases are business as usual** for Steve Berman. ”

– *The National Law Journal*, naming Steve Berman one of the 100 most influential attorneys in the nation for the third time in a row

“ [A] **clear choice** emerges. That choice is the Hagens Berman firm. ”

– U.S. District Court for the Northern District of California, *In re Optical Disk Drive Products Antitrust Litigation* (appointing the firm lead counsel)

“ All right, I think I can conclude on the basis with my five years with you all, watching this litigation progress and seeing it wind to a conclusion, that **the results are exceptional...** You did an exceptionally good job at organizing and managing the case... ”

– U.S. District Court for the Northern District of California, *In re Dynamic Random Access Memory Antitrust Litigation* (Hagens Berman was co-lead counsel and helped achieve the \$325 million class settlement)

VISA-MASTERCARD ANTITRUST LITIGATION

The firm served as co-lead counsel in what was then the largest antitrust settlement in history – valued at **\$27 billion**.

VOLKSWAGEN FRANCHISE DEALERS LITIGATION

The firm served as lead counsel representing VW franchise dealers in this suit related to the automaker's Dieselgate scandal. A **\$1.6 billion** settlement was reached, and represents a result of nearly full damages for the class.

VOLKSWAGEN EMISSIONS LITIGATION

Hagens Berman was named a member of the Plaintiffs' Steering Committee and part of the Settlement Negotiating team in this monumental case that culminated in the largest automotive settlement in history – **\$17.4 billion**.

TOYOTA UNINTENDED ACCELERATION LITIGATION

Hagens Berman obtained the then largest automotive settlement in history in this class action that recovered **\$1.6 billion** for vehicle owners.

STATE OF WASHINGTON, ET AL. V. PHILIP MORRIS, ET AL.

Hagens Berman represented 13 states in the largest recovery in litigation history – **\$206 billion**.

E-BOOKS ANTITRUST LITIGATION

Hagens Berman served as co-lead counsel in this matter and secured a combined **\$560 million** settlement on behalf of consumers against Apple and five of the nation's largest publishing companies.

LCD ANTITRUST LITIGATION

Hagens Berman served as a member of the Executive Committee representing consumers against multiple defendants in multi-district litigation. The total settlements exceeded **\$470 million**.

MCKESSON DRUG LITIGATION

Hagens Berman was lead counsel in these racketeering cases against McKesson for drug pricing fraud that settled for more than **\$444 million** on the eve of trials.

DAVITA HEALTHCARE PERSONAL INJURY LITIGATION

A Denver jury awarded a monumental **\$383.5 million** jury verdict against GranuFlo dialysis provider DaVita Inc. on June 27, 2018, to families of three patients who suffered cardiac arrests and died after receiving dialysis treatments at DaVita clinics.

DRAM ANTITRUST LITIGATION

The firm was co-lead counsel, and the case settled for **\$345 million** in favor of purchasers of dynamic random access memory chips (DRAM).

AVERAGE WHOLESALE PRICE DRUG LITIGATION

Hagens Berman was co-lead counsel in this ground-breaking drug pricing case against the world's largest pharmaceutical companies, resulting in a victory at trial. The court approved a total of **\$338 million** in settlements.

ENRON ERISA LITIGATION

Hagens Berman was co-lead counsel in this ERISA litigation, which recovered in excess of **\$250 million**, the largest ERISA settlement in history.

CHARLES SCHWAB SECURITIES LITIGATION

The firm was lead counsel in this action alleging fraud in the management of the Schwab YieldPlus mutual fund; a **\$235 million** class settlement was approved by the court.

Practice Areas

PRACTICE AREAS

Anti-Terrorism

With a long track record of upholding the rights of the voiceless, Hagens Berman fights for justice on behalf of victims of international terrorism. Our anti-terrorism legal team builds on our robust history to forge innovative cases, bringing action against those that support terrorism.

Hagens Berman has always believed in fighting for the rights of those with no voice – those who are victims to tragic circumstances beyond their control. With our guiding principles driving our efforts, the firm has expanded its practice areas to include anti-terrorism litigation.

It's no secret that some businesses and individuals have pled guilty to violating United States laws that prohibit financial transactions with terrorist organizations and foreign states that support terrorism. We believe that the law is one of the most powerful tools to combat terrorism, and our renowned team of litigators brings a fresh perspective to the fight for victims' rights in this complex arena.

Through a deep understanding of both U.S. and international anti-terrorism laws, Hagens Berman builds on its foundation to investigate acts of terrorism and forge ironclad cases against anyone responsible, to help ensure that those at the mercy of the world's most egregious perpetrators of violence are represented with the upmost integrity and determination.

The firm's new practice area carries out our mission of building a safer world through novel applications of the law and steadfast dedication.

› **Chiquita Bananas**

Hagens Berman represents American citizens who were victims of terrorism in Colombia. The victims were harmed by Colombian terrorists that Chiquita Brands International Inc. paid so that it could grow bananas in Colombia in regions that were controlled by the terrorists. Chiquita is one of the world's largest producers and marketers of fruits and vegetables and admitted it paid Colombian terrorist organizations as part of a guilty plea to settle criminal charges brought by the U.S. Department of Justice

Chiquita was placed on corporate probation and paid a \$25 million dollar fine because of its conduct in Colombia.

Plaintiffs have sued Chiquita under the U.S. Anti-Terrorism Act, which allows American victims of international terrorism to sue anyone responsible and to recover treble damages and attorney's fees. The claims are pending in the U.S. District Court for the Southern District of Florida as part of the consolidated multidistrict litigation to resolve claims related to Chiquita's payments to Colombian terrorist organizations.

PRACTICE AREAS

Antitrust

Hagens Berman works to preserve healthy marketplace competition and fair trade by protecting consumers and businesses that purchase goods and services from price fixing, market allocation agreements, monopolistic schemes and other trade restraints. The firm's lawyers have earned an enviable reputation as experts in this often confusing and combative area of commercial litigation. Our attorneys have a deep understanding of the legal and economic issues within the marketplace, allowing us to employ groundbreaking market theories that shed light on restrictive anti-competitive practices.

Hagens Berman represents millions of consumers in several high-profile class-action lawsuits, and takes on major antitrust litigation to improve market conditions for consumers, businesses and investors. We have represented plaintiffs in markets as diverse as debit and credit card services, personal computer components, electric and gas power, airlines, and internet services, and we have prevailed against some of the world's largest corporations.

The firm has also generated substantial recoveries on behalf of health plans and consumers in antitrust involving pharmaceutical companies abusing patent rights to block generic drugs from coming to market. Hagens Berman has served as lead or co-lead counsel in landmark litigation challenging anti-competitive practices, in the Paxil Direct Purchaser Litigation (\$100 million), Relafen Antitrust Litigation (\$75 million), Tricor Indirect Purchaser Antitrust Litigation (\$65.7 million), and Augmentin Antitrust Litigation (\$29 million). Representative antitrust successes on behalf of our clients include:

> Visa/MasterCard

Helped lead this record-breaking antitrust case against credit card giants Visa and MasterCard that challenged charges imposed in connection with debit cards.

RESULT: \$3.05 billion settlement and injunctive relief valued at more than \$20 billion.

> NCAA: Scholarships/Grants-In-Aid (GIAs)

In a first-of-its-kind antitrust action and potentially far-reaching case, Hagens Berman filed a class-action affecting approximately 40,000 Division I collegiate athletes who played men's or women's basketball, or FBS football, brought against the NCAA and its most powerful members, including the Pac-12, Big Ten, Big-12, SEC and ACC, claiming these entities violated federal antitrust laws by drastically reducing the number of scholarships and financial aid student-athletes receive to an amount below the actual cost of attendance and far below what the free market would bare.

The firm continues to fight on behalf of student-athletes to level the playing field and bring fairness to college sports and players.

RESULT: \$208.9 million settlement, bringing an estimated average amount of \$6,500 to each eligible class member who played his or her sport for four years.

> Apple E-books

With state attorneys general, the firm secured a \$166 million settlement with publishing companies that conspired with Apple to fix e-book prices. The firm then look on Apple for its part in the price-fixing conspiracy. In the final stage in the lawsuit, the Supreme Court denied appeal from Apple, bringing the consumer payback amount to more than twice the amount of losses suffered by the class of e-book purchasers. This represents one of the most successful recovery of damages in any antitrust lawsuit in the country.

RESULT: \$560 million total settlements.

PRACTICE AREAS

Antitrust

> Animation Workers Antitrust

Hagens Berman represents a nationwide class of animators and other artistic workers in an antitrust class-action case filed against defendants Pixar, Lucasfilm and its division Industrial Light & Magic, DreamWorks Animation, The Walt Disney Company, Sony Pictures Animation, Sony Pictures Imageworks, Blue Sky Studios, ImageMovers LLC, ImageMovers Digital LLC and others.

RESULT: Total settlements have reached \$168 million, resulting in a payment of more than \$13,000 per class member.

> TFT LCDs

Hagens Berman Sobol Shapiro filed a class-action lawsuit against several major manufacturers of TFT LCD products, claiming the companies engaged in a conspiracy to fix, raise, maintain and stabilize the price of televisions, desktop and notebook computer monitors, mobile phones, personal digital assistants (PDAs) and other devices. After years of representing consumers against multiple defendants in multi-district litigation, the case against Toshiba went to trial. Toshiba was found guilty of price-fixing in 2012, and settled.

RESULT: \$470 million in total settlements.

> DRAM

The suit claimed DRAM (Dynamic Random Access Memory) manufacturers secretly agreed to reduce the supply of DRAM, a necessary component in a wide variety of electronics which artificially raised prices. The class included equipment manufacturers, franchise distributors and purchasers.

RESULT: \$375 million settlement.

> Optical Disk Drives

Hagens Berman fought on behalf of consumers in a lawsuit filed against Philips, Pioneer and others for artificially inflating the price of ODDs for consumers.

RESULT: \$180 million in total settlements reclaimed for consumers.

> Lithium Ion Batteries

Hagens Berman filed a class-action lawsuit against some of the largest electronics manufacturers including Sony, Samsung and Panasonic for illegally fixing the price of lithium ion batteries, pushing costs higher for consumers. Defendants collectively controlled between 60 to 90 percent of the market for lithium-ion batteries between 2000 and 2011 and used that power to fix battery prices.

RESULT: \$65 million in total settlements against multiple defendants.

> AC Nielsen

Represented Information Resources, Inc. ("IRI"), in a suit claiming that AC Nielsen's anti-competitive practices caused IRI to suffer significant losses.

RESULT: \$55 million settlement.

> Dairy Products

The firm filed a class-action suit against several large players in the dairy industry, including the National Milk Producers Federation, Dairy Farmers of America, Land O'Lakes, Inc., Agri-Mark, Inc. and Cooperatives Working Together (CWT) that together produce nearly 70 percent of the milk consumed in the United States. The suit alleging that the groups conspired to fix the price of milk throughout the United States through an organized scheme to limit production, involving the needless and premature slaughtering of 500,000 cows.

RESULT: \$52 million settlement on behalf of consumers in 15 states and the District of Columbia who purchased dairy products.

> Toys "R" Us Baby Products

The firm brought this complaint on behalf of consumers claiming Toys "R" Us and several baby product manufacturers violated provisions of the Sherman Antitrust Act by conspiring to inflate prices of high-end baby products, including car seats, strollers, high chairs, crib bedding, breast pumps and infant carriers. The suit asked the court to end what it claims are anti-competitive activities and seeks damages caused by the company's actions.

RESULT: \$35.5 million settlement.

PRACTICE AREAS

Antitrust

> EA Madden

Class action claimed that video game giant Electronic Arts used exclusive licensing agreements with various football organizations to nearly double the price of several of its games.

RESULT: \$27 million settlement and imposed limits on EA's ability to pursue exclusive licensing agreements.

> Resistors Antitrust Litigation

Hagens Berman is co-lead lead counsel, representing direct purchasers of linear resistors (a device in electronics used to limit electric current) against an alleged cartel of manufacturers who conspired to limit linear resistor price competition for nearly a decade. The case is in its early stages and discovery is ongoing.

> Nespresso

Hagens Berman has assumed responsibility for a large antitrust case against Nespresso, a leading single-serve espresso and coffee maker, for its anticompetitive efforts to exclude environmentally friendly, biodegradable coffee capsules from the market.

In May 2010, our client Ethical Coffee Company ("ECC") sought to introduce an environmentally sound and more economical coffee capsule to be used in Nespresso's widely used coffee makers. It manufactured a single-use coffee capsule that did not contain harmful aluminum found in Nespresso's capsules. Nespresso knew that ECC posed a formidable challenge to its business model, which relied on captive consumers buying coffee capsules only from Nespresso. With a captive market, Nespresso could continue to charge consumers an inflated price, and continue to use the aluminum capsules that harm the environment. The U.S. Court has already ruled that these claims can proceed to discovery. Hagens Berman anticipates damages associated with Nespresso's actions to be in the hundreds of millions of dollars.

PRACTICE AREAS

Automotive - Non-Emissions Cases

In litigating cases we strive to make an impact for a large volume of consumers, especially those who fall victim to the gross negligence and oversight of some of the nation's largest entities: automakers. Hagens Berman's automotive litigation team has been named a 2016 Practice Group of the Year by Law360, highlighting its "eye toward landmark matters and general excellence," in this area of law.

The federal court overseeing the massive multi-district litigation against Toyota appointed the firm to co-lead one of the largest consolidations of class-action cases in U.S. history. The litigation combined more than 300 state and federal suits concerning acceleration defects tainting Toyota vehicles. Hagens Berman and its two co-lead firms were selected from more than 70 law firms applying for the role. Since then, the firm's automotive practice area has grown by leaps and bounds, pioneering new investigations into defects, false marketing and safety hazards affecting millions of drivers across the nation.

The firm was recently named to the National Law Journal's list of Elite Trial Lawyers for its work fighting corporate wrongdoing in the automotive industry. The firm's auto team members who worked on Toyota were also named finalists for Public Justice's Trial Lawyer of the Year award.

› General Motors Ignition Switch Litigation

Co-lead counsel in high-profile case on behalf of millions of owners of recalled GM vehicles affected by a safety defect linked to more than 120 fatalities. The suit alleges GM did not take appropriate measures, despite having prior knowledge of the defect. The case is pending, and most recently, the Supreme Court refused to hear GM's appeal regarding the pending suits when it claimed the cases were barred by its 2009 bankruptcy.

› Toyota Sudden, Unintended Acceleration Litigation

Co-lead counsel for the economic loss class in this lawsuit filed on behalf of Toyota owners alleging a defect causes vehicles to undergo sudden, unintended acceleration. In addition to safety risks, consumers suffered economic loss from decreased value of Toyota vehicles following media coverage of the alleged defect.

RESULT: Settlement package valued at up to \$1.6 billion, which was at the time the largest automotive settlement in history.

› MyFord Touch

Hagens Berman represents owners of Ford vehicles equipped with MyFord Touch, an in-car communication and entertainment package, who claim that the system is flawed, putting drivers at risk of an accident while causing economic hardship for owners. The complaint cites internal Ford documents that purportedly show that 500 of every 1,000 vehicles have issues involving MyFord Touch due to software bugs, and failures of the software process and architecture. Owners report that Ford has been unable to fix the problem, even after repeated visits. A federal judge overseeing the case recently certified nine subclasses of owners of affected vehicles in various states.

› Nissan Quest Accelerator Litigation

Represented Nissan Quest minivan owners who alleged that their vehicles developed deposits in a part of the engine, causing drivers to apply increased pressure to push the accelerator down.

RESULT: Settlement providing reimbursement for cleanings or replacements and applicable warranty coverage.

› Hyundai Kia MPG

Hagens Berman sued Hyundai and Kia on behalf of owners after the car manufacturers overstated the MPG fuel economy ratings on 900,000 of its cars. The suit seeks to give owners the ability to recover a lump-sum award for the lifetime extra fuel costs, rather than applying every year for that year's losses.

RESULT: \$255 million settlement. Lump-sum payment plan worth \$400 million on a cash basis, and worth even more if owners opt for store credit (150 percent of cash award) or new car discount (200 percent of cash award) options.

PRACTICE AREAS

Automotive - Non-Emissions Cases

> **BMW i3 REx**

Hagens Berman is representing BMW owners in a national class-action lawsuit, following reports that BMW's i3 REx model electric cars contain a defect that causes them to suddenly and without warning lose speed and power mid-drive, putting drivers and passengers at risk of crash and injury.

> **Fiat Chrysler Gear Shifter Rollaway Defect**

Hagens Berman has filed a national class-action lawsuit representing owners of Jeep Grand Cherokee, Chrysler 300 and Dodge Charger vehicles. The lawsuit states that Fiat Chrysler fraudulently concealed and failed to remedy a design defect in 811,000 vehicles that can cause cars to roll away after they are parked, causing injuries, accidents and other serious unintended consequences.

> **Ford Shelby GT350 Mustang Overheating**

Hagens Berman represents owners of certain 2016 Shelby GT350 Mustang models in a case alleging that Ford has sold these vehicles as track cars built to reach and sustain high speeds, but failed to disclose that the absence of a transmission and differential coolers can greatly diminish the vehicle's reported track capabilities. Shelby owners are reporting that this defect causes the vehicle to overheat and go into limp mode, while in use, even when the car is not being tracked

> **Tesla AP2 Defect**

The firm represents Tesla owners in a lawsuit against the automaker for knowingly selling nearly 50,000 cars with nonfunctional Enhanced Autopilot AP2.0 software that still has not met Tesla's promises, including inoperative Standard Safety Features on affected models sold in Q4 2016 and Q1 2017.

PRACTICE AREAS

Automotive - Emissions Litigation

Having played a lead role in the record-breaking Volkswagen diesel emissions case, Hagens Berman knew the story wasn't over. Since the Dieselgate scandal began, the firm has uniquely dedicated resources to uncovering cheating devices used by other automakers. The firm has become a trailblazer in this highly specialized realm, outpacing federal agencies in unmasking fraud in emissions reporting.

When news broke in 2015 of Volkswagen's massive diesel emissions-cheating scandal, Hagens Berman was the first firm in the nation to file suit against the automaker for its egregious fraud, going on to represent thousands of owners in litigation and take a leading role on the Plaintiffs' Steering Committee that would finalize a \$14.7 billion, record-breaking settlement for owners. Since this case emerged, Hagens Berman has been on the forefront of emissions litigation, relying on our legal team's steadfast and intensive investigative skills to unearth many other emissions-cheating schemes perpetrated by General Motors, Fiat Chrysler, Mercedes and other automakers, staying one step ahead of government regulators in our pursuit of car manufacturers that have violated emissions standards and regulations, as well as consumer confidence.

Hagens Berman's managing partner, Steve Berman, has dedicated the firm's resources to upholding the rights of consumers and the environment, becoming a one-man EPA. The firm is uniquely dedicated to this cause, and is the only firm that has purchased an emission testing machine to determine if other diesel car manufacturers install similar cheating devices, bringing new cases based on the firm's own research, time and testing.

> Volkswagen Diesel Emissions Litigation

Hagens Berman was the first firm in the nation to file a lawsuit against Volkswagen for its emissions fraud, seeking swift remedies for consumers affected by Volkswagen's fraud and violation of state regulations. The firm was named to the Plaintiffs' Steering Committee leading the national fight against VW, Porsche and Audi on behalf of owners and lessors of affected vehicles, and also served as part of the Settlement Negotiating team.

RESULT: The largest automotive settlement in history, \$14.7 billion.

> Volkswagen Dealers Litigation

Hagens Berman served as lead counsel in a first-of-its-kind lawsuit brought by a franchise dealer. Three family-owned Volkswagen dealers filed a class action against VW stating that it intentionally defrauded dealers by installing so-called "defeat devices" in its diesel cars, and separately carried out a systematic, illegal pricing and allocation scheme that favored some dealers over others and illegally channeled financing business to VW affiliate, Volkswagen Credit, Inc. The settlement garnered nearly unanimous approval of dealers, with 99 percent participation in the settlement.

RESULT: \$1.67 billion in benefits to Volkswagen dealers.

> Mercedes BlueTEC Emissions Litigation

Judge Jose L. Linares appointed the firm as interim class counsel in this class-action case against Mercedes concerning emissions of its BlueTEC diesel vehicles. Hagens Berman currently represents thousands of vehicle owners who were told by Mercedes that their diesel cars were "the world's cleanest and most advanced diesel," when in fact testing at highway speeds, at low temperatures, and at variable speeds, indicate a systemic failure to meet emissions standards. Low temperature testing at highway speeds for example, produced emissions that were 8.1 to 19.7 times the highway emissions standard. The lawsuit adds that testing at low temperatures at variable speeds produced emissions as high as 30.8 times the standard.

PRACTICE AREAS

Automotive - Emissions Litigation

› Chevy Cruze Diesel Emissions Litigation

Hagens Berman filed a class-action lawsuit against Chevrolet (a division of General Motors) for installing emissions-cheating software in Cruze Clean Turbo Diesel cars, forcing consumers to pay high premiums for vehicles that pollute at illegal levels. While Chevy marketed these cars as a clean option, the firm's testing has revealed emissions released at up to 13 times the federal standard. In a recent ruling, U.S. District Judge Thomas L. Ludington upheld claims brought by owners.

› Audi Emissions Litigation

Hagens Berman unearthed additional emissions-cheating by Audi, affecting its gasoline 3.0-liter vehicles. The firm's investigation shows that the newly discovered defeat device is installed in gasoline engines and changes how the transmission operates when testing is detected to lower CO2 emissions, but otherwise allows excessive CO2 emissions in normal, on-road driving.

› Fiat Chrysler EcoDiesel Emissions Litigation

The firm is leading charges against Fiat Chrysler that it sold hundreds of thousands of EcoDiesel-branded vehicles that release illegally high levels of NOx emissions, despite explicitly selling these "Eco" diesels to consumers who wanted a more environmentally friendly vehicle. Hagens Berman was the first firm in the nation to uncover this scheme and file against Fiat Chrysler on behalf of owners of Dodge RAM 1500 and Jeep Grand Cherokee EcoDiesel vehicles. Following the firm's groundbreaking suit, the EPA took notice, filing formal accusations against Fiat Chrysler.

› Dodge RAM 2500/3500 Diesel Emissions Litigation

According to the firm's investigation, Dodge has sold hundreds of thousands of Dodge RAM 2500 and 3500 trucks equipped with Cummins diesel engines that release illegally high levels of NOx emissions at up to 14 times the legal limit. This defect causes certain parts to wear out more quickly, potentially costing owners between \$3,000 and 5,000 to fix. The firm is leading a national class action against Fiat Chrysler for knowingly enducing consumers to pay premium prices for vehicles that fail to comply with federal regulations, and ultimately lead to higher costs of repairs for purchasers.

› General Motors Duramax Emissions Litigation

Hagens Berman recently pioneered another instance of diesel emissions fraud. The firm's independent testing revealed that GM had installed multiple emissions-masking defeat devices in its Duramax trucks, including Chevy Silverado and GMC Sierra models, in a cover-up akin to Volkswagen's Dieselgate concealment. In real world conditions the trucks emit 2 to 5 times the legal limit of deadly NOx pollutants, and the emissions cheating devices are installed in an estimated 705,000 affected vehicles.

PRACTICE AREAS

Civil and Human Rights

Hagens Berman has represented individuals and organizations in difficult civil rights challenges that have arisen in the past two decades. In doing so, we have managed cases presenting complex legal and factual issues that are often related to highly charged political and historical events. Our clients have included such diverse communities as World War II prisoners of war, conscripted civilians and entire villages.

In this cutting-edge practice area, the firm vigilantly keeps abreast of new state and national legislation and case-law developments. We achieve positive precedents by zealously prosecuting in our clients' interests. Some examples of our work in this area include:

› [World Trade Organization Protests](#)

During the 1999 World Trade Organization (WTO) protests in Seattle, tens of thousands of Seattle citizens became targets after Seattle officials banned all forms of peaceful protest. Seattle police attacked anyone found in the designated "no protest" zones with rubber bullets and tear gas. Hundreds of peaceful protesters were arrested and incarcerated without probable cause for up to four days. The firm won a jury trial on liability and ultimately secured a settlement from Seattle officials after filing a class action alleging violations of the First and Fourth Amendments.

› [Hungarian Gold Train](#)

Following the firm's representation of former forced and enslaved laborers for German companies in the Nazi Slave Labor Litigation, Hagens Berman led a team of lawyers against the U.S. on behalf of Hungarian Holocaust survivors in the Hungarian Gold Train case. The suit claimed that, during the waning days of World War II, the Hungarian Nazi government loaded plaintiffs' valuable personal property onto a train, which the U.S. Army later seized, never returning the property to its owners and heirs.

› [Dole Bananas](#)

Hagens Berman filed suit against the Dole Food Company, alleging that it misled consumers about its environmental record. The complaint alleged that Dole purchased bananas from a grower in Guatemala that caused severe environmental damage and health risks to local residents. Dole ultimately agreed to take action to improve environmental conditions, collaborating with a non-profit group on a water filtration project for local communities.

PRACTICE AREAS

Consumer Protection - General Class Litigation

Hagens Berman is a leader in protecting consumers, representing millions in large-scale cases that challenge unfair, deceptive and fraudulent practices.

We realize that consumers suffer the brunt of corporate wrongdoing and have little power to hold companies responsible or to change those tactics. We believe that when backed by a tenacious spirit and determination, class action cases have the ability to serve as a powerful line of defense in consumer protection.

Hagens Berman pursues class litigation on behalf of clients to confront fraudulent practices that consumers alone cannot effectively dispute. We make consumers' concerns a priority, collecting consumer complaints against suspected companies and exploring all avenues for prosecution.

Hagens Berman's legacy of protecting consumer rights reflects the wide spectrum of scams that occur in the marketplace. The cases that we have led have challenged a variety of practices such as:

- › False, deceptive advertising of consumer products and services
- › False billing and over-charging by credit card companies, banks, telecommunications providers, power companies, hospitals, insurance plans, shipping companies, airlines and Internet companies
- › Deceptive practices in selling insurance and financial products and services such as life insurance and annuities
- › Predatory and other unfair lending practices, and fraudulent activities related to home purchases

A few case examples are:

› **Expedia Hotel Taxes and Service Fees Litigation**

Hagens Berman led a nationwide class-action suit arising from bundled "taxes and service fees" that Expedia collects when its consumers book hotel reservations. Plaintiffs alleged that by collecting exorbitant fees as a flat percentage of the room rates, Expedia violated both the Washington Consumer Protection Act

and its contractual commitment to charge as service fees only "costs incurred in servicing" a given reservation.

RESULT: Summary judgment in the amount of \$184 million. The case settled for cash and consumer credits totaling \$123.4 million.

› **Stericycle**

The firm served as court-appointed lead counsel in a class-action lawsuit against Stericycle alleging that the company violated contracts and defrauded them by hundreds of millions of dollars through an automatic price-increasing scheme. In February of 2017, a federal judge certified a nationwide consumer class. The class had more than 246,000 class members, with damages estimated preliminarily at \$608 million.

RESULT: \$295 million settlement

› **Tenet Healthcare**

In a pioneering suit filed by Hagens Berman, plaintiffs alleged that Tenet Healthcare charged excessive prices to uninsured patients at 114 hospitals owned and operated by Tenet subsidiaries in 16 different states.

RESULT: Tenet settled and agreed to refund to class members amounts paid in excess of certain thresholds over a four-and-a-half year period.

PRACTICE AREAS

Consumer Protection - General Class Litigation

> Wells Fargo Force-Placed Insurance

Hagens Berman brought a case against Wells Fargo alleging it used “force-placed” insurance clauses in mortgage agreements, a practice that enables the bank to charge homeowners insurance premiums up to 10 times higher than normal rates.

RESULT: Hagens Berman reached a settlement in this case, under which all class members will be sent checks for more than double the amount of commissions that Wells Fargo wrongfully extracted from the force placement of insurance on class members’ properties.

> Consumer Insurance Litigation

Hagens Berman has pioneered theories to ensure that in first- and third-party contexts consumers and health plans always receive the treatment and benefits to which they are entitled. Many of our cases have succeeded in expanding coverage owed and providing more benefits; recovering underpayments of benefits; and returning uninsured/underinsured premiums from the misleading tactics of the insurer.

PRACTICE AREAS

Consumer Protection - Drug and Supplement Litigation

Hagens Berman aggressively pursues pharmaceutical industry litigation, fighting against waste, fraud and abuse in healthcare. For decades, pharmaceutical manufacturers have been among the most profitable companies in America. But while pharmaceutical companies become richer, consumers, health plans and insurers pay higher costs for prescription and over-the-counter drugs and supplements. We shine the light of public scrutiny on this industry's practices and represent individuals, direct and indirect purchasers, and the nation's most forward-thinking public-interest groups.

The firm's pharmaceutical and dietary supplement litigation practice is second to none in the nation in terms of expertise, commitment and landmark results. Hagens Berman's attorneys have argued suits against dozens of major drug companies and the firm's aggressive prosecution of pharmaceutical industry litigation has recovered more than \$1 billion in gross settlement funds.

RECENT ANTITRUST RESOLUTIONS

In the last few years, Hagens Berman – as lead or co-lead class counsel – has garnered significant settlements in several antitrust cases involving prescription drugs. In each case, the plaintiffs alleged that a manufacturer of a brand-name drug violated federal or state antitrust laws by delaying generic competitors from coming to market, forcing purchasers to buy the more expensive brand name version instead of the generic equivalent. Examples of our recent successes include:

> Flonase Antitrust Litigation

Hagens Berman represented purchasers in this case alleging pharmaceutical giant GlaxoSmithKline filed petitions to prevent the emergence of generic competitors to its drug Flonase, all to overcharge consumers and purchasers of the drug, which would have been priced lower had a generic competitor been allowed to come to market.

RESULT: \$150 million class settlement.

> Prograf Antitrust Litigation

Hagens Berman represented purchasers who alleged Astellas Pharma US, Inc. unlawfully maintained its monopoly and prevented generic competition for Prograf, an immunosuppressant used to help prevent organ rejection in transplant patients, harming purchasers by forcing them to pay inflated brand name prices for longer than they should have absent the anticompetitive conduct.

RESULT: The parties' motion for final approval of the \$98 million class settlement is under advisement with the court.

> Relafen Antitrust Litigation

Hagens Berman filed a class-action lawsuit against GlaxoSmithKline, SmithKline Beecham Corporation, Beecham Group PLC and SmithKline Beecham PLC, on behalf of consumers and third-party payors who purchased the drug Relafen or its generic alternatives. The suit alleged that the companies who manufacture and sell Relafen unlawfully obtained a patent which allowed them to enforce a monopoly over Relafen and prevented competition by generic prescription drugs, causing consumers to pay inflated prices for the drug.

RESULT: Under the terms of the settlement, the defendants will pay damages of \$75 million to those included in the class. Of the total settlement amount, \$25 million will be allocated to consumers and \$50 million will be used to pay the claims of insurers and other third-party payors.

PRACTICE AREAS

Consumer Protection - Drug and Supplement Litigation

> Skelaxin Antitrust Litigation

The firm represented purchasers in this case alleging King Pharmaceuticals LLC and Mutual Pharmaceutical Company alleged conspired to suppress generic competition and preserve King's monopoly in the market for the brand name muscle relaxant Skelaxin.

RESULT: \$73 million class settlement.

> Tricor Antitrust

In June 2005, Hagens Berman filed an antitrust lawsuit on behalf of a class of consumers and third party payors against pharmaceutical manufacturers Abbott Laboratories and Fournier Industries concerning the brand name cholesterol drug Tricor. HBSS was appointed co-lead class counsel by the Court.

RESULT: \$65.7 million recovery for consumers and third party payors who sued Abbott Laboratories and Fournier Industries in an antitrust action concerning the cholesterol drug Tricor.

FRAUDULENT DRUG PRICING RESOLUTIONS

Hagens Berman has led many complex cases that take on fraud and inflated drug prices throughout the U.S. This includes sweeping manipulation of the average wholesale price benchmark used to set prices for prescription drugs nationwide, fraudulent marketing of prescription drugs and the rampant use of co-pay subsidy cards that drive up healthcare costs. These efforts have led to several significant settlements:

> McKesson and First DataBank Drug Litigation

The firm discovered a far-reaching fraud by McKesson and became lead counsel in this RICO case against McKesson and First DataBank, alleging the companies fraudulently inflated prices of more than 400 prescription drugs.

RESULT: \$350 million settlement and a four percent rollback on the prices of 95 percent of the nation's retail branded drugs, the net impact of which could be in the billions of dollars. The states and federal government then used Hagens Berman's work to bring additional suits. Hagens Berman represented several states and obtained settlements three to seven times more than that of the Attorneys General. Almost \$1 billion was recovered from the McKesson fraud.

> Average Wholesale Price Drug Litigation

Hagens Berman served as co-lead counsel and lead trial counsel in this sprawling litigation against most of the nation's largest pharma companies, which alleges defendants artificially inflated Average Wholesale Price.

RESULT: Approximately \$338 million in class settlements. Hagens Berman's work in this area led to many state governments filing suit and hundreds of millions in additional recovery.

FRAUDULENT MARKETING RESOLUTIONS

Hagens Berman also litigates against drug companies that fraudulently promote drugs for uses not approved by the Food and Drug Administration (FDA), commonly known as "off-label" uses. We also litigate cases against dietary supplement manufacturers for making false claims about their products. Recent successes include:

> Neurontin Third Party Payor Litigation

Hagens Berman served as co-lead trial counsel in this case alleging that Pfizer fraudulently and unlawfully promoted the drug Neurontin for uses unapproved by the FDA.

RESULT: A jury returned a \$47 million verdict in favor of a single third-party payor plaintiff, automatically trebled to \$142 million, and the court recently approved a \$325 million class settlement.

> Lupron

Hagens Berman prosecuted a lawsuit against TAP Pharmaceuticals Products, Inc. on behalf of a class of consumers and third-party payors who purchased the drug Lupron. The suit charged that TAP Pharmaceutical Products, Inc., Abbott Laboratories and Takeda Pharmaceutical Company Limited conspired to fraudulently market, sell and distribute Lupron, causing consumers to pay inflated prices for the drug.

RESULT: Judge Richard Stearns issued a preliminary approval of the proposed settlement between TAP Pharmaceuticals and the class. Under the terms of the settlement, \$150 million will be paid by TAP on behalf of all defendants.

PRACTICE AREAS

Consumer Protection - Drug and Supplement Litigation

› **Celebrex/Bextra**

Hagens Berman filed a class-action lawsuit against Pfizer on behalf of individual consumers and third-party payors who paid for the drug Bextra. The firm was praised by Judge Breyer for its “unstinting” efforts on behalf of the class, adding, “The attorneys on both sides were sophisticated, skilled, professional counsel whose object was to zealously pursue their clients’ interest, but not at the cost of abandoning the appropriate litigation goals, which were to see, whether or not, based upon the merits of the cases, a settlement could be achieved.”

RESULT: \$89 million settlement.

› **Vioxx Third Party Payor Marketing and Sales Practices Litigation**

The firm served as lead counsel for third party payors in the Vioxx MDL, alleging that Merck & Co. misled physicians, consumers and health benefit providers when it touted Vioxx as a superior product to other non-steroidal anti-inflammatory drugs. According to the lawsuit,

The drug had no benefits over less expensive medications, but carried increased risk of causing cardiovascular events.

RESULT: \$80 million settlement.

› **Serono Drug Litigation**

Hagens Berman served as lead counsel for a class of consumers and third party payors in a suit alleging that global biotechnology company Serono, Inc. schemed to substantially increase sales of the AIDS drug Serostim by duping patients diagnosed with HIV into believing they suffered from AIDS-wasting and needed the drug to treat that condition.

RESULT: \$24 million settlement.

› **Bayer Combination Aspirin/Supplement Litigation**

Hagens Berman served as lead counsel on behalf of consumers in a suit alleging that Bayer Healthcare LLC deceptively marketed Bayer® Women’s Low-Dose Aspirin + Calcium, an 81 mg aspirin pill combined with calcium, and Bayer® Aspirin With Heart Advantage, an 81 mg aspirin pill combined with phytosterols. Plaintiffs alleged that Bayer overcharged consumers for these products or that these products should not have been sold, because these products were not FDA-approved, could not provide all advertised health benefits, and were inappropriate for long-term use.

RESULT: \$15 million settlement.

OTHER LANDMARK CASES

› **New England Compounding Center Meningitis Outbreak**

In 2012, the Center for Disease Control confirmed that New England Compounding Center sold at least 17,000 potentially tainted steroid shots to 75 clinics in 23 states across the country, resulting in more than 64 deaths and 751 cases of fungal meningitis, stroke or paraspinal/peripheral joint infection. HBSS attorneys Thomas M. Sobol and Kristen A. Johnson serve as Court-appointed Lead Counsel for the Plaintiffs’ Steering Committee on behalf of plaintiff-victims in MDL 2419 consolidated before The Honorable Ray W. Zobel in the United States District Court for the District of Massachusetts.

RESULT: \$100 million settlement.

PRACTICE AREAS

Employment Litigation

Hagens Berman takes special interest in protecting workers from exploitation or abuse. We take on race and gender discrimination, immigrant worker issues, wage and hour issues, on-the-job injury settlements and other crucial workplace issues.

Often, employees accept labor abuses or a curbing of their rights because they don't know the law, respect their superiors or fear for their jobs. We act on behalf of employees who may lack the individual power to bring about meaningful change in the workplace. We take a comprehensive approach to rooting out systemic employee abuses through in-depth investigation, knowledgeable experts and fervent exploration of prosecution strategies. Hagens Berman is a firm well-versed in taking on complicated employee policies and bringing about significant results. Representative cases include:

> **CB Richard Ellis Sexual Harassment Litigation**

Filed a class action against CB Richard Ellis, Inc., on behalf of 16,000 current and former female employees who alleged that the company fostered a climate of severe sexual harassment and discriminated against female employees by subjecting them to a hostile, intimidating and offensive work environment, also resulting in emotional distress and other physical and economic injuries to the class.

RESULT: An innovative and unprecedented settlement requiring changes to human resources policies and procedures, as well as the potential for individual awards of up to \$150,000 per class member. The company agreed to increase supervisor accountability, address sexually inappropriate conduct in the workplace, enhance record-keeping practices and conduct annual reviews of settlement compliance by a court appointed monitor.

> **Costco Wholesale Corporation Wage & Hour Litigation**

Filed a class action against Costco Wholesale Corporation on behalf of 2,000 current and former ancillary department employees, alleging that the company misclassified them as "exempt" executives, denying these employees overtime compensation, meal breaks and other employment benefits.

RESULT: \$15 million cash settlement on behalf of the class.

> **Washington State Ferry Workers Wage Litigation**

Represented "on-call" seamen who alleged that they were not paid for being "on call" in violation of federal and state law.

RESULT: Better working conditions for the employees and rearrangement in work assignments and the "on-call" system.

> **SunDance Rehabilitation Corporation**

Filed a class action against SunDance challenging illegal wage manipulation, inconsistent contracts and other compensation tricks used to force caregivers to work unpaid overtime.

RESULT: \$3 million settlement of stock to be distributed out of the company's bankruptcy estate.

> **Schneider National Carriers - Regional Drivers**

The firm represents a certified class of regional drivers in a suit filed against Schneider National Carriers, claiming that the company failed to pay its workers for all of their on duty time devoted to a variety of work tasks, including vehicle inspections, fueling, and waiting on customers and assignments. The suit also claims that the company does not provide proper meal and rest breaks and the company is liable for substantial penalties under the California Labor Code.

RESULT: A \$28 million settlement on behalf of drivers.

> **Schneider National Carriers - Mechanics**

Hagens Berman filed a class-action lawsuit alleging that Schneider National Carriers failed to provide mechanics with proper overtime compensation, meal and rest break premiums, and accurate wage statements as required by California law.

RESULT: In March of 2013, the case was settled on terms mutually acceptable to the parties.

PRACTICE AREAS

Employment Litigation

› [Swift Transportation Co. of Arizona LLC](#)

The firm represents a certified class of Washington-based truck drivers against Swift Transportation. The suit alleges that Swift failed to pay the drivers overtime and other earned wages in violation of Washington state law.

An agreement to settle the case was granted preliminary approval in October 2018. Final approval is pending.

PRACTICE AREAS

Environmental Litigation

Since Hagens Berman's founding, it has sought to work toward one simple goal: work for the greater good. Hagens Berman has established a nationally recognized environmental litigation practice, having handled several landmark cases in the Northwest, the nation and internationally.

Hagens Berman believes that protecting and restoring our environment from damage caused by irresponsible and illegal corporate action is some of the most rewarding work a law firm can do. Our firm has established an internationally recognized environmental litigation practice.

SCIENCE AND THE LAW

Hagens Berman's success in environmental litigation stems from a deep understanding of the medical and environmental science that measures potential hazards. That expertise is translated into the courtroom as our attorneys explain those hazards to a judge or jury in easily understood terms.

ENVIRONMENTAL EXPERTS

The firm has fostered deep relationships with top-notch environmental experts that result in resonating arguments and court victories, as well as thoroughly researched and vetted investigations.

REAL IMPACTS

Environmental law is a priority at our firm and we have taken an active role in expanding this practice area. In 2003, Steve Berman and his wife Kathy worked with the University of Washington to create the Kathy and Steve Berman Environmental Law Clinic, giving law students the training and opportunities needed to become hands-on advocates for the environment.

Hagens Berman's significant environmental cases include:

> Exxon Valdez Oil Spill Litigation

Hagens Berman represented various classes of claimants, including fisherman and businesses located in Prince William Sound and other impacted areas who were damaged by one of the worst oil spills in United States history.

RESULT: A \$5 billion judgment was awarded by a federal jury, and a \$98 million settlement was achieved with Alyeska, the oil company consortium that owned the output of the pipeline.

> San Francisco and Oakland Climate Change Litigation

Hagens Berman represents the cities of San Francisco and Oakland, Calif. in two lawsuits filed against BP, Chevron Corp., Exxon Mobil Corp., Royal Dutch Shell PLC and ConocoPhillips alleging that the Big Oil giants are responsible for the cities' costs of protecting themselves from global warming-induced sea level rise, including expenses to construct seawalls to protect the two cities' more than 5 million residents. The newly filed case seek an order requiring defendants to abate the global warming-induced sea level rise by funding an abatement program to build sea walls and other infrastructure. Attorneys for the cities say this abatement fund will be in the billions.

> Chinook Ferry Litigation

The firm represented a class of property owners who challenged Washington State Ferries' high-speed operation of a new generation of fast ferries in an environmentally sensitive area of Puget Sound. Two of the ferries at issue caused environmental havoc and property damage, compelling property owners to act. A SEPA study conducted in response to the suit confirmed the adverse environmental impacts of the fast ferry service

RESULT: A \$4.4 million settlement resulted that is among the most favorable in the annals of class litigation in Washington state.

> Grand Canyon Litigation

The firm represented the Sierra Club in a challenge to a Forest Service decision to allow commercial development on the southern edge of the Grand Canyon National Park.

RESULT: The trial court enjoined the project.

PRACTICE AREAS

Environmental Litigation

> Kerr-McGee Radiation Case

The firm brought a class action on behalf of residents of West Chicago, Illinois who were exposed to radioactive uranium tailings from a rare earth facility operated by Kerr-McGee.

RESULT: A medical monitoring settlement valued in excess of \$5 million

> Skagit Valley Flood Litigation

Hagens Berman represented farmers, homeowners and businesses who claimed damages as a result of the 1990 flooding of this community. The case was in litigation for ten years and involved a jury trial of more than five months.

RESULT: Following the entry of 53 verdicts against Skagit County, the trial court entered judgments exceeding \$6.3 million. Ultimately, the State Supreme Court reversed this judgment. Despite this reversal, the firm is proud of this representation and believes that the Supreme Court erred.

> Idaho Grass Burning Case

In 2002, Hagens Berman brought a class-action lawsuit on behalf of Idaho residents who claimed grass-burning farmers released more than 785 tons of pollutants into the air, including concentrations of polycyclic aromatic hydrocarbons (PAHs), proven carcinogens. Burning the fields annually caused serious health problems, especially to those with respiratory ailments such as cystic fibrosis and asthma. The suit also asserted that Idaho's grass burning policies are far below the standards of other states such as neighboring Washington, where farmers use other techniques to remove grass residue from the fields.

RESULT: The lawsuit settled in 2006 under confidential terms.

> Dole Bananas Case

The firm took on Dole Food Company Inc. in a class-action lawsuit claiming the world's largest fruit and vegetable company lied to consumers about its environmental record and banana-growing practices. The suit alleged that Dole misrepresented its commitment to the environment in selling bananas from a Guatemalan banana plantation that did not comply with proper environmental practices.

RESULT: The suit culminated in 2013. Dole and non-profit organization Water and Sanitation Health, Inc. collaborated on a water filter project to assist local communities in Guatemala.

> Diesel Emissions Litigation

Second to none in uncovering emissions-cheating, the firm has dedicated its time and resources to breaking up the dirty diesel ring. After filing the first lawsuit in the country against Volkswagen, Audi and Porsche for its massive Dieselpgate scandal in 2015, the firm went on to unmask emissions-cheating devices installed in vehicles made by Fiat Chrysler, Mercedes and General Motors and continues to investigate diesel cars for excessive, illegal and environmentally harmful levels of emissions.

RESULT: The firm's independently researched active cases have led to investigations by the EPA, DOJ and European authorities.

> Kivalina Global Warming Litigation

A tiny impoverished Alaskan village of Inupiat Eskimos took action against some of the world's largest greenhouse gas offenders, claiming that contributions to global warming are leading to the destruction of their village and causing erosion to the land that will eventually put the entire community under water. Hagens Berman, along with five law firms and two non-profit legal organizations, filed a suit against nine oil companies and 14 electric power companies that emit large quantities of greenhouse gases into the atmosphere. The lawsuit alleged their actions resulted in the destruction of protective ice, exposing the village to severe storms that destroy the ground the village stands on. Relocating the village of Kivalina could cost between \$95 and \$400 million, an expense the community cannot afford.

> Cane Run Power Plant Coal Ash Case

In 2013, Hagens Berman filed a class-action lawsuit against Louisville Gas and Electric Company alleging it illegally dumped waste from a coal-fired power plant onto neighboring property and homes where thousands of Kentucky residents live. According to the complaint, Louisville Gas and Electric Company's Cane Run Power Plant is fueled by the burning of coal, which also produces coal combustion byproducts—primarily fly ash and bottom ash—that contain significant quantities of toxic materials, including arsenic, chromium and lead. The dust spewed by Cane Run contains known carcinogens, posing significant potential health hazards.

PRACTICE AREAS

Governmental Representation

Hagens Berman has been selected by public officials to represent government agencies and bring civil law enforcement and damage recoupment actions designed to protect citizens and the treasury. We understand the needs of elected officials and the obligation to impartially and zealously represent the interests of the public, are often chosen after competitive bidding and have been hired by officials from across the political spectrum.

Hagens Berman has assisted governments in recovering billions of dollars in damages and penalties from corporate wrongdoers and, in the process, helped reform how some industries do business.

In serving government, we are often able to leverage the firm's expertise and success in related private class-action litigation.

Successes on behalf of government clients include:

> Big Tobacco

We represented 13 states in landmark Medicaid-recoupment litigation against the country's major tobacco companies. Only two states took cases to trial – Washington and Minnesota. The firm served as trial counsel for the state of Washington, becoming only one of two private firms in the entire country to take a state case to trial.

Hagens Berman was instrumental in developing what came to be accepted as the predominant legal tactic to use against the tobacco industry: emphasizing traditional law enforcement claims such as state consumer protection, antitrust and racketeering laws. This approach proved to be nearly universally successful at the pleading stage, leaving the industry vulnerable to a profits-disgorgement remedy, penalties and double damages. The firm also focused state legal claims on the industry's deplorable practice of luring children to tobacco use.

RESULT: \$206 billion for state programs, the largest settlement in the history of civil litigation in the U.S.

> McKesson Average Wholesale Price Litigation

This litigation is yet another example of fraudulent drug price inflation impacting not just consumers and private health plans, but public health programs such as Medicaid and local government-sponsored plans as well.

RESULT: Hagens Berman has started the AWP class action, which resulted in many states filing cases. The firm represented several of those states in successful litigation.

> McKesson Government Litigation

On the heels of Hagens Berman's class action against McKesson, the firm led lawsuits by states (Connecticut, Utah, Virginia, Montana, Arizona).

RESULT: These states obtained recoveries three to seven times larger than states settling in the multi-state Attorneys General settlement. In addition, the firm obtained \$12.5 million for the City of San Francisco and \$82 million for a nationwide class of public payors.

> Zyprexa Marketing & Sales Practices Litigation - Connecticut

Hagens Berman served as outside counsel to then-Attorney General Richard Blumenthal in litigation alleging that Lilly engaged in unlawful off-label promotion of the atypical antipsychotic Zyprexa. The litigation also alleged that Lilly made significant misrepresentations about Zyprexa's safety and efficacy, resulting in millions of dollars in excess pharmaceutical costs borne by the State and its taxpayers.

RESULT: \$25 million settlement.

> General Motors Ignition Switch Litigation

Hagens Berman is pleased to be assisting the Arizona Attorney General in its law enforcement action versus GM, as well as the district attorney of Orange County, California who filed a consumer protection lawsuit against GM, claiming the automaker deliberately endangered motorists and the public by intentionally concealing widespread, serious safety defects.

PRACTICE AREAS

Governmental Representation

> State Opioid Litigation

Hagens Berman was hired to assist multiple municipalities in lawsuits brought against large pharmaceutical manufacturers including Purdue Pharma, Cephalon, Janssen Pharmaceuticals, Endo Health Solutions and Actavis charging that these companies and others deceived physicians and consumers about the dangers of prescription painkillers.

The firm was first hired by California governmental entities for the counties of Orange and Santa Clara. The state of Mississippi also retained the firm's counsel in its state suit brought against the manufacturer of opioids. The suit alleges that the pharma companies engaged in tactics to prolong use of opioids despite knowing that opioids were too addictive and debilitating for long-term use for chronic non-cancer pain.

In a third filing, Hagens Berman was retained as trial counsel for the state of Ohio. Filed on May 31, 2017, the firm is assisting the Ohio Attorney General's office in its case against five opioid makers. Ohio Attorney General Mike DeWine stated that "drug companies engaged in fraudulent marketing regarding the risks and benefits of prescription opioids which fueled Ohio's opioid epidemic," and that "these pharmaceutical companies purposely misled doctors about the dangers connected with pain meds that they produced, and that they did so for the purpose of increasing sales."

> Municipal Lending

Hagens Berman represents the cities of Los Angeles and Miami in a series of lawsuits filed against the nation's largest banks, including CitiGroup, JP Morgan, Wells Fargo and Bank of America alleging that they engage in systematic discrimination against minority borrowers, resulting in reduced property tax receipts and other damages to the cities. The suits seek damages for the City, claiming that the banks' alleged discriminatory behavior resulted in foreclosures, causing a reduction of property tax revenues and increased municipal service costs.

PRACTICE AREAS

Intellectual Property

The Hagens Berman intellectual property team has deep experience in all aspects of intellectual property litigation. We specialize in complex and significant damages cases against some of the world's largest corporations.

The firm is primarily engaged in patent infringement litigation at this time. We seek to represent intellectual property owners, including inventors, universities, non-practicing entities, and other groups whose patent portfolios represents a significant creative and capital investment.

Our current and recent engagements include the following:

> **Bombardier Inc.**

The firm represented Arctic Cat Inc. in patent infringement litigation against Bombardier Recreational Products and BRP U.S. Inc. The complaint alleges that Bombardier's Sea-Doo personal watercraft infringe Arctic Cat's patents covering temporary steerable thrust technology used when the rider turns in off-throttle situations.

RESULT: Florida U.S. District Judge Beth Bloom issued a final judgment of \$46.7 million against defendants, trebling initial damages of \$15.5 million awarded in a unanimous jury verdict.

> **Angry Birds**

Hagens Berman represented a Seattle artist who filed a lawsuit against Hartz Mountain Corporation – one of the nation's largest producers of pet-related products – claiming the company illegally sold the artist's trademarked Angry Birds pet toy line to video game giant Rovio Entertainment Ltd, robbing her of millions of dollars of royalty fees.

RESULT: The case settled under confidential terms, which the firm found to be extremely satisfactory for the plaintiff.

> **Samsung, LG, Apple**

The firm represents FlatWorld Interactives LLC in patent litigation against Samsung, LG and Apple. The complaints allege that the defendants' mobile handsets, tablets, media players and other devices infringe a FlatWorld patent covering the use of certain gestures to control touchscreen displays.

RESULT: The case settled.

> **Oracle**

The firm represents Thought Inc. against Oracle Corporation in a suit alleging infringement of seven patents covering various aspects of middleware systems providing application to database mapping, reading and persistence.

> **Salesforce**

The firm represents Applications in Internet Time LLC in patent litigation against Salesforce Inc. The suit alleges that our client's patents cover the core architecture of Salesforce's platform for developing, customizing, and updating cloud-based software applications.

> **Nintendo**

The firm represented Japan-based Shinsedai Company in patent infringement litigation against Nintendo. The suit alleged that our client's patents were infringed by various sports games for the Nintendo Wii.

Unlike other intellectual property firms, Hagens Berman only represents plaintiffs. This reduces the risk of potential conflicts of interest which often create delays in deciding whether or not to take a case at larger firms.

PRACTICE AREAS

Intellectual Property

> [Electronic Arts](#)

Hagens Berman represents the original software developer of the Electronic Arts (EA) NFL Madden Football video game series in a suit alleging that he is owed royalties on EA Madden NFL titles as well as other derivative products. We prevailed in two trials against EA, and the verdicts were designated as the Top Verdict of the Year (2013) by The Daily Journal. The judgment is on appeal and if upheld will return for a final damages phase.

Hagens Berman is also skilled in other aspects of intellectual property law, including trademark, trade dress, trade secret and copyright litigation.

PRACTICE AREAS

Investor Fraud - Individual and Class Action Litigation

Investing is a speculative business involving assessment of a variety of risks that can only be properly weighed with full disclosure of accurate information. No investor should suffer undue risk or incur losses due to misrepresentations related to their investment decisions.

Our attorneys work for institutional and individual investors defrauded by unscrupulous corporate insiders and mutual funds. The firm vigorously pursues fraud recovery litigation, forcing corporations and mutual funds to answer to deceived investors.

Hagens Berman is one of the country's leading securities litigation firms advising clients in both individual and class-action cases. The firm has experience, dedication and a team with the horsepower required to drive complex cases to exemplary outcomes. Our attorneys are authorities in an array of issues unique to federal and state securities statutes and related laws. We use a variety of highly experienced experts as an integral part of our prosecution team. Successes on behalf of our investor clients include:

> **Charles Schwab Securities Litigation**

Lead counsel, alleging fraud in the management of the Schwab YieldPlus mutual fund.

RESULT: \$235 million class settlement for investors.

> **Oppenheimer**

Additional counsel for lead plaintiffs in class action alleging Oppenheimer misled investors regarding its Champion and Core Bond Funds.

RESULT: \$100 million for the classes.

> **Tremont**

Co-lead counsel in a case alleging Tremont Group Holdings breached its fiduciary duties by turning over \$3.1 billion to Bernard Madoff. On Sept. 14, 2015, after nearly two years of negotiations and mediation, the court granted final approval of the plan of allocation and distribution of the funds which markets estimate could yield investors as much as \$1.45 billion.

RESULT: \$100 million settlement between investors, Tremont and its affiliates.

> **Boeing**

Uncovered critical production problems with the 777 airliner documented internally by Boeing, but swept under the rug until a pending merger with McDonnell Douglas was completed.

RESULT: Record-breaking settlement of more than \$92.5 million.

> **J.P. Morgan – Madoff**

Case alleges that banking and investment giant J.P. Morgan was complicit in aiding Bernard Madoff's Ponzi scheme. Investors claim that J.P. Morgan operated as Bernard L. Madoff Investment Securities LLC's primary banker for more than 20 years.

RESULT: \$218 million settlement amount for the class and a total of \$2.2 billion paid from JPMorgan that will benefit victims of Madoff's Ponzi scheme.

> **Morrison Knudsen**

Filed a shareholder class action, alleging that MK's senior officers concealed hundreds of millions in losses.

RESULT: More than \$63 million for investors.

> **Raytheon/Washington Group**

Charged Raytheon with deliberately misrepresenting the true financial condition of Raytheon Engineers & Constructors division in order to sell this division to the Washington Group at an artificially inflated price.

RESULT: \$39 million settlement.

> **U.S. West**

Represented shareholders of U.S. West New Vector in a challenge to the proposed buyout of minority shareholders by U.S. West.

RESULT: The proposed buyout was stayed, and a settlement was achieved, resulting in a \$63 million increase in the price of the buyout.

PRACTICE AREAS

Investor Fraud - Individual and Class Action Litigation

Our current casework includes:

› Theranos Investor Litigation

Hagens Berman represents Theranos investors in a lawsuit that states that Theranos and its officers set in motion a publicity campaign to raise billions of dollars for Theranos and themselves, and to induce investors to invest in Theranos, all the while knowing that its “revolutionary” blood test technology was essentially a hoax. The suit filed against the company, its CEO Elizabeth Holmes and Ramesh Balwani, alleges that Theranos’ statements to investors were built on false statements. At the crux of the court’s recent decision to uphold the investor case against Theranos was a finding that while plaintiffs did not directly purchase their securities from defendants, claims made by Theranos, Holmes and Balwani constituted fraud.

› Aequitas Investor Litigation

The firm represents a group of investors alleging that national law firm Sidley Austin LLP, Oregon law firm Tonkon Torp LLP and accounting firms Deloitte & Touche LLP and EisnerAmper LLP violated Oregon securities laws by participating or materially aiding in misrepresentations made by Aequitas Management LLC and contributing to a \$350 million Ponzi scheme. Investors state, amongst other allegations, that in 2011 Aequitas began purchasing loan receivables from Corinthian College Inc. and had bought the rights to collect \$444 million in loans. Investment managers hid the details of the transactions from investors, and deceived them when Corinthian’s business was hit with regulatory challenges in 2014. When Corinthian collapsed in May 2015, the investment group and its managers continued to sell securities and used the money to pay off other investors and fund a lavish lifestyle, until Aequitas ultimately imploded in 2017, the investors claim.

› China MediaExpress

Hagens Berman represents investors in a case against China MediaExpress, which purported to be the owner of a network of advertising terminals on buses throughout China. The case alleges that the company and its auditor (Deloitte Touche Tohmatsu) participated in accounting fraud that ultimately led to the demise of the company. In early 2014, the court entered

a default judgment in the amount of \$535 million and certified a proposed class against China Media Express Holdings Inc. The case will proceed separately against Deloitte Touche Tohmatsu.

On May 6, 2015 Hagens Berman obtained a \$12 million settlement from Deloitte Touche Tohmatsu, one of the largest settlements against an auditor in a Chinese “reverse merger” case which is now awaiting final approval from the court.

› Altisource Asset Management Corporation

The firm was appointed lead counsel in this institutional investor lawsuit brought on behalf of purchasers of Altisource Asset Management Corporation (AAMC). The complaint alleges that AAMC misrepresented or outright concealed its relationship with these companies and the extent to which the interconnected entities engaged in conflicted transactions with themselves. Estimates of class-wide damages are in the hundreds of millions of dollars. The firm recently filed the consolidated complaint and motions to dismiss are pending before the U.S. District Court for the District of the Virgin Islands.

WHISTLEBLOWERS

In an effort to curb Wall Street excesses, Congress passed the Dodd-Frank Wall Street Reform and Consumer Protection Act, which built vigorous whistleblower protections into the legislation known as the “Wall Street Tip-Off Law.” The law empowers the U.S. Securities and Exchange Commission to award between 10 and 30 percent of any monetary sanctions recovered in excess of \$1 million to whistleblowers who provide information leading to a successful SEC enforcement. It also provides similar rewards for whistleblowers reporting fraud in the commodities markets.

Hagens Berman represents whistleblowers with claims involving violations of the Securities Exchange Act and the Commodities Exchange Act. Unlike traditional whistleblower firms who have pivoted into this area, Hagens Berman has a strong background and history of success in securities, antitrust and other areas of fraud enforcement, making us an ideal partner for these cases. Our matters before the SEC/CFTC include a range of claims, including market manipulation and fraudulent financial statements.

PRACTICE AREAS

Investor Fraud - Institutional Investor Portfolio Monitoring and Recovery Services

Hagens Berman is a leading provider of specialized securities litigation services to public, private and Taft-Hartley pension funds. We offer proprietary and unparalleled asset protection and recovery services to both foreign and domestic institutions. Our institutional services provide participants with the ability to identify, investigate and react to potential wrongdoing by companies in which the institution invests.

PORTFOLIO MONITORING. Timely information and analysis are the critical ingredients of a successful fraud recovery program. Institutions must receive quick, reliable determinations concerning the source and extent of their losses, the likelihood of recoupment and the best manner for pursuing it. Our Portfolio Monitoring Service provides these services at no cost to participating institutions. The Hagens Berman Portfolio Monitoring Service has three primary components:

TRACKING. Alerts clients of any significant portfolio losses due to suspected fraud.

ANALYSIS. Provide clients with necessary legal and factual analyses regarding possible recovery options, removing from the institution any burden connected with scrutinizing myriad instances of potential wrongdoing and attempt to decipher whether direct, recoverable injuries have resulted.

REPORTING. Attorneys and forensic accounting fraud experts deliver a concise monthly report that furnishes comprehensive answers to these inquiries. On a case-by-case basis, the report specifies each of the securities in which the client lost a significant amount of money, and matches those securities with an analysis of potential fraud likelihood, litigation options and an expert recommendation on how best to proceed for maximum recovery.

Our Portfolio Monitoring Service performs its functions with almost no inconvenience to participating institutions. A client's custodian bank provides us with records detailing the client's transactions from the prior several years and on a regular basis thereafter. Importantly, none of the institution's own personnel is required to share in this task, as we acquire the information directly from the custodian bank.

We provide our Portfolio Monitoring service with no strings attached and allow our clients to act without cost or commitment. In instances where a litigation opportunity arises, we believe our skills make us the ideal choice for such a role, although the client is free to choose others.

When a portfolio loses money because of corporate deception, our litigation services seek to recover a substantial percentage of those losses, thereby increasing a fund's performance metric. As fiduciaries, money managers may not have the ability or desire to risk funds on uncertain litigation using typical hourly-rate law firms. Hagens Berman seeks to minimize the burden on the money manager by pursuing cases on a contingent-fee basis.

PRACTICE AREAS

Personal Injury and Abuse

For nearly two decades, Hagens Berman's blend of professional expertise and commitment to our clients has made our firm one of the most well-respected and successful mass tort and personal injury law firms in the nation. We deliver exceptional results for our clients by obtaining impressive verdicts and settlements in personal injury litigation.

Our attorneys have experience in wrongful death, brain injury and other catastrophic injury cases, as well as deep experience in social work negligence, medical malpractice, nursing home negligence and sexual abuse cases.

Hagens Berman also has unparalleled experience in very specific areas of abuse law, recovering damages on behalf of some of the most vulnerable people in our society.

Sexual Abuse Litigation Hagens Berman has represented a wide spectrum of individuals who have been victims of sexual abuse, including children and developmentally disabled adults. We treat each case individually, with compassion and attention to detail and have the expertise, resources and track record to stand up to the toughest opponents. In the area of sexual abuse, our attorneys have obtained record-breaking verdicts, including the largest personal injury verdict ever upheld by an appellate court in the state of Washington.

Nursing Home Negligence Nursing home negligence is a growing problem throughout the nation. As our population ages, reports of elder abuse and nursing home negligence continue to rise. Today, elder abuse is one of the most rapidly escalating social problems in our society. Hagens Berman is uniquely qualified to represent victims of elder abuse and nursing home negligence. Our attorneys have secured outstanding settlements in this area of the law and have committed to holding nursing homes accountable for wrongdoing.

Social Work Negligence Social workers play a critical role in the daily lives of our nation's most vulnerable citizens. Social workers, assigned to protect children, the developmentally disabled and elderly adults, are responsible for critical aspects of the lives of

tens of thousands of citizens who are unable to protect themselves. Many social workers do a fine job. Tragically, many do not. The results are often catastrophic when a social worker fails to monitor and protect his or her vulnerable client. All too often, the failure to protect a child or disabled citizen leads to injury or sexual victimization by predators. With more than \$40 million in recoveries on behalf of vulnerable citizens who were neglected by social workers, Hagens Berman is the most experienced, successful and knowledgeable group of attorneys in this dynamic area of the law.

Workplace Injury While many workplace injury claims are precluded by workers compensation laws, many instances of workplace injury are caused by the negligence and dangerous oversight of third parties. In these instances, victims may have valid claims. Hagens Berman's personal injury legal team has successfully brought many workplace injury claims, holding third parties liable for our clients' serious bodily injuries.

Medical Malpractice Litigating a medical malpractice case takes acute specialization and knowledge of medical treatments and medicine. Notwithstanding these facts, Hagens Berman pursues meritorious medical malpractice claims in instances where clients have suffered life-altering personal injuries. Our firm's personal injury attorneys handle medical malpractice cases with the dedication and detail necessary to make victims whole. Hagens Berman is very selective in accepting medical malpractice cases and has been successful in recovering significant compensation for victims of medical error and negligence.

PRACTICE AREAS

Sports Litigation

Hagens Berman has one of the nation's most highly regarded sports law practices. Our attorneys are the vanguard of new and innovative legal approaches to protect the rights of professional and amateur athletes in cases against large, well-financed interests, including the National Collegiate Athletic Association (NCAA), the National Football League (NFL) and the Fédération Internationale de Football Association (FIFA).

› NCAA: Concussions

Cases of particular nationwide interest for fans, athletes and the general public involve numerous cases filed by Hagens Berman against the NCAA. Recently, the firm has taken on the NCAA for its failure to prevent concussions and protect student-athletes who suffered concussions. Steve Berman serves as lead counsel in multi-district litigation as the firm finalizes a settlement that will bring sweeping changes to the NCAA's approach to concussion treatment and prevention; provide a 50-year medical-monitoring program for student-athletes to screen for and track head injuries; and establish a \$5 million fund for concussion research.

The core settlement benefits include a 50-year medical monitoring program overseen by a medical science committee appointed by the court that will screen and track concussions, funded by a \$70 million medical monitoring fund, paid by the NCAA and its insurers. Examinations include neurological and neurocognitive assessments to evaluate potential injuries.

The settlement also mandates significant changes to and enforcement of the NCAA's concussion management policies and return-to-play guidelines. All players will now receive a seasonal, baseline test to better assess concussions sustained during the season. All athletes who have sustained a concussion will now need to be cleared before returning to play. A medical professional trained in the diagnosis of concussions will be present at all games involving contact-sports. The settlement also creates reporting mandates for concussions and their treatment.

› Player Likeness Rights

Hagens Berman attorneys representing student-athletes who claimed that the NCAA illegally used student-athletes' names, images and likenesses in Electronic Arts' popular NCAA Football, Basketball and March Madness video game series reached a combined \$60 million settlement with the NCAA and EA, marking the first time the NCAA has agreed to a settlement that pays student-athletes for acts related to their participation in athletics. Settlement checks were sent to about 15,000 players, with average amounts of \$1,100 and some up to \$7,600.

The firm began this case with the knowledge that the NCAA and member schools were resolute in keeping as much control over student-athletes as possible, and fought hard to ensure that plaintiffs would not be exploited for profit, especially by the organization that vowed to prevent the athlete from exploitation.

The firm also represented NFL legend Jim Brown in litigation against EA for improperly using his likeness in its NFL video games, culminating in a \$600,000 voluntary judgment offered by the video game manufacturer.

› FIFA/U.S. Soccer: Concussions

Several current and former soccer players filed a class action against U.S. soccer's governing bodies, which led to life-changing safety measures brought to millions of U.S. youth soccer players. Players represented by Hagens Berman alleged these groups failed to adopt effective policies to evaluate and manage concussions, leaving millions of players vulnerable to long-lasting brain injury.

PRACTICE AREAS

Sports Litigation

The settlement against six of the largest youth soccer organizations completely eliminates heading for youth soccer's youngest players, greatly diminishing risks of concussions and traumatic head injuries. Prior to the settlement, no rule limited headers in children's soccer.

It also sets new benchmarks for concussion measurement and safety protocols, and highlights the importance of on-staff medical personnel at youth tournaments. Under the settlement, youth players who have sustained a concussion during practice or a game will need to follow certain return-to-play protocols before they are allowed to play again. Steve Berman, a youth soccer coach, has seen first-hand the settlement's impacts and life-changing effects every time young athletes take to the field,

› NCAA: Transfer Antitrust

Hagens Berman has also recently taken on the NCAA on behalf of several highly recruited college athletes whose scholarships were revoked after a coaching change, or after the student-athletes sought to transfer to another NCAA-member school. The suit claims that the organization's limits and Draconian transfer regulations violate federal antitrust laws.

It the firm's most recent suit against the sports-governing entity, a Division I student-athlete at Northwestern University was faced with repeated harassment from the university to transfer, in order to underhandedly free up his athletic scholarship. According to the complaint, the university resorted to falsified records of misconduct, verbal harassment and more.

The firm's case hinges on a destructive double-standard. While Non-student-athletes are free to transfer and are eligible for a new scholarship without waiting a year, and coaches often transfer to the tune of a hefty pay raise, student-athletes are penalized and forced to sit out a year before they can play elsewhere, making them much less sought after by other college athletic programs. Hagens Berman continues to fight for student-athletes' rights to be treated fairly and terminate the NCAA's anticompetitive practices and overbearing regulations that limit players' options and freedoms.

› NCAA: Scholarships/Grants-In-Aid (GIAs)

In a first-of-its-kind antitrust action and potentially far-reaching case, Hagens Berman filed a class-action affecting approximately 40,000 Division I collegiate athletes who played men's or women's basketball, or FBS football, brought against the NCAA and its most powerful members, including the Pac-12, Big Ten, Big-12, SEC and ACC, claiming these entities violated federal antitrust laws by drastically reducing the number of scholarships and financial aid student-athletes receive to an amount below the actual cost of attendance and far below what the free market would bare.

The firm continues to fight on behalf of student-athletes to level the playing field and bring fairness to college sports and players. The case resulted in a \$208.9 million settlement, bringing an estimated average amount of \$6,500 to each eligible class member who played his or her sport for four years.

› Pop Warner

Hagens Berman represents youth athletes who have suffered traumatic brain injuries due to gross negligence, and filed a lawsuit on behalf of former Pop Warner football player Donovan Hill and his mother Crystal Dixon. The suit claims that the league insisted Hill use improper and dangerous tackling techniques which left the then 13-year-old paralyzed from the neck down.

Hagens Berman sought to hold Pop Warner, its affiliates, Hill's coaches and members of the Lakewood Pop Warner board of directors accountable for the coaches' repeated and incorrect instruction that Hill and his teammates tackle opposing players by leading with the head.

In January of 2016, the firm reached a settlement on behalf of Donovan and his mother, the details of which were not released. Sadly, months later, 17-year-old Donovan passed away. The firm believes that his case will continue to have a lasting impact on young athletes for generations and will help ensure safety in youth sports.

› MLB Foul Ball Injuries

Hagens Berman filed a class-action lawsuit on behalf of baseball fans, seeking to extend safety netting to all major and minor

PRACTICE AREAS

Sports Litigation

league ballparks from foul pole to foul pole. The suit alleges that tens of millions attend an MLB game annually, and every year fans of all ages, but often children, suffer horrific and preventable injuries, such as blindness, skull fractures, severe concussions and brain hemorrhages when struck by a fast-moving ball or flying shrapnel from a shattered bat.

In December of 2015, MLB's commissioner Rob Manfred issued a recommendation to all 30 MLB teams to implement extended safety measures, including additional safety netting at ballparks. While the firm commends the league for finally addressing the serious safety issue at stake, the firm continues to urge MLB and its commissioner to make these more than recommendations to help end senseless and avoidable injuries to baseball's biggest fans.

> Other Cases

In addition to its class actions, Hagens Berman has filed several individual cases to uphold the rights of athletes and ensure a fair and safe environment. The firm has filed multiple individual cases to address concussions and other traumatic head injuries among student-athletes at NCAA schools and in youth sports. Hagens Berman continues to represent the interests of athletes and find innovative and effective applications of the law to uphold players' rights.

The firm has also brought many concussions cases on behalf of individual athletes, challenging large universities and institutions for the rights those who have suffered irreversible damage due to gross negligence and lack of even the most basic concussion-management guidelines.

PRACTICE AREAS

Whistleblower Litigation

Hagens Berman represents whistleblowers under various programs at both the state and federal levels. All of these whistleblower programs reward private citizens who blow the whistle on fraud. In many cases, whistleblowers report fraud committed against the government and may sue those individuals or companies responsible, helping the government recover losses.

Our depth and reach as a leading national plaintiffs' firm with significant success in varied litigation against industry leaders in finance, health care, consumer products, and other fields causes many whistleblowers to seek us to represent them in claims alleging fraud against the government.

Our firm also has several former prosecutors and other government attorneys in its ranks and has a long history of working with governments, including close working relationships with attorneys at the U.S. Department of Justice. The whistleblower programs under which Hagens Berman pursues cases include:

FALSE CLAIMS ACT

Under the federal False Claims Act, and more than 30 similar state laws, a whistleblower reports fraud committed against the government, and under the law's *Qui Tam* provision, may file suit on its behalf to recover lost funds. False claims acts are one of the most effective tools in fighting Medicare and Medicaid fraud, defense contractor fraud, financial fraud, under-payment of royalties, fraud in general services contracts and other types of fraud perpetrated against governments.

The whistleblower initially files the case under seal, giving it only to the government and not to the defendant, which permits the government to investigate. After the investigation, the government may take over the whistleblower's suit, or it may decline. If the government declines, the whistleblower can proceed alone on his or her behalf. In successful suits, the whistleblower normally receives between 15 and 30 percent of the government's recovery as a reward.

Since 1986, federal and state false claims act recoveries have totaled more than \$22 billion. Some examples of our cases brought under the False Claims Act include:

> In U.S. ex rel. Lagow v. Bank of America

Represented former District Manager at Landsafe, Countrywide Financial's mortgage appraisal arm, who alleged systematic abuse of appraisal guidelines as a means of inflating mortgage values.

RESULT: The case was successful, ultimately triggering a settlement of \$1 billion, and our client received a substantial reward.

> In U.S. ex rel. Mackler v. Bank of America

Represented a whistleblower who alleged that Bank of America failed to satisfy material conditions of its government contract to provide homeowners mortgage relief under the HAMP program.

RESULT: The case succeeded and was settled as part of the 2012 global mortgage settlement, resulting in an award to our client.

> In U.S. ex rel. Horwitz v. Amgen

Represented Dr. Marshall S. Horwitz, who played a key role in uncovering an illegal scheme to manipulate the scientific record regarding two of Amgen's blockbuster drugs.

RESULT: \$762 million in criminal and civil penalties levied by the U.S. Department of Justice and an award to our client.

> In U.S. ex rel. Thomas v. Sound Inpatient Physicians Inc. and Robert A. Bessler

Represented a former regional vice president of operations for Sound Physicians, who blew the whistle on Sound's alleged misconduct.

RESULT: Tacoma-based Sound Physicians agreed to pay the United States government \$14.5 million.

> In U.S. ex rel. Plaintiffs v. Center for Diagnostic Imaging Inc.

In May 2010, Hagens Berman joined as lead trial counsel a qui tam lawsuit on behalf of two whistleblowers against Center for

PRACTICE AREAS

Whistleblower Litigation

Diagnostic Imaging, Inc. (CDI), alleging that CDI violated anti-kickback laws and defrauded federally funded health programs by presenting false claims for payment.

RESULT: In 2011, the government intervened in the claims, which the company settled for approximately \$1.3 million. The government declined to intervene, however, in the no-written-orders and kickback claims, leaving those claims for the whistleblowers and their counsel to pursue on their own. The non-intervened claims settled for an additional \$1.5 million payment to the government.

> **Medtronic**

On Feb. 19, 2008 the court unsealed a qui tam lawsuit brought by Hagens Berman against Medtronic, one of the world's largest medical technology companies, for fraudulent medical device applications to the FDA and off-label promotion of its biliary devices.

RESULT: The case settled in 2012 for an amount that remained under seal.

**SECURITIES AND EXCHANGE COMMISSION /
COMMODITY FUTURES TRADING COMMISSION**

Since implementation of the SEC/CFTC Dodd Frank whistleblower programs in 2011, Hagens Berman has naturally transitioned into representation of whistleblowers with claims involving violations of the Securities Exchange Act and the Commodities Exchange Act.

Unlike the False Claims Act, whistleblowers with these new programs do not initially file a sealed lawsuit. Instead, they provide information directly to the SEC or the CFTC regarding violations of the federal securities or commodities laws. If the whistleblower's information leads to an enforcement action, they may be entitled to between 10 and 30 percent of the recovery.

The firm currently represents HFT whistleblower and market expert, Haim Bodek, in an SEC fraud whistleblower case that prompted the U.S. Securities and Exchange Commission to bring record-breaking fines against two exchanges formerly owned by Direct Edge Holdings (and since acquired by Bats Global

Markets, the second-largest financial exchange in the country). The exchanges agreed to pay \$14 million to settle charges that the exchanges failed to accurately and completely disclose how order types functioned on its exchanges and for selectively providing such information only to certain high-frequency trading firms.

Hagens Berman also represents an anonymous whistleblower who brought his concerns and original analysis related to the May 2, 2010 Flash Crash to the CFTC after hundreds of hours spent analyzing data and other information.

Both the U.S. Commodity Futures Trading Commission (CFTC) and the Department of Justice, in separate criminal and civil enforcement actions, brought charges of market manipulation and spoofing against Nav Sarao Futures Limited PLC (Sarao Futures) and Navinder Singh Sarao (Sarao) based on the whistleblower's information.

Hagens Berman has worked alongside government officials and regulators, establishing the credibility necessary to bring a case to the SEC or CFTC. When Hagens Berman brings a claim, we work hard to earn their respect and regulators pay attention.

A few of the firm's most recent whistleblower cases in this area include:

> **EDGA Exchange Inc. and EDGX Exchange Inc.**

Represented HFT whistleblower and market expert, Haim Bodek, in an SEC fraud whistleblower case against two exchanges formerly owned by Direct Edge Holdings and since acquired by Bats Global Markets, the second-largest financial exchange in the country for spoofing.

RESULT: The case prompted the U.S. Securities and Exchange Commission to bring record-breaking fine of \$14 million against defendants, the largest ever brought against a financial exchange.

PRACTICE AREAS

Whistleblower Litigation

> [Nav Sarao Futures Limited PLC](#)

Hagens Berman represents an anonymous whistleblower who brought his concerns and original analysis to the CFTC after hundreds of hours spent analyzing data and other information. The claim brought about legal action against a market manipulator who profited more than \$40 million from market fraud and contributed to the May 6, 2010 Flash Crash.

RESULT: Both the CFTC and the Department of Justice, in separate criminal and civil enforcement actions, brought charges of market manipulation and spoofing against Nav Sarao Futures Limited PLC and Navinder Singh Sarao based on the whistleblower's information. The case is still pending under seal.

INTERNAL REVENUE SERVICE

Hagens Berman also represents whistleblowers under the IRS whistleblower program enacted with the Tax Relief and Health Care Act of 2006.

The IRS program offers rewards to those who come forward with information about persons, corporations or any other entity that cheats on its taxes. In the event of a successful recovery of government funds, a whistleblower can be rewarded with up to 30 percent of the overall amount collected in taxes, penalties and legal fees.

Hagens Berman helps IRS whistleblowers present specific, credible tax fraud information to the IRS. Unlike some traditional False Claims Act firms, Hagens Berman has experience representing governments facing lost tax revenue due to fraud, making us well-positioned to prosecute these cases.

Appellate Victories

APPELLATE VICTORIES

Strengthening Consumer Law

At Hagens Berman, we distinguish ourselves not merely by the results we obtain, but by how we obtain them. Few class-action firms have our firm's combination of resources and acumen to see a case through as long as needed to obtain a favorable outcome. Our attorneys were instrumental in obtaining these federal appellate decisions that have shaped consumer law and bolstered the rights of millions nationwide:

- › **In Matter of Motors Liquidation Co.**, 829 F.3d 135 (2d Cir. 2016) (General Motors bankruptcy reorganization did not bar claims stemming from defective ignition switches)
- › **George v. Urban Settlement Servs.**, 833 F.3d 1242 (10th Cir. 2016) (complaint adequately alleged Bank of America's mortgage modification program violated RICO)
- › **In re Loestrin 24 Fe Antitrust Litig.**, 814 F.3d 538 (1st Cir. 2016) ("reverse payments" for antitrust purposes under **Actavis** are not limited to cash payments)
- › **Osborn v. Visa Inc.**, 797 F.3d 1057 (D.C. Cir. 2015) (complaint adequately alleged Visa and MasterCard unlawfully agreed to restrain trade in setting ATM access fees)
- › **Little v. Louisville Gas & Elec. Co.**, 805 F.3d 695 (6th Cir. 2015) (Clean Air Act did not preempt state nuisance claims against coal plant for polluting surrounding community)
- › **City of Miami v. Citigroup Inc.**, 801 F.3d 1268 (11th Cir. 2015) (reversing dismissal of complaint alleging Citigroup violated Fair Housing Act by pattern of discriminatory lending)
- › **Rajagopalan v. NoteWorld, LLC**, 718 F.3d 844 (9th Cir. 2013) (non-party could not invoke arbitration clause against plaintiff suing debt services provider)
- › **In re Neurontin Mktg. & Sales Practices Litig.**, 712 F.3d 21 (1st Cir. 2013) (affirming \$142 million verdict for injury suffered from RICO scheme by Neurontin manufacturer Pfizer)
- › **In re NCAA Student-Athlete Name & Likeness Licensing Litig.**, 724 F.3d 1268 (9th Cir. 2013) (First Amendment did not shield video game developer's use of college athletes' likenesses)
- › **Garcia v. Wachovia Corp.**, 699 F.3d 1273 (11th Cir. 2012) (Wells Fargo could not rely on **Concepcion** to evade waiver of any right to compel arbitration)
- › **Agnew v. Nat'l Collegiate Athletic Ass'n**, 683 F.3d 328 (7th Cir. 2012) (NCAA bylaws limiting scholarships per team and prohibiting multiyear scholarships are subject to antitrust scrutiny and do not receive procompetitive justification at pleading stage)
- › **In re Lupron Mktg. & Sales Practices Litig.**, 677 F.3d 21, 24 (1st Cir. 2012) (approving cy pres provision in \$150 million settlement)
- › **In re Pharm. Indus. Average Wholesale Price Litig.**, 582 F.3d 156 (1st Cir. 2009) (AstraZeneca illegally published inflated average wholesale drug prices, thereby giving windfall to physicians and injuring patients who paid inflated prices)

We set ourselves apart not only by getting results but by litigating every case through to finish – to trial and appeal, if necessary. This tenacious drive has led our firm to generate groundbreaking precedents in consumer law.

Hagens Berman has also been active in state courts nationwide. Notable examples of our victories include:

- › **Garza v. Gama**, 379 P.3d 1004 (Ariz. Ct. App. 2016) (reinstating certified class in wage-and-hour action prosecuted by Hagens Berman since 2005)
- › **In re Farm Raised Salmon Cases**, 42 Cal. 4th 1077 (Cal. 2008) (Federal Food, Drug and Cosmetic Act did not preempt state claims for deceptive marketing of food products)
- › **Pickett v. Holland Am. Line-Westours, Inc.**, 35 P.3d 351 (Wash. 2001) (reversing state court of appeals and upholding class action settlement with cruise line)

Legal Team



MANAGING PARTNER

Steve W. Berman

Served as lead counsel for the largest settlement in world history against Big Tobacco, and at the time the largest automotive, antitrust, ERISA and securities settlements in U.S. history.

CONTACT

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YEARS OF EXPERIENCE

> 38

PRACTICE AREAS

- > Antitrust/Trade Law
- > Consumer Protection
- > Governmental Representation
- > Securities/Investment Fraud
- > Whistleblower/**Qui Tam**
- > Patent Litigation

BAR ADMISSIONS

- > Washington
- > Illinois

COURT ADMISSIONS

- > Supreme Court of the United States
- > Supreme Court of Illinois
- > Supreme Court of Washington
- > U.S. District Court for the Eastern and Western Districts of Washington
- > U.S. District Court for the Northern and Central Districts of Illinois
- > U.S. District Court for the District of Colorado
- > U.S. District Court for the Eastern District of Michigan
- > First Circuit Court of Appeals
- > Second Circuit Court of Appeals

Steve Berman represents consumers, investors and employees in large, complex litigation held in state and federal courts. Steve's trial experience has earned him significant recognition and led The National Law Journal to name him one of the 100 most powerful lawyers in the nation, and to repeatedly name Hagens Berman one of the top 10 plaintiffs' firms in the country. Steve was named an MVP of the Year by Law360 in 2016 and 2017 for his class-action litigation and received the 2017 Plaintiffs' Trailblazer award. He was recognized for the third year in a row as an Elite Trial Lawyer by The National Law Journal.

Steve co-founded Hagens Berman in 1993 after his prior firm refused to represent several young children who consumed fast food contaminated with E. coli—Steve knew he had to help. In that case, Steve proved that the poisoning was the result of Jack in the Box's cost cutting measures along with gross negligence. He was further inspired to build a firm that vociferously fought for the rights of those unable to fight for themselves. Berman's innovative approach, tenacious conviction and impeccable track record have earned him an excellent reputation and numerous historic legal victories. He is considered one of the nation's most successful class-action attorneys, and has been praised for securing record-breaking settlements and tangible benefits for class members. Steve is particularly known for his tenacity in forging consumer settlements that return a high percentage of recovery to class members.

CURRENT ROLE

- > Managing Partner, Hagens Berman Sobol Shapiro LLP

RECENT CASES

> Emissions Litigation

Steve has pioneered pursuing car manufacturers who have been violating emissions standards, including: Mercedes BlueTEC vehicles, GM Chevy Cruze, Dodge Ram 2500 and 3500 trucks, Dodge Ram 1500 and Jeep Cherokee EcoDiesel vehicles, Chevy Silverado, GMC Sierra as well as other models made by Ford, Audi and BMW. Steve and the firm's unmatched work in emissions-cheating investigations is often ahead of the EPA and government regulators.

