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**UNITED STATES DISTRICT COURT**  
**FOR THE NORTHERN DISTRICT OF CALIFORNIA**  
**SAN FRANCISCO DIVISION**

ANDREW COHEN, TIMOTHY HORNICK,  
KALEAH C. ALLEN, NICHOLAS CARLSON,  
GLENN E. JACOBS, MARK WEILER, CHAD  
SMITH, SARAH D. SMITH, MATT KOPPIN,  
SCOTT CISCHE, KRYSTLE FAERYN,  
RODOLFO CABRERA, BRANDY DAVIS,  
WILLIAM ZIDE, ZACHARY GOMOLEKOFF,  
DAVID HEDICKER, NANCY MAEKAWA,  
CATHERINE GOODWIN, PAUL COLETTI,  
KATHLEEN BOGGS, KIMBERLY  
MODESITT, KIMBERLY BENJAMIN, MARK  
KUNZE, ARIANA RYAN, NATHAN COOPER,  
BECKY WELLINGTON, M. GAIL SUNDELL,  
VICTOR PERLMAN, and JUNE A. HALL,  
individually and on behalf of all others similarly  
situated,

Plaintiffs,

v.

APPLE, INC. and SAMSUNG ELECTRONIC  
AMERICA INC.,

Defendants.

Case No.: 3:19-cv-5322-WHA

**FIRST AMENDED AND CONSOLIDATED  
CLASS ACTION COMPLAINT**

**DEMAND FOR JURY TRIAL**

1 Plaintiffs Andrew Cohen, Timothy Hornick, Kaleah C. Allen, Nicholas Carlson, Glenn E.  
 2 Jacobs, Mark Weiler, Chad Smith, Sarah D. Smith, Matt Koppin, Scott Cischke, Krystle Faeryn,  
 3 Rodolfo Cabrera, Brandy Davis, William Zide, Zachary Gomolekoff, David Hedicker, Nancy  
 4 Maekawa, Catherine Goodwin, Paul Coletti, Kathleen Boggs, Kimberly Modesitt, Kimberly  
 5 Benjamin, Mark Kunze, Ariana Ryan, Nathan Cooper, Becky Wellington, M. Gail Sundell, Victor  
 6 Perlman, and June A. Hall, by and through their attorneys, for their Consolidated Amended  
 7 Complaint, allege as follows based upon their personal information and investigation of their  
 8 attorneys:

### 9 I. INTRODUCTION

10 1. Defendants market and sell some of the most popular smartphones in the world –  
 11 including Apple’s iPhones and Samsung’s Galaxy phones – as being completely safe to carry and use  
 12 on or in close proximity to the human body.

13 2. Hold your smartphone to your ear for a phone call? No problem, say Defendants. Carry  
 14 your smartphone in your back pocket? Of course, say Defendants. Use your smartphone to conduct a  
 15 sonogram of your unborn child in utero? That’s ok too, according to Samsung.

16 3. Defendants fail to disclose, however, that the radiofrequency (RF) radiation that the  
 17 phones can and do emit when used in the way marketed by Defendants regularly exceeds the RF  
 18 radiation limits set by law.

19 4. In fact, testing of Defendants’ smartphone products in 2018 (commissioned by the  
 20 Chicago Tribune) and in 2019 (commissioned by Plaintiffs) by a laboratory accredited by the Federal  
 21 Communications Commission (“FCC”) shows that the potential exposure for users carrying the  
 22 smartphones in their pants or shirt pocket exceeded the federal exposure limit – in some instances by  
 23 500 percent. Yet, Defendants hide this type of information from consumers.

24 5. Despite the risks of RF radiation emissions and associated health risks when these  
 25 smartphones are carried in your pocket or used against the skin, Apple markets its iPhones as “the  
 26 Internet in your pocket,” “your life in your pocket,” and a “studio in your pocket.”

27 6. Similarly, Samsung markets its smartphones to be used in a variety of contexts,  
 28 including in bed and against the skin for sonograms of an unborn child in utero.

1           7. Defendants cannot hide behind regulatory compliance on testing to protect its marketing  
2 and advertising which knowingly misrepresents and/or omits the actual RF radiation exposure to the  
3 user when smartphones are used while touching or near the human body.

4           8. Physicians and scientists worldwide are calling this controversy “Phone Gate” because  
5 of the parallels to “Diesel Gate” – the Volkswagen emissions saga. Devra Davis, PhD, President and  
6 citizen of Environmental Health Trust explained, “Volkswagen cars passed diesel emission tests when  
7 tested in laboratory conditions, but when the cars were driven on real roads, they emitted far more  
8 fumes. In the same way, every one of these cell phones ‘passed’ laboratory radiation SAR tests. These  
9 phones are legally considered compliant. However, when these phones are tested in the ways that  
10 people use them in real life, such as in your jeans pocket or bra, the amount of absorbed radiation  
11 emissions in our bodies violates the regulatory limits.”<sup>1</sup>

12           9. Numerous recent scientific publications, supported by hundreds of scientists worldwide,  
13 have shown that RF radiation exposure affects living organisms at levels well below most  
14 international and national guidelines. Effects include increased cancer risk, cellular stress, increase in  
15 harmful free radicals, genetic damages, structural and functional changes of the reproductive system,  
16 learning and memory deficits, neurological disorders, and negative impacts on general well-being in  
17 humans.

18           10. Thus, Defendants’ marketing and sale of smartphones as being safe when used against  
19 the skin or near the body – when in fact the RF radiation exposure far exceeds federal guidelines when  
20 tested as marketed by Defendants – is deceptive and misleading. By covering up the actual RF  
21 radiation emissions of their smartphones when used as advertised, Defendants are preventing  
22 consumers from making informed decisions about how they will use their smartphones and/or how  
23 much the smartphones are worth.

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26  
27           <sup>1</sup> <https://ehtrust.org/cell-phone-radiation-scandal-french-government-data-indicates-cell-phones-exposeconsumers-radiation-levels-higher-manufacturers-claim/> (last accessed September 4, 2019).  
28

11. Plaintiffs thus bring this Complaint, individually and on behalf of purchases of all of Defendants' smartphones, for negligence, breach of warranty, consumer fraud and unjust enrichment, seeking actual damages, the costs of medical monitoring, restitution and injunctive relief.

## II. JURISDICTION

12. This Court has jurisdiction over this matter pursuant to 28 U.S.C. §1332(a)(1) as modified by the Class Action Fairness Act of 2005, because at least one member of the Class is a citizen of a different state than Defendant, there are more than 100 members of the Class, and the aggregate amount in controversy exceeds \$5,000,000.00, exclusive of interest and costs.

13. Pursuant to 28 U.S.C. §1391(b), venue is proper in this district because a substantial part of the events giving rise to the claims occurred in this District.