> General Motors Ignition Switch Defect Litigation

Steve serves as lead counsel seeking to obtain compensation for the millions of GM car owners who overpaid for cars that had hidden safety defects.

> NCAA Grant-in-Aid Scholarships

Served as co-lead counsel in the Alston case that successfully challenged the NCAA's limitations on the benefits student-athletes can receive as part of a scholarship, culminating in a \$208 million settlement. The recovery amounts to 100 percent of single damages in an exceptional result in an antitrust case. Steve will co-lead a trial this year on the injunctive aspect of the case that could result in a change of NCAA rules limiting the financial treatment of athletes. The trial may change the landscape for how NCAA football and basketball players are compensated.

- › Third Circuit Court of Appeals
- › Fifth Circuit Court of Appeals
- › Sixth Circuit Court of Appeals
- › Seventh Circuit Court of Appeals
- › Eighth Circuit Court of Appeals
- › Ninth Circuit Court of Appeals
- › Tenth Circuit Court of Appeals
- › Eleventh Circuit Court of Appeals
- › DC Circuit Court of Appeals
- › Federal Circuit Court of Appeals
- › U.S. Court of Federal Claims

EDUCATION

- › University of Chicago Law School, J.D., 1980
- › University of Michigan, B.A., 1976

MANAGING PARTNER

Steve W. Berman

› Climate Change – New York City, King County, Wash.

Steve has always been a fighter for the rights of the environment. In 2017, he began the firm's latest endeavor to combat global climate change through novel applications of the law. Steve currently represents the city of New York and Washington state's King County in lawsuits filed against the world's largest producers of oil: BP, Chevron Corp., Exxon Mobil Corp., Royal Dutch Shell PLC and ConocoPhillips. The cases seek to hold the Big Oil titans accountable for their brazen impact on global warming-induced sea level rise and related expenses to protect the cities and their millions of residents.

› Opioids - Orange and Santa Clara County, Seattle

Steve has always been a fighter for the rights of the environment. In 2017, he began the firm's latest endeavor to combat global climate change through novel applications of the law. Steve currently represents the city of New York and Washington state's King County in multiple lawsuits filed against the world's largest producers of oil: BP, Chevron Corp., Exxon Mobil Corp., Royal Dutch Shell PLC and ConocoPhillips. The cases seek to hold the Big Oil titans accountable for their brazen impact on global warming-induced sea level rise and related expenses to protect the cities and their millions of residents.

› Antitrust Litigation

Corporate fraud has many faces, and Steve has taken on some of the largest perpetrators through antitrust law. Steve serves as co-lead counsel in Visa MasterCard ATM, Batteries, Optical Disc Drives and is in the leadership of a class-action lawsuit against Qualcomm for orchestrating a monopoly that led to purchasers paying significantly more for mobile devices. He serves as interim class counsel in a case against chicken producers for conspiring to stabilize prices by reducing chicken production. Most recently, Steve filed a proposed class-action lawsuit against the world's largest manufacturers of Dynamic Random Access Memory for cornering the market and driving up DRAM.

› Consumer Protection

Steve is a leader in protecting millions of consumers in large-scale cases that challenge unfair, deceptive and fraudulent practices. He leads a class action on behalf of owners of Ford vehicles equipped with MyFord Touch, an in-car entertainment system, who claim the system is flawed, putting drivers at risk of an accident while causing economic hardship. Steve recently filed a class-action lawsuit against Facebook for allowing personal data to be harvested for psychographic profiling.

RECENT SUCCESS

› Volkswagen Franchise Dealerships - \$1.6 billion

Lead counsel for VW franchise dealers suit, in which a settlement of \$1.6 billion has received final approval, and represents a substantial recovery for the class.

› Stericycle Sterisafe Contract Litigation – \$295 million

Hagens Berman's team, led by Steve Berman, filed a class-action lawsuit against Stericycle, a massive medical waste disposal company and achieved a sizable settlement for hundreds of thousands of its small business customers.

› Dairy Price-Fixing – \$52 million

This antitrust suit's filing unearthed a massive collusion between the biggest dairy producers in the country, responsible for almost 70 percent of the nation's milk. Not only was the price of milk artificially inflated, but this scheme ultimately also cost 500,000 young cows their lives.

MANAGING PARTNER

Steve W. Berman

CAREER HIGHLIGHTS

- › **State Tobacco Litigation** - \$206 billion
Special assistant attorney general for the states of Washington, Arizona, Illinois, Indiana, New York, Alaska, Idaho, Ohio, Oregon, Nevada, Montana, Vermont and Rhode Island in prosecuting major actions against the tobacco industry. In November 1998, the initial proposed settlement led to a multi-state settlement requiring the tobacco companies to pay the states \$206 billion and to submit to broad advertising and marketing restrictions – the largest civil settlement in history.
- › **Visa MasterCard ATM Antitrust Litigation** - \$27 billion
Co-lead counsel in what was then the largest antitrust settlement in history: a class-action lawsuit alleging that Visa and MasterCard, together with Bank of America, JP Morgan Chase and Wells Fargo, violated federal antitrust laws by establishing uniform agreements with U.S. banks, preventing ATM operators from setting ATM access fees below the level of the fees charged on Visa's and MasterCard's networks.
- › **Toyota Sudden, Unintended Acceleration** - \$1.6 billion
Hagens Berman was co-lead counsel in this massive MDL alleging that Toyota vehicles contained a defect causing sudden, unintended acceleration (SUA). It was the largest automotive settlement in history at the time, valued at up to \$1.6 billion. The firm did not initially seek to lead the litigation, but was sought out by the judge for its wealth of experience in managing very complex class-action MDLs. Hagens Berman and managing partner Steve Berman agreed to take on the role of co-lead counsel for the economic loss class and head the plaintiffs' steering committee.
- › **Washington Public Power Supply System (WPPSS)** - \$700 million settlement
Represented bondholders and the bondholder trustee in a class-action lawsuit stemming from the failure of two WPPSS nuclear projects. The case was one of the most complex and lengthy securities fraud cases ever filed. The default was one of the largest municipal bond defaults in history. After years of litigation, plaintiffs were awarded a \$700 million settlement agreement brought against more than 200 defendants.
- › **E-books Antitrust Litigation** - \$560 million settlement
Fought against Apple and five of the nation's top publishers for colluding to raise the price of e-books, resulting in recovery equal to twice consumers' actual damages. The firm recovered an initial settlement of more than \$160 million with defendant publishing companies in conjunction with several states attorneys general. Steve then led the firm to pursue Apple for its involvement in the e-book price hike. Apple took the case to the Supreme Court, where it was ruled that Apple had conspired to raise prices, and the firm achieved an additional \$450 million settlement for consumers.
- › **Enron Pension Protection Litigation** - \$250 million settlement
Led the class-action litigation on behalf of Enron employees and retirees alleging that Enron leadership, including CEO Ken Lay, had a responsibility to protect the interests of those invested in the 401(k) program, an obligation they abrogated. The court selected Steve to co-lead the case against Enron and the other defendants.
- › **Charles Schwab Securities Litigation** - \$235 million settlement
Led the firm to file the first class-action lawsuit against Charles Schwab on Mar. 18, 2008, alleging that Schwab deceived investors about the underlying risk in its Schwab YieldPlus Funds Investor Shares and Schwab YieldPlus Funds Select Shares.

MANAGING PARTNER

Steve W. Berman

- › **JP Morgan Madoff Lawsuit** - \$218 million settlement
Represented Bernard L. Madoff investors in a suit filed against JPMorgan Chase Bank, one of the largest banks in the world.
- › **Boeing Securities Litigation** - \$92.5 million settlement
Represented a class of tens of thousands of shareholders against Boeing, culminating in a proposed settlement that was the second-largest awarded in the Northwest.
- › **NCAA Concussions** - \$75 million settlement, and 50-year medical monitoring fund
Led the firm's pioneering NCAA concussions suit that culminated in a proposed settlement that will provide a 50-year medical-monitoring program for student-athletes to screen for and track head injuries; make sweeping changes to the NCAA's approach to concussion treatment and prevention; and establish a \$5 million fund for concussion research, preliminarily approved by the court.
- › **US Youth Soccer Settlement**
Revolutionary settlement that changed U.S. Soccer regulations and bought sweeping safety measures to the game. Steve spearheaded a lawsuit against soccer-governing bodies, achieving a settlement that ended heading of the ball for U.S. Soccer's youngest players and greatly diminished risk of concussions and traumatic brain injuries. Additionally, the settlement highlights the importance of on-staff medical personnel at youth tournaments, as well as ongoing concussion education for coaches.

RECOGNITION

- › 2016-2018 Class Action MVP of the Year, Law360
- › 2018 Honoree for Outstanding Antitrust Litigation Achievement in Private Law Practice, American Antitrust Institute
- › 2018, 2016 Practice Group of the Year (Automotive), Law360
- › 2018 State Executive Committee member, The National Trial Lawyers
- › 2018 Top Attorney of the Year, International Association of Top Professionals
- › 2017 Plaintiffs' Trailblazer, The National Law Journal
- › 2017 Class Actions (Plaintiff) Law Firm of the Year in California, Global Law Experts
- › 2003-2017 Washington Super Lawyers
- › 2014-2016 Elite Trial Lawyers, The National Law Journal
- › 2014-2015 Lawdragon 500 Leading Lawyers in America
- › 2014 Finalist for Trial Lawyer of the Year, Public Justice
- › 2013 One of the 100 most influential attorneys in America, The National Law Journal
- › 2000 Most powerful lawyer in the state of Washington, The National Law Journal
- › One of the top 10 plaintiffs' firms in the country, The National Law Journal

OTHER NOTABLE CASES

- › **VW Emissions Litigation** - \$14.7 billion settlement
Steve served as a member of the Plaintiffs Steering Committee representing owners of Volkswagen CleanDiesel vehicles that were installed with emissions-cheating software.
- › **McKesson Drug Class Litigation** - \$350 million settlement
Lead counsel in an action that led to a rollback of benchmark prices of hundreds of brand name drugs, and relief for third-party payers and insurers. His discovery of the McKesson scheme led to follow up lawsuits by governmental entities and recovery in total of over \$600 million.

MANAGING PARTNER**Steve W. Berman****> Average Wholesale Price Litigation - \$338 million settlement**

Steve served as lead trial counsel, securing trial verdicts against three drug companies that paved the way for settlement.

> DRAM Memory Antitrust - \$345 million settlement

Forged a class-action suit against leading DRAM (Dynamic Random Access Memory) manufacturers, claiming the companies secretly agreed to reduce the supply of DRAM in order to artificially raise prices.

> Hyundai / Kia Fuel Efficiency - \$255 million settlement

Led the firm's aggressive fight against Hyundai and Kia on behalf of defrauded consumers who alleged the automakers had misrepresented fuel economies in vehicles, securing what was believed to then be the second-largest automotive settlement in history.

> Bextra/Celebrex Marketing and Products Liability Litigation - \$89 million settlement

Served as court-appointed member of the Plaintiffs Steering Committee and represented nationwide consumers and third party payers who paid for Celebrex and Bextra. The firm was praised by the court for its "unstinting" efforts on behalf of the class.

> McKesson Governmental Entity Class Litigation - \$82 million settlement

Steve was lead counsel for a nationwide class of local governments that resulted in a settlement for drug price-fixing claims.

> NCAA/Electronic Arts Name and Likeness - \$60 million settlement

Represented current and former student-athletes against the NCAA and Electronic Arts concerning illegal use of college football and basketball players' names and likenesses in video games without permission or consent from the players.

> State and Governmental Drug Litigation

Steve served as outside counsel for the state of New York for its Vioxx claims, several states for AWP claims and several states for claims against McKesson. In each representation, Steve recovered far more than the states in the NAAG multi-state settlements.

> Exxon Mobile Oil Spill

Steve represented clients against Exxon Mobil affected by the 10 million gallons of oil spilled off the coast of Alaska by the Exxon Valdez (multi-million dollar award).

> Lumber Liquidators Flooring

Steve was court-appointed co-lead counsel in litigation against Lumber Liquidators representing consumers who unknowingly purchased flooring tainted with toxic levels of cancer-causing formaldehyde. The consumer settlement was confidential.

PRESENTATIONS

- > Steve is a frequent public speaker and has been a guest lecturer at Stanford University, University of Washington, University of Michigan and Seattle University Law School.

PERSONAL INSIGHT

Steve was a high school and college soccer player and coach. Now that his daughter's soccer skills exceed his, he is relegated to being a certified soccer referee and spends weekends being yelled at by parents, players and coaches. Steve is also an avid cyclist and is heavily involved in working with young riders on the international Hagens Berman Axeon cycling team and the Hagens Berman | Supermint Pro Cycling women's team.



PARTNER, EXECUTIVE COMMITTEE MEMBER

Thomas M. Sobol

*Voted Massachusetts Ten Leading Litigators
— The National Law Journal*

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YEARS OF EXPERIENCE

> 35

PRACTICE AREAS

- > Pharmaceutical Fraud
- > Consumer Protection
- > Antitrust Litigation

BAR ADMISSIONS

- > Massachusetts
- > Rhode Island

COURT ADMISSIONS

- > First Circuit Court of Appeals
- > Second Circuit Court of Appeals
- > Supreme Court of the United States

EDUCATION

- > Boston University School of Law, J.D., **cum laude**, 1983
- > Clark University, B.A., **summa cum laude**, Phi Beta Kappa, 1980

CURRENT ROLE

- > Partner & Executive Committee Member, Hagens Berman Sobol Shapiro LLP
- > Leads Hagens Berman's Boston office
- > Leader in drug pricing litigation efforts against numerous pharmaceutical and medical device companies
- > Lead negotiator in court-approved settlements totaling more than \$2 billion
- > Currently court-appointed lead counsel for **In re Skelaxin Antitrust Litigation**, **In re Nexium Antitrust Litigation**, **In re Lipitor Antitrust Litigation**, **In re Effexor Antitrust Litigation**, and **In re Wellbutrin XL Antitrust Litigation**
- > Appointed lead counsel in MDL No. 2149: **In re New England Compounding Pharmacy Litigation Multidistrict Litigation**, representing more than 700 victims who contracted fungal meningitis or other serious health problems as a result of receiving contaminated products produced by NECC, resulting in a \$200 million settlement
- > Lead counsel to the Prescription Access Litigation (PAL) project, the largest coalition of health care advocacy groups that fight illegal, loophole-based overpricing by pharmaceutical companies

RECENT SUCCESS

- > **Neurontin class action marketing settlement** (\$325 million)
- > **NECC meningitis outbreak settlement** (\$200 million)
- > **Flonase direct purchaser litigation settlement** (\$150 million)
- > **Wellbutrin XL direct purchaser litigation** (\$37.5 million)
- > **First Databank litigation** (4% price reduction of most retail drugs)
- > **McKesson litigation** (\$350 million)
- > **Zyprexa litigation on behalf of the State of Connecticut** (\$25 million)
- > **Vioxx third party payor litigation** (\$80 million)
- > **Paxil direct purchaser litigation** (\$150 million)
- > **Co-lead trial counsel in the Neurontin MDL** (\$142 million RICO jury verdict)

RECOGNITION

- > Massachusetts Ten Leading Litigators, **The National Law Journal**

EXPERIENCE

- > Seventeen years in large Boston firm handling large complex civil litigation
- > Special Assistant Attorney General for the Commonwealth of Massachusetts and the states of New Hampshire and Rhode Island
- > Private counsel for Massachusetts and New Hampshire in ground breaking litigation against tobacco industry (Significant injunctive relief and recovery of more than \$10 billion)
- > Judicial clerk for Chief Justice Allan M. Hale, Massachusetts Appeals Court, 1983-1984
- > Board Chairman, New England Shelter for Homeless Veterans, 1995-2002

PARTNER, EXECUTIVE COMMITTEE MEMBER

Thomas M. Sobol

NOTABLE CASES

› **\$142 Million Civil RICO Jury Verdict in Massachusetts Over Neurontin**

On Mar. 25, 2010, following a four-and-a-half week trial and two days of deliberations, a jury in the U.S. District Court for Massachusetts returned a \$142 million RICO verdict against Pfizer, Warner Lambert and Parke Davis in a suit related to Pfizer's fraudulent and unlawful promotion of the drug Neurontin. The jury also found, in an advisory capacity, that defendants violated the California Unfair Competition Law. HBSS served as co-lead trial counsel for plaintiffs Kaiser Foundation Health Plans and Kaiser Foundation Hospitals. HBSS attorneys played a pivotal role in preparing the case for trial. Thomas Sobol, managing partner of the HBSS Boston office, examined seven economic and scientific experts and presented the evidence of Defendants' decade-long campaign of fraudulent and deceptive actions in his closing argument that resulted in the RICO verdict. Post-trial briefing is underway and a final judgment has not yet been entered.

Kaiser Foundation Health Plan, et al v. Pfizer, Inc., et al, D.Mass., Civil Action No. 04-cv-10739 (PBS).

› **\$150 Million Settlement for Consumers and TPPs for Purchases of Lupron**

In late 2004, HBSS announced a proposed resolution on behalf of consumers and third-party payors of Lupron in the amount of \$150 million. The litigation alleged widespread fraudulent marketing and sales practices against TAP Pharmaceuticals, a joint venture between Abbott Laboratories and Takeda Pharmaceuticals, Inc., and followed TAP's agreement to pay \$875 million in combined criminal and civil penalties regarding marketing and sales practices for the prostate cancer drug Lupron. HBSS served as court-appointed Co-Lead and Liaison Counsel.

In re Lupron Marketing and Sales Practices Litigation, D.Mass., MDL No. 1430.

› **\$150 Million Resolution on Behalf of Direct Purchasers of Paxil**

HBSS announced a \$150 million resolution of claims in 2004 in litigation on behalf of direct purchasers of the "blockbuster" selective serotonin reuptake inhibitor Paxil, manufactured by GlaxoSmithKline Corporation. The suit alleged that GSK engaged in sham litigation with respect to certain patents, all in an effort to delay competition from the entry of a generic form of the drug. HBSS served as court-appointed Co-Lead Counsel.

In re Paxil Direct Purchaser Litigation, E.D.Pa., Civil Action No. 03-4578.

› **The Major First Databank Price Rollback**

The First Circuit Court of Appeals recently affirmed the approval of a settlement reached between plaintiff health benefit plans and consumers in a class action against defendants First DataBank, Inc. and Medi-Span, two leading drug pricing publishers. The settlement resulted in a rollback of benchmark prices of some of the most common prescription medications and which could save consumers and other purchasers hundreds of millions of dollars. The settlement stems from a 2005 class-action lawsuit brought on behalf of health benefit plans and consumers against First DataBank (FDB) and McKesson Corporation, a large pharmaceutical wholesaler. Plaintiffs claimed that beginning in 2001, FDB and McKesson secretly agreed to raise the markup between the Wholesale Acquisition Cost and the Average Wholesale Price from 20 to 25 percent for more than 400 drugs, resulting in higher profits for retail pharmacies at the expense of consumers and payors.

PARTNER, EXECUTIVE COMMITTEE MEMBER

Thomas M. Sobol

On June 6, 2007, Judge Patti B. Saris of the District of Massachusetts preliminarily approved a settlement between the parties whereby FDB agreed to roll back pricing by five basis points, from 1.25 to 1.20, on the drugs included in the lawsuit as well as hundreds of other drugs, which should create cost-savings on a much broader range of prescription medications. An alphabet soup of associations representing pharmacies and pharmacy benefit managers fought the proposed rollback before federal trial and appellate courts, claiming either that small pharmacies would be put out of business through implementation of the rollback or that the savings to health plans and consumers would not be enough to justify the settlement. The courts rejected these claims and in a ruling on Sept. 4, 2009, the First Circuit Court of Appeals affirmed the approval of the settlement.

New England Carpenters Health Benefits Fund et al v. First Data Bank, Inc. and McKesson Corp., D.Mass., Civil Action No. 05-cv-11148-PBS; District Council 37 Health and Security Plan et al v. Medi-Span, D.Mass., Civil Action No. 07-cv-10988-PBS.

› **\$75 Million Resolution Against GSK and Its Predecessors for Relafen**

HBSS was court-appointed liaison counsel, and the firm has helped spearhead this litigation against GlaxoSmithKline Corporation and its predecessors, alleging that GSK fraudulently obtained a patent to prevent a generic version of Relafen, a frequently prescribed brand name pharmaceutical, from coming to market. Litigated for 12 to 18 months, HBSS announced a proposed \$75 million resolution of end-payor claims in 2004.

In re Relafen Antitrust Litigation, D.Mass., Master File No. 01-12239-WGY.

› **\$25 Million for the State of Connecticut for Zyprexa Fraud**

On Oct. 5, 2009, Judge Jack B. Weinstein, U.S. District Court Judge in the Eastern District of New York, entered an Order for Entry of Final Judgment in State of Connecticut v. Eli Lilly and Co., approving the \$25 million settlement reached by the parties to conclude the state's Zyprexa litigation. HBSS served as outside counsel to Attorney General Richard Blumenthal in the litigation that alleged Lilly engaged in unlawful off-label promotion of the atypical antipsychotic Zyprexa and made significant misrepresentations about Zyprexa's safety and efficacy, resulting in millions of dollars in excess pharmaceutical costs borne by the state and its taxpayers.

State of Connecticut v. Eli Lilly & Co., E.D.N.Y., Civil Action No. 08-cv-955-JBW.

› **\$65.7 Million Recovery in Antitrust Action Concerning Tricor**

On Oct. 29, 2009, Chief Judge Sue Robinson of the District of Delaware approved a \$65.7 million recovery for consumers and third party payors who sued Abbott Laboratories and Fournier Industries in an antitrust action concerning the cholesterol drug Tricor. Plaintiffs alleged Abbott and Fournier manipulated the statutory framework regulating the market for pharmaceuticals by instituting baseless patent litigation against generic manufacturers, and manipulative switching of dosage strengths and forms, which resulted in delayed entry of generics and thus lower prices into the market. HBSS served as Co-Lead Class Counsel in the case.

In re Tricor Indirect Purchaser Antitrust Litigation, D.Del., Civil Action No. 05-cv-360.



PARTNER, EXECUTIVE COMMITTEE MEMBER

Anthony D. Shapiro

Mr. Shapiro has handled hundreds of personal injury matters securing results in excess of \$1 million for his clients numerous times.

CONTACT

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YEARS OF EXPERIENCE

> 36

PRACTICE AREAS

> Antitrust Litigation
> Personal Injury Litigation

BAR ADMISSIONS

> Washington State Bar

EDUCATION

> Georgetown University Law
Center, J.D., 1982
> Colgate University, B.A.,
History, 1979

CURRENT ROLE

- > Partner & Executive Committee Member, Hagens Berman Sobol Shapiro LLP
- > Leads Personal Injury Group including wrongful death, brain injury and catastrophic personal injury matters resulting from construction site, workplace, automobile accidents, product liability and nursing home negligence
- > Prominent role in many of the firm's notable antitrust class actions

RECENT SUCCESS

- > Lead counsel in **In re DRAM Antitrust Litigation** (more than \$400 million)
- > Plaintiffs' executive committee in a number of prominent antitrust class actions including **In re LCD Antitrust Litigation** (\$500 million), and **Polyether Polyols Antitrust Litigation** (\$1.2 billion verdict after trebling)

RECOGNITION

- > Earned AV rating by Martindale-Hubbell, the highest rating a lawyer can obtain, indicating a very high to preeminent legal ability and exceptional ethical standards as established by confidential opinions from members of the Bar
- > Washington Super Lawyer, 2000-2014

EXPERIENCE

- > King County, Washington Prosecuting Attorney's Office, where he represented the state in more than 50 serious felony jury trials, including some of the state's most high-profile cases
- > Founding Partner, Rohan Goldfarb & Shapiro
- > Schweppe Krug & Tausend

LEGAL ACTIVITIES

- > Instructor, National Institute of Trial Advocacy
- > Adjunct Professor, University of Washington Law School

NOTABLE CASES

- > **Mantria Class Action**
- > **Air Cargo Antitrust Litigation**
- > **Baby Food Antitrust Litigation**
- > **Brand Name Prescription Drug Antitrust Litigation**
- > **Bromine Antitrust Litigation**
- > **Carbon Dioxide Antitrust Litigation**
- > **Carpet Antitrust Litigation**

PARTNER, EXECUTIVE COMMITTEE MEMBER

Anthony D. Shapiro

- > Commercial Tissue Products Antitrust Litigation
- > Compressors Antitrust Litigation
- > Concrete Antitrust Litigation
- > Containerboard Antitrust Litigation
- > CRT Antitrust Litigation
- > DRAM Antitrust Litigation
- > Exxon Valdez Oil Spill Litigation
- > Fasteners Antitrust Litigation
- > Flat Glass Antitrust Litigation
- > Forced Place Insurance – Wind Antitrust Litigation
- > High Fructose Corn Syrup Antitrust Litigation
- > Infant Formula Antitrust Litigation
- > Lease Oil Antitrust Litigation
- > Linerboard Antitrust Litigation
- > LCD Antitrust Litigation
- > Magazine Paper Antitrust Litigation
- > Medical X-Ray Film Antitrust Litigation
- > OSB Antitrust Litigation
- > Polyurethane Antitrust Litigation
- > Scouring Pads Antitrust Litigation
- > SRAM Antitrust Litigation
- > Steel Antitrust Litigation
- > Toilet Nut Product Defect Litigation
- > Wire Harness Antitrust Litigation



PARTNER, EXECUTIVE COMMITTEE MEMBER

Robert B. Carey

Rob added to HB's office a built-in mock courtroom, complete with jury box, audio-visual equipment to record witnesses and lawyers, and separate deliberation rooms for two juries. [Download photo »](#)

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YEARS OF EXPERIENCE

> 31

PRACTICE AREAS

- > Personal Injury Litigation
- > Insurance Bad Faith
- > Breach of Contract Claims

BAR ADMISSIONS

- > Arizona
- > Colorado

COURT ADMISSIONS

- > U.S. Supreme Court
- > United States Court of Appeals for the Federal Circuit
- > U.S. Court of Appeals, Fifth Circuit
- > U.S. Court of Appeals, Seventh Circuit
- > U.S. Court of Appeals, Ninth Circuit
- > U.S. Court of Appeals, Tenth Circuit
- > Various federal district courts

EDUCATION

- > University of Denver, M.B.A., J.D., 1986
- > Arizona State University, B.S., 1983
- > Harvard University, John F. Kennedy School of Government, State & Local Government Program, 1992

Mr. Carey handles class-action lawsuits against various types of organizations and companies. He has served as lead counsel in cases such as the LifeLock Sales and Marketing Litigation, Hyundai Motor America's cases on sub-frame corrosion and airbag systems and the state of Arizona's claim against McKesson Corporation for overcharging on prescription drugs. Mr. Carey has argued high-profile cases in federal and state courts across the country.

CURRENT ROLE

- > Partner & Executive Committee Member, Hagens Berman Sobol Shapiro LLP
- > Leads Hagens Berman's Phoenix office
- > Practice focuses on class-action lawsuits, including auto defect, insurance, right of publicity and fraud cases. Mr. Carey's work also extends to bad-faith insurance, personal injury and medical malpractice, with several jury trials involving verdicts with as much as \$75 million at stake.
 - Frequently asked to handle jury trials for high-value cases

RECENT SUCCESS

- > In June 2018, a Denver jury awarded a monumental \$383.5 million jury verdict against GranuFlo dialysis provider, DaVita Inc. culminating lawsuits brought by families of three patients who suffered cardiac arrests and died after receiving dialysis treatments at DaVita clinics. Each of the three parties was awarded \$125 million in punitive damages from the jury, with compensatory damages ranging from \$1.5 million to \$5 million.
- > Over the summer of 2012, Rob was lead counsel in Robin Antonick's case against Electronic Arts, where a jury heard evidence that Electronic Arts failed to pay Antonick for over 20 years for his work in coding and developing the legendary Madden NFL Football video game. This trial, held in the Northern District of California, resulted in two verdicts for Antonick and was dubbed a "Top Trial Verdict of 2013" by The Daily Journal, a leading legal publication.
- > Prevailed at the Arizona Court of Appeals for the second time, keeping intact class certification for tens of thousands of truck drivers suing to recover underpayments caused by misuse of Rand McNally's HHG software by Swift Transportation.
- > Helped originate the Toyota Sudden Unintended Acceleration case, filing the initial Hagens Berman complaints for a case that eventually settled for \$1.6 billion
- > Led Hagens Berman's efforts on the \$97 million settlement with Hyundai and Kia corporations over misrepresentations about MPG ratings
- > Helped secure a first-ever (\$60 million) settlement for collegiate student-athletes (Keller, consolidated with O'Bannon) from Electronic Arts (EA) and the NCAA for the misappropriation of the student-athletes' likenesses and images for the EA college football video game series. This groundbreaking suit

PARTNER, EXECUTIVE COMMITTEE MEMBER**Robert B. Carey**

went up to the U.S. Supreme Court before a settlement was reached, providing student-athletes—even current ones—with cash recoveries for the use of their likenesses without permission.

- › Represented Donovan Hill against Pop Warner after he was paralyzed at 13. With Rachel Freeman, Rob secured a settlement that “forever changed youth football” (OC Weekly) and was “unprecedented” and owed a debt of gratitude by those who care about the safety of kids playing football (Washington Post). Donovan died tragically during a 2016 surgery.
- › Rob secured a record verdict for a mother suing her deceased son’s estate for negligence in starting a home fire. He then took an assignment of the estate’s claim and pursued a bad faith claim against the insurer, resulting in lifetime financial security for the badly burned mother.
- › After successfully reforming an insurance policy to cover a client – a student-athlete injured in a roll-over accident that caused incomplete tetraplegia and traumatic brain injury – Rob went to the jury, which awarded damages for all harms and losses requested and for insurance bad faith, with a verdict exceeding over 15 times policy limits.
- › Rob sued the leading auto carrier for refusal to fully cover a pedestrian struck by the carrier’s driver. The verdict was valued over seven figures, and included a finding of willful and wanton conduct, trebling the damages.
- › After Rob cross-examined the CEO and CFO of a pharmacy benefits company, the jury entered a verdict for his client in the liability phase of a \$75-million dispute.
- › During his representation of a driver paralyzed by a car’s roof collapse, the insurance company ignored that the agent did not understand or offer required high-end coverages. The jury returned a verdict with a value over seven figures, including a finding for treble damages.
- › Rob represented passengers of drunk driver, and persuaded the jury to award future earning capacity, essential services, medical bills and to find willful and wanton conduct against the insurer (treble damages). After a successful trip to the state supreme court, the verdict was maintained and had a value in excess of 15 times the policy limits.
- › While serving as Arizona Chief Deputy Attorney General:
 - Helped secure a \$4 billion divestiture and a landmark \$165 million antitrust settlement
 - Helped revise Arizona’s criminal code and authored the section of the federal Prisoner Litigation Reform Act of 1995 that virtually eliminated frivolous prisoner lawsuits

RECOGNITION

- › Recognized by the judges of the Superior Court of Arizona in Maricopa County for outstanding contributions to the justice system
- › U.S. Department of Justice, recognized for victims’ rights efforts
- › Listed since 2008 as a Top 100 Trial Lawyer by Arizona’s Finest Lawyers and National Trial Lawyers
- › Member of Hagens Berman’s Toyota team selected as a Finalist for Public Justice’s 2014 Trial Lawyer of the Year

EXPERIENCE

- › While serving as Arizona Chief Deputy Attorney General Mr. Carey helped secure a \$4 billion divestiture

PARTNER, EXECUTIVE COMMITTEE MEMBER**Robert B. Carey**

and a landmark \$165 million antitrust settlement. He also was a principal drafter of the first major overhaul of Arizona's criminal code and authored the section of the federal Prisoner Litigation Reform Act of 1995 for Senators Dole and Kyl that virtually eliminated frivolous prisoner lawsuits. Mr. Carey oversaw all major legal, policy, legislative and political issues for the Arizona attorney general's office. He developed and spearheaded passage of Arizona's law requiring the DNA testing of all sex offenders and the law requiring that criminals pay the cost of victims' rights.

- › Campaign staffer, intern, and staff member for U.S. Senator John McCain, during and after Senator McCain's first run for public office
- › Adjunct Professor, Sandra Day O'Connor College of Law, teaching class actions. Has taught law and policy courses at other universities.
- › Judge Pro Tempore, Maricopa County Superior Court, presiding over contract and tort jury trials
- › In the 90s, he served as trial counsel on claims by counties for damages stemming from tobacco-related illnesses (and acted as special counsel for Hagens Berman in seeking to recover damages in the landmark tobacco litigation), and since then has led dozens of consumer and insurance class actions in various states.

LEGAL ACTIVITIES

- › Member and Former Chairman, Arizona State Bar Class Action and Derivative Suits Committee

PUBLICATIONS

- › Co-author of the Arizona chapter of the ABA's "A Practitioner's Guide to Class Actions"
- › Co-author of the Arizona and Colorado chapters of the ABA's "A Practitioner's Guide to Class Actions" (2d ed.)

NOTABLE CASES

- › Propane Exchange Tank Litigation
- › Hyundai/Kia MPG Litigation
- › Swift Truckers Litigation
- › Toyota Unintended Acceleration Litigation
- › NCAA Student-Athlete Name and Likeness Licensing Litigation
- › Hyundai Subframe Defect Litigation
- › Hyundai Occupant Classification System / Airbag Litigation
- › Hyundai Horsepower Litigation
- › Arizona v. McKesson False Claims and Consumer Protection Litigation (representing State of Arizona)
- › Apple Refurbished iPhone/iPad Litigation
- › Jim Brown v. Electronic Arts
- › LifeLock Sales and Marketing Litigation
- › Rexall Sundown Cellasene Litigation



PARTNER

Leonard W. Aragon

Before attending college, Mr. Aragon fulfilled his dream as a scout for the 2/68 Armored Tank Battalion.

CONTACT

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YEARS OF EXPERIENCE

> 17

PRACTICE AREAS

- > Commercial Litigation
- > Mass Tort
- > Appellate Advocacy
- > Personal Injury

COURT ADMISSIONS

- > U.S. District Court, District of Arizona
- > U.S. District Court, District of Colorado

EDUCATION

- > Stanford Law School, J.D., 2001
- > Arizona State University, B.A., History and Political Science, summa **cum laude**, 1998

INDUSTRY EXPERIENCE

- > Consumer Fraud
- > Software
- > Sports Law
- > Health Care
- > Pharmaceuticals
- > Election Law
- > Gambling
- > Administrative Procedures Act

CURRENT ROLE

- > Partner, Hagens Berman Sobol Shapiro LLP
- > Practice focuses on nationwide class actions and other complex litigation
- > Currently counsel for plaintiffs in the highly publicized cases **Keller v. Electronic Arts** and **In re NCAA Student-Athlete Name and Likeness Licensing Litigation** which alleges that video game manufacturer Electronic Arts, the National Collegiate Athletic Association, and the Collegiate Licensing Company used the names, images and likenesses of student-athletes in violation of state right of publicity laws and the NCAA's contractual agreements with the student-athletes. The plaintiffs reached a settlement with EA and the CLC in May for \$40 million and reached a settlement in June with the NCAA for \$20 million. The parties are in the process of seeking approval from the Court for the two settlements.

RECENT SUCCESS

- > Multimillion dollar jury verdict believed to be the largest in Columbiana County, Ohio history
- > Multimillion dollar class-action settlement on behalf of a nationwide class of student-athletes whose images were used on a website affiliated with CBS Interactive without their permission or compensation
- > Obtained two jury verdicts in favor of the original developer of the Madden Football video game franchise in phased trial over unpaid royalties

RECOGNITION

- > Super Lawyers, Rising Star: Class Action/Mass Tort

LEGAL ACTIVITIES

- > Adjunct Professor, Sandra Day O'Connor College of Law, Arizona State University
- > State Bar of Arizona Bar Leadership Institute Class I
- > Pro bono work in insurance, immigration, family and contract law

NOTABLE CASES

- > **In re NCAA Student-Athlete Name and Likeness Licensing Litigation**
- > **Keller v. Electronic Arts Inc.**
- > **Antonick v. Electronic Arts Inc.**
- > **In re Swift Transportation Co., Inc.**
- > **Hunter v. Hyundai Motor America**
- > **Jim Brown v. NCAA; Liebich v. Maricopa County Community College District**
- > **Liebich v. Maricopa County Community College District**

PERSONAL INSIGHT

Before entering the practice of law, Mr. Aragon was a scout for the 2/68 Armored Tank Battalion, communications director for a successful congressional campaign, and waited on season tickets holders at America West Arena so that he could secretly watch the Phoenix Suns.



PARTNER

Lauren Guth Barnes

Ms. Barnes was honored with the American Association for Justice's Distinguished Service Award in 2015 and 2017.

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YEARS OF EXPERIENCE

> 14

PRACTICE AREAS

- > Antitrust Litigation
- > Class Actions
- > Consumer Rights
- > Mass Torts
- > Medical Devices
- > Pharmaceuticals/Health Care
 - Fraud
- > RICO

BAR ADMISSIONS

- > Massachusetts

COURT ADMISSIONS

- > U.S. District Court, District of Massachusetts
- > U.S. Court of Appeals, Second Circuit, Eleventh Circuit
- > Supreme Court of the United States

EDUCATION

- > Boston College Law School, J.D., **cum laude**, Articles Editor, Boston College Law Review, 2005
- > Williams College, B.A., International Relations, **cum laude**, 1998

CURRENT ROLE

- > Partner, Hagens Berman Sobol Shapiro LLP
- > Practice focuses on antitrust, consumer protection and RICO litigation against drug and medical device manufacturers in complex class actions and personal injury cases for consumers, large and small health plans, direct purchasers and state governments
- > Helped reach a \$73 million class settlement for direct purchasers in MDL No. 2343: In re. Skelaxin Antitrust Litigation
- > Co-lead class counsel for direct purchasers in In re Niaspan Antitrust Litigation, In re Solodyn Antitrust Litigation, In re Asacol Antitrust Litigation
- > Liaison counsel for *In re Fresenius Granuflo/Naturalyte Dialysate Products Liability Litigation*
- > Represented the state of Connecticut and helped secure a \$25M settlement in its' action against Eli Lilly over unlawful promotion of and misrepresentation about Zyprexa
- > Represented health benefit providers in the firm's Ketek and copay subsidies class litigation, and individuals harmed by pharmaceuticals such as Yaz, Actos and Granuflo and medical devices including pelvic mesh
- > Pro bono counsel in a successful constitutional challenge to the Commonwealth of Massachusetts' exclusion of legal immigrants from the state's universal healthcare program

RECOGNITION

- > AAJ Above and Beyond Award (2016)
- > AAJ Distinguished Service Award (2017, 2015)
- > National Law Journal Boston Rising Star Award (2014)
- > Massachusetts Academy of Trial Attorneys President's Award (2014)
- > Massachusetts Bar Association Up & Coming Lawyer Award (2013)
- > AAJ New Lawyers Division Excellence Award (2010, 2011, 2013, 2014)
- > AAJ New Lawyers Division Above and Beyond Award (2012)
- > AAJ Wiedemann & Wysocki Award (2012, 2013)

EXPERIENCE

- > Serves on the Board of On The Rise, a Cambridge, MA daytime shelter for homeless women and women in crisis
- > Active in the fights against forced arbitration federal preemption of consumer rights, working to ensure

PARTNER**Lauren Guth Barnes**

the public maintains access to the civil justice system and the ability to seek remedies when companies violate the law

- › Co-authored an amicus brief to the Supreme Court in *Pliva v. Mensing* on this issue on behalf of practitioners and professors who teach and write on various aspects of pharmaceutical regulation and the delivery of healthcare
- › Worked at Conflict Management Group where she worked with members of the United Nations High Commissioner for Refugees on a pilot project in Bosnia-Herzegovina designed to ease tensions and encourage reconciliation in post-conflict societies, and contributed to *Imagine Coexistence*, a book developed out of the collaboration

LEGAL ACTIVITIES

- › Institute for Complex Litigation and Mass Claims, Next Gen Advising Board (2015-present)
- › American Association for Justice (AAJ)
 - Executive Committee, Member (2014-present)
 - Board of Governors, Member (2012-present)
 - Women Trial Lawyers Caucus, Former Chair (2012-2013)
 - Class Action Litigation Group, Former Co-Chair (2011-2012)
 - New Lawyers Division, Board of Governors (2009 to present)
 - Committees (various), Member
 - AAJ Trial Lawyers Care Task Force, Member (2012-present)
- › Massachusetts Academy of Trial Attorneys
 - Executive Committee, Member (2012-2013)
 - Board of Governors, Member (2011-present)
 - Women's Caucus, Co-Chair (2008 to present)
- › Boston Bar Association, Class Action Committee, Co-Chair (2014-present)
- › Public Justice, Class Action Preservation Project, Member

NOTABLE CASES

- › **Antitrust action for direct purchasers of Skelaxin**

On Sept. 24, 2014, Judge Curtis Collier of the Eastern District of Tennessee approved a \$73 million settlement for direct purchasers of Skelaxin in litigation alleging Skelaxin's manufacturer colluded with would-be generic competitors, fraudulently delaying generic competition and leading to higher prices. Metaxalone was sold under the brand name Skelaxin since 1962, but the original patent expired in 1979. Manufacturers applied to market generic metaxalone in 2002, and generic competitors remained foreclosed from marketing generic metaxalone until 2010. Hagens Berman served as lead counsel for direct purchasers.

In re Skelaxin (Metaxalone) Antitrust Litigation, E.D.TN., Civil Action No. 1:12-md-2343.
- › Health care coverage for 40,000 legal immigrants in Massachusetts

PARTNER**Lauren Guth Barnes**

On Jan. 5, 2012, the Massachusetts Supreme Judicial Court ruled unanimously that a state law barring 40,000 low-income legal immigrants from the state's universal health care program unconstitutionally violates those immigrants' rights to equal protection under the law and must be struck down. Hagens Berman served as pro bono counsel.

Finch v. Commonwealth Health Insurance Connector Authority, Mass., Civil Action No. SJC-11025.

› **\$25 million for the state of Connecticut for Zyprexa fraud**

On Oct. 5, 2009, U.S. District Court Judge Jack B. Weinstein approved a \$25 million settlement reached by the parties to conclude the state's Zyprexa litigation that alleged Lilly engaged in unlawful off-label promotion and misrepresented Zyprexa's safety and efficacy, resulting in millions of dollars in excess pharmaceutical costs. Hagens Berman served as outside counsel to Attorney General Richard Blumenthal.

State of Connecticut v. Eli Lilly & Co., E.D.N.Y., Civil Action No. 08-cv-955-JBW.

PUBLICATIONS

- › "How Mandatory Arbitration Agreements and Class Action Waivers Undermine Consumer Rights and Why We Need Congress to Act," Harvard Law and Policy Review, August 2015

PERSONAL INSIGHT

Unlike many of her colleagues at HBSS, Lauren does not run marathons – unless chasing after her small children counts. Lauren did wrestle in college but refused to don the wrestling singlet. Whenever she can, Lauren rock climbs with her in-laws, breathes deeply at yoga, and hosts dinner parties to, despite usual advice, try totally new recipes. She also keeps the pizza delivery guy on speed dial as back-up for such occasions.

**PARTNER****Ian M. Bauer**

Mr. Bauer has been at the forefront of child and social welfare policymaking and litigation in Washington State over the past decade, and has extensive experience in litigation involving abuse, neglect and exploitation of children and vulnerable adults.

CONTACT

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YEARS OF EXPERIENCE

> 13

PRACTICE AREAS

> Personal Injury Litigation
> Civil Rights

BAR ADMISSIONS

> Washington

COURT ADMISSIONS

> U.S. District Court, Western District of Washington
> U.S. District Court, Eastern District of Washington
> United State Bankruptcy Court for the Western District of Washington
> Ninth Circuit Court of Appeals

EDUCATION

> Connecticut College, B.A., 1999
> Seattle University School of Law, J.D., **magna cum laude**, 2004

CURRENT ROLE

> Partner, Hagens Berman Sobol Shapiro LLP
> Practice focuses on personal injury and civil rights cases

RECENT SUCCESS

Mr. Bauer has litigated numerous multi-million dollar cases involving children and vulnerable adults who have suffered profound abuse, neglect or exploitation. Recent recoveries include:

- > Settlement on behalf of five children abused and neglected by their biological parents (\$9.75 million)
- > Settlement on behalf of a developmentally-disabled woman who was abused, neglected and financially exploited by her state-paid, in-home caregiver (\$5.52 million)
- > Settlement on behalf of a young child who was abused and neglected by his biological parents (\$5.5 million)
- > Settlement on behalf of a young man who was abused and neglected by a non-relative caregiver (\$4.0 million)
- > Settlement on behalf of a young child who was abused and neglected by her biological mother (\$4.0 million)
- > Settlement on behalf of an infant abused in day care setting (\$2.84 million)
- > Settlement on behalf of a developmentally-disabled woman abused and neglected by her state-paid, in-home caregiver (\$2.5 million)
- > Settlement on behalf of a developmentally-disabled woman who was sexually and financially exploited by her state-paid, in-home caregiver (\$2.4 million)
- > Settlement on behalf of a young woman sexually abused by her biological father (\$2.0 million)
- > Settlement on behalf of a vulnerable woman sexually assaulted in a hospital emergency room (\$1.2 million)

RECOGNITION

- > Mr. Bauer has received an AV rating from Martindale-Hubbell, the highest peer-reviewed national rating a lawyer can obtain, reflecting a preeminent legal ability and exceptional ethical standards.
- > Rising Star, Washington Law & Politics Magazine (2009, 2016, 2017)

EXPERIENCE

Prior to joining Hagens Berman, Mr. Bauer's served as an Assistant Attorney General with the Washington State Attorney General's Office. In this role, Mr. Bauer coordinated the defense of civil rights and tort litigation against DSHS, WSDOT, WSP and other state agencies, and supervised two teams of highly-experienced attorneys and professional staff. Mr. Bauer also carried a significant caseload of high-profile tort and civil rights cases, as well as cases involving the operation and funding of Washington's foster care, mental health and public assistance systems. Mr. Bauer also advised executive-level agency staff and state risk managers on a wide variety of complex legal issues, including tactical litigation decisions,

PARTNER

Ian M. Bauer

the implications of legislative, judicial, political and policy decisions, and emergent situations involving the risk of significant exposure.

LEGAL ACTIVITIES

- > Member, Washington Association for Justice
- > Member, American Association for Justice

PERSONAL INSIGHT

Mr. Bauer is a former collegiate soccer player who continues to follow the game religiously.



PARTNER

Jeniphr A.E. Breckenridge

Ms. Breckenridge has practiced with the firm since its founding in 1993.

CONTACT

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YEARS OF EXPERIENCE

> 29

PRACTICE AREAS

- > Securities / Investor Fraud
- > Consumer Rights
- > Products Liability

INDUSTRY EXPERIENCE

- > Aeronautics
- > Pharmaceutical Fraud

COURT ADMISSIONS

- > Supreme Court of Washington
- > USDC, Western District of Washington
- > U.S. Court of Appeals, Third Circuit

EDUCATION

- > University of Maryland Law School, J.D., Notes and Comments Editor, Maryland Law Review
- > Georgetown University, B.A.

CURRENT ROLE

- > Partner, Hagens Berman Sobol Shapiro LLP, where she has practiced since the firm's founding
- > Practice concentrates on class actions, including consumer, automobile defects, securities litigation fraud, and wage and hour claims

NOTABLE CASES

- > Metropolitan Securities Litigation
- > Boeing Securities Litigation
- > Raytheon Securities Litigation
- > Average Wholesale Price Litigation
- > In re Pet Food Products Liability Litigation
- > Toyota Unintended Acceleration Litigation
- > State Tobacco cases



PARTNER

Elaine T. Byszewski

Litigated Milk Antitrust from complaint filing to recent settlement of \$52 million

CONTACT

301 North Lake Ave.
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Pasadena, CA 91101

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(213) 330-7152 fax
elaine@hbsslaw.com

YEARS OF EXPERIENCE

> 16

PRACTICE AREAS

- > Consumer Protection
- > Qui Tam
- > Antitrust Litigation
- > Appellate

BAR ADMISSIONS

- > State Bar of California

COURT ADMISSIONS

- > U.S. District Court for the Central District of California
- > U.S. District Court for the Northern District of California
- > U.S. District Court for the Southern District of California
- > U.S. Court of Appeals for the Ninth Circuit
- > U.S. District Court for the Eastern District of California

EDUCATION

- > Harvard Law School, J.D., **cum laude**, 2002
- > University of Southern California, B.S., Public Policy, **summa cum laude**, 1999

CURRENT ROLE

- > Partner, Hagens Berman Sobol Shapiro LLP
- > Ms. Byszewski has litigated a number of complex class actions on behalf of consumers, employees and whistleblowers resulting in multimillion-dollar settlements, including cases against Toyota, Ford, AstraZeneca Pharmaceuticals, Berkeley Premium Nutraceuticals, Solvay Pharmaceuticals, Costco, Apple and KB Homes.
- > Currently, Ms. Byszewski is involved in:
 - Multi-state antitrust action against major dairy cooperatives for colluding in the premature slaughter of a half a million cows to drive up the price of milk
 - Deceptive advertising case against Mars, Nestle, and Hershey involving their undisclosed use of child and slave labor in Ivory Coast chocolate supply chains
 - Deceptive advertising case against the makers of Chicken of the Sea, Fancy Feast, Iams, and Meow Mix involving their undisclosed use of slave labor in Thai seafood supply chains
 - Hagens Berman's representation of the City of Los Angeles and other municipalities in litigation against major banks for discriminating against minority borrowers

RECENT SUCCESS

- > Litigated **Milk Antitrust** from complaint filing to settlement of \$52 million and received the American Antitrust Institute's 2018 award for Outstanding Antitrust Litigation Achievement in Private Law Practice
- > Member of litigation team that settled **Toyota Unintended Acceleration Litigation** for \$1.6 billion and was a finalist for Public Justice's 2014 Trial Lawyer of the Year award

NOTABLE CASES

- > **Dairy Cooperatives Antitrust Litigation**
- > **SeaWorld Consumer Lawsuit**
- > **Chocolate Child Labor Cases**
- > **Seafood Slave Labor Cases**
- > **Toyota Unintended Acceleration**
- > **Ford Spark Plugs**
- > **SunRun, Inc. Advertising Litigation**
- > **AstraZeneca Pharmaceuticals (Nexium) Litigation**
- > **Merck (Vioxx) Litigation**
- > **Berkeley Nutraceuticals (Enzyte) Litigation**
- > **Solvay Pharmaceuticals (Estratest) Litigation**
- > **Apple iPod Litigation**
- > **Costco Wage and Hour Litigation**

EXPERIENCE

- > Prior to joining Hagens Berman, Ms. Byszewski focused her practice on labor and employment litigation and counseling. During law school she worked in the trial division of the office of the Attorney General of Massachusetts.

PARTNER

Elaine T. Byszewski

PUBLICATIONS

- > “Valuing Companion Animals in Wrongful Death Cases: A Survey of Current Court and Legislative Action and A Suggestion for Valuing Loss of Companionship,” *Animal Law Review*, 2003, Winner of the Animal Law Review’s 5th Annual Student Writing Competition
- > “What’s in the Wine? A History of FDA’s Role,” *Food and Drug Law Journal*, 2002
- > “ERISA and RICO: New Tools for HMO Litigators,” *Journal of Law, Medicine & Ethics*, 2000

PERSONAL INSIGHT

Ms. Byszewski’s proudest moment was teaching her older son to swim. Tennis is next on the agenda. Her biggest challenge is keeping her two-year-old out of trouble.



PARTNER

Jennifer Fountain Connolly

Successfully litigates complex fraud cases involving all types of industries.

CONTACT

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YEARS OF EXPERIENCE

> 20

PRACTICE AREAS

- > Qui Tam
- > Antitrust Litigation
- > Consumer Protection

BAR ADMISSIONS

- > Colorado
- > Illinois
- > District of Columbia

EDUCATION

- > University of Denver College of Law, J.D., 1998
- > University of Chicago, B.A., High Honors, Special Honors in English, 1993

CURRENT ROLE

- > Partner, Hagens Berman Sobol Shapiro LLP
- > Leads Hagens Berman's Washington D.C. office
- > Practice focuses on pharmaceutical pricing fraud cases, **qui tam** litigation, antitrust class actions and other types of complex litigation
- > Specializes in cases with complex factual or procedural questions, many of which have related proceedings pending in multiple jurisdictions

RECENT SUCCESS

- > Significant role in litigation against McKesson Corporation alleging the company engaged in a scheme that raised the prices of more than 400 brand name prescription drugs (\$350 million settlement)
- > Public payor case for municipalities throughout the United States (\$82 million settlement)
- > Represented numerous state attorneys general in similar claims against McKesson
- > Key member of the Hagens Berman-led team that successfully tried the **Average Wholesale Price litigation** against four pharmaceutical company defendants, obtaining a verdict that was subsequently affirmed in all respects by the First Circuit Court of Appeals

EXPERIENCE

- > Partner, Wexler Wallace LLP
- > Associate, Netzorg McKeever Koclanes & Bernhardt LLP (now Sherman & Howard, LLC)
- > Assistant Attorney General, Business Regulation Unit, Colorado Attorney General's Office

NOTABLE CASES

- > **McKesson Corporation Litigation**
 - Private class action (\$350 million settlement)
 - Municipal class action (\$82 million settlement)
 - Multiple state attorney general actions were favorably resolved
- > **AWP Litigation**
 - Represented classes of consumers and third-party payors in a groundbreaking pharmaceutical fraud case in which the court approved a total of \$338 million in settlements
- > **Opioids Litigation**
 - Retained by the state of Ohio to serve as trial counsel in a recently filed state suit against five manufacturers of opioids.
 - Representing the Orange County District Attorney's office in a case alleging five pharmaceutical companies orchestrated a false and misleading marketing scheme designed to reverse the popular and

PARTNER

Jennifer Fountain Connolly

medical understanding of the serious risks of long-term opioid use for chronic, non-cancer pain

› **Fannie Mae/Freddie Mac Takings Litigation**

Representing shareholders in the Court of Federal Claims alleging that, in imposing the conservatorships over Fannie Mae and Freddie Mac in September 2008, the Government took private property without just compensation

› **ATM Antitrust Litigation**

Representing consumers challenging illegal agreements among Visa, MasterCard and member banks to charge inflated ATM access fees, in violation of the federal antitrust laws

› **Qui Tam** matters

Currently working on numerous **qui tam** matters that are under seal in multiple jurisdictions



PARTNER

Elizabeth A. Fegan

"I have found working with you on this case one of the more interesting, challenging and, at some level, uplifting things that I have been able to do..." – Hon. Wayne Andersen (Ret.) at final approval of a nationwide sexual harassment settlement on behalf of 16,000 women.

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YEARS OF EXPERIENCE

> 23

PRACTICE AREAS

- > Antitrust
- > Insurance Fraud
- > Consumer Rights
- > Employment Discrimination
- > Products Liability

INDUSTRY EXPERIENCE

- > Pharmaceuticals

COURT ADMISSIONS

- > Second, Third, Seventh, Eighth and Ninth Circuit Courts of Appeals
- > U.S. District Court, Northern, Central and Southern Districts of Illinois
- > District of Colorado

EDUCATION

- > Loyola University Chicago School of Law, J.D., Editor of Loyola Law Journal

CURRENT ROLE

- > Partner, Hagens Berman Sobol Shapiro LLP
- > Leads Hagens Berman's Chicago office
- > Practice focuses on complex commercial class-action cases in the areas of antitrust, consumer protection, product liability, discrimination, and sexual harassment

RECENT SUCCESS

- > **American Equity Senior Annuities Fraud** (\$129 million settlement)
- > **Midland Senior Annuities Fraud** (\$79.5 million settlement)
- > **Baby Products Antitrust Settlement** (\$35 million settlement)
- > **Pre-Filled Propane Tank Marketing And Sales Practices** (\$35 million settlement);
- > **Bayer Combination Aspirin Consumer Fraud** (\$15 million settlement);
- > **Aurora Dairy Organic Milk Consumer Fraud** (\$7.5 million settlement);
- > **"Thomas the Tank Engine" Toys Lead Paint Products Liability** (\$30 million settlement of federal and state cases)

RECOGNITION

- > Illinois Super Lawyer, Super Lawyers Magazine (2016-18)
- > Woman of Influence 2017, Best Lawyers, Business Edition (Spring 2017)
- > The National Trial Lawyers: Top 100 (2014-15)
- > Time, Treasure & Talent Award, St. Giles CCW (2014)
- > AAJ, Civil Rights Section, Outstanding Section Newsletter of the Year (2006)

EXPERIENCE

- > Partner, The Wexler Firm
- > Associate, Shesky & Froelich Ltd.
 - Appointed Special Assistant Corporation Counsel on behalf of the City of Chicago, the Chicago Park District, and the Public Building Commission of Chicago
 - Appointed to the Special Master teams in **In re Waste Mgmt. Sec. Litig. (N.D. Ill.)** and **Wolens et al. v. American Airlines (Cir. Ct. Cook County, Ill.)**
- > Legal Writing Instructor, Loyola University Chicago School of Law

PUBLICATIONS

- > At Sidebar column: "From Litigator to Trial Lawyer," The Federal Lawyer (March 2018)
- > "You Have Class! How to Identify Potential Class Actions in Your Everyday Practice," Keynote Speaker, West Suburban Bar Association (Sept. 2016)
- > At Sidebar column: "FBA Convention and Ohio Spotlight," The Federal Lawyer (August 2016)
- > "An Opportunity Or Landmine: Promoting Gender Diversity From The Bench," The Federal Lawyer

PARTNER**Elizabeth A. Fegan**

(pending pub. May 2016)

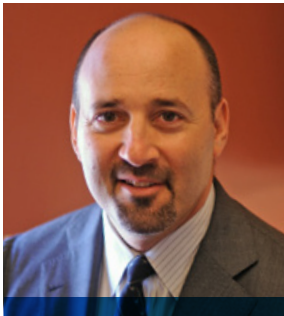
- > “Post-Certification Strategies,” Class Action Litigation in America – A National Symposium, American Bar Association (March 2016)
- > Articles Editor (2016-17), Proof Editor (2015-16), Editorial Board Committee, Federal Bar Association (appt. 2015-18)
- > Co-Chair, HarrisMartin’s MDL Conference: Herbal Supplements Litigation (2015)
- > “Being ‘Media-Relevant’-What It Means and Why It Matters” - Class Action Litigation Conference, Presenter, Perrin Conferences (2015)
- > “Recent Trends in Ascertainability” - National Consumer Class Action Conference, Presenter, Bridgeport Continuing Education (2014)
- > Contributing Editor, 2013 Annual Review of Antitrust Law Developments (ABA 2014)
Consumer Litigation Roundtable (including Chicago Federal Court judges, plaintiffs’ lawyers and defense lawyers) (2013)
- > “What’s wrong with owning your power?” - 2012 AAJ Convention: Women’s Trial Lawyers Caucus Summit, Presenter, American Association For Justice (2012)
- > “Motions to Dismiss Under Rule 12(b)(6): Updating Your Playbook After the Twombly and Iqbal Cases,” Presenter, Law Seminars International (2011)
- > Contributing Editor, 2007 Annual Review of Antitrust Law Developments (ABA 2008)
- > Newsletter Editor, Civil Rights Section of the American Trial Lawyers Association (n/k/a American Association for Justice) (2005-06)
- > “Home Rule Hits the Road in Illinois: American Telephone & Telegraph Company v. Village of Arlington Heights,” Loyola Law Journal (1995)

NOTABLE CASES

- > Students v. USC and Dr. Tyndall
- > Actress and entertainment industry class v. The Weinstein Company, Harvey Weinstein and related companies for racketeering and sexual assault
- > **Broiler Chicken Antitrust Litigation**
- > **NCAA Student-Athlete Concussion Litigation**
- > **NCAA Student-Athlete Scholarship Cap Antitrust Litigation**
- > Nationwide class action alleging sexual harassment on behalf of 16,000 current and former female employees of a commercial property brokerage firm. The settlement required changes to human resource policies and a streamlined claims process that provided the potential for individual awards up to \$150,000 per class member.
- > Multiple cases against annuities insurers for targeting seniors with deferred annuities that lock seniors’ savings up for their lifetimes
- > **Baby Products Antitrust Litigation**
- > **Midland Senior Annuities Fraud Litigation**
- > **American Equity Senior Annuities Fraud Litigation**
- > **Blue Rhino Propane Tanks Sales and Marketing Litigation**
- > **Bayer Combination Aspirin Sales and Marketing Litigation**

PERSONAL INSIGHT

- > Beth is still “leaning in” with five kids while training for her tenth marathon.
- > Once interviewed Barry Sanders in the Detroit Lions locker room while working as a sports stringer at the Lansing State Journal.



PARTNER

Jeff D. Friedman

Mr. Friedman is extensively involved in the firm's representation of government entities, successfully recovering hundreds of millions of dollars.

CONTACT

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YEARS OF EXPERIENCE

> 24

PRACTICE AREAS

- > Consumer Rights
- > Antitrust Litigation
- > Privacy Rights
- > Securities Litigation

BAR ADMISSIONS

> California

COURT ADMISSIONS

- > Central District of California
- > Northern District of California
- > U.S. Court of Appeals for the Ninth Circuit

EDUCATION

- > Santa Clara University School of Law, J.D., magna cum laude, 1994
- > University of Washington, B.A., Political Science, 1991

CURRENT ROLE

- > Partner, Hagens Berman Sobol Shapiro LLP
- > Specializing in class actions against some of the largest companies in the United States, Mr. Friedman litigates cases involving securities fraud, consumer protection and antitrust violations including litigation against technology companies and cutting-edge competition policy issues
- > Extensively involved in the firm's representation of government entities, successfully recovering hundreds of millions of dollars
- > Has taken and defended the depositions of dozens of the top economists in the United States concerning cartel behavior and statistical models relating to antitrust impact and damages. Mr. Friedman has also developed subject matter expertise in econometrics relating to regressions and economic theory proving pass-through of cartel overcharges through complex distribution channels.
- > Involved in firm's position as lead counsel on behalf of purchasers of millions of electronics products, including laptop computers and cell phones, against several multinational corporations alleged to have fixed the prices of lithium ion battery cells for more than a decade

RECOGNITION

- > Northern District of California Super Lawyer, 2013 - 2017

EXPERIENCE

- > General Counsel, public fiber-optic component company in Silicon Valley
- > Assistant U.S. Attorney, Criminal Division, Central District of California (Los Angeles)
- > Clerk for the Honorable Manuel L. Real, U.S. District Court Judge, Central District of California

NOTABLE CASES

- > **In re Electronic Books Antitrust Litig.**, No. 11-md-02293 (DLC) (S.D.N.Y.)
A nationwide class of e-book consumers allege five of the largest book publishers in the United States and Apple conspired to raise the prices of e-books and restrain competition.
- > **In re Optical Disk Drive Prods. Antitrust Litig.**, No. 3:10-md-2143 RS (N.D. Cal.)
An action on behalf of consumers in more than two dozen states against the manufacturers of optical disk drives. The plaintiffs allege defendants conspired to increase the price of ODDs that were sold to original equipment manufacturers. Defendants' conduct allegedly caused millions of consumer electronics products, such as computers, to be sold at illegally inflated prices.

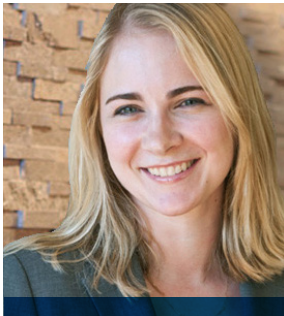
PARTNER

Jeff D. Friedman

- › **Pecover et al. v. Electronic Arts Inc.**, No. 3:08-cv-02820-CW (N.D. Cal.)
A nationwide certified class of consumers who bought interactive football video games. Plaintiffs allege Electronic Arts entered into a series of exclusive licenses with football intellectual property owners, such as the NFL, in order to lock-up the market. A \$27 million settlement in the case has been agreed to by the parties, but awaits approval by the court.
- › **San Francisco Health Plan v. McKesson Corp.**, No. 1:08-CV-10843-PBS (D. Mass.); **State of Utah v. McKesson Corp.**, No. CV 10-04743 SI (N.D. Cal.); **The Commonwealth of Virginia v. McKesson Corp.** et al., No. CV-11-02782 SI (N.D. Cal.); **State of Oregon v. McKesson Corp.**, No. CV-11-5384-SI (N.D. Cal.)
- › **In re eBay Seller Antitrust Litigation**, action on behalf of millions of eBay sellers, claiming eBay monopolized the online auction market and attempted to monopolize the person-to-persons payment systems market (Paypal)
- › **Dell Inc. Bait-And-Switch Sales Litigation**, negotiated multimillion dollar settlement on behalf of nearly one million consumers

PERSONAL INSIGHT

After daily discussions with his Sherpa guide while trekking in the Annapurna mountain range in Nepal, Mr. Friedman decided to devote his legal career to specializing in representing persons in collective actions who are individually powerless against corporations.



PARTNER

Kristen A. Johnson

Public Justice nominated Ms. Johnson and the rest of the Neurontin trial team for Trial Lawyer of the Year for securing a \$142 million verdict against Pfizer for suppressing and manipulating results of scientific studies.

CONTACT

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YEARS OF EXPERIENCE

> 11

PRACTICE AREAS

- > Class Actions
- > Consumer Rights
- > RICO
- > Antitrust

BAR ADMISSIONS

- > Massachusetts

COURT ADMISSIONS

- > U.S. District Court, District of Massachusetts
- > First Circuit Court of Appeals

EDUCATION

- > Boston College Law School, J.D.
- > Dartmouth College, **cum laude**, B.A.

CURRENT ROLE

- > Partner, Hagens Berman Sobol Shapiro LLP
- > Practice focuses combating waste, fraud and abuse in the healthcare industry
- > Personally appointed alternate lead counsel in the **In re New England Compounding Pharmacy Litigation Multidistrict Litigation** (MDL 2419). During the nascent stages of the MDL, Ms. Johnson was appointed liaison counsel to speak for the hundreds of victims who contracted fungal meningitis or suffered other serious health problems as a result of receiving contaminated products produced by NECC.
- > Actively involved in **In re Nexium Antitrust Litigation** (D. Mass., MDL No. 2409); **In re Loestrin Antitrust Litigation** (D.R.I., MDL No. 2472); and **In re Celebrex Antitrust Litigation**, (E.D. Va. 14-cv-00361).

RECENT SUCCESS

- > Lead counsel for plaintiffs who contracted fungal infections from contaminated steroids compounded by New England Compounding Center (\$200+ million settlement)
- > One of four attorneys who presented and cross examined witnesses for the plaintiffs during the 2014 Nexium Antitrust trial
- > \$142 million civil RICO verdict against Pfizer for suppressing and manipulating results of scientific studies
- > Instrumental in the recent **Neurontin** marketing (\$350 million), **Prograf** antitrust (\$98 million), **Flonase** antitrust (\$150 million) and **Wellbutrin XL** antitrust (\$37.5 million, partial) settlements

RECOGNITION

- > In 2014 and 2015, the National Law Journal honored Ms. Johnson as one of Boston's Rising Stars, one of 40 outstanding lawyers under 40.
- > In 2011, Public Justice nominated Ms. Johnson and the rest of the Neurontin trial team for Trial Lawyer of the Year for their work in securing a \$142 million verdict against Pfizer for suppressing and manipulating the results of scientific studies that showed Neurontin did not work to treat the off-label indications Pfizer was heavily promoting.

LEGAL ACTIVITIES

- > Public Justice, Class Action Preservation Committee
- > American Association for Justice

PARTNER

Kristen A. Johnson

NOTABLE CASES

- > Neurontin class action marketing settlement (\$325 million)
- > In re Prograf Antitrust Litigation (\$98 million)
- > Pfizer Neurontin RICO Litigation (\$142 million jury verdict)
- > In re Flonase Antitrust Litigation (\$150 million settlement)
- > In re Nexium Antitrust Litigation (trial October 2014)
- > In re Prograf Antitrust Litigation (trial fall 2014)

PERSONAL INSIGHT

Ms. Johnson grew up in a family law practice (they literally turned a closet into a playroom) in Canfield, Ohio. Her grandfather, uncle, father, brother and sister are all lawyers, all practice together, and her mother runs the law office. Ms. Johnson's career choice was perhaps inevitable, though her departure for Boston makes her a bit of a black sheep.

**PARTNER****Reed R. Kathrein**

Mr. Kathrein represents institutional, government and individual investors in securities fraud, and corporate governance cases.

CONTACT

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reed@hbsslaw.com

YEARS OF EXPERIENCE

> 42

PRACTICE AREAS

> Securities Litigation

BAR ADMISSIONS

> State of California
> State of Illinois
> State of Florida

COURT ADMISSIONS

> Supreme Court of California
> Supreme Court of Florida
> Supreme Court of Illinois
> U.S. District Court for the Northern District of California
> U.S. District Court for the Northern District of Illinois
> U.S. District Court of Colorado
> U.S. Court of Appeals, Ninth Circuit

EDUCATION

> University of Miami, J.D., 1977
> University of Miami, B.A., 1974

CURRENT ROLE

> Partner, Hagens Berman Sobol Shapiro LLP
> Regular public speaker on securities, class action and consumer law issues

RECOGNITION

> Super Lawyer, Super Lawyers Magazine, 2007 - 2017

EXPERIENCE

> Litigated over 100 securities fraud class actions
> Worked behind the scenes in shaping the Private Securities Litigation Reform Act, the Securities Litigation Uniform Standards Act and the Sarbanes-Oxley Act
> Lawyer Representative, Ninth Circuit Court of Appeals
> Lawyer Representative, U.S. District Court for the Northern District of California, 2008-2011
> Chaired the Magistrate Judge Merit Selection Panel, U.S. District Court, Northern District of California, 2006-2008
> Co-chaired the Securities Rules Advisory Committee, U.S. District Court, Northern District of California, 2004-2006

LEGAL ACTIVITIES

> Member, National Association of Public Pension Attorneys (NAPPA)
> Member and Speaker, National Conference on Public Employee Retirement Systems (NCPERS)
> Member, Council of Institutional Investors (CII)
> Member, State Association of County Retirement Systems (SACRS)
> Member, National Council on Teacher Retirement (NCTR)
> Member, California Association of Public Retirement Systems (CALAPRS)
> Member, Michigan Association of Public Employee Retirement Systems (MAPERS)
> Member, Illinois Public Pension Fund (IPPPFA)
> Member, Standing Committee on Professional Conduct, U.S. District Court, Northern District of California (Term expires 2017)
> Expedited Trial Rules Committee, U.S. District Court, Northern District of California, 2010-2012
> Lawyer Representative to the Ninth Circuit Court of Appeals, U.S. District Court, Northern District of California, 2008-2011
> Chair/ Member, Magistrate Judge Merit Selection Panel, U.S. District Court, Northern District of California, 2006-2008

PARTNER

Reed R. Kathrein

PUBLICATIONS

- > "A Look at Recent Demographics and Other Statistics in Securities Fraud Class Actions," The NAPPA Report, October 2016
- > "Post-Morrison: The Global Journey Towards Asset Recovery," Reed R. Kathrein, Peter E. Borkon, Nick S. Singer, contributing members, NAPPA Morrison Working Group, June 2016
- > "Interview with Bernie Madoff," Hagens Berman, HBSS Securities News, Fall 2015
- > "Is Your Fund Prepared for Halliburton?," March 2014
- > "O Securities Fraud, Where Art Thou?, Enter Robocop," Hagens Berman, HBSS Securities News, November 2013
- > "Professor Coffee to SEC: Hire Plaintiffs Bar!," Hagens Berman, HBSS Securities News, May 2013
- > "Living in a Post-Morrison World: How to Protect Your Assets Against Securities Fraud," Reed R. Kathrein, Peter E. Borkon, contributing members, NAPPA Morrison Working Group, 2012
- > "SEC Action Necessary, But Not Sufficient to Protect Investors," Hagens Berman, HBSS Securities News, November 2012
- > "Are You Watching Your Private Equity Valuations?" Hagens Berman, HBSS Securities News, May 2012
- > "What Do Trustees Need to Know When Investing In Foreign Equities?," Hagens Berman, HBSS Securities News, November 2011

PRESENTATIONS

- > "Incoming! How the New Administration's Approach to Securities Laws and Regulations Affect Investors and Markets," MAPERS, Spring Conference, May 2017
- > "Occupy Wall Street through Reform of the Securities Law," NCPERS, Legislative Conference, February 2012
- > "Legal Issues Facing Public Pensions," Opal, Public Funds Summit, January 2012
- > "Protection vs. Interference – What the New Federal Regulations Mean to Institutional Investors," NCPERS, Annual Conference, May 2011
- > "The Immediate Need for Congress to Act on Investor Friendly Legislation," NCPERS, Annual Conference, May 2010
- > "Investor Friendly Legislation in Congress," NCPERS, Legislative Conference, February 2010

NOTABLE CASES

- > Litigated over 100 securities fraud class actions including cases against 3Com, Adaptive Broadband, Abbott Laboratories, Bank of America, Capital Consultants, CBT, Ceridian, Commtouch, Covad, CVXT, ESS, Harmonics, Intel, Leasing Solutions, Nash Finch, Northpoint, Oppenheimer, Oracle, Pemstar, Retek, Schwab Yield Plus Fund, Secure Computing, Sun Microsystems, Tremont (Bernard Madoff), Titan, Verifone, Whitehall, and Xoma
- > Litigated many consumer, employment and privacy law cases including AT&T Wiretapping Litigation, Costco Employment, Solvay Consumer, Google/Yahoo Internet Gambling, Vonage Spam, Apple Nano

PARTNER

Reed R. Kathrein

Consumer, Ebay Consumer, LA Cellular Consumer, AOL Consumer, Tenet Consumer and Napster Consumer

PERSONAL INSIGHT

Reed is a recovering rock-and-roll drummer and banjo ukulele player. His rock band, the Stowaways, was voted 4th best in the State of Illinois out of 300 bands in the Jaycees Battle of the Bands. Reed's mother made his band costume of blue jean bell bottoms, sailor shirts and hats. The next year everyone wore blue jean bell bottoms to Woodstock. His prized possession is a 30lb Jeff Ocheltree snare drum made by Led Zeppelin John Bonham's drum technician. The rest of his kit is patterned after Dave Matthews Band's drummer, Carter Beauford. In his spare time, Reed works on playing Stairway to Heaven (drums) in his garage or Somewhere Over the Rainbow (banjo ukulele) in the High Sierra mountains.



PARTNER

Daniel J. Kurowski

Recognized as a 2016 "Rising Star" in Illinois by Super Lawyers

CONTACT

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dank@hbsslaw.com

YEARS OF EXPERIENCE

> 14

PRACTICE AREAS

- > Consumer Rights Litigation
- > Sports Litigation
- > Antitrust Litigation
- > Pharmaceutical Fraud

CLERKSHIPS

- > Hon. Paul E. Plunkett,
Northern District of Illinois
- > Hon. Maria Valdez, Northern
District of Illinois

BAR ADMISSIONS

- > Illinois

COURT ADMISSIONS

- > U.S. Court of Appeals, Seventh
Circuit
- > U.S. Court of Appeals, Second
Circuit
- > U.S. District Court, Northern
District of Illinois
- > U.S. District Court, Central
District of Illinois
- > U.S. District Court, Southern
District of Illinois

EDUCATION

- > John Marshall Law School,
J.D., **cum laude**, 2005
- > Loyola University Chicago,
B.B.A., with Honors, 2002

CURRENT ROLE

- > Associate, Hagens Berman Sobol Shapiro LLP

> Daniel J. Kurowski is a partner at Hagens Berman Sobol Shapiro LLP. Since 2006, Mr. Kurowski has focused his practice on protecting the interests of individuals and small companies prejudiced by large corporations and organizations, often in consolidated multi-district litigation proceedings. Based in Chicago, with cases located throughout the country, his current work with the firm covers a diverse variety of complex cases including:

- Representing student-athletes in both individual personal injury and class-action litigation pertaining to concussions/traumatic brain injuries suffered during sporting activities, including in **In Re National Collegiate Athletic Association Student-Athlete Concussion Injury Litigation** (N.D. Ill.).
- Representing student-athletes in antitrust litigation regarding the NCAA's Division I football scholarship policies.
- Representing consumers of electricity in action alleging claims against nearly two dozen defendants for perpetuating an extensive fuel oil fraud, resulting in users of electricity in Puerto Rico being overcharged by more than \$1 billion dollars for electricity since 2002.
- Contesting a prominent financial company's deferred annuity sales practices in RICO litigation, including practices negatively impacting senior citizens.
- Representing retail purchasers with antitrust, consumer fraud and/or unjust enrichment claims against sellers and manufacturers of retail products.

RECENT SUCCESS

- > **In re Pre-Filled Propane Sales & Marketing Practices Litigation** (W.D. Mo.) (\$35 million in settlements involving multiple defendants)
- > **In re Bayer Combination Aspirin Sales & Marketing Practices Litigation** (E.D.N.Y.) (\$15 million settlement)
- > **In re Aurora Dairy Organic Milk Marketing & Sales Practices Litigation** (E.D. Mo.) (\$7.5 million settlement)
- > **Silk v. Bowling Green State University** (Ohio Court of Claims) (\$712,500 individual settlement for student-athlete injured as a result of alleged failures to properly manage athlete's concussions)

RECOGNITION

- > Illinois Rising Star, Super Lawyers Magazine, 2015 - 2018

EXPERIENCE

- > Federal judicial law clerk, Hon. Paul E. Plunkett and Hon. Maria Valdez
- > Intern, U.S. Department of Housing and Urban Development's Office of Fair Housing and Equal Opportunity, the U.S. Attorney's Office for the Northern District of Illinois and with Hon. Ronald A. Guzman and his staff

- > During law school, Mr. Kurowski received multiple academic scholarships, served as a staff member and

PARTNER**Daniel J. Kurowski**

Lead Articles Editor for The John Marshall Law Review, and received an award for an appellate brief submitted in a national moot court competition

LEGAL ACTIVITIES

- › Seventh Circuit Electronic Discovery Pilot Program Committee
- › Member of American Association for Justice, Illinois State Bar Association, Chicago Bar Association
- › Investigator, Chicago Bar Association, Judicial Evaluation Committee

NOTABLE CASES

- › Aurora Dairy Corporation Organic Milk Marketing & Sales Practices Litigation (E.D. Mo.)
- › Bayer Corp. Combination Aspirin Product Marketing & Sales Practices Litigation (E.D.N.Y.)
- › Bisphenol-A (BPA) Polycarbonate Plastic Products Liability Litigation (W.D. Mo.)
- › Pre-Filled Propane Tank Marketing & Sales Practices Litigation (W.D. Mo.)
- › RC2 Corp. Toy Lead Paint Products Liability Litigation (N.D. Ill.)

PERSONAL INSIGHT

Dan enjoys staying active by competing in cyclocross races and equally intense races chasing after his two children. Before called to practice law, Dan's work included delivering flowers, selling architecture river cruise tickets and retailing compact discs... back when people still bought CDs.

**PARTNER****Thomas E. Loeser**

Mr. Loeser obtained judgments in cases that have returned billions of dollars to millions of consumers and more than \$100 million to the government.

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YEARS OF EXPERIENCE

> 19

PRACTICE AREAS

- > Consumer Rights
- > False Claims Act/**Qui Tam**
- > Government Fraud
- > Corporate Fraud
- > Data Breach/Identity Theft and Privacy

INDUSTRY EXPERIENCE

- > Automotive
- > Consumer Fraud
- > Cyber and Intellectual Property Crimes
- > Racketeering
- > False Claims
- > Government Fraud
- > Technology
- > Software
- > Recreation
- > Athletic Apparel

BAR ADMISSIONS

- > California
- > Illinois
- > District of Columbia

COURT ADMISSIONS

- > District of Columbia
- > U.S. District Court for the District of Columbia

CURRENT ROLE

- > Partner, Hagens Berman Sobol Shapiro LLP
- > Practice focuses on class actions, False Claims Act and other whistleblower cases, consumer protection and data breach/identity-theft/privacy cases
- > Successfully litigated class-action lawsuits against mortgage lenders, appraisal management companies, automotive manufacturers, national banks, home builders, hospitals, title insurers, technology companies and data processors
- > Currently prosecuting consumer protection class-action cases against banks, automobile manufacturers, lenders, loan servicing companies, technology companies, national retailers, payment processors and False Claims Act whistleblower suits now under seal
- > Obtained judgments in cases that have returned billions of dollars to millions of consumers and more than \$100 million to the government

RECOGNITION

- > Washington Super Lawyers, 2016 - 2018
- > Washington Top Lawyers, 2016 - 2018
- > Martindale-Hubbell® AV Preeminent rating, 2015 - 2018

EXPERIENCE

- > Experience trying cases in federal and state courts in San Francisco, Los Angeles and Seattle
- > Served as lead or co-lead counsel in 12 federal jury trials and has presented more than a dozen cases to the Ninth Circuit Court of Appeals
- > As a federal prosecutor in Los Angeles, Mr. Loeser was a member of the Cyber and Intellectual Property Crimes Section and regularly appeared in the Central District trial courts and the Ninth Circuit Court of Appeals
- > Assistant U.S. Attorney, U.S. Department of Justice
- > Wilson Sonsini Goodrich & Rosati

NOTABLE CASES

- > Volkswagen Emissions Defect Litigation
- > Shea Homes Construction Defect Litigation
- > Meracord/Noteworld Debt Settlement Litigation
- > Defective RV Refrigerators Litigation
- > New Jersey Medicare Outlier Litigation

PARTNER

Thomas E. Loeser

- › U.S. District Court for the Northern District of California
- › U.S. District Court for the Southern District of California
- › U.S. District Court for the Central District of California
- › U.S. District Court for the Western District of Washington
- › Ninth Circuit Court of Appeals
- › Center for Diagnostic Imaging Qui Tam Litigation
- › Countrywide FHA Fraud Qui Tam Litigation
- › Chicago Title Insurance Co. Litigation
- › KB Homes Captive Escrow Litigation
- › Aurora Loan Modification Litigation
- › Wells Fargo HAMP Modification Litigation
- › JPMorgan Chase Force-Placed Flood Insurance Litigation
- › Wells Fargo Force-Placed Insurance Litigation
- › Target Data Breach Litigation

EDUCATION

- › Duke University School of Law, J.D., **magna cum Laude**, Order of the Coif, Articles Editor Law and Contemporary Problems, 1999
- › University of Washington, M.B.A., **cum laude**, Beta Gamma Sigma, 1994
- › Middlebury College, B.A., Physics with Minor in Italian, 1988

- › Cornerstone Advisors Derivative Litigation
- › Honda Civic Hybrid Litigation
- › Hyundai MPG Litigation

LANGUAGES

- › French
- › Italian



PARTNER

Robert F. Lopez

Mr. Lopez continues practice on qui tam matters at the firm, representing whistleblowers in cases involving violations of federal and state laws that prohibit the making of false claims for government payments.

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PRACTICE AREAS

- › Complex Commercial Litigation
- › Health Care & Pharmaceuticals Litigation
- › Intellectual Property Litigation
- › Privacy Litigation
- › Antitrust Litigation
- › Securities Litigation
- › **Qui Tam** Litigation

BAR ADMISSIONS

- › Washington

COURT ADMISSIONS

- › Western District of Washington
- › Eastern District of Washington
- › U.S. Court of Appeals for the Ninth Circuit

EDUCATION

- › Gonzaga University, B.A., English Literature; Arnold Scholar
- › University of Washington School of Law, J.D.

CURRENT ROLE

- › Partner, Hagens Berman Sobol Shapiro LLP
- › Offers a broad range of legal experience in the fields of:
 - Complex commercial litigation
 - Health care and pharmaceuticals litigation
 - Product defect litigation
 - False Claims Act litigation
 - Intellectual property litigation
 - Privacy litigation
 - Securities litigation
 - Antitrust litigation
 - Creditor-debtor litigation
- › Member of firm's **In re Carrier IQ, Inc. Consumer Privacy Litigation** team
- › Member of the firm's team representing the plaintiffs and proposed class in *Free Range Content Inc. v. Google Inc.*, an class-action case based on allegations that Google unlawfully denies payments to thousands of website owners and operators who place ads on their sites sold through Google AdWords
- › Continues practice on **qui tam** matters at the firm, representing whistleblowers in cases involving violations of federal and state laws that prohibit the making of false claims for government payments

EXPERIENCE

- › Experienced in prosecuting and defending appeals in the federal and state courts of appeal; representing institutions and consumers in nationwide class-action lawsuits, including in the federal multidistrict litigation setting; advising clients in non-litigation settings with respect to trademark, trade-name, copyright and Internet-communications law
- › Member of firm's team representing one of the relators in the 2012 settlement with Amgen Inc., in which the company agreed to pay \$612 million to the U.S. and various state governments in order to resolve claims that it caused false claims to be submitted to Medicare, Medicaid and other government insurance programs
- › Member of the firm's team that prosecuted **In re Charles Schwab Corp. Securities Litigation**
- › Experienced in class-action litigation against DaimlerChrysler Corporation relating to product defects in its Neon automobiles, nationwide class-action cases against Trex Company, Inc. and Fiber Composites, Inc.
- › Founding Member and Partner, Socius Law Group PLLC
- › Partner, Betts, Patterson & Mines, P.S.

PARTNER

Robert F. Lopez

NOTABLE CASES

- > In re Pharmaceutical Industry Average Wholesale Price Litigation
- > Amgen Inc. Qui Tam Litigation
- > In re Metropolitan Securities Litigation
- > In re Charles Schwab Corp. Securities Litigation
- > In re Carrier IQ, Inc. Consumer Privacy Litigation



PARTNER

Barbara Mahoney

Ms. Mahoney received her doctorate in philosophy from the Universität Freiburg (Germany), where she graduated magna cum laude.