14. This Court has personal jurisdiction over Apple because Apple is incorporated in the state of California and has its principal place of business in this District.

15. This Court has personal jurisdiction over Samsung. The Court may exercise specific jurisdiction over Samsung based on Samsung's connections to San Jose, California regarding this particular controversy.

16. In 2015, Samsung opened the Samsung Device Solutions America campus at 3655 North 1st Street, San Jose, CA 95134, where it maintains its home to Samsung's digital health and data center projects.

17. Samsung's research and development work at its campus in San Jose, California includes development of Samsung's wireless products, including many components of and the displays on Samsung's smartphones.

18. The engineering work that Samsung conducts at this campus includes analysis, testing, and problem-solving focused on the radio-frequency (RF) system, which is the system that emits RF radiation that is central to this lawsuit.

19. For example, as of the date this lawsuit was filed, Samsung had postings for multiple jobs for the San Jose campus, reflecting its ongoing work at the campus that appears to be directly related to the RF radiation emission issues in this lawsuit. These postings include RF Hardware Field

Application Engineer at the senior level;<sup>2</sup> RF Software Field Application Engineer;<sup>3</sup> and RF Systems Engineer;<sup>4</sup>

20. According to Scott Birnbaum, Samsung's Vice President - Display Business, the San Jose campus also includes Samsung's work on LCD and OLED display panels,<sup>5</sup> which are used in smartphones. An acronym that stands for organic light-emitting diode, OLED displays are reportedly used on Samsung Galaxy S9, S9+, Galaxy Note 9 and others.<sup>6</sup>

21. The research, development and testing conducted on Samsung's smartphones concerning the displays and the RF radiation emissions are at the center of this lawsuit. This work was conducted by Samsung at its San Jose, California campus.

22. Because Samsung's work at its San Jose, California campus is central to this lawsuit – and the risks that Samsung hid from consumers, this Court can exercise specific jurisdiction over Samsung for Plaintiffs' claims.

### III. INTRADISTRICT ASSIGNMENT

23. Assignment to the San Francisco division of this district is appropriate under Civil Local Rule 3-2 because a substantial part of the events or omissions which give rise to the claims occurred in the San Francisco division.

### IV. PARTIES

24. Andrew Cohen is a resident of Scottsdale, Arizona and citizen of the United States. Cohen purchased an iPhone X in August 2017, and regularly carries and uses the phone on or near his body. Cohen would not have purchased the phone and/or would not have paid as much for the phone had he understood the risk of radiation exposure from the phone. As a result of Apple's actions as

<sup>2</sup> <https://www.samsung.com/us/samsungsemiconductor/careers/?p=job%2FoH7WafwE> (last accessed December 4, 2019).

<sup>3</sup> <https://www.samsung.com/us/samsungsemiconductor/careers/?p=job%2FoK4WafwE> (last accessed December 4, 2019).

<sup>4</sup> <https://www.samsung.com/us/samsungsemiconductor/careers/?p=job%2FoWTrbfbw> (last accessed December 4, 2019).

<sup>5</sup> See video entitled "Inside Samsung's New Silicon Valley Headquarters," available at [https://www.youtube.com/watch?v=-z5x\\_0lp5iM](https://www.youtube.com/watch?v=-z5x_0lp5iM) (at timestamp 1:19-1:33) (last accessed December 4, 2019).

<sup>6</sup> <https://www.trustedreviews.com/news/what-is-oled-3285263> (last accessed December 4, 2019).

1 alleged herein, Cohen has been damaged and is now at risk for problems associated with RF radiation  
2 exposure.

3 25. Timothy Hornick is a resident of Windber, Pennsylvania and citizen of the United  
4 States. Hornick purchased an iPhone 8 in January 2018, and regularly carries and uses the phone on or  
5 near his body. Hornick would not have purchased the phone and/or would not have paid as much for  
6 the phone had he understood the risk of radiation exposure from the phone. As a result of Apple's  
7 actions as alleged herein, Hornick has been damaged and is now at risk for problems associated with  
8 RF radiation exposure.

9 26. Kaleah C. Allen is a resident of Des Moines, Iowa and citizen of the United States.  
10 Allen purchased an iPhone 8 in January 2018, and regularly carries and uses the phone on or near her  
11 body. Allen would not have purchased the phone and/or would not have paid as much for the phone  
12 had she understood the risk of radiation exposure from the phone. As a result of Apple's actions as  
13 alleged herein, Allen has been damaged and is now at risk for problems associated with RF radiation  
14 exposure.

15 27. Nicholas Carlson is a resident of Lake Worth, Florida and citizen of the United States.  
16 Carlson purchased an iPhone 7 Plus in September 2016, and regularly carries and uses the phone on  
17 or near his body. Carlson would not have purchased the phone and/or would not have paid as much  
18 for the phone had he understood the risk of radiation exposure from the phone. As a result of Apple's  
19 actions as alleged herein, Carlson has been damaged and is now at risk for problems associated with  
20 RF radiation exposure.

21 28. Glenn E. Jacobs is a resident and citizen of Las Vegas, Nevada and citizen of the United  
22 States. Jacobs purchased an iPhone 6S in or around September 2015 and traded it in for an iPhone 7+  
23 in or around September 2016. Jacobs carries and uses the phone on or near his body. Jacobs would  
24 not have purchased the phones and/or would not have paid as much for the phones had he understood  
25 the risk of radiation exposure from the phones. As a result of Apple's actions as alleged herein,  
26 Jacobs has been damaged and is now at risk for problems associated with RF radiation exposure.

27 29. Mark Weiler is a resident of Fargo, North Dakota, and citizen of the United States.  
28 Weiler received a replacement iPhone 8 in January 2019 through insurance, and regularly carries and

1 uses the phone on or near his body. Weiler would not have purchased the phone and/or would not  
2 have paid as much for the phone had he understood the risk of radiation exposure from the phone. As  
3 a result of Apple's actions as alleged herein, Weiler has been damaged and is now at risk for problems  
4 associated with RF radiation exposure.

5 30. Chad Smith is a resident of Harrisburg, Pennsylvania, and citizen of the United States.  
6 Smith purchased a Samsung Galaxy S8 in June 2018, and regularly carries and uses the phone on or  
7 near his body. Smith would not have purchased the phone and/or would not have paid as much for  
8 the phone had he understood the risk of radiation exposure from the phone. As a result of Samsung's  
9 actions as alleged herein, Smith has been damaged and is now at risk for problems associated with RF  
10 radiation exposure.