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YEARS OF EXPERIENCE

> 17

PRACTICE AREAS

- > Civil RICO
- > Consumer Rights
- > Environmental Litigation
- > Intellectual Property
- > State False Claims

INDUSTRY EXPERIENCE

- > Pharmaceutical Industry
- > Class Action Litigation

BAR ADMISSIONS

- > Washington

COURT ADMISSIONS

- > U.S. District Court, Western District of Washington
- > U.S. District Court, Eastern District of Washington
- > Ninth Circuit Court of Appeals

EDUCATION

- > University of Washington, J.D., 2001
- > Universität Freiburg, PhD, philosophy, **magna cum laude**, 1993

CURRENT ROLE

- > Partner, Hagens Berman Sobol Shapiro LLP
- > Focuses primarily on national class actions and pharmaceutical litigation
- > Currently part of the firm's legal team representing 2014-16 BMW i3 REx owners in a class action regarding a defect in the range extender that causes the cars to suddenly reduce speed and power without warning when transitioning from pure battery mode to the range extender.
- > Represents consumers in a nationwide class action against Dometic Corporation seeking compensation for RV and boat owners who experienced extensive loss of property due to fires and explosions caused by defective refrigerators sold by Dometic.
- > Extensively involved in several suits against McKesson relating to allegations the company engaged in a scheme that raised prices of 400+ brand-name prescription drugs. Resulted in two national class-action settlements for \$350 million and \$82 million. In related litigation, Ms. Mahoney represented Virginia, Connecticut, Arizona, Oregon, Utah and Montana in individual cases against McKesson.
- > Extensively involved in **In re: Generic Pharmaceuticals Pricing Antitrust Litigation** on behalf of putative class of direct purchasers in MDL alleging generic drug manufacturers engaged in price fixing.
- > Represents Kentucky homeowners in a putative class action against Louisville Gas & Electricity to recover the cost of removing coal ash and dust from their homes.
- > Previously, she was involved in pioneering litigation against oil and energy companies for the village and tribe of Kivalina to recover the cost of extensive damage to the village caused by global warming.

RECOGNITION

- > Rising Star, Washington Law & Politics, 2005

EXPERIENCE

- > Worked in several areas of commercial litigation, including unlawful competition, antitrust, securities, trademark, CERCLA, RICO, FLSA as well as federal aviation and maritime law
- > Associate, Calfo Harrigan Leyh & Eakes LLP (formerly Danielson Harrigan Leyh & Tollefson)
- > Law Clerk, Justice Sanders, Washington Supreme Court
- > Law Clerk, Judge Sandra Brown Armstrong, U.S. District Court, N.D. California

LEGAL ACTIVITIES

- > Downtown Neighborhood Legal Clinic
- > Q Law

PARTNER

Barbara Mahoney

- › Cooperating Attorney with American Civil Liberties Union of Washington

NOTABLE CASES

- › New England Carpenters v. First DataBank (\$350 million class-action settlement)
- › Douglas County v. McKesson (\$82 million class-action settlement)

LANGUAGES

- › Fluent in German
- › Reads Swedish and French

PERSONAL INSIGHT

Ms. Mahoney lives in West Seattle with her partner and is very active in local athletic organizations. She is a former board member of Rain City Soccer, where she also organized a summer-long program on basic skills. She is also active in Seattle Frontrunners, a masters track club. She enjoys reading, running, soccer and studying foreign languages.



PARTNER

Sean R. Matt

Leads the firm's innovation in organizing and prosecuting individual class cases across many states involving the same defendants and similar factual and legal issues, an approach that continues to be a key factor in the firm's success

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YEARS OF EXPERIENCE

> 26

PRACTICE AREAS

- > Securities Litigation
- > Consumer Rights
- > Antitrust Litigation
- > Insurance
- > Products Liability

INDUSTRY EXPERIENCE

- > Complex Financial Instruments
- > Investments
- > Pharmaceuticals
- > Automotive

COURT ADMISSIONS

- > Supreme Court of Washington
- > U.S. District Court, Western District of Washington
- > U.S. District Court, District of Colorado
- > Ninth Circuit U.S. Court of Appeals

EDUCATION

- > Indiana University, B.S., Finance, Highest Distinction, 1988
- > University of Oregon School of Law, J.D., Order of the Coif (top 10%), Associate Editor of the Law Review, 1992

CURRENT ROLE

- > Partner, Hagens Berman Sobol Shapiro LLP, since its founding in 1993
- > Practice focuses on multi-state and nationwide class actions and complex commercial litigation encompassing securities and finance, consumer, antitrust, insurance and products
- > Diverse experience in most of the firm's practice areas, involving appearances in state and federal courts across the country at both the trial and appellate levels
- > Key member of the firm's securities litigation team, most recently co-leading the prosecution and settlement of the **In re Charles Schwab Securities Litigation**, the **In re Oppenheimer Champion Income Fund Securities Class Actions** and the **Oppenheimer Core Bond Fund Class Action Litigation**
- > Key member of the firm's pharmaceutical litigation team that confronts unfair and deceptive pricing and marketing practices in the drug and dietary supplement industries including Average Wholesale Price Litigation, the **First Databank/McKesson Pricing Fraud Litigation** and the **Enzyte Litigation**
- > Key member of the firm's automobile defect litigation team

RECOGNITION

- > In 2014, Public Justice nominated Mr. Matt and the **In re Toyota Motor Corp. Sudden, Unintended Acceleration** team for the Trial Lawyer of the Year Award for their work in securing a \$1.6 billion settlement for car owners.

PUBLICATIONS

- > Providing a Model Responsive to the Needs of Small Businesses at Formation: A Focus on Ex Ante Flexibility and Predictability, 71 Oregon Law Review 631, 1992

NOTABLE CASES

- > **In re Charles Schwab Securities Litigation** (\$235 million settlement)
- > **In re Oppenheimer Champion Income Fund Securities Fraud Class Actions** (\$52.5 million proposed settlement)
- > **Oppenheimer Core Bond Fund Class Action Litigation** (\$47.5 million settlement)
- > **Morrison Knudsen and Costco Wholesale Corp. Securities Litigation**
- > **In re Pharmaceutical Industry Average Wholesale Price Litigation** (\$338 million settlement)
- > **In re Toyota Motor Corp. Unintended Acceleration Marketing, Sales Practices, and Products Liability Litigation**
- > **In re Checking Account Overdraft** cases pending against many of the country's largest banks

PARTNER

Sean R. Matt

- › **Washington State Ferry Litigation**, which resulted in one of the most favorable settlements in class litigation in the history of the state of Washington
- › **Microsoft Consumer Antitrust** cases
- › State Attorneys General **Tobacco Litigation**, assisted with client liaison responsibilities, working closely with assistant attorneys general in Oregon, Ohio, Arizona, Alaska and New York, as well as assisting in all litigation matters

PERSONAL INSIGHT

Sean, whose four-man team won cycling's prestigious Race Across America with a time of six days and three hours, still occasionally rides a bike.

**PARTNER****Martin D. McLean**

Mr. McLean is a true trial attorney having tried more than 20 cases to verdict in various state and federal courts.

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YEARS OF EXPERIENCE

> 15

PRACTICE AREAS

- > Personal Injury
- > Civil Rights
- > Insurance Bad Faith
- > Public Records Act

BAR ADMISSIONS

- > U.S. District Court for the Western District of Washington
- > U.S. District Court for the Eastern District of Washington
- > Ninth Circuit Court of Appeals
- > Supreme Court of Washington

EDUCATION

- > Seattle University School of Law, J.D., **cum laude**, 2002

CURRENT ROLE

- > Associate, Hagens Berman Sobol Shapiro LLP
- > Represents individuals who have suffered catastrophic personal injury or loss
- > Clientele includes a wide range of individuals, including children who have suffered harm while in state care, elderly adults who have experienced abuse or neglect in nursing homes and individuals harmed by medical negligence.
- > Mr. McLean has been at the forefront of litigation involving the Washington Public Records Act.

RECENT SUCCESS

- > During his tenure with Hagens Berman's personal injury team, Mr. McLean has contributed to numerous lawsuits resulting in multi-million dollar recoveries on behalf of the firm's clients.

EXPERIENCE

- > Mr. McLean is a seasoned trial attorney, with extensive experience in all phases of litigation.

NOTABLE CASES

- > Marx v. DSHS, \$3 million judgment on behalf of developmentally-disabled patient sexually abused at state-run hospital
- > Tamas v. State of Washington, \$525,000 judgment on behalf of three children seeking publicrecords from state agency
- > Wright v. DSHS, \$2,850,000 judgment against the state of Washington for negligent child abuse investigation
- > Rudolph v. DSHS, \$900,000 judgement on behalf of family of a vulnerable adult severely neglected in state-licensed adult family home

PERSONAL INSIGHT

Mr. McLean spent a year living in Italy studying art, history, Italian and wine-drinking. When not practicing law, Mr. McLean enjoys his new favorite hobby: raising his young son with his wife.



PARTNER

David P. Moody

Mr. Moody has successfully secured many multi-million dollar recoveries on behalf of vulnerable citizens who have been abused, neglected or exploited.

CONTACT

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YEARS OF EXPERIENCE

> 25

PRACTICE AREAS

> Personal Injury Litigation
> Civil Rights

INDUSTRY EXPERIENCE

> Children, Elderly and
Incapacitated Citizens who are
Victims of Neglect or Abuse

BAR ADMISSIONS

> Washington

COURT ADMISSIONS

> U.S. Supreme Court
> U.S. Court of Appeals, Ninth
Circuit

EDUCATION

> George Washington University
School of Law, J.D., 1993
> University of Washington, B.A.,
1990

CURRENT ROLE

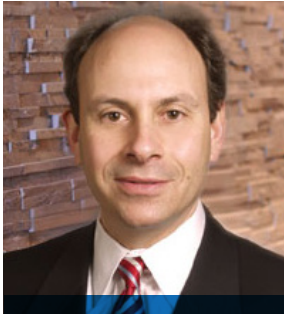
- > Partner, Hagens Berman Sobol Shapiro LLP
- > A trial attorney with a passion for representing children, the disabled, elderly and incapacitated citizens

NOTABLE CASES

- > Mr. Moody has secured many multi-million dollar recoveries on behalf of vulnerable citizens who have been abused, neglected or exploited, including:
 - Largest jury verdict ever upheld against the State of Washington, DSHS (\$17.8 million)
 - Largest single-plaintiff settlement against the State of Washington, DSHS (\$8.8 million)
 - Largest recovery on behalf of three foster children (\$7.3 million)
 - Largest single-plaintiff settlement on behalf of a child in Snohomish County, Washington (\$5 million)
 - Largest judgment on behalf of an incapacitated child in Spokane County, Washington (\$4 million)
 - Judgment for a disabled woman in Santa Clara County, California (\$4 million)
 - Largest judgment ever obtained against Eastern State Hospital (\$3 million)
 - Largest judgment ever obtained against the State of Washington, Child Study and Treatment Center (\$3 million)
 - Judgment for a boy neglected and abused in Snohomish County, Washington (\$2.85 million)
 - Judgment for a girl neglected and abused in Pierce County, Washington (\$2.85 million)
 - Settlement on behalf of brain-injured infant abused in day care setting (\$2.84 million)
 - Largest single-plaintiff jury verdict on behalf of an incapacitated adult in Kitsap County, Washington (\$2.6 million)
 - Judgment in the amount of \$2.5 million for a client abused at Eastern State Hospital
 - Largest single-plaintiff settlement on behalf of a developmentally disabled male in eastern Washington (\$2.25 million)
 - Several additional settlements in excess of \$1 million

PERSONAL INSIGHT

David is proud to be a native Washingtonian and enjoys strong ties to the eastern side of the state. David's grandfather Jack Edward Moody was born and raised in Dayton, Washington, and David's great-grandfather Edward Maple Moody was the Sheriff of Columbia County, Washington. David's maternal grandmother, Eva Armstrong, was one of the first female graduates of Whitman College in Walla Walla, Washington.



PARTNER

David S. Nalven

Extensive experience in prosecution of antitrust, fraudulent marketing and unfair pricing claims against manufacturers of pharmaceutical products and medical devices, representing prescription drug wholesalers and retailers, health insurers and consumers in these matters

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YEARS OF EXPERIENCE

> 33

PRACTICE AREAS

- > Pharmaceuticals and Medical Devices
- > Antitrust Litigation
- > Consumer Rights
- > Securities Litigation

BAR ADMISSIONS

- > Massachusetts
- > New York

CLERKSHIPS

- > John R. Gibson, U.S. Court of Appeals for the Eighth Circuit, 1985-1986

EDUCATION

- > New York University School of Law, J.D., 1985; Senior Research Editor, Annual Survey of American Law; Recipient, Philip Cohen award for greatest contribution by an editor to Annual Survey of American Law
- > University of Pennsylvania, B.A., English, **magna cum laude**, 1980

CURRENT ROLE

- > Partner, Hagens Berman Sobol Shapiro LLP
- > Practice focuses on prosecution of federal and multi-state class actions involving the pharmaceutical and medical device industries
- > Served in leadership roles in nationwide antitrust class actions against the manufacturers of Ovcon 35, OxyContin, Tricor, Wellbutrin XL, Toprol XL, Norvir, Doryx, Prograf, Nexium and others
- > Prosecuted fraudulent marketing class actions against the manufacturers of Serostim, Nexium, Actimmune and Zyprexa, as well as substantial matters against medical device manufacturers DePuy Spine, Inc. and Becton Dickinson
- > Worked extensively on the nationwide Average Wholesale Price Litigation and in the representation of the state of Connecticut in multiple prescription drug pricing matters

EXPERIENCE

- > Chief of Business and Labor Protection Bureau, Massachusetts Attorney General's Office, Commonwealth of Massachusetts, 1999-2004
- > Partner, Prince, Lobel & Tye, LLP, Boston, MA, 1991-1999
- > Private practice representing plaintiffs and defendants in civil and criminal business litigation, New York and Massachusetts, 1986-1991
- > Clerk to John R. Gibson, U.S. Court of Appeals for the Eighth Circuit, 1985-1986

NOTABLE CASES

- > Average Wholesale Price Litigation
- > Tricor Antitrust Litigation
- > Wellbutrin XL Antitrust Litigation
- > DePuy Spine Artificial Disc Litigation



PARTNER

Christopher A. O'Hara

Plays key role in working with notice and claims administrators on all the firm's class settlements and class notice programs

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YEARS OF EXPERIENCE

> 31

PRACTICE AREAS

- > Antitrust Litigation
- > Consumer Rights
- > Tax Law
- > Securities Litigation
- > Pharmaceutical Fraud

BAR ADMISSIONS

- > Washington
- > Arizona

COURT ADMISSIONS

- > U.S. Court of Appeals, Ninth Circuit

EDUCATION

- > University of Washington, B.A., Political Science, French Language and Literature, 1987
- > Seattle University School of Law, J.D., **cum laude**, 1993

CURRENT ROLE

- > Partner, Hagens Berman Sobol Shapiro LLP
- > Practice focuses on antitrust, consumer, tax and securities class actions
- > Serves as plaintiffs' counsel in Hotel Occupancy Tax litigation against major online travel companies in various jurisdictions across the country
- > Active member of firm's Microsoft defense team negotiating claims administration policy and processing rules in twenty consumer and antitrust class-action state settlements around the country
- > Key role in working with claims administrators on all class settlements and class notice programs

RECENT SUCCESS

- > Worked on related litigation against Expedia on behalf of a nationwide class of consumers who purchased hotel reservations and paid excessive "taxes and fees" charges. That case resulted in summary judgment in plaintiffs' favor and an eventual settlement for cash and credits totaling \$134 million. Mr. O'Hara also played a leading role for the firm on the \$235 million settlement of **In re Charles Schwab Securities Litigation** and the \$1.6 billion settlement of **In re Toyota Motor Corp. Unintended Acceleration Marketing, Sales Practices and Products Liability Litigation**.
- > Mr. O'Hara deposed more than a dozen of Big Tobacco's expert witnesses, research scientists and marketing executives for the tobacco litigation, focusing predominantly on the state of Arizona case. Coordinated Arizona's national and local expert witnesses, while contributing to all aspects of discovery and motion practice. Mr. O'Hara played a leading role in the firm's successful defense of the state of Arizona against claims brought by several Arizona counties in the aftermath of the state's tobacco litigation.

RECOGNITION

- > Rising Star, Washington Law and Politics, 2003

EXPERIENCE

- > Crowell & Moring, Paralegal, 1988-1990
- > Cozen & O'Connor, Associate, 1993-1997

NOTABLE CASES

- > **Tobacco Litigation** (\$206 billion multi-state settlement)
- > **Expedia Litigation** (\$134 million settlement)
- > **Charles Schwab Yieldplus Funds Litigation** (\$235 million settlement)
- > **Toyota Unintended Acceleration Litigation** (\$1.6 billion settlement)
- > **Microsoft Antitrust Litigation**

LANGUAGES

- > French



PARTNER

Matthew F. Pawa

Mr. Pawa represented the state of New Hampshire against the nation's largest oil companies, which resulted in a \$236 million verdict against Exxon Mobil Corporation – the largest verdict in New Hampshire history.

CONTACT

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YEARS OF EXPERIENCE

> 25

PRACTICE AREAS

> Environmental

BAR ADMISSIONS

> Massachusetts
> Vermont
> Pennsylvania
> District of Columbia

COURT ADMISSIONS

> Supreme Court of the United States
> First, Second, Third, Fourth, Fifth, Ninth and D.C. Circuit Courts of Appeals
> U.S. District Courts for the District of Washington D.C., District of Massachusetts, Eastern
> District of Pennsylvania, Southern District of New York and the District of Vermont

CLERKSHIPS

> Honorable Norma L. Shapiro, Eastern District of Pennsylvania, 1994-95

EDUCATION

> University of Pennsylvania Law School, J.D., cum laude, 1993 (associate editor, Law Review)
> Cornell University, B.S. with distinction, Natural Resources, 1987

CURRENT ROLE

> Partner, Hagens Berman Sobol Shapiro LLP
> Co-Chair of the firm's environmental practice

RECOGNITION

> 2013 Massachusetts Lawyer of the Year, in recognition of New Hampshire MTBE case
> 2011 American Lung Association Healthy Air Ambassador Award
> 2009 Certificate of Recognition for Best Papers, American Bar Association Section of Environment, Energy and Resources, 38th Annual Conference on Environmental Law
> 1993 Scribes Notes and Comments Award - national award for clarity, force and style in law review note or comment. Selected from among submissions by law reviews nationwide.
> 1993 University of Pennsylvania's Fred G. Leebron Prize for excellence in constitutional law writing.

EXPERIENCE

> Prior to joining Hagens Berman, Mr. Pawa was the president of Pawa Law Group P.C. where he was the founder and leader of the litigation firm specializing in major environmental cases. He handled jury trials, bench trials and argued appeals in state and federal courts in Massachusetts and across the nation, and collaborated with state attorneys general and non-profit clients on a major global warming case that went to the U.S. Supreme Court. Mr. Pawa forged the small law firm into a nationally known entity with a reputation for successfully litigating against some of the country's largest corporations.
> Attorney, Cohen, Milstein, Hausfeld & Toll PLLC., – Mr. Pawa litigated class action and individual antitrust, environmental and consumer cases.
> Attorney, Crowell & Moring LLP.– Litigated insurance coverage actions and drafted Supreme Court amicus brief on behalf of American Bar Association.
> Deputy State's Attorney, Chittenden County State's Attorney Office. Prosecuted felony and misdemeanor cases; successfully defended emergency appeal to Vermont Supreme Court on novel issue.

LEGAL ACTIVITIES

> Board of Trustees, Center for International Environmental Law
> American Bar Association
> Massachusetts Bar Association
> American Association for Justice
> Massachusetts Academy of Trial Attorneys
> Boston Bar Association
> Adjunct Professor of Law, Boston College Law School, Climate Change Law and Policy Seminar (2007)

PARTNER

Matthew F. Pawa

PRESENTATIONS

- › Keynote speaker, Boston College Law School's first annual Green Week (2010)
- › Keynote speaker, Public Interest Environmental Law Conference at the University of Oregon Law School (2009)

PUBLICATIONS

- › "This Town Ain't Big Enough for the Two of Us: Interstate Pollution and Federalism under **Milwaukee I** and **Milwaukee II**," American Bar Association Section of Environment, Energy and Resources, 38th Annual Conference on Environmental Law, Keystone, Colorado (March 2009) (presented paper)
- › "Saving Detroit - From Itself," **Boston Globe** Op Ed (Sunday lead opinion piece) (Nov. 17, 2008)
- › "Global Warming Litigation Heats Up," **Trial Magazine** (April, 2008 cover story)
- › "Global Warming: The Ultimate Public Nuisance," in **Creative Common Law Strategies for Protecting the Environment** (Clifford Rechtschaffen et al., eds., Environmental Law Institute 2007)
- › "Behind the Curve: The National Media's Reporting on Global Warming," 33 B.C. ENVTL. AFF. L. REV. 485 (2006) (with co-author Benjamin A. Krass)
- › "Global Warming as a Public Nuisance: Connecticut v. American Electric Power," 41 FORDHAM ENVTL. L. REV. 407 (2005) (with co-author Benjamin A. Krass)
- › "When the Supreme Court Restricts Constitutional Rights, Can Congress Save Us?," 141 U. PA. L. REV. 1029 (1993)

NOTABLE CASES

- › **State of New Hampshire v. Exxon Mobil Corp.**, 126 A.3d 266 (N.H. 2015) Upholding \$236 million jury verdict following three-month trial against petroleum company for polluting state's groundwater.
- › **Connecticut v. American Electric Power Co.**, 582 F.3d 309 (2d Cir. 2009) Reinstating global warming tort case filed by states and land trusts, rev'd on other grounds, 131 S. Ct. 2527 (2011)
- › **State v. Hess Corp.**, 161 N.H. 426 (2011) Holding that, under parens patriae doctrine, a state suing a polluter for groundwater contamination may recover as damages the cost of treating private well contamination.
- › **Alliance to Protect Nantucket Sound, Inc. v. Energy Facilities Siting Bd.**, 457 Mass. 663 (Mass. 2010) Upholding state environmental permits for Cape Wind.
- › **New Hampshire v. N. Atlantic Refining, Ltd.**, 999 A.2d 396 (N.H. 2010) Upholding personal jurisdiction over oil company in MTBE litigation.
- › **New Hampshire v. Hess Corp.**, 982 A.2d 388 (N.H. 2009) Affirming proper service of process on two oil company defendants in MTBE litigation.
- › **In re Inquest Proceedings**, 676 A.2d 790 (Vt. 1996) Rejecting claim of parent-child privilege and compelling parental testimony in rape case.

PERSONAL INSIGHT

Matt is a triathlete and also enjoys sailing, hiking, camping and river rafting.



PARTNER

Shana E. Scarlett

Northern California Super Lawyer, 2013 & 2014

CONTACT

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Berkeley, CA 94710

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shanas@hbsslaw.com

YEARS OF EXPERIENCE

> 17

PRACTICE AREAS

- > Antitrust Litigation
- > Consumer Protection
- > Securities Litigation

INDUSTRY EXPERIENCE

- > Technology Companies
- > Internet Companies
- > Agricultural Companies

BAR ADMISSIONS

- > California

COURT ADMISSIONS

- > U.S. District Courts for the Northern, Southern, Eastern and Central Districts of California
- > U.S. Court of Appeals, Second Circuit
- > U.S. Court of Appeals, Ninth Circuit
- > U.S. Court of Appeals, Federal Circuit

EDUCATION

- > Stanford Law School, J.D.
- > University of British Columbia, B.A.

CURRENT ROLE

- > Partner, Hagens Berman Sobol Shapiro LLP
- > Practice is devoted entirely to representing plaintiffs in complex litigation, and primarily in the areas of antitrust and unfair competition
- > One of the team of litigators representing indirect purchaser plaintiffs in the **In re Optical Disk Drive Antitrust Litigation**, alleging a price-fixing conspiracy to stabilize the prices of optical disk drives throughout the United States, in violation of federal and state antitrust laws
- > One of the team of co-lead counsel representing indirect purchaser plaintiffs in the **In re Lithium Ion Batteries Antitrust Litigation**
- > Represents a class of consumers in the **In re Electronic Books Antitrust Litigation**, pending in the Southern District of New York, where attorneys from Hagens Berman Sobol Shapiro have worked closely with numerous State Attorneys General in representing the rights of consumers

RECOGNITION

- > Northern District of California Super Lawyer, 2013 - 2017
- > Rising Star Award for Northern California, Super Lawyers, 2009 - 2011

EXPERIENCE

- > Extensive experience representing shareholders in securities matters throughout the country
- > Represented investors against defendants in a variety of industries, such as pharmaceutical manufacturers, (**In re Impax Sec. Litig.**, **In re CV Therapeutics, Inc. Sec. Litig.**, **In re Alkermes Sec. Litig.**), Internet companies (including **In re Verisign, Inc.** and **In re Northpoint Communications Group, Inc. Sec. Litig.**) and other manufactured products (**Ryan v. Flowserve Corp.**)

LEGAL ACTIVITIES

- > Panelist, Procedural Steps and Pitfalls in Antitrust Class Actions, American Bar Association (May 2018)
- > Panelist, Class Actions – Cutting Edge Developments in Claim Administration, Northern District of California Judicial Conference (April 2018)
- > Panelist, Antitrust for HR: No-Poach and Wage Fixing Agreements, Bar Association of San Francisco (Jan. 2018)
- > Panelist, Class Certification – Making Sense of Class Certification Doctrine, Economics and Econometrics, American Antitrust Institute (Nov. 2017)
- > Panelist, Increased Class Participation in the Digital Age, Class Action Money & Ethics Conference (May 2017)
- > Member of the Women Antitrust Plaintiffs' Attorneys

NOTABLE CASES

- > **In re Optical Disk Drive Antitrust Litigation**, MDL No. 2143
- > **In re Electronic Books Antitrust Litigation**, MDL No. 2293
- > **Pecover v. Electronic Arts, Inc.**, MDL No. 2420

PERSONAL INSIGHT

Shana is Canadian and the daughter of the noted Canadian jurist, the Hon. Edward D. Scarlett. When not in the Berkeley office of Hagens Berman, Shana usually can be found in Canada with her four sisters, nine nieces and nephews.



PARTNER

Craig R. Spiegel

After helping obtain recent substantial settlements in cases against drug companies for deceptive marketing, Mr. Spiegel now helps in the firm's attempt to obtain justice for thalidomide victims.

CONTACT

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YEARS OF EXPERIENCE

> 39

PRACTICE AREAS

> Consumer Rights

BAR ADMISSIONS

> California State Bar
Association
> Illinois State Bar Association
> Washington State Bar
Association

EDUCATION

> Harvard Law School, J.D.,
cum laude, 1979
> St. Olaf College, B.A., **summa
cum laude**, 1975

CURRENT ROLE

- > Partner, Hagens Berman Sobol Shapiro LLP
- > Practice primarily focuses on class actions concerning unfair pricing of pharmaceutical drugs. Recent cases include actions against AstraZeneca and Merck.

NOTABLE CASES

- > Involved in the firm's antitrust class-action lawsuit against the NCAA accusing the sports-governing body of engaging in anti-competitive practices in regards to its scholarships or Grants in Aid (GIAs) program. In March of 2017, U.S. District Judge Claudia Wilken approved a sweeping \$209 million settlement for student-athletes.
- > Helped obtain a substantial settlement for the state of New York and New York City in their litigation against Merck for losses suffered from deceptive marketing of the prescription drug Vioxx
- > Instrumental in obtaining a settlement for a class of Massachusetts consumers and third-party payors in their litigation against AstraZeneca, in which the class claimed that AstraZeneca deceptively marketed the prescription drug Nexium as superior to Prilosec
- > Deeply involved in the firm's lawsuits on behalf of thalidomide victims, who suffered severe personal injuries when their mothers ingested thalidomide during their pregnancies in the late 1950s and early 1960s, without knowing that thalidomide had not been approved by the FDA



PARTNER

Ronnie Seidel Spiegel

Ms. Spiegel has played a key role in litigating some of the largest antitrust cases in history, working on all aspects of these cases from filing through trial.

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YEARS OF EXPERIENCE

> 20

PRACTICE AREAS

> Antitrust Litigation
> Securities Litigation

BAR ADMISSIONS

> Washington
> Pennsylvania

COURT ADMISSIONS

> U.S. District Court, Eastern District of Pennsylvania
> U.S. District Court, Western District of Washington
> U.S. District Court, Eastern District of Michigan

EDUCATION

> Temple University Beasley School of Law, J.D., Temple Law Review (Editorial Board), 1994
> Boston University, B.A., International Relations, 1990

CURRENT ROLE

- > Partner, Hagens Berman Sobol Shapiro LLP
- > Extensive organizational, discovery, briefing and trial team experience in large antitrust price-fixing cases
- > Specializes in managing large-scale e-discovery
- > Deep experience with foreign discovery, translation issues, and translation objection process
- > Manager and coordinator of all-party, joint discovery effort in largest US antitrust case

PRIOR EXPERIENCE

- > Lead Antitrust Attorney and Manager of firm's North Carolina office, Spector Roseman Kodroff & Willis, Philadelphia, PA, Attorney, 1994-2000
- > Business Law Instructor, Central Piedmont Community College, Charlotte, NC, 2000-2001

NOTABLE CASES

- > In re Polyether Polyols Antitrust Litigation (Urethanes)
- > In re Automotive Parts Antitrust Litigation
- > In re Cathode Ray Tube (CRT) Antitrust Litigation
- > In re TFT-LCD (Flat Panel) Antitrust Litigation
- > In re Containerboard Antitrust Litigation
- > In re DRAM Antitrust Litigation
- > In re SRAM Antitrust Litigation
- > In re Brand Name Prescription Drugs Antitrust Litigation
- > In re NASDAQ Market-Makers Antitrust Litigation
- > In re Vitamins Antitrust Litigation
- > In re High Fructose Corn Syrup Antitrust Litigation
- > In re Commercial Tissue Paper Antitrust Litigation
- > In re Flat Glass Antitrust Litigation
- > In re Linerboard Antitrust Litigation
- > In re Air Cargo Antitrust Litigation
- > In re Fasteners Antitrust Litigation
- > In re Korean Air Antitrust Litigation
- > In re OSB Antitrust Litigation

LEGAL ACTIVITIES

- > Member of the American Bar Association's Antitrust Section
- > Member of the Sedona Conference Working Group 1 Series, Brainstorming Group and Drafting Team on Rule 45 Commentary.
- > Mother Attorneys Mentoring Association of Seattle (former Board Member)

PERSONAL INSIGHT

Ronnie is devoted mom to her three (very) busy teenage girls.



PARTNER

Shayne C. Stevenson

Since fighting against sweatshops and the exploitation of undocumented workers with the workers' rights organization he founded at Yale, Shayne has focused his legal career on prosecuting cases against individuals and businesses who victimize others by violence, deception and fraud.

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YEARS OF EXPERIENCE

> 18

PRACTICE AREAS

- > Whistleblower Law (False Claims Act, SEC, IRS, CFTC)
- > Appellate Litigation
- > Civil & Human Rights Litigation

BAR ADMISSIONS

- > Washington

CLERKSHIPS:

- > Honorable Betty B. Fletcher, Ninth Circuit Court of Appeals, 2001-02
- > Honorable Charles S. Haight, Jr., Southern District of New York, 2000-01

EDUCATION

- > Yale Law School, J.D., 2000
- > Gonzaga University, B.A., Philosophy and Political Science, Truman Scholar, **summa cum laude** (first-in-class), 1996

CURRENT ROLE

- > Partner, Hagens Berman Sobol Shapiro
- > Leads the firm's whistleblower practice and litigates select class-action cases
- > Litigates and argues both False Claims Act and class-action cases in federal district courts and on appeal at the courts of appeal nationwide
- > Experienced in successfully handling whistleblower cases against some of the world's largest financial companies, medical device and pharmaceutical companies, hospitals, mortgage companies and others
- > Represents dozens of whistleblowers under the Dodd-Frank whistleblower programs of the Securities and Exchange Commission (SEC) and the Commodity Futures Trading Commission (CFTC), including two of the most prominent whistleblowers under these programs, with cases in regional enforcement offices across the country
- > Currently represents several qui tam relators under the federal and various state False Claims Act laws, in both declined and intervened cases and many still under investigation. His False Claims Act practice includes, among other areas of focus, Medicare and Medicaid health care fraud, financial fraud, mortgage fraud, defense industry and other procurement fraud, education fraud, and grant-funding fraud.
- > Litigates class-action cases on behalf of veterans, consumers, workers and investors
- > Litigates select human rights and other public interest matters, including previous litigation against the Rio Tinto mining conglomerate that reached the Supreme Court in 2013 for war crimes on the island of Bougainville, in Papua New Guinea, and a current pending suit against SeaWorld
- > Previously a felony prosecutor who successfully tried several multi-week jury trials and argued several cases in trial and appellate courts

RECENT SUCCESS

- > Mr. Stevenson represents Dodd-Frank SEC whistleblower Haim Bodek in the recent SEC action against the New York Stock Exchange and affiliated exchanges for, among other things, their unlawful and undisclosed use of order types. In the Matter of New York Stock Exchange LLC, et al. (SEC order) (2018)
- > Mr. Stevenson helped represent a class of over 126,000 military servicemembers challenging Bank of America's alleged violations of the Servicemember Civil Relief Act, which requires financial institutions to limit the interest charged on loans to active duty servicemembers. In February of 2018, the Court granted final approval of a nationwide class settlement of nearly \$42 million for these military families. Childress v. Bank of America Corp., et al., 15-cv-00231 (E.D.N.C.) (2018).

PARTNER

Shayne C. Stevenson

- › Mr. Stevenson represented the highly publicized anonymous Dodd-Frank CFTC whistleblower who single-handedly brought to authorities, through his proprietary analysis of market and trading data, the international market manipulator later identified as Navinder Sarao, whose market manipulation through spoofing contributed to the “Flash Crash.” Mr. Sarao was extradited and pled guilty in November of 2016. CFTC v. Nav Sarao Futures Ltd. 15-cv-3398 (N.D. Ill.) (civil); U.S. v. Sarao 15-cr-75 (N.D. Ill.) (criminal)
- › Mr. Stevenson also represented another high-profile Dodd-Frank SEC whistleblower, the algorithmic trader and market structure expert Haim Bodek, rewarded in 2017 for his single-handed identification of securities law violations by a major U.S. financial exchange. Mr. Bodek was twice featured on the front page of the Wall Street Journal for his efforts, which led to the largest SEC fine in history against a financial exchange. In the Matter of EDGA Exchange, Inc., et al. (SEC Order)
- › Mr. Stevenson handled both False Claims Act whistleblower cases against Bank of America that culminated in the historic \$1 billion settlement between the Department of Justice and Bank of America addressing mortgage fraud and whistleblower awards to both clients in unrelated litigation. First, whistleblower client Mr. Kyle Lagow (in U.S. ex rel. Lagow v. Countrywide Financial Corp.) (E.D.N.Y.) sparked a Department of Justice investigation of Countrywide and Bank of America’s fraudulent mortgage origination and appraisal practices. Second, whistleblower client Mr. Gregory Mackler (in U.S. ex rel. Mackler v. Bank of America) (E.D.N.Y.) helped the Department of Treasury recover several million dollars from Bank of America for allegedly violating its agreement with the Department to properly administer the Home Affordable Mortgage Program (HAMP) for struggling homeowners.

EXPERIENCE

- › King County Prosecuting Attorney’s Office, Felony Prosecutor
- › Law Clerk, Honorable Betty B. Fletcher, Ninth Circuit Court of Appeals, 2001-02
- › Law Clerk, Honorable Charles S. Haight, Jr., Southern District of New York, 2000-01
- › U.S. Attorney’s Office, District of Connecticut, Intern

PUBLICATIONS

- › Author, “The Honorable Betty B. Fletcher: A Tribute to a Legal Trailblazer,” Federal Bar Association, November 2012

PRESENTATIONS

- › Speaker: “Whistleblowers & Financial Fraud,” National Whistleblower Conference. San Francisco, CA. Jan. 22-23, 2018
- › Speaker: “Financial Fraud,” National Qui Tam Conference. Los Angeles, CA. Nov. 3-4, 2016
- › Speaker: “Representing Dodd-Frank Whistleblowers,” Taxpayers Against Fraud Education Fund, Annual Conference. Washington, D.C. Nov. 16, 2015.
- › Speaker: “Secrets from the Plaintiff’s Bar,” Hospital and Health Care Law Conference. Seattle, WA. Apr. 24, 2015.
- › Speaker: “False Claims in the Financial Sector,” False Claims and Qui Tam Enforcement Conference. New York, New York. Jan. 21-22, 2015.
- › Lecture: “Access to Civil Remedy,” Business, Social Responsibility, & Human Rights, University of Washington School of Law. Seattle, Washington. Nov. 4, 2014.
- › Speaker: “Enforcement of Financial Fraud,” False Claims Act: National Qui Tam Conference. San Francisco, California. Oct. 27-28, 2014.

PARTNER

Shayne C. Stevenson

- > Lecture: "Human Rights Law After Kiobel," University of Washington School of Law. Seattle, Washington. Nov. 12, 2013.
- > Speaker: "Financial Fraud Enforcement," False Claims Act: All Points of View, National Conference. San Francisco, California. Apr. 18-19, 2013.
- > Lecture: "Strategy after Kiobel and Bauman," International Human Rights Seminar, University of Washington School of Law. Seattle, Washington. Apr. 17, 2013.
- > Lecture: "Alien Tort Statute and Human Rights Litigation," University of Washington School of Law. Seattle, Washington. Nov. 13, 2012.
- > Speaker: "Protecting Whistleblowers, Protecting the Public," Whistleblowing: Law, Compliance, and the Public Interest. Government Accountability Project. Seattle University School of Law. Seattle, Washington. Mar. 23, 2012.

MEDIA INTERVIEWS

- > "SeaWorld Visitors Ask 9th Cir. to Flip Whale Abuse Suit," Law360, Mar. 12, 2018. [view »](#)
- > "Dodd-Frank Whistleblowers Help Clean Up Our Markets," (Guest Column) ValueWalk, Feb. 6, 2018. [view »](#)
- > "Attorneys React to DOJ's New Memo on FCA Dismissals," Law360, Jan. 26, 2018. [view »](#)
- > "Limiting Whistleblower Rewards Weakens Program," Bloomberg Law, Nov. 2, 2017.
- > "BoFA's \$42m Military Member Fee Settlement Wins Initial OK," Law360, Sept. 13, 2017 [view »](#)
- > "Sarao Flash Crash Manipulation Case Benchmarks Point in History," ValueWalk, Nov. 15, 2016 [view »](#)
- > "What SEC Whistleblowers Should Know About Insider Trading," (Guest Column) ValueWalk, Oct. 20, 2016 [view »](#)

[Read more of Mr. Stevenson's media interviews »](#)

NOTABLE CASES

- > **Childress v. Bank of America Corp., et al., Eastern District of North Carolina** (represented class of over 125,000 military servicemembers and secured nearly \$42 million settlement for violations of the SCRA) (2018)
- > **In the Matter of New York Stock Exchange, et al. (SEC Order)** (represents SEC whistleblower in action tying record fine against financial exchange) (2018)
- > **United States v. Sarao & CFTC v. Nav Sarao Futures Ltd., Northern District of Illinois;** (represented anonymous CFTC whistleblower in market manipulation prosecution)
- > **In the Matter of EDGA Exchange, Inc., et al. (SEC Order)** (represented SEC whistleblower in action culminating in largest fine against a U.S. exchange in history)
- > **U.S. ex rel. Lagow v. Bank of America, Eastern District of New York** (False Claims Act – FHA fraud)
- > **U.S. ex rel. Mackler v. Bank of America, Eastern District of New York** (False Claims Act – HAMP fraud)
- > **U.S. ex rel. Nowak v. Medtronic, Inc., District of Massachusetts** (False Claims Act – off-label marketing of medical devices)
- > **U.S. ex rel. Kite v. Besler Consulting, et al., District of New Jersey** (False Claims Act – Medicare "outlier" fraud)
- > **U.S. ex rel. Polansky v. Pfizer, Inc., Eastern District of New York** (False Claims Act – off-label marketing of Lipitor)
- > **Sarei v. Rio Tinto, Central District of California** (Alien Tort Statute – international human rights litigation)
- > **Tittle v. United States Postal Service, Western District of Washington** (Privacy Act – employee class action)
- > **Hutchinson v. British Airways PLC, Eastern District of New York** (Montreal Convention – consumer class action)

**PARTNER****Michael W. Stocker**

A nationally recognized leader in investor advocacy both inside and outside the courtroom.

CONTACT

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YEARS OF EXPERIENCE

> 24

PRACTICE AREAS

> Securities

BAR ADMISSIONS

> California
> New York

COURT ADMISSIONS

> U.S. Court of Appeals
Second Circuit
Eighth Circuit
Ninth Circuit
Tenth Circuit
> U.S. District Court
Northern District of California
Central District of California
Southern District of New York
Eastern District of New York
Southern District of California

EDUCATION

> University of Sydney,
Master of Criminology, Law
Department, 2001
> University of California,
Hastings College of the Law,
J.D., 1995
> University of California,
Berkeley, B.A., 1989

Mike Stocker co-chairs Hagens Berman's securities practice with managing partner, Steve Berman. He joined the firm to fight for the same belief spurring the firm's founding: that the powerful must be subject to the same rules as the powerless.

Leveraging the firm's unparalleled track record in bringing corporate giants to justice, Mike works with Hagen Berman's securities team to protect the transparency and integrity of the U.S. financial markets.

Mike takes a proactive approach to securities litigation, identifying cases using meticulous investigation backed by experts drawn from law enforcement and accounting.

Through work in print and broadcast media, he ensures his advocacy for investors does not end at the courthouse steps, pressing for protection and reform intended not only to redress past harm but to prevent future violations.

CURRENT ROLE

> Partner, Hagens Berman Sobol Shapiro LLP
> Co-chair of the firm's securities practice

EXPERIENCE

> Labaton Sucharow, led teams identifying and prosecuting securities and data privacy class-action cases (2006-2018)
> United States Court of Appeals for the Ninth Circuit, Senior Staff Attorney
> Legal externship with federal Judge Phyllis J. Hamilton, currently sitting in the U.S. District Court for the Northern District of California

PRO BONO

> Mike advises non-profit investor and consumer organizations regarding the U.S. markets.

LEGAL ACTIVITIES

> National Association of Public Pension Attorneys (NAPPA)
> New York State Bar Association · Association of the Bar of the City of New York
> Law360's Securities Editorial Advisory Board for three consecutive years (2013-2016)
> Markets Advisory Council appointment by the Council of Institutional Investors (2015-2017)
> The American Law Institute, elected member
> Advisory Committee for the John L. Weinberg Center for Corporate Governance of the University of Delaware (2016-2017)

PARTNER**Michael W. Stocker****RECOGNITION**

- › John L. Weinberg Center for Corporate Governance of the University of Delaware, Advisory Committee Member (2017)
- › American Law Institute (ALI), Elected Member (2016)
- › Law360, Securities Editorial Advisory Board (2013-2016)
- › Council of Institutional Investors (CII), Markets Advisory Council, Elected Member (2015-2017)

RECENT CASES

- › Helped secure a more than \$1 billion recovery against an American multinational insurance corporation and 21 other defendants
- › Helped secure a \$275 million settlement with a global investment bank, securities trading and brokerage firm and a \$19.9 million settlement with their auditor, one of the Big Four accounting firms
- › Held a leadership role in litigating a landmark action against a multinational health care company

MEDIA INTERVIEWS

- › Banks on Trial, Australian Broadcasting Network, 07/31/2016 (Audio)
- › Mike is frequently contacted by the media for securities expertise and has recently appeared on PBS, Bloomberg, Vator, Fox Business, the Australian Broadcasting Network and Law360.

PUBLICATIONS

- › Thomson Reuters Westlaw Journal Securities Litigation & Regulation, "Cyber Threats and Securities Litigation: The Emerging Landscape" (10/27/2016)
- › Forbes, "Shareholders Sue Companies for Lying About Cyber Security" (10/27/2016)
- › National Association of Public Pension Plan Attorneys (NAPPA) White Paper, "Post-Morrison: The Global Journey Toward Asset Recovery" (06/30/2016)
- › Daily Journal, "Securities Act cases are surging in...state courts?" (07/28/2015)
- › Association of Benefit Administrators (ABA), "2014 Securities Litigation Overview" (05/01/2014)
- › National Association of Public Pension Plan Attorneys (NAPPA), "Mandatory Arbitration Agreements: A New Attack on Access to the Courts" (04/30/2014)
- › Pensions & Investments, "Accounting Danger Signs: Tools For Investors" (07/30/2013)
- › American Banker, "JPMorgan Shareholders Chose Wrong Side of History" (06/04/2013)
- › Economia, "Autonomy, HP and the FRC: Who Has the Most to Lose?" (02/18/2013)
- › Ethisphere, "Flawed Credit Ratings and the Impact on Investment" (01/31/2013)
- › Lawyers Monthly Magazine, "Legal Focus - USA: M&A Litigation" (01/01/2013)

PRESENTATIONS

- › American Bar Association Section of Litigation, Roadshow 2.0, "Precision Advocacy: Reinventing Motion Practice to Win" (Panelist) (04/27/2017)
- › Skytop Strategies, "Legal Tsunami – The Growing Body of Cases and Associated Costs" (Speaker) and "Avoiding Shareholder Action – How to Integrate All Internal Stakeholders into the Cyber Risk Governance Defense" (Moderator) (03/16/2017)
- › Council of Institutional Investors (CII), "Teleconference on Cybersecurity from an Investor's Perspective" (Speaker) (10/26/2016)
- › Practising Law Institute (PLI), "Cyber Securities Litigation: When Data Breaches Become Fraud Suits" (Speaker) (06/09/2016)

PARTNER**Michael W. Stocker**

- › Webinar, "Alternative Investments for Pension Funds: Balancing Return and Transparency in Volatile Markets" (Moderator) (05/12/2016)
- › Institute for Law and Economic Policy (ILEP), "22nd Annual Symposium, "Private Suits While the Regulator Slumbers" (Moderator) (04/08/2016)
- › State Financial Officers Foundation, "2015 Fall National Meeting" (Panelist) (09/22/2015)
- › Institute for Law and Economic Policy (ILEP), "21st Annual Symposium" (Panelist) (04/17/2015)
- › Council of Institutional Investors (CII), "Teleconference: Halliburton Co. v. Erica P. John Fund, Inc." (Panelist) (07/16/2014)
- › West LegalEdcenter, "Preparing to Clear OTC Derivatives to Ensure June 10th Compliance: The Brave New World of Swaps Clearing under Dodd-Frank" (Webinar Speaker) (05/14/2013)
- › German Bar Association, "Litigating Banking Claims in U.S. Courts - An Insight" (Panelist) (04/22/2013)

LANGUAGES

- › Mandarin Chinese

PERSONAL INSIGHT

Mike grew up on a sailboat with three siblings, a dog and a cat. He later studied classical Chinese at Beijing University.



PARTNER

Andrew M. Volk

Worked extensively on consumer claims against Expedia resulting in the largest summary judgment award in Washington state history

CONTACT

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YEARS OF EXPERIENCE

> 27

PRACTICE AREAS

- > Patent Litigation
- > Intellectual Property
- > ERISA Litigation
- > Hotel Tax Litigation

BAR ADMISSIONS

- > New York
- > Oregon
- > Washington

EDUCATION

- > Cornell Law School, J.D.,
cum laude, Articles Editor for
Cornell International Law
Review, 1991
- > Columbia University, B.A.,
English, 1986

CURRENT ROLE

- > Partner, Hagens Berman Sobol Shapiro LLP
- > Practice focuses on consumer litigation, including automobile defect litigation against General Motors and Kia
- > Worked on hotel tax collection cases against the major online travel companies (OTC). The firm achieved settlements on behalf of Brevard County, Florida, the village of Rosemont, Illinois and the city of Denver, Colorado.
- > Extensively involved in ERISA cases for breach of fiduciary duties, including settlements of claims on behalf of employees of Enron, Washington Mutual Bank, General Motors, the Montana Power Company and Sterling Savings Bank

RECENT SUCCESS

- > Worked on litigation against Expedia on behalf of a nationwide class of consumers who purchased hotel reservations and paid excessive "taxes and fees" charges. That case resulted in summary judgment in plaintiffs' favor and an eventual settlement for cash and credits totaling \$134 million.

EXPERIENCE

- > Mr. Volk was extensively involved in the tobacco litigation in the late 1990s.
- > Legal Writing and Research, University of Oregon School of Law, Instructor
- > Attorney, Legal Aid Society, New York City

NOTABLE CASES

- > **Expedia Litigation** (\$134 million settlement)
- > **Tobacco Litigation** on behalf of States (resolved in \$206 billion settlement)
- > **Enron ERISA Litigation** (\$265 million settlement)
- > **Washington Mutual Bank ERISA Litigation** (\$49 million settlement)
- > **General Motors ERISA Litigation** (\$37.5 million settlement)



PARTNER

Garth Wojtanowicz

Named a "Rising Star" by Super Lawyers Magazine in 2006, 2007, 2010

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YEARS OF EXPERIENCE

> 18

PRACTICE AREAS

- > Consumer Protection
- > Securities Litigation
- > Unfair Competition

BAR ADMISSIONS

- > Washington
- > California

EDUCATION

- > University of Washington
School of Law, J.D., 2000
- > University of Washington, B.A.,
English, 1997

CURRENT ROLE

- > Partner, Hagens Berman Sobol Shapiro LLP
- > Practice focuses on consumer protection cases
- > Currently working on cases against Fresenius Medical Care, N.A. and DaVita, Inc., the first and second largest dialysis companies in the United States, relating to those companies' use of GranuFlo.>
Also working on a nationwide class action against medical waste disposal company Stericycle, Inc., challenging that company's pricing practices which resulted in hundreds of millions of dollars in over-charges to doctors' offices, dentist offices, hospitals and similar businesses

RECOGNITION

- > "Rising Star" by Super Lawyers Magazine in 2006, 2007 and 2010

EXPERIENCE

- > Member, Cornerstone Law Group, PLLC
- > Associate, Danielson Harrigan Leyh & Tollefson, LLP
- > Assistant City Attorney, Seattle City Attorney's Office, Civil Division

NOTABLE CASES

- > Toyota Sudden, Unintended Acceleration (SUA) class-action lawsuit on behalf of Toyota owners and lessees, which resulted in an historic settlement recovery valued at \$1.6 billion

PERSONAL INSIGHT

Mr. Wojtanowicz volunteers his time as a non-profit director for Girls Giving Back and the Blossoming Hill Montessori School and has worked as a volunteer attorney for the Northwest Immigrant Rights Project.



PARTNER

Jason A. Zweig

Mr. Zweig was a key member in the High Fructose Corn Syrup Antitrust Litigation which resulted in a \$531 million recovery—one of the largest antitrust and securities class actions in history.

CONTACT

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jasonz@hbsslaw.com

YEARS OF EXPERIENCE

> 20

PRACTICE AREAS

- > Complex Litigation
- > Securities Litigation
- > Antitrust Litigation
- > Consumer Protection

BAR ADMISSIONS

- > U.S. Department of Veterans Affairs
- > New York
- > U.S. District Courts for the Northern, Southern and Eastern Districts of New York
- > U.S. District Court for the Eastern District of Michigan
- > U.S. District Court for the Eastern District of Wisconsin
- > U.S. Court of Appeals
 - Second Circuit
 - Third Circuit

EDUCATION

- > Columbia Law School, J.D., Executive Editor for Columbia Journal of Environmental Law, 1998
- > Indiana University, B.S., 1995

CURRENT ROLE

- > Partner, Hagens Berman Sobol Shapiro LLP
- > Works at the firm's Chicago and New York offices
- > Extensively experienced in representing plaintiffs in antitrust, securities, consumer and other complex litigation
- > Experience representing large entities in opt-out litigation, as well as plaintiffs in class-action litigation
- > Currently representing the City of Newark, New Jersey in Federal price-fixing antitrust litigation involving wastewater treatment chemical liquid aluminum sulfate
- > Representing New Jersey municipalities in class-action litigation against artificial turf manufacturer for sales of defective turf
- > Key member in some of the largest antitrust and securities class actions in history including the *High Fructose Corn Syrup Antitrust Litigation* which resulted in a \$531 million recovery
- > Led the firm's representation of merchants who opted out of the class in *In re Payment Card Interchange Fee and Merchant Discount Litigation*, MDL No. 1720 (E.D.N.Y.), including American Airlines, Southwest Airlines, Alaska Airlines, JetBlue, British Airways, Hawaiian Airlines, DSW and Bloomin' Brands
- > Leads the firm's efforts in the *New Jersey Tax Sales Certificates Antitrust Litigation*, an antitrust class action in which the firm has been appointed co-interim class counsel (more than \$9.6 million recovered)
- > Co-led the firm's representation of payphone owners who sued a large national telecommunications carrier over unpaid dial-around compensation

EXPERIENCE

- > Partner, Kaplan Fox & Kilsheimer LLP in New York, 2003-2010
- > Associate, Proskauer Rose LLP in New York where he practiced in all areas of civil and criminal litigation
- > Judicial intern to the Honorable Jed S. Rakoff, U.S. District Court Judge for the Southern District of New York

LEGAL ACTIVITIES

- > The Chicago Bar Association, Vice-Chair of the Class Action Committee
- > Federal Bar Association
- > The American Bar Association Sections of Litigation, Antitrust Law and International Law

PARTNER

Jason A. Zweig

- > Advisory Board of the Cartel and Criminal Practice Committee of the ABA Section of Antitrust Law
- > The New York State Bar Association
- > The Indiana University Student Foundation Board of Associates
- > Former member of the Jewish Board of Family and Children's Services, Children & Adolescents in Residence Divisional Board
- > Former Co-Chair of the Young Lawyer's Division of the UJA Federation-New York

RECOGNITION

- > Rising Star, New York Super Lawyers Magazine, 2011 & 2013

NOTABLE CASES

- > *Hill v. J.P. Morgan - Madoff-related Litigation* (\$218 million recovered)
- > *High Fructose Corn Syrup Antitrust Litigation* (\$531 million recovered)
- > *In re Air Cargo Antitrust Litigation* (Over \$1 billion recovered)
- > *In re Polyether Polyols Antitrust Litigation* (\$1 billion recovered)
- > *Hydrogen Peroxide Antitrust Litigation* (\$97 million recovered)
- > *Plastics Additives Antitrust Litigation* (\$46 million recovered)
- > *NBR Antitrust Litigation* (\$34 million recovered)
- > *Linens Antitrust Litigation* (\$11 million recovered)
- > *In re Merrill Lynch & Co., Inc. Securities, Derivative & ERISA Litigation* (\$475 million recovered)
- > *Merrill Lynch Research Reports Securities Litigation* (\$125 million recovered)
- > *Salomon Analyst Metromedia Litigation* (\$35 million recovered)

PRESENTATIONS

- > American Bar Association, Class Action Institute, October 2017, Washington, D.C., Considerations regarding whether to opt-out of a class-action.
- > Chair of the Harris Martin Herbal Supplements Conference, May 2015, Minneapolis, Minnesota
- > "Class Actions in the Wake of AT&T v. Concepcion," Presentation to the New Jersey Association for Justice, November 2011
- > "Class Action Settlements and Attorneys' Fees," Presentation to the Cleveland Metropolitan Bar Association, October 2008

PERSONAL INSIGHT

Outside of the office, Mr. Zweig engages in a daily practice of Transcendental Meditation to stay sharp and focused. Mr. Zweig also volunteers his time to assist U.S. veterans before the Department of Veterans Affairs.



SENIOR COUNSEL

Kevin K. Green

Mr. Green is a career appellate lawyer. He has argued in multiple federal circuits, 10 different states and seven state supreme courts. He also works on critical motions and issues likely to go on appeal.

CONTACT

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YEARS OF EXPERIENCE

> 23

PRACTICE AREAS

- > Appellate
- > Consumer Rights
- > Securities
- > Investor Fraud
- > Employment Litigation

BAR ADMISSIONS

- > California

COURT ADMISSIONS

- > U.S. Supreme Court
- > U.S. Courts of Appeals for the Second, Third, Seventh, Eighth, Ninth, Tenth and District of Columbia Circuits
- > U.S. District Courts for the Northern, Central, Eastern and Southern Districts of California

CLERKSHIPS

- > Supreme Court of Indiana (Hon. Theodore R. Boehm, Associate Justice)
- > U.S. District Court for the Southern District of California (Hon. Barry T. Moskowitz, Chief Judge 2012-19)

EDUCATION

- > Notre Dame Law School, J.D., 1995
- > University of California, Berkeley, B.A., with honors and distinction, 1989

CURRENT ROLE

- > Senior Counsel, Hagens Berman Sobol Shapiro LLP
- > Concentrates on appeals as well as consumer rights, securities and employment litigation
- > Certified Appellate Specialist, State Bar of California Board of Legal Specialization (since 2006)

LEGAL ACTIVITIES

- > California Lawyers Association, Committee on Administration of Justice (since 2016)
- > Appellate Advisory Committee, Judicial Council of California (since 2013)
- > Co-Chair, CAOC Amicus Curiae Committee (since 2011)
- > ATAJ Committee, San Diego County Bar Association
- > Magistrate Judge Selection Panel, Southern District of California (2013-17)
- > Working Group, San Diego Appellate Inn of Court (launched 2016)
- > Co-Founder, Civil Appellate Self-Help Workshop (launched 2014)
- > Appellate Court Committee, San Diego County Bar Association (Chair, 2010)
- > State Bar of California, Committee on Appellate Courts (2006-09)

RECOGNITION

- > Top 100 California Appellate Lawyers, American Society of Legal Advocates (since 2015)
- > Super Lawyer (since 2008)
- > Legal Aid Society of San Diego, Outstanding Service Award (2015)
- > Consumer Attorneys of California, Presidential Award of Merit (2013 & 2016)

NOTABLE DECISIONS

- > **Mayall v. USA Water Polo**, 909 F.3d 1055 (9th Cir. 2018) (viable claims alleged concerning duty to implement concussion and return-to-play protocols)
- > **Hernandez v. Restoration Hardware**, 4 Cal. 5th 260 (2018) (agreeing with CAOC as amicus curiae that unnamed class members must intervene for standing to appeal)
- > **Friedman v. AARP, Inc.**, 855 F.3d 1047 (9th Cir. 2017) (UCL claim stated that AARP unlawfully transacted insurance without license)
- > **George v. Urban Settlement Serv.**, 833 F.3d 1242 (10th Cir. 2016) (reinstating RICO class complaint against Bank of America)
- > **Garza v. Gama**, 379 P.3d 1004 (Ariz. Ct. App. 2016) (reversing decertification of wage-and-hour class action)

SENIOR COUNSEL

Kevin K. Green

- › **McCormack v. Cao**, 636 F. App'x 945 (9th Cir. 2016) (affirming "excellent result" valued at \$129 million for senior citizen class)
- › **Duran v. U.S. Bank**, 59 Cal. 4th 1 (2014) (CAOC amicus curiae addressing representative evidence in class actions)
- › **Wong v. Accretive Health**, 773 F.3d 859 (7th Cir. 2014) (upholding \$14 million securities settlement)
- › **Harris v. Superior Court**, 207 Cal. App. 4th 1225 (2012) (\$65 million resolution for employee class after reversal)
- › **Lynch v. Rawls**, 429 F. App'x 641 (9th Cir. 2011) (\$15 million derivative settlement after first Ninth Circuit reversal on presuit demand requirement)
- › **Kwikset Corp. v. Superior Court**, 51 Cal. 4th 310 (2011) (rejecting stringent interpretation of UCL standing prerequisites)
- › **Luther v. Countrywide Fin. Corp.**, 195 Cal. App. 4th 789 (2011) (Securities Act class actions permitted in state court, leading to \$500 million settlement)
- › **In re F5 Networks, Inc. Derivative Litig.**, 207 P.3d 433 (Wash. 2009) (Washington follows demand futility standard, not universal demand rule)
- › **Smith v. Am. Family Mut. Ins. Co.**, 289 S.W.3d 675 (Mo. Ct. App. 2009) (reinstating \$17 million jury verdict for plaintiff class)
- › **Alaska Elec. Pension Fund v. Brown**, 941 A.2d 1011 (Del. 2007) (en banc) (intervening shareholders who show corporate benefit entitled to attorney fees)
- › **Ritt v. Billy Blanks Enters.**, 870 N.E.2d 212 (Ohio Ct. App. 2007) (reversing on class certification, leading to \$40 million settlement)
- › **Lavie v. Procter & Gamble Co.**, 105 Cal. App. 4th 496 (2003) (leading precedent on California's reasonable consumer standard)

PUBLICATIONS

- › **Amicus Curiae Update**, Forum (regular column for CAOC's periodical) (since 2012)
- › **Distinguishing Mayor McCheese from Hexadecimal Assembly Code for Madden Football: The Need to Correct the 9th Circuit's 'Nutty' Rule barring Expert Testimony in Software Copyright Cases** (Oct. 2017) (with David Nimmer and Peter S. Menell) (available at SSRN)
- › **Forfeiture at the Pleading Stage: Ask Permission First, Don't Apologize Later**, California Litigation (Vol. 28, No. 1, 2015) (with Rupa G. Singh) (Journal of State Bar Litigation Section)
- › **Closing the Appellate Justice Gap**, Los Angeles Daily Journal (Feb. 10, 2015)
- › **Appellate Review in California Class Actions**, California Litigation (Vol. 24, No. 2, 2011) (Journal of State Bar Litigation Section)
- › **A Tool for Mischief: Preemptive Defense Motions Under BCBG Overtime Cases to Reject Class Certification**, Forum (Vol. 39, No. 1, Jan./Feb. 2009) (with Kimberly A. Kralowec)
- › **The Unfair Competition Law After Proposition 64: The California Supreme Court Speaks**, Competition (Vol. 15, No. 2, Fall/Winter 2006) (Journal of State Bar Antitrust & Unfair Competition Law Section)

PRESENTATIONS

- › Bridgeport Class Action Conference (Expert Evidence at Class Certification, Jan. 2019)
- › California Lawyers Association Webinar (New Mandatory Disclosures Before Mediation, Dec. 2018)

SENIOR COUNSEL**Kevin K. Green**

- › Bridgeport Class Action Conference (Consumer Protection Cases Predicated on Omissions, Jan. 2018)
- › State Bar Webinar (Material Omission Claims Under California's UCL, FAL and CLRA, Sept. 2017) (with Timothy W. Loose)
- › CAOC Class Action Seminar (Faculty, Feb. 2017)
- › Bridgeport Consumer Litigation Conference (Material Omissions, Jan. 2017)
- › CAOC Webinar (Ninth Circuit Practice: Everything but the Brief, Nov. 2016)
- › Bridgeport Class Action Litigation Conference (Objectors, Sept. 2016)
- › University of San Diego School of Law (Legal Writing in Practice Seminar, Feb. 2015)
- › CAOC Annual Convention (Class Action Update, Nov. 2014)
- › San Diego County Bar Association (Moderator, Pleasing the Court: Making Your Oral Argument Count, Oct. 2014)
- › State Bar of California Annual Meeting (Forfeiture: A Four-Letter Word in the Court of Appeal, Sept. 2014)
- › Consumer Attorneys of San Diego, Class Action Symposium (Appellate Perspective on Class Actions, May 2014)
- › State Bar of California Golden State Institute (California Supreme Court Panel, Oct. 2012)
- › State Bar of California Annual Meeting (Moderator, Preparing an Appellate Record, Sept. 2009)
- › CAOC Annual Convention (Employment Litigation Panel, Nov. 2008)

PERSONAL INSIGHT

Concerned a legal career meant taking life too seriously, Kevin spent several years after college blending work and travel. He taught English in Switzerland, toiled as a luggage porter in Australia and scaled a live volcano in Guatemala. He ran with the bulls at Pamplona before easing into a monastic life of appellate practice.



SENIOR COUNSEL

Anne F. Johnson

Ms. Johnson specializes in high-stakes, complex litigation challenging Big Pharma's schemes to block consumer access to less expensive generic drugs, as well as mass actions fighting corporate indifference and greed.

CONTACT

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YEARS OF EXPERIENCE

> 16

PRACTICE AREAS

- > Personal Injury
- > Antitrust
- > Consumer Protection

INDUSTRY EXPERIENCE

- > Pharmaceuticals
- > Automotive

BAR ADMISSIONS

- > New York
- > Texas

COURT ADMISSIONS

- > U.S. District Courts for the Southern and Eastern Districts of New York

EDUCATION

- > Brooklyn Law School, cum laude
- > James Madison University, magna cum laude

CURRENT ROLE

- > Senior Counsel, Hagens Berman Sobol Shapiro LLP

RECENT SUCCESS

- > Ms. Johnson was instrumental in achieving a \$200+ million aggregate settlement for her clients in General Motors LLC Ignition Switch Litigation.

EXPERIENCE

- > Prior to joining Hagens Berman, Ms. Johnson was a partner at a Texas litigation firm and an associate at two New York City plaintiffs' class-action firms.
- > Led the discovery, briefing and trial preparation teams on behalf of court-appointed co-lead counsel for the wrongful death and personal injury plaintiffs in **General Motors LLC Ignition Switch Litigation**, one of the largest product liability litigations in U.S. history.
- > Member of the trial team in the first pay-for-delay pharmaceutical antitrust case to go to trial after the U.S. Supreme Court's watershed decision in **FTC v. Actavis**.
- > Developed and filed multiple pharmaceutical antitrust cases challenging drug companies' schemes to prevent less expensive generic versions of brand name drugs from entering the market, including by using sham litigation, sham citizen petitions, pay-for-delay settlements and "product hopping."

ACTIVITIES

- > Fundraising volunteer for Annie's List, which helps to elect progressive women to office in Texas
- > Organized the American Constitution Society's Constitution in the Classroom program for New York City schools

RECOGNITION

- > Brooklyn Law Review

NOTABLE CASES

- > General Motors LLC Ignition Switch Litigation
- > Solodyn Antitrust Litigation
- > Suboxone Antitrust Litigation
- > Nexium Antitrust Litigation
- > Provigil Antitrust Litigation
- > Tricor Antitrust Litigation

PERSONAL INSIGHT

When she's not working, Anne is on her porch listening to records – rhythm and blues, country or rock 'n' roll – with her family and dogs.



OF COUNSEL

Gregory T. Arnold

Led efforts on behalf of three law firms protecting the interests of more than 25,000 asbestos sufferers, resulting in the denial of the debtors' proposed plan of reorganization and a substantial payment to the claimants.

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grega@hbsslaw.com

YEARS OF EXPERIENCE

> 22

PRACTICE AREAS

- > Antitrust Litigation
- > Personal Injury Litigation

BAR ADMISSIONS

- > Massachusetts
- > U.S. District Court, District of Massachusetts
- > Court of Appeals, 2nd Circuit

EDUCATION

- > Fairfield University, B.S., Marketing, 1991
- > Villanova University School of Law, J.D., 1996 (served on Law Review)

CURRENT ROLE

- > Of Counsel, Hagens Berman Sobol Shapiro LLP
- > Practice focuses on prosecution of large-scale, nationwide class actions, primarily against the pharmaceutical industry
- > Works on behalf of large health care providers, seeking recoveries from tortfeasors associated with payments the providers make as a result of the harm they have caused
- > Works on the Direct Purchaser Class Action cases in Lipitor and Effexor

RECENT SUCCESS

- > Represented a variety of states, including the Commonwealth of Massachusetts, in their cases against the tobacco industry
- > Led efforts on behalf of three law firms protecting the interests of more than 25,000 asbestos sufferers, resulting in the denial of the debtors' proposed plan of reorganization and a substantial payment to the claimants
- > Prior bankruptcy experience included representing an Ad Hoc Committee of Trade Creditors in the **In re WorldCom** matter, resulting in a near 50% increase in the clients' recovery
- > Represented large groups of investors in litigation brought against offshore hedge funds, pursuing the recovery of hundreds of millions of dollars
- > Represented national and international clients on a full range of patent litigation issues, including proceedings before the International Trade Commission
- > Successful eminent domain trials, representing companies and individuals on a variety of labor and employment issues including non-compete agreements and various intellectual property matters

EXPERIENCE

- > Income Partner, Litigation Department for a large Boston-based law firm

NOTABLE CASES

> Bankruptcy-related litigation

- Lead efforts on behalf of three law firms protecting the interests of more than 25,000 claimants suffering from asbestos-related diseases, to block a proposed plan of reorganization. During more than 5 years of litigation, succeeded in forcing numerous changes to the proposed plan, including the voting methodology, amount of contribution and distributions. Pursued several interlocutory appeals throughout the case. Oversaw and managed all aspects of this complex litigation, culminating in a successful 20-day bench trial conducted in the Bankruptcy Court for the Southern District of New

OF COUNSEL

Gregory Arnold

York, after which the Court rejected the proposed bankruptcy plan, thereby securing a substantial benefit for the clients.

- One of a team of lawyers representing the interests of The Ad Hoc Committee of Trade Creditors in the **In re WorldCom** matter, resulting in increasing our clients' recoveries by nearly 50%.

> Mass Torts/Class Actions

- Played pivotal role in representing the Commonwealth of Massachusetts in landmark litigation against the Tobacco Industry, including establishing personal jurisdiction in Massachusetts over the United Kingdom-based parent company to Brown & Williamson. This work product, as well as the resulting Court decision, was relied upon by Attorneys General throughout the country in their cases against the Tobacco Industry.
- Following the Commonwealth of Massachusetts' action, lead Brown Rudnick's efforts in pursuing a
Successfully defended a class action case brought against a major credit card issuer, obtaining a denial of class certification and dismissal of individual's claims.

> Complex Financial Litigation

- Successfully represented a group of more than 65 investors in offshore hedge funds, pursuing recoveries for over \$600 million of invested capital lost due to fraudulent practices of hedge fund manager.

> General Commercial Litigation

- Represented former attorney whose malpractice insurer had refused defense and indemnity after an office worker embezzled millions of dollars in client funds. Following a five-week Superior Court trial, secured a verdict in favor of the client, holding the insurance company responsible for more than \$2 million in liability to the insured's former client. Successfully defended insurer's appeal of the trial court decision in the Appeals Court. Subsequently brought a case against the insurance company under Chapter 93a, resulting in a multi-million dollar recovery for the client.
- Obtained a substantial recovery for a client whose intellectual property was wrongfully assigned to a third-party. Achieved a pre-trial settlement with the assigning party while pursuing a bench trial in Middlesex Superior Court against the party using the software.
- Served as "first chair" in a complex, multi-week bench trial in federal court over breach of multi-million dollar commercial contract concerning sale of radiology equipment, including prevailing on counter-claim seeking to impose multi-million dollar liability.

> Patent Litigation

- Represented national and international clients on a full range of patent litigation issues, including trials. Successful litigator before the United States International Trade Commission, including obtaining favorable outcome for a client protecting their intellectual property rights against an infringer based in Sweden.

> Labor and Employment Litigation

- Defended client interests in a variety of matters, including those involving non-competition agreements, wrongful terminations, and harassment claims.
- Successfully represented companies enforcing non-compete agreements against former employees, as well as new employers/former employees in avoiding the terms of non-compete agreements.

OF COUNSEL

Gregory Arnold

Handled trials before administrative bodies, including the U.S. Department of Labor, including defending a client against claims made under the Surface Transportation Assistance Act ("STAA") following the termination of an employee/truck driver.

> Other Litigation

- Represented client in an eminent domain trial, resulting in a jury award more than 10 times the Commonwealth's pro tanto offer.

OF COUNSEL

Karl Barth

Key member on firm's securities fraud cases against companies such as Boeing, Einstein Noah Bagel Corp., Pepsi Puerto Rico Bottling Co., PriceCostco, Templeton Vietnam Opportunities Fund and Wall Data.

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YEARS OF EXPERIENCE

> 23

PRACTICE AREAS

> Securities Litigation
> Investor Rights

BAR ADMISSIONS

> Washington

EDUCATION

> Georgetown University Law Center, J.D.
> University of Virginia, B.S. Accounting, Certified Public Accountant

CURRENT ROLE

- > Of Counsel, Hagens Berman Sobol Shapiro LLP
- > Previously with the firm from 1994 through 2004 before he rejoined in 2010
- > Key member on firm's securities fraud cases against companies such as Boeing, Einstein Noah Bagel Corp., Identix, Midcom Communications, MidiSoft, Oppenheimer Delta Partners, Pepsi Puerto Rico Bottling Co., PriceCostco, Templeton Vietnam Opportunities Fund and Wall Data
- > Represents investors seeking to protect assets and recover investment losses from companies engaged in securities and accounting wrongdoing

EXPERIENCE

- > Certified Public Accountant
- > Certified Fraud Examiner
- > Certified in Financial Forensics
- > Consultant at a national financial consulting firm specializing in expert witness testimony on accounting and financial issues
- > Graduated from Georgetown University Law Center, and from the University of Virginia with a B.S. in Accounting



OF COUNSEL

Molly A. Booker

Ms. Booker has a depth of commercial litigation experience across a variety of industries including business litigation, financial services, trademark and business torts.

CONTACT

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mollyb@hbsslaw.com

YEARS OF EXPERIENCE

> 11

BAR ADMISSIONS

> Arizona

COURT ADMISSIONS:

> U.S. District Court, District of Arizona
> U.S. Court of Appeals for the 9th Circuit

EDUCATION

> University of Arizona, James E. Rogers College of Law, J.D., Tucson, Arizona, 2007
> University of Southern California, B.A., **summa cum laude**, Phi Beta Kappa, Los Angeles, California, 2004

CURRENT ROLE

> Of Counsel, Hagens Berman Sobol Shapiro LLP
> Ms. Booker has worked on a variety of complex cases at Hagens Berman, most recently relating to her expertise in the area of representing families of dialysis patients in wrongful death cases, in which she has achieved monumental jury verdicts for her clients.

EXPERIENCE

> Shareholder, Litigation Attorney, Ryley, Carlock & Applewhite, P.A., Phoenix, AZ, 2007 - 2016
> Legal Intern, Federal Public Defender's Office Phoenix, Phoenix, AZ, Summer 2005

RECOGNITION

> Selected to Super Lawyers 2018 - 2019, Rising Stars 2015 - 2017

NOTABLE CASES

> Molly helped secure a combined \$383.5 million jury verdict in wrongful death cases against dialysis provider DaVita. She represented the families of three patients who suffered cardiac arrests and died after receiving dialysis treatments at DaVita clinics. Each of the three parties was awarded \$125 million in punitive damages from the jury, with compensatory damages ranging from \$1.5 million to \$5 million.

LEGAL ACTIVITIES

> St. Mary's Food Bank Alliance, Advisory Board Member, Mission & Means Committee Member, 2014-Present
> Arizona Asian American Bar Association, Member, 2009-Present
> State Bar of Arizona Committee on Minorities and Women in the Law, Past Chair

PRESENTATIONS

> "Current Legal Landscape," University of Arizona Law School Board of Visitors, Panelist, April 2014
> "The Pen is Mightier than the Sword: Tips for Drafting and Enforcing Your Business Contracts," Better Business Bureau Accredited Business Seminar, August 2013
> "Arbitration in Arizona and the Revised Uniform Arbitration Act," Better Business Bureau Accredited Business Seminar, June 2011
> "How to Turn Your Summer Job Into a Full-Time Position," Arizona State University College of Law, Sponsored by the State Bar of Arizona Committee on Minorities and Women in the Law, April 2011
> "Mechanics' and Materialmen's Liens: Understanding and Protecting Your Rights as a Contractor, Supplier, Property Owner, or Tenant," Better Business Bureau Legal Series Seminar, May 2009
> "Lock It Up: Protecting Your Trade Secrets and Preventing Unfair Competition," Trade Secrets and Restrictive Covenants Seminar, September 2008

LANGUAGES

> Spanish

PERSONAL INSIGHT

Molly enjoys athletic challenges and her favorite pastimes are soccer, cycling and running. Endurance is her forte, and with good fortune, because she is a mom to triplets. Molly also has a penchant for learning foreign languages. She is fluent in Spanish and lived in Madrid, Spain.



OF COUNSEL

Mark S. Carlson

Mr. Carlson is an active member of the legal community frequently making presentations to legal forums and industry groups on intellectual property law.

CONTACT

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YEARS OF EXPERIENCE

> 31

PRACTICE AREAS

- > Patent Infringement
- > Trademark and Trade Dress Infringement
- > Trade Secret Misappropriation
- > Complex Litigation

BAR ADMISSIONS

- > Washington
- > U.S. District Court, Western District of Washington
- > U.S. Court of Appeals, Federal Circuit
- > Numerous other jurisdictions pro hac vice

EDUCATION

- > University of Puget Sound School of Law, J.D., **cum laude**, 1987
- > University of Washington, B.A., History, 1984

CURRENT ROLE

- > Of Counsel, Hagens Berman Sobol Shapiro LLP
- > Working in intellectual property since 1987, handling a full range of intellectual property litigation focused primarily on patent infringement disputes
- > Currently representing FlatWorld Interactives in patent infringement litigation against Apple, Samsung and LG involving touch screen gesture recognition technology in the iOS and Android operating systems, Thought Inc. against Oracle involving software application data persistence technology, and the University of Utah in patent infringement litigation regarding RNA interference therapies for genetic diseases
- > Active member of the legal community making presentations in legal forums and industry groups on intellectual property law
- > Active participant in the Seattle Intellectual Property Inn of Court and Washington State Patent Law Association

RECENT CASES

- > Twice litigated against AT&T on wireless handset, network and telematics patents
- > Twice litigated on behalf of The Nautilus Group in patent, trademark, false advertising and unfair competition cases involving the BowFlex exercise machine and other exercise equipment
- > Represented the owner of traddress rights to the Stanley Classic vacuum bottle in trade dress litigation against Thermos
- > Represented a software patent licensor in litigation against Microsoft over the scope of a license for relational database technology

EXPERIENCE

- > Dorsey & Whitney, Patent Litigation Group
- > Bogle & Gates, Intellectual Property Litigation Group

PUBLICATIONS/PRESENTATIONS

- > "The European Privacy Directive for Personal Data," American Electronics Association Newsline for the Washington State Council
- > "Recovery of Pure Economic Loss in Product Liability Actions: An Economic Comparison of Three Legal Rules," University of Puget Sound Law Review
- > "Patent Litigation and the Non-Practicing Entity," ITRI IP Executives Conference, University of Washington Foster School of Business, 2012

OF COUNSEL

Mark S. Carlson

- › “Vernor v. Autodesk, the Future, or Demise, of the First Sale and Essential Step Defenses in Copyright,” Seattle Intellectual Property Inn of Court, 2011
- › “What Are My Odds? A Disciplined Approach to Assessing Case Value and Litigation Risk,” Seattle Intellectual Property Inn of Court, 2010
- › “Medimmune v. Genentech: Consequences for Patent Licenses, Litigation and Settlements,” 2009
- › “E-Discovery and the New Federal Rules,” 2008
- › “Recent Developments in Pharmaceutical Patents,” 2008

LEGAL ACTIVITIES

- › Seattle Intellectual Property Inn of Court
- › Washington State Patent Law Association
- › American Intellectual Property Law Association

NOTABLE CASES

- › Thought v. Oracle
- › FlatWorld v. Apple; v. Samsung; v. LG
- › University of Utah v. Max Planck Institute, et al.
- › Airbiquity v. AT&T, et al.
- › Timeline v. Microsoft; v. Oracle; v. Sagent
- › The Nautilus Group v. Icon Health and Fitness



OF COUNSEL

Jeannie Evans

Successfully litigates multi-million and multi-billion dollar antitrust and other complex fraud cases.

CONTACT

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Chicago, IL 60611

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(708) 628-4950 fax
jeannie@hbsslaw.com

YEARS OF EXPERIENCE

> 22

PRACTICE AREAS

- > Antitrust Litigation
- > Investor Fraud
- > Securities

BAR ADMISSIONS

- > Illinois
- > California

CLERKSHIPS:

- > Hon. Alex Kozinski, U.S. Court of Appeals for the Ninth Circuit, summer 1997. Hon. Susan Illston, U.S. District Court for the Northern District of California, summer 2003

EDUCATION

- > Harvard Law School, J.D. **cum laude**, 1997
Executive Editor, Harvard Journal of Law and Public Policy; Federalist Society; Asia Law Society
- > Brigham Young University, B.A., Political Science, **summa cum laude**, Ezra Taft Benson Scholar; University Honors, 1994
Editor-in-Chief, Journal of International and Area Studies

CURRENT ROLE

- > Of Counsel, Hagens Berman Sobol Shapiro LLP
- > Represents plaintiffs in complex litigation, focusing on antitrust and financial fraud claims

EXPERIENCE

- > Jeannie has successfully represented both plaintiffs and defendants in multi-million and multi-billion dollar disputes in state and federal courts across the country
- > Co-Founder and Managing Partner of Agrawal Evans LLP, a trial and appellate boutique firm based in Chicago
- > Kirkland & Ellis LLP (Chicago)
- > Wilson Sonsini Goodrich & Rosati (Palo Alto)

AWARDS & RECOGNITION

- > President, Harvard Law Society of Illinois, 2016-2017
- > Chicago Chapter Chair, J. Reuben Clark Law Society, 2016-2017
- > BYU Law School Board of Advisors, 2017
- > Best Lawyers, Women of Influence Nominee, 2017
- > Illinois Super Lawyer, 2016 - 2018

PRESENTATIONS

- > Basics of Accounting for Lawyers 2015, Practicing Law Institute (PLI)
- > Basics of Accounting for Lawyers 2014, Practicing Law Institute (PLI)
- > Preparing the Expert Witness for Deposition 2013, Pincus Professional Education

LANGUAGES

- > Cantonese (Chinese)
- > Mandarin (Chinese)

PERSONAL INSIGHT

Jeannie loves the outdoors — body surfing in the ocean, hiking in the mountains, running, or playing tennis with her husband and four children.



OF COUNSEL

Philip J. Graves

Mr. Graves brings to the firm more than 20 years of experience as a patent and intellectual property litigator, having represented companies in patent cases in many technical fields.

CONTACT

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91101

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phillipg@hbsslaw.com

YEARS OF EXPERIENCE

> 27

PRACTICE AREAS

> Intellectual Property

BAR ADMISSIONS

> U.S. Supreme Court
> Supreme Court of California
> U.S. Court of Appeals, Federal Circuit
> U.S. Court of Appeals, Ninth Circuit
> U.S. District Court, Central District of California
> U.S. District Court, Northern District of California
> U.S. District Court, Eastern District of California
> U.S. District Court, Southern District of California

EDUCATION

> Columbia University School of Law (J.D., 1990)
Harlan Fiske Stone Scholar
Writing and Research Editor,
Columbia Business Law Review
> University of Washington
(B.A., **cum laude**, 1987)
Phi Beta Kappa
Robert A. Dahl Award

CURRENT ROLE

> Of Counsel, Hagens Berman Sobol Shapiro, head of the firm's intellectual property practice
> Practice focuses on intellectual property, including cases involving trademark infringement, copyright infringement, unfair competition and misappropriation of trade secrets

EXPERIENCE

> Before joining Hagens Berman, Mr. Graves' practice focused on represented technology companies in patent cases involving network security, web-hosting, image capture, digital signature and encryption technologies, nano-scale manufacturing and biotech, among many other technical fields.

LEGAL ACTIVITIES

> State Bar of California
> Alaska Bar Association
> Los Angeles Intellectual Property Law Association
- 2015 Judges' Night, Chair
- 2011 Spring Seminar, Chair
> American Intellectual Property Law Association
> Federal Circuit Bar Association

AWARDS & RECOGNITION

> Pasadena Top Attorney, Pasadena Magazine (2016)
> **40 Angelenos to Know in Intellectual Property Law**, Los Angeles Business Journal (2012)
> Southern California Super Lawyers®, Intellectual Property Litigation, Business Litigation (2004-2018)

PUBLICATIONS

> **Preparing to Defend a Section 337 Action: What District Court Litigators Need to Know**, Lead Author, New Matter (Fall 2014)
> **Intellectual Property: It's Not Just for Specialists Anymore**, Co-Presenter, Association of Corporate Counsel (Southern California Chapter), Long Beach, CA (June 19, 2014)
> **Section 337: Whether to Respond or Default**, Lead Author, Intellectual Property Today (June 9, 2014)

OF COUNSEL

Philip Graves

- › **U.S. Patent Litigation under Section 337**, Presenter, Shijingshan Scientific and Technological Services Alliance/Beijing Intellectual Property Office/Zhongguancun Scientific and Technological Park, Beijing, China (May 6, 2014)
- › **Double Exposure: Keeping Your Confidential Information Out of the Public Eye in the Wake of Apple v. Samsung**, Lead Author, ABA Landslide Magazine (May/June 2013 Issue)
- › **Potential Ramifications of Already v. Nike**, Lead Author, Law360 (September 6, 2012)
- › **U.S. Patent Litigation Involving Pharmaceutical Patents**, Co-Presenter, Taiwan Medical and Pharmaceutical Industry Technology and Development Center, Taipei, Taiwan (May 25, 2012)
- › **Developments in Trademark Law and the Internet: Domain Name Disputes**, Banner Ads, Pop-Ups, and Related Issues, Author, 2004 Intellectual Property Institute of the State Bar of California
- › **Damages in Copyright and Patent Infringement Actions**, Author, Intellectual Property Law Section of the Alaska Bar Association

NOTABLE CASES

- › **Stamps.com**, several patent infringement cases involving online postage generation and delivery, network security, digital signature and encryption technology. As lead trial counsel, obtained a jury verdict in Stamps.com's favor, avoiding over \$30 million in damages.
- › **Web.com Group**, patent infringement suits in Arizona and Texas concerning a variety of backend and client-facing content hosting and delivery functionalities, as well as several business litigation matters in California in which Mr. Graves obtained a dismissal of one suit on summary judgment and affirmance of another favorable judgment on appeal.
- › **Fotona d.d.**, a European manufacturer of medical lasers, in a patent infringement action involving dental laser surgery technology. Following a three day evidentiary hearing, Mr. Graves obtained a favorable resolution of the case and a full award of attorneys' fees for the client.
- › **Developer of motion capture technology**, breach of contract action involving rights in the technology. As lead trial counsel, obtained a verdict in favor of the client as well as an award of all of the client's attorneys' fees.
- › **Designer and importer of consumer electronics products**, represented in a patent infringement action venued in the International Trade Commission. The complainant dismissed its complaint on the eve of trial, following the filing of the parties' pretrial briefs and witness statements.
- › **Large publicly traded company**, in several patent infringement suits in California and Texas involving rapid prototyping technology.
- › **Technology development company**, represented in a patent infringement suit involving imaging systems used at tourist attractions and theme parks.
- › **Cosmetics company**, represented in consolidated suits alleging unfair competition and infringement of patents covering various prostaglandin analogs.

PERSONAL INSIGHT

Phil took a break from his judicial clerkship in 1991 to travel a war zone (Croatia, Serbia, Kosovo) and was chased down a mountainside by Kosovar rebels.



OF COUNSEL

John D. Jenkins

John has extensive experience in the government and private sector as a trial attorney and manager of complex investigations and prosecutions.

CONTACT

(714) 222-2333 office
johnj@hbsslaw.com

PRACTICE AREAS

- > Investor Fraud
- > Securities

EDUCATION

- > University of Southern California, B.A. and J.D.

CURRENT ROLE

- > Of Counsel, Hagens Berman Sobol Shapiro LLP
- > John Jenkins has considerable experience as a trial lawyer, corporate advisor, president of an internationally recognized investigative and security firm and expert in complex investigations and prosecutions.

EXPERIENCE

- > Former Deputy District Attorney in Orange County, California
- > Prior to joining Hagens Berman, Mr. Jenkins was a lawyer at Hill, Wynne, Troop & Meisinger. He also has more than 20 years of experience managing domestic and international investigations. He was previously the president of CoreFacts, before and after the sale of CoreFacts as the investigative consulting platform to what became CoreLogic, Inc. (NYSE: CLGX), a leading global risk mitigation and business solutions provider. Prior to CoreFacts, he was an executive at two leading global investigative consulting firms.

ACTIVITIES

- > Member, Board of Governors at the University of Southern California
- > Member, Board of Directors of Lear Capital

PERSONAL INSIGHT

In his spare time, John enjoys fishing with his son and watching his twin daughters compete as saber fencers.



OF COUNSEL

Wesley Kelman

Wes has worked for many years to protect the environment, including key early global warming cases, and on New Hampshire's \$236 million recovery against ExxonMobil in a groundwater contamination case.

CONTACT

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wes@hbsslaw.com

YEARS OF EXPERIENCE

> 17

PRACTICE AREAS

- > Commercial Litigation
- > Environmental Litigation
- > Mass Torts

BAR ADMISSIONS

- > Massachusetts
- > New York

COURT ADMISSIONS

- > U.S. District Court, Southern District of New York
- > U.S. District Court of Massachusetts

CLERKSHIPS:

- > Hon. Warren W. Matthews, Alaska Supreme Court, Anchorage, AK 2004-05
- > Hon. Jon O. Newman, U.S. Court of Appeals, Second Circuit, Hartford, CT 2000-2001

EDUCATION

- > Yale Law School, J.D., 2000, Yale Law Journal
- > University of Chicago, A.B., History, Phi Beta Kappa, 1993

CURRENT ROLE

- > Of Counsel, Hagens Berman Sobol Shapiro LLP

EXPERIENCE

- > Prior to joining Hagens Berman, Mr. Kelman practiced environmental law at Pawa Law Group where his clients included:
 - The states of New Hampshire and Vermont in statewide MTBE groundwater contamination claims against major oil companies
 - Trusts and an Alaskan native village in global warming claims
 - Citizen groups including administrative litigation over air pollution permits, including a challenge to a major new power plant
- > Mr. Kelman drafted papers submitted to state and federal appellate courts and helped other attorneys at Pawa Law Group try several cases to verdict.
- > Mr. Kelman also worked at the Environmental Protection Agency, Region 1, Boston, MA as enforcement counsel. He negotiated consent decrees under which private parties performed cleanups and brought enforcement actions against regulated parties. He was employee of the year for the Superfund section of the regional office, and won a "ROD of the Year" EPA national award for papers documenting EPA's clean-up decision for the Sudbury River in Massachusetts.
- > Cleary, Gottlieb, Steen & Hamilton, Associate. In the wake of Argentina's financial crisis of 2001, Mr. Kelman was part of a small group of lawyers defending the Republic of Argentina against claims by holders of Argentina's sovereign debt.

NOTABLE CASES

- > Wes has worked on key early global warming cases and on behalf of state attorneys general who have sued for damage to statewide groundwater supplies, including a \$236 million recovery against ExxonMobil for the state of New Hampshire.

PERSONAL INSIGHT

Wes loves to ride his bicycle and commutes on it through all four seasons.



OF COUNSEL

Michella A. Kras

State Bar of Arizona President's Volunteer Service Award, 2010

CONTACT

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michellak@hbsslaw.com

YEARS OF EXPERIENCE

> 15

PRACTICE AREAS

> Commercial Litigation
> Complex Civil Litigation

BAR ADMISSIONS

> Arizona
> U.S. District Court for the
District of Arizona

EDUCATION

> Arizona State University
College of Law, J.D., **magna
cum laude**, 2003
> Arizona State University, B.A.,
1997

CURRENT ROLE

- > Of Counsel, Hagens Berman Sobol Shapiro LLP
- > Practice focuses on class actions and complex litigation
- > Extensive expertise in complex litigation in a variety of commercial contexts, including actions involving various contractual breaches, RICO violations, securities fraud, negligent and intentional torts, and federal and state employment law

RECOGNITION

- > State Bar of Arizona President's Volunteer Service Award, 2010
- > Rising Star, Southwest Super Lawyers, 2014

EXPERIENCE

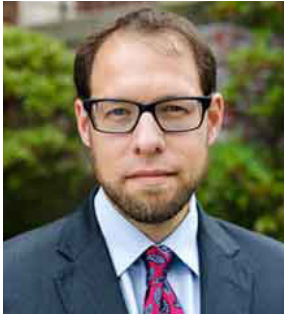
- > Member of the commercial and securities litigation group in the Phoenix office of an international law firm where she worked on complex litigation matters involving private securities offerings, private lending, asset purchase agreements, shareholder and member disputes, and federal and state wage and hour disputes
- > Associate, Steptoe & Johnson LLP, 2007-2013
- > Associate, Gammage & Burnham, work included civil litigation, employment law, election law, health care law and estate planning, 2004-2007
- > Judicial Law Clerk, Arizona Supreme Court, work consisted of a variety of appeals, including civil cases, criminal actions and attorney discipline, 2003-2004

LEGAL ACTIVITIES

- > Consistent commitment to pro bono work. She's worked on several pro bono matters, including obtaining Special Juvenile Immigrant Status for a teenager that was brought to the United States as a toddler and later abandoned by her parent
- > Volunteer and member of the steering committee for Wills for Heroes, an organization that provides free estate planning for Arizona's first responders

NOTABLE CASES

- > Successfully litigated and obtained summary judgment on multiple matters involving breach of contract, conversion, intentional interference and breach of fiduciary duty, even successfully piercing the corporate veil



OF COUNSEL

Benjamin A. Krass

Ben positions his clients to succeed by his experience bringing environmental cases for more than a decade, the close relationships he builds with his clients and his attention to every aspect of a client's case.

CONTACT

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YEARS OF EXPERIENCE

> 16

PRACTICE AREAS

> Environmental Litigation
> Products Liability

BAR ADMISSIONS

> Massachusetts

COURT ADMISSIONS

> U.S. District Court, District of Massachusetts
> U.S. District Court, District of Vermont

EDUCATION

> Boston College Law School, J.D., 2003
Honors: Managing Editor, Boston College Environmental Affairs Law Review; Boston College Environmental Law Society Certificate in Environmental and Land Use Law; Adjunct Lecturer, Environmental Law, Boston College Political Science Department (Spring 2003)
> Universidad de Oviedo, 1999-2000, William J. Fulbright scholarship
> Canisius College, B.A., **summa cum laude**, 1999

CURRENT ROLE

> Of Counsel, Hagens Berman Sobol Shapiro LLP

EXPERIENCE

> Prior to joining Hagens Berman, Mr. Krass was a Partner at Pawa Law Group where he gained extensive experience representing the states of New Hampshire, Rhode Island and Vermont in MTBE litigation.

> Litigated nearly every aspect of the New Hampshire MTBE case for over a decade and participated in the three-month trial against ExxonMobil, including by handling the examination of expert and state witnesses.

> Involved in all of his prior firm's other major environmental cases, including American Elec. Power Co. v. Connecticut, 131 S. Ct. 2527 (2011), Native Village of Kivalina v. ExxonMobil Corp., 696 F.3d 849 (9th Cir. 2012), and Green Mt. Chrysler Plymouth Dodge Jeep v. Crombie, 508 F. Supp. 2d 295 (D. Vt. 2007). Played a significant role in preparing evidence and cross examination in the multi-week Crombie trial.

RECENT SUCCESS

> Represented the state of New Hampshire from 2003-2016 in litigation against major oil companies for statewide contamination of the state's waters with the chemical and gasoline additive MTBE

> Helped obtain settlements of \$136 million from approximately a dozen defendants prior to or at the commencement of trial and participated in the three-month trial against ExxonMobil which resulted in a \$236 million jury verdict against ExxonMobil. The jury verdict was affirmed on appeal by the New Hampshire Supreme Court. New Hampshire v. Exxon Mobil Corp., 126 A.3d 266 (N.H. 2015), cert. denied, 136 S. Ct. 2009 (2016).

NOTABLE DECISIONS

> State of New Hampshire v. Exxon Mobil Corp., 126 A.3d 266 (N.H. 2015) (upholding \$236 million jury verdict following three-month trial against petroleum company for polluting state's groundwater)

> Connecticut v. American Electric Power Co., 582 F.3d 309 (2d Cir. 2009) (reinstating global warming tort case filed by states and land trusts), rev'd on other grounds, 131 S. Ct. 2527 (2011)

> State v. Hess Corp., 161 N.H. 426 (2011) (holding that, under *parens patriae* doctrine, a state suing a polluter for groundwater contamination may recover as damages the cost of treating private well contamination)

> New Hampshire v. N. Atlantic Refining, Ltd., 999 A.2d 396 (N.H. 2010) (upholding personal jurisdiction over oil company in MTBE litigation); New Hampshire v. Hess Corp., 982 A.2d 388 (N.H. 2009) (affirming proper service of process on two oil company defendants in MTBE litigation)

ACTIVITIES

> President, Board of Directors, Transportation Children's Center (2016-2017)

OF COUNSEL

Benjamin A. Krass

PUBLICATIONS

- > "Behind the Curve: The National Media's Reporting on Global Warming," 33 B.C. Env'tl. Aff. L. Rev. 485 (2006)
- > "Global Warming As A Public Nuisance: Connecticut v. American Electric Power," 16 Fordham Env'tl. L. Rev. 407 (2005)
- > "Comment: Combating Urban Sprawl in Massachusetts: Reforming the Zoning Act through Legal Challenges," 30 B.C. Env'tl. Aff. L. Rev. 605 (2003)

LANGUAGES

- > Spanish

PERSONAL INSIGHT

Ben is a competitive runner and enjoys winter mountaineering, backpacking, gardening and spending time with his family.

OF COUNSEL

Kristen McCulloch

Advocating for investors in securities fraud, and corporate governance cases.

CONTACT

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kristenm@hbsslaw.com

YEARS OF EXPERIENCE

> 25

PRACTICE AREAS

> Investor Fraud
> Securities

BAR ADMISSIONS

> California

COURT ADMISSIONS

> California State Courts
> U.S. District Court for the
Central District of California
> U.S. District Court for the
Eastern District of California
> U.S. District Court for the
Northern District of California
> U.S. District Court for the
Southern District of California
> U.S. Bankruptcy Court for the
Central District of California
> U.S. Tax Court

EDUCATION

> University of California, Santa
Barbara, B.A. Business
Economics, 1987
> University of San Diego
School of Law, J.D., 1994
> University of San Diego
School of Law, LL.M. Taxation,
2000

CURRENT ROLE

> Of Counsel, Hagens Berman Sobol Shapiro LLP

EXPERIENCE

> Kristen joined the firm's securities practice group to advocate for investors' rights to financial security through transparent corporate disclosures, which is the foundation of the integrity of our financial markets.

> Kristen is also a California Certified Public Accountant, which allows her to meticulously evaluate the truthfulness of financial disclosures.

> Prior to joining Hagens Berman, Kristen litigated matters throughout the state of California in both state and federal court. Kristen's legal practice has included investor securities fraud litigation with another preeminent plaintiffs' side law firm, and she also has substantial mediation experience.

> Kristen graduated from the University of California, Santa Barbara with a Bachelor of Arts degree in business economics. She earned her law degree and her LL.M. in Taxation Law, cum laude, from the University of San Diego School of Law. After earning her LL.M. in taxation, she worked as a tax litigation attorney and worked with a boutique law firm as an ERISA litigation attorney and adviser representing unionized industry Taft-Hartly trust funds. Before attending law school, Kristen worked for a Big 8 (now 4) accounting firm.

ACTIVITIES

Kristen enjoys sailing both as a crew member in sail boat races and leisurely cruising. She also enjoys hiking, kayaking, skiing and biking.



OF COUNSEL

James J. Nicklaus

During his legal career, Mr. Nicklaus has represented clients in antitrust, securities fraud, product liability and patent litigation.

CONTACT

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BAR ADMISSIONS

› Massachusetts

COURT ADMISSIONS

› U.S. District Court for the
District of Massachusetts

EDUCATION

› Harvard Law School, J.D.,
magna cum laude, 1993
Harvard Legal Aid Bureau,
Student Representative
on Committee on Clinical
Education
› Harvard College, B.A.,
East Asian Languages and
Civilizations, cum laude, Phi
Beta Kappa, 1990

CURRENT ROLE

› Of Counsel, Hagens Berman Sobol Shapiro LLP

EXPERIENCE

› Prior to joining Hagens Berman, Mr. Nicklaus worked for other firms in the Boston area, including representing clients in insurance coverage, product liability and lender liability litigation at Michienzie & Sawin LLC and representing clients in insurance coverage, patent, product liability, antitrust and securities fraud litigation at Willcox, Pirozzolo & McCarthy, P.C.

› His work has included all phases of litigation, including drafting of pleadings and motions, taking and defending depositions, conducting and coordinating discovery, preparing summary judgment motions and oppositions, arguing dispositive motions and conducting all aspects of trial preparation.



OF COUNSEL

Ed Notargiacomo

Mr. Notargiacomo is involved in a number of large class-action suits against large pharmaceutical manufacturers in both the consumer protection and antitrust areas.

CONTACT

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YEARS OF EXPERIENCE

> 29

PRACTICE AREAS

- > Consumer Protection
- > Complex Commercial
- > Antitrust Litigation

BAR ADMISSIONS

- > Massachusetts
- > U.S. District Court, District of Massachusetts

EDUCATION

- > Boston University, J.D., with Honors, 1994, served on the Boston University Public Interest Law Review
- > Brown University, B.A., 1989

CURRENT ROLE

- > Of Counsel, Hagens Berman Sobol Shapiro LLP
- > Practice focuses on complex consumer, commercial and antitrust litigation

RECENT SUCCESS

- > **Relafen Antitrust Litigation** (\$85 million settlement)
- > **In re Lupron Marketing and Sales Practices Litigation** (\$150 million settlement)
- > **In re Pharmaceutical Manufacturers Average Wholesale Price Litigation** (\$300 million in settlements)
- > **In re Vytarin/Zetia Marketing, Sales Practices, and Products Liability Litigation** (\$80 million settlement)
- > **In re Flonase Antitrust Litigation** (\$150 million settlement)
- > **In re Wellbutrin Antitrust Litigation** (\$21 million settlement)
- > **In re Skelaxin Antitrust Litigation** (settlement pending)

EXPERIENCE

- > Served as Special Assistant Attorney General for Massachusetts in its suit against the tobacco industry to recoup funds expended to treat smoking-related illnesses
- > Helped represent Rhode Island, New Hampshire and Maine in their suits against the tobacco industry
- > Represented the city of Boston in its suit against gun manufacturers and distributors in order to force them to take responsibility for violence perpetrated with firearms that they negligently and illegally distributed in cities like Boston
- > Experience also includes consumer class actions against predatory lenders and employment litigation against a major retail chain, as well as intense involvement in high-profile impact litigation against cigarette manufacturers and the firearms industry
- > Loeff, Cabraser, Heimann & Bernstein, LLP, Boston, MA
Litigation of consumer class actions to redress major corporate misconduct. Co-lead effort on behalf of the City of Boston and the Boston Public Health Commission in suit against major firearms manufacturers in an effort to recover the cost of gun violence to the City of Boston and its citizens. Heavily involved in extended negotiations to settle municipal gun suits on behalf of the City of Boston. Engaged in the litigation of several suits against major pharmaceutical manufacturers for illegal activities that artificially inflate the price of prescription drugs paid by consumers.
- > Law Offices of Edward Notargiacomo, Boston, MA
Primary focus in civil litigation, including construction and contract claims, employment disputes as well as some personal injury. Represented clients in commercial and residential real estate conveyancing as well as advised clients on land use and zoning issues. Experience with mediation, arbitration and

OF COUNSEL

Ed Notargiacomo

negotiation and settlement of a wide range of disputes. Drafted and negotiated contracts, commercial leases and settlement agreements. Provided aggressive representation to clients in construction and contract disputes, copyright actions, zoning and land use matters, and commercial and residential lease disputes.

- › Brown, Rudnick, Freed & Gesmer, P.C., Boston, MA
Experience in real estate conveyancing and finance, including representation of international investment funds seeking to acquire investment grade commercial property in the United States. Provided legal representation in a wide range of practice areas including real estate development and complex real estate finance, zoning regulations, and commercial lease negotiation. Two years concentrating in commercial litigation, representing a wide range of business clients in state and federal courts.

PUBLICATONS

- › Boston University Public Interest Law Review, 1994

NOTABLE CASES

- › **In re Relafen Antitrust Litigation** (\$85 million settlement)
- › **In re Lupron Marketing and Sales Practices Litigation** (\$150 million settlement)
- › **In re Pharmaceutical Manufacturers Average Wholesale Price Litigation** (\$300 million in settlements)
- › **State of Connecticut v. Eli Lilly** (\$25 million settlement)
- › **Pfizer Neurontin Promotions Litigation** (jury verdict and judgment for \$142 million)
- › **In re Wellbutrin SR Antitrust Litigation**
- › **In re Vytorin/Zetio Marketing, Sales Practices and Products Liability Litigation**
- › **In re Flonase Antitrust Litigation**

PERSONAL INSIGHT

Ed once had a one-on-one lunch with Cher while working as an investigator for the public defender's office in Washington, D.C. Cher was researching her role as a public defense attorney in the movie Suspect. He also once owned a pot-bellied pig who could sit, play dead and turn in a circle on command (and for a tasty treat).



OF COUNSEL

Jerrod C. Patterson

Served as federal prosecutor for over nine years, prosecuting tax cases, fraud, and other financial crimes. Extensive experience trying complex cases to verdict.

CONTACT

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YEARS OF EXPERIENCE

> 17

PRACTICE AREAS

- > Antitrust Litigation
- > Racketeering
- > Automotive Litigation

BAR ADMISSIONS

- > Washington
- > New York
- > District of Columbia

CLERKSHIPS:

- > The Hon. Louis F. Oberdorfer, U.S. District Court for D.C.
- > U.S. Senate Judiciary Committee (Sen. Leahy) Washington, D.C.

EDUCATION

- > University of California, Berkeley School of Law (Boalt Hall), J.D., May 2002; top 15% of graduating class
- > Johns Hopkins University, School of Advanced International Studies (SAIS) M.A. in International Economics and International Relations, December 1997, Graduated with distinction (top 10%)
- > Brown University A.B. in International Relations, May 1995, **magna cum laude**

CURRENT ROLE

- > Of Counsel, Hagens Berman Sobol Shapiro LLP
- > Practice focuses on antitrust and other fraud cases, including Animation Workers Antitrust, Batteries Antitrust and Nespresso Antitrust
- > Mr. Patterson brings to the firm extensive trial experience and a history of prosecuting complex fraud cases, including tax fraud, bank fraud, wire fraud, money laundering and prescription fraud.

RECOGNITION

- > Organized Crime and Drug Enforcement Task Force “Best Financial Investigation in the Nation” – 2012
- > U.S. Attorney General “Outstanding Performance as a Special Assistant U.S. Attorney” – 2010
- > Assistant Attorney General “Outstanding Tax Division Attorney” – 2009
- > Assistant Attorney General “Outstanding Tax Division Attorney” – 2008

NOTABLE CASES

- > **In re Animation Workers Antitrust Litig.**, 14-cv-4062 LHK (N.D. Cal.): Class-action antitrust case against major animation studios for conspiring to fix wages of their animators
- > **In re Lithium Ion Batteries Antitrust Litig.**, 12-cv-5129 YGR (N.D. Cal.): Class-action antitrust case against large battery producers for conspiring to fix prices
- > **Nespresso v. Ethical Coffee Co.**, 16-cv-0194 GMS (D. Del.): Represents counterclaimants, alleging Nespresso monopolized the single-serve coffee capsule market through predatory redesigns of their coffee machines
- > **Melton v. Century Arms**, 16-cv-21008 FAM (S.D. Fla.): Class-action case against assault rifle manufacturer for selling rifles with a defective safety level, causing rifles to discharge without warning
- > As a federal prosecutor, led or co-chaired 11 federal jury trials, and 22 bench trials

EXPERIENCE

- > Prior to joining Hagens Berman, Mr. Patterson served as an Assistant United States Attorney at the U.S. Attorney’s Office in Seattle, WA.
 - Prosecuted complex fraud cases, including tax fraud, bank fraud, wire fraud, money laundering, and prescription fraud
 - Served as Project Safe Childhood Coordinator; led efforts to investigate and prosecute child pornography and child exploitation cases
 - Led prosecution of large-scale drug trafficking organizations, including cartels and street gangs, to interdict drug smuggling and investigate money laundering

OF COUNSEL

Jerrod C. Patterson

- › Trial Attorney, U.S. Department of Justice Washington, D.C., Tax Division, Northern Criminal Enforcement Section
 - Co-chaired prosecution of two defendants, in separate trials, for scheme to defraud the Cleveland Catholic Diocese
- › Special Assistant U.S. Attorney, U.S. Attorney's Office for D.C. Nov. 2006 - May 2007
 - Prosecuted 22 bench trials in Sex Offense/Domestic Violence Section
- › Associate, Wilmer Cutler Pickering (WilmerHale)

PERSONAL INSIGHT

Although not a Washington state native, Mr. Patterson has quickly adopted Seattle as his hometown. In his spare time, he and his family enjoy the local wineries, lakes and hiking trails.



OF COUNSEL

Greer N. Shaw

Greer works hard for every client, large and small, with integrity and creativity.

CONTACT

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YEARS OF EXPERIENCE

> 21

PRACTICE AREAS

- > Appeals
- > Complex Commercial
- > Intellectual Property
- > Patent Litigation
- > Trademark and Trade Dress Infringement
- > Trade Secret Misappropriation

BAR ADMISSIONS

- > California
- > Arizona
- > Massachusetts

COURT ADMISSIONS

- > U.S. Court of Appeals, Federal Circuit
- > U.S. Court of Appeals, Ninth and First Circuits
- > U.S. District Court, Central, Northern, Eastern and Southern Districts of California
- > U.S. District Court, Districts of Arizona, Massachusetts, Nebraska and E.D. of Texas

CLERKSHIPS:

- > Honorable Bailey Aldrich, U.S. Court of Appeals, First Circuit

EDUCATION

- > Boston University School of Law, J.D., **magna cum laude**; Managing Editor, Boston University Law Review
- > University of California, Berkeley, B.A.

CURRENT ROLE

- > Of Counsel, Hagens Berman Sobol Shapiro LLP

RECOGNITION

- > Southern California Super Lawyers®, Intellectual Property Litigation, 2014-2016; 2019

EXPERIENCE

- > Snell & Wilmer LLP, 2011-2015
- > Graves & Shaw LLP, 2009-2011
- > Kirkland & Ellis LLP, 2004-2009
- > Goodwin Procter LLP, 1998-2003
- > U.S. Court of Appeals, First Circuit, 1997-1998

LEGAL ACTIVITIES

- > Intellectual Property Owners Association; Litigation Committee (2014-2015)
- > Los Angeles Intellectual Property Law Association; Board of Directors (2012-2015)
- > USC Intellectual Property Institute; 2015 Planning Committee
- > The Judge Paul R. Michel Intellectual Property American Inn of Court; Reporter (2008-2009), Team Captain (2009, 2012); Program Chair (2012-2014)
- > American Intellectual Property Law Association

PRESENTATIONS

- > "Nautilus, Ariad, and Beyond; The Current State of § 112's Definiteness, Enablement, and Written Description Requirements in Litigation and Prosecution," Co-Presenter, Webinar produced by the State Bar of California, Patent Interest Group (March 18, 2015)
- > "LAIPLA Goes to Court - Settlement of IP Disputes," Moderator (with Hon. George Wu, Hon. Gary Feess (Ret.) and Hon. Suzanne Segal, U.S. District Court, Central District of California), presented by the Los Angeles Intellectual Property Law Association (January 13, 2015)
- > "Careers in Intellectual Property and Entertainment Law," Panelist, sponsored by the Los Angeles Intellectual Property Law Association and Pepperdine University School of Law (October 1, 2014)
- > "Intellectual Property: It's Not Just for Specialists Anymore," Co-Presenter, Association of Corporate Counsel (Southern California Chapter), Long Beach, CA (June 19, 2014)

OF COUNSEL

Greer Shaw

- > “Hot Topics for In-House Patent Practitioners,” Moderator, “Washington in the West 2014” conference, presented by Los Angeles Intellectual Property Law Association (January 24, 2014)
- > “Hot Topics and Notable Developments in IP Law,” Co-Presenter, Association of Corporate Counsel (Mountain West Chapter), Salt Lake City, UT (June 28, 2013)
- > “Design Patent Infringement 2013,” Co-Presenter, Webinar produced by The Knowledge Group, LLC (January 29, 2013)
- > “Litigating Patents in the Central District: Local Practices and the Patent Pilot Program from the Practitioner’s Perspective,” Moderator, Litigation Roundtable, Los Angeles Intellectual Property Law Association, Los Angeles, CA (May 30, 2012)
- > “U.S. Patent Litigation Involving Pharmaceutical Patents,” Co-Presenter, Taiwan Medical and Pharmaceutical Industry Technology and Development Center, Taipei, Taiwan (May 25, 2012)
- > “Washington in the West Conference,” Chairperson, sponsored by Los Angeles Intellectual Property Law Association (February 14, 2012)
- > “Dual Actor Infringement: Drafting and Enforcing Telecommunication and Computer Science Claims Following BMC, Muniuction, SiRF and Akamai,” Panelist, Los Angeles Intellectual Property Law Association, 2011 Spring Seminar (June 4, 2011)
- > “IP Law – Where Do I Fit In?,” Panelist, Sponsored by The Palmer Center, the Los Angeles Intellectual Property Law Association, and the Pepperdine University Career Development Office (October 28, 2008)
- > “Patents & The Supreme Court,” Moderator, Panel presentation of the 10th Annual “Washington in the West” Conference presented by the Los Angeles Intellectual Property Law Association (January 31, 2007)
- > “Recent Developments In False Designation of Origin and Willful Patent Infringement,” Panelist, Fifth Annual Technology Law Conference, Pepperdine University School of Law, Sponsored by the Association of Corporate Counsel (June 25, 2004)

PERSONAL INSIGHT

When he is not helping clients who have been ripped off or wrongly accused, Greer enjoys scaling mountains, exploring canyons, and rappelling down waterfalls with the Altadena Mountain Rescue Team of the Los Angeles County Sheriff’s Department.



OF COUNSEL

Nick Styant-Browne

Served as lead counsel in the trial against Australia's major newspaper publishers, including "News," which resulted in the deregulation of the system of distribution of newspapers and magazines throughout Australia.

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YEARS OF EXPERIENCE

> 26

PRACTICE AREAS

- > Human Rights
- > Environmental Protection
- > Consumer Rights

BAR ADMISSIONS

- > Washington State Bar Association
- > Australian State Bars including Victoria, NSW, and WA
- > Supreme Court of Papua New Guinea

EDUCATION

- > University of Melbourne

CURRENT ROLE

- > Of Counsel, Hagens Berman Sobol Shapiro LLP
- > Practiced class-action and multi-plaintiff litigation since 2001
- > Current projects include Rio Tinto Litigation for human rights and environmental abuses at the Panguna mine on the Pacific island of Bougainville
- > Has been lead counsel in both bench and jury class action trials in Federal Court

EXPERIENCE

- > Senior partner (one of five) at Australia's largest plaintiff law firm working on class actions, environmental litigation and antitrust litigation

LEGAL ACTIVITIES

- > Past elected member, Council of Greenpeace, Australia

NOTABLE CASES

- > Served as co-counsel on Australia's then-largest class action against a wholly owned subsidiary of Exxon, arising out of a gas plant explosion which shut down the gas supply to Melbourne and most of the State of Victoria for 10 days
- > **Rio Tinto Litigation**
Mr. Styant-Browne's practice has involved several projects in the Pacific Rim, acting principally on behalf of the indigenous peoples of poor developing Pacific nations claiming environmental and human rights abuses. His successes and passion for the causes of indigenous peoples have led to him being retained by the national governments of Pacific States including Tuvalu and the Kingdom of Tonga
- > **BHP Environmental Litigation**
Mr. Styant-Browne's meticulous outlining of the environmental devastation caused by the Ok Tedi mine in Papua New Guinea helped force mining companies adopt stricter environmental standards in developing countries
- > **Toyota Unintended Acceleration Litigation**
- > **Thalidomide Drug Litigation**

OF COUNSEL

Hannah Schwarzdchild

Hannah has litigated cases involving employee and consumer rights, and now focuses on antitrust claims in the pharmaceutical industry.

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YEARS OF EXPERIENCE

> 30

BAR ADMISSIONS

> State of California (inactive)
> State of Pennsylvania

PRACTICE AREAS

> Antitrust Litigation
> Consumer Rights

COURT ADMISSIONS

U.S. District Court for the
Northern District of California
> Ninth Circuit Court of Appeals
> U.S. District Court for
the Eastern District of
Pennsylvania
> Third Circuit Court of Appeals

EDUCATION

> University of California,
Berkeley, Boalt Hall School of
Law, J.D., 1989
AmJur Award, 1988; Best
Brief Award, Moot Court
Competition, 1987
> University of California,
Berkeley, A.B., History, Phi
Beta Kappa, 1986

CURRENT ROLE

> Of Counsel, Hagens Berman Sobol Shapiro LLP
> Practice focuses on consumer and antitrust litigation

EXPERIENCE

> Prior to joining Hagens Berman, Ms. Schwarzschild coordinated large-scale litigation projects in Boston and Philadelphia. Over the past 25 years, she has litigated employment and consumer rights cases in federal and state courts and administrative agencies, including jury and bench trials and appeals.

PUBLICATIONS

> Same-Sex Marriage and Constitutional Privacy, Berkeley Women's Law Journal, 1989.

PERSONAL INSIGHT

Hannah grew up in and around New York City. Before law school, she helped build a community arts facility in San Francisco's Mission District in the 1980s and worked on nuclear arms control at the Ploughshares Fund. Hannah has been working for LGBT rights and Middle East peace and justice for more than 20 years. These days, her best times are spent biking around Cambridge and Cape Cod with her partner and teenage stepdaughter in search of interesting food, art, wildlife and humans.



OF COUNSEL

Nathaniel A. Tarnor

Mr. Tarnor has litigated a wide variety of legal matters and takes pride in pursuing justice on behalf of his clients for as long as it takes to win.

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YEARS OF EXPERIENCE

> 14

BAR ADMISSIONS

- > State of Illinois
- > State of New York
- > District of Columbia

PRACTICE AREAS

- > Antitrust Litigation
- > Anti-Terrorism
- > Consumer Rights
- > Investor Fraud
- > Whistleblower Litigation

COURT ADMISSIONS

- > U.S. Supreme Court
- > U.S. Courts of Appeals for the 2nd and 7th Circuits, and for the District of Columbia
- > U.S. District Court for the District of Columbia
- > U.S. District Courts for the Northern & Central Districts of Illinois
- > U.S. District Court for the Eastern & Southern District of New York

EDUCATION

- > Chicago-Kent College of Law, J.D., CALI Award, 2004
- > University of Illinois, B.A., Phi Beta Kappa, **summa cum laude**, Milton Ravoce Award, 2000

CURRENT ROLE

- > Of Counsel, Hagens Berman Sobol Shapiro LLP
- > Represents American terrorism victims against Chiquita Brands International for violations of U.S. anti-terrorism laws in Columbia
- > Practice concentrates on complex federal litigation

EXPERIENCE

- > Milberg LLP, New York, NY, 2009-2016
- > Practice areas include antitrust, class actions, consumer protection, contractual disputes, securities and whistleblower representation in conjunction with the U.S. Department of Justice and the U.S. Securities & Exchange Commission
- > Pro Bono: Represented families of American terrorism and torture victims before the U.S. Supreme Court and Second Circuit.
- > Previously provided legal assistance to human rights victims from around the world in conjunction with other prominent law firms.

RECOGNITION

- > Chicago-Kent International Law Moot Court Honor Society, 2002-2004
- > Captain, Chicago-Kent International Law Moot Court Team, 2002-2004
- > Highest Oralist Score 2003 Philip C. Jessup International Law Moot Court Regional Competition Chicago-Kent Moot Court Team
- > CALI Award Commercial Payment Systems Law

PERSONAL INSIGHT

Nathaniel enjoys competing in endurance sports and hiking with his family.



ASSOCIATE

Hannah Brennan

Hannah brings to the firm experience in drug pricing, patent, and international right to health litigation as well as international trade agreements.

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YEARS OF EXPERIENCE

> 5

PRACTICE AREAS

- > Antitrust Litigation
- > Civil & Human Rights Litigation
- > Consumer Rights
- > Medical Devices
- > Pharmaceutical Fraud
- > RICO

INDUSTRY EXPERIENCE

- > Drug Pricing
- > Patent
- > International Right to Health Litigation
- > International Trade Agreements

BAR ADMISSIONS

- > Massachusetts

COURT ADMISSIONS

- > Third Circuit

EDUCATION

- > Yale Law School, J.D., 2013
- > Brown University, B.A., 2009

CURRENT ROLE

- > Associate, Hagens Berman Sobol Shapiro LLP

EXPERIENCE

- > Prior to joining Hagens Berman, Ms. Brennan clerked for the Honorable Timothy B. Dyk of the United States Court of Appeals for the Federal Circuit and the Honorable Theodore McKee, Chief Judge of United States Court of Appeals for the Third Circuit.
- > She was awarded a Yale Gruber Fellowship in Global Justice and Women's Rights to work for Public Citizen's Global Access to Medicines Program. At Public Citizen, she worked on a broad range of healthcare issues, including: negotiation of the intellectual property provisions of the Trans-Pacific Partnership Agreement, compulsory licensing of HIV medications in Peru, and policies for improving access to Hepatitis C medications for veterans, Native Americans and prisoners.
- > In law school, Ms. Brennan worked in the Global Health and Justice Clinic, where she helped develop a human rights approach to intellectual property law. She also served in the Workers and Immigrants' Rights Advocacy Clinic, where she obtained a substantial settlement for a group of Latino construction workers with unpaid wage claims. She further represented Connecticut DREAMers in their legislative and regulatory campaigns to secure financial aid for undocumented students at Connecticut state universities.
- > Prior to law school, Ms. Brennan served as Fulbright Scholar in Lima, Peru, where she researched labor rights abuses in the domestic housework industry and advocated for greater government regulation of this area.

LEGAL ACTIVITIES

- > Member, American Association for Justice

RECOGNITION

- > Charles G. Albom Prize for Excellency in Appellate Advocacy

PUBLICATIONS

- > Hannah Brennan, Christine Monahan, Zain Rizva, & Amy Kapczynski, **Government Patent Use: How a Little Known Statute Can Bring Down Drug Prices and Transform Health**, 18 Yale J. of L. & Tech. 275 (2016).
- > Hannah Brennan, **The Cost of Confusion: The Paradox of Trademarked Pharmaceuticals**, 22 Mich. Telecomm. & Tech. L. Rev. 1 (2016)
- > Hannah Brennan & Burcu Kilic, **Freeing Trade at the Expense of Local Crop Markets?: A Look at the Trans-Pacific Partnership's New Plant Related Intellectual Property Rights From Human Rights Perspective**, Harv. Hum. Rts. J. Online (2015)

ASSOCIATE

Hannah Brennan

- › Burcu Kilic, Hannah Brennan, & Peter Maybarduk, **What Is Patentable Under the Trans-Pacific Trade Partnership?**, 40 Yale J. Int'l L. Online 1 (2015)
- › **Inside Views: The TPP's New Plant-Related Intellectual Property Provisions**, Intellectual Property Watch (Oct. 17, 2014)
- › A Human Rights Approach to Intellectual Property and Access to Medicines, Yale Global Health and Justice Partnership
- › Trabajo en servicio doméstico: capacitación laboral y agencias de empleo [Domestic House Work: Labor Training and Employment Agencies] (Asociación Grupo de Trabajo Redes eds., 2010)

LANGUAGES

- › Spanish

PERSONAL INSIGHT

Hannah's favorite country is Peru and her favorite city is Lima. She was born and raised in Boston, but notably does not support any of the region's sport teams.



ASSOCIATE

Dawn Cornelius

Ms. Cornelius is committed to protecting consumers from unfair and deceptive corporate practices, and has assisted in obtaining recoveries for homeowners, investors and protestors.

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BAR ADMISSIONS

> Washington

COURT ADMISSIONS

> U.S. District Court for
the Western District of
Washington

EDUCATION

> WSBA Law Clerk Program,
2014
> University of Washington, B.A.
Criminal Justice, 1992

CURRENT ROLE

- > Associate, Hagens Berman Sobol Shapiro
- > Practice focuses on class actions involving consumer-related claims, predatory lending practices, and claims on behalf of people harmed by pollution from neighboring power plants.

EXPERIENCE

- > Prior to becoming an attorney, Dawn worked as a senior paralegal at Hagens Berman for 20 years, managing cases and developing extensive civil procedure experience in jurisdictions across the United States.
- > Ms. Cornelius also worked in the legal department of Mercedes Benz U.S. International, Inc. in Tuscaloosa, Alabama, and for the firm of Oven, Gwynn & Strickland in Tallahassee, Florida.

NOTABLE CASES

- > **Expedia Litigation**, assisted in recovering \$134 million settlement for consumers
- > **Little et al. v. Louisville Gas & Electric Co.**: Part of team representing residents living next to a coal-fired power plant emitting coal ash and dust containing toxic metals in violation of state regulations and federal law
- > **In re Bank of America Home Affordable Modification Program (HAMP) Contract Litigation**: Part of team representing homeowners to whom the defendant allegedly promised mortgage modifications as part of a federal program
- > **In re Checking Account Overdraft Litigation**: Part of team representing banking customers whose accounts were allegedly charged repeated overdraft fees based on the way the banks manipulated transactions
- > **WTO Wrongful Arrest Litigation**: assisted in recovering \$1 million and non-monetary relief for protestors

PERSONAL INSIGHT

Dawn is a native Washingtonian, an avid hiker and music buff. For years, she covered the Washington Huskies football team for a local publication and remains a passionate football fan. Dawn also spends many summer vacations on the family farm, driving tractor.



ASSOCIATE

John DeStefano

Mr. DeStefano takes special pride in protecting the public against broad-based frauds and swindles and the corruption of honest enterprise.

CONTACT

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PRACTICE AREAS

- > Consumer Protection
- > Commercial Litigation
- > Privacy Rights
- > Appellate Advocacy

BAR ADMISSIONS

- > U.S. Supreme Court
- > U.S. Court of Appeals, Ninth Circuit
- > U.S. Court of Appeals, Tenth Circuit
- > U.S. District Court, District of Arizona
- > Supreme Court of Arizona

EDUCATION

- > University of Arizona Law School, J.D., Senior Managing Editor, Arizona Law Review
- > Harvard University, B.A., Classics

CURRENT ROLE

- > Associate, Hagens Berman Sobol Shapiro LLP
- > Practice focuses on consumer and antitrust class actions as well as media and entertainment litigation

RECENT SUCCESS

- > Obtained court approval of \$400 million settlement to compensate Hyundai and Kia owners for misstatement of EPA fuel economy ratings. Settlement payments averaged \$353 for Hyundai owners and \$667 for Kia owners.
- > Obtained appellate reversal of judgment for defendant in multimillion-dollar business ownership dispute.

EXPERIENCE

- > Snell & Wilmer LLP 2009-2013
- > American Inns of Court Pegasus Scholar 2012: study of commercial, media, and privacy law with barristers and judges in the U.K.
- > U.S. District Court for the District of Arizona, Law Clerk to the Hon. Neil V. Wake 2008-2009
- > U.S. Court of Appeals for the Ninth Circuit, Law Clerk to the Hon. William C. Canby, Jr. 2007-2008

RECOGNITION

- > Super Lawyers, Rising Star: Class Action/Mass Tort 2015 - 2017
- > Arizona Foundation for Legal Services & Education, Top Pro Bono Attorneys in Arizona Award 2013

NOTABLE CASES

- > *In re Pre-Filled Propane Tank Antitrust Litigation*
- > *In re Hyundai & Kia Fuel Economy Litigation*
- > *Sheridan v. iHeartMedia; Sheridan v. Sirius XM and Pandora Media*
- > *Jim Brown v. Electronic Arts Inc.*
- > *In re NCAA Student-Athlete Name and Likeness Licensing Litigation*
- > *Antonick v. Electronic Arts Inc.*
- > *In re Swift Transportation Co., Inc.*
- > Obtained a published reversal of a deportation order in a hotly disputed immigration appeal before the U.S. Court of Appeals for the Ninth Circuit (pro bono)
- > Represented an international human rights organization as amicus curiae in the U.S. Supreme Court case *Moloney v. United States*, opposing the enforcement of a foreign law enforcement subpoena for confidential academic research in the U.S. (pro bono)

ASSOCIATE

John DeStefano

LEGAL ACTIVITIES

- > American Association for Justice
- > Program Chair (current), Treasurer (past), Lorna Lockwood American Inn of Court
- > Volunteer Lawyers Program of Arizona

PERSONAL INSIGHT

When John's great-grandfather came from Italy to Boston, he lost his life savings to a man he met named Charles Ponzi. A century later, John takes special pride in protecting the public against broad-based frauds and swindles and the corruption of honest enterprise.



ASSOCIATE

Steve W. Fimmel

Mr. Fimmel was a key member of the litigation team that won a judgment in Idaho Federal District Court involving claims exceeding \$400 million.

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YEARS OF EXPERIENCE

> 28

PRACTICE AREAS

> Complex Litigation

BAR ADMISSIONS

> Washington
> U.S. District Court, Eastern
District of Washington
> U.S. Court of Appeals, Ninth
Circuit

EDUCATION

> Lewis & Clark Law School,
J.D.
> University of Washington, B.A.,
Phi Beta Kappa

CURRENT ROLE

> Associate, Hagens Berman Sobol Shapiro LLP
> Focuses on high-value, document-intensive cases

EXPERIENCE

> Attorney, Oles, Morrison, Rinker & Baker where he was a key member of the litigation team that won a judgment in Idaho Federal District Court involving claims exceeding \$400 million. The court sustained an unprecedented termination for default against the Lockheed-Martin Corporation for breach of contract to remediate a nuclear waste site at the Idaho National Engineering Laboratory.
> Associate, Hanford Litigation Office in Seattle representing Hanford downwinders

NOTABLE CASES

> LMITCO v. LMAES
> Hanford Downwinders Litigation

PERSONAL INSIGHT

In a previous life, Mr. Fimmel was a sports anchor and reporter for KHQ-TV, Spokane's NBC affiliate. Through his senior year at the University of Washington and while attending law school at Lewis & Clark in Portland, Steve was the sports play-by-play and color broadcaster for Seattle's KCTS-TV on Seattle Sounder and Washington Husky basketball telecasts.



ASSOCIATE

Rachel E. Fitzpatrick

Ms. Fitzpatrick was a member of the trial team responsible for a \$5.25 million dollar jury verdict on behalf of an Ohio plaintiff who was badly burned while trying to rescue her paraplegic son.

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YEARS OF EXPERIENCE

> 7

PRACTICE AREAS

- > Complex Civil Litigation
- > Consumer Fraud
- > Mass Tort

BAR ADMISSIONS

- > Arizona

EDUCATION

- > Arizona State University, B.S., **magna cum laude**, 2007
- > Arizona State University Sandra Day O'Connor College of Law, J.D., 2011

CURRENT ROLE

- > Associate, Hagens Berman Sobol Shapiro LLP
- > Practice focuses on complex civil litigation and nationwide class actions, including consumer fraud and mass tort
- > Ms. Fitzpatrick worked on behalf of student-athlete plaintiffs in the highly publicized cases **Keller v. Electronic Arts** and **In re NCAA Student-Athlete Name and Likeness Licensing Litigation**. The cases allege that video game manufacturer Electronic Arts, the National Collegiate Athletic Association and the Collegiate Licensing Company violated state right of publicity laws and the NCAA's contractual agreements with student-athletes by using the names, images and likenesses of the student athletes in EA's NCAA-themed football and basketball video games.

RECENT SUCCESS

- > In March 2012, Ms. Fitzpatrick was a member of the trial team responsible for a \$5.25 million dollar jury verdict on behalf of an Ohio plaintiff who was badly burned while trying to rescue her paraplegic son from his burning home. The verdict is believed to be the largest in Columbiana County, Ohio history.

NOTABLE CASES

- > **Keller v. Electronic Arts Inc.**, U.S. Court of Appeals, Ninth Circuit, Case No. 10-15387
- > **In re: NCAA Student-Athlete Name and Likeness Licensing Litigation**, U.S. District Court, ND Cal., Case No. 3:09-CV-01967-CW
- > **Antonick v. Electronic Arts, Inc.**, U.S. District Court, ND Cal., Case No. 3:11-CV-01543-CRB

PERSONAL INSIGHT

Ms. Fitzpatrick spent three years as a professional NFL cheerleader for the Arizona Cardinals and traveled with the squad to Iraq, Kuwait and the United Arab Emirates to perform for troops stationed overseas.



ASSOCIATE

Catherine Y.N. Gannon

Super Lawyers magazine has recognized Ms. Gannon as a "Rising Star" in Washington state from 2016 to 2018.

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YEARS OF EXPERIENCE

> 10

PRACTICE AREAS

- > Securities and Antitrust
- > Consumer Protection

BAR ADMISSIONS

- > Washington
- > New York
- > Ontario (Canada)

EDUCATION

- > York University, Osgoode Hall Law School, Senior Editor, Osgoode Hall Law Journal J.D., 2008
- > Carleton University, Bachelor of Public Affairs and Policy Management, **summa cum laude**, 2005

CURRENT ROLE

- > Associate, Hagens Berman Sobol Shapiro LLP
- > Practice focuses on securities and antitrust matters, as well as nationwide consumer protection cases involving large corporations
- > Extensive experience working with expert witnesses, often in economic and other highly technical areas

NOTABLE CASES

- > **In re MyFord Touch Consumer Litigation**
- > **NCAA Grants-In-Aid Gap Antitrust Litigation**

EXPERIENCE

- > Weil, Gotshal and Manges LLP, New York, New York, Securities Litigation and Corporate Governance Group
- > McCarthy Tétrault LLP, Toronto, Canada, Complex Commercial Litigation Group
- > Department of Finance, Government of Canada, International Trade and Finance group with an emphasis on economic and trade negotiations at the G-20, IMF and the Paris Club

LEGAL ACTIVITIES

- > Director, Board of Directors, Eastside Legal Assistance Program (ELAP)
- > Volunteer, Legal Voice
- > Volunteer, Disability Rights Washington
- > Broad pro bono practice with an emphasis on healthcare and disability rights. Successfully served as lead counsel seeking access to specialized education programs for autistic students in the New York City public school district and has repeatedly advocated for prisoners with mental health needs.

PUBLICATIONS

- > Co-author of the American Bar Association's "A Practitioner's Guide to Class Actions – Vermont Chapter" (2017)
- > "Designing a New Playbook for the New Paradigm: Global Securities Litigation and Regulation," (2011) Harvard Law School Forum on Corporate Governance and Financial Regulation
- > "Legal Vulnerability of Bioethicists in Canada: Is a New Era Upon Us?" (2010) 30 Health Law in Canada 132
- > "The Threat of the Oppression Remedy to Reorganizing Insolvent Corporations," (2009) Annual Review of Insolvency Law 429 (with Stephanie Ben-Ishai)

PERSONAL INSIGHT

Ms. Gannon previously worked at leading law firms in both New York City and Toronto prior to joining Hagens Berman in Seattle. Outside of work, Ms. Gannon serves on the board of directors for the Eastside Legal Assistance Program, which provides pro bono civil legal services in the greater Seattle area. She has also volunteered with organizations such as Legal Voice, Disability Rights Washington, Advocates for Children of New York and The Innocence Project. A seasoned backpacker, Ms. Gannon once spent six months traveling to more than a dozen countries across five continents. She is fluent in French and can still pack a suitcase in less than 5 minutes.



ASSOCIATE

Anthea D. Grivas

Working on behalf of consumers, continuing a long-standing dedication to public interest legal advocacy.

CONTACT

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YEARS OF EXPERIENCE

> 17

PRACTICE AREAS

- > Consumer Protection
- > Anti-Trust
- > Civil and Human Rights

BAR ADMISSIONS

- > Washington

EDUCATION

- > University of Washington
School of Law, J.D., 2001
- > University of Washington, B.A.
Political Science, 1995

CURRENT ROLE

- > Associate, Hagens Berman Sobol Shapiro LLP
- > Significant complex multi-party litigation experience with an emphasis on anti-trust price-fixing, product liability and nationwide class action cases on behalf of consumers. Ms. Grivas develops successful litigation theories and strategies, drafts legal motions and handles all aspects of large-scale multi-firm case discovery.
- > Ms. Grivas' contributions to the firm have included:
 - Member of **In re Automotive Parts Antitrust Litigation** team
 - Drafted interrogatories and discovery motions, managed multi-firm review and oversaw in-house deposition preparation in **In re Toyota Motor Corp. Sudden, Unintended Acceleration** matter
 - Extensive discovery work in an anti-trust case brought against several of the world's largest manufacturers of TFT-LCD products
 - Part of team working on class-action litigation brought by collegiate student athletes who suffered concussions/traumatic brain injuries
 - Litigation against a large, publicly traded medical waste disposal company on behalf of small businesses
 - Nationwide class-action cases brought by homeowners with catastrophic property damage claims against makers of water connectors
 - Litigation involving the world's largest fruit and vegetable company, claiming it misled consumers about its environmental record

RECENT SUCCESS

- > **NCAA Concussions** – part of HB legal team whose efforts resulted in settlement providing medical-monitoring program for current and former student-athletes, sweeping changes to the NCAA's approach to concussion treatment and prevention, and a \$5 million concussion research fund.
- > **In re Toyota Motor Corp. Sudden, Unintended Acceleration** – part of HB legal team that obtained record settlement on behalf of auto purchasers.
- > **In re TFT-LCD (Flat Panel) Antitrust Litigation** – part of HB legal team that obtained settlement on behalf of TFT-LCD product purchasers.
- > **Trabakoolas v. Watts Water Technologies, Inc.** – part of HB legal team that obtained settlement on behalf of customers.
- > **Dole Bananas** – part of HB legal team whose efforts resulted in settlement on behalf of local communities in Guatemala.

ASSOCIATE

Anthea D. Grivas

RECOGNITION

- › Ms. Grivas has been recognized by the University of Washington's law school for her commitment to advocacy on behalf of the public interest, and was awarded the university's annual dean's list award for high scholarship.
- › Public Justice recognized the **In re Toyota Motor Corp. Sudden, Unintended Acceleration** team for its work on behalf of auto consumers.

EXPERIENCE

- › Ms. Grivas has a long-standing dedication to legal advocacy on behalf of traditionally underrepresented groups. She is a former co-chair of an organization that helps prepare Violence Against Women Act self-petitions on behalf of survivors of domestic violence, has represented refugees with disabilities in INS administrative proceedings, worked as an advocate for families receiving Temporary Assistance for Needy Families benefits, and has visited womens' shelters to conduct public assistance trainings.
- › As a summer law clerk, Ms. Grivas worked on *Arc of Washington vs. Quasim*, a significant case brought on behalf of individuals with developmental disabilities. She was tasked with researching and constructing a legal argument against the state of Washington's claim of deliberative process privilege, and her work helped expose a state audit report containing what the *Seattle Post-Intelligencer* described as "damning revelations" regarding the state's limited oversight of services for disabled individuals.
- › Ms. Grivas also has a strong technical background, incorporating over a decade of electronic discovery institutional knowledge, and has seven years of experience in litigation impacting the software industry, including work in the compliance phase of *US v. Microsoft*.

LEGAL ACTIVITIES

- › Northwest Immigrant Rights Project
- › Solid Ground/Fremont Public Association
- › Public Interest Law Association
- › Women's Law Caucus
- › Immigrant Families Advocacy Project
- › American Civil Liberties Union of Washington
- › KCBA Neighborhood Legal Clinics program

PUBLICATIONS

- › Author, "An Unreal Dream: The Impact of DNA Technology on the American Criminal Justice System," (DeNovo, XVI.IV, 2002)

NOTABLE CASES

- › **Toyota Motor Corp. Sudden, Unintended Acceleration**
- › **In re TFT-LCD flat panel litigation**
- › **NCAA Concussions**

PERSONAL INSIGHT

Ms. Grivas is a lifelong musician who has performed at the Northwest Folklife Festival, Northwest Orchestra Festival, the Nippon Kan theater and as principal violinist and concertmaster with a local symphony orchestra.



ASSOCIATE

Ben Harrington

Ben focuses on challenging fraudulent business practices and enforcing antitrust laws, drawing from his extensive experience representing both plaintiffs and defendants at all stages of litigation.

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YEARS OF EXPERIENCE

> 11

INDUSTRY EXPERIENCE

- > Antitrust Litigation
- > Consumer Rights
- > Pharmaceutical Fraud

BAR ADMISSIONS

- > California
- > New York

COURT ADMISSIONS

- > U.S. District Court for the Southern District of New York
- > U.S. District Court for the Eastern District of New York

CLERKSHIPS

- > Honorable Nina Gershon,
U.S. District Court for the Eastern District of New York,
2014-2016
- > Honorable Harris Hartz,
U.S. Court of Appeals, Tenth Circuit, 2008-2009

EDUCATION

- > University of California,
Hastings College of the Law,
J.D., **summa cum laude**, 2008
- > The Evergreen State College,
B.A., 2001

CURRENT ROLE

- > Associate, Hagens Berman Sobol Shapiro LLP

EXPERIENCE

- > Prior to joining Hagens Berman, Ben worked as a litigation associate in the New York office of Quinn Emanuel Urquhart & Sullivan LLP

PERSONAL INSIGHT

If Ben is not working you will probably find him chasing after his young daughter, noodling on a guitar or tending to his ever-growing stable of bicycles.



ASSOCIATE

Jeffrey A. Lang

Over 10 years of experience focused exclusively on review of discovery.

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YEARS OF EXPERIENCE

> 22

PRACTICE AREAS

- > Securities Litigation
- > Antitrust Litigation
- > Pharmaceutical Fraud
- > Consumer Protection

BAR ADMISSIONS

- > Washington

EDUCATION

- > University of Puget Sound
School of Law, J.D.
- > University of Washington, B.A.

CURRENT ROLE

- > Associate, Hagens Berman Sobol Shapiro LLP
- > Focuses on review of discovery in document intensive cases involving the firm's consumer protection, pharmaceutical fraud, antitrust and investor fraud litigation
- > 19 years of experience across a variety of practice areas
- > Focused on the review of discovery material since 2003

EXPERIENCE

- > Special project attorney, Preston Gates Ellis, where he was involved in the Microsoft Antitrust Litigation
- > Experienced in land-use, SEPA, and zoning and building compliance through his positions with Whalen & Company and the Law Offices of Dan Clawson

NOTABLE CASES

- > Microsoft Antitrust Litigation
- > E-books Antitrust Litigation
- > Average Wholesale Price Litigation
- > Oppenheimer Core Bond Fund & Champion Income Fund Litigation

PERSONAL INSIGHT

Jeff enjoys playing soccer, attending kickboxing classes, and working out.



ASSOCIATE

Kristie A. LaSalle

Ms. LaSalle graduated magna cum laude from Brooklyn Law School in 2012.

CONTACT

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kristiel@hbsslw.com

YEARS OF EXPERIENCE

> 6

PRACTICE AREAS

- > Antitrust Litigation
- > Pharmaceutical Fraud

CLERKSHIPS

- > Law Clerk, Staff Attorney's Office for the U.S. Court of Appeals for the Second Circuit

BAR ADMISSIONS

- > Massachusetts
- > New York

COURT ADMISSIONS

- > U.S. Supreme Court
- > U.S. Court of Appeals, First Circuit
- > U.S. Court of Appeals, Third Circuit
- > U.S. Tax Court
- > U.S. District Court for the District of Massachusetts

EDUCATION

- > Brooklyn Law School, JD, **magna cum laude**, 2012
- > Swarthmore College, BA 2006

CURRENT ROLE

- > Associate, Hagens Berman Sobol Shapiro LLP
- > Practice focuses on nationwide class-action litigation against pharmaceutical companies that violate antitrust, consumer protection and anti-fraud laws.

RECOGNITION

- > Order of the Barristers
- > Scholarly Journal Writing Award
- > John P. O'Boyle Memorial Endowed Scholarship, Carswell Scholarship, Dean's Merit Scholarship, Centennial Grant

EXPERIENCE

- > After law school, Ms. LaSalle served for two years as a law clerk in the Staff Attorney's Office for the U.S. Court of Appeals for the Second Circuit, where she handled motions practice and appeals of complex class-action litigation.
- > Prior to law school, Ms. LaSalle worked as a paralegal at a large Philadelphia law firm as a member of the legal team defending a pharmaceutical fraud class action.

PUBLICATIONS

- > Author, "The Other 99% of the Expressive Conduct Doctrine: the Occupy Wall Street Movement and the Importance of Recognizing the Contribution of Conduct to Speech," 18 Tex. J. on Civ. Rights & Civ. Liberties 1 (2013)
- > Author, "A Prescription for Change: Citizens United's Implications for Regulation of Off-Label Promotion of Prescription Pharmaceuticals," 19 J.L. Pol'y 867 (2011)

PERSONAL INSIGHT

Kristie filled her spare time during undergrad as a volunteer EMT in the suburbs of Philadelphia. She spent her days studying biology and chemistry, and her nights saving lives, running red lights and parallel parking a firetruck.



ASSOCIATE

Jessica R. MacAuley

Ms. MacAuley graduated cum laude from Northeastern University in 2005.

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YEARS OF EXPERIENCE

> 6

PRACTICE AREAS

- > Antitrust Litigation
- > Consumer Rights
- > Pharmaceutical Fraud

BAR ADMISSIONS

- > Massachusetts
- > District Court of
Massachusetts
- > Second Circuit Court of
Appeals

EDUCATION

- > Northeastern University, B.A.,
cum laude, 2005
- > The Pennsylvania State
University, Dickinson School of
Law, J.D., 2012

CURRENT ROLE

- > Associate, Hagens Berman Sobol Shapiro LLP
- > Practice focuses on nationwide antitrust class actions and consumer fraud
- > Instrumental in reaching a \$98 million settlement for direct purchasers of the immunosuppressant, Prograf
- > Co-lead class counsel for direct purchasers **In re: Solodyn Antitrust Litigation**, a multi-district litigation challenging anticompetitive conduct by pharmaceutical drug makers
- > Represents health benefit providers in the Ketek class litigation, currently on appeal in the Second Circuit

RECOGNITION

- > "Rising Star," Massachusetts Super Lawyers Magazine, 2015 - 2017

EXPERIENCE

- > During law school Ms. MacAuley was a certified legal intern for the Rural Economic Development Clinic, advising clients on Marcellus shale exploration land rights, FDA regulations for artisanal cheese makers and formation of corporate entities for dairy farmers.

NOTABLE CASES

- > **In re: Prograf Antitrust Litigation**

PERSONAL INSIGHT

Jessica has long been active in social justice movements, starting in kindergarten when she led an unsuccessful boycott of Columbus Day.



ASSOCIATE

Rio Pierce

A magna cum laude graduate of Harvard Law School, Rio focuses his practice on ensuring fair and free markets for the benefit of consumers.

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YEARS OF EXPERIENCE

> 5

PRACTICE AREAS

- > Consumer Protection
- > Intellectual Property

BAR ADMISSIONS

- > California

COURT ADMISSIONS

- > U.S. District Court for the Central District of California
- > U.S. District Court for the Northern District of California
- > U.S. District Court for the Southern District of California

CLERKSHIPS:

- > Honorable Jerome Farris of the U.S. Court of Appeals for the Ninth Circuit, 2013 - 2014

EDUCATION

- > Harvard Law School, **magna cum laude**, 2013
- > Duke University, **magna cum laude**, 2005

CURRENT ROLE

- > Associate, Hagens Berman Sobol Shapiro LLP

RECENT SUCCESS

- > Achieved favorable settlements for group of 80 tenants in tort suit against landlords for slum housing conditions.

RECOGNITION

- > Chayes Fellow, National Prosecuting Authority in Cape Town, South Africa
- > Teaching Fellow, Copyright EdX

EXPERIENCE

- > Prior to joining Hagens Berman, Mr. Pierce worked as an associate for two years at Munger, Tolles & Olson, where he gained significant experience in class action and complex commercial litigation. Mr. Pierce also did extensive pro bono work on immigration matters.
- > Law Clerk, U.S. Court of Appeals for the Ninth Circuit, Judge Jerome Farris, 2013-2014
- > Associate, Munger Tolles & Olson, 2014-2016

LEGAL ACTIVITIES

- > American Association for Justice

PUBLICATIONS

- > "A Heavy Hand or A Light Touch: What Force Will California's Anti-SLAPP Statute Have After Baral v. Schnitt?" California Litigation Review, 2015

PERSONAL INSIGHT

A proud California native, Rio loves exploring the whole state, especially Big Sur. Prior to law school, Rio worked at Miramax for several years and still loves a good indie film. In his free time, Rio enjoys making pies.



ASSOCIATE

Christopher R. Pitoun

Christopher R. Pitoun has focused on consumer litigation since graduating from law school and has gained broad experience representing individuals, municipalities and small businesses in all forms of complex litigation.

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YEARS OF EXPERIENCE

> 8

PRACTICE AREAS

- > Consumer Protection
- > Intellectual Property

BAR ADMISSIONS

- > California
- > U.S. District Court, Central District of California
- > U.S. District Court, Northern District of California
- > U.S. District Court, Southern District of California
- > U.S. District Court, Eastern District of California

EDUCATION

- > Loyola Law School, Los Angeles, J.D. 2011, Note and Comment Editor, Loyola of Los Angeles Entertainment Law Review
- > University of Chicago, M.A. 2005
- > University of Michigan, B.A., with High Honors, 2004
- > London School of Economics, General Course, 2003

CURRENT ROLE

- > Associate, Hagens Berman Sobol Shapiro LLP
- > Practice focuses on class actions and other complex litigation

EXPERIENCE

- > Associate, Girardi Keese, 2011-2014, where he gained extensive experience representing plaintiffs in business litigation involving copyright and trademark disputes, breach of contract claims and breach of fiduciary duty claims. He also worked on a number of nationwide class actions involving products liability matters in the pharmaceutical and construction industries.
- > Office of the Attorney General of California, Business and Tax Division, Winter 2010

LEGAL ACTIVITIES

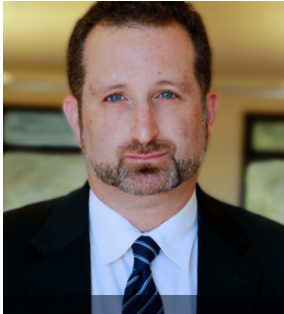
- > Federal Bar Association
- > American Association For Justice (AAJ)
- > Consumer Attorneys Association of Los Angeles (CAALA)

NOTABLE CASES

- > *Fiat Chrysler Gear Shifter Rollaway, Litigation*
- > *Countrywide Financial, et al. Pretextual Appraisal Litigation*
- > *EZconn Corp., Litigation*
- > *Students v. USC and Dr. Tyndall*

PERSONAL INSIGHT

- > Prior to attending law school, Chris taught English and French to high school students in China.
- > Chris later decided to become a lawyer while marketing the film "Michael Clayton."



ASSOCIATE

Benjamin J. Siegel

Mr. Siegel is an experienced litigator with a focus on antitrust law who has represented clients in state and federal courts, on appeals, as well as before arbitrators and governmental agencies, and has achieved significant settlements.

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YEARS OF EXPERIENCE

> 11

PRACTICE AREAS

> Antitrust Litigation

BAR ADMISSIONS

> California

COURT ADMISSIONS

> U.S. District Court for the Northern District of California
> U.S. District Court for the Eastern District of California
> U.S. Court of Appeals
> Ninth Circuit

CLERKSHIPS

> Hon. Thomas M. Reavley, U.S. Court of Appeals for the Fifth Circuit

EDUCATION

> The University of Texas School of Law, The University of Texas LBJ School of Public Affairs, J.D., M.P.A., Order of the Coif, High Honors, 2007
> Articles Editor, Texas Law Review; Texas Law Review Best Litigation Note, Volume 85; Texas Law Public Interest Fellowship; LBJ Foundation Award, First in Class
> Yale University, B.A. Political Science, **cum laude**, Phi Beta Kappa, 2000

CURRENT ROLE

> Associate, Hagens Berman Sobol Shapiro LLP

EXPERIENCE

> Following his work at Boies, Schiller & Flexner LLP in 2008-2009, Mr. Siegel has litigated cases on behalf of plaintiffs for the past seven years.

LEGAL ACTIVITIES

> Alameda County Bar Association

RECENT CASES

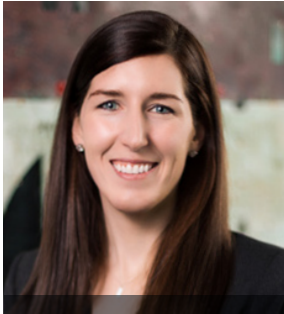
> *In re Optical Disk Drive Prods. Antitrust Litigation, No. 3:10-md-2143-RS (N.D. Cal.)*
> *In re NCAA Grant-In-Aid Antitrust Litigation, 4:14-md-02541-CW (N.D. Cal.)*
> *In re Resistors Antitrust Litigation, 5:15-cv-03820-JD (N.D. Cal.)*

PUBLICATIONS

> Benjamin Siegel, Constitutional Rights and the Counter-Majoritarian Dilemma (May 15, 2007) (unpublished Master's thesis, University of Texas at Austin).
> Benjamin Siegel, Note, Applying a "Maturity Factor" Without Compromising the Goals of the Class Action, 85 Texas L. Rev. 741 (2007) (Texas Law Review Best Litigation Note, Volume 85).
> Benjamin Siegel et al., Beyond the Numbers: Improving Postsecondary Success through a Central Texas High School Data Center, LBJ School of Public Affairs, Policy Research Report No. 148 (2005).
> Benjamin Siegel, California Must Protect Health Care for Medi-Cal Children, 15 Youth L. News 1 (2004), available at <http://www.youthlaw.org>.
> Jenny Brodsky, Jack Habib & Benjamin Siegel, Lessons for Long-Term Care Policy, World Health Organization, Publication No: WHO/NMH7CCL/02.1 (2002).
> Jenny Brodsky, Jack Habib, Miriam Hirschfeld & Benjamin Siegel, Care of the Frail Elderly in Developed and Developing Countries: the Experience and the Challenges, 14 Aging Clinical & Experimental Research 279 (2002).

PERSONAL INSIGHT

When not working to enforce the nation's antitrust laws, Mr. Siegel enjoys spending time with his wife and two young children in his hometown of Oakland, California. He also likes playing softball and pick-up basketball with his friends.



ASSOCIATE

Emilee Sisco

Ms. Sisco practices in the areas of sports litigation, antitrust and consumer protection. As a former Division I athlete, she has worked on the firm's cases against the NCAA, furthering the rights of college-athletes across the nation.

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YEARS OF EXPERIENCE

> 3

PRACTICE AREAS

> Antitrust Litigation
> Consumer Rights
> Sports Litigation

BAR ADMISSIONS

> Washington

COURT ADMISSIONS

> U.S. District Court, Western
District of Washington

EDUCATION

> Seattle University School of
Law, J.D.
> University of Oregon, B.A.

CURRENT ROLE

> Associate, Hagens Berman Sobol Shapiro LLP

EXPERIENCE

> Law Clerk for Washington State Office of the Attorney General – Antitrust Division

LEGAL ACTIVITIES

> During 2L and 3L years in law school, Ms. Sisco was a fulltime volunteer intern for the WSBA Moderate Means Program. She volunteered more than 250 hours of pro bono service during law school.

RECENT CASES

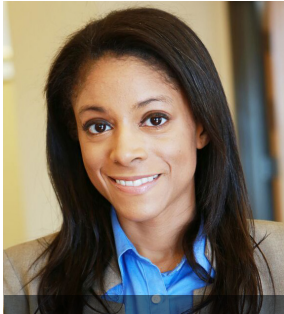
> *Namoff v. Fleishman & Shapiro, P.C. et al*
> *In re: National Prescription Opiate Litigation*
> *In re: NCAA Athletic Grant-In-Aid Cap Antitrust Litigation*
> *In re: General Motors LLC Ignition Switch Litigation*

LANGUAGES

> Latin

PERSONAL INSIGHT

Ms. Sisco was a Division I volleyball athlete for the University of Oregon and University of Colorado. She was a member of the U.S. Women's Volleyball A3 team and was also a three-sport varsity athlete throughout high school, earning top 10 state finishes in two events at the WIAA Track & Field Championship.



ASSOCIATE

Danielle Smith

Ms. Charles is an investor and consumer rights attorney with a background in litigation and public entities.

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daniellec@hbsslw.com

YEARS OF EXPERIENCE

> 7

BAR ADMISSIONS

> California

PRACTICE AREAS

> Class Actions
> Complex Civil Litigation
> Consumer Rights
> Investor Fraud
> Securities

COURT ADMISSIONS

> U.S. District Court for the
Northern District of California
> U.S. District Court for the
Southern District of California

EDUCATION

> Harvard Law School, J.D.,
2012
> Columbia University, B.A.,
2009

CURRENT ROLE

> Associate, Hagens Berman Sobol Shapiro

RECENT CASES

> BlackRock iShares ETF August 24, 2015 Flash Crash Litigation
> **Colman et al. v. Theranos, Inc., et al.**, Case Number: 5:16-cv-06822

ACTIVITIES

> Oakland NAACP – Legal Redress Chair
> Board Member, Conservatory of Vocal and Instrumental Arts, Oakland, CA

LEGAL ACTIVITIES

> Member, Alameda County Bar Association

PRESENTATIONS

> California School Boards Association – Annual Workshop for California Council of School Attorneys,
December 2015.

PERSONAL INSIGHT

When she's not working tirelessly to protect her clients' interests, Danielle enjoys biking, movies and action/RPG gaming.



ASSOCIATE

Shelby R. Smith

Shelby has dedicated her career to serving vulnerable victims of violent crimes.

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YEARS OF EXPERIENCE

> 17

PRACTICE AREAS

- > Personal Injury Litigation
- > Sports Concussions
- > Social Work Negligence
- > Nursing Home/Adult Family Home Negligence
- > Daycare/School Negligence
- > Civil Rights
- > Privacy Rights
- > Consumer Protection

BAR ADMISSIONS

- > Washington
- > U.S. District Court, Western District of Washington

EDUCATION

- > Seattle University, J.D., Member, Public Interest Law Society, 2000
- > University of Washington, B.A., cum laude, Sociology, 1996

CURRENT ROLE

- > Associate, Hagens Berman Sobol Shapiro LLP
- > Prosecutes personal injury cases and class action cases on behalf of consumers
- > Currently represents student-athletes in personal injury litigation pertaining to concussions/traumatic brain injuries suffered during sporting activities
- > Currently represents victims who have suffered severe personal injuries due to their mothers ingesting thalidomide during pregnancy in the late 1950's and early 1960's without knowing that the drug had not been approved by the FDA
- > She continues to represent victims of domestic violence and sexual assault to obtain protection orders so that their abusers cannot have any contact with them
- > Also represents crime victims who wish to keep their counseling records private during criminal Proceedings

NOTABLE CASES

- > Volkswagen Emissions Defect Litigation
- > Mercedes BlueTEC Emissions Litigation
- > GM Ignition Switch Recall
- > Corvette Overheating
- > Harvey Weinstein Sexual Harassment RICO
- > USC and Dr. George Tyndall Sexual Abuse

EXPERIENCE

- > Litigation associate, Williams Kastner, where she planned and executed a civil caseload involving defense of physicians, hospitals, dentists and other healthcare providers. While at Williams Kastner, Ms. Smith developed successful litigation strategies, handled case discoveries, secured depositions, managed trial preparation, drafted and argued legal motions, and conducted voir dire and jury trials.
- > Prior to working at Hagens Berman, Ms. Smith worked for 10 years at the King County Prosecuting Attorney's Office, working on cases in a diverse set of areas, including the sexual assault, violent crime, district court, domestic violence, felony filing and special drug units. During her 10 years as a prosecutor, Ms. Smith tried over 100 felony jury trials. She spent five years in the Domestic Violence Unit and Special Assault Unit where she handled hundreds of cases involving physical and sexual abuse of children and adults.

LEGAL ACTIVITIES

- > Consistent commitment to pro bono work and services for victims of domestic violence and sexual assault

PERSONAL INSIGHT

Shelby Smith was born and raised in Seattle, and graduated from Garfield High School—which also boasts Quincy Jones and Jimi Hendrix as alums. She has a passion for live music and fashion, and has never met a sport she did not enjoy competing in: while raising three daughters and practicing law, Shelby plays on competitive indoor and outdoor soccer teams, and runs at least one marathon and two half-marathons every year.



ASSOCIATE

Zoran (Zoki) Tasic

Zoki is an accomplished legal writer, having written extensively for all of the judges of the Seventh Circuit during his three-year term as a judicial staff clerk. He also wrote numerous winning briefs during his time as a trial attorney with the DOJ's Antitrust Division.

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YEARS OF EXPERIENCE

> 5

BAR ADMISSIONS

> Illinois

COURT ADMISSIONS

- > U.S. District Court for the Northern District of Illinois
- > U.S. Court of Appeals for the Seventh Circuit

CLERKSHIPS

- > Staff Law Clerk, U.S. Court of Appeals for the Seventh Circuit, 2013-16

EDUCATION

- > Washington University School of Law, J.D., **magna cum laude**, 2013
- > Washington University in St. Louis, B.S., Electrical Engineering, **magna cum laude**, 2006 and A.B., Music, **summa cum laude**, 2006

CURRENT ROLE

- > Associate, Hagens Berman Sobol Shapiro LLP

EXPERIENCE

- > Trial Attorney at the U.S. Department of Justice, Antitrust Division, 2016-18
- > Staff Law Clerk, U.S. Court of Appeals for the Seventh Circuit, 2013-16
- > During law school:
 - Washington University Appellate Clinic, 2012-13
 - Legal Practice Teaching Assistant for Prof. Ann Davis Shields, Washington University School of Law, 2012-13
 - Summer Law Clerk, American Civil Liberties Union of Eastern Missouri, Summer 2012
 - Consumer Unit Intern, Legal Services of Eastern Missouri, Spring 2012
 - St. Louis City Trial Division Intern, Legal Services of Eastern Missouri, Summer 2011

PUBLICATIONS

- > **Reforming Richard Posner: The Former Federal Judge Needs to Overhaul His Assessment of the Seventh Circuit's Staff Attorney Program and Correct the Errors in His Book (Oct. 2017), Summary**
- > **Note, The Speaker the Court Forgot: Re-Evaluating NLRA Section 8(b)(4)(B)'s Secondary Boycott Restrictions in Light of Citizens United and Sorrell, 90 WASH. U. L. REV. 237 (2012)**

PRESENTATIONS

- > **How to Write Well and Influence People** (Madison, Wis. Aug. 2017): Presentation on legal writing to staff attorneys of Legal Action of Wisconsin's Elder Rights Project.
- > **Procedural Issues in Pro Se Litigation: Dismissal of an Indigent Pro Se's Complaint for Non-Payment of Fees** (Chicago, Ill. Mar. 2016): Presentation to all pro se law clerks employed by federal district courts within the Seventh Circuit.

LANGUAGES

- > Proficient in Bosnian, Croatian, and Serbian

PERSONAL INSIGHT

Zoki enjoys photography and reading nonfiction. He recently began relearning to play the piano, an instrument he briefly studied in college.



ASSOCIATE

Jessica Thompson

Jessica began her legal career at an AMLaw 100 firm representing Fortune-ranked corporations in antitrust, intellectual property and financial services industries. Though grateful for the intense training that those matters provided, Jessica is proud to now be working for the good guys.

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jessicat@hbsslaw.com

YEARS OF EXPERIENCE

> 9

PRACTICE AREAS

- > Commercial Litigation
- > Class Actions

BAR ADMISSIONS

- > District of Columbia
- > Maryland
- > Washington

EDUCATION

- > University of Baltimore School of Law, Baltimore, Maryland, J.D. **magna cum laude**, 2010
 - Honors: Class Rank 21/333; G.P.A. 3.68
 - Honors: Highest Grade in the Class Award, Evidence
 - Law Review: Staff Editor, University of Baltimore Law Review
- > University of Baltimore, Baltimore, Maryland, B.A. **cum laude**, 2005
 - Major: Community Studies and Civic Engagement

CURRENT ROLE

- > Associate, Hagens Berman Sobol Shapiro LLP
- > Practice focuses on complex consumer protection cases, primarily within the realms of automotive and emissions litigation
- > Ms. Thompson is currently involved in many of the firm's high-profile auto cases, including litigation against General Motors for faulty ignition switches that are linked to more than 120 fatalities, and emissions-cheating cases brought against Mercedes, Fiat Chrysler and GM. She worked on the Volkswagen CleanDiesel emissions lawsuits brought on behalf of consumers and of franchise dealers.

RECENT SUCCESS

- > Conducting internal investigations on behalf of financial services company into compliance with business conduct rules such as trade allocation and trade errors
- > Defending mobile merchandiser against consumer class actions filed throughout the country alleging unauthorized charges to cell phone customers
- > Representing health insurance providers in a multidistrict antitrust suit consolidated in the Northern District of Alabama
- > Represented chemical manufacturer in trade secret and contract case against competitor. Won temporary restraining order in Michigan state court.
- > Defended international hospitality company in contract suit challenging its national sales program

EXPERIENCE

- > Crowell & Moring LLP, Washington, D.C., Associate, 2011 - 2014
- > Cadwalader, Wickersham & Taft LLP, Washington, D.C., Associate, 2011
- > Howrey LLP, Washington, D.C., Litigation Associate, 2010 - 2011
- > Howrey LLP, Washington, D.C., Summer Associate, 2009
- > Montgomery County State's Attorney's Office, Rockville, MD, Student Attorney, 2010

ACTIVITIES

- > Webinar: "Garden Leaves and Other Strategies to Protect Trade Secrets When Losing Employees," Crowell & Moring, March 28, 2013 - Present
- > Workshop: "Don't Sign that Yet!," Crowell & Moring, Washington, D.C., March 5, 2013 - Present

PUBLICATIONS

- > "The ITC Can Play a Critical Role in Combating International Trade Secret Theft," Intellectual Property Today, Jan. 20, 2012
- > Client Alerts & Newsletters:

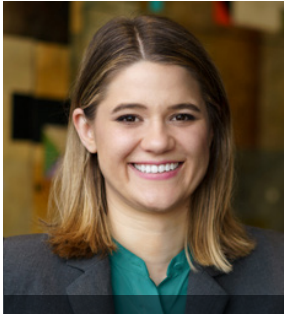
ASSOCIATE

Jessica Thompson

- "Consensus Grows as Congress Continues to Refine Its Efforts to Create a Federal Civil Cause of Action For Certain Trade Secret Theft," Regulatory Alert (May 12, 2014)
- "Federal Trade Secret Reform Continues With Two New Attempts to Improve Protection," Regulatory Alert (July 22, 2013)
- "Supreme Court Rejects Attempt by Class Action Plaintiff to Plead Around Federal Court Jurisdiction," (Mar. 22, 2013)

PERSONAL INSIGHT

Jessica comes from a working-class Baltimore family. Though she has dutifully relearned the pronunciation of words like water (not "wooder") and wash (not "warsh"), she continues to inquire about "dem O's" and refuses to participate in the singing of "Shout" at the seventh-inning stretch. It's an abomination.



ASSOCIATE

Breanna Van Engelen

Breanna advocates on behalf of consumers in complex litigation, including in antitrust cases and cases involving unfair competition.

CONTACT

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Suite 2000
Seattle, WA 98101

(206) 623-7292 office
(206) 623-0594 fax
breannav@hbsslaw.com

PRACTICE AREAS

- > Antitrust Litigation
- > Consumer Rights

BAR ADMISSIONS

- > Washington

EDUCATION

- > University of Michigan Law School, J.D.
- > Washington State University, B.A., **magna cum laude**

CURRENT ROLE

- > Associate, Hagens Berman Sobol Shapiro LLP

EXPERIENCE

- > Prior to joining Hagens Berman, Breanna was an associate at K&L Gates LLP in Seattle, where she focused on Internet and technology law. Breanna took one of the first electronic impersonation cases in Washington state to trial. At trial, she secured an \$8.9 million dollar verdict for her clients – the largest verdict ever awarded to a non-celebrity in an electronic impersonation/invasion of privacy case.

MEDIA INTERVIEWS

- > Brooke Jarvis, **How One Woman's Digital Life Was Weaponized Against Her**, WIRED (Nov. 11, 2017, 6:00 AM) (<https://www.wired.com/story/how-one-womans-digital-life-was-weaponized-against-her/>)

PRESENTATIONS

- > "Taking the Distribution of Intimate Images to Trial," Presentation at 9th Annual Domestic Violence Symposium, Seattle, WA, Sept. 2017

PERSONAL INSIGHT

Breanna grew up in Idaho, where she learned to ski in the winter and race horses on mountain trails in the summer. Before becoming an attorney, Breanna taught at a pre-school in eastern Washington. When she's not working, you can find Breanna on her parents' ranch in Texas, taking care of the land and snuggling animals.



ASSOCIATE

Mark Vazquez

During law school, Mark served as an editor for the DePaul Law Review, graduated from the top of his class, and earned the CALI Excellence for the Future Award in all five of his legal writing and trial advocacy courses.

CONTACT

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Chicago, IL 60611

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(708) 628-4950 fax
markv@hbsslaw.com

BAR ADMISSIONS

> Illinois

CLERKSHIPS

> Hon. John Z. Lee, Northern
District of Illinois
> Hon. Jesse G. Reyes, Illinois
Appellate Court, First District

EDUCATION

> DePaul University College of
Law, J.D., **summa cum laude**,
2012
> Editor, DePaul Law Review
> University of Chicago, B.A.,
2006

CURRENT ROLE

> Associate, Hagens Berman Sobol Shapiro LLP

EXPERIENCE

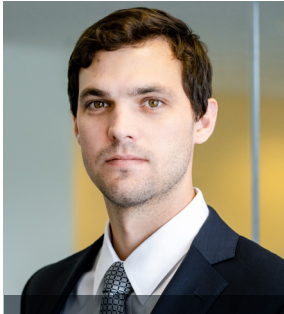
> Mark comes to Hagens Berman with a variety of clerkship experience, having clerked for both Judge John Z. Lee at the federal trial level and Justice Jesse G. Reyes at the state appellate level.
> During law school, Mark served as an editor for the DePaul Law Review, graduated from the top of his class, and earned the CALI Excellence for the Future Award in all five of his legal writing and trial advocacy courses.

PUBLICATIONS

> **People v. Kladis and the Illinois Courts' Treatment of Evidence Spoliation by Law Enforcement**, Illinois State Bar Association Criminal Justice Newsletter, Vol. 56, No. 1 (August 2012)

PERSONAL INSIGHT

An avid musician, Mark has been playing bass and guitar for various rock, blues, jazz, and country acts since he was in grade school. You can frequently hear him alongside his father at bar association events throughout Chicago—that is, should you be able to hear anything in a crowded room full of lawyers.



ASSOCIATE

Bradley J. Vettraiño

Mr. Vettraiño is committed to challenging corporate misconduct and has represented institutional and individual plaintiffs in numerous complex class actions across the country.

CONTACT

55 Cambridge Parkway
Suite 301
Cambridge, MA 02142

(617) 482-3700 office
(617) 482-3003 fax
bradleyv@hbslaw.com

BAR ADMISSIONS

- > Illinois
- > Massachusetts
- > Missouri

COURT ADMISSIONS

- > U.S. District Court, District of Massachusetts
- > U.S. District Court, Southern District of Illinois

EDUCATION

- > Washington University in St. Louis School of Law, J.D., 2013
- > Metropolitan State University of Denver, B.A., 2009

CURRENT ROLE

- > Associate, Hagens Berman Sobol Shapiro LLP

EXPERIENCE

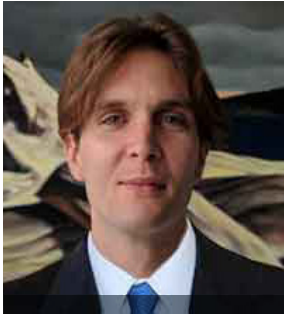
- > Associate at a nationwide class-action firm, where he prosecuted numerous securities, merger and acquisition, and consumer class actions on behalf of both individuals and large public pension funds.
- > After graduating from Washington University in St. Louis School of Law in 2013, Mr. Vettraiño worked for two preeminent toxic tort and products liability firms representing individuals harmed by corporate negligence and greed.

AWARDS

- > Upon graduating law school, Mr. Vettraiño received the Dan Carter-Earl Tedrow Memorial Award, as the student who most embodied the aims of the legal profession.

PERSONAL INSIGHT

Originally from Colorado, Mr. Vettraiño has adapted to hiking and snowboarding in New England. He enjoys cooking creative meals and listening to vinyl records in his spare time.



ASSOCIATE

Ted Wojcik

Ted is devoted to working on behalf of those harmed by corporate misconduct, and has experience advocating for individuals in several contexts.