11 31. Sarah D. Smith is a resident of Harrisburg, Pennsylvania and citizen of the United  
12 States. Smith purchased a Samsung Galaxy Note 8 in or about January 2018, and regularly carries and  
13 uses the phone on or near her body. Smith would not have purchased the phone and/or would not  
14 have paid as much for the phone had she understood the risk of radiation exposure from the phone.  
15 As a result of Samsung's actions as alleged herein, Smith has been damaged and is now at risk for  
16 problems associated with RF radiation exposure.

17 32. Matt Koppin is a resident of Yorkville, Illinois and citizen of the United States. Koppin  
18 purchased an iPhone 8 in Spring 2018, and regularly carries and uses the phone on or near his body.  
19 Koppin would not have purchased the phone and/or would not have paid as much for the phone had  
20 he understood the risk of radiation exposure from the phone. As a result of Apple's actions as alleged  
21 herein, Koppin has been damaged and is now at risk for problems associated with RF radiation  
22 exposure.

23 33. Scott Cischke is a resident of LaGrange Park, Illinois, and citizen of the United States.  
24 Cischke purchased an iPhone X in June 2018, and regularly carries and uses the phone on or near his  
25 body. Cischke would not have purchased the phone and/or would not have paid as much for the  
26 phone had he understood the risk of radiation exposure from the phone. As a result of Apple's actions  
27 as alleged herein, Cischke has been damaged and is now at risk for problems associated with RF  
28 radiation exposure.

1           34. Krystle Faeryn is a resident and citizen of Rochester, Minnesota and citizen of the  
2 United States. Faeryn purchased an iPhone 8+ in September 2018, a Samsung Galaxy S9+ in July  
3 2018, and a Samsung Galaxy S8+ in April 2017 for personal use. Faeryn regularly carried and used  
4 the phones on or near her body. Faeryn would not have purchased the phones and/or would not have  
5 paid as much for the phones had she understood the risk of radiation exposure from the phone. As a  
6 result of Apple's and Samsung's actions as alleged herein, Faeryn has been damaged and is now at  
7 risk for problems associated with RF radiation exposure.

8           35. Rodolfo Cabrera is a resident and citizen of Kent, Washington and citizen of the United  
9 States. Cabrera purchased an iPhone 8 in March 2018, and regularly carries and uses the phone on or  
10 near his body. Cabrera would not have purchased the phone and/or would not have paid as much for  
11 the phone had he understood the risk of radiation exposure from the phone. As a result of Apple's  
12 actions as alleged herein, Cabrera has been damaged and is now at risk for problems associated with  
13 RF radiation exposure.

14           36. Brandy Davis is a resident and citizen of Chicago, Illinois and citizen of the United  
15 States. Davis purchased an iPhone XR in or about February 2019, and regularly carries and uses the  
16 phone on or near her body. Davis would not have purchased the phone and/or would not have paid as  
17 much for the phone had she understood the risk of radiation exposure from the phone. As a result of  
18 Apple's actions as alleged herein, Davis has been damaged and is now at risk for problems associated  
19 with RF radiation exposure.

20           37. William Zide is a resident and citizen of Tinton Falls, New Jersey and citizen of the  
21 United States. Zide purchased an iPhone 7 in 2016 and then purchased in iPhone 8 in 2019. He  
22 regularly carries and uses the phone on or near his body. Zide would not have purchased the phones  
23 and/or would not have paid as much for the phone had he understood the risk of radiation exposure  
24 from the phone. As a result of Apple's actions as alleged herein, Zide has been damaged and is now  
25 at risk for problems associated with RF radiation exposure.

26           38. Zachary Gomolekoff is a resident and citizen of Erie, Pennsylvania and citizen of the  
27 United States. Gomolekoff purchased an iPhone 7 in 2016. He regularly carries and uses the phone  
28 on or near his body. Gomolekoff would not have purchased the phone and/or would not have paid as



1 much for the phone had he understood the risk of radiation exposure from the phone. As a result of  
2 Apple's actions as alleged herein, Gomolekoff has been damaged and is now at risk for problems  
3 associated with RF radiation exposure.

4 39. David Hedicker is a resident and citizen of Vandalia, Ohio and legal resident and citizen  
5 of the United States. Hedicker purchased an iPhone 7 Plus in January 2019, and regularly carries and  
6 uses the phone on or near his body. Hedicker would not have purchased the phone and/or would not  
7 have paid as much for the phone had he understood the risk of radiation exposure from the phone. As  
8 a result of Apple's actions as alleged herein, Hedicker has been damaged and is now at risk for  
9 problems associated with RF radiation exposure.

10 40. Nancy Maekawa is a resident and citizen of Forest Hill, Maryland, and citizen of the  
11 United States. Maekawa purchased an iPhone 7 Plus in December 2018, and regularly carries and uses  
12 the phone on or near her body. Maekawa would not have purchased the phone and/or would not have  
13 paid as much for the phone had she understood the risk of radiation exposure from the phone. As a  
14 result of Apple's actions as alleged herein, Maekawa has been damaged and is now at risk for  
15 problems associated with RF radiation exposure.

16 41. Catherine Goodwin is a resident and citizen of Rosamond, California, and citizen of the  
17 United States. Goodwin purchased an iPhone 7 in November 2017, and regularly carries and uses the  
18 phone on or near her body. Goodwin would not have purchased the phone and/or would not have  
19 paid as much for the phone had she understood the risk of radiation exposure from the phone. As a  
20 result of Apple's actions as alleged herein, Goodwin has been damaged and is now at risk for  
21 problems associated with RF radiation exposure.

22 42. Paul Coletti is a resident and citizen of Napa, California and citizen of the United States.  
23 Coletti purchased an iPhone 7 in June 2017, and regularly carries and uses the phone on or near his  
24 body. Coletti would not have purchased the phone and/or would not have paid as much for the phone  
25 had he understood the risk of radiation exposure from the phone. As a result of Apple's actions as  
26 alleged herein, Coletti has been damaged and is now at risk for problems associated with RF radiation  
27 exposure.

1           43. Kathleen Boggs is a resident and citizen of San Anselmo, California and citizen of the  
2 United States. Boggs purchased an iPhone X in May 2018, and an iPhone 7 in August 2018 for  
3 personal or household use. Boggs also purchased an iPhone 4 and iPhone 5s (investigation continues  
4 as to exact date; however, she was the original owner and still has the devices in her possession).  
5 Boggs also purchased two Samsung Note 4 smartphones in August 2016 for personal or household  
6 use. Boggs and/or her family members regularly carry and use the phones on or near their bodies.  
7 Boggs would not have purchased the phones and/or would not have paid as much for the phones had  
8 she understood the risk of radiation exposure from the phone. As a result of Apple's and Samsung's  
9 actions as alleged herein, Boggs has been damaged and is now at risk for problems associated with RF  
10 radiation exposure.