CONTACT

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tedw@hbsslw.com

BAR ADMISSIONS

› Georgia

CLERKSHIPS

› Judge Mark H. Cohen, U.S. District Court for the Northern District of Georgia, Atlanta, GA, 2016-2018
› Judge Marjorie Allard, Alaska Court of Appeals, Anchorage, AK, 2015-2016

EDUCATION

› Yale Law School, J.D., 2015
› Dartmouth College, A.B., 2011,
magna cum laude

CURRENT ROLE

› Associate, Hagens Berman Sobol Shapiro LLP

EXPERIENCE

› Prior to joining Hagens Berman, Ted served as a clerk to U.S. District Judge Mark H. Cohen, and prior to that, for Judge Marjorie Allard in the Alaska Court of Appeals.
› During law school, Ted interned for the Alaska Public Defender Agency in Palmer, Alaska, and the New Orleans City Attorney's Office. He also worked as a student attorney in the landlord/tenant and immigration legal services clinics, and was an editor for the Yale Law Journal.
› Before law school, Ted worked for a year as a high school teacher in the Marshall Islands.

PERSONAL INSIGHT

A Maine native and recent Seattle transplant, Ted is working hard to master the intricacies of composting and to remember that the ocean lies to the west now, not the east.

1 Steve W. Berman (*Pro Hac Vice*)
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Facsimile: (206) 623-0594
4 Email: steve@hbsslaw.com

5 Robert B. Carey (*Pro Hac Vice*)
Michella A. Kras (*Pro Hac Vice*)
6 HAGENS BERMAN SOBOL SHAPIRO LLP
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7 Phoenix, Arizona 85003
Telephone: (602) 840-5900
8 Facsimile: (602) 840-3012
Email: rob@hbsslaw.com
9 michellak@hbsslaw.com

10 *Attorneys for Plaintiff*

11 UNITED STATES DISTRICT COURT
12 NORTHERN DISTRICT OF CALIFORNIA
13 SAN FRANCISCO DIVISION

14 VICKY MALDONADO AND JUSTIN CARTER,
15 individually and on behalf of themselves and all
16 others similarly situated,

17 Plaintiffs,

18 v.

19 APPLE INC., APPLCARE SERVICE
20 COMPANY, INC., AND APPLE CSC, INC.

21 Defendants.

No. 3:16-cv-04067-WHO

Related Case:
English v. Apple Inc., et al.
Case No. 3:14-cv-01619-WHO

**DECLARATION OF MICHELLA A.
KRAS IN SUPPORT OF PLAINTIFFS'
AMENDED MOTION FOR CLASS
CERTIFICATION**

Hearing: May 15, 2019
Time: 2:00 p.m.
Judge: William H. Orrick
Courtroom: 2, 17th Floor

1 I, Michella Kras, declare as follows:

2 1. I am an attorney duly licensed to practice before the courts of the State of Arizona,
3 and admitted *pro hac vice* to this Court. I am of counsel with the law firm of Hagens Berman
4 Sobol Shapiro LLP and have appeared in this case as one of the counsel of record for Plaintiffs in
5 the above-entitled action. I have personal knowledge of the matters stated herein and, if called
6 upon, I could and would competently testify thereto.

7 2. I submit this declaration on behalf of Plaintiffs in support of their Amended Motion
8 For Class Certification.

9 3. Attached hereto as Exhibit A are true and correct copies of Apple One (1) Year
10 Limited Warranties for these periods:

- 11 a. September 12, 2012 to March 27, 2013
- 12 b. March 28, 2013 to February 3, 2016
- 13 c. February 4, 2016 to August 26, 2016
- 14 d. August 27, 2016 to July 13, 2018
- 15 e. July 13, 2018 to Present.

16 4. I pulled the Limited Warranties from the Apple's website at:
17 <https://www.apple.com/legal/warranty/products/ios-warranty-document-us.html>, last visited
18 February 22, 2019. These are true and accurate representations of what Apple purports to be its
19 Limited Warranty.

20 5. In anticipation of mediation, the parties agreed that Apple would produce limited
21 return rate data. Because the case has not settled, Plaintiffs will request more robust return rate data
22 as set forth in the Expert Report of Dr. Robert Bardwell.

23 I declare under penalty of perjury under the laws of the United States of America that the
24 foregoing is true and correct.

25 Executed this 28th day of February, 2019, at Phoenix, Arizona.

26
27 
28 Michella A. Kras

EXHIBIT A

View Warranty version

< February 04, 2016 - August 26, 2016 March 28, 2013 - February 03, 2016 September 12, 2012 - March 27, 2013

Your Hardware Warranty

IMPORTANT: BY USING YOUR iPhone, iPad or iPod PRODUCT YOU ARE AGREEING TO BE BOUND BY THE TERMS OF THE APPLE ONE (1) YEAR LIMITED WARRANTY ("WARRANTY") AS SET OUT BELOW.

DO NOT USE YOUR PRODUCT UNTIL YOU HAVE READ THE TERMS OF THE WARRANTY.. IF YOU DO NOT AGREE TO THE TERMS OF THE WARRANTY, DO NOT USE THE PRODUCT AND RETURN IT WITHIN THE RETURN PERIOD STATED IN APPLE'S RETURN POLICY (FOUND AT www.apple.com/legal/sales_policies/) TO THE APPLE OWNED RETAIL STORE OR THE AUTHORIZED DISTRIBUTOR WHERE YOU PURCHASED IT FOR A REFUND.

Apple One (1) Year Limited Warranty – iOS
For Apple Branded Product Only

HOW CONSUMER LAW RELATES TO THIS WARRANTY

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY HAVE OTHER RIGHTS THAT VARY FROM STATE TO STATE (OR BY COUNTRY OR PROVINCE). OTHER THAN AS PERMITTED BY LAW, APPLE DOES NOT EXCLUDE, LIMIT OR SUSPEND OTHER RIGHTS YOU MAY HAVE, INCLUDING THOSE THAT MAY ARISE FROM THE NONCONFORMITY OF A SALES CONTRACT. FOR A FULL UNDERSTANDING OF YOUR RIGHTS YOU SHOULD CONSULT THE LAWS OF YOUR COUNTRY, PROVINCE OR STATE.

WARRANTY LIMITATIONS SUBJECT TO CONSUMER LAW

TO THE EXTENT PERMITTED BY LAW, THIS WARRANTY AND THE REMEDIES SET FORTH ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, REMEDIES AND CONDITIONS, WHETHER ORAL, WRITTEN, STATUTORY, EXPRESS OR IMPLIED. APPLE DISCLAIMS ALL STATUTORY AND IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND WARRANTIES AGAINST HIDDEN OR LATENT DEFECTS, TO THE EXTENT PERMITTED BY LAW. IN SO FAR AS SUCH WARRANTIES CANNOT BE DISCLAIMED, APPLE LIMITS THE DURATION AND REMEDIES OF SUCH WARRANTIES TO THE DURATION OF THIS EXPRESS WARRANTY AND, AT APPLE'S OPTION, THE REPAIR OR REPLACEMENT SERVICES DESCRIBED BELOW. SOME STATES (COUNTRIES AND PROVINCES) DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY (OR CONDITION) MAY LAST, SO THE LIMITATION DESCRIBED ABOVE MAY NOT APPLY TO YOU.

WHAT IS COVERED BY THIS WARRANTY?

Apple Inc. of One Infinite Loop, Cupertino, California, U.S.A. 95014 ("Apple") warrants the Apple-branded iPhone, iPad or iPod hardware product and accessories contained in the original packaging ("Apple Product") against defects in materials and workmanship when used normally in accordance with Apple's published guidelines for a period of ONE (1) YEAR from the date of original retail purchase by the end-user purchaser ("Warranty Period"). Apple's published guidelines include but are not limited to information contained in technical specifications, user manuals and service communications.

WHAT IS NOT COVERED BY THIS WARRANTY?

This Warranty does not apply to any non-Apple branded hardware products or any software, even if packaged or sold with Apple hardware. Manufacturers, suppliers, or publishers, other than Apple, may provide their own warranties to you – please contact them for further information. Software distributed by Apple with or without the Apple brand (including, but not limited to system software) is not covered by this Warranty. Please refer to the licensing agreement accompanying the software for details of your rights with respect to its use. Apple does not warrant that the operation of the Apple Product will be uninterrupted or error-free. Apple is not responsible for damage arising from failure to follow instructions relating to the Apple Product's use.

This Warranty does not apply: (a) to consumable parts, such as batteries or protective coatings that are designed to diminish over time, unless failure has occurred due to a defect in materials or workmanship; (b) to cosmetic damage, including but not limited to scratches, dents and broken plastic on ports; (c) to damage caused by use with another product; (d) to damage caused by accident, abuse, misuse, liquid contact, fire, earthquake or other external cause; (e) to damage caused by operating the Apple Product outside Apple's published guidelines; (f) to damage caused by service (including upgrades and expansions) performed by anyone who is not a representative of Apple or an Apple Authorized Service Provider ("AASP"); (g) to an Apple Product that has been modified to alter functionality or capability without the written permission of Apple; (h) to defects caused by normal wear and tear or otherwise due to the normal aging of the Apple Product, or (i) if any serial number has been removed or defaced from the Apple Product.

IMPORTANT RESTRICTION FOR iPhone AND iPad SERVICE.

Apple may restrict warranty service for iPhone and iPad to the country where Apple or its Authorized Distributors originally sold the device.

YOUR RESPONSIBILITIES

YOU SHOULD MAKE PERIODIC BACKUP COPIES OF THE INFORMATION CONTAINED ON THE APPLE PRODUCT STORAGE MEDIA TO PROTECT THE CONTENTS AND AS A PRECAUTION AGAINST POSSIBLE OPERATIONAL FAILURES.

Before receiving warranty service, Apple or its agents may require that you furnish proof of purchase details, respond to questions designed to assist with diagnosing potential issues and follow Apple's procedures for obtaining warranty service. Before submitting your Apple Product for warranty service you should maintain a separate backup copy of the contents of its storage media, remove all personal information that you want to protect and disable all security passwords.

DURING WARRANTY SERVICE THE CONTENTS OF THE STORAGE MEDIA WILL BE DELETED AND REFORMATTED. APPLE AND ITS AGENTS ARE NOT RESPONSIBLE FOR ANY LOSS OF SOFTWARE PROGRAMS, DATA OR OTHER INFORMATION CONTAINED ON THE STORAGE MEDIA OR ANY OTHER PART OF THE APPLE PRODUCT SERVICED.

Following warranty service your Apple Product or a replacement device will be returned to you as your Apple Product was configured when originally purchased, subject to applicable updates. Apple may install system software updates as part of warranty service that will prevent the Apple Product from reverting to an earlier version of the system software. Third party applications installed on the Apple Product may not be compatible or work with the Apple Product as a result of the system software update. You will be responsible for reinstalling all other software programs, data and information. Recovery and reinstallation of other software programs, data and information are not covered under this Warranty.

Important: Do not open the Apple Product. Opening the Apple Product may cause damage that is not covered by this Warranty. Only Apple or an AASP should perform service on this Apple Product.

WHAT WILL APPLE DO IN THE EVENT THE WARRANTY IS BREACHED?

If during the Warranty Period you submit a valid claim to Apple or an AASP, Apple will, at its option, (i) repair the Apple Product using new or previously used parts that are equivalent to new in performance and reliability, (ii) replace the Apple Product with a device that is at least functionally equivalent to the Apple Product and is formed from new and/or previously used parts that are equivalent to new in performance and reliability, or (iii) exchange the Apple Product for a refund of your purchase price.

Apple may request that you replace certain user-installable parts or Apple Products. A replacement part or Apple Product, including a user-installable part that has been installed in accordance with instructions provided by Apple, assumes the remaining term of the Warranty or ninety (90) days from the date of replacement or repair, whichever provides longer coverage for you. When an Apple Product or part is replaced or a refund provided, any replacement item becomes your property and the replaced or refunded item becomes Apple's property.

HOW TO OBTAIN WARRANTY SERVICE?

Please access and review the online help resources described below before seeking warranty service. If the Apple Product is still not functioning properly after making use of these resources, please contact an Apple representative or, if applicable, an Apple owned retail store ("Apple Retail") or AASP, using the information provided below. An Apple representative or AASP will help determine whether your Apple Product requires service and, if it does, will inform you how Apple will provide it. When contacting Apple via telephone, other charges may apply depending on your location.

Online information with details on obtaining warranty service is provided below.

WARRANTY SERVICE OPTIONS

Apple will provide warranty service through one or more of the following options:

(i) Carry-in service. You may return your Apple Product to an Apple Retail or AASP location offering carry-in service. Service will be performed at the location, or Apple Retail or an AASP may send your Apple Product to an Apple Repair Service ("ARS") location to be serviced. Once you are notified that service is complete, you will promptly retrieve the Apple Product from the Apple Retail or AASP location, or the Apple Product will be sent directly to your location from the ARS location.

(ii) Mail-in service. If Apple determines that your Apple Product is eligible for mail-in service, Apple will send you prepaid waybills and if applicable, packaging material, so that you may ship your Apple Product to an ARS or AASP location in accordance with Apple's instructions. Once service is complete, the ARS or AASP location will return the Apple Product to you. Apple will pay for shipping to and from your location if all instructions are followed.

(iii) Do-it-yourself (DIY) parts service. DIY parts service allows you to service your own Apple Product. If DIY parts service is available in the circumstances, the following process will apply.

(a) Service where Apple requires return of the replaced Apple Product or part. Apple may require a credit card authorization as security for the retail price of the replacement Apple Product or part and applicable shipping costs. If you are unable to provide credit card authorization, DIY parts service may not be available to you and Apple will offer alternative arrangements for service. Apple will ship a replacement Apple Product or part to you with installation instructions, if applicable, and any requirements for the return of the replaced Apple Product or part. If you follow the instructions, Apple will cancel the credit card authorization, so you will not be charged for the Apple Product or part and shipping to and from your location. If you fail to return the replaced Apple Product or part as instructed or return a replaced Apple Product or part that is ineligible for service, Apple will charge your credit card for the authorized amount.

(b) Service where Apple does not require return of the replaced Apple Product or part. Apple will ship you free of charge a replacement Apple Product or part accompanied by instructions on installation, if applicable, and any requirements for the disposal of the replaced Apple Product or part.

(c) Apple is not responsible for any labor costs you incur relating to DIY parts service. Should you require further assistance, contact Apple at the telephone number listed below.

Apple reserves the right to change the method by which Apple may provide warranty service to you, and your Apple Product's eligibility to receive a particular method of service. Service will be limited to the options available in the country where service is requested. Service options, parts availability and response times may vary according to country. You may be responsible for shipping and handling charges if the Apple Product cannot be serviced in the country it is in. If you seek service in a country that is not the original country of purchase, you will comply with all applicable import and export laws and regulations and be responsible for all custom duties, V.A.T. and other associated taxes and charges. Where international service is available, Apple may repair or replace Apple Products and parts with comparable Apple Product and parts that comply with local standards.

LIMITATION OF LIABILITY

EXCEPT AS PROVIDED IN THIS WARRANTY AND TO THE MAXIMUM EXTENT PERMITTED BY LAW, APPLE IS NOT RESPONSIBLE FOR DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OF WARRANTY OR CONDITION, OR UNDER ANY OTHER LEGAL THEORY, INCLUDING BUT NOT LIMITED TO LOSS OF USE; LOSS OF REVENUE; LOSS OF ACTUAL OR ANTICIPATED PROFITS (INCLUDING LOSS OF PROFITS ON CONTRACTS); LOSS OF THE USE OF MONEY; LOSS OF ANTICIPATED SAVINGS; LOSS OF BUSINESS; LOSS OF OPPORTUNITY; LOSS OF GOODWILL; LOSS OF REPUTATION; LOSS OF, DAMAGE TO, COMPROMISE OR CORRUPTION OF DATA; OR ANY INDIRECT OR CONSEQUENTIAL LOSS OR DAMAGE HOWSOEVER CAUSED INCLUDING THE REPLACEMENT OF EQUIPMENT AND PROPERTY, ANY COSTS OF RECOVERING, PROGRAMMING, OR REPRODUCING ANY PROGRAM OR DATA STORED IN OR USED WITH THE APPLE PRODUCT OR ANY FAILURE TO MAINTAIN THE CONFIDENTIALITY OF INFORMATION STORED ON THE APPLE PRODUCT.

THE FOREGOING LIMITATION SHALL NOT APPLY TO DEATH OR PERSONAL INJURY CLAIMS, OR ANY STATUTORY LIABILITY FOR INTENTIONAL AND GROSS NEGLIGENT ACTS AND/OR OMISSIONS. APPLE DISCLAIMS ANY REPRESENTATION THAT IT WILL BE ABLE TO REPAIR ANY iOS DEVICE UNDER THIS WARRANTY OR REPLACE THE APPLE PRODUCT WITHOUT RISK TO OR LOSS OF INFORMATION STORED IN THE APPLE PRODUCT.

SOME STATES (COUNTRIES AND PROVINCES) DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

PRIVACY

Apple will maintain and use customer information in accordance with the Apple Customer Privacy Policy available at www.apple.com/legal/internet-services/privacy.

GENERAL

No Apple reseller, agent, or employee is authorized to make any modification, extension, or addition to this Warranty. If any term is held to be illegal or unenforceable, the legality or enforceability of the remaining terms shall not be affected or impaired. This Warranty is governed by and construed under the laws of the country in which the Apple Product purchase took place. Apple or its successor in title is the warrantor under this Warranty.

ONLINE INFORMATION

More information of the following is available online:

- International Support Information
- Authorized Distributors
- Apple Authorized Service Providers support.apple.com/kb/HT1937 | support.apple.com/kb/HT1434
- Apple Retail Store
- Apple Support and Service
- Apple Complimentary Support

WARRANTY OBLIGOR FOR REGION OR COUNTRY OF PURCHASE

Region/Country of Purchase	Apple	Address
Americas		
Brazil	Apple Computer Brasil Ltda	Rua: Leopoldo Couto Magalhães Júnior, nº 700, 7º andares, São Paulo, SP, Brasil 04542-000 SAC: 0800-761-0880 https://www.apple.com/br/support
Canada	Apple Canada Inc.	7495 Birchmount Rd.; Markham, Ontario, Canada; L3R 5G2 Canada
Mexico	Apple Operations Mexico, S.A. de C.V.	Prolongación Paseo de la Reforma #600, Suite 132, Colonia Peña Blanca, Santa Fé, Delegación Álvaro Obregón, México D.F., CP 01210, Mexico
United States and Other Americas Countries	Apple Inc.	1 Infinite Loop; Cupertino, CA 95014, U.S.A.
Europe, Middle East and Africa		
Russian Federation	Limited Liability Company Apple Rus	5 Petrovka Street, Berlin House Business Center, 107031, Moscow, Russian Federation
Turkey	Apple Teknoloji ve Satış Limited Şirketi	FSM Mahallesi Poligon Caddesi Buyaka 2 Sitesi No:8, Blok No.2 (C Blok) Kat:18 34471 Ümraniye İstanbul, Turkey

Region/Country of Purchase	Apple	Address
All Other Countries	Apple Distribution International	Hollyhill Industrial Estate Hollyhill, Cork, Republic of Ireland
Asia Pacific		
Australia; New Zealand; Fiji, Papua New Guinea; Vanuatu	Apple Pty. Limited.	PO Box A2629, Sydney South, NSW 1235, Australia Tel: 133 622
Hong Kong	Apple Asia Limited	2401 Tower One, Times Square, Causeway Bay; Hong Kong
India	Apple India Private Ltd.	19th Floor, Concorde Tower C, UB City No 24, Vittal Mallya Road, Bangalore 560-001, India
Japan	Apple Japan Inc.	6-10-1 Roppongi, Minato-ku Tokyo 106-6140, Japan
Korea	Apple Korea Ltd.	3901, ASEM Tower; 159, Samsung-dong, Gangnam-Gu; Seoul 135-798, Republic of Korea
Afghanistan, Bangladesh, Bhutan, Brunei, Cambodia, Guam, Indonesia, Laos, Singapore, Malaysia, Nepal, Pakistan, Philippines, Sri Lanka, Vietnam	Apple South Asia Pte. Ltd.	7 Ang Mo Kio Street 64 Singapore 569086
People's Republic of China	Apple Computer Trading (Shanghai) Co. Ltd.	Room 1815, No. 1 Jilong Road, Waigaoqiao Free Trade Zone, Shanghai 200131 China
Thailand	Apple South Asia (Thailand) Limited	44th Floor, Room No. HH4401-6, The Offices at Central World, 999/9 Rama 1 Road, Pathumwan, Pathumwan, Bangkok 10330 Thailand
Taiwan	Apple Asia LLC	19F., No.1, Songzhi Rd., Xinyi Dist., Taipei City 110, Taiwan
Other Asian Pacific Countries	Apple Inc.	1 Infinite Loop; Cupertino, CA 95014, U.S.A.

Legal Hardware Apple One (1) Year Limited Warranty

Hardware and Software

Hardware Warranties

Software License Agreements

RF Exposure

Sales & Support

Overview

AppleCare

Repair Terms and Conditions

Internet Services

Overview

Apple Media Services Terms and Conditions

Intellectual Property

Overview

Guidelines for Using Apple Trademarks and Copyrights

Trademarks

More Resources

- Overview
- Government Information Requests
- Contact Apple Legal
- Global Trade Compliance
- Supplier Provisions
- Filemaker Legal Information

- Express Replacement Service
- Remote Support Terms and Conditions (PDF)
- Sales Policies
- Certification Agreements and Policies
- Training Service Terms and Conditions
- Support Communities Terms of Use

- iTunes Gift Cards and Codes Terms and Conditions
- Game Center Terms and Conditions
- iCloud Terms of Service
- Privacy Policy
- Website Terms of Use
- iChat Account Terms of Service
- Print Services Sales Policies
- Print Services Terms of Use

- Rights and Permissions
- Piracy Prevention
- Unsolicited Idea Submission Policy

Education

- Apple School Manager

More ways to shop: [Visit an Apple Store](#), call 1-800-MY-APPLE, or [find a reseller](#).

View Warranty version

< February 04, 2016 - August 26, 2016 March 28, 2013 - February 03, 2016 **September 12, 2012 - March 27, 201** >

Your Hardware Warranty

IMPORTANT: BY USING YOUR iPhone, iPad or iPod product you are agreeing to be bound by the terms of the Apple One (1) Year Limited Warranty ("Warranty") as set out below. Do not use your product until you have read the terms of the warranty. If you do not agree to the terms of the warranty, do not use the product and return it within the return period stated in Apple's return policy (found at www.apple.com/legal/sales_policies/) to the Apple owned retail store or the authorized distributor where you purchased it for a refund. Apple One (1) Year Limited Warranty – iOS For Apple Branded Product Only

HOW CONSUMER LAW RELATES TO THIS WARRANTY

This warranty gives you specific legal rights, and you may have other rights that vary from state to state (or by country or province). Other than as permitted by law, Apple does not exclude, limit or suspend other rights you may have, including those that may arise from the nonconformity of a sales contract. For a full understanding of your rights you should consult the laws of your country, province or state.

WARRANTY LIMITATIONS SUBJECT TO CONSUMER LAW

To the extent permitted by law, this warranty and the remedies set forth are exclusive and in lieu of all other warranties, remedies and conditions, whether oral, written, statutory, express or implied. Apple disclaims all statutory and implied warranties, including without limitation, warranties of merchantability and fitness for a particular purpose and warranties against hidden or latent defects, to the extent permitted by law. In so far as such warranties cannot be disclaimed, Apple limits the duration and remedies of such warranties to the duration of this express warranty and, at Apple's option, the repair or replacement services described below. Some states (countries and provinces) do not allow limitations on how long an implied warranty (or condition) may last, so the limitation described above may not apply to you.

WHAT IS COVERED BY THIS WARRANTY?

Apple Inc. of One Infinite Loop, Cupertino, California, U.S.A. 95014 ("Apple") warrants the Apple-branded iPhone, iPad or iPod hardware product and accessories contained in the original packaging ("Apple Product") against defects in materials and workmanship when used normally in accordance with Apple's published guidelines for a period of ONE (1) YEAR from the date of original retail purchase by the end-user purchaser ("Warranty Period"). Apple's published guidelines include but are not limited to information contained in technical specifications, user manuals and service communications.

WHAT IS NOT COVERED BY THIS WARRANTY?

This Warranty does not apply to any non-Apple branded hardware products or any software, even if packaged or sold with Apple hardware. Manufacturers, suppliers, or publishers, other than Apple, may provide their own warranties to you – please contact them for further information. Software distributed by Apple with or without the Apple brand (including, but not limited to system software) is not covered by this Warranty. Please refer to the licensing agreement accompanying the software for details of your rights with respect to its use. Apple does not warrant that the operation of the Apple Product will be uninterrupted or error-free. Apple is not responsible for damage arising from failure to follow instructions relating to the Apple Product's use.

This Warranty does not apply: (a) to consumable parts, such as batteries or protective coatings that are designed to diminish over time, unless failure has occurred due to a defect in materials or workmanship; (b) to cosmetic damage, including but not limited to scratches, dents and broken plastic on ports; (c) to damage caused by use with another product; (d) to damage caused by accident, abuse, misuse, liquid contact, fire, earthquake or other external cause; (e) to damage caused by operating the Apple Product outside Apple's published guidelines; (f) to damage caused by service (including upgrades and expansions) performed by anyone who is not a representative of Apple or an Apple Authorized Service Provider ("AASP"); (g) to an Apple Product that has been modified to alter functionality or capability without the written permission of Apple; (h) to defects caused by normal wear and tear or otherwise due to the normal aging of the Apple Product, or (i) if any serial number has been removed or defaced from the Apple Product.

IMPORTANT RESTRICTION FOR IPHONE AND IPAD SERVICE.

Apple may restrict warranty service for iPhone and iPad to the country where Apple or its Authorized Distributors originally sold the device.

YOUR RESPONSIBILITIES

YOU SHOULD MAKE PERIODIC BACKUP COPIES OF THE INFORMATION CONTAINED ON THE APPLE PRODUCT STORAGE MEDIA TO PROTECT THE CONTENTS AND AS A PRECAUTION AGAINST POSSIBLE OPERATIONAL FAILURES.

Before receiving warranty service, Apple or its agents may require that you furnish proof of purchase details, respond to questions designed to assist with diagnosing potential issues and follow Apple's procedures for obtaining warranty service. Before submitting your Apple Product for warranty service you should maintain a separate backup copy of the contents of its storage media, remove all personal information that you want to protect and disable all security passwords.

DURING WARRANTY SERVICE THE CONTENTS OF THE STORAGE MEDIA WILL BE DELETED AND REFORMATTED. APPLE AND ITS AGENTS ARE NOT RESPONSIBLE FOR ANY LOSS OF SOFTWARE PROGRAMS, DATA OR OTHER INFORMATION CONTAINED ON THE STORAGE MEDIA OR ANY OTHER PART OF THE APPLE PRODUCT SERVICED.

Following warranty service your Apple Product or a replacement device will be returned to you as your Apple Product was configured when originally purchased, subject to applicable updates. Apple may install

system software updates as part of warranty service that will prevent the Apple Product from reverting to an earlier version of the system software. Third party applications installed on the Apple Product may not be compatible or work with the Apple Product as a result of the system software update. You will be responsible for reinstalling all other software programs, data and information. Recovery and reinstallation of other software programs, data and information are not covered under this Warranty.

Important: Do not open the Apple Product. Opening the Apple Product may cause damage that is not covered by this Warranty. Only Apple or an AASP should perform service on this Apple Product.

WHAT WILL APPLE DO IN THE EVENT THE WARRANTY IS BREACHED?

If during the Warranty Period you submit a valid claim to Apple or an AASP, Apple will, at its option, (i) repair the Apple Product using new or previously used parts that are equivalent to new in performance and reliability, (ii) replace the Apple Product with a device that is at least functionally equivalent to the Apple Product and is formed from new and/or previously used parts that are equivalent to new in performance and reliability, or (iii) exchange the Apple Product for a refund of your purchase price.

Apple may request that you replace certain user-installable parts or Apple Products. A replacement part or Apple Product, including a user-installable part that has been installed in accordance with instructions provided by Apple, assumes the remaining term of the Warranty or ninety (90) days from the date of replacement or repair, whichever provides longer coverage for you. When an Apple Product or part is replaced or a refund provided, any replacement item becomes your property and the replaced or refunded item becomes Apple's property.

HOW TO OBTAIN WARRANTY SERVICE?

Please access and review the online help resources described below before seeking warranty service. If the Apple Product is still not functioning properly after making use of these resources, please contact an Apple representative or, if applicable, an Apple owned retail store ("Apple Retail") or AASP, using the information provided below. An Apple representative or AASP will help determine whether your Apple Product requires service and, if it does, will inform you how Apple will provide it. When contacting Apple via telephone, other charges may apply depending on your location.

Online information with details on obtaining warranty service is provided below.

WARRANTY SERVICE OPTIONS

Apple will provide warranty service through one or more of the following options:

(i) Carry-in service. You may return your Apple Product to an Apple Retail or AASP location offering carry-in service. Service will be performed at the location, or Apple Retail or an AASP may send your Apple Product to an Apple Repair Service ("ARS") location to be serviced. Once you are notified that service is complete, you will promptly retrieve the Apple Product from the Apple Retail or AASP location, or the Apple Product will be sent directly to your location from the ARS location.

(ii) Mail-in service. If Apple determines that your Apple Product is eligible for mail-in service, Apple will send you prepaid waybills and if applicable, packaging material, so that you may ship your Apple Product to an ARS or AASP location in accordance with Apple's instructions. Once service is complete, the ARS or AASP location will return the Apple Product to you. Apple will pay for shipping to and from your location if all instructions are followed.

(iii) Do-it-yourself (DIY) parts service. DIY parts service allows you to service your own Apple Product. If DIY parts service is available in the circumstances, the following process will apply.

(a) Service where Apple requires return of the replaced Apple Product or part. Apple may require a credit card authorization as security for the retail price of the replacement Apple Product or part and applicable shipping costs. If you are unable to provide credit card authorization, DIY parts service may not be available to you and Apple will offer alternative arrangements for service. Apple will ship a replacement Apple Product or part to you with installation instructions, if applicable, and any requirements for the return of the replaced Apple Product or part. If you follow the instructions, Apple will cancel the credit card authorization, so you will not be charged for the Apple Product or part and shipping to and from your location. If you fail to return the replaced Apple Product or part as instructed or return a replaced Apple Product or part that is ineligible for service, Apple will charge your credit card for the authorized amount.

(b) Service where Apple does not require return of the replaced Apple Product or part. Apple will ship you free of charge a replacement Apple Product or part accompanied by instructions on installation, if applicable, and any requirements for the disposal of the replaced Apple Product or part.

(c) Apple is not responsible for any labor costs you incur relating to DIY parts service. Should you require further assistance, contact Apple at the telephone number listed below.

Apple reserves the right to change the method by which Apple may provide warranty service to you, and your Apple Product's eligibility to receive a particular method of service. Service will be limited to the options available in the country where service is requested. Service options, parts availability and response times may vary according to country. You may be responsible for shipping and handling charges if the Apple Product cannot be serviced in the country it is in. If you seek service in a country that is not the original country of purchase, you will comply with all applicable import and export laws and regulations and be responsible for all custom duties, V.A.T. and other associated taxes and charges. Where international service is available, Apple may repair or replace Apple Products and parts with comparable Apple Product and parts that comply with local standards.

LIMITATION OF LIABILITY

EXCEPT AS PROVIDED IN THIS WARRANTY AND TO THE MAXIMUM EXTENT PERMITTED BY LAW, APPLE IS NOT RESPONSIBLE FOR DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OF WARRANTY OR CONDITION, OR UNDER ANY OTHER LEGAL THEORY, INCLUDING BUT NOT LIMITED TO LOSS OF USE; LOSS OF REVENUE; LOSS OF ACTUAL OR ANTICIPATED PROFITS (INCLUDING LOSS OF PROFITS ON CONTRACTS); LOSS OF THE USE OF MONEY; LOSS OF ANTICIPATED SAVINGS; LOSS OF BUSINESS; LOSS OF OPPORTUNITY; LOSS OF GOODWILL; LOSS OF REPUTATION; LOSS OF, DAMAGE TO, COMPROMISE OR CORRUPTION OF DATA; OR ANY INDIRECT OR CONSEQUENTIAL LOSS OR DAMAGE HOWSOEVER CAUSED INCLUDING THE REPLACEMENT OF EQUIPMENT AND PROPERTY, ANY COSTS OF RECOVERING, PROGRAMMING, OR REPRODUCING ANY PROGRAM OR DATA STORED IN OR USED WITH THE APPLE PRODUCT OR ANY FAILURE TO MAINTAIN THE CONFIDENTIALITY OF INFORMATION STORED ON THE APPLE PRODUCT.

THE FOREGOING LIMITATION SHALL NOT APPLY TO DEATH OR PERSONAL INJURY CLAIMS, OR ANY STATUTORY LIABILITY FOR INTENTIONAL AND GROSS NEGLIGENT ACTS AND/OR OMISSIONS. APPLE DISCLAIMS ANY REPRESENTATION THAT IT WILL BE ABLE TO REPAIR ANY iOS DEVICE UNDER THIS WARRANTY OR REPLACE THE APPLE PRODUCT WITHOUT RISK TO OR LOSS OF INFORMATION STORED IN THE APPLE PRODUCT.

SOME STATES (COUNTRIES AND PROVINCES) DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

PRIVACY

Apple will maintain and use customer information in accordance with the Apple Customer Privacy Policy available at www.apple.com/legal/internet-services/privacy.

GENERAL

No Apple reseller, agent, or employee is authorized to make any modification, extension, or addition to this Warranty. If any term is held to be illegal or unenforceable, the legality or enforceability of the remaining terms shall not be affected or impaired. This Warranty is governed by and construed under the laws of the country in which the Apple Product purchase took place. Apple or its successor in title is the warrantor under this Warranty.

ONLINE INFORMATION

More information of the following is available online:

- International Support Information
- Authorized Distributors
- Apple Authorized Service Providers support.apple.com/kb/HT1937 | support.apple.com/kb/HT1434
- Apple Retail Store
- Apple Support and Service
- Apple Complimentary Support

WARRANTY OBLIGOR FOR REGION OR COUNTRY OF PURCHASE

Region/Country of Purchase	Apple	Address
Americas		
Brazil	Apple Computer Brasil Ltda	Rua: Leopoldo Couto Magalhães Júnior, nº 700, 7º andares, São Paulo, SP, Brasil 04542-000 SAC: 0800-761-0880 https://www.apple.com/br/support
Canada	Apple Canada Inc.	7495 Birchmount Rd.; Markham, Ontario, Canada; L3R 5G2 Canada
Mexico	Apple Operations Mexico, S.A. de C.V.	Prolongación Paseo de la Reforma #600, Suite 132, Colonia Peña Blanca, Santa Fé, Delegación Álvaro Obregón, México D.F., CP 01210, Mexico
United States and Other Americas Countries	Apple Inc.	1 Infinite Loop; Cupertino, CA 95014, U.S.A.
Europe, Middle East and Africa		
Russian Federation	Limited Liability Company Apple Rus	5 Petrovka Street, Berlin House Business Center, 107031, Moscow, Russian Federation
Turkey	Apple Teknoloji ve Satış Limited Şirketi	Büyükdere Caddesi Levent 199 Kat:22-23 34394 Şişli İstanbul, Turkey

Region/Country of Purchase	Apple	Address
All Other Countries	Apple Distribution International	Hollyhill Industrial Estate Hollyhill, Cork, Republic of Ireland
Asia Pacific		
Australia; New Zealand; Fiji, Papua New Guinea; Vanuatu	Apple Pty. Limited.	PO Box A2629, Sydney South, NSW 1235, Australia Tel: 133 622
Hong Kong	Apple Asia Limited	2401 Tower One, Times Square, Causeway Bay; Hong Kong
India	Apple India Private Ltd.	19th Floor, Concorde Tower C, UB City No 24, Vittal Mallya Road, Bangalore 560-001, India
Japan	Apple Japan Inc.	6-10-1 Roppongi, Minato-ku Tokyo 106-6140, Japan
Korea	Apple Korea Ltd.	3901, ASEM Tower; 159, Samsung-dong, Gangnam-Gu; Seoul 135-798, Republic of Korea
Afghanistan, Bangladesh, Bhutan, Brunei, Cambodia, Guam, Indonesia, Laos, Singapore, Malaysia, Nepal, Pakistan, Philippines, Sri Lanka, Vietnam	Apple South Asia Pte. Ltd.	7 Ang Mo Kio Street 64 Singapore 569086
People's Republic of China	Apple Computer Trading (Shanghai) Co. Ltd.	Room 1815, No. 1 Jilong Road, Waigaoqiao Free Trade Zone, Shanghai 200131 China
Thailand	Apple South Asia (Thailand) Limited	44th Floor, Room No. HH4401-6, The Offices at Central World, 999/9 Rama 1 Road, Pathumwan, Pathumwan, Bangkok 10330 Thailand
Taiwan	Apple Asia LLC	19F., No.1, Songzhi Rd., Xinyi Dist., Taipei City 110, Taiwan
Other Asian Pacific Countries	Apple Inc.	1 Infinite Loop; Cupertino, CA 95014, U.S.A.

Hardware and Software

Hardware Warranties

Software License Agreements

RF Exposure

More Resources

Sales & Support

Overview

AppleCare

Repair Terms and Conditions

Express Replacement Service

Internet Services

Overview

Apple Media Services Terms and Conditions

iTunes Gift Cards and Codes Terms and Conditions

Intellectual Property

Overview

Guidelines for Using Apple Trademarks and Copyrights

Trademarks

Rights and Permissions

Overview

Government Information Requests

Contact Apple Legal

Global Trade Compliance

Supplier Provisions

Filemaker Legal Information

Remote Support Terms and Conditions (PDF)

Sales Policies

Certification Agreements and Policies

Training Service Terms and Conditions

Support Communities Terms of Use

Game Center Terms and Conditions

iCloud Terms of Service

Privacy Policy

Website Terms of Use

iChat Account Terms of Service

Print Services Sales Policies

Print Services Terms of Use

Piracy Prevention

Unsolicited Idea Submission Policy

Education

Apple School Manager

More ways to shop: [Visit an Apple Store](#), call 1-800-MY-APPLE, or [find a reseller](#).

View Warranty version

August 27, 2016 - July 12, 2018

February 04, 2016 - August 26, 2016

March 28, 2013 - February 03, 2016

Apple One (1) Year Limited Warranty

For Apple Branded Product Only

IMPORTANT: BY USING YOUR iPhone, iPad, iPod or Apple TV Product you are agreeing to be bound by the terms of the Apple One (1) Year Limited Warranty ("Warranty") as set out below.

Do not use your product until you have read the terms of the warranty. If you do not agree to the terms of the warranty, do not use the product and return it within the return period stated in Apple's return policy (found at www.apple.com/legal/sales_policies/) to the Apple owned retail store or the authorized distributor where you purchased it for a refund.

How Consumer Law Relates to This Warranty

This warranty gives you specific legal rights, and you may have other rights that vary from state to state (or by country or province). Other than as permitted by law, Apple does not exclude, limit or suspend other rights you may have, including those that may arise from the nonconformity of a sales contract. For a full understanding of your rights you should consult the laws of your country, province or state.

Warranty Limitations Subject to Consumer Law

To the extent permitted by law, this warranty and the remedies set forth are exclusive and in lieu of all other warranties, remedies and conditions, whether oral, written, statutory, express or implied. Apple disclaims all statutory and implied warranties, including without limitation, warranties of merchantability and fitness for a particular purpose and warranties against hidden or latent defects, to the extent permitted by law. In so far as such warranties cannot be disclaimed, Apple limits the duration and remedies of such warranties to the duration of this express warranty and, at Apple's option, the repair or replacement services described below. Some states (countries and provinces) do not allow limitations on how long an implied warranty (or condition) may last, so the limitation described above may not apply to you.

What is Covered by This Warranty?

Apple Inc. of One Infinite Loop, Cupertino, California, U.S.A. 95014 ("Apple") warrants the Apple-branded iPhone, iPad, iPod or Apple TV hardware product and the Apple-branded accessories contained in the original packaging ("Apple Product") against defects in materials and workmanship when used normally in accordance with Apple's published guidelines for a period of ONE (1) Year from the date of original retail

purchase by the end-user purchaser ("Warranty Period"). Apple's published guidelines include but are not limited to information contained in technical specifications, user manuals and service communications.

WHAT IS NOT COVERED BY THIS WARRANTY?

This Warranty does not apply to any non-Apple branded hardware products or any software, even if packaged or sold with Apple hardware. Manufacturers, suppliers, or publishers, other than Apple, may provide their own warranties to you – please contact them for further information. Software distributed by Apple with or without the Apple brand (including, but not limited to system software) is not covered by this Warranty. Please refer to the licensing agreement accompanying the software for details of your rights with respect to its use. Apple does not warrant that the operation of the Apple Product will be uninterrupted or error-free. Apple is not responsible for damage arising from failure to follow instructions relating to the Apple Product's use.

This Warranty does not apply: (a) to consumable parts, such as batteries or protective coatings that are designed to diminish over time, unless failure has occurred due to a defect in materials or workmanship; (b) to cosmetic damage, including but not limited to scratches, dents and broken plastic on ports unless failure has occurred due to a defect in materials or workmanship; (c) to damage caused by use with a third party component or product that does not meet the Apple Product's specifications (Apple Product specifications are available at www.apple.com under the technical specifications for each product and also available in stores); (d) to damage caused by accident, abuse, misuse, fire, earthquake or other external cause; (e) to damage caused by operating the Apple Product outside Apple's published guidelines; (f) to damage caused by service (including upgrades and expansions) performed by anyone who is not a representative of Apple or an Apple Authorized Service Provider ("AASP"); (g) to an Apple Product that has been modified to alter functionality or capability without the written permission of Apple; (h) to defects caused by normal wear and tear or otherwise due to the normal aging of the Apple Product; (i) if any serial number has been removed or defaced from the Apple Product; or (j) if Apple receives information from relevant public authorities that the product has been stolen or if you are unable to deactivate passcode-enabled or other security measures designed to prevent unauthorized access to the Apple Product, and you cannot prove in any way that you are the authorized user of the product (eg. by presenting proof of purchase).

IMPORTANT RESTRICTION FOR IPHONE, IPAD AND APPLE TV SERVICE.

Apple may restrict warranty service for iPhone, iPad and Apple TV to the country where Apple or its Authorized Distributors originally sold the device.

YOUR RESPONSIBILITIES

YOU SHOULD MAKE PERIODIC BACKUP COPIES OF THE INFORMATION CONTAINED ON THE APPLE PRODUCT STORAGE MEDIA TO PROTECT THE CONTENTS AND AS A PRECAUTION AGAINST POSSIBLE OPERATIONAL FAILURES.

Before receiving warranty service, Apple or its agents may require that you furnish proof of purchase details, respond to questions designed to assist with diagnosing potential issues and follow Apple's procedures for obtaining warranty service. Before submitting your Apple Product for warranty service you should maintain a separate backup copy of the contents of its storage media, remove all personal information that you want to protect and disable all security passwords.

DURING WARRANTY SERVICE THE CONTENTS OF THE STORAGE MEDIA WILL BE DELETED AND REFORMATTED. APPLE AND ITS AGENTS ARE NOT RESPONSIBLE FOR ANY LOSS OF SOFTWARE PROGRAMS, DATA OR OTHER INFORMATION CONTAINED ON THE STORAGE MEDIA OR ANY OTHER PART OF THE APPLE PRODUCT SERVICED.

Following warranty service your Apple Product or a replacement device will be returned to you as your Apple Product was configured when originally purchased, subject to applicable updates. Apple may install

Apple One (3) Year Limited Warranty

system software updates as part of warranty service that will prevent the Apple Product from reverting to an earlier version of the system software. Third party applications installed on the Apple Product may not be compatible or work with the Apple Product as a result of the system software update. You will be responsible for reinstalling all other software programs, data and information. Recovery and reinstallation of other software programs, data and information are not covered under this Warranty.

Important: Do not open the Apple Product. Opening the Apple Product may cause damage that is not covered by this Warranty. Only Apple or an AASP should perform service on this Apple Product.

WHAT WILL APPLE DO IN THE EVENT THE WARRANTY IS BREACHED?

If during the Warranty Period you submit a claim to Apple or an AASP in accordance with this warranty, Apple will, at its option:

- (i) repair the Apple Product using new or previously used parts that are equivalent to new in performance and reliability,
- (ii) replace the Apple Product with the same model (or with your consent a product that has similar functionality) formed from new and/or previously used parts that are equivalent to new in performance and reliability, or
- (iii) exchange the Apple Product for a refund of your purchase price.

Apple may request that you replace certain user-installable parts or Apple Products. A replacement part or Apple Product, including a user-installable part that has been installed in accordance with instructions provided by Apple, assumes the remaining term of the Warranty or ninety (90) days from the date of replacement or repair, whichever provides longer coverage for you. When an Apple Product or part is replaced or a refund provided, any replacement item becomes your property and the replaced or refunded item becomes Apple's property.

HOW TO OBTAIN WARRANTY SERVICE?

Please access and review the online help resources described below before seeking warranty service. If the Apple Product is still not functioning properly after making use of these resources, please contact an Apple representative or, if applicable, an Apple owned retail store ("Apple Retail") or AASP, using the information provided below. An Apple representative or AASP will help determine whether your Apple Product requires service and, if it does, will inform you how Apple will provide it. When contacting Apple via telephone, other charges may apply depending on your location.

Online information with details on obtaining warranty service is provided below.

WARRANTY SERVICE OPTIONS

Apple will provide warranty service through one or more of the following options:

- (i) Carry-in service. You may return your Apple Product to an Apple Retail or AASP location offering carry-in service. Service will be performed at the location, or Apple Retail or an AASP may send your Apple Product to an Apple Repair Service ("ARS") location to be serviced. Once you are notified that service is complete, you will retrieve the Apple Product from the Apple Retail or AASP location without delay unless Apple notifies you that the Apple Product will be sent directly to your location from the ARS location.
- (ii) Mail-in service. If Apple determines that your Apple Product is eligible for mail-in service, Apple will send you prepaid waybills and if applicable, packaging material and instructions on how to properly pack and address your Apple product, so that you may ship your Apple Product to an ARS or AASP location. Instructions may be sent to you via email or in hard copy with the packaging material. Once service is complete, the ARS or AASP location will return the Apple Product to you. Apple will pay for shipping to and from your location if all instructions regarding the method of packaging and shipping the Apple Product are followed.

(iii) Do-it-yourself (DIY) parts service. DIY parts service allows you to service your own Apple Product. If DIY parts service is available in the circumstances, the following process will apply.

(a) Service where Apple requires return of the replaced Apple Product or part. Apple may require a credit card authorization as security for the retail price of the replacement Apple Product or part and applicable shipping costs. If you are unable to provide credit card authorization, DIY parts service may not be available to you and Apple will offer alternative arrangements for service. Apple will ship a replacement Apple Product or part to you with installation instructions, if applicable, and any requirements for the return of the replaced Apple Product or part. If you follow the instructions, Apple will cancel the credit card authorization, so you will not be charged for the Apple Product or part and shipping to and from your location. If you fail to return the replaced Apple Product or part as instructed or return a replaced Apple Product or part that is ineligible for service, Apple will charge your credit card for the authorized amount.

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(c) Apple is not responsible for any labor costs you incur relating to DIY parts service. Should you require further assistance, contact Apple at the telephone number listed below.

Apple reserves the right to change the method by which Apple may provide warranty service to you, and your Apple Product's eligibility to receive a particular method of service. Service will be limited to the options available in the country where service is requested. Service options, parts availability and response times may vary according to country. You may be responsible for shipping and handling charges if the Apple Product cannot be serviced in the country it is in. If you seek service in a country that is not the original country of purchase, you will comply with all applicable import and export laws and regulations and be responsible for all custom duties, V.A.T. and other associated taxes and charges. Where international service is available, Apple may repair or replace Apple Products and parts with comparable Apple Product and parts that comply with local standards.

LIMITATION OF LIABILITY

EXCEPT AS PROVIDED IN THIS WARRANTY AND TO THE MAXIMUM EXTENT PERMITTED BY LAW, APPLE IS NOT RESPONSIBLE FOR DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OF WARRANTY OR CONDITION, OR UNDER ANY OTHER LEGAL THEORY, INCLUDING BUT NOT LIMITED TO LOSS OF USE; LOSS OF REVENUE; LOSS OF ACTUAL OR ANTICIPATED PROFITS (INCLUDING LOSS OF PROFITS ON CONTRACTS); LOSS OF THE USE OF MONEY; LOSS OF ANTICIPATED SAVINGS; LOSS OF BUSINESS; LOSS OF OPPORTUNITY; LOSS OF GOODWILL; LOSS OF REPUTATION; LOSS OF, DAMAGE TO, COMPROMISE OR CORRUPTION OF DATA; OR ANY INDIRECT OR CONSEQUENTIAL LOSS OR DAMAGE HOWSOEVER CAUSED INCLUDING THE REPLACEMENT OF EQUIPMENT AND PROPERTY, ANY COSTS OF RECOVERING, PROGRAMMING, OR REPRODUCING ANY PROGRAM OR DATA STORED IN OR USED WITH THE APPLE PRODUCT OR ANY FAILURE TO MAINTAIN THE CONFIDENTIALITY OF INFORMATION STORED ON THE APPLE PRODUCT.

THE FOREGOING LIMITATION SHALL NOT APPLY TO DEATH OR PERSONAL INJURY CLAIMS, OR ANY STATUTORY LIABILITY FOR INTENTIONAL AND GROSS NEGLIGENT ACTS AND/OR OMISSIONS. APPLE DISCLAIMS ANY REPRESENTATION THAT IT WILL BE ABLE TO REPAIR ANY APPLE PRODUCT UNDER THIS WARRANTY OR REPLACE THE APPLE PRODUCT WITHOUT RISK TO OR LOSS OF INFORMATION STORED IN THE APPLE PRODUCT.

SOME STATES (COUNTRIES AND PROVINCES) DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

GENERAL

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ONLINE INFORMATION

More information of the following is available online:

International Support Information

Authorized Distributors

Apple Authorized Service Providers support.apple.com/kb/HT1937 | support.apple.com/kb/HT1434

Apple Retail Store

Apple Support and Service

Apple Complimentary Support

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Legal Hardware Apple One (1) Year Limited Warranty

Hardware and Software

- Hardware Warranties
- Software License Agreements
- RF Exposure

More Resources

- Overview
- Government Information Requests
- Contact Apple Legal
- Global Trade Compliance
- Supplier Provisions
- Filemaker Legal Information

Sales & Support

- Overview
- AppleCare
- Repair Terms and Conditions
- Express Replacement Service
- Remote Support Terms and Conditions (PDF)
- Sales Policies
- Certification Agreements and Policies
- Training Service Terms and Conditions
- Support Communities Terms of Use

Internet Services

- Overview
- Apple Media Services Terms and Conditions
- iTunes Gift Cards and Codes Terms and Conditions
- Game Center Terms and Conditions
- iCloud Terms of Service
- Privacy Policy
- Website Terms of Use
- iChat Account Terms of Service
- Print Services Sales Policies
- Print Services Terms of Use

Intellectual Property

- Overview
- Guidelines for Using Apple Trademarks and Copyrights
- Trademarks
- Rights and Permissions
- Piracy Prevention
- Unsolicited Idea Submission Policy

Education

- Apple School Manager

More ways to shop: [Visit an Apple Store](#), call 1-800-MY-APPLE, or [find a reseller](#).

View Warranty version

July 13, 2018 - Present

August 27, 2016 - July 12, 2018

February 04, 2016 - August 26, 2016

March 28, 2015 >

Apple One (1) Year Limited Warranty

For Apple Branded Product Only

IMPORTANT: BY USING YOUR iPhone, iPad, iPod or Apple TV PRODUCT YOU ARE AGREEING TO BE BOUND BY THE TERMS OF THE APPLE ONE (1) YEAR LIMITED WARRANTY ("WARRANTY") AS SET OUT BELOW. DO NOT USE YOUR PRODUCT UNTIL YOU HAVE READ THE TERMS OF THE WARRANTY. IF YOU DO NOT AGREE TO THE TERMS OF THE WARRANTY, DO NOT USE THE PRODUCT AND RETURN IT WITHIN THE RETURN PERIOD STATED IN APPLE'S RETURN POLICY (FOUND AT www.apple.com/legal/sales_policies/) TO THE APPLE OWNED RETAIL STORE OR THE AUTHORIZED DISTRIBUTOR WHERE YOU PURCHASED IT FOR A REFUND.

HOW CONSUMER LAW RELATES TO THIS WARRANTY

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY HAVE OTHER RIGHTS THAT VARY FROM STATE TO STATE (OR BY COUNTRY OR PROVINCE). OTHER THAN AS PERMITTED BY LAW, APPLE DOES NOT EXCLUDE, LIMIT OR SUSPEND OTHER RIGHTS YOU MAY HAVE, INCLUDING THOSE THAT MAY ARISE FROM THE NONCONFORMITY OF A SALES CONTRACT. FOR A FULL UNDERSTANDING OF YOUR RIGHTS YOU SHOULD CONSULT THE LAWS OF YOUR COUNTRY, PROVINCE OR STATE.

WARRANTY LIMITATIONS SUBJECT TO CONSUMER LAW

TO THE EXTENT PERMITTED BY LAW, THIS WARRANTY AND THE REMEDIES SET FORTH ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, REMEDIES AND CONDITIONS, WHETHER ORAL, WRITTEN, STATUTORY, EXPRESS OR IMPLIED. APPLE DISCLAIMS ALL STATUTORY AND IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND WARRANTIES AGAINST HIDDEN OR LATENT DEFECTS, TO THE EXTENT PERMITTED BY LAW. IN SO FAR AS SUCH WARRANTIES CANNOT BE DISCLAIMED, APPLE LIMITS THE DURATION AND REMEDIES OF SUCH WARRANTIES TO THE DURATION OF THIS EXPRESS WARRANTY AND, AT APPLE'S OPTION, THE REPAIR OR REPLACEMENT SERVICES DESCRIBED BELOW. SOME STATES (COUNTRIES AND PROVINCES) DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY (OR CONDITION) MAY LAST, SO THE LIMITATION DESCRIBED ABOVE MAY NOT APPLY TO YOU.

WHAT IS COVERED BY THIS WARRANTY?

Apple Inc. of One Infinite Loop, Cupertino, California, U.S.A. 95014 ("Apple") warrants the Apple-branded iPhone, iPad, iPod or Apple TV hardware product and the Apple-branded accessories contained in the

original packaging ("Apple Product") against defects in materials and workmanship when used normally in accordance with Apple's published guidelines for a period of ONE (1) YEAR from the date of original retail purchase by the end-user purchaser ("Warranty Period"). Apple's published guidelines include but are not limited to information contained in technical specifications, user manuals and service communications.

WHAT IS NOT COVERED BY THIS WARRANTY?

This Warranty does not apply to any non-Apple branded hardware products or any software, even if packaged or sold with Apple hardware. Manufacturers, suppliers, or publishers, other than Apple, may provide their own warranties to you – please contact them for further information. Software distributed by Apple with or without the Apple brand (including, but not limited to system software) is not covered by this Warranty. Please refer to the licensing agreement accompanying the software for details of your rights with respect to its use. Apple does not warrant that the operation of the Apple Product will be uninterrupted or error-free. Apple is not responsible for damage arising from failure to follow instructions relating to the Apple Product's use.

This Warranty does not apply: (a) to consumable parts, such as batteries or protective coatings that are designed to diminish over time, unless failure has occurred due to a defect in materials or workmanship; (b) to cosmetic damage, including but not limited to scratches, dents and broken plastic on ports unless failure has occurred due to a defect in materials or workmanship; (c) to damage caused by use with a third party component or product that does not meet the Apple Product's specifications (Apple Product specifications are available at www.apple.com under the technical specifications for each product and also available in stores); (d) to damage caused by accident, abuse, misuse, fire, liquid contact, earthquake or other external cause; (e) to damage caused by operating the Apple Product outside Apple's published guidelines; (f) to damage caused by service (including upgrades and expansions) performed by anyone who is not a representative of Apple or an Apple Authorized Service Provider ("AASP"); (g) to an Apple Product that has been modified to alter functionality or capability without the written permission of Apple; (h) to defects caused by normal wear and tear or otherwise due to the normal aging of the Apple Product; (i) if any serial number has been removed or defaced from the Apple Product; or (j) if Apple receives information from relevant public authorities that the product has been stolen or if you are unable to deactivate passcode-enabled or other security measures designed to prevent unauthorized access to the Apple Product, and you cannot prove in any way that you are the authorized user of the product (eg. by presenting proof of purchase).

IMPORTANT RESTRICTION FOR IPHONE, IPAD AND APPLE TV SERVICE.

Apple may restrict warranty service for iPhone, iPad and Apple TV to the country where Apple or its Authorized Distributors originally sold the device.

YOUR RESPONSIBILITIES

YOU SHOULD MAKE PERIODIC BACKUP COPIES OF THE INFORMATION CONTAINED ON THE APPLE PRODUCT STORAGE MEDIA TO PROTECT THE CONTENTS AND AS A PRECAUTION AGAINST POSSIBLE OPERATIONAL FAILURES.

Before receiving warranty service, Apple or its agents may require that you furnish proof of purchase details, respond to questions designed to assist with diagnosing potential issues and follow Apple's procedures for obtaining warranty service. Before submitting your Apple Product for warranty service you should maintain a separate backup copy of the contents of its storage media, remove all personal information that you want to protect and disable all security passwords.

DURING WARRANTY SERVICE THE CONTENTS OF THE STORAGE MEDIA WILL BE DELETED AND REFORMATTED. APPLE AND ITS AGENTS ARE NOT RESPONSIBLE FOR ANY LOSS OF SOFTWARE PROGRAMS, DATA OR OTHER INFORMATION CONTAINED ON THE STORAGE MEDIA OR ANY OTHER PART OF THE APPLE PRODUCT SERVICED.

Following warranty service your Apple Product or a replacement device will be returned to you as your Apple Product was configured when originally purchased, subject to applicable updates. Apple may install system software updates as part of warranty service that will prevent the Apple Product from reverting to an earlier version of the system software. Third party applications installed on the Apple Product may not be compatible or work with the Apple Product as a result of the system software update. You will be responsible for reinstalling all other software programs, data and information. Recovery and reinstallation of other software programs, data and information are not covered under this Warranty.

Important: Do not open the Apple Product. Opening the Apple Product may cause damage that is not covered by this Warranty. Only Apple or an AASP should perform service on this Apple Product.

WHAT WILL APPLE DO IN THE EVENT THE WARRANTY IS BREACHED?

If during the Warranty Period you submit a claim to Apple or an AASP in accordance with this warranty, Apple will, at its option:

- (i) repair the Apple Product using new or previously used parts that are equivalent to new in performance and reliability,
- (ii) replace the Apple Product with the same model (or with your consent a product that has similar functionality) formed from new and/or previously used parts that are equivalent to new in performance and reliability, or
- (iii) exchange the Apple Product for a refund of your purchase price.

Apple may request that you replace certain user-installable parts or Apple Products. A replacement part or Apple Product, including a user-installable part that has been installed in accordance with instructions provided by Apple, assumes the remaining term of the Warranty or ninety (90) days from the date of replacement or repair, whichever provides longer coverage for you. When an Apple Product or part is replaced or a refund provided, any replacement item becomes your property and the replaced or refunded item becomes Apple's property.

HOW TO OBTAIN WARRANTY SERVICE?

Please access and review the online help resources described below before seeking warranty service. If the Apple Product is still not functioning properly after making use of these resources, please contact an Apple representative or, if applicable, an Apple owned retail store ("Apple Retail") or AASP, using the information provided below. An Apple representative or AASP will help determine whether your Apple Product requires service and, if it does, will inform you how Apple will provide it. When contacting Apple via telephone, other charges may apply depending on your location.

Online information with details on obtaining warranty service is provided below.

WARRANTY SERVICE OPTIONS

Apple will provide warranty service through one or more of the following options:

(i) Carry-in service. You may return your Apple Product to an Apple Retail or AASP location offering carry-in service. Service will be performed at the location, or Apple Retail or an AASP may send your Apple Product to an Apple Repair Service ("ARS") location to be serviced. Once you are notified that service is complete, you will retrieve the Apple Product from the Apple Retail or AASP location without delay unless Apple notifies you that the Apple Product will be sent directly to your location from the ARS location.

(ii) Mail-in service. If Apple determines that your Apple Product is eligible for mail-in service, Apple will send you prepaid waybills and if applicable, packaging material and instructions on how to properly pack and address your Apple product, so that you may ship your Apple Product to an ARS or AASP location. Instructions may be sent to you via email or in hard copy with the packaging material. Once service is complete, the ARS or AASP location will return the Apple Product to you. Apple will pay for shipping to and

from your location if all instructions regarding the method of packaging and shipping the Apple Product are followed.

(iii) Do-it-yourself (DIY) parts service. DIY parts service allows you to service your own Apple Product. If DIY parts service is available in the circumstances, the following process will apply.

(a) Service where Apple requires return of the replaced Apple Product or part. Apple may require a credit card authorization as security for the retail price of the replacement Apple Product or part and applicable shipping costs. If you are unable to provide credit card authorization, DIY parts service may not be available to you and Apple will offer alternative arrangements for service. Apple will ship a replacement Apple Product or part to you with installation instructions, if applicable, and any requirements for the return of the replaced Apple Product or part. If you follow the instructions, Apple will cancel the credit card authorization, so you will not be charged for the Apple Product or part and shipping to and from your location. If you fail to return the replaced Apple Product or part as instructed or return a replaced Apple Product or part that is ineligible for service, Apple will charge your credit card for the authorized amount.

(b) Service where Apple does not require return of the replaced Apple Product or part. Apple will ship you free of charge a replacement Apple Product or part accompanied by instructions on installation, if applicable, and any requirements for the disposal of the replaced Apple Product or part.

(c) Apple is not responsible for any labor costs you incur relating to DIY parts service. Should you require further assistance, contact Apple at the telephone number listed below.

Apple reserves the right to change the method by which Apple may provide warranty service to you, and your Apple Product's eligibility to receive a particular method of service. Service will be limited to the options available in the country where service is requested. Service options, parts availability and response times may vary according to country. You may be responsible for shipping and handling charges if the Apple Product cannot be serviced in the country it is in. If you seek service in a country that is not the original country of purchase, you will comply with all applicable import and export laws and regulations and be responsible for all custom duties, V.A.T. and other associated taxes and charges. Where international service is available, Apple may repair or replace Apple Products and parts with comparable Apple Product and parts that comply with local standards.

LIMITATION OF LIABILITY

EXCEPT AS PROVIDED IN THIS WARRANTY AND TO THE MAXIMUM EXTENT PERMITTED BY LAW, APPLE IS NOT RESPONSIBLE FOR DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OF WARRANTY OR CONDITION, OR UNDER ANY OTHER LEGAL THEORY, INCLUDING BUT NOT LIMITED TO LOSS OF USE; LOSS OF REVENUE; LOSS OF ACTUAL OR ANTICIPATED PROFITS (INCLUDING LOSS OF PROFITS ON CONTRACTS); LOSS OF THE USE OF MONEY; LOSS OF ANTICIPATED SAVINGS; LOSS OF BUSINESS; LOSS OF OPPORTUNITY; LOSS OF GOODWILL; LOSS OF REPUTATION; LOSS OF, DAMAGE TO, COMPROMISE OR CORRUPTION OF DATA; OR ANY INDIRECT OR CONSEQUENTIAL LOSS OR DAMAGE HOWSOEVER CAUSED INCLUDING THE REPLACEMENT OF EQUIPMENT AND PROPERTY, ANY COSTS OF RECOVERING, PROGRAMMING, OR REPRODUCING ANY PROGRAM OR DATA STORED IN OR USED WITH THE APPLE PRODUCT OR ANY FAILURE TO MAINTAIN THE CONFIDENTIALITY OF INFORMATION STORED ON THE APPLE PRODUCT.

THE FOREGOING LIMITATION SHALL NOT APPLY TO DEATH OR PERSONAL INJURY CLAIMS, OR ANY STATUTORY LIABILITY FOR INTENTIONAL AND GROSS NEGLIGENT ACTS AND/OR OMISSIONS. APPLE DISCLAIMS ANY REPRESENTATION THAT IT WILL BE ABLE TO REPAIR ANY APPLE PRODUCT UNDER THIS WARRANTY OR REPLACE THE APPLE PRODUCT WITHOUT RISK TO OR LOSS OF INFORMATION STORED IN THE APPLE PRODUCT.

SOME STATES (COUNTRIES AND PROVINCES) DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

GENERAL

No Apple reseller, agent, or employee is authorized to make any modification, extension, or addition to this Warranty. If any term is held to be illegal or unenforceable, the legality or enforceability of the remaining terms shall not be affected or impaired. This Warranty is governed by and construed under the laws of the country in which the Apple Product purchase took place. Apple or its successor in title is the warrantor under this Warranty.

ONLINE INFORMATION

More information of the following is available online:

International Support Information

Authorized Distributors

Apple Authorized Service Providers support.apple.com/kb/HT1937 | support.apple.com/kb/HT1434

Apple Retail Store

Apple Support and Service

Apple Complimentary Support

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Legal Hardware Apple One (1) Year Limited Warranty

Hardware and Software

- Hardware Warranties
- Software License Agreements
- RF Exposure

More Resources

- Overview
- Government Information Requests
- Contact Apple Legal
- Global Trade Compliance
- Supplier Provisions
- Filemaker Legal Information

Sales & Support

- Overview
- AppleCare
- Repair Terms and Conditions
- Express Replacement Service
- Remote Support Terms and Conditions (PDF)
- Sales Policies
- Certification Agreements and Policies
- Training Service Terms and Conditions
- Support Communities Terms of Use

Internet Services

- Overview
- Apple Media Services Terms and Conditions
- iTunes Gift Cards and Codes Terms and Conditions
- Game Center Terms and Conditions
- iCloud Terms of Service
- Privacy Policy
- Website Terms of Use
- iChat Account Terms of Service
- Print Services Sales Policies
- Print Services Terms of Use

Intellectual Property

- Overview
- Guidelines for Using Apple Trademarks and Copyrights
- Trademarks
- Rights and Permissions
- Piracy Prevention
- Unsolicited Idea Submission Policy

Education

- Apple School Manager

More ways to shop: [Visit an Apple Store](#), call 1-800-MY-APPLE, or [find a reseller](#).

View Warranty version

July 13, 2018 - Present

August 27, 2016 - July 12, 2018

February 04, 2016 - August 26, 2016

March 28, 2015

Apple One (1) Year Limited Warranty

For Apple Branded Product Only

IMPORTANT: BY USING YOUR iPhone, iPad, iPod, Apple TV or HomePod PRODUCT YOU ARE AGREEING TO BE BOUND BY THE TERMS OF THE APPLE ONE (1) YEAR LIMITED WARRANTY ("WARRANTY") AS SET OUT BELOW.

DO NOT USE YOUR PRODUCT UNTIL YOU HAVE READ THE TERMS OF THE WARRANTY. IF YOU DO NOT AGREE TO THE TERMS OF THE WARRANTY, DO NOT USE THE PRODUCT AND RETURN IT WITHIN THE RETURN PERIOD STATED IN APPLE'S RETURN POLICY (FOUND AT www.apple.com/legal/sales_policies/) TO THE APPLE OWNED RETAIL STORE OR THE AUTHORIZED DISTRIBUTOR WHERE YOU PURCHASED IT FOR A REFUND.

HOW CONSUMER LAW RELATES TO THIS WARRANTY

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY HAVE OTHER RIGHTS THAT VARY FROM STATE TO STATE (OR BY COUNTRY OR PROVINCE). OTHER THAN AS PERMITTED BY LAW, APPLE DOES NOT EXCLUDE, LIMIT OR SUSPEND OTHER RIGHTS YOU MAY HAVE, INCLUDING THOSE THAT MAY ARISE FROM THE NONCONFORMITY OF A SALES CONTRACT. FOR A FULL UNDERSTANDING OF YOUR RIGHTS YOU SHOULD CONSULT THE LAWS OF YOUR COUNTRY, PROVINCE OR STATE.

WARRANTY LIMITATIONS SUBJECT TO CONSUMER LAW

TO THE EXTENT PERMITTED BY LAW, THIS WARRANTY AND THE REMEDIES SET FORTH ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, REMEDIES AND CONDITIONS, WHETHER ORAL, WRITTEN, STATUTORY, EXPRESS OR IMPLIED. APPLE DISCLAIMS ALL STATUTORY AND IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND WARRANTIES AGAINST HIDDEN OR LATENT DEFECTS, TO THE EXTENT PERMITTED BY LAW. IN SO FAR AS SUCH WARRANTIES CANNOT BE DISCLAIMED, APPLE LIMITS THE DURATION AND REMEDIES OF SUCH WARRANTIES TO THE DURATION OF THIS EXPRESS WARRANTY AND, AT APPLE'S OPTION, THE REPAIR OR REPLACEMENT SERVICES DESCRIBED BELOW. SOME STATES (COUNTRIES AND PROVINCES) DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY (OR CONDITION) MAY LAST, SO THE LIMITATION DESCRIBED ABOVE MAY NOT APPLY TO YOU.

WHAT IS COVERED BY THIS WARRANTY?

Apple Inc. of One Apple Park Way, Cupertino, California, U.S.A. 95014 ("Apple") warrants the Apple-branded iPhone, iPad, iPod, Apple TV or HomePod hardware product and the Apple-branded accessories contained in the original packaging ("Apple Product") against defects in materials and workmanship when used normally in accordance with Apple's published guidelines for a period of ONE (1) YEAR from the date

of original retail purchase by the end-user purchaser ("Warranty Period"). Apple's published guidelines include but are not limited to information contained in technical specifications, user manuals and service communications.

WHAT IS NOT COVERED BY THIS WARRANTY?

This Warranty does not apply to any non-Apple branded hardware products or any software, even if packaged or sold with Apple hardware. Manufacturers, suppliers, or publishers, other than Apple, may provide their own warranties to you – please contact them for further information. Software distributed by Apple with or without the Apple brand (including, but not limited to system software) is not covered by this Warranty. Please refer to the licensing agreement accompanying the software for details of your rights with respect to its use. Apple does not warrant that the operation of the Apple Product will be uninterrupted or error-free. Apple is not responsible for damage arising from failure to follow instructions relating to the Apple Product's use.

This Warranty does not apply: (a) to consumable parts, such as batteries or protective coatings that are designed to diminish over time, unless failure has occurred due to a defect in materials or workmanship; (b) to cosmetic damage, including but not limited to scratches, dents and broken plastic on ports unless failure has occurred due to a defect in materials or workmanship; (c) to damage caused by use with a third party component or product that does not meet the Apple Product's specifications (Apple Product specifications are available at www.apple.com under the technical specifications for each product and also available in stores); (d) to damage caused by accident, abuse, misuse, fire, liquid contact, earthquake or other external cause; (e) to damage caused by operating the Apple Product outside Apple's published guidelines; (f) to damage caused by service (including upgrades and expansions) performed by anyone who is not a representative of Apple or an Apple Authorized Service Provider ("AASP"); (g) to an Apple Product that has been modified to alter functionality or capability without the written permission of Apple; (h) to defects caused by normal wear and tear or otherwise due to the normal aging of the Apple Product; (i) if any serial number has been removed or defaced from the Apple Product; or (j) if Apple receives information from relevant public authorities that the product has been stolen or if you are unable to deactivate passcode-enabled or other security measures designed to prevent unauthorized access to the Apple Product, and you cannot prove in any way that you are the authorized user of the product (eg. by presenting proof of purchase).

IMPORTANT RESTRICTION FOR IPHONE, IPAD, APPLE TV and HOMEPOD SERVICE.

Apple may restrict warranty service for iPhone, iPad, Apple TV and HomePod to the country where Apple or its Authorized Distributors originally sold the device.

YOUR RESPONSIBILITIES

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- (ii) replace the Apple Product with the same model (or with your consent a product that has similar functionality) formed from new and/or previously used parts that are equivalent to new in performance and reliability, or
- (iii) exchange the Apple Product for a refund of your purchase price.

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WARRANTY SERVICE OPTIONS

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(ii) Mail-in service. If Apple determines that your Apple Product is eligible for mail-in service, Apple will send you prepaid waybills and if applicable, packaging material and instructions on how to properly pack and address your Apple product, so that you may ship your Apple Product to an ARS or AASP location. Instructions may be sent to you via email or in hard copy with the packaging material. Once service is complete, the ARS or AASP location will return the Apple Product to you. Apple will pay for shipping to and

from your location if all instructions regarding the method of packaging and shipping the Apple Product are followed.

(iii) Do-it-yourself (DIY) parts service. DIY parts service allows you to service your own Apple Product. If DIY parts service is available in the circumstances, the following process will apply.

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(c) Apple is not responsible for any labor costs you incur relating to DIY parts service. Should you require further assistance, contact Apple at the telephone number listed below.

Apple reserves the right to change the method by which Apple may provide warranty service to you, and your Apple Product's eligibility to receive a particular method of service. Service will be limited to the options available in the country where service is requested. Service options, parts availability and response times may vary according to country. You may be responsible for shipping and handling charges if the Apple Product cannot be serviced in the country it is in. If you seek service in a country that is not the original country of purchase, you will comply with all applicable import and export laws and regulations and be responsible for all custom duties, V.A.T. and other associated taxes and charges. Where international service is available, Apple may repair or replace Apple Products and parts with comparable Apple Product and parts that comply with local standards.

LIMITATION OF LIABILITY

EXCEPT AS PROVIDED IN THIS WARRANTY AND TO THE MAXIMUM EXTENT PERMITTED BY LAW, APPLE IS NOT RESPONSIBLE FOR DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OF WARRANTY OR CONDITION, OR UNDER ANY OTHER LEGAL THEORY, INCLUDING BUT NOT LIMITED TO LOSS OF USE; LOSS OF REVENUE; LOSS OF ACTUAL OR ANTICIPATED PROFITS (INCLUDING LOSS OF PROFITS ON CONTRACTS); LOSS OF THE USE OF MONEY; LOSS OF ANTICIPATED SAVINGS; LOSS OF BUSINESS; LOSS OF OPPORTUNITY; LOSS OF GOODWILL; LOSS OF REPUTATION; LOSS OF, DAMAGE TO, COMPROMISE OR CORRUPTION OF DATA; OR ANY INDIRECT OR CONSEQUENTIAL LOSS OR DAMAGE HOWSOEVER CAUSED INCLUDING THE REPLACEMENT OF EQUIPMENT AND PROPERTY, ANY COSTS OF RECOVERING, PROGRAMMING, OR REPRODUCING ANY PROGRAM OR DATA STORED IN OR USED WITH THE APPLE PRODUCT OR ANY FAILURE TO MAINTAIN THE CONFIDENTIALITY OF INFORMATION STORED ON THE APPLE PRODUCT.

THE FOREGOING LIMITATION SHALL NOT APPLY TO DEATH OR PERSONAL INJURY CLAIMS, OR ANY STATUTORY LIABILITY FOR INTENTIONAL AND GROSS NEGLIGENT ACTS AND/OR OMISSIONS. APPLE DISCLAIMS ANY REPRESENTATION THAT IT WILL BE ABLE TO REPAIR ANY APPLE PRODUCT UNDER THIS WARRANTY OR REPLACE THE APPLE PRODUCT WITHOUT RISK TO OR LOSS OF INFORMATION STORED IN THE APPLE PRODUCT.

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ONLINE INFORMATION

More information of the following is available online:

- International Support Information www.apple.com/support/country
- Authorized Distributors support.apple.com/kb/HT1434
- Apple Authorized Service Providers support.apple.com/kb/HT1937
support.apple.com/kb/HT1434
- Apple Retail Store www.apple.com/retail/storelist/
- Apple Support and Service www.apple.com/support/contact/phone_contacts.html
- Apple Complimentary Support www.apple.com/support/country/?dest=complimentary

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Legal Hardware Apple One (1) Year Limited Warranty

Hardware and Software	Sales & Support	Internet Services	Intellectual Property
Hardware Warranties	Overview	Overview	Overview
Software License Agreements	AppleCare	Apple Media Services Terms and Conditions	Guidelines for Using Apple Trademarks and Copyrights
RF Exposure	Repair Terms and Conditions	iTunes Gift Cards and Codes Terms and Conditions	Trademarks
More Resources	Express Replacement Service	Game Center Terms and Conditions	Rights and Permissions
Overview	Remote Support Terms and Conditions (PDF)	iCloud Terms of Service	Piracy Prevention
Government Information Requests	Sales Policies	Privacy Policy	Unsolicited Idea Submission Policy
Contact Apple Legal	Certification Agreements and Policies	Website Terms of Use	Education
Global Trade Compliance	Training Service Terms and Conditions	iChat Account Terms of Service	Apple School Manager
Supplier Provisions	Support Communities Terms of Use	Print Services Sales Policies	
Filemaker Legal Information		Print Services Terms of Use	

More ways to shop: [Visit an Apple Store](#), call 1-800-MY-APPLE, or [find a reseller](#).

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10 *Attorneys for Plaintiff*

11
12 UNITED STATES DISTRICT COURT
13 NORTHERN DISTRICT OF CALIFORNIA
14 SAN FRANCISCO DIVISION

15 VICKY MALDONADO AND JUSTIN CARTER,
16 individually and on behalf of themselves and all
others similarly situated,

17 Plaintiffs,

18 v.

19 APPLE INC., APPLCARE SERVICE
20 COMPANY, INC., AND APPLE CSC, INC.

21 Defendants.
22

No. 3:16-cv-04067-WHO

Related Case:
English v. Apple Inc., et al.
Case No. 3:14-cv-01619-WHO

**DECLARATION OF MICHAEL PECHT
IN SUPPORT OF PLAINTIFFS' MOTION
FOR CLASS CERTIFICATION**

Hearing: May 15, 2019
Time: 2:00 p.m.
Judge: William H. Orrick
Courtroom: 2, 17th Floor

1 I, Michael Pecht, declare as follows:

2 1. I have been retained by Plaintiffs as an expert in the above-captioned action. I have
3 specialized knowledge, skill, and professional experience in the field of reliability, reliability of
4 electronics and electrical engineering. I am personally familiar with the facts set forth in this
5 declaration. If called as a witness, I could and would competently testify to the matters stated
6 herein.

7 2. I submit this declaration on behalf of the Plaintiffs in support of their Motion for
8 Class Certification.

9 3. Attached hereto as Exhibit A is a true and correct copy of my Expert Report.

10 4. Attached hereto as Exhibit B is a true and correct copy of my Curriculum Vitae.

11 I declare under penalty of perjury under the laws of the United States that the foregoing is
12 true and correct.

13 Executed this 25th day of February, 2019, in Hyattsville, Maryland.

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15 _____
16 Michael Pecht

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EXHIBIT A

FILED UNDER SEAL

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN FRANCISCO DIVISION

VICKY MALDONADO AND JUSTIN CARTER,))
Individually and on behalf of themselves and all))
others similarly situated,))

Plaintiffs,))

v.))

Case No. 3:16-cv-04067-WHO

APPLE INC., APPLECARE SERVICES))
COMPANY, INC., AND APPLE CSC, INC.))

Defendants.))

EXPERT REPORT OF MICHAEL PECHT, PH.D.

Prepared for:
Steve Berman
Robert Carey
Michella Kras
Hagens Berman Sobol Shapiro LLP
February 25, 2019

Michael Pecht, Ph.D.

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TABLE OF CONTENTS

Table of Contents2

1. Introduction3

 Qualifications.....3

 Context of Analysis5

2. Case BackGround.....7

3. Opinion10

 Summary of Opinion10

4. Conclusions13

5. Data Sources and Documents Used13

1. INTRODUCTION

This report presents an opinion regarding the language “equivalent to new in performance and reliability” and whether testing protocols and procedures are sufficient for Apple to represent that its remanufactured iPads and iPhones are “equivalent to new in performance and reliability,” as set forth in Apple’s AppleCare and AppleCare+ contracts related to Apple Inc.’s, et al. (“Defendants” or “Apple”) breach of contract asserted in this case. I have been retained on behalf of Vicky Maldonado and Justin Carter and similarly situated individuals (“Plaintiffs”) as an expert in the above captioned matter.

QUALIFICATIONS

I have a B.S. in Physics, an M.S. in Electrical Engineering, and an M.S. and Ph.D. in Engineering Mechanics from the University of Wisconsin at Madison. I worked as a civil servant electrical technician for 4 years to pay my way through college. After graduation, I spent one year working as a NASA contractor on the Astro-1 space telescope to assess reliability issues for that telescope. Since my Ph.D., I have had over thirty years of additional experience in electronics generally, including with electronic materials, components, and electronics testing, and reliability. I have extensive, hands-on experience in the design, manufacture, and testing of electronic components and final products.

I have a Professional Engineer license for the State of Maryland, and I am a Fellow of three of the largest professional societies relevant to the subject matter in this case: The Institute of Electrical and Electronics Engineers, Inc. (“IEEE”), the International Microelectronics Packaging Society (“IMAPS”), and the American Society of Mechanical Engineers (“ASME”). These professional societies address electronic materials, components, assemblies and products; electronics design, manufacture and testing; and quality and reliability.

I am the founder and Director of CALCE Electronic Products and Systems Center at the University of Maryland, which is funded by over 100 of the world’s leading electronics companies. I am also a Professor of Applied Mathematics, Statistics and Scientific Computation. And, I am also the George Dieter Chair Professor in Mechanical Engineering at the University of Maryland, where I have taught classes on electronics materials, design, manufacture and testing, and reliability and safety, at the graduate and undergraduate level, for over 25 years. I have also served as a Professor in Electrical Engineering and Physics and I have taught formal courses for private companies and professional organizations, including the ASME, IEEE, SMTA and IPC, the U.S. military, NASA, the FDA, and for agencies under the sponsorship of the United Nations.

Besides teaching, I have consulted with over eighty major international electronics companies, including with companies on the subject of electronics design, manufacture and testing; quality and reliability; for companies such as Intel, Microsoft, Texas Instruments, Dell, AMP, Nortel,

Samsung, Nokia, Ericson, Emerson, Honeywell, Boeing, and others. I have also had numerous projects with NASA, the FDA, and the U.S. Military.

I am very familiar with the quality and reliability issues associated with electronics products and systems. I have conducted or had conducted at my direction many hundreds of tests and failure analysis of electronics, including but not limited to, cell phones, computers, engine control units for automobiles and airplanes, and electronics used in medical systems, telecommunication systems, military systems and space applications.

I have served on various National Academy of Science / Engineering (NAE / NAS) Committees (invited to participate), including the committee for reliability growth (how to improve the reliability of U.S. military weapon systems); committee to investigate printed circuit board manufacturing in the U.S.; committee to examine U.S. research needs in materials engineering

I also served as an expert for congressional investigations, including the Committee on Energy & Commerce to investigate automotive reliability and safety issues: Toyota sudden acceleration (2009-2010); and GM ignition, air-bag recalls and NHTSA responses (2014).

I served as an FDA expert and taught electronics and reliability courses and aided the FDA in assessing the reliability capability maturity assessment of manufacturers of medical products, the techniques used to qualify products, and medical product reliability and safety.

I served as chief editor of the IEEE Access for six years, IEEE Transactions on Reliability for eight years, and on the advisory board of IEEE Spectrum. I also served as chief editor for Microelectronics Reliability for over 16 years and as an associate editor for the IEEE Transactions on Components and Packaging Technology. I am the editor in chief of the journal Circuit World, and also editor in chief of the journal Life Cycle Reliability and Safety Engineering.

I have written over thirty books and over 700 articles on various subjects related to electronic product design, manufacture, test, reliability and supply chain management. According to Google Scholar, I have over 25,000 citations to my work. I wrote one of the first electronics packaging books for practicing engineers and the classroom, entitled Handbook of Electronic Package Design, Marcel Dekker, New York, NY (1991). In addition, I have authored, co-authored, or edited several reference books that discuss electronics design, manufacture and testing, quality and reliability, including:

- Chung, H. S., H. Wang, F. Blaabjerg, and M. Pecht, *Reliability of Power Electronic Converter Systems*, The Institution of Engineering and Technology, London, United Kingdom (2015).

- Fries, A., W. P. Cherry, R. G. Easterling, E. A. Elsayed, A. V. Huzurbazar, P. A. Jacobs, W. Q. Meeker JR, G. Nagappan, M. Pecht, A. Sen, and S. V. Wiel, *Reliability Growth: Enhancing Defense System Reliability*, The National Academies Press, Washington, DC (2015).
- Kapur, K., and M. Pecht, *Reliability Engineering*, John Wiley, Hoboken, NJ (2014).
- Ardebili, H., and M. Pecht, *Encapsulation Technologies for Electronic Applications, Materials and Processes for Electronic Applications Series*, Elsevier Press (2009).
- Pecht, M., *Parts Selection and Management*, John Wiley Publishing Co. (2004).
- Liu, W. and M. Pecht, *IC Component Sockets*, John Wiley & Sons, Inc. (2004).
- Pecht, M., et al., *Electronic Packaging Materials and their Properties*, CRC Press (1999).
- Hannemann, R., Kraus, A. and M. Pecht, *Semiconductor Packaging—A Multidisciplinary Approach*, John Wiley Publishing Co. (1997).
- Pecht, M., et al., *Plastic Encapsulated Microelectronics: Materials, Processes, Quality, Reliability, and Applications*, John Wiley Publishing Co. (1995).
- Pecht M., *Integrated Circuit, Hybrid and Multichip Module Package Design Guidelines*, John Wiley Publishing Co. (1994).
- Pecht, M., *Soldering Processes and Equipment*, John Wiley Publishing Co. (1993).
- Pecht, M., *Handbook of Electronic Package Design*, Marcel Dekker (1991).

I hold 10 U.S. patents. In 1997, I received the ISHM / IEPS William D. Ashman Memorial Achievement Award for numerous contributions to academia and the electronics packaging industry. In 1999, I received the 3M Research Award for research work in the electronics reliability area that has significantly contributed to the scientific understanding of material properties and their complex behavior. In 2008, I was awarded the IEEE Reliability Society's Lifetime Achievement Award. In 2010, I received the IEEE Exceptional Technical Achievement Award.

CONTEXT OF ANALYSIS

Plaintiffs assert that Apple breached its AppleCare and AppleCare+ contracts by providing remanufactured replacements that are not equivalent to new devices in performance or reliability.

I was tasked to look to the factual basis for the language “equivalent to new in terms of performance and reliability.” While I have examined iPhones and iPads, having taken them apart and examined the components; have written articles pertaining to Apple products; and having reviewed various documents provided by counsel, including depositions of Apple employees, I have focused this Report on whether a remanufactured iPhone or iPad, consisting

of “used” (salvaged) parts taken from previously used iPhones / iPads, can be equivalent to new in terms of performance and reliability.