11           44. Kimberly Modesitt is a resident and citizen of Centennial, Colorado and citizen of the  
12 United States. Modesitt purchased a Samsung S7 Edge in or about April 2019, and regularly carries  
13 and uses the phone on or near her body. Modesitt would not have purchased the phone and/or would  
14 not have paid as much for the phone had she understood the risk of radiation exposure from the  
15 phone. As a result of Samsung's actions as alleged herein, Modesitt has been damaged and is now at  
16 risk for problems associated with RF radiation exposure.

17           45. Kimberly Benjamin is a resident of Raymore, Missouri and citizen of the United States.  
18 Benjamin purchased an iPhone X in or about 2017, and regularly carries and uses the phone on or  
19 near her body. Benjamin would not have purchased the phone and/or would not have paid as much for  
20 the phone had she understood the risk of radiation exposure from the phone. As a result of Apple's  
21 actions as alleged herein, Benjamin has been damaged and is now at risk for problems associated with  
22 RF radiation exposure.

23           46. Mark Kunze is a resident and citizen of Loveland, Colorado, and citizen of the United  
24 States. Kunze purchased an iPhone X in or about September 2017, and regularly carries and uses the  
25 phone on or near his body. Kunze would not have purchased the phone and/or would not have paid as  
26 much for the phone had he understood the risk of radiation exposure from the phone. As a result of  
27 Apple's actions as alleged herein, Kunze has been damaged and is now at risk for problems associated  
28 with RF radiation exposure.

1           47. Ariana Ryan is a resident and citizen of Minneapolis, Minnesota and citizen of the  
2 United States. Ryan purchased an iPhone 7 in or about September 2016, and regularly carries and uses  
3 the phone on or near her body. Ryan would not have purchased the phone and/or would not have paid  
4 as much for the phone had she understood the risk of radiation exposure from the phone. As a result  
5 of Apple's actions as alleged herein, Ryan has been damaged and is now at risk for problems  
6 associated with RF radiation exposure.

7           48. Nathan Cooper is a resident and citizen of New York, New York, and citizen of the  
8 United States. Cooper purchased an iPhone 7 in or about April 2019, and regularly carries and uses  
9 the phone on or near his body. Cooper would not have purchased the phone and/or would not have  
10 paid as much for the phone had he understood the risk of radiation exposure from the phone. As a  
11 result of Apple's actions as alleged herein, Cooper has been damaged and is now at risk for problems  
12 associated with RF radiation exposure.

13           49. Becky Wellington is a resident and citizen of Edmond, Oklahoma and citizen of the  
14 United States. Wellington purchased an iPhone 7 in 2017, and regularly carries and uses the phone on  
15 or near her body. Wellington would not have purchased the phone and/or would not have paid as  
16 much for the phone had she understood the risk of radiation exposure from the phone. As a result of  
17 Apple's actions as alleged herein, Wellington has been damaged and is now at risk for problems  
18 associated with RF radiation exposure.

19           50. M. Gail Sundell is a resident and citizen of Cheyenne, Wyoming, and citizen of the  
20 United States. Sundell purchased an iPhone 7 in May 2017, and regularly carries and uses the phone  
21 on or near her body. Sundell would not have purchased the phone and/or would not have paid as  
22 much for the phone had she understood the risk of radiation exposure from the phone. As a result of  
23 Apple's actions as alleged herein, Sundell has been damaged and is now at risk for problems  
24 associated with RF radiation exposure.

25           51. Victor Perlman is a resident and citizen of Philadelphia, Pennsylvania, and citizen of the  
26 United States. Perlman purchased an iPhone 6s, and regularly carries and uses the phone on or near  
27 his body. Perlman would not have purchased the phone and/or would not have paid as much for the  
28 phone had he understood the risk of radiation exposure from the phone. As a result of Apple's actions

1 as alleged herein, Perlman has been damaged and is now at risk for problems associated with RF  
2 radiation exposure.

3 52. June A. Hall is a resident and citizen of Atlanta, Georgia and a citizen of the United  
4 States. Hall purchased an iPhone 6S in 2017 and carries it and uses the phone when necessary. Hall  
5 had some concerns about the risks of radiation exposure when she purchased the phone, and now has  
6 greater concerns and feels she put herself at risk of radiation exposure from the phone. As a result of  
7 Apple's actions as alleged herein, Hall has been damaged and is now at risk for problems associated  
8 with RF radiation exposure.

9 53. Andrew Cohen, Timothy Hornick, Kaleah Allen, Nicholas Carlson, Glenn E. Jacobs,  
10 Mark Weiler, Matt Koppin, Scott Cischke, Krystle Faeryn, Rodolfo Cabrera, Brandy Davis, William  
11 Zide, Zachary Gomolekoff, David Hedicker, Nancy Maekawa, Catherine Goodwin, Paul Coletti,  
12 Kathleen Boggs, Kimberly Benjamin, Mark Kunze, Ariana Ryan, Nathan Cooper, Becky Wellington,  
13 M. Gail Sundell, Victor Perlman, and June A. Hall are collectively referred to as the "Apple  
14 Plaintiffs."

15 54. Chad Smith, Sarah Smith, Krystle Faeryn, Kathleen Boggs, and Kimberly Modesitt are  
16 collectively referred to as the "Samsung Plaintiffs." The Apple Plaintiffs and Samsung Plaintiffs are  
17 collectively referred to as "Plaintiffs."

#### 18 **A. Defendants**

19 55. Apple, Inc. ("Apple") is a California corporation with its headquarters and principal  
20 place of business in Cupertino, California, which lies within this District. Apple designs,  
21 manufactures and sells various consumer electronics, computer software and online services. Apple's  
22 consumer electronics products include a series of smartphone models known as the iPhone.

23 56. In addition to being headquartered and having its principal place of business in  
24 Cupertino, California, Apple transacts substantial business throughout the State of California, through  
25 advertising, marketing and ownership of numerous Apple retail stores throughout California,  
26 including several in this District. Apple also transacts business nationwide, advertising, marketing,  
27  
28

1 distributing and selling its iPhone products nationwide and ownership of Apple retail stores in 44  
2 states and the District of Columbia.

3 57. Samsung Electronics America, Inc. (“Samsung”) is a New York corporation that  
4 maintains its principal place of business at 85 Challenger Road, Ridgefield Park, New Jersey 07669.

5 58. In addition to maintaining its campus in San Jose, California, Samsung transacts  
6 substantial business throughout the State of California. Samsung also transacts business nationwide,  
7 advertising, marketing, distributing and selling its smartphone products nationwide.