I also reviewed Apple’s performance and reliability testing protocols and procedures and opine on whether those testing protocols and procedures are sufficient for Apple to represent that its remanufactured iPads and iPhones are “equivalent to new in performance and reliability,” as set forth in Apple’s AppleCare and AppleCare+ contracts.

My opinions are based on more than 35 years in the reliability industry. My team has some of the most sophisticated test and analysis equipment in the world and has conducted studies for companies such as Samsung, LG, Nokia, Intel, and Emerson. I also have experience and written papers in the area of refurbishment (remanufacturing). Industry publications similarly support my finding.¹ Furthermore, as chief editor of Microelectronics Reliability and IEEE Transactions on Reliability and as a professional engineer and author of some 30 books and over 500 publications in the area of reliability, I can say, based on my knowledge and experience, and applying basic principles of physics and engineering in a generally accepted manner, that when a device consists of salvaged (used and thus subject to aging and wear-out degradation mechanisms) electronics parts, they are not equivalent to new in terms of reliability.

All the facts and circumstances set forth in this report are known to me personally and I am prepared to testify to them if called upon to do so. A true and correct copy of my curriculum vitae, which includes a list of my publications, is submitted herewith. I am being compensated for my work on this matter based on an agreed upon hourly billing rate schedule. My hourly billing rate for professional services related to this case is \$500 per hour, \$550 per hour for testimony, and \$200 an hour for required travel when no work may be conducted. My payment in this matter is not contingent upon my opinions or the outcome of this litigation.

In formulating my opinions in this case, I focused on the materials listed in Section 5. My analysis of materials produced in this case is on-going. As new material is presented to me, I will continue my review of such material. Therefore, this report represents only those opinions I have formed to date. I reserve the right to revise, supplement, and amend the opinions stated herein based on new information, on my continuing analysis of the materials already provided, and on any new information, materials, and analyses related to the expert reports in this case.

In connection with my anticipated testimony at trial, I may use as exhibits various documents produced in this case that refer to or relate to the matters contained within this report and

¹ JEDEC provides fundamental standards for the electronics reliability engineers. For example, JEDEC’s JEP 122G Standard, titled Failure Mechanisms and Models for Semiconductor Devices, provides information on how loading conditions cause degradation to electronic components. JEDEC is widely used and accepted in the engineering and electronics manufacturing realms.

exhibits, or which are derived from the results and analyses discussed in this report and attached exhibits.

2. CASE BACKGROUND

Apple, Inc. (“Apple”) allegedly sold extended warranties on its iPhones and iPads called AppleCare and AppleCare+, as described in Plaintiffs First Amended Complaint (“FAC”),² and admitted in Apple Inc.’s Answer to the FAC³. I reviewed and relied on the AppleCare/AppleCare+ warranties, especially provisions relating to covered and replacement devices.

Section 3.1 of the AppleCare contract covers defects in materials and workmanship, and provides in part:

3.1 Hardware Service

If during the Coverage Period, you submit a valid claim by notifying Apple that (i) a defect in materials and workmanship has arisen in the Covered Equipment ... Apple will . . . exchange the Covered Equipment with a replacement product that is new or equivalent to new in performance and reliability and is functionally equivalent to the original product.⁴

Section 3 of the AppleCare+ contract covers defects in materials, workmanship, and accidental damage, and provides in part:

3.1 Hardware Service

If during the Plan Term, you submit a valid claim by notifying Apple that (i) a defect in materials and workmanship has arisen in the Covered Equipment ... Apple will . . . exchange the Covered Equipment, with a replacement product that is new or equivalent to new in performance and reliability. All replacement products provided under this Plan will at a minimum be functionally equivalent to the original product

...

² First Amended Complaint (“FAC”) ¶¶ 33-34, 46-49, November 14, 2017.

³ Apple Inc.’s Answer to the FAC (“Answer”) ¶¶ 33-34, 46-49, April 5, 2017.

⁴ APL-MLDND0_00001158-1166.

3.2 Accidental Damage from Handling

If during the Plan Term you submit a valid claim notifying Apple that the Covered Device has failed due to accidental damage from handling (“ADH”), Apple will, subject to the service fee described below, . . . exchange the Covered Device with a replacement product that is new or equivalent to new in performance and reliability (both individually known as a “Service Event”).⁵

Based on my review of these contracts and the materials in this case, the relevant provisions at issue in the case are the same, notwithstanding that are different iterations of AppleCare and AppleCare+ contract language. Specifically, under the AppleCare contract, if an iPhone or iPad is defective, Apple will replace the iPhone or iPad with one that is “new or equivalent to new in performance and reliability.” AppleCare+ provides that if an iPhone or iPad is defective or becomes damaged by the customer, Apple will provide a replacement iPhone or iPad that is “new or equivalent to new in performance and reliability.”⁶ I further understand that the parties have stipulated that such language applies to all devices at issue in this matter.

Apple admits that the replacement iPhones and iPads (“devices”) it provides under AppleCare/AppleCare+ fall into three categories: new, reclaimed,⁷ and remanufactured.⁸

Apple builds both new and remanufactured devices and [REDACTED]

[REDACTED]⁹

[REDACTED]¹⁰

The main difference between new and remanufactured devices is that new devices contain all new parts and remanufactured devices contain salvaged (used) parts. [REDACTED]

[REDACTED]

⁵ APL-MLDND0_00000055-65.

⁶ FAC ¶¶ 33, 38, 40, 43, 49, 52-53, 62, 65; Apple Inc.’s Responses and Objections to Plaintiffs’ First Set of Non-Uniform Interrogatories, Response to Interrogatory No.12, July 28, 2017.

⁷ I was not asked to make an opinion on reclaimed devices.

⁸ Apple Inc.’s Responses and Objections to Plaintiffs’ First Set of Non-Uniform Interrogatories, Response to Interrogatory Nos.1, 15, July 28, 2017.

⁹ Apple Inc.’s Responses and Objections to Plaintiffs’ First Set of Non-Uniform Interrogatories, Response to Interrogatory No. 15, July 28, 2017; Deposition of Jason Fu 18:24-19:8, 19:12-15, Jan. 8, 2019; Deposition of Michael Lanigan 41:21-24, Jan. 11, 2019.

¹⁰ Apple Inc.’s Highly Confidential Supplemental Response and Objections to Plaintiffs’ First Set of Non-Uniform Interrogatories, Response to Interrogatory No. 4, February 2, 2018.

[REDACTED]

1

[REDACTED]

Apple alleges its remanufactured iPhones and iPads are equivalent to new in performance and reliability because they undergo the same performance testing, meet the same performance standards, and are subject to the same reliability testing.¹⁴

Apple alleges that every new and remanufactured device is subject to the same performance tests

[REDACTED]

[REDACTED]

¹¹ Apple Inc.'s Highly Confidential Supplemental Response and Objections to Plaintiffs' First Set of Non-Uniform Interrogatories, Response to Interrogatory No. 15, February 2, 2018; Deposition of Jason Fu 19:20-20:21, Jan. 8, 2019; Deposition of Michael Lanigan 21:25-22:6, Jan. 11, 2019.

¹² Apple Inc.'s Highly Confidential Supplemental Response and Objections to Plaintiffs' First Set of Non-Uniform Interrogatories, Response to Interrogatory Nos. 6 and 9, February 2, 2018.

¹³ Deposition of Michael Lanigan 67:6-18, 68:10-69:4, Jan. 11, 2019.

¹⁴ Apple Inc.'s Highly Confidential and Restricted Access Supplemental Response and Objections to Plaintiffs' First Set of Non-Uniform Interrogatories (Interrogatory No. 7), February 2, 2018 ("Fully-assembled remanufactured iPhones and iPads likewise undergo the same testing and are subject to the same high quality standards as iPhones and iPads that Apple sells as new in Apple-branded boxes"); Deposition of Jason Fu 21:20-24, 22:24-23:4, 24:12-15, 90:25-91:13, Jan. 8, 2019; Deposition of Michael Lanigan 126:17-22, Jan. 11, 2019.

¹⁵ Apple Inc.'s Highly Confidential and Restricted Access Supplemental Response and Objections to Plaintiffs' First Set of Non-Uniform Interrogatories (Interrogatory No. 7), February 2, 2018; Deposition of Jason Fu 21:20-24, 22:24-23:4, 24:12-15, Jan. 8, 2019; Deposition of Michael Lanigan 27:8-11, 50:18-23, 52:10-12, 54:3-9, 126:7-127:5, 128:8-12, 129:23-130:23, 133:9-25, 134:16-9, Jan. 11, 2019.

3. OPINIONS

SUMMARY OF OPINIONS

1. Reliability is the probability that a product will properly perform its intended functions over time. In the simplest sense, for a fixed population of devices, the reliability $R(t)$, at a time t , is the number of devices that have not yet failed, divided by the population of devices.
2. Electronic parts and products (devices, equipment) are known to wear-out with time, usage (operational) conditions, and environmental conditions.
3. The clock ticks as soon as the parts of the product are made and continues through assembly into the product, shipping, handling, and operation (and non-operating) under the various environmental conditions that the product (device) and its components encounter.
4. The loading (stress) conditions that cause degradation through the life cycle profiles include but are not limited to: thermal ranges and changes, mechanical loads / stresses (including handling and operation such as pushing buttons), humidity and moisture, vibration, shock, dust, smoke and other contaminants, and even radiation.
5. Load (stress) conditions arise from the environmental surrounding and the operation. Dropping your product, for example, can cause damage to parts and components; this damage may not be readily seen by the naked eye or by normal functional / performance testing, but it will accelerate the failure of the product (e.g., reduce the useful life of the product).
6. As loads (stresses) are encountered, the components of the product degrade. The amount of degradation will depend on the specific loads (stresses) that were applied and the length of time (cycles, rates, etc.) that the loads (stresses) were applied (e.g. the load profile).

¹⁶ Deposition of Jason Fu 24:18-25:6, 160:8-162:23, Jan. 8, 2019; Deposition of Michael Lanigan 46:6-47:23, Jan.11, 2019.

¹⁷ Deposition of Jason Fu 25:17-26:1, 34:3-6, Jan. 8, 2019; Deposition of Michael Lanigan 49:12-50:15, 53:8-15, Jan. 11, 2019.

7. Every iPhone or iPad used by a consumer will be subjected to some load conditions. These load (stress) conditions occur as a result of simply operating the device and will vary depending on numerous factors, such as, how long the device was used, how much it was used, what were the temperatures and temperature changes of the device, how the device battery was charged and discharged, how often it was dropped, and how much dust, smoke, and moisture has been introduced into the device.

8. Like all electronic components, the electrical components in Apple's devices have a limited life span because of these load (stress) conditions. Load (stress) conditions age materials, degrade components of the device, and thus use up the life of a component and the device itself.

9. [REDACTED] The science behind this can be found in various articles that I (and others) have published on vibrational and shock fatigue of solder joints, including in some of the documents I listed in this report.

10. A given load (stress) condition may not affect the immediate performance or functionality of a device, but they will age / degrade the components and the device, and thus the components and the device will not have the same life span as a new component / device. [REDACTED] —but their life span will have shortened / degraded. For example, a MEMS (Micro-Electro-Mechanical Systems, or MEMS, is a technology that is generally defined as miniaturized mechanical and electro-mechanical elements, structures and devices, that are made using the techniques of microfabrication) microphone will degrade in its acoustic frequency range if the MEMS has been subjected to any form of contaminants that can affect the delicate diaphragm of the MEMS. Thus, while one may still be able to hear a voice, the MEMS will degrade over time until it fails.

11. Similarly, there could be some degradation in performance (e.g. sound quality) due to load (stress) conditions [REDACTED] is a sensitive, tiny, exposed electronic part whose exterior surface is subjected to moisture, heat, and dust, and smoke, which will

¹⁸ Deposition of Michael Lanigan 168:8-11, May 8, 2015.

¹⁹ Deposition of Michael Lanigan 228:21-229:1, May 8, 2015.

degrade its performance. Without knowing the specific tests and standards applied, I can only opine generically that load conditions could diminish performance.

[REDACTED]

[REDACTED]

14. Under Apple's approach, every remanufactured device has salvaged components, and those components would have been subjected to some level of load (stress) conditions.

[REDACTED]

15. [REDACTED], components will have been subject to varying levels of load (stress) conditions. These parts may pass a functional test, but they will not be the same as new, since they were subjected to loading (stress) conditions. This is similar to the fact that smoking a pack of cigarettes a day may not immediately affect one's health, but it is constantly degrading the lungs. As a result, remanufactured devices containing used components can never be as reliable as new devices containing all new components.

16. Apple's reliability testing does not determine whether remanufactured devices are equally reliable to new devices.

[REDACTED]

If this was conducted, then Apple could determine the [REDACTED] that would enable a proper comparison. [REDACTED]

²⁰ Deposition of Jason Fu 25:17-26:1, 34:3-6, 160:8-162:23, Jan. 8, 2019; Deposition of Michael Lanigan 46:6-47:23, 49:12-50:15, 53:8-15, Jan. 11, 2019.

²¹ Deposition of Michael Lanigan 67:6-18, 68:10-69:4, Jan. 11, 2019.

²² Deposition of Michael Lanigan 30:23-23, May 8, 2015; Deposition of Michael Lanigan 34:11-35:9, Jan. 11, 2019.

[REDACTED] Apple cannot determine whether remanufactured devices are “equivalent to new” devices; it only assesses that each passes [REDACTED]

4. CONCLUSIONS

1. Devices containing salvaged (used) components can never be as reliable as devices containing new components, meaning remanufactured devices can never be equivalent to new in reliability. Furthermore, devices’ performance is also likely to be adversely impacted by load conditions.
2. Apple’s testing is insufficient for Apple to represent that remanufactured devices are equivalent to new devices in reliability.

5. DATA SOURCES AND DOCUMENTS USED

In forming my opinions for this report, I have considered the documents referenced in this report and specifically the following materials:

DOCUMENTS

1. Plaintiff’s First Amended Complaint, November 14, 2016
2. Apple Inc.’s Answer to First Amended Complaint, April 5, 2017
3. Apple Inc.’s Responses and Objections to Plaintiffs’ First Set of Non-Uniform Interrogatories, July 28, 2017
4. Apple Inc.’s Highly Confidential and Restricted Access Supplemental Response and Objections to Plaintiffs’ First Set of Non-Uniform Interrogatories (Interrogatory No. 7), February 2, 2018
5. Apple Inc.’s Highly Confidential Supplemental Response and Objections to Plaintiffs’ First Set of Non-Uniform Interrogatories (Interrogatory Nos. 4, 6, 9, 10, 11, and 15), February 2, 2018
6. Highly Confidential and Restricted Access Rule 30(b)(6) Deposition of Jason Fu, January 8, 2019
7. Highly Confidential and Restricted Access Rule 30(b)(6) Deposition of Michael Lanigan, January 11, 2019
8. AppleCare and AppleCare+ Contracts, APL-MLDNDO_00001158-1166 and APL-MLDNDO_00000055-65

²³ Deposition of Michal Lanigan 129:23-130:23, 133:9-22, 134:16-9, Jan. 11, 2019.

9. *English v. Apple, Inc.*, Case No.:14-cv-01619-WHO, Highly Confidential-Attorneys'-Eyes-Only Deposition of Michael Lanigan, May 8, 2015

OTHER REFERENCES

1. Failure Mechanisms and Models for Semiconductor Devices, JEDEC JEP 122G (1996)
2. Physics of Failure Reliability Predictions, ANSI/VITA (2016)
3. Qualification and Environmental Stress Screening in Support of Reliability Predictions, ANSI/VITA (2010, R2016)

6. PREVIOUS TESTIMONY

The following is a list of cases I given expert testimony in a deposition or at trial in the last four years:

1. Michael Phelan, Phelan Petty, PLC (2018–present): Consultant on various e-cigarette battery reliability and safety law cases. (deposition)
2. *Seoul Viosys Co., Ltd. v. P3 Internat'l Corp. et al.*, No. 16-CV-06276(AJN)(SN), S.D.N.Y. (2017–2018) IPR on 3 Seoul Semiconductor LED patents (deposition)
3. *Bing Xu Precision Co. Ltd., v. Acer Inc., et al.*, No. 5:16-cv-02491-EJD, N.D. Cal. (2017 - 2018) (2017–2018): consultant on SATA connector patents (IPR): (deposition)
4. *Lotes Co., Ltd. v. Hon Hai Precision Industry Co., Ltd et al.*, 2:12-cv-07465-SAS, S.D.N.Y. Hon Hai (Foxconn) (2016): Expert on connector / IC socket patents. (deposition, trial testimony)
5. European litigation (2016): Advokatfirman Vinge KB: reliability analysis of power meters and repair processes. (trial court)
6. *English et al. v. Apple, Inc. et al.*, Case No.:14-cv-01619-WHO (N.D. Cal. 2014): expert on reliability and refurbishment issues related to Apple devices (deposition)

EXHIBIT B

Michael Gerard Pecht

Professional Engineer

EDUCATION

Ph.D. Engineering Mechanics (1982); M.S. Engineering Mechanics (1979); M.S. Electrical Engineering (1978); B.S. Acoustics-Physics (1976); Univ. of Wisconsin, Madison.

EXPERIENCE

Faculty: George E. Dieter Chair Professor in Mechanical Engineering (1983–present), Professor of Applied Mathematics, Statistics and Scientific Computation (2008–present), and Professor in Systems Engineering at the University of Maryland (1990–1994). Adjunct Professor in Risk Management at Yokohama National University (2016), Professor of Electrical Engineering at City University of Hong Kong (2008–2010). Visiting Professor in Reliability Engineering at Beihang University—China (2005–2013). Visiting Professor in Physics at Shanghai—JiaoTong University (2004–2007). Managed over 200 programs funded by both government and industry. Developed 12 courses associated with electronics products and systems, and prognostics and systems health management, authored more than 30 books, and graduated over 100 M.S. and 60 Ph.D. students.

Founder and Director: Center for Advanced Life Cycle Engineering (CALCE), having consortia in both Electronic Products and Systems, and Prognostics and Health Management, and supported by over 150 industry and government members, with a budget of over \$6 million/yr, and graduating over 30 M.S. and Ph.D. students per year.

National Academy of Science/Engineering (NAE/NAS) Committees (invited to participate): Committee for reliability growth; Committee to investigate printed circuit board manufacturing in the U.S.; Committee to examine research needs in materials engineering; Committee to investigate automotive sudden acceleration and reliability (gave presentation but declined to participate).

Expert for Congressional Investigations: Committee on Energy & Commerce to investigate automotive reliability issues: Toyota sudden acceleration (2009–2010); and GM ignition – air bag recalls and NHTSA responses (2014).

FDA Expert: Taught reliability and aided FDA in assessing the reliability capability maturity assessment of manufacturers of medical devices, the techniques used to qualify devices, and medical device reliability and safety. (Sept. 2007–Sept. 2008)

Editor in Chief:

- IEEE Access (2012–present): first editor of the journal; 2015 PROSE Award winner in the subject category of “Journal/Best New STM (Scientific, Technical, and Medical).” : Selected for Thomson Reuters Science Citation Index in 2015.
- Life Cycle Reliability and Safety Engineering, Springer (2012–present)
- Microelectronics Reliability, Elsevier (1996–2012)
- International Journal of Performability Engineering (2009–2012)
- IEEE Transactions on Reliability (1988–1997)

Vice President: PASS Inc., Initiated programs under both U.S. Army and Air Force contracts to determine the storage reliability of electronic equipment and to develop assessment methods for long term storage and dormancy reliability. Resigned as Vice President but still serves as a consultant (company is now called ERS Inc.) (1990–1993)

Vice President: Ramsearch Inc., Established company and awarded \$1.5M to develop a concurrent electrical engineering decision support system. Won contracts to research temperature-dependent IC failures. Was bought out in 1991. (1988–1991)

Scientist: Engineering Research Center, Madison, WI: Worked on reliability assessment of Astro I Space Telescope. (1983)

Civil Service Electronics Technician: High Energy Physics at the University of Wisconsin and at the National Accelerator Laboratory in Batavia, Illinois. Developed electronics instrumentation. (1971–1975)

Selected Research and Organizational Accomplishments

- 2017, Chairman for IEEE 1856, “Standard Framework for Prognostics and Health Management (PHM) of Electronic Systems”. This standard describes a normative framework for classifying PHM capability and for planning the development of PHM for an electronic system or product.
- 2012, Selected to be the Editor in Chief of the new IEEE Access journal. This journal was awarded the 2015 PROSE Award in the subject category of “Journal/Best New STM (Scientific, Technical, and Medical).”
- 2010, Established a battery health management and prognostics research program at CALCE, with over \$1M funding from NSF, U.S. Navy, and the CALCE members.
- 2008, Initiated prognostics and system’s health management research at the City University of Hong Kong and within southern China. Received over US \$3M in grant funding from the Hong Kong government.
- 2007, Established the CALCE Prognostics and Health Management Consortium at the University of Maryland. This was the first diagnostics, prognostics, and system health management consortium for electronics in the world.
- 2005, Developed a new paradigm for reliability prediction of electronics based on prognostics, whereby sensor data can be integrated with models that enable in-situ assessment of the deviation or degradation of a product from an expected normal operating condition and the prediction of the future state of reliability. Developed prognostics roadmap for inclusion in the ITRI semiconductor roadmap.
- 2005, Chairman for IEEE Organizational Reliability Capability Standard 1624, which defines the reliability capability of organizations and identifies the criteria for assessing the reliability capability of an organization.
- 2004, Developed the concept of physics-of-failure for electronics reliability and the Failure Modes, Mechanism and Effects Analysis (FMMEA), which became formalized in a series of JEDEC Standards, including: JEDEC-STD-148, titled “Reliability Qualification of Semiconductor Devices Based on Physics of Failure Risk and Opportunity Assessment;” JESD34, titled “Failure-Mechanism-Driven Reliability Qualification of Silicon Devices;” JESD47, titled “Stress-Test Driven Qualification of Integrated Circuits;” and JESD94, titled “Application Specific Qualification Using Knowledge Based Test Methodology.”
- 2002, Established electronics prognostics and health monitoring program at CALCE Electronic Products and Systems Center. Developed prognostics and physics-of-failure techniques to prove (under 2 NASA contracts) that the electronics on a NASA space shuttle robot arm and on NASA booster rockets can survive additional missions after the completion of the 2001 designed-for life. This was used to certify future missions.
- 2002, Chairman for IEEE Reliability Prediction Assessment Guidebook #1413.1 (1999–2002).
- 2001, Established \$4M lead-free electronics research program at CALCE. This was the only research program to assess the long-term (6 years +) reliability of lead-free devices and products.
- 1999, Established CALCE Electronic Products and Systems Center as the first academic research facility in the world to be ISO 9001 certified.
- 1999, Developed Pecht’s Law, which provides an estimate of semiconductor device reliability trends and the requirements for accelerated testing.
- 1998, As IEEE chairperson, led the development of both the IEEE #1332 Reliability Program Standard, and IEEE #1413 Standard Methodology for Reliability Prediction and Assessment for Electronic Systems and Equipment. Received IEEE Standards Award in 2000.
- 1997, Developed the concept of “up-rating”, which is the process to assess the capability of semiconductor devices to meet functionality and performance requirements outside the manufacturers’ specification. The up-rating approach was institutionalized into IEC/PAS 62240: Use of Semiconductor Devices Outside Manufacturers’ Specified

Temperature Ranges, Edition 1, 2001; as well as GEIA 4900, 2001, and is currently used for all commercial avionics systems.

- 1996, Led program to develop production-quality design and reliability assessment methods and software used by Texas Instruments, Westinghouse, AlliedSignal, Lockheed, and Rockwell International.
- 1995, Won \$4.8M in NSF contracts to enhance the research and educational programs in electronic products and systems development.
- 1995, Modeled IC endurance and assessed the risks of replacing ceramic IC packages with plastic packages for avionics and military applications. The studies (and book “Plastic Encapsulated Microcircuits” John Wiley Publishing), were fundamental to the use of plastic encapsulated microcircuits for the Boeing 777 and for the general use of commercial parts in military and aerospace applications.
- 1995, Formalized the concept of the physics-of-failure of electronic components, a methodology which includes modeling root-cause failure mechanisms and the impact of defects and loads on product reliability.
- 1993, Designed and fabricated an opto-electronics semiconductor package for the automotive industry (with Dr. David Bigio).
- 1992–1994, Guided the U.S. DoD to reform the military reliability standards, which led to the “Perry Memo” on Standards Reform. Pecht’s work led to Army’s establishment of a Physics-of-Failure Branch and their use of software generated by CALCE for military systems. Similarly, GM transitioned from military reliability standards and now requires the use of CALCE reliability software in their vehicles under GM specification GM-3172.
- 1992, Conducted physics-of-failure methodology for the reliability assessment of electronics in NASA’s Zeno Space Shuttle Experiment. Demonstrated the applicability of the physics-of-failure approach in the design and assessment of the Zeno Program, as a replacement for Mil-Hdbk-217 and progeny.
- 1991, Developed techniques to monitor quality and logistics parameters and to aid in decision support during the design of electronic assemblies, under DARPA’s Initiative in Concurrent Engineering (DICE). These techniques were incorporated into Texas Instruments’ (Raytheon) CARMA software and commercially marketed.
- 1990, Conducted experimental study of AWACs cooling to determine the temperature profiles of AWACs convectively cooled electronic equipment and developed models for reliability design and assessment.
- 1988–1990, Developed microelectronic packaging design guidelines for the U.S. Air Force. This was the first document of its kind to incorporate physics-of-failure in design (DfR). These guidelines were extended to incorporate commercial and industrial microelectronic packaging trade-offs.
- 1987–1989, Developed reliability models for very high speed integrated circuit (VHSIC) devices and semiconductor packages for the U. S. Air Force.
- 1986–1988, Developed methodologies and computational techniques for derating and preferred parts selection for the U.S. Integrated Electronics Warfare Systems (INEWS) program.
- 1984–1986, Developed the first Reliability and Maintainability Computer Aided Design (RAMCAD) software. Lead to the development of RAMCAD software by more than ten commercial companies.

CONSULTANT

1. Emerson (2018): assessment of supplier fraud.
2. ISID (2018): developed PHM trends document for Japanese aerospace industry.
3. Abbott (2018): provided course lectures on medical electronics, design, test, and supply chains.
4. Alstom (2018): consultant on advanced in prognostics and systems health management.
5. Bing Xu Precision (2017): consultant on SATA connector patents (IPR).
6. Tessera (2017): consultant on semiconductor encapsulation patents (IPR).
7. Huawei (2017): consultant on Li-ion battery testing. Taught course on fundamentals of Li-ion batteries
8. Texas Instruments (2017): Expert on two microelectronic package patents for IPRs.
9. Roadtrack (2017): Short course on automotive electronics reliability and intermittent failures. Consulting on automotive reliability concerns and how to evaluate field failure and warranty data.
10. Hon Hai (Foxconn) (2016 – present): Expert on connector / IC socket patents. (expert reports, depositions, testify in court)
11. IBM: consultant on batteries for mainframe applications, supply chain management and test development.
12. Nevro (2016 - 2018): consultant on battery cell manufacturing, testing, quality, and reliability for implantable neural stimulators (includes audits of Eagle Pitcher manufacturing facilities in Vancouver and Joplin)
13. Philips Medical (2016): lectures (short course) on best practices in reliability; consultant.
14. Nevro (2016-2017): consultant on manufacturing, defect analysis and reliability of various electronics.
15. Cochlear Inc. (2016 - 2018): consultant on use of new solders and mixed soldering manufacturing processes for implantable hearing devices; analysis of tin whisker tests; analysis of supply chain issues;
16. European litigation (2016): Advokatfirman Vinge KB: reliability analysis of power meters and repair processes.
17. Aztera SBIR: Standards Development (2016): Consultant.
18. Board of Advisors (2016 - present): Lahore University of Management Sciences, Lahore, Pakistan.
19. English vs Apple Litigation (2015): expert on reliability and refurbishment issues (expert report, deposition)
20. TOK vs Huntsman litigation (2015): expert on process change requirements and management, Mayer-Brown.
21. LG (2015): Expert on battery patent in US Patent Office (IPR).
22. Garmin Class Action Case (2015): Expert on reliability/remaining useful life of products (expert report).
23. Whirlpool/Sears Class Action Cases (2015): Expert on the reliability of electronics control units of dishwashers and washing machines (expert reports).
24. CEVA (2014): Expert concerning reliability issues associated with the transshipment of containers filled with consumer electronics (expert report).
25. Custom Manufacturing & Engineering, Inc. (2014): expert concerning the supply chain and distribution of counterfeit electronics in military systems (expert report, testified at arbitration hearing).
26. Stratsys (2014): Short course on physics of failure.
27. Emerson (2014): Short courses (series) on reliability and physics of failure; counterfeit electronics; and on advances in RoHS.
28. Nevro (2014): Consultant on battery field issues.
29. Nevro (2014): Consultant on battery reliability and test methods. Evaluated responses to FDA, and aided in FDA approval development for its Senza spinal cord stimulation (SCS) system.
30. ASM (2014): Consultant on Singapore patent regarding molding equipment.
31. Emerson (2014): Study of risks of ROHS compliance in long-term harsh environment industrial applications.
32. U.S. Oversight & Investigations Subcommittee, Committee on Energy and Commerce (2014): Consultant on GM recall and NHTSA handling of the case.
33. CFD Research Corporation (2014): Consultant on SBIR: assessment of reliability risks in using copper wire bonded semiconductor packages in military applications.
34. Chicony Power Technology (2013–2014): Expert on various issues related to supply chain responsibilities and recalls (expert report, testified in Superior Court of California).
35. Medtronic (2013–2014): Consultant on best reliability practices for new medical products development. Helped in development of internal standards. Evaluated responses to FDA.
36. Amkor (2013–2014): Consultant on MEMS package patent re-examination by US Patent Office (declarations, depositions).
37. Goertek (2013–2014): Consultant on MEMS package patent for IPR (declarations, depositions).
38. Emerson (2013): Study of nanomaterials used in electronics.
39. W.L. Gore (2013): Consultant on electronics corrosion prevention mechanisms.
40. W.L. Gore (2013): Consultant on the effect of dust and dust filters on microphones.
41. Invensense (2013): Consultant on MEMS microphone patents (3 declarations: Petition for *Inter Partes* Review).

42. Eli Lilly-Paul Hastings (2013): Consultant on medical devices and patents.
43. Marvel Semiconductors (2013): Consultant on electronics packaging patents.
44. Nevro (2013): Consultant on best reliability practices for new medical products development.
45. Foxconn (2013): Consultant on connector patent re-examination by US Patent Office.
46. United Technologies Aerospace Systems (Jan. 2013): Consultant on solder joint reliability failures.
47. Taiwan Union Technology Corp. (2012-2013): Consultant on patent issues related to PCB composition/construction.
48. Dow Solar (2013): Reliability consultant and audit of Emerson facilities in Philippines.
49. Bel Stewart (2012–2015): Consultant in litigation concerning the reliability of connectors subject to packaging materials (expert report, testified in court).
50. Analog Devices (2012–2013): Consultant on silicon microphone packaging patents [expert reports, depositions, testified at ITC court; also North District of Illinois Case].
51. Invensys (2012): Consultant on prognostics system health monitoring methods.
52. Moog (2012): Consultant on uprating and counterfeit electronics.
53. Cochlear Ltd. (2012): Consultant on cochlear implant reliability and test methods, audit of PCB supply chain, and best reliability practices for new medical products development.
54. Sjocroma Van Stigt (2012): Consultant on automotive reliability.
55. Philips-Lumiled (2012): Provided courses on LED reliability. Consultant on LED test methods.
56. Micronics-Japan (2011–2012): Consultant on patents related to semiconductor sockets.
57. Emerson (2011): Prepared analysis information for life cycle carbon footprint analysis for electronics.
58. Emerson (2011): Prepared analysis information for conflict materials for electronics.
59. Osram (2011): Consultant on patents related to LED packaging.
60. Foxconn (2011): Consultant on patents related to connectors.
61. Fazio & Micheletti LLP (2011): Consultant on Apple products and reliability [declaration].
62. Anadigics (2011): Developed guidelines for plated copper wire in plastic encapsulated devices.
63. Philips (2011): Consultant on patents related to LEDs.
64. Visiting Professor at Seoul National University (2011): Provided lectures on design for reliability and testing.
65. National University of Singapore (2011): Consultant on alternative eco-friendly solders and wire bonding materials for microsystem applications.
66. Medical Devices Inc. (2011): Consultant on health care medical bed patents [expert report for Fulbright & Jaworski].
67. PACE Automotive Awards (2010 - present): audit finalists - automotive suppliers in Japan and Korea for selection of award.
68. Fireman's Insurance (2010): Consultant on reliability Rogers high-speed laminates for printed circuit assemblies [expert report].
69. Huawei (2010): Consultant on Huawei strategic planning for reliability.
70. Huawei (2010): Consultant on reliability of electronic equipment used in outdoor environments.
71. Analog Devices Inc. (2010): Consultant on MEMS packaging patents [expert reports, depo, testified in ITC court].
72. Huawei (2010): Consultant on reduced air cooling of telecom systems and prognostic methods for fans.
73. Emerson (2009–2010): Consultant on prognostic methods for power supplies, fans, and systems.
74. Bosch (2009): Consultant and short course on accelerated qualification methods.
75. Lenovo (2009): Provided lectures on design for reliability and prognostics methods.
76. Sony (2008–2009): Consultant on product reliability [expert report, deposition].
77. ASE (2008–2009): Consultant on computer and semiconductor package failure mechanisms and qualification methods.
78. Ericsson (2008): Consultant on the use of prognostics and health management in telecom systems.
79. Schlumberger-Houston, Schlumberger-Japan, and Schlumberger-France (2008): Consultant on cost-effective methods for qualification and supplier selection, and implementation of prognostics in product development and field use. Presented and consulted at all the sites.
80. Emerson (2008): Consultant on RoHS requirements and provided position paper on RoHS exemptions for EU.
81. FDA (2007-2008): Consultant tasked with the evaluation of FDA programs and working with FDA research team. Also provided series of reliability courses.
82. Microsoft (2007–2008): Consultant on new supply chain analysis, reliability capability, and reliability assessment techniques. Also provided guidance for the implementation of prognostics in product development and field use.
83. Seiren-Japan (2007–2008): Consultant on gasket patents.

84. Vitronix (2007): Consultant on PCB failures.
85. W.L. Gore (2007): Consultant on water-induced corrosion.
86. TRW (2007): Consultant on CAF/CFF failure mechanisms.
87. Emerson (2007): Consultant on green recycling project with Polytechnic University of Shanghai.
88. Emerson (2007): Consultant on counterfeit electronics and risk management methods.
89. Huawei, China (2007): Consultant on burn-in methods.
90. Siemens (2007): Consultant on conformal coating patent [expert reports, testimony in England court].
91. Lexmark (2007): Provided lectures on reliability methods and consulted on ionic contamination.
92. Forizs & Dogali (2006–2007): Consultant on automotive reliability [expert report].
93. Philips (2006–2007): Consultant on electronic product reliability [expert reports, testimony in European court].
94. Rosneft (2006): Consultant: Providing lectures on reliability methods and assessing supplier reliability practices both in Moscow and Neftegaz - Russia.
95. Emerson (2006): Provided lectures on RoHS to Chinese government advisors.
96. FoxConn (2006): Consultant on connector and socket patents.
97. Intellipark (2006): Consultant on new product reliability and qualification planning.
98. EADS (2006): Consultant on environmental management and prognostics for electronic systems.
99. Lutron (2006): Consultant on Chinese electronics industry, outsourcing and supply chain management.
100. Geico (2005–2012): Consultant on vehicle electronics reliability [depo].
101. ST Microelectronics (2005–2007): Consultant on IC packaging patents [expert reports, deposition].
102. Holland & Knight (2005–2006): Consultant on reliability of electronics module for U.K. Ministry of Defence.
103. Boeing Company (2005): Consultant on Chinese electronics industry, outsourcing, and supply chain management.
104. United Nations (2005): Expert on China's electronics industry and market access.
105. Goldman, Sachs & Co. (2005): Venture capital assessment of new product.
106. Tessera (2005): Consultant on IC packaging patents.
107. FreeScale (2005): Consultant on IC packaging.
108. Philips (2005): Consultant on mold compound reliability.
109. On-Semiconductor (2005): Consultant on semiconductor reliability.
110. ACEL, Beijing China (2005): Guest faculty and lecturer.
111. Emerson Network Power: Avansys (2004–2005): Training and reliability capability audits.
112. Lutron (2004): consultant on reliability organization.
113. The National Academies: (2004): Consultant on defense manufacturing base issues (printed circuit technologies).
114. Fish and Richardson (2004): Consultant on Osram and Dominant photo-optic devices and patents.
115. IEEE Spectrum, Asia Technology Panel (2004): Consultant on Asian technology trends.
116. HP (2004). Consultant on computer reliability.
117. Brault et al. (2004): Consultant on reliability of electronic equipment subject to fire damage [expert reports, deposition].
118. Stactek (2004): Consultant on die stack patent.
119. Astek (2004): Conducted reliability capability audit and wrote report.
120. Sullivan & Cromwell, LLP (2003-2004): Consultant on electronics product reliability [deposition].
121. Weil, Gotshal and Manges (2003): Consultant on Samsung electronics packaging patent.
122. Motorola (2003–2004): Consultant on Motorola electronics packaging patent.
123. Huawei, China (2003): Consultant on electronics uprating. Consultant on electronics reliability. Provided courses on reliability.
124. Texas Instruments (2003): Consultant on PCMCIA patent.
125. Herbst LaZar Bell (2003): Consultant on electronics upgrade for Northrop-Grumman military - avionics detect and jam system.
126. Emerson (2002–2003): Consultant on reliability capability assessment plan, and lead-free product development.
127. Westinghouse (2002–2003): Team leader on DoD-homeland security project.
128. Jones Day (2002): Consultant on 3-D packaging patents associated with Simple and DensePak.
129. Technobit, Spain (2002): Consultant on design for reliability. Also provided a two day, in-house short course.
130. United Defense (2002): Consultant on design for reliability. Also provided a two day, in-house short course.
131. John Rodman and Associates (2002): Consultant on automotive electronics reliability issues [deposition].
132. Johnson, Clifton, Larson & Corson (2001–2002): Consultant on automotive electronics reliability issues.
133. Pancratz LTD. (2001–2002): Consultant on motor vehicle ignition modules and warranties.
134. Schlumberger (2001–2002): Evaluated reliability assessment methods and provided next generation design-for-reliability practices for oil well equipment.

135. Huawei (2001): Consultant on electronics uprating and electronics reliability. Provided course on reliability.
136. Medtronic (2001): Consultant on parts reliability for medical products. Provided short course on device encapsulation.
137. Hamilton-Sundstrand (2001): Presented short courses on parts selection and management and PWB assembly. Reviewed design methods used by Hamilton-Sundstrand and provided recommendations for improvements.
138. St. Jude Medical (2001): Consultant on parts reliability for medical products.
139. Emerson Electronics (2000–2001): Lead team to evaluate potential PCB fabrication and assembly facilities in Taiwan and China. Also provided reliability short courses for Emerson employees in the U.S. and China.
140. WTEC (2000): Team leader to interview and evaluate Chinese semiconductor and electronic packaging industry.
141. Murray and Murray (1999–2002): Consultant on various automotive electronics reliability issues.
142. Jones Day (1999–2001): Consultant on electronic packaging patents associated with Texas Instruments and Tessera. [District Court: expert report, deposition]
143. Finnegan et al. (1999–2001): Consultant on electronic packaging patents associated with Altima and Intel. [ITC: expert report, deposition and testified]
144. Microsoft (1999–2001): Reliability education program for Microsoft employees.
145. Arter & Hadden (1999–2000): Consultant on reliability assessment of computer monitors associated with Tatung and Apple Computers. [ICC: expert reports, deposition and testified]
146. ERS Inc. (1999): Reliability assessment of advanced autonomous amphibious vehicle (AAAV) for U.S. Marines.
147. AlliedSignal (1999): Reliability assessment of a failed electronics assembly.
148. Aspect (1998): Strategic planning and development of an electronics parts database.
149. Johnson Wax (1998): Reliability assessment of a new product.
150. GM Truck (1998): Team leader to assess the reliability of an electronic assembly, and develop and validate an alternative. ITT Automotive (1998): Reliability analysis of an electronic assembly.
151. Hancock, Rothert & Bunshoft LLP (1997–2001): Consultant on Ford thick film ignition modules. [District Court: expert report, deposition and testified]
152. Howrey & Simmon, Washington, DC (1997–1998): Consultant on a fuse product patent.
153. Sun Microsystems (1997): Consultant on computer hardware reliability.
154. Teradyne (1997): Consultant on supplier's reliability plans and assessment methods.
155. Heart Stream (1997): Consultant on a medical electronics product.
156. Smiths Industries (1996): Evaluated electronics parts management program.
157. AlliedSignal (1996): Headed up team to prepare a company-wide parts management program.
158. Boeing Commercial Airplane Group (1996): Advisory board to evaluate three key BCAG reliability policy documents: Electronic Components Management Program; Reduced Infant Mortality; and Reliability Enhancement Testing.
159. Boeing Commercial Airplane Group (1996): Board of advisors/consultant to provide guidance to BCAG Vice Presidents on key reliability challenges facing the BCAG avionics community.
160. WTEC (1996): Team leader to evaluate Singaporean and Malaysian semiconductor and electronic packaging industry.
161. Jones Day (1995–1996): Consultant on Texas Instruments plastic encapsulation process and leadframe patents. [testified].
162. WTEC (1995): Team leader to interview and evaluate Korean semiconductor and electronic packaging industry.
163. Hong Kong University of Science and Technology (1995): Helped develop Hong Kong electronics industry/government/ academia roadmap.
164. Alliantech, Annapolis, MD (1995): Helped develop ruggedized (COTS) computer systems.
165. Teltech Network of Experts (1994–1998): Consultant on various short term studies for electronics industry.
166. Institute for Defense Analyses (1994–1996): Electronics packaging study for U.S. government, including life cycle engineering requirements for reliable electronics design, simulation and assessment.
167. Trident (1994): Consultant on packaging materials patents.
168. Textron (1994): Helped develop parts selection methodology.
169. PPG (1994): Conducted reliability study of woven E-glass fabrics used in circuit cards.
170. United Technology-Photonics (1993–1995): Consultant on screening and reliability assessment of opto-electronic integrated circuits.
171. JTEC (1993): Conducted interviews and evaluation of Japanese electronic packaging industry.
172. United Nations (1993): Mission Expert. Lectures in India on electronics.
173. Sweetheart Paper (1993): UMD Technology Extension Service (TES) Project.
174. Paramax, Boston, MA (1992): Conducted lead failure analysis study.
175. Aventek, Annapolis, MD (1991): Conducted study on infrared experimentation of circuit cards.

176. Westinghouse, Baltimore, MD (1991): Identified methods to improve cost-effective parts selection in the design of the ARSR-4 ground based radar.
177. Howrey & Simmon, Washington, DC (1991): Consultant on electronic product patents.
178. U.S. Air Force (1991): Provided training on AVIP concepts to Air Force contractors.
179. Cetar, Ltd., Subsidiary of Philips (1990–1991): Company board of advisors.
180. UNISYS, MN (1990): Investigated reliability development growth tests for avionics on the B-2.
181. MALCO Plastics, Gaithersburg, MD (1990). UMD Technology Extension Service (TES) Project.
182. Union Camp, Rockville, MD (1988–1989). UMD Technology Extensions Service (TES) Project.
183. GTE, Needham, MA (1987). Consultant on thermal analysis of circuit cards.
184. Department of Natural Resources, Madison, WI (1977). Conducted ozone monitoring tests.

PROFESSIONAL SOCIETIES

Fellow	Institute of Electrical and Electronics Engineers (IEEE) American Society of Mechanical Engineers (ASME) Society of Automotive Engineers (SAE) Int'l Microelectronics and Packaging Society (IMAPS)
Senior Member	Institute of Environmental Sciences and Technology (IEST)
Member	Association for the Advancement of Artificial Intelligence (AAAI) Institute for Interconnecting and Packaging Electronic Circuits (IPC) American Society of Materials Int'l (ASM) ASM - Electronic Device Failure Analysis Society (EDFAS) Surface Mount Technology Association (SMTA)

PROFESSIONAL SERVICES

Board of Directors	Scientific Advisory Board: Alstom- France (2015 – present) Early-Bird Alert Inc. (2008–2016). The Prognostics and Health Management Society (2009–2010). Energetic Technology Center, Maryland (2007). Airpax, a Subsidiary of Philips (1998)
Editor-in-Chief	IEEE Access (2012–present) Life Cycle Reliability and Safety Engineering, Springer Pub. (2012 – present), formerly, SRESA Journal of Life Cycle Reliability and Safety Engineering International Journal of Performability Engineering (2011–2012) Microelectronics Reliability International (1996–2012) IEEE Transactions on Reliability (1988–1997) The Wisconsin Engineer Magazine (1979–1980)
Associate Editor	IEEE Transactions on Electronic Components, Packaging and Manufacturing Tech. (1995–2010). International Microelectronics Journal (1995–2002). SAE Journal of Reliability, Maintainability and Supportability (1993–1997). IEEE Transactions on Reliability (1987–1988).
Editor-at-Large	Marcel Dekker: Electrical Engineering and Electronics (1991–1993)
Editorial Board	Energies, MDPI AG, Switzerland (2015 – present) Journal of Electronic Measurement and Instrument (2014 – present) Editor from U.S. (2013–present). Chinese Journal of Aeronautics (2013–present) Journal of COMADEM, Honorary Regional (2013) Proceedings of the ICMR (2013) Journal of Systems Engineering and Electronics, China (2011–present) Journal of Reliability and Risk Analysis: Theory and Applications (2009) KSME International Journal, Korean Society of Mechanical Engineers (1997–2005) IEEE Spectrum (1993–1995) Journal of Electronics Manufacturing (1990–1999) Journal of Concurrent Engineering (1990–1992)
Chairperson	International Scientific Advisory Panel (ISAP) for the Offshore Robotics for Certification of Assets (ORCA) Hub. The Hub is a collaboration of experts from 5 United Kingdom universities and more than 30 industry partners with expertise in subsea, ground and aerial robotics, human-machine interaction, asset management and certification, and innovative and low-cost sensor networks. IEEE Reliability Prediction Assessment Guidebook #1413.1 (1999–2002) IEEE Standard Methodology for Reliability Prediction and Assessment for Electronic Systems and Equipment #1413 (1995–1998) IEEE Reliability Program Standard #1332 (1995–1998)

Conference Chair Symposium on Solder Interconnect Reliability, National University of Singapore, Singapore, December 8 – 11, 2015,
IEEE PHM 2015, 2015 Prognostics and System Health Management Conference, Beijing, China, October 21-24, 2015

IEEE PHM 2014, 2014 Prognostics and System Health Management Conference, Zhangjiajie, Hunan, China, August 24–27, 2014
IEEE Prognostics and System Health Management Conference, May 23–25, 2012, Beijing, China (General Chair, Founder, and Organizer) Battery Management Systems for High Operational Availability and Safety Conference, Shenzhen, China, May 21, 2012
IEEE Prognostics and Systems Health Management Conf., May 24–27, Shenzhen, China, 2011
International Conference on Reliability, Maintainability and Safety (ICRMS 2011), Guiyang, China, June 2011 (2011)
2nd International Conference on Reliability, Safety and Hazard-2010 (ICRESH 2010), New Mumbai, India, Dec. 14–16, 2010 (2010)
IEEE Prognostics and Health Management Conference 2010 (PHM-2010 Macau), Macau, P.R. China, Jan. 12–14, 2010 (2010)
Prognostics and Health Management, ASME 2009 DETC & CIE Conference, San Diego, CA, Aug. 30-Sept. 2, (2009)
2009 8th International Conference on Reliability, Maintainability and Safety (ICRMS 2009), Chengdu, China, July 20–24, 2009
Int'l Conf. on Reliability, Maintainability and Safety 2007, Beijing, China (2007)
2004 Int'l Conf. on the Business of Electronic Product Reliability and Liability, Shanghai, China, April 27–30, 2004
IEEE Conf. on Business of Electronic Product Reliability and Liability, Hong Kong and Shenzhen, China, Jan 13–17, 2003

Member

Education committee; EDFAS- ASM (2015 – present)
Association for the Advancement of Medical Instrumentation: Cochlear Implant Committee
IEEE Publications and Strategic Planning Board (2012–present)
IEEE Standards Association (2000–2009)
U.S. Army Research, Development Engineering Command Reliability Focus Team (2008)
UL Standards Committee (2001–2008)
IEEE Representative to Int'l Reliability Standards Committee (1993–1995)
SAE Automotive Reliability Standards Committee (1990–1993)
Navy Electronics Manufacturing-Policy Committee (1992)

MEDIA PRESENTATIONS

1. CNN's Drew Griffin Investigates a Toyota Engineering Memo that Suggests an Electronic Problem in a Prototype Car, CNN Video, <http://www.cnn.com/video/#/video/bestoftv/2012/03/02/ac-griffin-toyota-investigation.cnn>; <http://www.cnn.com/2012/03/01/us/toyota-acceleration-documents/index.html?iref=allsearch>, March 1, 2012.
2. Zuga, L. and M. Pecht, "The Politicization of Counterfeit Electronics," *Battlespace Update*, Vol. 15, Issue 01, Jan. 5, 2012; "Misplaced Blame: The Politicization of Counterfeit Electronics," SLD (sldinfo.com) website, Dec. 14, 2011.
3. "Don't Blame the Chinese-Blame Raytheon," Letter to the Editor, Circuitnet website: (http://www.circuitnet.com/articles/article_85572.shtml), Nov. 23, 2011.
4. The Counterfeit Electronics Problem - Trying to Reach Harmony in a Storm, Int'l Conf. on Economics, Politics, and Security of China and the USA, Nov. 19, 2011 (televised live on Voice of America)
5. ACTUS, L'Offensive Made in China (*in French*), pp. 26-27, June 2011.
6. CNN, interviews on Toyota and sudden acceleration and congressional hearing, March 2, 2010.
7. NPR, Toyota Recalls Spur worries-Sudden Acceleration in Toyota Vehicles, Feb. 3, 2010.
8. History Channel Modern Marvels: Engineering Disasters, Tin Whiskers, March 22, 2006.
9. CNN with Lou Dobbs, China's Semiconductor Industry and exporting, Sept 16, 2004.
10. Newsnight Maryland, Maryland Public Television: Electronics Industry, June 8, 1998.

PATENTS

1. 3D RF MemS Biosensor for Multiplexed Label Free Detection, A. Vasani, M. Pecht and A. Kluger, U.S. Patent #9,151,723, Oct. 6, 2015 (USA).
2. Energy Harvesting Using RF MEMS, Ravi Doraiswami M. Pecht, A. Vasani, Y. Huang and A. Kluger, U.S. Patent #8,859,879, Oct. 14, 2014 (USA). US 8,878,667
3. Wireless Biosensor Network for Point of Care Preparedness for Critical Patients, Ravi Doraiswami M. Pecht, A. Vasani, Y. Huang and A. Kluger, U.S. Patent #8,878,667, Oct. 14, 2014 (USA).
4. Method to Extract Parameters from in-situ Monitored Signals for Prognostics, Vichare, N., and M. Pecht, U.S. Patent # 8,521,443, Aug. 27, 2013 (USA).
5. Prognostics and Health Management Implementation for Self Cognizant Electronic Products, M. Pecht, and J. Gu, U.S. Patent #8,494,807, Jul. 23, 2013 (USA).
6. MEMS Barcode Device for Monitoring Medical Systems at Point of Care, R. Doraiswami, M. Pecht, A. Vasani, Y. Huan, and A. Kluger, U.S. Patent # 8,424,765, Apr. 23, 2013 (USA).
7. A Prognostics and Health Management Method for Aging Systems, M. Pecht and S. Cheng, U.S. Patent # 8,423,484, Apr. 16, 2013 (USA).
8. Electromechanical Device Having a Plurality of Bundles of Fibers for Interconnection of Two Planar Surfaces, U.S. Patent # 7,220,131, May 22, 2007 (USA).

HONORS AND AWARDS

1. The most highly cited article in *Microelectronics Reliability* for the years 2012, 2013, 2014, 2015, 2016: Chang, M. H., D. Das, P. V. Varde, and M. Pecht, "Light Emitting Diodes Reliability Review," *Microelectronics Reliability*, Vol. 52, No. 5, pp. 762-782, May 2012.
1. Awarded: IEEE CPMT Technical Field Award (2016)
2. Awarded: 2015 Applied Energy Award – most highly cited research paper. Xing, Y., W. He, and M. Pecht, "State of Charge Estimation of Lithium-ion Batteries Using the Open-circuit Voltage at Various Ambient Temperatures," *Applied Energy*, Vol. 113, pp. 106-115, Jan. 2014.
3. Best Student Paper Award of Conference (2016): N. Jordan Jameson, Kai Wang, Carlos Morillo, Michael H. Azarian, and Michael Pecht, "Health Monitoring of Solenoid Valve Electromagnetic Coil Insulation under Thermal Deterioration," *Proceedings of MFPT 2016/ISA's 62nd IIS*, Dayton, OH, May 24-26, 2016.
4. Awarded: 2016 Chinese Academy of Sciences President's International Fellowship
5. Best paper award: Fan, J., ChengQian, Fan, X., Zhang, G., and M. Pecht, "In-situ Monitoring and Anomaly Detection for LED Packages Using a Mahalanobis Distance Approach," *The First International Conference on Reliability System Engineering & Prognostics and System Health Management Conference-Beijing* (2015 ICRSE & PHM-Beijing), Beijing, China, October 23, 2015.
6. Awarded the distinction of "Honorary Professor" by the Harbin Institute of Technology (HIT) in Harbin, China, on July 16, 2015. The Honorary Professor award was granted to Prof Pecht for his technical expertise batteries and for his involvement with HIT in battery research. HIT was established in 1954 and is a member of the prestigious C9

League of Chinese universities. HIT was ranked 10th in the ranking of “Best Global Universities for Engineering” by *U.S. News & World Report* in 2015.

7. Awarded: 2015 Distinguished Scientist: Chinese Academy of Sciences President’s International Fellowship.
8. IEEE Access was awarded the 2015 PROSE Award winner in the subject category of “Journal/Best New STM (Scientific, Technical, and Medical).” Prof. Pecht is the Editor-in-Chief of IEEE Access. The American Publishers Award for Professional and Scholarly Excellence (PROSE) annually recognize the very best in professional and scholarly publishing by bringing attention to distinguished books, journals, and electronic content. IEEE Access was also a finalist for the Award for Excellence in Physical Sciences and Mathematics.
9. “Academic Excellence Award” by the Electronics Components Industry Association (ECIA). The award is used to recognize outstanding academic projects ‘that reference the application of advanced technologies for passive electronic components’. Peter, Anto, Michael H. Azarian, Michael Pecht, “Step Stress Testing of Electric Double Layer Capacitors,” International Capacitor and Resistor Technology Symposium, Santa Clara, CA, April 2014.
10. 2014 Corporate Connector of the Year from the University of Maryland, College Park: The Corporate Connector Award celebrates those individuals or units on campus that do the most to promote and connect UM with the private sector to advance research, partnerships, and scholarship.
11. 4th most cited article in Transactions of the Institute of Measurement and Control over five years (2009 -2014): Pecht, M. and Gu, J., “Physics-of-failure-based Prognostics for Electronic Products,” *Trans. of the Institute of Measurement and Control*, Vol. 31, No. 3/4, pp. 309–322, 2009, DOI: 10.1177/0142331208092031
12. 2013: Received gift of \$750k for research into automotive reliability from Hagans, Berman, Sobol, Shapiro LLP
13. 2013 IEEE Educational Activities Board/Standards Association (EAB/SA) Standards Education Award “for continued leadership in developing and promoting standards education in the field of reliability engineering.”
14. Outstanding Paper Award (2013): for Williard, N., W. He, M. Osterman, and M. Pecht, “Reliability and Failure Analysis of Lithium Ion Batteries for Electronic Systems,” International Conference on Electronic Packaging Technology and High Density Packaging (ICEPT-HDP), Aug. 2012.
15. University of Wisconsin-Madison College of Engineering Distinguished Achievement Award (2013). In recognition of the eminent Professional contributions as a “world-renowned professional engineer and educator whose innovations in reliability and prognostic methods have made a significant contribution to the field of electronics”
16. Most downloaded article in Microelectronics Reliability for the years 2012, 2013, 2014: Chang, M-H, D. Das, P.V. Varde, and M. Pecht, “Light Emitting Diodes Reliability Review,” *Microelectronics Reliability*, Vol. 52, No. 5, pp. 762–782, May 2012.
17. First Place, IEEE PHM 2012 Prognostic Challenge, Academic Category (2012): for successfully extracting degradation features from vibration data and developing fault propagation models to accurately predict the remaining useful life of bearings. The CALCE team included Arvind Vasan, Edwin Sutrisno, Wei He, Moon-Hwan Chang, Jing Tian, Yan Ning, Hyunseok Oh, and Surya Kunche.
18. Best Student Paper Award of Conference (2012): for Chauhan, P., M. Osterman, and M. Pecht, “Canary Approach for Monitoring BGA Interconnect Reliability under Temperature Cycling,” MFPT 2012: The Prognostics and Health Management Solutions Conference, Dayton, OH, April 24–26, 2012.
19. Overall Best Conference Paper from Academia (2011): for Haddad, G., P. Sandborn, and M. Pecht, “Method for Valuating Options Arising in PHM,” *Proc. of 2011 IEEE PHM Conference*, Denver, CO, June 2011.
20. Inducted to 2011 Innovation Hall of Fame at the A. James Clark School of Engineering, University of Maryland (2011): for pioneering innovations in advanced reliability and prognostic methods for electronics.
21. Maurice Simpson Technical Editors Award for best paper of the 2010 year (2010): for Gu, J. and M. Pecht, “Prognostics and Health Assessment Implementation for Electronic Products,” *J. of the IEST*, Vol. 53, Num 1, pp. 44-58, April 2010.
22. Indian Society of Reliability, Maintainability and Safety Lifetime Reliability Achievement Award (2010): On Dec. 16, 2010 in Mumbai, India, Dr. Pecht received the first and highest reliability award of its kind of India for his “significant contributions in the area of product reliability, prognostics & health management of electronic components.”
23. CPMT Society Exceptional Technical Achievement Award (2010): to recognize for exceptional technical achievement in the fields encompassed by the CPMT Society. “Dr Pecht is recognized worldwide for his seminal contributions in the area of electronics reliability from which he has developed a new and significant field of prognostics for electronics. This includes models that enable in-situ assessment of the deviation or degradation of a product from expected normal operating conditions and the prediction of the future state of reliability of that product. Michael’s contributions in this area span more than 20 years and his subject matter expertise is disseminated in a book, several book chapters, handbooks, numerous articles, invited talks and short courses presented worldwide.”
24. Society of Automotive Engineering (SAE) Fellow (2010): for his research and promotion of the reliability of the electronic parts and systems used in automotive and aerospace applications.

25. National Defense Industrial Association award (2009) for CALCE for demonstrating outstanding achievement in the practical application of Systems Engineering principles, promotion of robust systems engineering principles throughout the organization, and effective systems engineering process development.
26. University of Maryland Outstanding Faculty Research Award (2009): to recognize research contributions and exceptionally influential research accomplishments by engineering faculty.
27. Outstanding Paper, I-Connect (Connecting the Global Electronics Supply Chain), (2009): for the paper, He, X., M. Azarian, and M. Pecht, "Comparative Assessment of Electrochemical Migration on PCBs with Lead-Free and Tin-Lead Solders," SMT Online Magazine.
28. The Alexander Schwarzkopf Prize for Technological Innovation (2008): awarded to National Science Foundation (NSF) Industry/University Cooperative Research Centers that have had a significant impact on the world. CALCE won the award for its research on physics-of-failure reliability analysis methods and advanced supply chain management concepts for electronic products and systems.
29. Best Paper Award (2008): for the 62nd Meeting of the Society for Machinery Failure Prevention Technology. Gu, J., Barker D., and M. Pecht, "Prognostics of Electronics under Vibration Using Acceleration Sensors," Proceeding for 62nd Meeting of the Society for Machinery Failure Prevention Technology (MFPT), Virginia Beach, VA, May 2008, pp. 253-263.
30. Maurice Simpson Technical Editors Award (2008) for best 2007 article in IEST. Sony Mathew, Diganta Das, Michael Osterman, Michael Pecht, Robin Ferebee, and Joseph Clayton, for their paper, "Virtual Remaining Life Assessment of Electronic Hardware Subjected to Shock and Random Vibration Life Cycle Loads," Journal of the IEST, Vol. 50, No. 1, pp. 86-97, April 2007.
31. Japan Society for the Promotion of Science Fellowship (2008): for research in prognostics in electronics.
32. IEEE Reliability Society's Lifetime Achievement Award (2007): recognizes Prof. Pecht's long-term contributions to the Reliability Society, reliability research, and reliability education, all benefiting the reliability community.
33. European Micro and Nano-Reliability Award (2007): for outstanding contributions to reliability research.
34. Distinguished International Service Award (2006) for significant contributions to the development of international institutional programs at the University of Maryland; and a distinguished international career.
35. Grand Fellowship of the Mirce Academy, England (2005): the highest award that the Academy can bestow upon an individual in recognition of their unique contribution to the understanding and/or predicting of the motion of functionability through system life, at the global level of significance.
36. IEEE Best Paper of the Year (2004) Award: for paper titled "Characterization of Hygroscopic Swelling Behavior of Mold Compounds and Plastic Packages."
37. The Royal Society, United Kingdom, Kan Tong Po Electrical Engineering Visiting Professorship Award at City University in Hong Kong (2002).
38. George E. Dieter Chair Professor of Mechanical Engineering, for significant contributions to the reputation of the Department, College and University with the establishment of CALCE Electronic Products and Systems Center (2001).
39. IEEE Standards Award for chairing and developing IEEE Standard Methodology for Reliability Prediction and Assessment for Electronic Systems and Equipment #1413 (2000).
40. IEEE Standards Award for chairing and developing IEEE Reliability Program Standard #1332 (2000).
41. 3M Research Award for "research work in the electronics reliability area that has made significant contributions to the scientific understanding of material properties and their complex behavior" (1999).
42. ASME Electrical and Electronic Packaging Division (EEPD) Award "for outstanding contributions to the field of application of engineering mechanics to electronic packaging" (1999).
43. IEEE Undergraduate Teaching Award, "for the development and realization of a cross disciplinary educational program in Computer Aided Life Cycle Engineering (CALCE)" (1999).
44. Outstanding paper of the year for the Microelectronics Int'l Journal, "Popcorning in PBGA Packages during IR Reflow Soldering," P. McCluskey, R. Munamarty, and M. Pecht, Vol. 42 Nr. 1, (1997).
45. ISHM/IEPS William D. Ashman Memorial Achievement Award (1997), "for his numerous contributions to academia and the electronics packaging industry."
46. IEEE Reliability Society's Annual Reliability Award (1996), "for his contributions to the IEEE Trans. on Reliability, his work with CALCE Electronic Packaging Research Center and his work on Reliability Standards."
47. Faculty Achievement Award (April 1996), "in recognition of outstanding contributions to industrial research enabled by the Technology Initiatives Program."
48. American Society for Quality Control: Reliability Division, Austin Bonis Award for the Advancement of Reliability Education (1996) for outstanding achievement in the advancement of reliability education.

49. Institute of Environmental Sciences Reliability Test and Evaluation Award (1996), “for vital contribution to the development and promotion of physics-of-failure modeling and analysis as a valuable reliability design and test process in the government, commercial and academic communities.”
50. ASME Fellow (1995), “for promoting the art, science, and practice of mechanical engineering.”
51. National Aeronautics Space Agency (NASA) certificate of “recognition of your significant contributions in the preparation and execution of the successful Second U.S. Microgravity Payload (USMP-2) Mission, launched on March 4, 1994.”
52. IEEE Fellow (1992), “for effectiveness in leadership in the development and realization of an exemplary program and successful efforts to raise the level of engineering excellence and practice within and without the organization.”
53. Int’l Electronic Packaging Society (IEPS) Educational Award “for excellence in research and education at the University of Maryland CALCE Electronics Packaging Research Center (1990).”
54. Best paper of the year (Maurice Simpson Technical Editors Award) for the Journal of the Institute of Environmental Sciences, “Reliability Prediction of Electronic Packages,” May/June 1990.
55. Best paper award, “How Failure Prediction Methodology Affects Electronic Equipment Design,” with C. Leonard, Power Conversion Conf., Long Beach, CA, Oct. 16–19, 1989.
56. Westinghouse Professor (1987-1988).
57. Visiting Scholar Award, Excellence in Reliability and Maintainability, Air Force Institute of Technology, Wright Patterson Air Force Base, Dayton, OH, June 15–July 10, 1987.
58. Outstanding Systems Engineering Faculty, (1986–1987), Systems Research Center, Univ. of Maryland.
59. Engineering Research Center’s University of Maryland, Technology Advancement Program (TAP) Award (1986).

PUBLICATIONS

Books Authored/Edited

1. Varde, P.V., and M. Pecht, *Risk-Based Engineering*, Springer Singapore, 2019
2. Anand, D., D. Hazelwood, M. Pecht, and M. Kapilashrami, *Engineering for Social Change: Engineering Is Not Just Engineering*, CALCE EPSC Press, University of Maryland, College Park, MD, 2016
3. Chung, H. S., H. Wang, F. Blaabjerg, and M. Pecht, *Reliability of Power Electronic Converter Systems*, The Institution of Engineering and Technology, London, United Kingdom, 2015.
4. Fries, A., W. P. Cherry, R. G. Easterling, E. A. Elsayed, A. V. Huzurbazar, P. A. Jacobs, W. Q. Meeker JR, G. Nagappan, M. Pecht, A. Sen, and S. V. Wiel, *Reliability Growth: Enhancing Defense System Reliability*, The National Academies Press, Washington, DC, 2015.
5. Kapur, K., and M. Pecht, *Reliability Engineering*, John Wiley, Hoboken, NJ, 2014.
6. Dai, J., M. Ohadi, D. Das, and M. Pecht, *Optimum Cooling of Data Centers: Application of Risk Assessment & Mitigation Techniques*, Springer Science, 2013.
7. Chauhan, P., A. Choubey, Z. Zhong, and M. Pecht, *Copper Wire Bonding*, Springer-Verlag, New York, NY, 2013.
8. Pecht, M., R. Kaczmarek, X. Song, D. Hazelwood, R. Kavetsky, and D. Anand, *Rare Earth Materials: Insights and Concerns*, CALCE EPSC Press, University of Maryland, College Park, MD, 2012.
9. Bartels, B., U. Ermel, P. Sandborn, and M. Pecht, *Strategies to the Prediction, Mitigation, and Management of Product Obsolescence*, John Wiley, Hoboken, NJ, 2012.
10. Pecht, M., K. C. Kapur, R. Kang, and S. Zhang, *Foundations of Reliability Engineering (in Chinese)*, Publishing House of Electronics Industry, China, 2011.
11. Short, J. M., R. A. Kavetsky, M. Pecht, and D. K. Anand, *Energetics Science & Technology in China*, CALCE EPSC Press, University of Maryland, College Park, MD, 2010.
12. Pecht, M. and R. Kang, *Diagnostics, Prognostics and System's Health Management (in Chinese)*, City Univ. of Hong Kong, 2010.
13. Pecht, M., *China's Electronics Industry – The Definitive Guide for Companies and Policy Makers with Interests in China*, William Andrew Publishing, Norwich, NY, 2006; updated in 2010 with Len Zuga as co-author.
14. Ardebili, H. and M. Pecht, *Encapsulation Technologies for Electronic Applications, Materials and Processes for Electronic Applications Series*, Elsevier Press, New York, NY, 2009.
15. Pecht, M., *Product Reliability, Maintainability, and Supportability Handbook*, 2nd ed., CRC Press, Boca Raton, FL, 2009; 1st ed., 1995.
16. Pecht, M., *Prognostics and Health Management of Electronics*, John Wiley, New York, NY, 2008.
17. Ganesan S. and M. Pecht, *Lead-Free Electronics*, John Wiley, New York, NY, 2006.
18. Das, D., M. Pecht, and N. Pendse, *Rating and Uprating of Electronic Products*, CALCE EPSC Press, University of Maryland, College Park, MD, 2004.
19. Pecht, M., *Parts Selection and Management*, John Wiley, New York, NY, 2004.
20. Liu, W. and M. Pecht, *IC Component Sockets*, John Wiley, Hoboken, NJ, 2004.
21. Lee, S. B., M. Lee, and M. Pecht, *Korean Electronics Industry*, CALCE EPSC Press, University of Maryland, College Park, MD, 2004; update of Pecht M., J. Bernstein, M. Peckerar, and D. Searls, *The Korean Electronics Industry*, CRC Press, Boca Raton, FL, 1997.
22. Castelli, C., C. Nash, C. Ditlow, and M. Pecht, *Sudden Acceleration – The Myth of Driver Error*, CALCE Press, University of Maryland, College Park, MD, 2003.
23. Pecht, M., E. Bumiller, J. Pecht, and D. Douthit, *Contamination of Electronic Assemblies*, CRC Press, Boca Raton, FL, 2002.
24. Pecht, M., R. Solomon, P. Sandborn, C. Wilkinson, and D. Das, *Life Cycle Forecasting, Mitigation Assessment and Obsolescence Strategies*, CALCE EPSC Press, University of Maryland, College Park, MD, 2002.
25. Sharma, R., S. Parthasarathy, D. Bansal, and M. Pecht, *Indian Electronics Industry*, CALCE EPSC Press, University of Maryland, College Park, MD, 2002.
26. Nakayama, W., W. Boulton, and M. Pecht, *The Japanese Electronics Industry*, CRC Press, Boca Raton, FL, 1999.
27. Pecht, M., R. Radojcic, and G. Rao, *Guidebook for Managing Silicon Chip Reliability*, CRC Press, Boca Raton, FL, 1999.
28. Pecht, M., R. Agarwal, P. McCluskey, T. Dishongh, S. Javadpour, and R. Mahajan, *Electronic Packaging Materials and their Properties*, CRC Press, Boca Raton, FL, 1999.
29. Lall, P., Pecht, M., and E. Hakim, *The Influence of Temperature on Microelectronic Device Reliability*, CRC Press, Boca Raton, FL, 1997.
30. Lee, C. and M. Pecht, *The Taiwan Electronics Industry*, CRC Press, Boca Raton, FL, 1997.

31. Pecht, M., Beane, D., and A. Shukla, *The Singapore and Malaysia's Electronics Industries*, CRC Press, Boca Raton, FL, 1997.
32. Hannemann, R., Kraus, A., and M. Pecht, *Semiconductor Packaging – A Multidisciplinary Approach*, John Wiley, New York, NY, 1997.
33. Wong, Y. and M. Pecht, *Advanced Routing of Electronic Modules*, CRC Press, Boca Raton, FL, 1995.
34. Pecht, J. and M. Pecht, *Long-term Non-operating Reliability of Electronic Products*, CRC Press, Boca Raton, FL, 1995.
35. Pecht, M., Nguyen, L., and E. Hakim, *Plastic Encapsulated Microelectronics: Materials, Processes, Quality, Reliability, and Applications*, John Wiley, New York, NY, 1995.
36. Pecht M., *Integrated Circuit, Hybrid and Multichip Module Package Design Guidelines*, John Wiley, New York, NY, 1994.
37. Pecht, M., Dasgupta, A., Evans, J., and J. Evans, *Quality Conformance and Qualification of Electronic Packages*, John Wiley, New York, NY, 1994.
38. Pecht, M., *Placement and Routing of Electronic Modules*, Marcel Dekker, New York, NY, 1993.
39. Pecht, M., *Soldering Processes and Equipment*, John Wiley, New York, NY, 1993.
40. Pecht, M., *Handbook of Electronic Package Design*, Marcel Dekker, New York, NY, 1991.

Chapters in Books and Handbooks

1. Su, Y., X. Song, T. Syrus, P. S. Chauhan, and M. Pecht, "Plastic Packaging of Microelectronic Devices," in *Reference Module in Materials Science and Materials Engineering*, S. Hashmi (Ed.), Elsevier, Oxford, UK, 2016.
2. Yan, S., X. Song, J. A. Scalise, and M. G. Pecht, "Electronic Packages: Quality and Reliability," in *Reference Module in Materials Science and Materials Engineering*, S. Hashmi (Ed.), Elsevier, Oxford, UK, 2016.
3. Hendricks, C., E. George, M. Osterman, and M. Pecht, "Physics-of-failure (PoF) Methodology for Electronics Reliability," in *Reliability Characterisation of Electrical and Electronic Systems*, J. Swingler (Ed.), Woodhead Publishing, Cambridge, UK, pp. 27–42, 2015.
4. Dai, J., M. M. Ohadi, and M. Pecht, "Energy Efficiency and Reliability Risk Mitigation of Data Centers through Prognostics and Health Management" in *Cooling of Microelectronic and Nanoelectronic Equipment*, M. Iyengar, K. Geisler, and B. Sammakia (Eds.), World Scientific, Singapore, pp. 357–375, 2014.
5. Campbell, P., and M. Pecht, "The Emperor's New Clothes: Intellectual Property Protections in China," in *Foreign Scholars Discuss Chinese Law (Series): Intellectual Property Law China*, X. Chen (Ed.), Encyclopedia of China Publishing House, pp. 236–272, 2014.
6. Cheng, S., and M. Pecht, "Applications of Sensor Systems in Prognostics and Health Management," Chapter 16 in *Novel Advances in Microsystems Technologies and Their Applications*, L. Francis and K. Iniewski (Eds.), CRC Press, Boca Raton, FL, pp. 377–392, 2014.
7. Haddad, G., P. Sandborn, and M. Pecht, "Using Real Options to Value Decisions for Systems with Prognostic Capabilities," Chapter 3 in *Integrated Vehicle Health Management: Business Case Theory and Practice*, I. Jennions (Ed.), SAE International, Warrendale, PA, pp. 23–38, 2013.
8. Mathew, S., and M. Pecht, "IVHM System Design," Chapter 9 in *Integrated Vehicle Health Management: The Technology*, I. Jennions (Ed.), SAE International, Warrendale, PA, pp. 157–176, 2013.
9. Foote, P., C. Dibsedale, K. Jackson, R. Kumar, S. Raveendran, M. Azarian, and M. Pecht, "Prognostics and Health Management for Wind Turbines," Chapter 10 in *Integrated Vehicle Health Management: The Technology*, I. Jennions (Ed.), SAE International, Warrendale, PA, pp. 177–233, 2013.
10. Pecht, M., and M.-H. Chang, "Failure Mechanisms and Reliability Issues in LEDs," Chapter 3 in *Solid State Lighting Reliability: Components to Systems*, Springer Science, pp. 43–110, 2013.
11. Pecht, M., "Prognostics and Health Management," Chapter 14 in *Solid State Lighting Reliability: Components to Systems*, Springer Science, pp. 373–394, 2013.
12. Pecht, M., D. Das, and M.-H. Chang, "Introduction to LED Thermal Management and Reliability," Chapter 1 in *Thermal Management for LED Applications*, Springer Science + Business Media, pp. 3–14, 2013.
13. Cheng, S., and M. Pecht, "Applications of Sensor Systems in Prognostics and Health Management," Chapter 17 in *Novel Advances in Microsystems Technologies and their Applications*, L. Francis and K. Iniewski (Eds.), Taylor & Francis Books, pp. 397–412, 2013.
14. Sood, B., and M. Pecht, "Printed Circuit Board Laminates," in *Encyclopedia of Composites*, L. Nicolais and A. Borzacchiello (Eds.), John Wiley, pp. 2391–2401, 2012.
15. Yang, D., Y. C. Chan, and M. Pecht, "Electromigration in Flip-chip Solder Joints," in *Electromigration in Thin Films and Electronic Devices*, C.-U. Kim (Ed.), Woodhead Publishing, 2012.
16. Pecht, M., in *Diagnostics and Prognostics of Engineering Systems: Methods and Techniques*, IGI Global, 2012.
17. Haddad, G., P. A. Sandborn, T. Jazouli, M. Pecht, B. Foucher, and V. Rouet, "Guaranteeing High Availability of Wind Turbines," in *Advances in Safety, Reliability and Risk Management*, G. Berenguer and G. Soares (Eds.), CRC Press, pp. 461–469, 2012.
18. Rouet V., A. Delye, N. Vichare, M. Pecht, and B. Foucher, "Embedded Remaining Life Prognostics and Diagnostics of Electronics," *Smart Systems Integration and Reliability*, Honorary Vol., B. Michel and K. Lang (Eds.), Goldenbogen, pp. 606–613, 2010.
19. Stellrecht, E., B. T. Han, and M. Pecht, "Characterization of Hygroscopic Deformations by Moire Interferometry," Chapter 5 in *Moisture Sensitivity of Plastic Packages of IC Devices*, part of the series of Micro- and Opto-Electronic Materials, Structures, and Systems, X. J. Fan and E. Suhir (Eds.), Springer Science + Business Media, New York, NY, pp. 113–130, 2010.
20. Pecht, M., "Reliability, Maintainability, and Availability," Chapter 8 in *Handbook of Systems Engineering and Management*, 2nd ed., John Wiley, pp. 361–395, 2009.
21. Rouet, V., A. Delye, N. Vichare, M. Pecht, and B. Foucher, "Embedded Remaining Life Prognostics and Diagnostics of Electronics," in *Micro Nano Reliability Handbook*, 2008.
22. Vichare, N., B. Tuchband, and M. Pecht, "Prognostic Health Management," Chapter 67 in *Handbook of Performability Engineering*, Springer, pp. 1107–1122, 2008.

23. Das, D., and M. Pecht, "Electronic Hardware Reliability," Chapter 20 in *RF and Microwave Handbook, RF and Microwave Applications and Systems*, 2nd ed., CRC Press, Boca Raton, FL, pp. 20-1–20-24, 2008.
24. Wang, W., Y. C. Chan, and M. Pecht, "Anisotropic Conductive Adhesives for Flip-chip Interconnections," in *Electrically Conductive Adhesives*, R. Gomatam and K. L. Mittal (Eds.), VSP, Leiden, The Netherlands, pp. 57–78, 2008.
25. Pecht, M., "Prognostics and Health Management of Electronics," Chapter 150 in *Encyclopedia of Structural Health Monitoring, Other Applications*, C. Boller, F. K. Chang, and Y. Fujino (Eds.), John Wiley, 2008.
26. Pecht, M., and Y. C. Chan, "Health Monitoring, Diagnostics, and Prognostics of Avionic Systems," *Encyclopedia of Structural Health Monitoring, Aerospace Applications*, C. Boller, F. K. Chang, and Y. Fujino (Eds.), John Wiley, 2008.
27. Pecht, M., "Lead-free Legislations, Exemptions, and Compliance," Chapter 4 in *Green Manufacturing Book Series: RoHS & WEEE - Status, Compliance, Issues and Implications*, Y. C. Chan (Ed.), pp. 65–105, Oct. 2006.
28. Middendorf, A., W. Grimm, O. Neb, N. Vichare, and M. Pecht, "Reliability of Electronic Systems as an Indispensable Condition for Sustainable Development," in *The World of Electronic Packaging and System Integration*, ddp goldenbogen, Dresden, Germany, pp. 367–374, 2004.
29. Liu C., M. Pecht, and Scalise J. A., "Electronic Packages: Quality and Reliability," in *Encyclopedia of Materials: Science and Technology*, Elsevier, pp. 2644–2654, 2001.
30. Syrus T., and M. Pecht, "Plastic Packaging of Microelectronic Devices," in *Encyclopedia of Materials: Science and Technology*, Elsevier, pp. 5610–5616, 2001.
31. Pecht, M., P. McCluskey, and J. Y. Evans, "Failures in Electronic Assemblies and Devices," Chapter 8 in *Product Integrity and Reliability in Design*, Evans, J. W., and J. Y. Evans (Eds.), Springer-Verlag London Limited, pp. 204–232, 2001.
32. Pecht, M., and I. Bordelon, "Electronic Hardware Reliability," in *Electronic Systems Maintenance Handbook*, J. C. Whitaker (Ed.), CRC Press, Boca Raton, FL, pp. 2.1–2.12, Dec. 2001.
33. Pecht, M., and P. McCluskey, "Failure Analysis of Assemblies and Devices," Chapter 13 in *Product Integrity and Reliability in Design*, J. W. Evans, and J. Y. Evans (Eds.), Springer-Verlag London, pp. 338–369, 2001.
34. Vichare, N., P. Zhao, D. Das, and M. Pecht, "Electronic Hardware Reliability," Chapter 4 in *Avionics: Elements, Software and Functions*, Taylor & Francis, CRC, Routledge, FL, pp. 4-1–4-22, 2006; update of Ramakrishnan, A., T. Syrus, and M. Pecht, "Electronic Hardware Reliability," in *Avionics Handbook*, CRC Press, Boca Raton, FL, pp. 22.1–22.21, Dec. 2000.
35. Ramakrishnan, A., T. Syrus, and M. Pecht, "Electronic Hardware Reliability," in *RF and Microwave Handbook*, J. M. Golio (Ed.), CRC Press, Boca Raton, FL, pp. 3.102–3.121, Dec. 2000.
36. M. Pecht, "Reliability, Maintainability, and Availability," in *Handbook of Systems Engineering and Management*, John Wiley, New York, NY, pp. 303–326, April 1999.
37. Pecht, M., and A. Prabhu, "Packaging (Electronic Materials)," in *The Concise Encyclopedia of Chemical Technology*, 4th ed., Vol. 17, Wiley Interscience, New York, NY, pp. 1440–1441, 1999.
38. Pecht et al. "Engineering Design," in *The CRC Handbook of Mechanical Engineering*, F. Kreith (Ed.), CRC Press, Boca Raton, FL, pp. 11.22–11.36, 1997.
39. Pecht, M., and L. Nguyen, "Plastic Packaging," Vol. 2, in *Microelectronics Packaging Handbook, Semiconductor Packaging*, 2nd ed., R. Tummala, E. Rymaszewski, and A. Klopfenstein (Eds.), Chapman & Hall, New York, NY, pp. 394–508, 1997.
40. M. Pecht, "Plastic Encapsulated Microcircuits," in *Reliability, Maintainability, and Supportability Guidebook - Third Edition SAE Int'l RMS Committee (G-11)*, Society of Automotive Engineers, 1997.
41. Pecht, M., P. Lall, and E. Hakim, "Temperature as a Reliability Factor," in *Thermal Management of Electronic System II*, E. Beyne, C. Lasance, and J. Berghmans (Eds.), Kluwer Academic Publishers, pp. 1–20, 1997.
42. Pecht, M., and I. Bordelon, "Electronic Hardware Reliability," Chapter 137, Section XXI in *The Electronics Handbook*, J. C. Whitaker (Ed.), CRC Press, Boca Raton, FL, pp. 2160–2170, 1996.
43. Pecht, M., D. Burkus, and S. Bhagath, "Electronics Assembly," Chapter 22 in *Handbook of Manufacturing Engineering*, Marcel Dekker, New York, NY, pp. 1027–1092, 1996.
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16. Computer Aided Life Cycle Engineering at the University of Maryland, Pecht, M. and D. Barker, in The CALS Report, edited by William Beazley, Pasha Publications, Rosslyn, VA, 1989; update of R&M in the Context of Interdisciplinary Research, Pecht, M., Dasgupta, A. and D. Barker, Proc. Concurrent Engineering of Mechanical Systems, Vol. 1, pp. 353-368, Oct. 1989; update of CALCE Research Opportunities at the University of Maryland, Pecht, M., Barker, D. and D. Weiss, Proc. 1989 IEEE Int. Electronic Manufacturing Sym., pp. 182-185, San Francisco, Sept. 25-27, 1989*; update of Computer Aided Life Cycle Engineering at the University of Maryland, Pecht, M. and D. Barker, Proc. 5th Annual RAM/CAD Technical Interchange Meeting, San Diego, CA, pp.198-212, April 11-12 1989*; update of CALCE Center at the University of Maryland Helps Electronics Design Industries, Pecht, M. and D. Barker, CALS Report, Vol. 2 (8), pp. 16-17, Aug. 1989.
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18. Free Convection Analysis for PCB's, Pezza, A., Pecht, M. and M. Palmer, Westinghouse Defense Electronics Center, DSC-13673, Aug. 1986.
19. "The Effects of Component Placement on the Thermal Reliability of Conductively Cooled Printed Circuit Boards," Pecht, M. and M. Palmer, Westinghouse Defense Electronics Center, DSC-13670, Apr. 1986.
20. CAE Program for Printed Wiring Board Thermal and Reliability Analysis, Pecht, M. and M. Palmer, Westinghouse Defense Electronics Center, DSC-13650, Feb. 1986.
21. Sawyer, T. and M. Pecht, A Material Selection Program, BYTE: The Small Systems Journal, Vol. 11 (7), . 235-248, 1986; A Desktop Aid For Materials Selection, M. Pecht, Machine Design, pp. 164, Apr. 1987; update of MSP: A Material Selection Program, Pecht, M., Sawyer, T., Dieter, G. and Y. Pan, Proc. ASEE Computer Aided Engineering, Vol. 2, pp. 635-638, June 1985.
22. "A Thermal Analysis Interface to Racal-Redac," Pecht, M., Palmer, M. and J. Horan, Westinghouse Defense Electronics Center, DSC-13467, Feb. 1985.
23. "Mechanical Response of Thermoplastics to Environmental Aging," II, Ramis, A., Sutton, R., Tenny, M. and M. Pecht, "Mechanical Response of Thermoplastics to Environmental Aging," I, Berringer, B., Cranston, J., LaValle, T., McGrath, P. and M. Pecht, "Experimental Creep Studies of the Effects of Aging on Thermoplastic AF-1006,"

Gordon, L., Mary, B., Tyber, M., Wentzel, A. and M. Pecht, "A Study of the Effects of Environmental Conditioning of Isoplast 101 and Thermocomp GF-1006," Bitting, R., Colle, P., Everhart, D., Naraghi, M., Neshati, A., Simpson, K. and M. Pecht, NSWC Report, (Sections of NSWC TR 85-16) Naval Surface Weapons Center, White Oak, MD, Dec. 1983.