## 8 V. SUBSTANTIVE ALLEGATIONS

### 9 A. The Role of Smartphones in American Culture

10 59. According to Pew Research Center, 96 percent of Americans own a cellphone of some  
11 kind.<sup>7</sup> Of those, 81 percent own smartphones,<sup>8</sup> up from just 35% in Pew Research Center’s first  
12 survey of smartphone ownership conducted in 2011.<sup>9</sup>

13 60. Roughly 20 percent of American adults are “smartphone-only” internet users, meaning  
14 they own a smartphone but don’t otherwise subscribe to internet service.<sup>10</sup>

15 61. According to the Chicago Tribune, there are currently an estimated 285 million  
16 smartphones in active use in the United States.<sup>11</sup>

17 62. And, 29 percent of U.S. teens sleep with their cellphones in bed with them, according to  
18 a 2019 report by the nonprofit organization Common Sense Media.

21 <sup>7</sup> <https://www.pewinternet.org/fact-sheet/mobile/> (last visited August 23, 2019).

22 <sup>8</sup> PC Magazine defines the term “smartphone” as “[a] cellphone and handheld computer that  
23 created the greatest tech revolution since the Internet. A smartphone can do everything a personal  
24 computer can do, and because of its mobility, much more . . . A smartphone combines a cellphone  
25 with e-mail and Web, music and movie player, camera, camcorder, GPS navigation, voice recorder,  
26 alarm clock, flashlight, photo album, address book and a lot more. It is also a personal assistant that  
delivers information and answers questions about almost everything .... A lot more personal than a  
personal computer, a smartphone is generally within reach at all times.” See  
<http://www.pcmag.com/encyclopedia/term/51537/smartphone> (last visited August 23, 2019).

27 <sup>9</sup> *Id.*

<sup>10</sup> *Id.*

28 <sup>11</sup> <https://www.chicagotribune.com/investigations/ct-cell-phone-radiation-testing-20190821-72qgu4nzlfda5kyuhteieh4da-story.html> (last visited August 23, 2019).

**B. Defendants Market and Sell Their Smartphones as Being Safe to Use on and Close to the Human Body at All Times.**

63. Widely recognized as Apple's premier product line, iPhone is a line of industry-leading smartphones that debuted on June 29, 2007.

64. When Steve Jobs introduced the iPhone in 2007, he described it as "the Internet in your pocket for the first time ever." He emphasized that the "iPhone is like having your life in your pocket."<sup>12</sup> And displayed behind Jobs as he launched the iPhone was the following picture:



65. In July of 2016, Apple celebrated the sale of its billionth iPhone.<sup>13</sup> Apple included within the press release announcing that milestone sale the following quote from its CEO Tim Cook: "iPhone has become one of the most important, world-changing and successful products in history. It's become more than a constant companion. iPhone is truly an essential part of our daily life and enables much of what we do throughout the day."<sup>14</sup>

66. Throughout the years, Apple has repeatedly expounded on the theme of keeping the iPhone in your pocket. For example, in May 2018, Apple released a commercial for iPhone X, touting the phone's camera and portrait lighting capabilities. In the ad, a woman is seen taking the iPhone X

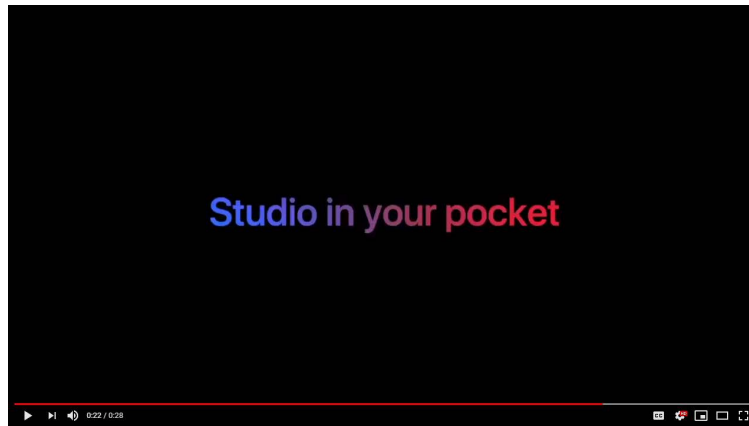
<sup>12</sup> <https://thenextweb.com/apple/2015/09/09/genius-annotated-with-genius/> (last accessed August 23, 2019).

<sup>13</sup> <https://www.apple.com/newsroom/2016/07/apple-celebrates-one-billion-iphones.html> (last visited August 23, 2019).

<sup>14</sup> *Id.*

1 out of her pocket. Immediately, lights, umbrellas and all the other trappings of a professional studio  
2 appear around her.<sup>15</sup>

3 67. The commercial ends with the slogan “Studio in Your Pocket”:<sup>16</sup>



11 68. In December 2019, Apple announced the Apple Music Awards, and stated: “With iPod  
12 and iTunes, Apple revolutionized the music experience by putting a thousand songs *in your pocket*.  
13 \*\*\* Streaming seamlessly to iPhone, iPad, Apple Watch, Apple TV, Mac, HomePod and CarPlay,  
14 Apple Music is the most complete music experience on the planet.”<sup>17</sup>

15 69. Apple’s commercials regularly show people listening to music through headphones with  
16 their iPhones in their pockets<sup>18</sup> or strapped to their arms,<sup>19</sup> or using the iPhones while holding it in  
17 their bare hands.<sup>20</sup>

18 70. Apple’s commercials show people using iPhones in their beds,<sup>21</sup> even being held against  
19 a person’s body as they fall asleep while watching a video.<sup>22</sup>

20  
21 <sup>15</sup> <https://www.youtube.com/watch?v=NApRGgbm480> (last accessed August 23, 2019).

22 <sup>16</sup> <https://www.youtube.com/watch?v=NApRGgbm480> (last accessed August 23, 2019).

23 <sup>17</sup> <https://www.apple.com/newsroom/2019/12/apple-announces-first-ever-apple-music-awards/>  
(emphasis supplied) (last accessed December 4, 2019).

24 <sup>18</sup> <https://www.ispot.tv/ad/wC3Y/apple-iphone-x-sway-song-by-sam-smith> (last accessed  
25 August 23, 2019).

26 <sup>19</sup> <http://osxdaily.com/2014/06/05/apple-runs-an-iphone-5s-fitness-advertisement-strength/>  
(last accessed December 4, 2019).

27 <sup>20</sup> <https://www.ispot.tv/ad/I9eg/apple-iphone-privacy-on-iphone-inside-joke> (last accessed  
28 August 23, 2019).

<sup>21</sup> <https://www.ispot.tv/ad/IjPm/apple-iphone-xr-and-xs-depth-control-alejandro>;  
[https://www.ispot.tv/ad/I\\_8y/apple-iphone-private-side](https://www.ispot.tv/ad/I_8y/apple-iphone-private-side) (last accessed August 23, 2019).

<sup>22</sup> <https://www.ispot.tv/ad/oVp4/apple-iphone-xr-battery-life-up-late-song-by-julie-andrews>  
(last accessed August 23, 2019).



71. Following Apple's lead, Samsung launched the first android-based smartphone in April 2009. The Galaxy S series of smartphones has made Samsung the biggest seller of smartphones in the world.

72. Like Apple, Samsung advertises people using its smartphones in close proximity to their bodies.

73. For example, one commercial shows a pregnant woman lying in bed and touching the cell phone to her belly to take a sonogram of her child in utero. In the same commercial, a child has a smartphone tucked into his backpack.<sup>23</sup>

74. Another commercial shows a hiker take the Samsung phone out of her back pants' pocket at the summit.<sup>24</sup>

75. Thus, at all relevant times, Defendants have touted the use of their smartphones as being safe and appropriate to use while touching or within close proximity to the human body.

### **C. The Dangers of Cellphone Exposure**

#### **1. Radio Frequency (RF) Exposure**

76. Cellphones use radiofrequency (RF) radiation to send signals. When turned on, cell phones and other wireless devices emit RF radiation continually, even if they are not being actively used, because they are always communicating with cell towers. The dose intensity tails off with increasing distance from the body and reaches a maximum when the devices are used next to the head during phone calls or next to the body while texting or using the phone.<sup>25</sup>

77. This type of radiation is called non-ionizing radiation, which has been classified as a "possible human carcinogen."

78. In May 2011, the International Agency for Research on Cancer (IARC), a part of the World Health Organization, classified radio-frequency radiation from wireless devices as a "possible

<sup>23</sup> [https://www.adsoftheworld.com/media/film/samsung\\_samsung\\_galaxy\\_the\\_future](https://www.adsoftheworld.com/media/film/samsung_samsung_galaxy_the_future) (last accessed August 23, 2019).

<sup>24</sup> <https://www.bestadsonTV.com/ad/107658/Samsung-Do-What-You-Cant> (last accessed August 23, 2019).

<sup>25</sup> <https://www.scientificamerican.com/article/new-studies-link-cell-phone-radiation-with-cancer/> (last accessed December 5, 2019).



human carcinogen” based largely on findings of increased risks of gliomas (a malignant type of brain cancer) and Schwann cell tumors in the brain near the ear in humans after long term use of cellphones.<sup>26</sup>

79. The IARC cited, in part, to one study of cell phone use, which showed a 40% increased risk for gliomas in the highest category of heavy users (reported average: 30 minutes per day over a 10-year period).<sup>27</sup>

80. In 2015, more than 150 scientists from around the world sent an appeal to the United Nations and World Health Organization, calling for more protective RF radiation exposure guidelines, and education of the public concerning the attendant health risks, particularly to children and fetal development.

81. The appeal, titled “International Appeal: Scientists call for Protection from Non-ionizing Electromagnetic Field Exposure,” was signed by 40 scientists in the United States, including a Member of the U.S. National Academies of Sciences Committee for Radio Frequencies; a retired leader of the National Toxicology Project’s health effects studies of cell phone radio frequency radiation under the National Institute of Environmental Health Sciences; and multiple physicians and scientists from esteemed universities, such as Harvard, Columbia, UCLA, USC and others.

82. In relevant part, the appeal explained the risk of RF radiation exposure:

Numerous recent scientific publications have shown that EMF affects living organisms at levels well below most international and national guidelines. Effects include increased cancer risk, cellular stress, increase in harmful free radicals, genetic damages, structural and functional changes of the reproductive system, learning and memory deficits, neurological disorders, and negative impacts on general well-being in humans.

83. In May 2017, a longtime Telecom Italia employee won a judgment after a court found that his brain tumor was caused by improper use of a company-issued cellphone.<sup>28</sup> The employee

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<sup>26</sup> [https://www.iarc.fr/wp-content/uploads/2018/07/pr208\\_E.pdf](https://www.iarc.fr/wp-content/uploads/2018/07/pr208_E.pdf) (last accessed August 23, 2019).

<sup>27</sup> *Id.*

<sup>28</sup> <https://www.nydailynews.com/newswires/news/national/cell-phones-brain-tumors-italian-court-rules-article-1.3080304> (last accessed September 4, 2019).

1 reportedly used the company cellphone for three hours a day for 15 years without taking any  
2 precautions, resulting in the non-cancerous tumor and the subsequent loss of hearing in one ear.<sup>29</sup>

3 84. In October 2017, a study was published in the American Journal of Epidemiology,  
4 which found cell phones associated with a doubled risk of glioma, a type of brain cancer.<sup>30</sup>

5 85. Moreover, in the fall of 2018, in one of the largest studies to date, the National  
6 Toxicology Program (“NTP”), a research group within the National Institutes of Health, U.S.  
7 Department of Health and Human Services, conducted a study to test the assumption that cell phone  
8 radiofrequency radiation could not cause cancers or other adverse health effects (other than by tissue  
9 heating) because this type of radiation (non-ionizing) did not have sufficient energy to break chemical  
10 bonds.<sup>31</sup>

11 86. Researchers tested 3,000 rats and mice of both sexes for two years—the largest  
12 investigation of RF radiation and cancer in rodents ever undertaken in the U.S.<sup>32</sup> The NTP looked at  
13 “near-field” exposures, which approximate how people are dosed while using cell phones.<sup>33</sup>

14 87. The NTP study dosed rats and mice with RF radiation at either 1.5, 3 or 6 watts of  
15 radiation per kilogram of body weight, or W/kg. The lowest dose is just under the FCC’s limit for  
16 public exposure from cell phones, which is 1.6 W/kg. The animals were exposed nine hours a day for  
17 two years (about the average life span for a rat), and the exposures were increased as the animals  
18 grew, so the absorbed doses per unit body weight remained constant over time.

19 88. The NTP found that high exposure to the kind of radiofrequency radiation used by  
20 cellphones was associated with “clear evidence” of heart schwannomas, or cancerous heart tumors, in  
21 male rats.

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23 <sup>29</sup> *Id.*

24 <sup>30</sup> Momoli et al., Probabilistic Multiple-Bias Modeling Applied to the Canadian Data From the  
25 Interphone Study of Mobile Phone Use and Risk of Glioma, Meningioma, Acoustic Neuroma, and  
26 Parotid Gland Tumors, *Am. J. Epidemiol.* 1;186(7):885-893 (Oct. 2017), *available at*  
*https://www.ncbi.nlm.nih.gov/pubmed/28535174* (last accessed September 4, 2019).

27 <sup>31</sup> *https://thehill.com/opinion/healthcare/416515-theres-a-clear-cell-phone-cancer-link-but-fda-*  
*is-downplaying-it* (last accessed August 23, 2019).