Invited Talks, Lectures, and Keynote (invited*) Presentations

1. * Prognostics and Systems Health Management Advances and Trends,” ISID- Microsoft PHM Conference, Tokyo, Japan, May 22, 2018.
2. * IoT and Prognostics for Reliability, National Cheng Kung University, Taiwan, May 14, 2018.
3. * “Advances in Product Qualification and Supply Chain Responsibilities”, **Keynote Speaker**, GOPE-2018 2nd International Conference on Gas, Oil and Petroleum Engineering, Houston, USA, Feb 26-28, 2018.
4. * “System Health Monitoring and Prognostics in the Internet of Things,” Indian Institute of Engineering Science and Technology, Kolkata, India, Jan 9, 2018.
5. “The U.S. Food and Drug Administration’s Database of Medical Device Adverse Events”, **Keynote Speaker**, The 19th International Conference on E-health Networking, Application & Services, Dalian, China, October 12-15, 2017.
6. “State of the Art Advances in Supply Chain Management, Reliability Testing and Reliability Prediction.” speaker in Quality assurance of electronic hardware Seminar, Gothenburg, Sweden, Sept 8, 2017
7. “Advances in Reliability Prediction, Testing and Supply Chain Management”, Speaker, *SPMs 50 years anniversary seminar on Reliability Management*, Denmark, Sept 5-6, 2017.
8. “E-bike Battery Lifetime Factors & Warranty Concerns”, *26th International Bicycle Trade Exhibition*, Friedrichshafen, Germany, August 30 – September 2, 2017.
9. The “Prognostics-Based Qualification for Electronics Components and Systems”, Keynote speaker, *International Conference on Sensing, Diagnostics, Prognostics, and Control*, Shanghai, China, August 16-18, 2017.
10. * “Systems Health Monitoring and Management within the Internet of Things,” **Keynote Speaker**, Harriot-Watt University Workshop on Embedded Intelligence”, Edinburgh, Scotland, Aug 9, 2017.
11. “Asia Pacific Conference of the Prognostics and Health Management Society.” Jeju, Korea, July 12-15, 2017.
12. * “Prognostics and System Health Management Conference”, Harbin, China, July 09-12, 2017.
13. * “International Conference on Reliability Systems Engineering”, Beijing, China, July 10-12, 2017.
14. “A New Application for Failure Prognostics – Reduction of Automotive Electronics Reliability Test Duration”, PHM
15. “Prognostics-Based Qualification for Power Electronics”, **Keynote Speaker**, *ECPE Workshop*, Condition and Health Monitoring in Power Electronics, Alborg, Denmark, July 4-5, 2017.
16. * “Systems Health Monitoring and Management within the Internet of Things,” 9th EAI International Wireless Internet Conference, Haikou, China, Dec. 19, 2016.
17. “Systems Health Monitoring and Management within the Internet of Things,” Guangdong University of Petrochemical Technology, Maoming, China, Dec. 17, 2016.
18. * Understanding and Predicting the Risks in Electronics, IEEE Italy, Milan, Nov 25, 2016.
19. * A Fusion Prognostics Approach to Qualification of Microelectronics” 2016 International Conference on Reliability and Science”, Paris, France, Nov 15-18, 2016.
20. * Understanding and Predicting the Risks in Electronics, Naval Research Center, Washington DC, Nov 10, 2016.
21. * “Supply Chain Management and Electronic Parts Selection”, KIMM Reliability Conference, Daejeon, Korea, Sept. 28, 2016.
22. “Batteries and Battery Management Systems for e-Bikes”, EuroBike, Friedrichshafen, Germany, Sept. 1, 2016.
23. * “Systems Health Monitoring and Management within the Internet of Things”, **Keynote Speaker**, Comadem2016, Xian, China, August 19 – 23, 2016.
24. * “Systems Health Monitoring and Management within the Internet of Things”, Cisco Internet of Everything Innovation Centre, Curtin University, Perth, Australia, June 21, 2016.
25. * “Prognostics and System’s Health Management for Electronics Systems”, Reliability Engineering Academy, Stuttgart, Germany, June 9, 2016.
26. * “Reliability Prediction Approaches”, Huawei, Shenzhen, China, May 27, 2016
27. “Systems Health Management and Prognostics within the Internet of Things,” Chongqing Technology and Business University, Chongqing, China, May 24, 2016.
28. * “Business Opportunities for Systems Health Management and Prognostics within the Internet of Things,” **Keynote Speaker**, UNIST Symposium on Prognostics and System’s Health Management, Ulsan, Korea, May 19, 2016.
29. “Advances in Qualification and Testing”, Chinese Academy of Science – Shenyang Institute of Automation, Shenyang, China, May 11, 2016
30. “Advances in Microelectronics Qualification”, Chinese Academy of Science – Institute of Microelectronics, Beijing China, May 9, 2016
31. “Systems Health Management and Prognostics within the Internet of Things,” Lindburg Lectures Series, University of Wisconsin – Madison, April 28, 2016.

32. “Reducing Risk - Systems Health Management and Prognostics within the Internet of Things,” College of Information Engineering, Capital Normal University, Beijing, China, April 20, 2016.
33. “Reducing Risk - Systems Health Management and Prognostics within the Internet of Things,” Ulsan Institute of Technology, Ulsan, Korea, April 17, 2016.
34. *’’How Cultural Differences Affect Communications, Friendships, and Business Relations,’’ Yokohama National University, April 15, 2016.
35. “Systems Health Monitoring and Management within the Internet of Things,’’ HKUST Shenzhen Research Institute, Shenzhen, China, March 16, 2016.
36. “Reducing Risk - Systems Health Management and Prognostics within the Internet of Things,’’ **Keynote Speaker**, Institute of Advanced Sciences (IAS), Yokohama National University, Yokohama, Japan, March 3, 2016.
37. *’’System Health Monitoring and Prognostics in the Internet of Things,’’ Lahore University of Management Sciences, Lahore, Pakistan, Jan. 19, 2016.
38. *’’Advances in Predicting Electronics Reliability,’’ **Keynote Speaker**, 7th International Conference on Quality, Reliability, Infocom Technology and Business Operations, Delhi, India, Dec. 28–30, 2015.
39. *’’A Perspective of the IPC Report on Lead-free Electronics,’’ Symposium on Solder Interconnect Reliability, Singapore, Dec. 8–11, 2015.
40. *’’Solar Energy: Can We Meet the Reliability Requirements for Cost Effective Implementation,’’ **Keynote Speaker**, Lisbon, Portugal, Nov. 23–25, 2015.
41. “Understanding and Predicting Electronics System Reliability,’’ CORPE - Aalborg University, Denmark, Nov. 18, 2015.
42. Jian Guo, Zhaojun Li, and Michael Pecht, “A Bayesian Approach for Li-Ion Battery Capacity Fade Modeling and Cycle to Failure Prognostics,’’ NASA Aerospace Battery Workshop, Huntsville, AL, Nov. 17–19, 2015.
43. *’’Prognostics in the Internet of Things,’’ IEEE Workshop on Automation, **Keynote Speaker**, Shenzhen, China, Nov. 2, 2015.
44. *’’How Cultural Differences Affect Communications, Friendships, and Business Relations,’’ Guangdong University, Maoming, China, Oct. 28, 2015; also Nanjing University, Oct. 26, 2015; also University of Science and Technology Beijing, Beijing, Oct. 23, 2015.
45. *’’Understanding and Predicting Electronics System Reliability,’’ **Keynote Speaker**, IEEE PHM 2015, 2015 Prognostics and System Health Management Conference, Beijing, China, Oct. 22, 2015.
46. *’’Advances in Reliability,’’ Undersecretary of Defense for Turkey, Ankara, Turkey, Sept. 16, 2015.
47. “Concerns with China as the World’s Electronics Supplier,’’ Software and Supply Chain Assurance Forum, McLean, VA, Sept. 1, 2015.
48. “Current Trends and Concern in System’s Reliability,’’ Mitre – Office of the Secretary of Defense, McClean, VA, Sept. 1, 2015.
49. “Prognostics in the Internet of Things,’’ 2015 Smart World Congress, **Keynote Speaker**, Beijing, China, Aug. 10–14, 2015.
50. Presentation on Lithium Ion Battery Separators to U.S. Patent Office, for the USPTO’s Patent Examiner Technical Training Program, July 28, 2015.
51. “PHM in the Internet of Things,’’ Harbin Institute of Technology lecture series, Harbin, China, July 16, 2015.
52. “System’s Engineering and Prognostics,’’ University of Western Australia, Perth, Au, July 7, 2015.
53. *’’Prognostics and Systems Health Management within the Internet of Things,’’ **Keynote Speaker**, IEEE International Conference on CYBER Technology (IEEE-CYBER2015), Shenyang, China, June 8–12, 2015.
54. *’’Understanding and Predicting Electronics System Reliability,’’ **Keynote Speaker**, ICRESH-ARMS, Lulea, Sweden, June 4–6, 2015.
55. “Advanced Qualification and Accelerated Test Methods,’’ State Key Laboratory of Solid State Lighting (Changzhou Base), Changzhou, China, May 13, 2015.
56. “Reliability and Systems Health Management,’’ Smart Materials & Electronic Packaging Center, South China University of Technology, Guangzhou, China, May 12, 2015.
57. “Sensor Development, Prognostics and Data Analytics, and the Internet of Things,’’ Shenyang Institute of Automation (SIA), Shenyang, China, March 10–13, 2015.
58. “Prognostics and Systems Health Management within the Internet of Things,’’ **Keynote Speaker**, 2nd International Symposium on Physics & Technology of Sensors Conference (ISPTS-2), Pune, India, March 8–10, 2015.
59. *’’Battery Reliability and Safety,’’ **Keynote Speaker**, 2014 the 4th International Conference on Power and Energy Systems (ICPES 2014), International Conference on Mechanical Manufacturing and Control (ICMMC 2014), Singapore, Nov. 22–23, 2014.

60. *Advances in the Reliability of LED Luminaires, **Keynote Speaker**, SIMTech AStar Conference on LEDs, Singapore, Nov. 19–20, 2014.
61. *Radiation Effect on Electronics, **Keynote Speaker**, 2014 International Conference on Particle Radiation Research and Applications, Taipei, Taiwan, Nov. 1–2, 2014.
62. *Advances in Battery Safety and Reliability, **Keynote Speaker**, International Forum on Reliability Engineering Applied to Power Battery, Taipei, Taiwan, Oct. 31, 2014.
63. *Prognostics and Systems Health Management within the Internet of Things, **Keynote Speaker**, Computing, Communications & Applications Conference - (ComComAp 2014), Beijing, China, Oct 20–24, 2014.
64. *Lessons Learned from the 787 Dreamliner on Lithium-ion Battery Reliability, **Keynote Speaker**, 27th International Congress of Condition Monitoring and Diagnostic Engineering Management (COMADEM 2014), Brisbane, Australia, Sept. 16 – 20, 2014.
65. “Battery Management Systems for e-Bike Safety”, EuroBike, Friedrichshafen, Germany, Sept. 1, 2014.
66. Why the Best Companies are Monitoring the Health of Their Products and Systems, for Shenyang Institute of Aeronautics, Shenyang, Aug. 13, 2014.
67. *Why the Best Companies are Monitoring the Health of Their Products and Systems, **Keynote Speaker**, International Conference on Reliability, Maintainability and Safety (ICRMS), GuangZhou, China, Aug. 6-8, 2014.
68. *A Lead-Free Transition Plan for Safety and Reliability Critical Products, **Keynote Speaker**, International Conference on Challenges in IT, Engineering and Technology (ICCIET) Phuket, Thailand, July 17-18, 2014.
69. *A New Perspective on Electronic Product Reliability, Prognostics and Health Management, Emerson 2014 Technology Innovation and Growth Conference, June 23-25, 2014.
70. *Battery Prognostics and Safety Management, Nanjing University of Aeronautics and Aviation, Nanjing, China, June 12, 2014.
71. *Why the Best Companies are Monitoring the Health of their Products and Systems, Nanjing University of Aeronautics and Aviation, Nanjing, China, June 11, 2014.
72. *Why the Best Companies are Monitoring the Health of their Products and Systems, University of Science and Technology Beijing, Beijing China, June 10, 2014.
73. “Advanced Qualification of Automotive Electronics,” International Seminar on Reliability Trends in ICT Combined Automotive Components, Korea Institute of Machinery & Materials (KIMM), Daejeon, Korea, May 14, 2014.
74. “Lithium Ion Battery Technology,” China International Electric Vehicle and Parts Exhibition, Shanghai, China, April 13-16, 2014.
75. *Product Qualification and Supply Chain Responsibilities, 15th Electronics Packaging Technology Conf. (EPTC), Dec. 11, 2013.
76. Improved Battery Testability and Safety by Better BMS, China e-Bike Conference, Shanghai, China, April 13, 2014.
77. *Product Qualification and Supply Chain Responsibilities, 15th Electronics Packaging Technology Conf. (EPTC), Dec. 11, 2013.
78. *Counterfeit Electronics: Sources and Solutions, Conf. on Enterprise and Supply Chain Management (ESCM 2013), Sanya, China, Dec. 4, 2013.
79. *Prognostics and System Health Monitoring for Battery Systems Reliability and Safety, **Keynote Speaker**, 8th World Congress on Engineering Asset Management (WCEAM) & 3rd Int’l Conf. on Utility Management & Safety (ICUMAS), Hong Kong, Oct. 30, 2013.
80. *A New Approach to Qualification, **Keynote Speaker**, IPC Southeast Asia Conf., Bangkok, Nov. 19, 2013.
81. *Using PHM to Keep the Dreamliner in the Clouds, **Keynote Speaker**, 2013 PHM Conference, Milan, Italy, Sept. 9, 2013.
82. *Using System Health Monitoring to Keep the Dream-Liner in the Clouds, **Keynote Speaker**, 8th International Conference on Communications and Networking, Guilin, China, Aug. 15, 2013.
83. *Prognostics and System Health Monitoring for Avionics Battery Systems Reliability and Safety, **Keynote Speaker**, 2013 Xi’an International Aviation Maintenance and Management Conference, Xi’an, China.
84. Recommendations on Life Estimation for Cochlear Implants, 2013 IEEE International Symposium on Product Compliance Engineering, ISPCE 2013.
85. Health Monitoring of Lithium-ion Batteries, 2013 IEEE International Symposium on Product Compliance Engineering, ISPCE 2013.
86. *How to Buy Counterfeit Electronics, **Keynote Speaker**, Counterfeit Electronic Parts and Electronic Supply Chain Symposium East, College Park, MD, June 25, 2013.
87. *Battery Management Systems- The Key Challenge to the Electric Vehicle, **Keynote Speaker**, Power and Energy Engineering Conference, Hainan Island, China, Jan. 1, 2013.

88. *Prognostics and Systems Health Management for Sustainability, **Keynote Speaker**, E-Maintenance Conference, Lulea, Sweden, Dec. 13, 2012.
89. *Prognostics and Health Management, **Keynote Speaker**, Helsinki, Finland, Dec. 12, 2012.
90. *Prognostics and Health Management, Universidad Simon Bolivar, Caracas, Venezuela, Nov. 26, 2012.
91. *Implementation of Prognostics and Systems Health Management by Industry, Japanese Society of Mechanical Engineering, Tokyo, Japan, Oct. 19, 2012.
92. *Aerospace Challenges and Research Opportunities, The Hong Kong Polytechnic University, Aug. 30, 2012.
93. *Prognostics and Health Management, China Electronic Produce Reliability and Environmental Testing Institute (CEPREI), Aug. 23, 2012.
94. * Advanced Qualification Methods, **Keynote Speaker**, 13th International Conference on Electronic Packaging Technology & High Density Packaging (ICEPT-HDP 2012), Guilin, China, August 13, 2012.
95. *Reliability Engineering in the Next Generation, **Keynote Speaker**, Conference on Reliability Engineering, Reliability Center in Rafael, July 2, 2012.
96. *Advances in PHM for Tomorrow's Industries, **Keynote Speaker**, IEEE Prognostics and Health Management 2012 Conference, Beijing, China, May 23, 2012.
97. *Battery Management Systems, IEEE Battery Management System Conference, Shenzhen, China, May 21, 2012.
98. *LED Color Failure Prediction using Spectral Power Distribution, HKUST LED-FPD Technology R&D Center at Foshan, Guangdong, China, May 18, 2012.
99. *Battery Health and Safety Management, **Keynote Speaker**, MFPT 2012: The Prognostics and Health Management Solutions Conference, Dayton, OH, April 24, 2012.
100. *Battery Management Systems- The Key Challenge to the Electric Vehicle, International Forum on Life Cycle Analysis of Electronic Devices, New Taipei City, Taiwan, April 19, 2012.
101. *Battery Management System- Advances in Prognostics, Taiwan NSF Forum, Taipei, TW, April 18, 2012.
102. *Prognostics and System Health Management, National University of Taiwan, April 17, 2012; NCUT April 16, 2012.
103. *Battery Management Systems- The Key Challenge to the Electric Vehicle, **Keynote Speaker**, 2nd International Conference on Electric Information and Control Engineering (ICEICE), Lushan, China, April 7, 2012.
104. *The Counterfeit Electronics Problem - Trying to Reach Harmony in a Storm, Int'l Conf. on Economics, Politics, and Security of China and the USA, Uni. Of MD, College Park, MD, Nov. 19, 2011 (televised live on Voice of America)
105. *APEC Workshop on Energy and Green Transport Benefits of Electric Vehicles, Hong Kong Science Park, Hong Kong, Oct. 25, 2011.
106. *The Role of China in the Counterfeiting of Electronic Products, DC Counterfeit Microelectronics Working Group, Washington, DC, Oct. 27, 2011.
107. *Apple's Best Practices, Lenovo, Beijing, China, Sept 21, 2011.
108. *Apple's Best Practices, Lenovo, Shanghai, China, Sept 19, 2011.
109. *A New Approach to Qualification, Keynote Speaker, 2011 IEEE International Conference on Quality and Reliability, Bangkok, Thailand, Sep. 16, 2011.
110. *Apple's Best Practices, Huawei, China, Sept. 13, 2011.
111. *Prognostic Methods for Military Systems, Naval Surface Warfare, Indian Head, MD, August 18, 2011.
112. *New Trends in Product Development Process, PSD Seminar, LG Research Institute, Pyungteak, Korea, July 25, 2011.
113. *Apple's Best Practices, Lenovo, Xiamen, China, July 23, 2011
114. Reliability Concepts, Life Cycle Profile, 1st Reliability and PHM Workshop, Korea, July 14, 2011.
115. *Reliability Testing of Electronics for Military Applications," Korean Defense Logistics Conf., Daegon, Korea, July 7, 2011.
116. *Re-Innovating the Qualification Process for the Electronics Industry, **Keynote Speaker**, 9th Int'l Conf. on Reliability, Maintainability and Safety, Guiyang, China, June 13, 2011.
117. *Advances in Prognostics, IEEE PHM Conference, Shenzhen- China, May 24, 2011.
118. *Counterfeit Electronics, Department of Energy Panel, Washington, DC, May 12, 2011.
119. *Implications of China's Growing Electronics Industry, Military Microelectronics Conf., Washington, DC, May 9, 2011.
120. *Counterfeit Electronics, UM School of Law Symp., Baltimore, MD, March 25, 2011.
121. R&D in China, Workshop on Energetics - Past and Present, Center for Energetic Concepts Development, Hong Kong Science and Technology Parks, Hong Kong, China, Dec. 8, 2010.
122. Prognostics and Health Management based Qualification, 4th Asia-Pacific Int'l Symp. on Advanced Reliability and Maintenance Modeling (APARM 2010), Wellington, New Zealand, Dec. 2, 2010.
123. ***Keynote speaker**, Nano- S&T 2011, Dalian, China, Oct. 23-26, 2011.

124. *The Impact of Free Air Cooling on Telecom Equipment, Lenovo, Beijing, China, Jan. 4, 2011.
125. *The Impact of Free Air Cooling on Telecom Equipment, Huawei and ZTE, Shenzhen, China, Dec. 29, 2010.
126. *Physics of Failure Based Reliability Analysis (with Dr. Diganta Das), ICRMS and Sanya, Hainan, China, Dec. 23-24, 2010.
127. *Advances in the Reliability of Lead-free Solders, Emerson, Hong Kong, Dec. 21, 2010.
128. * Prognostics and Systems Health Management for Improved Reliability, **Keynote speaker**, 7th China Manufacturing Management International Forum, Tianjin, China, Oct. 29, 2010.
129. * “Information Systems Safety and Availability – A New Time-Bomb”. **Keynote address**, World Congress on Engineering Asset Management (WCEAM), Brisbane, Australia, Oct. 25, 2010.
130. * Prognostics and Systems Health Management for Improved Reliability, **Keynote address**, Electronic Systems, Institute for International Research XIII Kongres SUR, Poland, Oct. 19, 2010.
131. * Prognostics and Systems Health Management for Improved Reliability, **Keynote address**, International Education Forum on Reliability and Systems Engineering (IEFR&SE), Beihang University, Beijing, China, Oct. 15, 2010.
132. *Analyzing UA and Intermittent Failure Mechanisms, Committee on Electronic Vehicle Controls and Unintended Acceleration, The National Academies, Transportation Research Board, Washington, DC, June 20, 2010.
133. *Prognostics for Improved Qualification, presentation to Nissan, Japan, May 14, 2010.
134. *Prognostic Methods for IGBT Qualification, Japanese Society of Mechanical Engineering Consortium Meeting, Tokyo, Japan, May 11, 2010.
135. *Self-Cognizant Electronics for Long Life Reliability, Japanese Society of Mechanical Engineering Conf. on Long Life Project, Tokyo, Japan, May 10, 2010.
136. Power Electronics Prognostics, GE Global Research Workshop on Power Electronics Packaging & Reliability, Bangalore, India, Feb. 25, 2010.
137. *What’s Happening with Electronic Product Reliability? **Keynote address**, the Maintenance & Reliability Conf. (MARCON 2010), Knoxville, TN, Feb 17, 2010.
138. *Does the Electronics Industry Need a New Approach to Qualification? **Keynote address**, Int’l Conf. on Electronics Packaging, Sapporo, Japan, Jan. 12-14, 2010.
139. Avionic PHM, the AVIC SAC/TC427 National Technical committee 427 on Process Management for Avionics of Standardization Administration of China, China, Jan. 10, 2010.
140. *Advances in Prognostics, Cranfield University, England, Nov. 27, 2009.
141. *Monitoring the Health of Electronic Systems, EADS, France, Nov. 26, 2009.
142. *Advanced Life Cycle Engineering, German Military COG, Munich, Germany, Nov. 25, 2009.
143. *Reliability Prediction Methods: What We Should Use and Not Use, IEEE Reliability Seminar & Workshop, University of Greenwich, London, UK, Sept 14, 2009.
144. *Health Management and Prognostics, GM Vehicle Health Management Workshop, Bangalore, India, Aug. 26, 2009.
145. A New Paradigm of Electronic Products Assessment, 2009 Int’l Conf. on Electronic Packaging Technology & High Density Packaging, Beijing, China, Aug. 10, 2009.
146. Prognostics and Health Management Special Forum, 2009 8th Int’l Conf. on Reliability, Maintainability and Safety (ICRMS 2009), Chengdu, China, July 20-24, 2009.
147. *Prognostics and Health Management Research, Technical University of Ostrava, Ostrava, Czech Republic, July 16, 2009.
148. *Prognostics and Health Management, Vehicle Maintenance & Repair Conference 2009, London, UK, July 14-15, 2009.
149. *Monitoring the Health of Products, University of Greenwich (Old Royal Naval College), UK, July 13, 2009.
150. *Prognostics and Health Management, National Semiconductor Corp., Hong Kong, July 8, 2009.
151. *Prognostics and Health Management, Huazhong University of Science and Technology, Wuhan, China, May 14, 2009.
152. *Prognostics and Health Monitoring for Improved Qualification, EuroSimE 2009, Netherland, April 27-29, 2009
153. Prognostics Implementation in Aerospace Applications, Condition-Based Maintenance and Health and usage Monitoring Symposium, Shrivenham, UK, April 21-22, 2009.
154. A New Perspective on Electronic Product Reliability, City University of Hong Kong, April 3, 2009.
155. *Prognostics and Health Management, CAPE, Beijing, China, March 2009.
156. *Prognostics and Health Management, Beihang University, Beijing, China, March 2009.
157. *Prognostics and Health Management, CEPREI, Guangzhou, China, March 2009.
158. *A New Approach to Qualification Testing, **Keynote Speech**, Electronics Packaging Technology Conference (EPTC) 2008, Singapore, Dec. 10, 2008.

159. *Health Management and Prognostics, **Keynote Speech**, 4th Dresden Airport Seminar, Structural Health Monitoring (SHM) and its Resources, Dresden, Germany, Nov. 6, 2008.
160. WCEAM Conference, Beijing, China, Oct. 27, 2008.
161. *A New Approach to Qualification Testing, **Keynote Speech**, IMPACT/EMAP, Taipei, Taiwan, Oct. 24, 2008.
162. Counterfeit Electronics, 2008 Fleck Connection Congress, Las Vegas, NV, Oct. 9, 2008.
163. *Health Management and Prognostics, IPC Midwest Conference, Schaumburg, IL, Sept. 20-25, 2008.
164. Prognostics-based Product Qualification for Advanced Microelectronic Systems, HKUST, Hong Kong, August 8, 2008.
165. *Advanced Prognostic Techniques, Beihang University Reliability Conference, Beijing, China, June 19, 2008; City University Quest Lecture, Hong Kong, June 23, 2008; Tayoma Prefecture University, Japan, June 25, 2008; NEC, Japan, June 26, 2008; IHI, Japan, July 15, 2008; Honda, July 17, 2008; Denso, July 18, 2008; Nissan, July 22, 2008; and Fujitsu, July 24, 2008.
166. *Reliability Engineering in the Next Generation, **Keynote Speech**, The 2nd IEEE International Conference on Secure System Integration and Reliability Improvement (SSIRI 2008), July 14, 2008.
167. *Key Reliability Challenges in Electronic Products and Systems, **Keynote Speech**, IEEE Safety and Security Conference, Japan, July 14, 2008.
168. *Advanced Prognostic Techniques, Hong Kong, China, June 23, 2008.
169. *Advanced Prognostic Techniques for Aerospace Applications, China Aerospace Institute, Shenyang, China, June 18, 2008.
170. *Advanced Prognostic Techniques for Aerospace Applications, CAPE, Beijing, China, June 17, 2008.
171. *Key Reliability Challenges in Telecommunications, Datung, Beijing, China, June 16, 2008.
172. *A New Approach to Qualification Testing, **Keynote Speech**, IEEE Int'l Reliability Physics Sym., Phoenix, AZ, April 29, 2008.
173. *A Modern Perspective of Conductive Filament Formation, TRW, MI, Dec 18, 2007.
174. *Contamination Induced Failures of Electronics, WL Gore, MD, Dec 17, 2007.
175. *Advanced Prognostic Techniques, JiaoTong University, Shanghai, China, Dec 9, 2007.
176. *Prognostics for Automotive Electronics, GM Conference on Diagnostics and Prognostics, Bangalore, India, Dec 3, 2007.
177. *Advanced Prognostic Techniques, GM internal R&D Conference on Diagnostics and Prognostics, Bangalore, India, Dec 1, 2007.
178. *Advances in Electronics Reliability, Microsoft, Shenzhen, China, Nov 29, 2007.
179. *China's Electronics Industry - What are the Risks to US Companies and Consumers, Dallas IEEE Reliability Society/Texas EDFAS Meeting, Richardson, TX, Nov. 15, 2007.
180. *The Use of Prognostics in Electronic Product, Int'l Microsystems, Packaging, Assembly and Circuits Technology Conference, Taipei, Taiwan, Oct. 1, 2007.
181. *New Methods to Predict Reliability of Electronics, **Keynote Speech**, MicroNanoReliability 2007, Berlin, Germany, Sept. 3, 2007.
182. Tin Whiskers: How to Mitigate and Manage the Risks, SMTA, China South Technical Conference, Shenzhen, China, August 27, 2007.
183. *New Methods to Predict Reliability of Electronics, **Keynote Speech**, ICRMS'2007, Beijing, China, August 23, 2007.
184. *Predicting the Reliability of Electronic Products, **Keynote Speech**, ICEPT 2007, Shanghai, China, August 15, 2007.
185. Electronic Product Reliability Diagnostics and Prognostics, City University of Hong Kong, August 3, 2007.
186. Data Analysis for System Reliability Diagnostics and Prognostics, Yokohama University, Japan, July 19, 2007.
187. *Tin Whiskers: How to Mitigate and Manage the Risks, **Keynote Speech**, 2007 International Sym. on High Density Packaging and Microsystem Integration (HDP'07), Shanghai, China, June 27, 2007.
188. Electronic PHM, GE Global Research PHM Conference, Niskayuna, NY, May 30, 2007.
189. IEEE 1413.1 - A Guide for Selecting and Using Reliability Predictions, Reliability Prediction- Understanding Techniques, Standards & the New Challenges, Institut Aeronautique et Spatial (IAS), Toulouse, France, May 4, 2007.
190. Prognostic Health Management, Reliability Prediction - Understanding Techniques, Standards & the New Challenges, Institut Aeronautique et Spatial (IAS), Toulouse, France, May 3, 2007.
191. Prognostics and Health Monitoring - The Brave New World, Health & Usage Monitoring & Condition-based Maintenance Sym., Defence Academy of the United Kingdom, Shrivenham, UK, May 1, 2007.
192. Prognostics Health Management, Defense Maintenance & Repair Conference, Arlington, VA, March 6-8, 2007.
193. Tin Whisker Bridging Across Electrical Conductors, 2nd International Eco-Electronic Conference, Beijing, China, December 7, 2006.

194. *IEEE Reliability Prediction Standards and the Handbook based Reliability Prediction Methods, Reliability Prediction for Military Electronic Equipment and Systems, Beijing, China, December 6, 2006.
195. *Electronic Health Monitoring, Emerson Materials and Manufacturing Forum, Coronado Springs, FL, November 8, 2006.
196. *Prognostics Health Management, Halliburton Reliability Conference 2006, Houston, TX, November 1, 2006.
197. *Providing the End-to-End Connection for the Sustainment Value Chain, 2006 DoD Maintenance Symp., Reno, NV, October 24, 2006.
198. *Prognostics and Sense and Respond Logistics, 2006 DoD Maintenance Symp., Reno, NV, October 23, 2006.
199. *Enabling Electronic Prognostics Using Thermal Data, 12th Int'l Workshop on Thermal Investigations of ICs and Systems (THERMINIC 2006), Nice, France, Sept. 27, 2006.
200. Today's and Future Challenges Concerning Lead-free Electronics, **Keynote Speech**, 1st Electronics System Integration Technology Conf. (ESTC 2006), Dresden, Germany, Sept. 6, 2006.
201. Advances in Prognostics for Electronic Products and Systems, 2006 Int'l Military & Aerospace/Avionics COTS Conference, Aug. 22, 2006.
202. Tin Whiskers: How to Mitigate and Manage the Risks, 2006 Int'l Military & Aerospace/Avionics COTS Conference, Aug. 21, 2006.
203. *Prognostics and Health Management, Prognostics and Health Management Sym., **Keynote Speech**, Exeter, UK, July 9, 2006.
204. *Accelerated Testing: Ways to Understand Reliability Quickly and Accurately, **Keynote Speech**, IMAPS-Taiwan 2006 Int'l Technical Sym., Taipei, Taiwan, June 30, 2006.
205. *Advances in Canaries, Precursors, and Physics-of-Failure Based Prognostic Techniques in Fielded Electronics Applications, Lockheed Martin Prognostics and Health Management Conference, Bethesda, MD, June 7, 2006.
206. A New Prognostics Method for Extending the Life of Legacy Systems, IMAPS Topical Workshop on Military, Aerospace, Space and Homeland Security: Packaging Issues and Applications (MASA 2006), Washington, DC, June 7, 2006.
207. *Prognostics for Electronics, 2nd Annual Raytheon Enterprise Logistics Solutions Conf., Manhattan Beach, CA, May 17, 2006.
208. *Prognostic Technology Benchmarking, EADS, Paris, France, Feb. 28, 2006.
209. *Theory and Practice of Prognostic and Health Management, Reliability 2006 Conference, Seoul, Korea, Feb. 21, 2006.
210. *The Impact of the Growing Chinese Electronics Industry on the Future of Aerospace, Boeing, Seattle, WA, Dec. 21, 2005.
211. *The Story Behind the Red Phosphorus Mold Compound Device Failure, **Keynote Lecture**, EMAP 2005, Tokyo Institute of Technology, Tokyo, Japan, Dec. 12, 2005.
212. *Prognostics and Health Monitoring, Mirce Academy, Exeter, UK, Nov. 30, 2005.
213. *Health Monitoring of Electronic Systems, Airbus, Bristol, UK, Nov. 29, 2005.
214. *Market Access and Electronics Products Development in China, United Nations, Geneva, Switzerland, Nov 24, 2005.
215. *IC Reliability in Low Volume Production, DoD Advisory Committee on Electron Device (AGED), Nov. 26, 2005
216. What are the Proper Accelerators for Predicting the Reliability of Active Implantable Medical Devices? Workshop on Measurement Methods for Evaluation of the Reliability of Active Implantable Medical Devices, NIST, Gaithersburg, MD, October 4, 2005.
217. *China's S&T Policy, **Keynote Speech**, For China Industry and Government Directors Meeting, University of Maryland, Sept 29, 2005.
218. *Theory and Practices of Prognostics Health Management, **Keynote Speech**, China Government, Industry and University workshop, Beijing, China, Sept. 5, 2005.
219. Health Monitoring of Electronic Products, Yokohama National University, Yokohama, Japan, Jan. 19, 2005.
220. Long-term Lead-free Product Analysis, JEITA, Japan, Jan 18, 2005.
221. Using Failure Mechanism Based Analysis for Physics-of-Failure assessment, Toshiba, Japan, Jan. 18, 2005.
222. China's Electronics Industry, Fleck Connection Congress, Anaheim, CA, October 28, 2004.
223. *Advances in Reliability and Maintainability Research, **Keynote Speech**, 6th Int'l Conf. on Reliability Maintainability & Safety, Xi'an, China, Aug. 26, 2004.
224. Sensors, NEMI 2004 Technology Roadmap Workshop, Washington, DC, June 23, 2004.
225. Reliability of Lead-free Electronics, 2004 Int'l Conf. Addressing on WEEE & RoHS Directives & the Third Int'l Conf. on WEEE Recycling, Guangzhou, China, June 11, 2004.

226. *Product Reliability and Liability: Business and Legal Aspects of Product Procurement, 2004 Int'l Conf. on the Business of Electronic Product Reliability and Liability, Shanghai, China, April 29, 2004.
227. *The Reliability of Next Generation Electronics, **Keynote Lecture**, Materials Congress 2004, London, UK, March 30, 2004.
228. *IEEE 1413 and Reliability Prediction Methods, JSME, Japan, Jan. 16, 2004.
229. *Auditing the Reliability Capability of Electronic Manufacturers, Tokyo Institute of Technology, Tokyo, Japan, Jan. 15, 2004.
230. In-situ Health Monitoring of Electronics, National Central University, Taiwan, Dec. 29, 2003.
231. * Reliability Analysis and Prediction Methods, Shanghai Jiao Tong University, Shanghai, China, October 23, 2003.
232. * Electronics Aging Assessment and Prediction, Workshop on Aging and Long-term Reliability of Microelectronics Materials and Devices (sponsored by the Air Force Office of Scientific Research), Vanderbilt University, Nashville, TN, October 9, 2003.
233. * Lead-Free Solder Patents, Emerson Lead-Free Solder Sym., Aug 21, 2003; IPC/Maxtor Conf., Aug. 20, 2003; also IEEE Public Lecture, Hong Kong, June 24, 2003; also Shenzhen, China, July 2, 2003; also IEEE Int'l Conf. on Electronics Packaging, Tokyo, Japan, April 17, 2003.
234. * The New IEEE Reliability Prediction Standards, UK Ministry of Defense Reliability Conf., April 3, 2003.
235. Uprating: the Dilemma between Semiconductor Manufacturers and Users, Commercialization of Military & Space Electronics Conf., Los Angeles, CA, Feb. 11, 2003.
236. * Auditing the Reliability Capability of Electronics Manufactures, **Keynote Presentation**, Int'l IEEE Conf. on the Business of Electronic Product Reliability and Liability, Hong Kong, Jan. 14, 2003.
237. * The New IEEE Standards on Reliability Program and Reliability Prediction Methods for Electronic Equipment, City University of Hong Kong, Hong Kong, Jan. 9, 2003.
238. * The Technical, Social and Legal Outlook for Lead-Free Solders, **Keynote Presentation**, IEEE Int'l Sym. on Electronic Material and Packaging, Kaoshiung, Taiwan, Dec. 3-6, 2002.
239. * Challenges for Adopting Pb-Free Interconnects for "Green" Electronics, **Key-Note Presentation**, IPC/JEDEC Int'l Conf. on Lead-Free Electronic Components and Assemblies, Taipei, Taiwan, Dec. 10-12, 2002.
240. * IEEE Reliability Prediction Standard for Devices and Systems, **Keynote Presentation**, ESREF Int'l Conf., Rimini, Italy, Oct 7-11, 2002.
241. Sensors Used for Health Monitoring of Electronic Products and Systems, National University of Singapore, Singapore, July 24, 2002.
242. Mechanics Solution-Methodologies to Electronic Packaging, Cambridge University, UK, July 4, 2002.
243. * Reliability of Electronics and Photonics-Components and Systems, **Keynote Presentation**, EPPIC Conf., Scotland, UK, July 3, 2002.
244. * In-situ Semiconductor Health Monitor for Product Reliability Monitoring, **Keynote Presentation**, IEEE/SPIE Design, Test, Integration and Packaging MEMS/MoEMS, Cannes, France, May 6-8, 2002.
245. * Life Consumption Monitoring, **Keynote Presentation**, UK-Ministry of Defense R&M Specialists' Seminar, Malvern, United Kingdom, April 25-26, 2002
246. The Business, Product Liability and Technical Issues Associated with Using Electronic Parts Outside the Manufacturer's Specified Temperature Ranges, City University of Hong Kong, Hong Kong, March 4, 2002
247. * The Business, Product Liability and Technical Issues Associated with Using Electronic Parts Outside the Manufacturer's Specified Temperature Range, **Keynote Presentation**, Pan Pacific Microelectronics Sym. and Tabletop Exhibit, Maui, HI, pp. 391-398, Feb. 5-7, 2002.
248. Capturing the Benefits of Disruptive Innovation in E-Business Supply Chain Management, 2001 Int. Conf. on Supply Chain Management and Information Systems, Hong Kong, Dec. 14-18, 2001.
249. * Electronics Reliability Engineering in the 21st Century, **Keynote Presentation**, The 3rd Int'l Sym. on Electronic Materials and Packaging 2001, Jeju Island, Korea, Nov. 18-23, 2001.
250. Electronics R & M - Physics of Failure, Lecture, Istanbul Technical University of Turkey, Turkey, July 27, 2001.
251. Electronics Reliability Engineering in the 21st Century, Public Lecture, City University of Hong Kong, Hong Kong, China, June 29, 2001.
252. China's Semiconductor Industry, Electronic Packaging Industry Development in China, Taiwan, and Hong Kong Sym., Shanghai, China, April 2, 2001.
253. Reliability in the New Millennium, Festschrift Conf., University of Wisconsin; Sept. 29 - 30, 2000.
254. Writing in the Brave New World; Professional Writing Program - Fall Faculty Development Day, University of Maryland, Aug. 29, 2000.
255. Preparing for a Time-to-Profit Economy, Feddersen Distinguished Lecture in Mechanical Engineering, Purdue University, West Lafayette, IN, Feb. 21, 2000.

256. Reliability of Electronic Products in the 21st Century, Motorola, IEEE CPMT Society, IL, July 28, 1999.
257. Electronic Devices for Reliable Defense Applications, US Office of Secretary of Defense (OSD), July 23, 1999.
258. COTS Analysis Methods, DoD Scientific Advisory Board Meeting on COTS, Reston, VA, June 8, 1999.
259. * Virtual Component Qualification, **Keynote Presentation**, MSM '99, Puerto Rico, April 1999.
260. Reliability of Electronic Devices for Defense Applications, Reliability STAR, Palisades Institute, Arlington, VA, Feb. 23, 1999.
261. Reliability in the 21st Century, Focus on Electronic Products and Systems, IEEE Boston Reliability Chapter, Dec 9, 1998.
262. Characterization of Plastic Encapsulant Materials as a Baseline for Reliability Testing-Moisture Content and Ionic Contamination, POLY '98, The Electrical and Electronic Packaging Division, ASME Int'l, Dec. 1, 1998
263. Recent Developments in China's Electronic Industry, ISEPT '98, Beijing, China, Aug. 17-21, 1998.
264. Strategies for Rapid Technology Implementation, SEMICON/WEST 98, Semiconductor Equipment and Materials Int'l, July 15, 1998.
265. Invited speaker on NEWSNIGHT MARYLAND, Maryland Public Television, June 8, 1998.
266. Plastic Packages - Status and the Future, The Reliability Challenge, Dublin, Ireland, May 19, 1998.
267. Moving Toward Virtual Qualification, Dependability '98, Ottawa, Canada, May 12-14, 1998.
268. Reliability Assessment Trends for the 21st Century, Electronic Packaging 1998, Stockholm, Sweden, March 17 1998.
269. Decreasing the Time-to-Market Through Virtual Risk Assessment and Risk Mitigation, Smiths Industries, Clearwater, FL, Feb. 10, 1998.
270. Decreasing the Time-to-Market Through Virtual Risk Assessment and Risk Mitigation, Harris Semiconductors, Palm Bay, Melbourne, FL, Jan. 8-9, 1998.
271. Decreasing the Time-to-Market Through Virtual Risk Assessment and Risk Mitigation, NAE: National Materials Advisory Board: Irvine CA, Nov. 13-14, 1997.
272. Reducing Qualification Time for Higher Reliability Microelectronics Packages and Interconnects, Key Development Series in Microelectronics & Electronic Packaging Workshop, ISHM-IMAPS, Santa Fe, NM, Nov. 12, 1997.
273. Accelerated Risk Assessment and Mitigation, Nokia Research Center, Finland, Oct. 2, 1997.
274. Design for Quality and Reliability, Compaq Computer Corp., Houston, TX, Sept. 26, 1997.
275. Electronics as an Integrated Technology Across Engineering Disciplines, Joint ASME-IEEE Lecture Series, Houston, TX, Sept. 25, 1997.
276. * The Developing Electronics Device Market Place and its Impact on Procurement and Reliability, **Keynote Presentation**, The Royal Aeronautical Society, London, UK, Sept. 18, 1997.
277. * Decreasing the Time-to-Market Through Virtual Risk Assessment and Risk Mitigation, **Keynote Presentation**, 21st Int'l Conf. on Microelectronics, Nis, Yugoslavia, Sept. 16, 1997.
278. Moisture Results, BGA Substrate PTAB Meeting, Sematech, Durham, NC, Aug. 6, 1997.
279. Decreasing the Time-to-Market Through Virtual Risk Assessment and Risk Mitigation, Strategic Research Program Seminar, Nanyang Technological University, Singapore, July 23, 1997.
280. * Decreasing the Time-To-Market through Virtual Risk Assessment and Risk Mitigation, **Keynote Presentation**, InterPak'97, Island of Hawaii, HI, June 16, 1997.
281. Southeast Electronics Industry, InterPACK 1997, Mauna Lani, Kohala Coast, Island of Hawaii, June 15-19, 1997.
282. Long Term Dormant Storage Modeling of Plastic Encapsulated Microcircuits, Army-Micom, June 4, 1997.
283. Rapid and Effective Reliability Risk Assessment and Risk Mitigation, Motorola Corporate Engineering Council 1997 Simulation and Modeling for 10X Cycle Time Reduction Sym., Chicago, June 3, 1997.
284. Obtaining Electronic Systems Quality and Reliability in the 21st Century, Computing Devices Int'l, Bloomington, MN, May 19, 1997.
285. Reliability Test Planning, Sematech and IPC Substrate PTAB Meeting, Austin, TX, April 29, 1997; also Denver, CO, Feb. 6, 1997.
286. Obtaining Quality and Reliability in Automotive Industry, GM, Warren, MI, April 18, 1997.
287. Technology Reinvestment Project - Work Force Retraining in Manufacturing Science and Engineering of Cost-effective and Reliable Electronics, NSF Engineering Education Innovators' Conf., Arlington, VA, April 8, 1997.
288. R&M Within the 'Tiger Economy' Nations of the Pacific Rim, MoD Reliability and Maintainability Specialists Seminar, Oxfordshire, England, March 13-14, 1997.
289. The Electronic System Development in the 21st Century, Johns Hopkins University, March 10, 1997.
290. Reliability Modeling and Testing, Second Joint Conf. on Electronic Packaging Education, Ithaca, NY, Sept. 30 - Oct. 1, 1996.
291. Introduction and Background of Boeing ECMP Philosophy, Smiths ECMP Meeting, Malvern, PA, Sept. 19, 1996.
292. Materials Information for the Electronics Industry, NIST Metallurgy Division Strategic Planning Session for Data Projects/Programs, Gaithersburg, MD, Sept. 5, 1996.

293. Issues in the Long Term Dormant Storage of PEMs, 1996 Advanced Electronics Acquisition, Qualification, and Reliability Workshop, Schaumburg, IL, Aug. 21-23, 1996.
294. Reliability Issues in Thermal Design, National Heat Transfer Conf., Houston, TX, Aug. 3-6, 1996.
295. ASA Electronic Business in Transition Military to Non-Mil. Parts Allied Signal Phoenix, AZ, June 6, 1996.
296. Shattering the Myths of Electronic Reliability, 1996 Spring Quarter Woodruff Seminar Series, Georgia Institute of Technology, Atlanta, GA, May 23, 1996.
297. Plastic Encapsulated Microcircuits, The Hardness Assurance Committee of the NASA/AFSMC Space Parts Working Group, Alexandria, VA, May 20-22, 1996.
298. Physics of Failure and Environmental Effects, 43rd Institute of Environmental Sciences Annual Technical Meeting and Expo, Los Angeles, CA, May 15, 1996.
299. * The Next Decade of Reliability Engineering, **Keynote Presentation**, Ministry of Defence R&M Specialists Seminar, Steeple Aston, Oxon, England, March 28, 1996.
300. Shattering the Myths of Electronics Reliability, National Center for Ultra-Reliability Engineering (Strategic Surety) Seminar, Sandia Labs, Albuquerque, NM, March 21, 1996.
301. The Part Selection Processes, Semiconductor Industry Association (SIA) Government Procurement Committee Meeting, Seattle, WA, Feb. 26, 1996.
302. Reducing the Time-to-Market Using Simulated Qualification, IBM, Poughkeepsie, NY, Feb. 21, 1996.
303. * Cost-effective Reliability Assessment, **Keynote Presentation**, ISHM - India, EMIT 1996, Bangalore, India, Feb. 14, 1996.
304. Cost-effective Reliability Assessment, High Density Packaging User Group, Palo Alto, CA, Feb. 6, 1996.
305. Popcorning in Full and Perimeter Plastic Ball Grid Array Packages during IR Reflow Soldering, Munamarty, R. and M. Pecht, Area Array Packaging Technologies, Workshop on Flip Chip and Ball Grid Arrays, Berlin, Germany, Nov. 13-15, 1995.
306. Can We Build-in Reliability Without Physics of Failures? **Keynote Presentation**, 1995 IEEE Int'l Integrated Reliability Workshop, Lake Tahoe, CA, Oct. 22-25, 1995.
307. * Bringing An Electro-Technology To Market, **Keynote Presentation**, Micro-Integrated Smart Materials and Structures Conf., (MISMSC), Williamsburg, VA, Oct. 12, 1995.
308. Attaining High Reliability in Low-Cost Electronic Systems, Thermal Management of 21st Century Electronic Systems Center for the Development of Technological Leadership, NSF Workshop, Minneapolis, MN, Oct. 10, 1995.
309. * Advances in Heat Transfer, **Keynote Presentation**, Fourth Int'l Flotherm User Conf., San Jose, CA, Oct. 4, 1995.
310. * Temperature As a Reliability Factor, **Keynote Presentation**, Eurotherm Conf. No. 45, Leuven, Belgium, Sept. 19-23, 1995.
311. Packaging Research Efforts at the University of Maryland Packaging Research Center, Motorola Semiconductor Packaging Technology Steering Committee Meeting, Arlington Heights, IL, July 18, 1995.
312. Japanese Government and Industry Collaboration in Electronic Packaging R&D, Semicon/West 95, San Francisco, July 6-13, 1995.
313. Problems and Alternatives to NASA's Component Reliability Assessment Methodology, CIMSS/SSEC Seminar, Madison, WI, July 7, 1995.
314. Physics of Failure Reliability Methods, General Motor's NAO Technical Center, Warren, MI, June 15, 1995.
315. Influence of Fiber Glass-Resin Interface on Reliability of Electronic Packaging Laminates, Fiber Glass Research Center Technical Seminar, O'Hara, PA, April 27, 1995.
316. Research in the Design of Reliable Electronic Products, Delco Electronics, Kokomo, IN, April 19, 1995.
317. Advances in the Design and Assessment of Reliable Microelectronics, ETRI, KAIST, Korea, April 3, 95; also LG Semicon, Korea, April 4, 1995; also Daewoo Electronics, Korea, April 6, 1995.
318. Int'l Developments in Packaging Technology, panel speech, Int'l Intersociety Electronic Packaging Conf., HI, March 29, 1995.
319. * Physics of Failure, **Keynote Presentation**, Ministry of Defence R&M Specialists' Seminar, Steeple Aston, Oxon, United Kingdom, March 2-3, 1995.
320. Recent Trends in the Design and Qualification of Electronic Products, Motorola Corporate Manufacturing Research Center (CMRC), Schaumburg, IL, Nov. 22, 1994; also Motorola, Phoenix, AZ, Nov. 28, 1994.
321. Recent Trends in the Design and Qualification of Electronic Products, Dy4 Systems, Inc., Ontario, Canada, Nov. 4, 1994.
322. Comparison of Electronic Packaging Trends in the U.S. and Southeast Asia CALCE EPRC Research Review Meeting, October 19-21, 1994.
323. Reliability Program Standard to Replace Mil-Std-785, EIA G-41 R&M Committee, Fall 1994 Meeting, College Park, MD, Oct. 17, 1994.

324. A Physics-of-Failure Approach to Addressing Device Reliability in Accelerated Testing, Lall, P. and M. Pecht, 5th European Sym. on Reliability of Electron Devices Failure Physics and Analysis, Glasgow, Scotland, Oct. 4-7, 1994.
325. * Success Factors in the Malaysian, Taiwanese and Japanese Electronics Industry, **Key-Note Presentation**, Surface Mount Int'l Conf. & Exposition, San Jose, CA, Aug. 28 - Sept. 1, 1994.
326. Computational Methods to Address Reliability of Electronic Packaging, The Third World Congress on Computational Mechanics, Chiba, Japan, Aug. 1-5, 1994.
327. Possible Missed Opportunities for the Use of PEMs by the Military, Office of Secretary of Defense, Case Studies Sym. on the Successful Use of Commercial Integrated Circuits in Military Applications, June 13-15, 1994.
328. Commercial Versus Military Practices, panel and open forum, 40th Institute of Environmental Science Annual Technical Meeting and Expo, Chicago, IL, May 3, 1994.
329. Dual Use GaAs Technology: A Reliability Approach, 1994 U.S. Conf. on GaAs MANufacturing TECHnology, Tropicana, Las Vegas, NV, May 1-5, 1994.
330. A Computerized Physics-of-Failure Approach to Reliability Assessment, 1994 Utica Conf. & Technology Expo, Springfield, MA, April 28, 1994.
331. The Influence of Temperature on Integrated Circuit Failure Mechanisms, MCC, Austin, TX, March 22, 1994.
332. A Physics-of-Failure Approach to Reliability Assessment, ESL, San Jose, CA, March 2-3, 1994.
333. Design & Verification of Safe, Reliable and Robust Airplane Systems, 40th Reliability and Maintainability Sym., Anaheim, CA, Jan. 27, 1994.
334. A Physics-of-Failure Approach to Derating, SRC Electronic Packaging Program Kick-off Meeting, Atlanta, GA, Jan. 14, 1994.
335. Design and Simulation Tools for Electronics Packaging, Industry/University Case Study Panel II: Design and Integration Engineering, 1994 NSF Design and Manufacturing Grantees Conf., MIT, MA, Jan. 5-7, 1994.
336. The Physics-of-Failure Approach, NASA Johnson Space Flight Center, Houston, TX, Dec. 22, 1993.
337. Lall, P., Pecht, M., Cushing, M. and T. Stadterman, Physics-of-failure Based Computer Tools for the Design of Microelectronic Packages, 1993 Avionics Conf. and Exhibition, London, UK, Dec. 1-2, 1993.
338. IEEE Reliability Program Standard: Revising MIL-STD-785, New Directions in Military Reliability Availability and Maintainability (RAM) Symp: The American Defense Preparedness Association, Aberdeen Proving Ground, MD, Oct. 19, 1993.
339. Rudra, Balu and M. Pecht, Conductive Filament Formation: A Focus on MCM-L Substrates, IPC Fall Meeting, Washington, DC, Oct. 1993.
340. M. Pecht, Reliability Issues for MCM-L, IPC Short Course, IPC Fall Meeting, Washington, DC, Oct. 1993.
341. M. Pecht, Computer-Aided Reliability, Design and Assessment of MCMs: A Physics of Failure Based Approach, 1993 Advanced Microelectronics Qualification/Reliability Workshop, Denver, CO, Aug. 24-26, 1993.
342. Best Commercial Parts and Practice Seminar, Honeywell Inc., Clearwater, FL, Aug. 17, 1993.
343. Electronics Reliability Trends, Indian Government Electronics, SAMEER, Bombay, India, Aug. 5, 1993.
344. Advances in the Design and Assessment of Reliable Electronics Using Concurrent Engineering, U.S./R.O.C. Workshop on Automation and Productivity for Small to Medium Scale Manufacturing Industry, July 1993.
345. Avionics Design Process: Military and Commercial, NAECON 93, Dayton, OH, May 24-27, 1993.
346. A Changing Paradigm in the Design of Reliable Electronics, United Technologies Engineering Coordination Activities (UTECA) Conf., April 29, 1993.
347. Reliability Assessment of Plastic Packages, Litton Quality and Reliability Seminar, Greenbelt, MD, April 20, 1993; also DoD Workshop on Plastic Packages, Bloomington, IN, Nov. 4-5, 1992.
348. Reliability Assessment for Predictive Maintenance, Martin Marietta Energy Systems, Second Annual Prediction Maintenance Forum, Knoxville, TN, March 25, 1993.
349. Future Trends in Plastic Packaging, 39th Reliability and Maintainability Sym., Atlanta, GA, Jan. 25, 1993.
350. Needed Change in Military Standards, Quality Day, RAFAEL Ministry of Defense, Haifa, Israel, Nov. 14, 1992; also AGED STAR Workshop, Alexandria, VA, March 2-5, 1992.
351. Electronics R & M - Physics of Failure, Lecture, MIRCE Akademy, Exeter, UK, July 23, 2001.
352. Thermal Challenges in Electronics Packaging, ASME Winter Annual Meeting, Anaheim, CA, Nov. 8-12, 1992.
353. Influence of Temperature on Microelectronic Device Failure Mechanisms, Keynote Speaker: IEEE-ISHM-IEPS Advanced Technology Workshop, Aug. 25, 1992.
354. The Physics-of-Failure Approach to Multi-chip Module Design and Assessment, Nippon Steel-Electronics, Tokyo Japan, July 27, 1992, Toshiba, Kawasaki, Japan, July 28, 1992, Matsushita Electric Works, Osaka, Japan, July 29, 1992, Matsushita Electric Industries, Osaka, Japan, July 30, 1992, Matsushita Electric Corporation, Osaka, Japan, July 31, 1992.

355. Pecht, M. and M. Cushing, Should MIL-STD-785 Have A More Science-Based Foundation, Proc. American Defense Preparedness Association Sym., pp. 76-87, Aberdeen, MD, June 16-17, 1992.
356. Round Table on Multi-chip Modules, SME Round Table, Mansfield, MA, June 23, 1992.
357. Cost Effective Design of Reliable Electronic Equipment, for AMSAA Senior Analysts Review, Aug. 12-13, 1992; Comanche PMO and Contractors, May 7, 1992; Darold Griffin, PADRA, AMC HQ, May 7, 1992; Walt Hollis, Deputy Undersecretary of Defense Army, April 17, 1992; Brig. General Mullen, April 4, 1992; Stephen Burdt, Pentagon, April 24, 1992; Mr. Vitali, LABCOTM Technology Director, Jan. 8, 1992.
358. An Electronics Packaging Compiler, MCM Workshop, Navy EMPF, IN, Feb. 18-19, 1992; also DARPA-MADE Workshop, Salt Lake City, UT, Jan. 26-28, 1992.
359. Integrating Thermal Analysis of Electronics with Design, ASME Winter Annual Meeting, Atlanta, GA, Dec. 1-6, 1991.
360. Software for Concurrent Engineering, NASA Electronic Packaging and Processes Working Group, Nov. 22, 1991; also State of Maryland Technology Forum, Nov. 6, 1991.
361. Manufacturing in Education and Research, ASEE Middle Atlantic Fall Meeting, College Park, MD, Nov. 2, 1991.
362. MIL-HDBK-217 Issues, Naval Weapons Support Center, Crane, IN, Oct. 31 - Nov. 1, 1991.
363. Pecht, M. and C. Leonard, An Approach to Improved Electronics Reliability, 1991 Advanced Microelectronics Technology Qualification, Reliability, and Logistics Workshop, Seattle, WA, Aug. 13-15, 1991.
364. What Will It Take For The Military to Design Cost-Effective Reliable Products, Engr. For Electronics Design and Production Sym., Bloomington, IN, June 25-27, 1991.
365. Bhandarkar, S., Dasgupta, A., Pecht, M. and D. Barker, Non-Linear Thermo-Mechanical Properties of Fabric Reinforced Printed Wiring Boards, 5th Int'l SAMPE Electronics Conf., June 18-20, 1991.
366. How Failure Prediction Methodology Affects Electronic Equipment, GE Sym. on Reliability in Electronic Systems, Schenectady, NY, June 13-14, 1991.
367. Putting Science Into Reliability Prediction, for Boeing Commercial Airplanes and Boeing Aerospace, June 5-6, 1991.
368. Hu, J. and M. Pecht, Experimental Evaluation of the Mechanical Behavior of GaAs Wafers, Materials Research Society Symp. 8 pages, April 23 - May 3, 1991.
369. Advances in Assessment of Electronics Reliability, Ford Motor Co., Dearborn, MI, April 15, 1993; also Plenary Speaker, 47th Meeting of the Mechanical Failure Prevention Group, Virginia Beach, VA, April 13, 1993; also United Technologies, Hartford, CT, Oct. 24, 1992; also SUNY-Binghamton, Oct. 1, 1992; also Honeywell Reliability Advisory Board Meeting, July 9, 1992; also Dallas IEEE Reliability Society, May 19, 1992; also 25) Institute of Statistical Sciences, Academia Sinica, Taipei, Taiwan, Nov. 27, 1991; also Luncheon Speaker at SEMITHERM VII Sym., Feb. 12-14, 1991.
370. What Every Electrical Engineer Should Know About Mechanical Reliability, IEEE Reliability Society, Baltimore, MD, Jan. 16, 1991.
371. Cooling of Avionics for Tactical Fighter Aircraft, AIAA/ASME Joint Thermophysical Conf., Seattle, WA, June 18-20, 1990.
372. Osterman, M. and M. Pecht, Placement for Reliability Based on Physics of Failure Concepts, 90 IEEE NAECON Conf. Vol. 3, pp. 1021-1027, May 21-25, 1990.
373. Reinhart, H. and M. Pecht, Automated Design for Maintainability, 17th IEEE Inter-Ram Conf., pp. 230-236, June 12-15, 1990; update of, Proc. 90 IEEE NAECON Conf., Vol. 3, pp. 1227-1232, May 21-25, 1990; update of Proc. 6th Annual RAMCAD Conf., pp. 215-238, April 26, 1990.
374. Bhandarkar, S., Dasgupta, A., Pecht, M. and D. Barker, Effects of Voids in Solder-Filled Plated-Through Holes, IPC Technical Paper TP-863, 33rd IPC Conf., April 1-6, 1990.
375. Computer-Aided Life Cycle Engineering of Electronic Equipment, Pecht, M. and R. Porter, NSF Sym. on Industry/University Collaboration: Models for Success, Washington, DC, Feb. 28, 1990.
376. Hevner, A., Basu, A., Pecht, M. and B. Pourbabai, A Methodology for Concurrent Product Development with a Focus on Electronic Products, Proc. Second National Sym. on Concurrent Engineering, Morgantown, WV, Feb. 7-9, 1990.
377. Reliability In Education, 36th Reliability and Maintainability Sym., Los Angeles, CA, Jan. 23-25, 1990.
378. NSF Industry/University Cooperative Research Center Directors, Washington, DC, Jan. 11-12, 1990.
379. CALCE: A Systems Approach to Reliable Electronics Design, Science Council Seminar Series, Martin Marietta Laboratories, Dec. 6, 1989.
380. Current Trends in Reliability Predictions of Electronic Components, Department of Mechanical and Industrial Engineering, SUNY at Binghamton, Oct. 26, 1990; also New Jersey Chapter of the Reliability Society, ITT Avionics Auditorium, Clifton, NJ, Sept. 19, 1989.
381. 217E, AVIP and Beyond, IEEE-ISHM Annual Reliable Electronics Packaging Workshop, College Park, MD, Oct 2-3, 1990, also IEEE R&M Workshop, Taipei, Taiwan, June 1-2, 1990; also Leesburg, VA, Aug. 25-26, 1989.

382. Reliability Engineering Education, Reliability Conf., West Point Academy, NY, Nov. 5, 1989; also USAF RAMCAD Curricula Workshop, Arlington, VA, June 14-15, 1989.
383. Concurrent Design: A Life Cycle Engineering Approach, Digital Equipment Corp., Maynard, MA, Jan. 17, 1989.
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1. Advanced in PHM, ISID short course for Japan companies, Tokyo, Japan, May 23, 2018.
2. Supplier Trust, Emerson, Taiwan, May 15, 2018.
3. Advances in Reliability: short course for Abbott Medical, Los Angeles, April 12, 2018.
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8. Advanced Reliability Methods, for Schlumberger, Katy, Texas, Apr. 11, 2016.
9. Test Methods for Rapid Qualification, Symposium on Solder Interconnect Reliability, Singapore, Dec. 8, 2015.
10. Advanced Reliability Methods and Supply Chain Management, Ankara, Turkey, Sept. 17-18, 2015.
11. Advancements in Qualification and Accelerated Testing, at Continental facilities, Tijera, Mexico, July 28, 2015.
12. Product Qualification and Supply Chain Responsibilities, IEEE International Conference on Thermal, Mechanical and Multi-Physics Simulation and Experiments in Microelectronics and Microsystems (EuroSimE 2015), Budapest, Hungary, April 19, 2015.
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14. Physics of Failure, Stratsys, MN, Sept. 4, 2014.
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16. Counterfeit Electronics, Emerson 2014 Technology Innovation and Growth Conference, June 23-25, 2014.
17. Advanced Qualification of Microelectronics, 2014 ECTC, Orlando, USA, May 27-30, 2014.
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21. Prognostics and System Health Management, KIMM, Korea, Mar. 13, 2013.
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134. Reliability: The Key to Product Success, 1 of 6 Presenters, NTU Advanced Technology and Management Program, College Park, MD, June 18-19, 1992.
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138. Introduction to Reliability and Safety Engineering, Hardware and Software, University of Maryland Center for Professional Development, College Park, MD, Apr. 9-11, 1990.
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11 UNITED STATES DISTRICT COURT
12 NORTHERN DISTRICT OF CALIFORNIA
13 SAN FRANCISCO DIVISION

14 VICKY MALDONADO AND JUSTIN CARTER,
15 individually and on behalf of themselves and all
16 others similarly situated,

17 Plaintiffs,

18 v.

19 APPLE INC., APPLCARE SERVICE
COMPANY, INC., AND APPLE CSC, INC.

20 Defendants.
21
22

No. 3:16-cv-04067-WHO

Related Case:
English v. Apple Inc., et al.
Case No. 3:14-cv-01619-WHO

**DECLARATION OF ROBERT A.
BARDWELL, Ph.D. IN SUPPORT OF
PLAINTIFFS' MOTION FOR CLASS
CERTIFICATION**

Hearing: May 15, 2019
Time: 2:00 p.m.
Judge: William H. Orrick
Courtroom: 2, 17th Floor

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I, Robert A. Bardwell, Ph.D., declare as follows:

1. I have been retained by Plaintiffs as an expert in the above-captioned action. I have specialized knowledge, skill, and professional experience in the field of statistics. I am personally familiar with the facts set forth in this declaration. If called as a witness, I could and would competently testify to the matters stated herein.

2. I submit this declaration on behalf of the Plaintiffs in support of their Motion for Class Certification.

3. Attached hereto as Exhibit A is a true and correct copy of my Expert Report and Curriculum Vitae.

I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct.

Executed this 25th day of February 2019, in Denver, Colorado.



Robert A. Bardwell, Ph.D.

EXHIBIT A

FILED UNDER SEAL

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN FRANCISCO DIVISION

VICKY MALDONADO AND JUSTIN CARTER,)
Individually and on behalf of themselves and all)
others similarly situated,)

Plaintiffs,)

v.)

APPLE INC., APPLE CARE SERVICES)
COMPANY, INC., AND APPLE CSC, INC.)

Defendants.)

Case No. 3:16-cv-04067-WHO

EXPERT REPORT OF ROBERT A. BARDWELL

Prepared for:
Steve Berman
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February 25, 2019

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TABLE OF CONTENTS

Table of Contents	2
1. Introduction	3
Context of the Analysis	3
Summary of Findings	4
2. Description of the Data	5
3. Data Show [REDACTED]	7
1. Remanufactured Devices [REDACTED] ..	8
Table 1. Remanufactured Replacements [REDACTED] : 19 iPhone Models	10
Table 2. Remanufactured Replacements [REDACTED] : 30 iPad Models	11
2. [REDACTED]	12
3. Data Hide Remanufactured Device Defects.....	12
Table 3. Remanufactured Replacements Increase Over Time: iPhone 7	13
Table 4. Limiting Analysis to 13-Weeks Reduces Censoring: iPhone 7	14
4. Outliers Attributable to [REDACTED]	15
5. Additional Data Would Allow More Robust Analysis	16
4. Apple Does Not [REDACTED]	18
Performance and Reliability Testing [REDACTED]	18
AppleCare Replacements [REDACTED]	19
5. Conclusion	19
6. Data Sources and Documents Used	19
Data.....	19
Documents	20
Other References	20
7. Consultant Background and Compensation.....	21
8. Attachment: Robert A. Bardwell Curriculum Vitae	23

1. INTRODUCTION

This report presents an analysis of device failures for new and used replacement devices provided as part of AppleCare and AppleCare+ service plans. Section 1 provides a context of the analysis and a summary of my findings. Section 2 describes the data used in the analysis, and the handling of these data. Section 3 details my findings of [REDACTED] for remanufactured replacements and Section 4 discusses why Defendant testing [REDACTED]. Section 5 provides a brief conclusion, and Section 6 lists the data and sources used in this report. Section 7 addresses my qualifications and compensation, and my CV is attached in Section 8.

CONTEXT OF THE ANALYSIS

Bardwell Consulting has been retained on behalf of Vicky Maldonado and Justin Carter (“Plaintiffs”). I have been asked to evaluate if there is a material and significant difference in performance and reliability between new and remanufactured iPhones and iPads provided to customers as part of AppleCare and AppleCare+ (AppleCare) service agreements.

AppleCare and AppleCare+ are protection plans offered by Apple Inc., et al. (“Defendants” or “Apple”) for iPhones and iPads. For products covered by AppleCare, Defendants agreed to replace or repair iPhones and iPads with devices that are new or equivalent to new in performance and reliability.¹ This report addresses those devices provided as replacements for the AppleCare plans that are remanufactured devices, which contain used parts.² Plaintiffs assert that devices containing used parts can never be equivalent to new devices in performance and reliability.

Defendants have provided internal documents comparing the [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

¹ First Amended Complaint (“FAC”) ¶¶ 3, 38, 43, 52-53, 61-62, Nov. 14, 2016.

² FAC ¶ 70.

³ APL-MLDND0_00013497 [REDACTED]
[REDACTED]
[REDACTED]

[REDACTED] See Deposition of Michael Lanigan (“Lanigan Dep.”) 22:18-24:25, 31:16-32:17, Jan. 11, 2019.

⁴ Lanigan Dep.106:13-16, Jan. 11, 2019.

are not known,⁵ I present in this report an analysis of iPhone and iPad performance and reliability based on [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]⁶

SUMMARY OF FINDINGS

These iPhone and iPad [REDACTED] provided by AppleCare provide strong evidence that

[REDACTED]

[REDACTED] My principal findings are:

1. [REDACTED]
[REDACTED]
2. [REDACTED]
[REDACTED]
3. [REDACTED]
[REDACTED]
[REDACTED]
4. [REDACTED]
5. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
6. [REDACTED]
[REDACTED]
7. [REDACTED]
[REDACTED]
[REDACTED]
8. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

⁵ Lanigan Dep.96:19-25.

⁶ APL-MLDNDO-00005561; APL-MLDNDO-00005565.

9. [REDACTED]
[REDACTED]
[REDACTED]⁷
10. More detailed data would allow more robust analysis and would likely [REDACTED]
[REDACTED]

2. DESCRIPTION OF THE DATA

I analyzed the data provided in the documents bates-stamped APL-MLDNDO-00005559-5566. These data are summary tables of [REDACTED]. [REDACTED]
[REDACTED].⁸ There are eight distinct tables:

1. [REDACTED]
2. [REDACTED]
3. [REDACTED]
4. [REDACTED]
5. [REDACTED]
6. [REDACTED]
7. [REDACTED]
8. [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]⁹

⁷ [REDACTED]
[REDACTED]
[REDACTED] See APL-MLDNDO_00013524. [REDACTED]
[REDACTED]
[REDACTED]

⁸ Deposition of Avijit Sen (“Sen Dep.”), 14, Oct. 9, 2018.

⁹ 2018-09-27 P. Patel Ltr to Plaintiffs Transmitting Mediation Discovery page 2.

The four tables without [REDACTED] contain the following columns:

1. iPhone/iPad Model;
2. [REDACTED]
3. [REDACTED]
4. [REDACTED] and
5. [REDACTED].

The four tables with [REDACTED] contain the following columns:

1. iPhone/iPad Model;
2. [REDACTED]
3. [REDACTED]
4. [REDACTED]
5. [REDACTED].

I interpret these fields to have the following meaning:

1. iPhone/iPad Model identifies the model of the device.
2. [REDACTED]
[REDACTED].¹⁰
3. [REDACTED]
[REDACTED].¹¹
4. [REDACTED]
[REDACTED]
[REDACTED].
5. [REDACTED]
[REDACTED]
[REDACTED].¹²
6. [REDACTED]
[REDACTED]
[REDACTED].

¹⁰ Sen Dep. 80:20-21.

¹¹ Sen Dep. 44-46.

¹² Sen Dep. 57-58.

Data Show [REDACTED]

The analysis in this report is limited to the four replacement device tables.¹³ [REDACTED]
[REDACTED]
[REDACTED]

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

The data represent [REDACTED], and [REDACTED]
[REDACTED]. Over [REDACTED], and [REDACTED]
[REDACTED]

3. DATA SHOW [REDACTED]

iPhone and iPad failure data provided by AppleCare provide strong evidence that [REDACTED]. My key findings are:

1. [REDACTED]
2. [REDACTED]
3. The nature of the data hides defects of remanufactured devices. [REDACTED]
4. [REDACTED]
5. More detailed data would allow more robust analysis and would likely [REDACTED]

¹³ I focus my analysis on replacement devices in order to control for differences between individuals who require replacement devices and individuals who do not require replacement devices.

¹⁴ Lanigan Dep.22-23.

¹⁵ Lanigan Dep. 22-24.

Data Show [REDACTED]

1. [REDACTED]

Using the Mantel-Haenszel method, I test whether remanufactured devices have [REDACTED] than new replacement devices after 13 weeks in service. [REDACTED]

The Mantel-Haenszel method is the accepted statistical test for comparing proportions of two groups, here remanufactured and new devices, across multiple categories, here device models.¹⁶ The chi square test is the most common method for assessing the whether a difference in proportions between two groups is statistically significant, and has been widely accepted by courts. The Mantel-Haenszel method extends the chi square test to assess whether the difference between two groups is statistically significant across multiple categories. Academic and technical citations supporting this method are listed in Section 5. In this case, the Mantel-Haenszel method assesses whether the difference in the [REDACTED] between new and remanufactured replacements over all iPad and iPhone models is statistically significant.

I control for potential differences in [REDACTED] between original purchased devices and replacement devices by only comparing remanufactured devices to new replacement devices rather than original purchase devices. The 13-week service date was selected to minimize the bias associated with two types of censoring. This censoring is discussed in more detail in Finding 3 below.

I calculate the odds ratio for 19 iPhone models and 30 iPad models that have data under the category “13 weeks in service.”¹⁷ Table 1 and Table 2 below summarize these iPhone and iPad models. Sixteen iPhone models and 28 iPad models have odds ratios [REDACTED] Finding 4 below shows that the models with odds ratios [REDACTED]

I compute a common odds ratio across the entire set of models using the Mantel-Haenszel method, [REDACTED]

¹⁶ Several courts have approved of this statistical method. *See, e.g., Chang v. Univ. of Rhode Island*, 606 F. Supp. 1161, 1203 (D.R.I. 1985); *EEOC v. IBM*, 583 F.Supp. 875, 900 (D. Md. 1984); *Hogan v. Pierce*, No. 79-2124, 1983 WL 30295, at *3 (D.D.C. Jan. 31, 1983).

¹⁷ As the name indicates, the odds ratio is the ratio of the odds of a remanufactured phone failing to the odds of a new replacement phone failing. The “odds” of a replacement failing is the probability the replacement unit fails divided by the probability that the replacement does not fail, while under AppleCare service coverage.

Data Show [REDACTED]

[REDACTED]
[REDACTED] [REDACTED] [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]
[REDACTED] [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] [REDACTED]

18 [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Data Show

Table 2. Remanufactured Replacements 30 iPad Models

Model	New Devices		Remanufactured Devices		Odds Ratio
	Fail	Survive	Fail	Survive	
iPad (3rd Gen) Wi-Fi	█	██	██	████	████
iPad (3rd Gen) Wi-Fi, Cellular	█	██	██	████	████
iPad (3rd Gen) Wi-Fi, Cellular (VZ)	█	█	██	████	████
iPad (4th Gen) Wi-Fi	██	████	████	████	████
iPad (4th Gen) Wi-Fi, Cellular	██	████	██	████	████
iPad (4th Gen) Wi-Fi, Cellular (MM)	██	████	██	████	████
iPad (5th Gen) Wi-Fi	██	████	█	████	████
iPad (5th Gen) Wi-Fi, Cellular	██	████	█	██	████
iPad 2	█	██	██	████	████
iPad 2 3G (Verizon)	█	█	█	████	████
iPad AIR 2 Wi-Fi	██	████	██	████	████
iPad AIR 2 Wi-Fi, Cellular	██	████	██	████	████
iPad AIR Wi-Fi	██	████	████	████	████
iPad AIR Wi-Fi, Cellular	██	████	████	████	████
iPad Mini 2 Wi-Fi	██	████	██	████	████
iPad Mini 2 Wi-Fi, Cellular	██	████	██	████	████
iPad Mini 3 Wi-Fi	█	████	█	████	████
iPad Mini 3 Wi-Fi, Cellular	█	██	█	████	████
iPad Mini 4 Wi-Fi	██	████	██	████	████
iPad Mini 4 Wi-Fi, Cellular	██	████	█	████	████
iPad Mini Wi-Fi	██	████	████	████	████
iPad Mini Wi-Fi, Cellular	██	████	██	████	████
iPad Mini Wi-Fi, Cellular (MM)	██	████	██	████	████
iPad Pro 10.5-Inch, Wi-Fi	██	████	█	██	████
iPad Pro 10.5-Inch, Wi-Fi, Cellular	██	████	█	████	████
iPad Pro 12.9-Inch, 2ND Gen, Wi-Fi	█	██	█	██	████
iPad Pro 12.9-Inch Wi-Fi	██	████	██	████	████
iPad Pro 12.9-Inch Wi-Fi, Cellular	██	████	██	████	████
iPad Pro 9.7-Inch Wi-Fi	██	████	██	████	████
iPad Pro 9.7-Inch Wi-Fi, Cellular	██	████	██	████	████
Combined					████

Data Show [REDACTED]

2. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

3. DATA HIDE REMANUFACTURED DEVICE DEFECTS

The data do not reveal the full impact of remanufactured replacement devices because of four limitations:

1. The mixture of new and remanufactured replacements changes over time.
2. Data are right censored due to expiration of AppleCare plan term.
3. Data are right censored due to observation collection time.
4. Data are summary data with relatively large three- and six-month bins.

These limitations result in systematic under-estimates of the odds ratios, [REDACTED]. However, I have minimized the impact by focusing on the 13-week [REDACTED].

The Composition of New and Remanufactured Replacement Changes Over Time

[REDACTED]
[REDACTED]
[REDACTED]

¹⁹ Based on [REDACTED] at after 13 weeks of service.
²⁰ Apple Inc.'s Highly Confidential Suppl. Resps. and Objections to Plaintiffs' First Set of Non-Uniform Interrogatories at Resp. to Interrog. 9, Feb. 2, 2018.
²¹ Based on [REDACTED] at after 13 weeks of service.
²² <https://www.apple.com/support/iphone-7-no-service/> last accessed October 17, 2018.
²³ Apple Inc.'s Highly Confidential Suppl. Resps. and Objections to Plaintiffs' First Set of Non-Uniform Interrogatories at Resp. to Interrog. 6 and 9, Feb 2. 2018.

Data Show [REDACTED]

Table 3. Remanufactured Replacements Increase Over Time: iPhone 7

Date Range	Incremental New Replacements	Incremental Remanufactured Replacements	Percent New
9/14/2016	Model Released		
9/14/2016 to 9/27/2016	[REDACTED]	[REDACTED]	[REDACTED]
09/27/2016 to 03/27/2017	[REDACTED]	[REDACTED]	[REDACTED]
03/27/2017 to 09/27/2017	[REDACTED]	[REDACTED]	[REDACTED]
09/27/2017 to 03/27/2018	[REDACTED]	[REDACTED]	[REDACTED]
03/27/2018 to 06/27/2018	[REDACTED]	[REDACTED]	[REDACTED]

Data Are Right Censored Due to Expiration of Service Plan

[REDACTED]

[REDACTED]

Data Show [REDACTED]

I minimize the impact of service plan censoring by only analyzing defective replacement lifespans of 13 weeks or less. AppleCare plans expire after two years, or 104 weeks. Therefore,

[REDACTED]

Data are Right Censored Due to Observation Collection Time

These data record events through September 27, 2018. If a replacement device turns out to be defective after September 27, the end of data collection, I would not have a record of that failure in the data. This problem is known as right-censoring and will bias the results if ignored.

The iPhone 7, a newer model, is an ideal case study for illustrating this bias. It was released to the public on September 14, 2016. Therefore, there is no right-censoring due to the end of the two-year service plans, since service plans for these phones would not have expired before the end of data collection.

[REDACTED]

limiting my analysis to the first 13 weeks of device time in field, most of the censored failures of devices later in the model lifecycle are excluded. In Table 4, we see the results for the iPhone 7.

Table 4. Limiting Analysis to 13-Weeks Reduces Censoring: iPhone 7

Replacement Lifespan	[REDACTED]	
	New	Remanufactured
13 weeks or less (limited censoring)	[REDACTED]	[REDACTED]
All in data (right censored)	[REDACTED]	[REDACTED]

The impact of both service plan censoring and observation censoring increases [REDACTED]

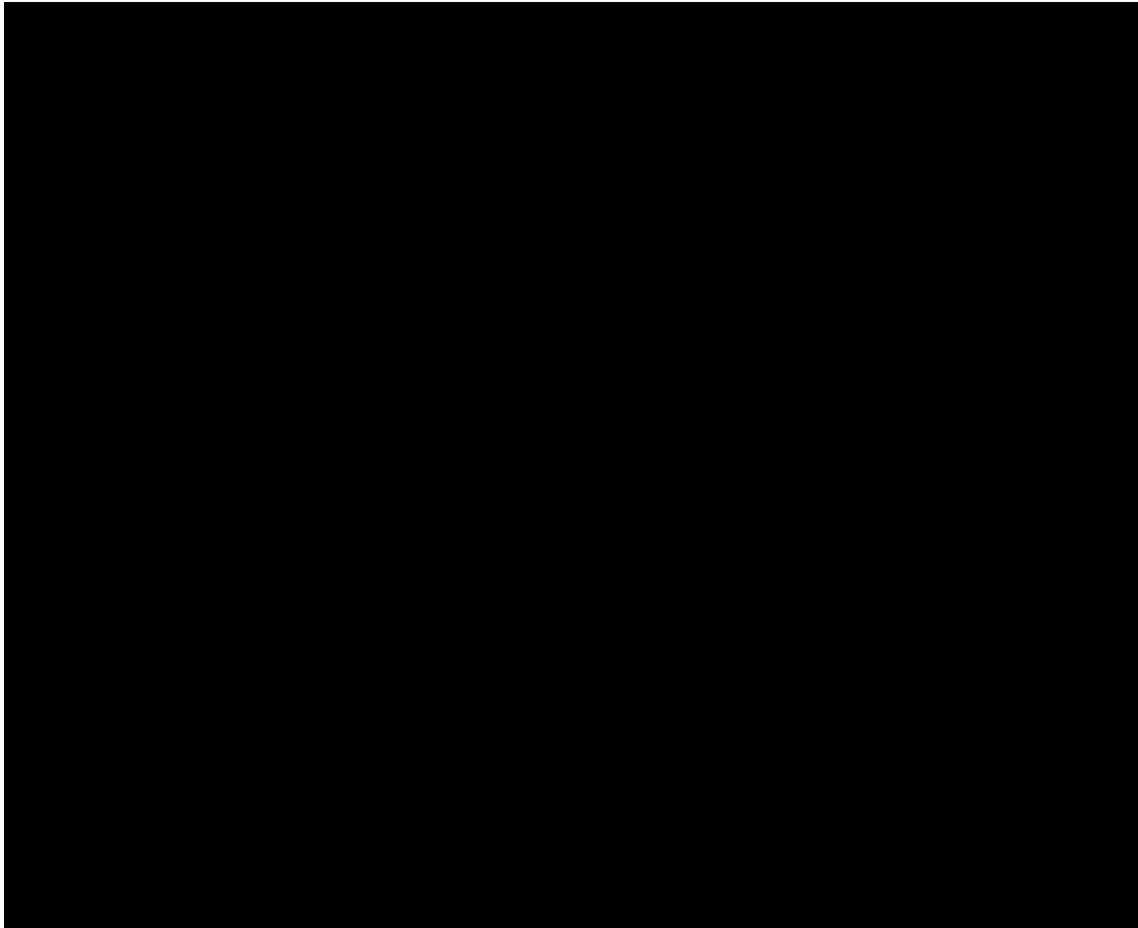
[REDACTED]

[REDACTED]. If the data were not censored, [REDACTED].

²⁴ [REDACTED]

Data Show [REDACTED]

Figure 1: CDPPM Ratio Over Time



Data are Summary Data with Relatively Large Three- and Six-Month Bins

The data are provided at a summary level, with values at three- and six-month intervals. This coarseness of data lumping prevents the application of additional statistical techniques to address censoring issues.

4. OUTLIERS ATTRIBUTABLE TO [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Data Show [REDACTED]

[REDACTED]
[REDACTED].²⁵ A possible explanation for this difference in results is that my analysis does not control for date of manufacture. The data I was provided do not have information about date of device manufacture or sale.

5. ADDITIONAL DATA WOULD ALLOW MORE ROBUST ANALYSIS

As noted above the data have several limitations that limit my analysis. [REDACTED]
[REDACTED]
[REDACTED]

[REDACTED] I understand that if this case proceeds past certification these data could be made available [REDACTED].

The data produced by Apple allow me to compute and compare [REDACTED] for all Apple devices reliably. However, the data do not provide a complete record of replacement devices, so [REDACTED] can only be calculated for select times and with limited accuracy. [REDACTED]
[REDACTED]
[REDACTED]

[REDACTED].²⁷ With more granular data I would be able to resolve the biases caused by censoring. This would strengthen my key finding that [REDACTED]. The following data should be collected to support further analysis:

²⁵ APL-MLDNDO_00013524.

²⁶ APL-MLDNDO_00013496.

²⁷ Sen Dep. 35:1-4; 53:10-14 [REDACTED]; 35:11-25; 36:1-9 [REDACTED]
[REDACTED]
[REDACTED]; 63:16-25; 64:1-21; 65:21-25; 66:1-24; 67:2-5 [REDACTED]
[REDACTED]
[REDACTED]

Data Show [REDACTED]

1. Device level data for all devices covered under either general warranties, AppleCare, or AppleCare with the following fields:
 - a. Unique device id (serial number);
 - b. Model;
 - c. [REDACTED]
 - d. Memory capacity of device;
 - e. Date placed in service;
 - f. Date service plan term expires;
 - g. Unique id associated with service plan;
 - h. Date of each device repair;
 - i. Type of each repair;
 - j. Date of device replacement;
 - k. [REDACTED]
 1. [REDACTED]
 2. [REDACTED]
 - l. The cost of the associated service plan;
 - m. The cost of the device originally purchased with the associated service plan; and
 - n. The model of the device originally purchased with the associated service plan.
2. Data dictionaries documenting the following information for each database tracking the manufacture, remanufacture, sales, or service warranty for the devices identified in the responses item 1 above, including but not limited to all databases accessed to generate the responses to item 1. The data dictionaries should include the following information:
 - a. Description of each table;
 - b. Description of each field within each table, including field type;
 - c. Relationships among all tables; and
 - d. Definitions for all codes or abbreviations within the data, including numeric codes.
3. All business documents and analysis used to evaluate the price and profitability of each AppleCare offering or the AppleCare business in general, including but not limited to:
 - a. Actuarial analysis;
 - b. Financial analysis;
 - c. Due diligence studies;
 - d. Business case and all supporting documents; and
 - e. All board of director, committee, and subcommittee minutes and presentations.
4. [REDACTED]
[REDACTED] page 40 lines
12-14 of the Transcript of Avijit Sen dated October 9, 2018.
5. Identification of the nature, purpose, and date of all manufacturing changes that occurred during the production life of each device model, including but not limited to the following:

Apple Does Not [REDACTED]

- a. Manufacturing facility or contractor;
- b. Component type, design, or manufacturing facility; and
- c. Quality control procedures.