28 <sup>32</sup> *https://www.scientificamerican.com/article/new-studies-link-cell-phone-radiation-with-*  
*cancer/* (last accessed December 4, 2019).

<sup>33</sup> *Id.*

89. The results of the NTP studies demonstrated that cell phone radiation caused Schwann cell cancers of the heart and brain gliomas in rats, as well as DNA damage in the brain.<sup>34</sup> The researchers reported elevated rates of lymphoma as well as cancers affecting the prostate, skin, lung, liver and brain in the exposed animals.

90. At the same time the NTP study was being conducted, European investigators at the Ramazzini Institute in Italy were investigating “far-field” exposure RF effects in nearly 2,500 rats from the fetal stage until death.<sup>35</sup> Like with the NTP study, male rats developed schwannomas of the heart at statistically higher rates than control animals that were not exposed.

## 2. FCC Limits for RF Radiation Exposure

91. When cellphones hit the market in the 1980s, authorities focused on setting an exposure limit to address only the heating risks of cellphones. Scientists found that animals showed adverse effects when exposed to enough radiofrequency radiation to raise their body temperature by one degree Celsius. Authorities used this finding to help calculate a safety limit for humans.

92. In 1996, The Federal Communications Commission (“FCC”) set a Specific Absorption Rate (“SAR”), which is reportedly “a measure of the amount of radio frequency energy absorbed by the body when using a mobile phone,” of 1.6 watts per kilogram averaged over one gram of tissue.<sup>36</sup> The FCC requires cell phone manufacturers to ensure that their phones comply with SAR limits.

93. Critically, this rule is based on the heating risks of cellphones and is not based on the risk of RF radiation as a possible human carcinogen.

94. To demonstrate compliance, phone makers were told to conduct two tests: when the devices are held against the head and when held up to an inch from the body. Phone manufacturers are only required to provide test results for one phone to the FCC before going to market.

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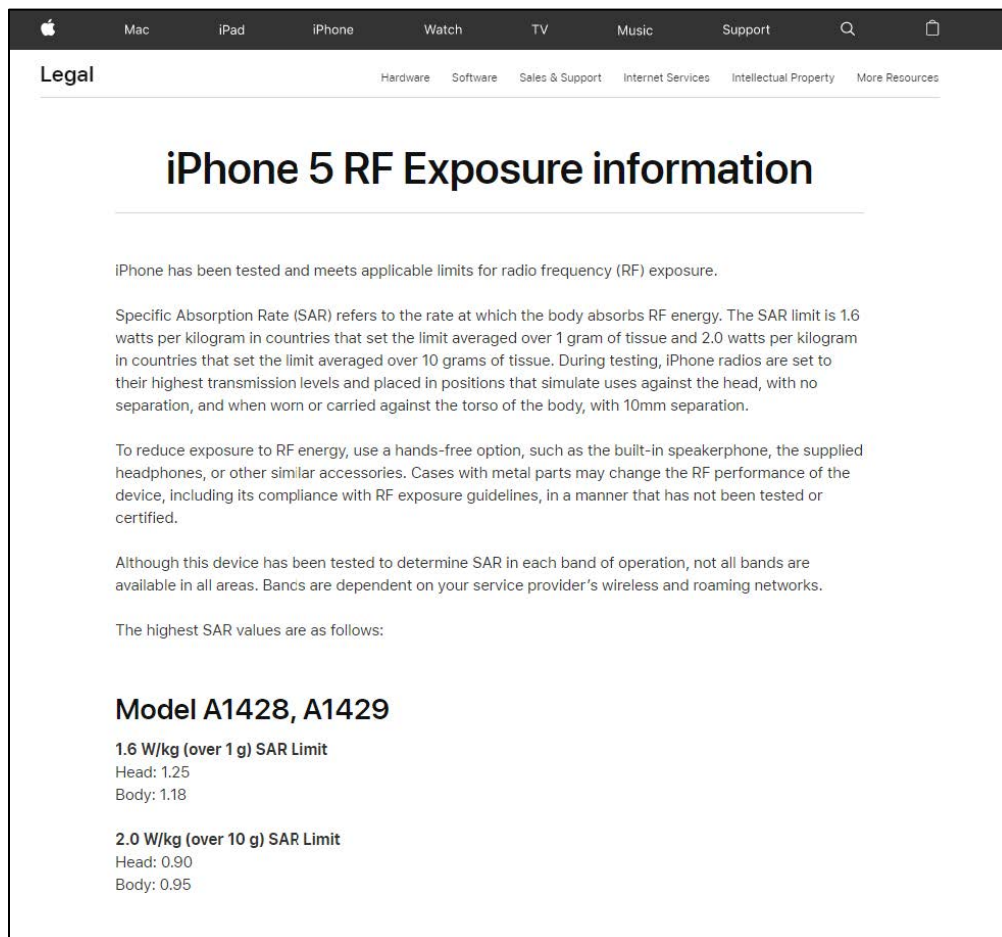
<sup>34</sup> <https://thehill.com/opinion/healthcare/416515-theres-a-clear-cell-phone-cancer-link-but-fda-is-downplaying-it> (last accessed August 23, 2019).

<sup>35</sup> <https://www.scientificamerican.com/article/new-studies-link-cell-phone-radiation-with-cancer/> (last accessed December 4, 2019).

<sup>36</sup> <https://www.fcc.gov/general/specific-absorption-rate-sar-cellular-telephones> (last accessed December 5, 2019).

95. And companies testing a new phone for compliance with the safety limit are permitted to position the phone up to 25 millimeters away from the body — nearly an inch — depending on how the device is used.

96. Nonetheless, on its website, in the “Legal” section, Apple warrants that it tests the iPhone at the “highest transmission levels and placed in positions that simulate uses against the head, *with no separation*, and when worn or carried against the torso of the body, with 10mm separation.”<sup>37</sup>



97. For some past models, Apple’s website told users of the iPhone 4 and 4s: “Carry iPhone at least 10mm away from your body to ensure exposure levels remain at or below the as-tested levels.” The site says those phones were tested at 10 millimeters.

<sup>37</sup> <https://www.apple.com/legal/rfexposure/iphone5,1/en/> (emphasis supplied) (last accessed August 23, 2019). Apple also warrants that it tests its iPods at 5mm separation. <https://www.apple.com/legal/rfexposure/ipod5,1/en/> (last accessed August 23, 2019).

1           98. When Apple submitted its application to the FCC to market the iPhone 7, the company  
2 included a similarly worded radiation statement, suggesting users carry the device at least 5  
3 millimeters from the body, records show.

4           99. Despite these statements which were hidden among technical jargon, Apple marketed  
5 the devices as safe to carry and use on and against the skin.