These data could be used to support the following types of analysis:

1. Poisson regression analysis;
2. Survival analysis to establish:
 - a. Difference in expected lives between new and remanufactured devices;
 - b. Expected future failures and failure times for devices still under warranty;
 - c. Marginal impact of used components on failure rates;
3. Cochran-Mantel-Haenszel analysis at additional points in service life; and
4. Comparison of repair rates for new and remanufactured devices to assist in characterizing past and future damage.

4. APPLE DOES NOT [REDACTED]

Evidence presented in this section demonstrates that Apple's performance and reliability testing [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

PERFORMANCE AND RELIABILITY TESTING [REDACTED]

Apple's reliability testing is not intended to provide a valid measure of the [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED] This procedure is not intended to, and cannot result in a random sample that can provide statistically valid inferences about failure rates.

[REDACTED]
[REDACTED]

²⁸ Deposition of Jason Fu ("Fu Dep.") 27:5-15, 30:17-31:6, 31:19-32:17, Jan. 8, 2019.

²⁹ Fu Dep. 68:1-72:15; Lanigan Dep. 118:2-23.

[REDACTED]

APPLECARE REPLACEMENTS [REDACTED]

[REDACTED]

5. CONCLUSION

[REDACTED]. More detailed data and additional analysis would likely strengthen these findings.

6. DATA SOURCES AND DOCUMENTS USED

I used the following information in this report:

DATA

1. APL-MLDNDO_00005559.xlsx

³⁰ Fu Dep. 87:15-23, 91:18-22.

³¹ Apple Inc.'s Highly Confidential Supplemental Response and Objections to Plaintiffs' First Set of Non-Uniform Interrogatories, Response to Interrogatory Nos. 6, February 2, 2018.

³² Sen Dep. 100:3-25; 101:1-3 [REDACTED]

2. APL-MLDNDO_00005560.xlsx
3. APL-MLDNDO_00005561.xlsx
4. APL-MLDNDO_00005562.xlsx
5. APL-MLDNDO_00005563.xlsx
6. APL-MLDNDO_00005564.xlsx
7. APL-MLDNDO_00005565.xlsx
8. APL-MLDNDO_00005566.xlsx

DOCUMENTS

1. Plaintiffs' First Amended Complaint, November 14, 2016
2. Apple Inc.'s Highly Confidential Supplemental Response and Objections to Plaintiffs' First Set of Non-Uniform Interrogatories (Interrogatory Nos. 16-18), January 30, 2018
3. Apple Inc.'s Highly Confidential Supplemental Response and Objections to Plaintiffs' First Set of Non-Uniform Interrogatories, (Interrogatory Nos. 4, 6, 9, 10, 11,
4. and 15), February 2, 2018
5. Apple's Restricted Access Responses to NUI Nos. 19-20, January 30, 2018
6. Transcript of Jason Fu Deposition, January 8, 2019
7. Transcript of Michael Lanigan Deposition, January 11, 2019
8. Transcript of Avijit Sen Deposition, October 9, 2018
9. APL-MLDNDO_00013487.pdf
10. APL-MLDNDO_00013532.pdf

OTHER REFERENCES

1. <https://www.apple.com/support/iphone-7-no-service/> last accessed October 17, 2018.
2. William Cochran, Some Methods of Strengthening the Common Chi-squared Tests, (1954) *Biometrics*, 10, 417-451.
3. Nathan Mantel and William Haenszel, Statistical Aspects of the Analysis of Data from Retrospective Studies of Disease (1959), *Journal of the National Cancer Institute*, 22, 719-748. (Applied the Mantel-Haenszel method to epidemiology and adjusted it for use with small peer group. This method is used extensively by epidemiologists in the study of treatments for disease. Control (untreated) and treated subjects are divided according to factors that might also be related to disease incidence, and then the success of the treatment is measured in each peer group with the same characteristics. This technique is the preferred analysis for retrospective studies with large populations.)
4. Fleiss, Joseph L. (1981). *Statistical Methods for Rates and Proportions*. N.Y.: John Wiley & Sons. (Mantel-Haenszel computations are contained in Section 10.4, pages 173 through 175.)

5. StataCorp (2007) *Stata Statistical Software: Release 10*. College Station, TX: StataCorp LP.
6. StataCorp (2007) *Survival Analysis and Epidemiological Tables*. College Station, TX: Stata Press. (Mantel-Haenszel test is documented in the “epitab” section, pp. 232-78.)
7. National Institute of Standards and Technology, US Department of Commerce, <https://www.itl.nist.gov/div898/software/dataplot/refman1/auxillar/mantel.htm> (“The Mantel-Haenszel test can be used to estimate the common odds ratio and to test whether the overall degree of association is significant.”)

7. CONSULTANT BACKGROUND AND COMPENSATION

I, Robert A. Bardwell, have been retained as an expert witness in this case. I received my Ph.D. in Mathematical Statistics from the University of Colorado, Boulder, in 1989. I have collaborated on published statistical studies, including *Local TV News: Getting Away with Murder*, Harvard International Journal of Press/Politics, 2(2): 102-112 (1997), *The Economic Toll of Intimate Partner Violence against Women in the United States*, *Violence and Victims*, 19 (3) (June 2004); *Safety Practices in Relation to Home Ownership Among Urban Mexican Immigrant Families*, *Journal of Community Health*, 37 (1): 165-175 (2012).

I have worked as a statistical consultant for over 25 years and have been qualified as an expert in the field of statistics, including probability modeling, in numerous cases across multiple jurisdictions. I have been retained by government agencies, corporations, non-profits, and plaintiffs and defendants in a variety of cases to perform statistical analysis and probability modeling and have testified as an expert in the area of statistics in United States District Court for the District of Colorado, United States District Court for the District of Nevada, and the Circuit Court of the Sixth Judicial Circuit, Pinellas County, Florida.

A few examples of my statistical and probability modeling work include:

- I testified in litigation using a Markov modeling method in litigation involving BMG Rights Management LLC, Round Hill Music LP, and the internet service provider Cox Enterprises. That trial resulted in Cox losing the safe harbor provision of the DMCA and an award for the plaintiffs (remanded on appeal for retrial).
- I consulted for the Center for Policy Research on survey execution, weighting and estimation for a large and detailed national probability sample for the National Violence Against Women survey. As part of this project, I conducted sensitivity analyses, and theoretical explication of the impact of sample weighting, and revised the methodology report, to secure acceptance of the survey by the statistical department of the Center for Disease Control.
- I was retained by the Boulder Police Department in Boulder, Colorado, to evaluate the

probability associated with physical and circumstantial evidence in a notorious unsolved murder case (<http://www.fbi.gov/wanted/murders/thayne-alan-smika/view>). My analysis resulted in a ground-breaking technique for identification of shot-shell pellet evidence.

- I computed probabilities and payoffs for new casino game for the World Gaming Corporation in Las Vegas, Nevada.
- From 2006 through the present, Bardwell Consulting developed and maintains the computer program used by the Federal Election Commission to design, draw and evaluate random samples for audits of contributions and expenditures for all Federal elections.
- From 1993 through 1996, Bardwell Consulting designed and developed sampling strategies and statistical algorithms used by the Mineral Management Service of the United States Department of Interior for measuring gas, oil, and mineral royalty payment compliance. This work included the development of a compliance index that has been presented to the US Congress to document the MMS performance for over a decade. Subsequent contracts included the sample design and statistical analysis required for billing royalty underpayments based on statistical sampling.

My curriculum vitae is provided in the appendices under Section 8. Cases in which I have testified as an expert at trial or by deposition within the preceding four years are indicated in bold in my curriculum vitae. My publications in the previous ten years are listed in my curriculum vitae.

My hourly rates are \$750 per hour for testimony and preparation, \$500 for consultation and research. My compensation is not contingent on the outcome of this case.

I swear and affirm that all of the contents of this report are true to the best of my knowledge

Robert A. Bardwell, Ph.D.



8. ATTACHMENT: ROBERT A. BARDWELL CURRICULUM VITAE

PERSONAL:

ROBERT A. BARDWELL
4801 W. Yale Ave.
Denver, Colorado 80219
(303) 934-3851

EDUCATION:

University of Colorado, Boulder	Ph.D. Mathematics	1985 – 1989
University of Colorado, Denver	B.A. Philosophy	1981 – 1982
University of Chicago		1969 – 1971

PROFESSIONAL EXPERIENCE:

Statistical consulting	1989 – present	
University of Colorado instructor and teaching assistant		1985 – 1989
Research, consulting, and statistical programming		1976 – 1986

PUBLICATIONS:

- Bardwell, Robert A., Paul Klite, and Jason Salzman. “Local TV News: Getting Away with Murder.” *Harvard International Journal of Press/Politics*, 2(2): 102-112 (1997).
- Max, Wendy, Dorothy P. Rice, Eric Finkelstein, Robert A. Bardwell, Steven Leadbetter. “The Economic Toll of Intimate Partner Violence against Women in the United States.” *Violence and Victims*, 19 (3) (June 2004).
- DiGuseppi, Carolyn, Cynthia W. Goss, Lihong Dao, Amanda Allshouse, Robert A. Bardwell, Edward Hendrikson, Shelly L. Miller, Jill Litt. “Safety Practices in Relation to Home Ownership Among Urban Mexican Immigrant Families.” *Journal of Community Health*, 37 (1): 165-175 (2012).

RESEARCH, CONSULTING, AND STATISTICAL PROGRAMMING:

- Stein Mitchell Cipollone Beato & Missner LLP, Washington, DC, 2017 –
Deposed as an expert witness for plaintiffs re a proprietary probability model developed to identify and verify accounts responsible for repeated infringements of asserted copyrights by defendants’ internet subscribers in re UMG Recordings Inc., et al., v. Grange Communications Networks LLC and Patriot Media Consulting, LLC, Case No. 1:17-cv-00365, United States District Court Western District of Texas, Austin Division.
- Lisa Sahli, Esq., Denver, Colorado, 2017 –
Deposed as an expert witness for plaintiffs to evaluate the impact of gender and age on terminations in re Christine Frappied et al. v. Affinity Gaming Blackhawk, LLC, Civil Action No. 17-cv-01294-RM-NYW, United States District Court, District of Colorado.
- Lowery Parady, LLC, Denver, Colorado, 2017
Retained by plaintiffs in class action to estimate damages from unpaid overtime and gap time in re Violeta Solis et al. v. The Circle Group, LLC, et al., Case No. 1:16-cv-01329-RBJ, United States District Court, District of Colorado.
- Killmer, Lane & Newman, LLP, Denver, Colorado 2017
Retained by plaintiffs to analyze the impact of race on terminations in re Calvin Brown et al. v. City of Aurora et al., Case No. 15-cv-00767-RPM, United States District Court, District of Colorado.
- Sawaya & Miller Law Firm, Denver, Colorado, 2017
Provide data processing and analysis of employment records leading to settlement.
- Financial Scholars Group, Orinda, California, 2017

Attachment: Robert A. Bardwell Curriculum Vitae

- Provided analysis of risk profile in bundled real estate and personal loans in re Old Republic Insurance Company v. Countrywide Bank et al., Circuit Court of Cook County, Illinois, Chancery Division.
- Financial Scholars Group, Orinda, California, 2017
Provided consultation and analysis of financial market transactions in preparation of settlement claims filings in re Laydon v. Mizuho Bank, Ltd., et al. and Sonterra Capital Master Fund Ltd. et al v. UBS AG et al.
 - Clean Energy Action, Boulder, Colorado, 2016 – 2017
Testified and consulted on the appropriate discounting methodology used in energy resource planning in the Public Service Company of Colorado application for approval of the 2016 Electric Resource Plan, Proceeding No. 16A-0396E, Public Utilities Commission of the State of Colorado.
 - Confidential Client, Los Angeles, CA 2016
Retained to provide analysis and report on the probability that distinct crimes are independent events based on geographical analysis of crime rates.
 - Steptoe & Johnson LLP, Washington, DC 2016
Retained as an expert witness for plaintiffs to analyze the impact of unpaid work time and estimate damages related to donning and doffing claims in re Trecia Marie Moore et al. v. Verizon West Virginia, Inc., et al., Case No. 11-c-307-2, Circuit Court of Harrison County, West Virginia
 - Christine Lamb and Kevin James Burns, Denver, Colorado, 2016
Retained as an expert witness for defendant to analyze the impact of ethnicity on termination decisions in re Aaron Aragon et al v. Home Depot USA, Inc., Case No. 1:15-cv-00466-MCA-KK, United States District Court, District of New Mexico.
 - Steptoe & Johnson LLP, Washington, DC, 2015 –
Deposed and testified as an expert witness for plaintiffs re a proprietary probability model developed to identify and verify accounts responsible for repeated infringements of asserted copyrights by defendants' internet subscribers in re BMG Rights Management (US) LLC, and Round Hill Music LP v. Cox Enterprises, Inc., et al., Case No. 1:14-cv-1611(LOG/JFA), United States District Court Eastern District of Virginia, Alexandria Division.
 - Hagens Berman Sobol Shapiro, LLP, Phoenix, Arizona, 2014 –
Deposed as an expert witness for plaintiffs re calculation of unpaid mileage for truck drivers in re Swift Transportation Co., Inc., Civil Action No. CV2004-001777, Superior Court of the State of Arizona, County of Maricopa.
 - Hagens Berman Sobol Shapiro, LLP, Phoenix, Arizona, 2014 – 2016
Retained as an expert witness for plaintiffs to analyze sample result to estimate the number of unique individuals in database of photographic images in re Yahchaaroad Lightbourne et al. v. Printroom, Inc., et al., Civil Action No. 8:13-cv-00876-JLS-RNB, United States District Court, District of Colorado.
 - Karen Larson, Denver, Colorado, 2014 – 2016
Deposed as an expert witness for plaintiff re the impact of race on workforce distribution in re Sangho Lee v. Avago Technologies U.A., Inc., Civil Action No. 1:13-cv-03450-RM-KMT, United States District Court, District of Colorado.
 - Elizabeth Lamb Kearney, P.C., Denver, Colorado, 2014 – 2016
Retained as an expert witness for plaintiff to evaluate the impact of race and gender on workforce representation and terminations in re Annette Canales et al. v. AMPCO System Parking, Civil Action No. 13-cv-02571-RM-MJW, United States District Court, District of Colorado.
 - Padilla & Padilla, PLLC, Denver, Colorado, 2014 – 2016

- Deposed and testified** as an expert witness for plaintiffs re the impact on minority applicants from use of the AccuPlacer Test by the City and County of Denver, and estimated damages in re Marian G. Kerner et al. v. City and County of Denver, Civil Action No. 11-cv-00256-MSK-KMT, United States District Court, District of Colorado.
- Padilla & Padilla, PLLC, Denver, Colorado, 2014
Retained as an expert witness for plaintiffs to estimate lost earnings from wrongful death in re Margarita Madrigal et al. v. Randall Carroll et al., Civil Action No. 12-cv-01918-PAB-MJW, United States District Court, District of Colorado.
 - Hawks Quindel, S.C., Milwaukee, Wisconsin, 2013
Retained as an expert witness for plaintiffs to develop damages model including calculation of unpaid drive time and other unpaid time in re Steven Berndt et al. v. Cleary Building Corp., Civil Action No. 3:11-cv-00791-wmc, United States District Court, District of Wisconsin.
 - Maduff & Maduff, LLC, Chicago, Illinois, 2013 –
Retained as an expert witness for plaintiffs to analyze the impact of unpaid work time related to donning and doffing, meal breaks, and rounding in re James Blakes et al. v. Illinois Bell Telephone Company, Case No. 11-cv-336, United States District Court, Northern District of Illinois, Eastern Division.
 - Steptoe & Johnson PLLC, West Virginia, 2013 –
Retained as an expert witness for plaintiffs to analyze the impact of unpaid work time and estimate damages related to donning and doffing claims in re Charles Byard et al., v. Verizon West Virginia et al., Civil Action No. 1:11cv132, United States District Court, Northern District of West Virginia.
 - Federal Election Commission, 2013 – 2014
Retained to update the Auditors' Sampling Program Bardwell Consulting Ltd. developed for the Federal Election Commission to monitor contributions and expenditures for all Federal elections.
 - U.S. Equal Employment Opportunity Commission, 2013 –
Retained to provide statistical analysis of EEOC filings.
 - Gonser Law Office, P.C., Denver, Colorado, 2012 – 2014
Retained as an expert witness for plaintiff to analyze unpaid work time and estimate damages in re Peter Miller v. Yotes, Inc. d/b/a The Mattress Firm, Case No. 12 cv 4044, District Court, Denver County.
 - Wakefield Holdings, 2012
Developed algorithms to comparatively rank college and professional teams and athletes in competitive sports for StazHub website.
 - Killmer, Lane & Newman LLP., Denver, Colorado, 2012 – 2013
Testified for defendant regarding the impact of venue selection on the composition of potential venire, in re State of Colorado v. Edward Montour, Jr., Case Number: 02CR782, District Court Douglas County, Colorado.
 - McNamara Roseman & Kazmierski LLP, Denver, Colorado, 2012 – 2013
Retained as an expert witness for the plaintiffs regarding analysis of rounding and adjustments in work time records in re Abeyta et al. v. CF&I Steel, L.P. d/b/a Evraz Rocky Mountain Steel, Civil Action No. 1:11-cv-00663-RBJ-CBS, United States District Court, Colorado.
 - Cappello & Noël LLP, Santa Barbara, California, 2012
Deposed as an expert witness for the plaintiffs regarding vehicle accident probabilities in re Jose Arredondo et al. v. Santa Barbara Sheriff's Department, Case No.: 1370977, California State Court.
 - David Lichtenstein, Denver, Colorado, 2011

Attachment: Robert A. Bardwell Curriculum Vitae

- Retained as an expert witness for the plaintiffs regarding analysis of work time records in re Anderson et al. v. Pure Energy Services (USA), Inc., Civil Action No. 11-CV-00676-MSK-BNB, United States District Court, Colorado.
- Nichols Kaster & Anderson, PLLP, Minneapolis, Minnesota, 2011
Deposed as expert witness for the plaintiffs in unpaid work time action in re Jana Karl et al. v. Uptown Drink LLC et al., Court File No. 27-CV-10-1926, State of Minnesota District Court.
 - King and Greisen, Denver, Colorado, 2011
Retained as an expert witness for the plaintiffs to analyze the impact of race and national origin on job assignments and compensation in re Nasir Abagibe et al. v. Colorado Cab Co., DBA Yellow Cab Co., American Arbitration Association.
 - Nichols Kaster, PLLP, Minneapolis, Minnesota, 2010 – 2011
Deposed as expert witness for the plaintiffs re analysis of utilization of African-American and other minority employees in sales jobs in re Austin H. Coleman II v. Oracle USA, Inc., Court File No. 09-cv-03472 (DSD/JJG), United States District Court, District of Minnesota.
 - King and Greisen; Isaacson Rosenbaum, Denver, Colorado, 2010
Testified as an expert witness for the plaintiffs regarding compliance by the Colorado Department of Corrections with the Montez Remediation Plan requiring equitable treatment of disabled inmates in re Jesse Montez et al. v. Bill Owens et al., Civil Action No. 92-cv-870-EWN-OES, United States District Court, Colorado.
 - Boulder Police Department, Boulder, Colorado, 2010 –
Retained to reevaluate, in the light of the 2005 National Research Council study of bullet lead identification evidence, the unprecedented technique developed earlier for the identification of shot-shell pellet evidence in Case No. P83-7907, homicide of Sidney Wells.
 - Curry and Kerlinger, LLC., McLean, Virginia, 2009
Retained to estimate bird and bat collision fatality under wind towers, using a new method of bird/bat fatality estimation based upon bootstrapping.
 - BASF, 2009
Contracted to develop residential energy analysis web site utilizing the OptiMiser computational engine developed by Bardwell Consulting Ltd.
 - The Land Group, Inc., Coeur d'Alene, ID, 2009
Retained to design and conduct public survey to determine the desires and needs of the community's use of open space.
 - McKenna Long & Aldridge LLP, Denver, Colorado, 2009
Deposed and testified as an expert witness for plaintiffs on the design and implement surveys to assess the cost and value of claimed trade secret information in re Cartel v. Ocwen Realty Advisors, Civil Action No. 01-B-164, United States District Court, Colorado.
 - Federal Election Commission, 2009
Retained to developed enhanced version of the Auditors' Sampling Program Bardwell Consulting Ltd. developed for the Federal Election Commission to monitor contributions and expenditures for all Federal elections.
 - Nichols Kaster, PLLP, Minneapolis, Minnesota, 2009
Retained as expert witness by plaintiffs in California overtime class action, to analyze computerized work records to determine unpaid work time in re Cervantez v. Celestica, Case No. ED CV 07-00729 VAP (OPx), United States District Court, Central District of California, Eastern Division.
 - Fisher & Phillips LLP, Denver, Colorado, 2009

Attachment: Robert A. Bardwell Curriculum Vitae

- Retained as expert witness for defendants re alleged gender discrimination in hiring in re Hana Teissler M.D. v. Colorado West Healthcare System and Community Anesthesia Consultants PLLC, Case No.: 2008cv213, Mesa County Court, Colorado.
- Stephen R. Bruce, Washington, D.C., 2009
Retained as consultant for plaintiffs to evaluate damages in ERISA claim in re Kafafi v. Hilton Hotels Retirement Plan, Civil Action 98-1517, United States District Court, District of Columbia.
 - Hilder & Associates, P.C., Houston, Texas, 2009
Testified as for defendant to evaluate sample estimate of damages in claim of overpayment of Medicare Part B reimbursements for ambulance service against Momentum EMS.
 - Springer & Steinberg, P.C, Denver, Colorado, 2009
Retained by plaintiffs to design a random sampling method to evaluate numerosity and potential damages in claims of copyright infringement in re Heileman et. al. v. Houghton Mifflin Harcourt Publishing Co., Civil Action No. 08-cv-775-MSK-CBS, United States District Court, Colorado.
 - Nichols Kaster, PLLP, Minneapolis, Minnesota, 2009
Retained and **deposed** as expert witness by plaintiffs in unpaid work time class action, to analyze eight million computerized work records to determine unpaid work time in re Constemecka Russell et al. v. Illinois Bell Telephone Company, Inc., Case No. 08-cv-1871, United States District Court, Northern District of Illinois, Eastern Division.
 - William & Rhodes LLP, Denver, Colorado, 2009
Deposed as expert witness for plaintiffs in alleged gender discrimination in hiring and promotions in re Monica White v. Tom Vilsack, United States Department of Agriculture, Civil Action No. 08-cv-1874-MSK-KMT, and Anita Luster v. Tom Vilsack, United States Department of Agriculture, Civil Action No. 08-cv-2399-PAB-KMT, United States District Court, Colorado.
 - Initiative Legal Group, LLP, Los Angeles, 2009
Retained as expert witness by plaintiffs in California overtime employment class action, to **testify** regarding the appropriate use of sampling to estimate damages and provide evidence of commonality in re Esteban Zamora et al., v. Balboa Life & Casualty, LLC and Countrywide Home Loans, Inc., Case No.: BC360026, Superior Court of California, County of Los Angeles.
 - Stephen R. Bruce, Washington, D.C., 2009
Retained and **deposed** as expert witness for plaintiffs claiming violation of the ADEA and ERISA by replacing a defined benefit retirement plan with a cash balance plan in a manner that freezes the benefits of older, longer-service employees during a “wear-away” period, in re Wade. E. Jensen and Donald D. Goff, individually and on behalf of all others similarly situated, v. Solvay Chemicals, Inc., Solvay America, Inc., Solvay America Companies Pension Plan, Civil Action No. 06-CV-273 (ABJ/WCB), United States District Court, District of Wyoming.
 - Stephen R. Bruce, Washington, D.C., 2008
Retained and **deposed** as expert witness for plaintiffs claiming violation of the ADEA and ERISA by replacing a defined benefit retirement plan with a cash balance plan in a manner that freezes the benefits of older, longer-service employees during a “wear-away” period, in re Phillip C. Engers, Warren J. McFall, Donald G. Noerr, and Gerald Smit, individually and on behalf of all others similarly situated, v. AT&T Corporation and AT&T Management Pension Plan, Civil Action No. 98-CV-3660 (SRC/CCC), United States District Court, District of New Jersey (Newark).
 - Hoskin, Farina & Kampf, P.C., Grand Junction, Colorado, 2008

- Retained as expert witness for defendants to rebut claim of age discrimination in hiring and compensation of teachers in the Mesa County Valley School District from 2001 to 2008 in re Phillips v. Mesa County Valley School District No. 51, Case No.: 2007cv505, Mesa County Court, Colorado.
- Stephen R. Bruce, Washington, D.C., 2008
Retained and **deposed** as expert witness for plaintiffs claiming violation of the ADEA and ERISA by replacing a defined benefit retirement plan with a cash balance plan in a manner that freezes the benefits of older, longer-service employees during a “wear-away” period, in re Phillip C. Engers, Warren J. McFall, Donald G. Noerr, and Gerald Smit, individually and on behalf of all others similarly situated v. AT&T Corporation and AT&T Management Pension Plan, Civil Action No. 98-CV-3660 (SRC/CCC), United States District Court, District of New Jersey (Newark).
 - Governor’s Energy Office, Colorado, 2008
Received grant to build a commercial version of the OptiMiser software developed by Bardwell Consulting. OptiMiser provides economic and engineering analysis of building retrofit packages, integrating efficiency measures and renewable energy technologies. Financial tools include present value analysis of benefit-cost ratios, internal rate of return, and years to positive cash flow. OptiMiser creates and evaluates a full range of near-optimal solutions for energy retrofits, offering a flexible and efficient tool for the energy analyst, minimizing required data entry and fully integrating renewable energy technologies.
 - Glustrom and LaPlaca, Denver, Colorado, 2008
Submitted testimony on existing utility incentives and the regulatory structure before the Public Utilities Commission of the State of Colorado, Docket No. 08I-113EG.
 - Joseph M. Sellers, Cohen, Milstein, Hausfeld & Toll P.L.L.P., New York, 2008 –
Retained and **deposed** for plaintiffs regarding the impact of underwriting on black applicants in re Patricia Amos et al. v. GEICO Corporation et al., Civil Action No. 06-cv-1281 (RHK/JSM), United States District Court, District of Minnesota.
 - Glustrom and LaPlaca, Denver, Colorado, 2007 – 2008
Created econometric models of electrical generating resources demonstrating the impact on levelized costs of modeling assumptions. Submitted written testimony and testified in PUC hearings re: (1) models showing improper resource selection resulting from use of high discount rates in present value modeling; (2) a statistical decomposition of error in Energy Information Administration forecasts of natural gas showing high levels of bias; (3) an alternative forecast of natural gas prices based on petroleum costs and demand and production forecasts; and (4) Monte Carlo modeling of levelized costs demonstrating the risk associated with resources from escalating fuel, CO₂ and water costs, poorly monetized costs of other emissions, and escalation of capital costs for IGCC and nuclear resources. Submitted Answer testimony, Cross-Answer testimony, oral testimony, and material for a Statement of Position in Hearings before the Public Utilities Commission of the State of Colorado in the application by the Public Service Company of Colorado for Approval of its 2007 Colorado Resource Plan, Docket No. 07A-447E.
 - Nichols Kaster & Anderson, PLLP, Minneapolis, Minnesota, 2007 – 2008
Retained to identify potential Muslim class members using custom Muslim name identification program.
 - Stephen R. Bruce, Washington, D.C., 2007
Retained and **deposed** as expert witness for plaintiffs claiming violation of the ADEA and ERISA by replacing a defined benefit retirement plan with a cash balance plan in a manner that freezes the benefits of older, longer-service employees during a “wear-away” period, in re Wayne Tomlinson et al. v. El Paso Corporation and El Paso Pension Plan,

Attachment: Robert A. Bardwell Curriculum Vitae

- Civil Action No. 4-cv-02686-WDM-CBS, United States District Court, for the District of Colorado.
- Minami Tamaki LLP, San Francisco, California, 2007 – 2008
Retained as expert witness for plaintiffs in race discrimination in hiring class action, in re Albert Crews et al. v. Cisco Systems, United States District Court, Northern District of California.
 - Hagens Berman Sobol Shapiro LLP, Los Angeles, 2007
Retained as expert witness by plaintiffs in California overtime employment class action, to testify regarding the appropriate use of sampling to estimate damages and provide evidence of commonality in re Randall et al. v. Costco Wholesale Corporation, Case No.: BC 296369, California Superior Court.
 - Institute for Environmental Solutions, Denver, 2007
Retained as sampling and research design consultant on *The Tree Project*, a community-scale research program to assess the environmental impact of urban tree cover. Assisted with the integration of available scientific tools, and the development of new measurement protocols, and consulted on the design of the spatial sampling plan for the initial survey in Golden, Colorado.
 - FIMAC Solutions, Inc., Denver, 2007
Retained to research and develop econometric analysis of core deposits for banking institutions. Developed a suite of analytic tools that, (1) provide less conservative projections of the decay rate of non-maturity deposits than those provided by regulatory agencies; (2) generate more accurate forecasts of account balances; and (3) include an index to evaluate risk from core deposit decline. These analytic tools employ appropriate times series and hazard rate analyses.
 - Arius Energy, LLC, Denver, 2006
Designed and developed web-based tool for individuals and communities to track their carbon footprint and energy consumption.
 - Federal Election Commission, 2006 – 2007
Designed and developed sampling program used by the Federal Election Commission to monitor contributions and expenditures for all Federal elections. Program was developed as a web-based application that can also run on auditors' notebook computers. Program designs, draws and evaluates samples of transactions for audit. All results were tested against the American Institute of Certified Public Accountant statistical auditing programs.
 - John Robert Holland, Denver, Colorado, 2007
Retained as expert witness by plaintiffs to evaluate the adverse impact of treatments for bed bug infestations on persons with disabilities in re Charlotte McConnell, Willard McConnell and John McConnell v. The Tower at Speer, LLC, Marcy Payne, and Libby Burney, District Court, City and County of Denver, Colorado.
 - Nichols Kaster & Anderson, PLLP, Minneapolis, Minnesota, 2006 – 2007
Retained as expert witness by plaintiffs to evaluate the adverse impact of hiring, compensation, discipline and terminations decisions on Hispanic employees in re Mendez et al. v. Faribault Foods, Inc. and The Work Connection, United States District Court, District of Minnesota.
 - Cornish and Dell'Olio, Colorado Springs, Colorado, 2006
Retained as expert witness by plaintiff to evaluate the disparate impact of testing and terminations decisions on the women in the training academy for the Colorado Springs Fire Department, in re Karyn S. Palgut v. The City of Colorado Springs, Civil Action No. 06-cv-01142-WDM-MJW, United States District Court, Colorado.
 - Legal Aid Society of Minneapolis, Minneapolis, Minnesota, 2006

Attachment: Robert A. Bardwell Curriculum Vitae

- Retained as expert witness by plaintiffs to evaluate the adverse impact of alternative pre-employment tests on Minneapolis Fire Cadet Selection Process; demonstrated adverse impact and proposed the remedy which was implemented, of augmenting pool of Stage II candidates with 55% additional protected class applicants.
- Killmer, Lane & Newman, LLP, Denver, Colorado, 2006
Retained as expert witness by plaintiffs to evaluate the impact of gender on utilization, hiring and promotions at Car Toys, Inc., in re Monica Britton et al. v. Car Toys, Inc., and Bruce Cameron, Civil Action No. 05-CV-00726-WYD-PAC, United States District Court, Colorado.
 - Shores, Williamson & Ohaebosim, LLC, Wichita, Kansas, 2006
Deposed as expert witness by plaintiffs to evaluate the impact of gender on workforce utilization, promotions, terminations, and compensation at The Fresh Market, Inc., in re Terrence Mcfadgon, Terra Mukes, Gloria Keith, and Starika Smith v. The Fresh Market, Inc., Case No.: 05-2151, United States District Court, Western District of Tennessee.
 - University of Colorado Health Sciences Center, Denver, Colorado, 2005
Member of research team for *A Study of Immigrant Housing Conditions in Commerce City, Colorado*, to assess housing-related health risks affecting recent immigrant families with children. Responsible for construction of housing inventory and GIS profile of the study area; construction of the sample frame; design the sample of participating households; supervision of survey analysis, compilation of survey estimates, and contribution to resulting publications.
 - McKenna Long & Aldridge LLP, Denver; Seyfarth Shaw LLP, Washington, D.C., 2005
Deposed as expert witness for defendants on the impact of age on separations at the Hershey Company, in re Montagne et al. v. The Hershey Company, Case No.: 04-cv-1881-WYD-BNB, United States District Court, Colorado.
 - The Carey Law Firm, Colorado Springs, Colorado, 2005
Retained, **deposed**, and **testified** as expert witness by plaintiffs to estimate attorney's fees retained by the Colorado in Supplemental Security Income (SSI) Reimbursements, 1997 – 2005, in re Chad Martinez and Larry King v. Colorado Department of Human Services and Otero County Department of Human Services, Case No.: 02 CV 1066, District Court, City and County of Denver, Colorado.
 - Cayman Islands Real Estate Brokers Association, Grand Cayman, Cayman Islands, 2005-
Retained to conduct an econometric analysis of the impact of stamp duty rates on real estate transaction volume and value in the Cayman Islands from 1990 through 2004.
 - Shores, Williamson & Ohaebosim, LLC, Wichita, Kansas, 2005
Retained as expert witness by plaintiffs to evaluate the impact of gender on workforce utilization, promotions, terminations, and compensation at Wichita Police Department in re Greta Semsroth et al. v. City of Wichita, and Chief Norman Williams, Case No. 04-1245-MLB, United States District Court, District of Kansas.
 - King & Greisen, LLP, Denver, Colorado, 2005
Deposed as expert witness by plaintiffs to evaluate race discrimination in layoffs in re Freeman et al. v. Roxanne White et al., Case No.: 05CV164, United States District Court, Colorado.
 - Burr & Smith, LLP, Tampa, Florida, 2005 – 2006
Retained as expert witness by plaintiffs to design a stratified random sample of nationwide class to estimate damages and provide evidence of commonality in re Kent Dunwiddie, Grant Lincoln, and Edward Gotowala et al. v. Central Locating Service, Ltd., Corporation, Case No.: 5:04CV315-OC-10GRJ, United States District Court, Middle District of Florida.
 - Bennett Bigelow & Leedom, P.S., Seattle, Washington, 2005

Attachment: Robert A. Bardwell Curriculum Vitae

- Retained regarding health care regulatory dispute, to evaluate the application of non-linear regression model in calculating demand for kidney dialysis facilities.
- Strindberg Scholnick & Chamness, LLC, Salt Lake City, Utah, 2005
Deposed as expert witness for plaintiffs regarding race discrimination in workforce utilization, concentration and underrepresentation, in re Terry H. Fullwiley v. Union Pacific Corporation and Union Pacific Railroad Company, Case No. 2:04-CV-671DB, United States District Court, District of Utah, Central Division.
 - White O'Connor Curry & Avanzado LLP, Los Angeles, California, 2005
 Retained as expert witness for defendants to evaluate alleged age discrimination in terminations in re Harold Moore Hennesy et al. v. Infinity Radio Inc., Arbitration No. 77116Y0035804 BEAH, American Arbitration Association, Denver, Colorado.
 - Colorado Center on Law and Policy, Denver, 2004
Testified as expert on computer systems and statistical modeling for plaintiffs, assessing adequacy of project management, testing, and preparation for release of the Colorado Benefits Management System (CBMS), which was designed to integrate administration of six Colorado and Federal benefit programs for all Colorado counties. Developed and presented model of caseload backlog resulting from CBMS implementation in re Valerie Imani Hawthorne-Bey et al. v. Karen Reinerstson, Executive Director of the Colorado Department of Health Care Policies and Financing, et. al., Case No. 04-CV-7059, District Court, City and County of Denver, Colorado.
 - Newman & Newman, LLP, Seattle, Washington, 2004
 Retained as expert witness for plaintiffs to design a sample of all Internet domain name registration changes over a two year period and to create an econometric model of the impact of the Internet domain name Wait Listing Service to be implemented by defendants in re Registersite.com et al. v. Internet Corporation for Assigned Names and Numbers, Verisign, Inc., and Does 1-10, Case File No. CV04-1368 ABC (CWx) 02-RB-2104 (CBS), United States District Court, Central District of California.
 - King Clextion & Feola, Denver, Colorado, 2004 – 2005
 Retained as expert witness for plaintiff to analyze the impact of race and national origin on promotions and compensation in re Medhanie Gebreluel Werede v. Allright Holdings Inc., Civil Action No. 01-WM-1167, United States District Court, Colorado.
 - Hale Hackstaff Friesen, LLP, Denver, Colorado, 2004 – 2005
 Retained as expert witness for plaintiff to design and conduct a door-to-door survey of voters and voting behavior to determine the impact of disparate treatment of absentee ballots and to analyze evidence of voting rights violations in re Jeffrey Vigil v. Carol Snyder, County Clerk, Adams County Colorado, Case File No. 02-RB-2104 (CBS), United States District Court, Colorado.
 - Nichols Kaster and Anderson, Minneapolis, Minnesota, 2003 – 2004
Deposed as expert witness for plaintiff regarding race discrimination in utilization, and terminations in re Jarvis Jones v. St. Paul Companies, Inc., Case File No. 02-1305, United States District Court, Minnesota.
 - Nichols Kaster and Anderson, Minneapolis, Minnesota, 2003 – 2004
Deposed as expert witness for plaintiff regarding gender discrimination in utilization and salary and other compensation in re Susan M. Veeder v. Cargill, Incorporated, Civil No. 02-1711 (PAM/RLE), United States District Court, Minnesota.
 - Killmer and Lane LLP, Denver, Colorado, 2003 – 2004
Testified for defendant regarding expert report analyzing race, ethnic, and age composition of the Juror Pools and bias in jury selection process in re People of the State of Colorado v. Dante Lamar Owens, Case No. 98-CR-2729, District Court, Arapahoe County, Colorado.

Attachment: Robert A. Bardwell Curriculum Vitae

- DeFranco & Allen, LLC, Boulder, Colorado, 2003 – 2004
Testified for defendant as expert witness regarding race, ethnic, and age composition of the Juror Pools in Arapahoe County, Colorado. Constructed model of jury selection process revealing systemic bias in re People of the State of Colorado v. Trevon Washington, Case No. 98-CR-2459, District Court, Arapahoe County, Colorado.
- Thomas Feldman, Denver, Colorado, 2002 – 2004
Testified as expert witness for plaintiff to evaluate discrimination in layoffs related to filing worker's compensation claims in re Denise J. Welsch v. Sundyne Corporation, Civil Action No. 02-Z-468 (BNB), United States District Court, Colorado.
- Nichols Kaster and Anderson, Minneapolis, Minnesota, 1998 – 2003
Deposed as expert witness for plaintiff to evaluate race and ethnic discrimination in hiring, utilization, promotions, and salary in re Maria Garcia et al. v. Viratec Thin Films, Inc., Civil Number 01-1978 MJD/JGL, United States District Court, Minnesota.
- King Clexton & Feola, Denver, Colorado, 2002 – 2003
Deposed as expert witness for plaintiffs to analyze the impact of race and national origin on promotions and compensation in re Solomon Goitom, Amune D. Meskele, Fowsi Ali, and Omar Nur v. Allright Holdings, Inc., Civil Action No. 01-WM-1353 (CBS), United States District Court, Colorado.
- Johnson, Blakely, Pope, Bokor, Ruppel & Burns, P.A., Tampa, Florida, 2001
Testified as expert witness for plaintiff to evaluate the impact of race on the quality of education and the relative impacts of poverty and race in re William Crowley v. The Pinellas County School Board et al., Case No.00-005667-CI-021, Circuit Court of Sixth Judicial Circuit, Pinellas County, Florida.
- Tegtmeier, Frank & Jones, LLC, Colorado Springs, Colorado, 2001
Testified regarding expert report for defendant analyzing race, ethnic, and age composition of the Qualified Jury Panel and bias in jury selection process in re U.S.A. v. Rice, United States District Court, Colorado.
- Gerash, Prugh & Gerash, L.L.C., Denver, Colorado, 2001
Testified regarding expert report for defendant analyzing race, ethnic, and age composition of the Qualified Jury Panel and bias in jury selection process in re U.S.A. v. Carl Kenneth Kabat, Case No. 00-CR-385-N, United States District Court, Colorado.
- Research Triangle Institute, Research Triangle Park, North Carolina, 2000 – 2001 Center for Disease Control, Washington, D.C.
Retained to lead project to analyze large and detailed national probability sample and compute statistical estimates and variances for incidence, prevalence, and total costs in *Cost Study of Intimate Partner Violence Against Women* being prepared for congress, and to conduct independent evaluation of the cost report.
- Register Machine Learning Technologies, Inc., Littleton, Colorado, 2000 – 2001
Retained to develop algorithms applying probability theory to improve performance of advanced genetic programming computer application.
- Kummer Kaempfer Bonner & Renshaw, Las Vegas, Nevada, 2000 – 2004
Deposed and testified as expert witness for plaintiff on the impact of race in hiring and promotions in re Jordan v. County of Clark and Clark County Department of Aviation, Case No. CV-S-99-0688-HDM (RJ), United States District Court, Nevada.
- Gerash, Prugh & Gerash, LLC., Denver, Colorado, 1999 – 2001
Prepared expert report for defendant analyzing race, ethnic, and age composition of the Qualified Jury Panel and bias in jury selection process in re U.S.A. v. Lawrence Sposato et al., Case No. 99 CR 232-S, United States District Court, Colorado.
- U. S. Equal Employment Opportunity Commission, Denver District Office, Colorado, 1999 – 2001

- Retained to analyze the existing model used to estimate labor market availability for a large number of store locations, and to design a corrected model; evaluated the impact of racial discrimination in hiring, and the estimated the resulting damages.
- Zarlengo & Kimmell, LLC, Denver, CO, 2000
Deposed as expert for plaintiff on the impact of race on compensation and promotions at PacifiCare between 1997 and 1998 in re Antoinette Ingram v. FHP Health Care/PacifiCare, Case No. 98 BP 2795, United States District Court, Colorado.
 - Holland & Hart LLP, Denver, Colorado, 2000
Deposed as expert for defendant to evaluate alleged age discrimination in layoffs in re Hennesy et al. v. Gates Rubber Company, Civil Action No. 99-M-1787, United States District Court, Colorado.
 - Goldstein and Dodge, Denver, Colorado, 2000
Submitted report assessing the bias in Division Independent Medical Examinations performed for the Division of Workers Compensation.
 - Isaacson, Rosenbaum, Woods & Levy, P.C., Denver, Colorado, 1999 – 2000
Retained as expert witness for plaintiff to evaluate ethnic and gender discrimination in hiring, promotions and terminations in re Nuvia Rodriguez v. Greyhound Lines, Inc., Civil Action No. 99-N-1596, United States District Court, Colorado.
 - The Leventhal Law Firm, P. C., Denver, Colorado, 1999
Submitted affidavit for plaintiff testifying to the limitations of the studies relied upon by defendant experts who discounted the possibility that injury resulted from rear-end collision, in re Czeslawa Sosnowska v. Kimberlee Hrbek Smith, Case No. 97CV1400, Denver District Court, Colorado.
 - Feiger & Collison, P.C., Denver, Colorado, 1999
Retained as expert witness for plaintiff to evaluate gender discrimination in promotions and terminations in re Blasio et al. v. United Parcel Service, Case No. 98-M-1709, United States District Court, Colorado.
 - Pacey Economics, Boulder, Colorado, 1999
Retained to design and analyze samples of properties to be appraised in south Globeville neighborhood to estimate total property value for settlement of damages from heavy metals pollution from smelter.
 - Collect America, Ltd., Denver, Colorado, 1999
Retained to design and analyze samples of collections to be audited for approval of IPO.
 - Nichols Kaster and Anderson, Minneapolis, Minnesota, 1998 –
Retained as expert witness for plaintiff to evaluate race and ethnic discrimination in promotions and salary in re Augustine C. Crawford et al. v. Ceridian Corporation, Computing Devices International and General Dynamics Information Systems, Civil Number 97-2634, United States District Court, Minnesota.
 - Center for Policy Research, Denver, Colorado, 1998 – 2000
Retained as consultant on survey execution, weighting, and estimation for a large and detailed national probability sample for the National Violence Against Women survey; conducted sensitivity analyses and theoretical explication of the impact of sample weighting and revised methodology report throughout review by the Center for Disease Control.
 - Curtis L. Kennedy, Denver, Colorado, 1997 – 2000
Testified and deposed as expert witness for plaintiffs concerning alleged age discrimination in re James R. Henry v. US WEST, Inc., et al., Civil Action No. 96-N-724, United States District Court, Colorado.
 - Boulder Police Department, Boulder, Colorado, 1998 – 1999

Attachment: Robert A. Bardwell Curriculum Vitae

- Retained to evaluate probability associated with physical and circumstantial evidence, resulting in an unprecedented technique for identification of shot-shell pellet evidence in Case No. P83-7907, homicide of Sidney Wells.
- Mohr, Hackett, Pederson, Blakely, Randolph & Haga, P.C., Phoenix, Arizona, 1997 – 1999
Deposed as expert witness for plaintiffs concerning alleged age discrimination in re Jeney v. Quaker Oats, Civil Action No. CIV 96-0822-PHX-RCB. Retained as expert witness concerning age discrimination in re Gentile v. Quaker Oats, Coleman v. Quaker Oats, Tallariti v. Quaker Oats, and Russell v. Quaker Oats and Christenson v. Quaker Oats.
 - Miller, Lane, Killmer & Greisen, LLP. Denver, Colorado, 1998
Retained as expert witness for plaintiff to evaluate race and ethnic discrimination in employment decisions in re Visor et al. v. Sprint/ United Management Company, Case Number 96-K-1730, U.S. District Court, Colorado.
 - Johnson, Blakely, Pope, Bokor, Ruppel & Burns, P.A., Tampa, Florida, 1997
Retained as expert witness for plaintiff to evaluate gender discrimination in allocation of stock option plan in re Gosche v. West Publishing Company, Case No. 97-Z-1954, U.S. District Court, Colorado.
 - Johnson, Blakely, Pope, Bokor, Ruppel & Burns, P.A., Tampa, Florida, 1997
Retained as expert witness for plaintiff to evaluate gender discrimination in allocation of stock and constructed econometric model of resulting losses in re Patricia Winn Carter and Maxine M. Jones et al. v. West Publishing Company, Case No. 97-2537-CIV-T-26A, U.S. District Court, Middle District of Florida.
 - Colorado Lawyers Committee, Denver, Colorado, 1997
Testified as expert witness for plaintiffs concerning residency in land title dispute in re Espinoza v. Taylor, Case No. 81-CV-5, Culebra County District Court.
 - Jefferson County Department of Human Services, 1997
Retained to review the implementation of the NAOMI computer system at the Jefferson County Department of Human Services in response to persistent failures in prior launch of the system; the NAOMI system was used by most or all caseworkers in Jefferson County to do CWEST submissions only, but had been designed to integrate casework for multiple programs related to child welfare. Authored report analyzing failures in the prior launch of NAOMI, and submitted recommendations for disciplined implementation.
 - Colorado Department of Human Services, 1997
Retained to develop computer programs to analyze recidivism and issues relating to the quality of child welfare using data in CWEST, the Child Welfare information system for Colorado.
 - Roman, Benezra, & Culver, Denver, Colorado, 1997
Retained as expert witness for plaintiffs concerning gender and ethnic discrimination claim resulting from terminations in re Chacon v. Public Service Company of Colorado.
 - Fox & Robertson, P.C., Denver, Colorado, 1997
Deposed as expert witness for plaintiff to design and conduct a public survey to project number of persons who use wheelchairs that are denied access to retail stores in re CCDC et al. v. Campbell-Ritter Corp. et al., 96-WY-2490-AJ, CCDC et al. v. AnnTaylor Stores Corp. et al., 96-WY-2491-AJ, CCDC et al. v. Nine West Group, Inc., et al., 96-WY-2492-AJ, and CCDC et al. v. Hermanson Limited Partnership I, 96-WY-2493-AJ, United States District Court, Colorado.
 - Holland & Hart, Denver, Colorado, 1997
Deposed as expert witness for defendant concerning alleged age discrimination in re Ronald Kirkland v. Safeway Inc., 96-CV-0264-J, United States District Court, Colorado.
 - Roman, Benezra, & Culver, Denver, Colorado, 1996 – 2000

Attachment: Robert A. Bardwell Curriculum Vitae

- Retained as expert witness for plaintiffs concerning age discrimination claim resulting from layoffs in re Vaszlavik et al. v. Storage Technology Corporation.
- Peacock & Myers, Albuquerque, New Mexico, 1996
Retained in trademark infringement litigation to construct an econometric model of variable costs associated with production in re Rogers et al. v. Legin et al.
 - Holland & Hart, Cheyenne, Wyoming, 1996
Retained as expert witness for defendant concerning computation of lost earnings and age discrimination claim resulting from reduction in force in re David Moffat v. Amoco Corporation, Civil Action No. 95-CV-242-D, United States District Court, Wyoming.
 - Mineral Management Services, U. S. Department of Interior, Denver, Colorado, 1996
Retained to develop sampling plan, statistical algorithms and software to audit target selection and estimate royalty underpayment for statistical billing, and to compute median weighted gas valuation index.
 - U. S. Department of Justice, District of Colorado, 1996
Retained as expert witness for defendant concerning claim of age and gender discrimination in promotions in re Edward F. Craig, Jr. v. Hazel R. O'Leary, Civil Action No. 93-K-1828, United States District Court, Colorado.
 - Gerash, Robinson & Miranda, P. C., Denver, Colorado, 1995
Prepared expert report analyzing ethnic, gender, and age composition of the Qualified Jury Panel and bias in jury selection process in re U.S.A. v. Hampton, 95-CR-253-M, United States District Court, Colorado.
 - Holland & Hart, Cheyenne, Wyoming, 1995
Deposed as expert witness for defendant concerning age and ethnic discrimination claim resulting from reduction in force in re Robert Nicol v. Amoco Corporation, Civil Action No. 95-CV-115-D, United States District Court, Wyoming.
 - Plaintiff Employment Lawyers Association, Denver, Colorado, 1995
Conducted seminar on *Using Statistics to Prove Disparate Impact*.
 - Jeffery Menter, Greenwood Village, Colorado, 1995
Computed present value of lost earnings in re Michael Marsh v. Delta Air Lines, Inc.
 - Bart Rice, P.C., Englewood, Colorado, 1995
Deposed as expert for plaintiffs regarding age bias in severances in re Mary Fields et al. v. Information Handling Services Inc., Civil Action No. 95-B-516, United States District Court, Colorado.
 - Mineral Management Services, U. S. Department of Interior, Denver, Colorado, 1995
Programmed method for aggregating transactions and computing median weighted gas valuation index; designed weighted, multi-stage, proportional sampling strategy for validating index using ratio estimation.
 - Colorado Department of Social Services, Implementation Assistance Committee, 1995
Retained to evaluate sampling strategy and survey analysis for measuring compliance with settlement agreement in re L.P.M. et al. by their next friend David Littman v. Roy Romer and Karen Beye, Civil Action No. 94-M-1417, United States District Court, Colorado.
 - Mineral Management Services, U. S. Department of Interior, Denver, Colorado, 1995
Authored report on the application of statistical sampling to audit target selection and royalty billing; programmed automated routines for designing the required samples, randomly sampling royalty transactions, and computing estimated underpayment.
 - Macon Cowles & Associates, Boulder, Colorado, 1995
Retained to analyze employee records for evidence of ethnic bias in promotions at the Denver Mint in re Joe Sanchez v. Lloyd Bensten, Civil Action No. 94-Z-1400.
 - Mineral Management Services, U. S. Department of Interior, New Orleans, Louisiana, 1995

Attachment: Robert A. Bardwell Curriculum Vitae

- Presented findings regarding methods for measuring gas, oil, and mineral royalty payment compliance and billing royalty underpayments based on statistical sampling to State and Tribal Audit Committee Conference.
- Sears, Anderson & Swanson, Colorado Springs, Colorado, 1994
Evaluated disparities in salaries using multivariate regression.
 - Holland and Hart, Denver, Colorado, 1993
Consulted regarding discriminatory impact of investigative stops in re Irvin v. Sungailia, et. al., Civil Action No. 93-M-1551.
 - Paul A. Baca, Denver, Colorado, 1993 – 1994
Deposed regarding disparate impact of promotional practices of Denver Police Department in re Humphries v. Belo, Civil Action No. 93-N-2731.
 - Teamsters Local Union No. 435, Denver, Colorado, 1993 – 1994
Analyzed discipline and termination policy and provided expert report for arbitration involving Supervalu Inc.
 - Children's Legal Clinic, Denver, Colorado, 1993 – 1994
Consulted on survey design of judges and guardians ad litem, and designed program for monitoring guardian ad litem representation of children in dependency and neglect hearings in the Denver Juvenile Court.
 - Robinson, Waters, O'Dorisio and Rapson, Denver, Colorado, 1993 – 1994
Retained as expert to analyze class-wide age discrimination in terminations at Martin Marietta Corporation Astronautics Group for consolidated cases in re Marvin Wilkerson, et. al. v. Martin Marietta Corporation, Civil Action No. 91-S-2078, United States District Court, Colorado.
 - Donald P. MacDonald, Denver, Colorado, 1993 – 1994
Consulted concerning alleged age discrimination in terminations in re Ken Fortner v. Halliburton Energy Services.
 - Reginald H. Martin & Associates, Denver, Colorado, 1993 – 1994
Retained to design statistical method for measuring gas, oil, and mineral royalty payment compliance for the Mineral Management Service of the United States Department of Interior, and to design and analyze methods for billing royalty underpayments based on statistical sampling.
 - Serge L. Herscovici, Littleton, Colorado, 1993
Consulted concerning alleged gender discrimination in re Elizabeth Ponder v. Metromedia.
 - Rothgerber, Appel, Powers & Johnson, Denver, Colorado, 1993
Retained as consultant on alleged age discrimination in terminations in re Backlund et. al. v. Gates Corporation.
 - Pulmonary Consultants, Denver, Colorado, 1993
Reviewed analyses of two studies of dust exposure and pulmonary function.
 - Colorado Lawyers Committee, Voting Rights Task Force, Denver, Colorado, 1993 – 1994
Conducted study of minority voting patterns in current and revised House District 60 using ecological regression and homogeneous case analysis; **deposed and testified** as expert witness in voting rights litigation in re Jennie Sanchez, et. al. v. Colorado, Civil Action No. 93-S-963, United States District Court, Colorado.
 - Serge L. Herscovici, Littleton, Colorado, 1993
Retained as expert to prepare analysis of age discrimination in departmental terminations in re Mildred M. Pittman, et. al. v. Martin Marietta Corporation, Civil Action No. 92-M-1557, United States District Court, Colorado.
 - World Gaming Corporation, Las Vegas, Nevada 1992 – 1994
Computed probabilities and payoffs for new casino game.

Attachment: Robert A. Bardwell Curriculum Vitae

- Paul A. Baca, Denver, Colorado, 1992 – 1994
Deposed as expert on ethnic discrimination in promotions in re Rodriguez, et. al. v. Denver Sheriff's Department, et. al., Civil Action No. 92- -2335, United States District Court, Colorado.
- Robinson, Waters, O'Dorisio and Rapson, Denver, Colorado, 1992 – 1993
Retained as expert to prepare analysis of age discrimination in departmental terminations in re Marvin Wilkerson, et. al. v. Martin Marietta Corporation, Civil Action No. 91-B-2078, United States District Court, Colorado.
- Colorado Lawyers Committee, Foster Care Task Force, 1992 – 1994
Retained as expert consultant to analyze Foster Care Review database and prepared issues analysis in re L.P.M., et. al. by their next friend David Littman v. Roy Romer and Karen Beye, Civil Action No. 94-M-1417, United States District Court, Colorado.
- Causey, Demgen & Moore Inc., Denver, Colorado, 1992
Designed stratified sample of inventory for Tattered Cover Bookstore audit.
- Robinson, Waters, O'Dorisio and Rapson, Denver, Colorado, 1992
Deposed as expert concerning analysis of age discrimination in departmental terminations in re Alivan Rea, et. al. v. Martin Marietta Corporation, Civil Action No. 91-S-1242, United States District Court, Colorado.
- Kelly, Haglund, Garnsey & Kahn, Denver, Colorado, 1992 – 1993
Retained as expert and prepared offer of proof concerning congressional redistricting in re Martinez, et. al. v. Romer, Civil Action No. 91-C-1972, United States District Court, Colorado.
- Robinson, Waters, O'Dorisio and Rapson, Denver, Colorado, 1992
Deposed as expert in preparation of lost-earnings analyses for termination with alleged age and ethnic discrimination in re Chan v. Apache Oil Corporation, Civil Action No. 90-M-1898, United States District Court, Colorado.
- Lundy Foundation, Denver, Colorado, 1992
Designed and analyzed survey of AIDS/ARC service providers and users and authored survey report.
- Colorado Lawyers Committee, Voting Rights Task Force, Denver, 1992
Conducted model study of minority voting patterns in Denver Colorado using ecological regression. Designed Colorado State House District creating a minority opportunity district and prepared expert demographic analysis in re Reapportionment of the Colorado General Assembly, Case No. 92 SA 19, Supreme Court, State of Colorado.
- Robinson, Waters, O'Dorisio and Rapson, Denver, Colorado, 1991
Deposed as expert witness in preparation of lost earnings analyses for termination with alleged age discrimination in re Mark Bremmer v. Martin Marietta Corporation, Civil Action No. 90-Z-828, United States District Court, Colorado.
- David A. Lane, Esq, Denver, Colorado, 1989
Analyzed ethnic and age composition of the Qualified Jury Wheel and **testified** as expert concerning age bias in jury selection process in re U.S.A. v. Laymon, 89-CR-113, United States District Court, Colorado
- Colorado Professional Black Firefighters, Paul A. Baca, Esq., 1989
Analyzed results of Denver Fire Department promotional exam for racial or ethnic bias and **testified** as an expert witness at the preliminary injunction hearing in re Fuller v. Cisneros, United States District Court.

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10 *Attorneys for Plaintiff*

11 UNITED STATES DISTRICT COURT
12 NORTHERN DISTRICT OF CALIFORNIA
13 SAN FRANCISCO DIVISION

14 VICKY MALDONADO AND JUSTIN CARTER,
15 individually and on behalf of themselves and all
16 others similarly situated,

17 Plaintiffs,

18 v.

19 APPLE INC., APPLCARE SERVICE
20 COMPANY, INC., AND APPLE CSC, INC.

21 Defendants.

No. 3:16-cv-04067-WHO

Related Case:
English v. Apple Inc., et al.
Case No. 3:14-cv-01619-WHO

**DECLARATION OF LANCE KAUFMAN
IN SUPPORT OF PLAINTIFFS' MOTION
FOR CLASS CERTIFICATION**

Hearing: May 15, 2019
Time: 2:00 p.m.
Judge: William H. Orrick
Courtroom: 2, 17th Floor

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I, Lance Kaufman, declare as follows:

1. I have been retained by Plaintiffs as an expert in the above-captioned action. I have specialized knowledge, skill, and professional experience in the field of economics. I am personally familiar with the facts set forth in this declaration. If called as a witness, I could and would competently testify to the matters stated herein.

2. I submit this declaration on behalf of the Plaintiffs in support of their Motion for Class Certification.

3. Attached hereto as Exhibit A is a true and correct copy of my Expert Report and Curriculum Vitae.

I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct.

Executed this 25th day of February 2019, in Corvallis, Oregon.



Lance Kaufman

EXHIBIT A

FILED UNDER SEAL

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN FRANCISCO DIVISION

VICKY MALDONADO AND JUSTIN CARTER,)
Individually and on behalf of themselves and all)
others similarly situated,)

Plaintiffs,)

v.)

Case No. 3:16-cv-04067-WHO

APPLE INC., APPLE CARE SERVICES)
COMPANY, INC., AND APPLE CSC, INC.)

Defendants.)

EXPERT REPORT OF LANCE D. KAUFMAN

Prepared for:
Steve Berman
Robert Carey
Michella Kras
Hagens Berman Sobol Shapiro LLP
February 25, 2019

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TABLE OF CONTENTS

Table of Contents2

1. Introduction3

 Qualifications.....3

 Context of Analysis3

 Summary of Findings3

2. Description of the Data4

3. Methodology and Findings4

 Plaintiffs Experienced Economic Harm From Receiving Remanufactured
 Devices5

 Remedies for Economic Harm6

4. Conclusion9

5. Data Sources and Documents Used10

 Data.....10

 Documents10

 Other References10

6. Attachment: Lance D. Kaufman Curriculum Vitae12

1. INTRODUCTION

This report presents a methodology for calculating economic harm related to Apple Inc., et al. (“Defendants” or “Apple”) breach of contract asserted in this case.

QUALIFICATIONS

I am the Principal Economist of Bardwell Consulting and I have been qualified as an expert in Alaska, Oregon, and Arizona. I am a Certified Depreciation Professional with experience performing engineering survival analysis of plant, property, and equipment. I perform economic analysis and modeling of firms, markets and individuals, including economic damages, lost profits, and lost earnings. I have developed and implemented algorithms to analyze Big Data to predict operating costs, energy use, market behavior and internet traffic. I received my Ph.D. in Economics from the University of Oregon.

My hourly rates are \$500 per hour for testimony and preparation, \$350 for consultation and research. My compensation is not contingent on the outcome of this case.

CONTEXT OF ANALYSIS

Bardwell Consulting has been retained on behalf of Vicky Maldonado and Justin Carter and similarly situated individuals (“Plaintiffs”). Plaintiffs assert that Apple breached its AppleCare and AppleCare+ contracts by providing remanufactured replacements that are not equivalent to new devices in performance or reliability. Dr. Robert Bardwell, in a separate opinion, has determined that remanufactured devices [REDACTED]

[REDACTED] I have been asked to identify a methodology for calculating the economic harm caused by Apple’s use of remanufactured iPhones and iPads as AppleCare/AppleCare+ replacement devices.

SUMMARY OF FINDINGS

[REDACTED]
[REDACTED]¹ Remanufactured devices may contain used components [REDACTED]
[REDACTED]² Plaintiffs assert that Apple breached its contractual duties by

¹ APL-MLDNDO-00005561; APL-MLDNDO-00005565.

² Apple Inc.’s Highly Confidential Suppl. Resps. and Objections to Plaintiffs’ First Set of Non-Uniform Interrogatories at Resp. to Interrog. 9, Feb. 2, 2018.

providing replacement devices with used components, which differ materially from new devices.³ My principle findings are:

1. [REDACTED]
2. Independent research shows that consumers value remanufactured devices less than new devices.
3. The retail price of remanufactured devices is lower than the retail price of new devices.
4. The use of remanufactured devices as service replacements harms Plaintiffs because it provides plaintiffs with replacement devices that have materially lower value and reliability than new devices.
5. The difference between the retail price of new and remanufactured devices is one measure of the economic harm from remanufactured replacements.
6. The cost of the AppleCare/AppleCare+ plans provides an alternate measure of economic harm.
7. Both measures of economic harm can be calculated separately for each type of device and purchase date using available data.

2. DESCRIPTION OF THE DATA

This report does not contain analysis of data. However, I did review data, documents, and deposition testimonies in preparation of this report. In particular, [REDACTED] I also reviewed the findings and analysis of Dr. Robert Bardwell regarding the [REDACTED].

3. METHODOLOGY AND FINDINGS

This section presents the basis for my conclusion that Plaintiffs experienced economic harm from receiving remanufactured devices as replacements rather than new or like new devices. This section also describes two methods of calculating economic harm, explains why the methods are reasonable, and provides evidence that data are available to perform the necessary calculations.

³ First Amended Complaint (“FAC”) ¶ 70.

⁴ Documents reviewed included APLMLDNDO-MED_00001-00247, which provide information as of September 27, 2018, and 1-30-18 Apple's Restricted Access Responses to NUI Nos. 19-20 and 1-30-18 Apple's Highly Confidential Responses to NUI Nos. 16-18, which provide information as of June 30, 2017.

PLAINTIFFS EXPERIENCED ECONOMIC HARM FROM RECEIVING REMANUFACTURED DEVICES

1. [REDACTED]
2. Independent research shows that consumers value remanufactured devices less than new devices.
3. The retail price of remanufactured devices is lower than the retail price of new devices.
4. The use of remanufactured devices as service replacements harms Plaintiffs because it provides plaintiffs with replacement devices that have materially lower value, reliability, lifespan, and performance than new devices.

Consumers value Remanufactured Devices Less Than New Devices

Independent research shows that consumers value remanufactured devices less than new devices. The market for remanufactured devices has been studied extensively for over 30 years. There is a large body of independent, peer reviewed research establishing that consumers value remanufactured devices less than new devices.⁵ This type of material is routinely relied on by experts in my field, and in the same way as I am doing so here.⁶ The primary factor causing lower consumer value for remanufactured devices is lower perceived reliability.

⁵ Abby, Meloy, Blackburn, and Guide (2015) show through experimental evidence that for technology products such as smart phones, 20 to 30 percent of consumers are unwilling to purchase remanufactured devices at any price. Abby, Kleber, Souza, and Voigt (2017) show that consumers perceive remanufactured products as lower in quality than new products, and that quality is the foremost concern causing consumers to have a lower willingness to pay for remanufactured products. Zhou and Gupta (2018) show the difference in market value between new and remanufactured iPhones increases dramatically over the first two to three years after the product's release date. Guide and Li (2010) show there is little overlap between consumers willing to purchase new products and remanufactured products, and that there is a 15 to 40 percent price difference between new and remanufactured products.

⁶ It is standard practice for economists to perform a review of related literature as part of a research project. For this report I surveyed academic articles in peer-reviewed journals in the fields of operations management, marketing research, business research, and remanufacturing. I am familiar with the analytic methods employed in these articles

Retail Price of Remanufactured Devices is Less Than New Devices

Remanufactured devices⁷ sell on Apple's website at a 15 to 33 percent discount relative to new models.⁸ This shows that the retail market value of devices with used components is lower than those with new components. The price discount of remanufactured devices is a market reflection of consumer's lower value for remanufactured devices.

Lower Reliability and Retail Value of Remanufactured Devices Harm Plaintiffs

The use of remanufactured devices as service replacements harms Plaintiffs because it provides Plaintiffs with replacement devices that have materially lower value and reliability than new devices.

REMEDIES FOR ECONOMIC HARM

1. The difference between the retail price of new and remanufactured devices is one measure of the economic harm from remanufactured replacements.
2. The cost of the AppleCare+ plan provides an alternate measure of economic harm.
3. Contract rescission should be offered as an option to remedy harm.
4. Data are available to calculate both remedies.

Retail Price Difference Measures Harm

Standard economic principles demonstrate that the retail price difference between new and remanufactured devices measures the economic harm to plaintiffs. This theory is supported by academic research specific to remanufactured products. Revealed preference theory is a generally accepted economic theory that a consumer's actual behavior can accurately reveal the preferences of that consumer.⁹

“Willingness to pay” is a term used to refer to the most that a consumer is willing to pay for a good or service. If a consumer has an opportunity to purchase a good at a price lower than the willingness to pay, then the consumer will purchase the product. When facing a purchase decision, the consumer's action reveals whether the consumer's willingness to pay is higher or

because they use methods that are common to economic research including structural modeling, game theory, parametric estimation, behavioral experimentation, and surveys.

⁷ [REDACTED]. Deposition of Michael Lanigan 23:12-24:7, 24:17-25, 25:9-26:3, Jan. 11, 2019.

⁸ <https://www.apple.com/shop/refurbished/ipad> and <https://www.apple.com/shop/refurbished/iphone> last accessed 2/22/2018.

⁹ Samuelson (1938, 1948).

lower than the price of the product. If the consumer purchased the product, the willingness to pay was greater than the price. If the consumer did not purchase the product, then the willingness to pay was lower than the price.

The retail price of a product sets the cost for a consumer to obtain a product. Class members who purchased new models and not remanufactured models have revealed the value difference between new and remanufactured devices is equal to or greater than the retail price difference.¹⁰

The price difference between a new device and a used device is an appropriate measure of the harm associated with remanufactured replacement devices because it is an objective and observable measure of the value difference between new and remanufactured devices. The measure is conservatively low because it represents the minimum value difference.¹¹

The damage calculation for Plaintiffs using the price differential measure has two components: one for historically received remanufactured replacements and one for future remanufactured replacements. The retail price difference may vary over time for the same device model, memory size, and color. Damage related to historically received remanufactured devices should be equal to the sum of the price difference at the time each replacement device was received for all replacement devices received.

Damage associated with future replacements is calculated by multiplying the following values:

- The number of future replacements (denoted by n where $n=1, 2, \dots$);
- The probability of receiving n remanufactured replacements in the future, for each n ; and
- The expected future price difference between new and remanufactured devices.

The resulting number is then summed for all values of n . Harm to Plaintiffs occurred over an extended period and may continue. Past and future damages should be adjusted to present value.

To reach these conclusions I applied economics principles that are well established in my field, including revealed preference theory and expected value methodologies and applied them in a reliable manner by describing how the principles relate to context and data in this case. I intend to apply the principles to the data in the manner described when the data are made available.

¹⁰ For class members who purchased new phones, the value (or willingness to pay) to them of a new device must be greater than or equal to the price of a new device. Since they did not purchase a remanufactured device, the value to them of a remanufactured device is less than the price of a remanufactured device. Therefore, the difference in value of a new device and a remanufactured device for class members must be greater than or equal to the difference in the price of a new device and a remanufactured device.

¹¹ As noted above, the difference in willingness to pay is greater than or equal to the price difference for new and remanufactured devices. This means that the price difference provides a minimum value difference.

Contract Rescission Should be Offered as an Option to Remedy Harm.

The price difference damage measure may not fully mitigate the harm associated with remanufactured replacement devices. As noted above, this measure is conservatively low because, for consumers who purchased new devices, the difference in willingness to pay between new and remanufactured devices may be greater than the price difference. Contract rescission is the refund of the service plan combined with termination of the service coverage.

The AppleCare/AppleCare+ service plans have diminished value for customers once the customers understand that replacement devices have [REDACTED] than new devices.¹² AppleCare+ customers may have valued the plan differently had they known that replacement devices would have reused components. For example, Plaintiff Carter would not have purchased the AppleCare+ contract at the contract price had he known that he would receive a remanufactured replacement.¹³ Some plaintiffs may prefer contract rescission to the price difference damage compensation because the price difference measure may not fully compensate some Plaintiffs.

Both the Price Difference Damage and Contract Rescission Should be Offered

Both the price difference damage and the contract rescission should be offered to Plaintiffs. This will allow Plaintiffs to self-select the remedy that best fits their situation without sacrificing the objectivity of the mitigation.

Data Are Available to Calculate both Remedies

Data are available to calculate both remedies on an individual Plaintiff basis. Reasonably accurate estimations can be made using standard methods, data already produced by the Defendant, and data available from third parties. More precise calculations can be made using data that are likely maintained by the Defendant but have not yet been produced. I can produce damage calculations equal to the granularity of the data available. If Defendant provides individual level detail I will apply these calculations on an individual basis. If provided aggregated data I will apply these calculation on an average basis.

The necessary data for the price difference remedy is:

1. Retail price of new and remanufactured devices;
2. [REDACTED] and
3. Time remaining under contract for estimating future replacements.

¹² FAC ¶ 121.

¹³ FAC ¶ 121.

The first data requirement can be obtained from Apple's retail website, archives of Apples retail website, and other historical records documenting Apple's retail prices. [REDACTED].¹⁴ Based on my experience reviewing corporate accounting and customer service computer systems, I find it likely that Apple maintains historical retail sales prices and device sales dates for customers with AppleCare+ plans.

The second data requirement has been produced on a summary level. The Expert Report of Robert Bardwell contains a description of these data and a summary analysis of [REDACTED]. The findings contained in that report are sufficient to estimate future replacements. This would be accomplished by extending the [REDACTED] for plans that have experienced the full two years of coverage to plans that have not experienced the full two years. The Expert Report of Robert Bardwell also states that additional data may be available and could be used to estimate a survival model for devices. A survival model would allow even more precision in forecasting future replacements.

The third data requirement is available at a summary level in data already produced by Defendant.


The necessary data for contract recession is the purchase price of the contract. The AppleCare+ contract cost ranges from \$69 to \$199 depending on the model and time of purchase.¹⁵

4. CONCLUSION

This report shows that purchasers who, under their service contracts, received remanufactured devices as replacement devices experienced economic harm. The retail price difference between new and remanufactured devices is a simple and objective measure of the economic harm. Contract rescission should be offered as an alternative to damages. These two methods can be calculated in a manner that accounts for differences among Plaintiffs, such as model and time of purchase.

I swear and affirm that all the contents of this report are true to the best of my knowledge.

Lance D. Kaufman, Ph.D.



¹⁴ Deposition of Avijit Sen, page 41 to 44, Oct. 9, 2018.

¹⁵ FAC ¶¶ 45, 66; Apple Inc.'s Answer to FAC ("Answer") ¶¶ 45, 66; AppleCare+ current pricing found at <https://www.apple.com/search/Applecare?page=1&sel=accessories&src=serp>.

5. DATA SOURCES AND DOCUMENTS USED

I used the following information in this report:

DATA

1. *APL-MLDNDO_00005559.xlsx*
2. *APL-MLDNDO_00005560.xlsx*
3. *APL-MLDNDO_00005561.xlsx*
4. *APL-MLDNDO_00005562.xlsx*
5. *APL-MLDNDO_00005563.xlsx*
6. *APL-MLDNDO_00005564.xlsx*
7. *APL-MLDNDO_00005565.xlsx*
8. *APL-MLDNDO_00005566.xlsx*

DOCUMENTS

1. Plaintiffs' First Amended Complaint, November 14, 2016
2. Apple's Highly Confidential Responses to NUI Nos. 16-18, January 30, 2018
3. Apple's Restricted Access Responses to NUI Nos. 19-20, January 30, 2018
4. Transcript of Jason Fu Deposition, January 8, 2019
5. Transcript of Michael Lanigan Deposition, January 11, 2019
6. Transcript of Avijit Sen Deposition, October 9, 2018
7. *APL-MLDNDO_00013487.pdf*
8. *APL-MLDNDO_00013532.pdf*

OTHER REFERENCES

1. Abbey, J. D., et al. (2015) "Remanufactured Products in Closed-Loop Supply Chains for Consumer Goods." *Production and Operations Management* vol. 24, pp. 488-503. doi 10.1111/poms.12238
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6. ATTACHMENT: LANCE D. KAUFMAN CURRICULUM VITAE

PERSONAL:

Lance D. Kaufman
4801 W. Yale Ave.
Denver, Colorado 80219
(541) 515-0380

EDUCATION:

University of Oregon	Ph.D.	Economics	2008-2013
University of Oregon	M.S.	Economics	2006-2008
University of Anchorage Alaska	B.B.A.	Economics	2001-2004

CERTIFICATIONS:

Certified Depreciation Professional	Society of Depreciation Professionals	2018
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PROFESSIONAL EXPERIENCE:

Principal Economist	Bardwell Consulting	2014-Present
Senior Economist	Oregon Public Utility Commission	2015-2018
Public Utility Advocate	Alaska Department of Law	2014-2015
Senior Economist	Oregon Public Utility Commission	2013-2014
Instructor	University of Oregon	2008-2012
Research Assistant	University of Alaska Anchorage	2003-2008

PROFESSIONAL MEMBERSHIPS:

Society of Depreciation Professionals	2015-Present
American Economic Association	2017-Present

RESEARCH, CONSULTING, AND ECONOMETRIC ANALYSIS:

- Hagens Berman Sobol Shapiro, LLP, Phoenix, Arizona, 2018
Deposed and testified as an expert witness for plaintiffs re calculation of unpaid mileage for truck drivers in re Swift Transportation Co., Inc., Civil Action No. CV2004-001777, Superior Court of the State of Arizona, County of Maricopa.
- Killmer, Lane, and Newman, LLP, Denver, Colorado, 2018
Retained as expert witness for plaintiffs re reasonable attorney fees in re Jeanne Stroup and Ruben Lee, v. United Airlines, Inc., Case No. 15-cv-01389-WYD-STV, United States District Court, District of Colorado.
- Klein and Frank, PC, Denver, Colorado, 2018
Retained as expert witness for plaintiffs re potential jury bias in re Gail Goehrig and Chris Goehrig v. Core Mountain Enterprises, LLC, Case No. 2016CV030004, San Juan County District Court.
- Robert Belluso, Pennsylvania, 2017
Retained as expert witness for plaintiff re lost profit in re Robert Belluso D.O. v Trustees of Charleroi Community Park, PHRC Case No. 201505365, Pennsylvania Human Relations Commission.
- Lowery Parady, LLC, Denver, Colorado, 2017
Analyzed payroll data and calculated unpaid overtime and unpaid hours for plaintiff class action in re Violeta Solis, et al. v. The Circle Group, LLC, et al., Case No. 1:16-cv-01329-RBJ, United States District Court, District of Colorado.

- Sawaya & Miller Law Firm, Denver, Colorado, 2017
Provided data processing and analysis of employment records.
- Financial Scholars Group, Orinda, California, 2017
Provided analysis of risk profile in bundled real estate and personal loans in re Old Republic Insurance Company v. Countrywide Bank et al., Circuit Court of Cook County, Illinois, Chancery Division.
- Financial Scholars Group, Orinda, California, 2017
Provided consultation and analysis of financial market transactions in preparation of settlement claims filings in re Laydon v. Mizuho Bank, Ltd., et al. and Sonterra Capital Master Fund Ltd., et al v. UBS AG et al.
- Clean Energy Action, Boulder, Colorado, 2016 – 2017
Provided consultation on the appropriate discounting methodology used in energy resource planning in the Public Service Company of Colorado application for approval of the 2016 Electric Resource Plan, Proceeding No. 16A-0396E, Public Utilities Commission of the State of Colorado.
- Confidential Client, 2016
Provided analysis and report on the probability that distinct crimes are independent events based on geographical analysis of crime rates.
- Christine Lamb and Kevin James Burns, Denver, Colorado, 2016
Provided data analysis for defendant of the impact of ethnicity on termination decisions in re Aragon et al v. Home Depot USA, Inc., Case No. 1:15-cv- 00466-MCA-KK, United States District Court, District of New Mexico.
- Steptoe & Johnson LLP, Washington, DC, 2015 – 2016
Programmed analysis of internet traffic data for plaintiffs applying a proprietary probability model developed to identify and verify accounts responsible for repeated infringements of asserted copyrights by defendants' internet subscribers in re BMG Rights Management (US) LLC, and Round Hill Music LP v. Cox Enterprises, Inc., et al., Case No. 1:14-cv-1611(LOG/JFA), United States District Court Eastern District of Virginia, Alexandria Division.
- Hagens Berman Sobol Shapiro, LLP, Phoenix, Arizona, 2014 –
Programmed analysis for plaintiffs to calculate unpaid mileage for truck drivers in re Swift Transportation Co., Inc., Civil Action No. CV2004-001777, Superior Court of the State of Arizona, County of Maricopa.
- Padilla & Padilla, PLLC, Denver, Colorado, 2014 – 2016
Provided research and analysis for plaintiffs re the impact on minority applicants from use of the AccuPlacer Test by the City and County of Denver, and estimated damages in re Marian G. Kerner et al. v. City and County of Denver, Civil Action No. 11-cv-00256-MSK-KMT, United States District Court, District of Colorado.
- U.S. Equal Employment Opportunity Commission, 2013 –
Provided statistical analysis of EEOC filings.

REGULATORY PROCEEDINGS

- Portland General Electric 2016 Annual Power Cost Variance Docket No. UE 329.
- PacifiCorp 2016 Power Cost Adjustment Mechanism Docket No. UE 327.
- Public Utility Commission of Oregon Staff Investigation into the Treatment of New Facility Direct Access Charges Docket No. UM 1837
- PacifiCorp Oregon Specific Cost Allocation Investigation Docket No. UM 1824.
- PacifiCorp 2018 Transition Adjustment Mechanism Docket No. UE 323.
- Portland General Electric 2018 General Rate Case Docket No. UE 319.
- Avista Corp. 2017 General Rate Case Docket No. UG 325.

- Portland General Electric Affiliated Interest Agreement with Portland General Gas Supply Docket No. UI 376.
- Portland General Electric 2017 Automated Update Tariff Docket No. UE 308
- PacifiCorp 2017 Transition Adjustment Mechanism Docket No. UE 307
- Portland General Electric 2017 Reauthorization of Decoupling Adjustment Docket No. UE 306
- Northwest Natural Gas Investigation of WARM Program Docket No. UM 1750.
- PacifiCorp Investigation into Multi-Jurisdictional Allocation Issues Docket No. UM 1050.
- Idaho Power Company 2015 Power Supply Expense True Up Docket No. UE 305
- Homer Electric Association 2015 Depreciation Study U-15-094
- Submitted prefiled testimony regarding the depreciation study.
- Chugach Electric Association 2015 Rate Case U-15-081
- Developed staff position regarding margin calculations.
- ENSTAR 2014 Rate Case U-14-111
- Submitted prefiled testimony regarding sales forecast.
- Alaska Pacific Environmental Services 2014 Rate Case U-14-114/115/116/117/118
Submitted prefiled testimony regarding cost allocations, cost of service, cost of capital, affiliated interests, and depreciation.
- Alaska Waste 2014 Rate Case U-14-104/105/106/107
Submitted prefiled testimony regarding cost of service study, cost of capital, operating ratio, and affiliated interest real estate contracts.
- Fairbanks Natural Gas 2014 Rate Case U-14-102
Submitted prefiled testimony regarding cost of service study and forecasting models.
- Avista 2015 Rate Case U-14-104
Submitted analysis supporting OPUC Staff settlement positions regarding Avista's sales and load forecast, decoupling mechanisms and interstate cost allocation methodology. Represented Staff in settlement conferences on November 21, November 26, and December 4, 2013.
- Portland General Electric 2015 Rate Case
Submitted pre-filed opening testimony addressing PGE's sales forecast, printing and mailing budget forecast, mailing budget, marginal cost study, line extension policy and reactive demand charge. Represented OPUC Staff in settlement conferences on May 20, May 27, and June 12, 2014.
- Portland General Electric 2014 General Rate Case
Submitted analysis supporting OPUC Staff settlement positions regarding PGE's sales and load forecast, revenue decoupling mechanism, and cost of service study. Represented OPUC Staff in settlement conferences on May 29, June 3, June 6, July 2, and July 9 of 2013. Submitted testimony in support of partial stipulation, pre-filed opening testimony addressing PGE's decoupling mechanism, and testimony in support of a second partial stipulation.
- PacifiCorp 2014 General Electric Rate Case
Submitted analysis supporting OPUC Staff settlement positions regarding PacifiCorp's sales and load forecast and cost of service study. Represented Staff in settlement conferences on June 12 through June 14, 2013.

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10 *Attorneys for Plaintiff*

11 UNITED STATES DISTRICT COURT
12 NORTHERN DISTRICT OF CALIFORNIA
13 SAN FRANCISCO DIVISION

14 VICKY MALDONADO AND JUSTIN CARTER,
15 individually and on behalf of themselves and all
16 others similarly situated,

17 Plaintiffs,

18 v.

19 APPLE INC., APPLCARE SERVICE
20 COMPANY, INC., AND APPLE CSC, INC.

21 Defendants.

No. 3:16-cv-04067-WHO

Related Case:
English v. Apple Inc., et al.
Case No. 3:14-cv-01619-WHO

**[PROPOSED] ORDER GRANTING
PLAINTIFFS' AMENDED MOTION FOR
CLASS CERTIFICATION**

Hearing: May 15, 2019
Time: 2:00 p.m.
Judge: William H. Orrick
Courtroom: 2, 17th Floor

1 Upon consideration of Plaintiffs' Amended Motion for Class Certification and
2 accompanying Memorandum of Points and Authorities, any opposition thereto, and any further
3 briefing and argument thereon, it is hereby ORDERED that the Motion is GRANTED. The Court
4 makes the following determinations as required by Rule 23:

5 1. Pursuant to Fed. R. Civ. P. 23(c)(1)(B), the Class is defined as follows:

6 All individuals who (1) purchased AppleCare or AppleCare+, either
7 directly or through the iPhone Upgrade Program, on or after January
8 1, 2009, and (2) received a remanufactured replacement Device.

9 2. Plaintiffs Vicky Maldonado and Justin Carter satisfied the requirements of Rule
10 23(a) and (b)(3), and the Court specifically finds that:

- 11 a. The Class is sufficiently numerous.
- 12 b. There are questions of law and fact common to the Class.
- 13 c. Plaintiffs' claims are typical of the claims of the Class.
- 14 d. Plaintiffs will fairly and adequately protect the interests of the Class and
15 have no antagonistic conflicts.
- 16 e. Common questions of law and fact predominate over individual issues, and a
17 class action is superior method of adjudication.

18 3. The Court appoints Vicky Maldonado and Justin Carter as Class Representatives.

19 4. The Court appoints Steve Berman of Hagens Berman Sobol Shapiro LLP as Lead
20 Counsel for the Class.

21 5. The Court certifies the following claims for class action treatment:

- 22 a. Breach of Contract;
- 23 b. Violation of the Song-Beverly Consumer Warranty Act;
- 24 c. Violation of the Magnuson-Moss Warranty Act; and
- 25 d. Violations of the unlawful and unfair prongs of California's Unfair
26 Competition Law.

27 6. Plaintiffs shall submit a proposed plan of notice under Rule 23(c)(2).

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IT IS SO ORDERED.

Dated: _____, 2019

BY THE COURT:

Judge William H. Orrick
United States District Court