6           100. Over time, Apple phased out the limited warnings it did bury. The iPhone 7s (and  
7 subsequent models) sold to the public did not include that advice.<sup>38</sup>

8           101. Similarly, on its website, Samsung provides users the opportunity to check the RF  
9 emission levels. Samsung represents not only its smartphones meet federal requirements, but also that  
10 “Body-worn SAR testing has been carried out at a separation distance of 0.0 cm.” Samsung thus  
11 represents that using, carrying or wearing its smartphones on or in close proximity to the human body  
12 is completely safe and/or that the SAR levels meet federal standards even when the phones are used  
13 against the skin.

#### 14           **D. Recent Testing of RF Radiation Shows Clear Risk to Plaintiffs and the Class**

##### 15           **1. Testing initiated by the Canadian Broadcasting Corporation in 2017**

16           102. In March 2017, the Canadian Broadcasting Corporation (CBC) conducted a test to  
17 determine the RF radiation emissions from cellphones. The CBC hired an FCC-accredited laboratory,  
18 RF Exposure Lab, to conduct tests of the Samsung Galaxy S7, the iPhone 7, and the LG 5 in the way  
19 that people use their phones (against their skin and in their pockets).<sup>39</sup>

20           103. When tested equivalent to the way in which people use their phones – in pockets or  
21 directly against the skin, the radiation absorbed increased three to four times federal safety limits.<sup>40</sup>

##### 22           **2. Testing released by the French National Frequencies Agency in 2018**

23           104. In March 2018, the French National Frequencies Agency (ANFR), a government agency  
24 which manages all radio frequencies in France, released a report of the results of testing it conducted  
25

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26           <sup>38</sup> <https://www.chicagotribune.com/investigations/ct-cell-phone-radiation-testing-20190821-72qgu4nzhfda5kyuhteieh4da-story.html> (last accessed August 23, 2019).

27           <sup>39</sup> [https://www.youtube.com/watch?v=Wm69ik\\_Qdb8&feature=youtu.be](https://www.youtube.com/watch?v=Wm69ik_Qdb8&feature=youtu.be) (last accessed  
28 November 4, 2019).

<sup>40</sup> *Id.*

on 450 cellphones since 2012. Nine out of ten phones tested by the ANFR in contact with the body showed a Specific Absorption Rate (SAR) value higher than the European regulatory threshold of 2W/kg.<sup>41</sup>

105. The report was released after a lawsuit was filed by Dr. Marc Arazi to compel disclosure of the test results.

106. Many phones tested by the ANFR reached more than 20W/kg, according to U.S. standards, at 0mm from the skin.<sup>42</sup>

107. “According to Professor Om Gandhi, one of the designers of cell phone radiation testing, if the ANFR test results were applied to the United States, cell phones would exceed the regulatory limits. For example, for the Apple iPhone 5, the SAR test trunk result at 0mm from the skin is 5.32 W/kg for Europe,”<sup>43</sup> which is the equivalent of 10.642 W/kg for the United States.<sup>44</sup>

108. Examples of the ANFR test results for some of the Defendants’ cell phones at minimum FCC equivalents were as follows:<sup>45</sup>

Phone	Test Date	SAR Trunk/Body (FCC equivalent) (1g avg 0 mm)
Apple iPhone 5	10/22/12	10.642
Apple iPhone 6 Plus	11/21/14	6.34
Apple iPhone 5C	2/11/14	6.22
Apple iPhone 6S	5/14/16	5.18
Apple iPhone 6 16GC	11/14/14	4.1
Apple iPhone SE	6/9/16	3.48
Samsung Wave Y GT-S53	7/4/13	8.94
Samsung Galaxy S5	3/18/15	8.36

<sup>41</sup> [https://ntp.niehs.nih.gov/ntp/about\\_ntp/bsc/2018/june/publiccomm/phonegatealert\\_20180612\\_508.pdf](https://ntp.niehs.nih.gov/ntp/about_ntp/bsc/2018/june/publiccomm/phonegatealert_20180612_508.pdf) (last accessed September 4, 2019).

<sup>42</sup> *Id.*

<sup>43</sup> *Id.*

<sup>44</sup> <https://ehtrust.org/wp-content/uploads/ANFR-Data-PDF-SAR-European-and-FCC-.pdf> (last accessed September 4, 2019).

<sup>45</sup> *Id.*

Phone	Test Date	SAR Trunk/Body (FCC equivalent) (1g avg 0 mm)
Samsung Galaxy Mega GT	2/13/14	7.58
Samsung Galaxy Core P	3/27/14	7.14
Samsung Galaxy J7	10/18/16	7.12
Samsung Galaxy S5	5/13/14	7.1
Samsung Galaxy S6 Edge	7/1/15	6.68

109. Dr. Arazi and his colleagues have coined the cellphone manufacturers' knowledge of RF radiation emitted when tested against skin as "Phone Gate" because of the parallels to "Diesel Gate" – the Volkswagen emissions saga.

### 3. Testing released by the Chicago Tribune in 2019

110. Beginning in or about August 2018, the Chicago Tribune hired RF Exposure Lab in San Marcos, California to measure eleven different cellphone models for radiofrequency radiation.<sup>46</sup>

111. RF Exposure Lab, an accredited testing lab recognized by the FCC, has conducted radiation tests for 15 years for wireless companies seeking FCC approval for new products.<sup>47</sup>

112. In August and October 2018, twelve phones were tested: three iPhone 7s, an iPhone X, an iPhone 8, an iPhone 8 Plus, a Galaxy S9, a Galaxy S8, a Galaxy J3, a Moto e5 Play, a Moto g6 Play and a Vivo 5 Mini (collectively, the "Affected Phones").<sup>48</sup>

113. According to the lab, all the tests were done in accordance with FCC rules and guidelines.<sup>49</sup>

114. In one phase of the testing, all phones were positioned at the same distance from the simulated body tissue that the manufacturers chose for their own tests — from 5 to 15 millimeters, depending on the model.<sup>50</sup>

<sup>46</sup> <https://www.chicagotribune.com/investigations/ct-cell-phone-radiation-testing-methodology--20190821-whddrljk6fbmxoqh25u5t7lkb4-story.html> (last accessed August 23, 2019).

<sup>47</sup> *Id.*

<sup>48</sup> *Id.*

<sup>49</sup> *Id.*

<sup>50</sup> *Id.*



115. Prior to each test, the laboratory reviewed the publicly-available testing data that phone manufacturers had submitted to the FCC to demonstrate compliance with radiofrequency radiation limits and gain permission to market the devices.<sup>51</sup>

116. For each phone model, the laboratory determined which licensed band, frequency and channel yielded the highest radiofrequency radiation reading in the manufacturer's own tests, and then replicated this configuration.<sup>52</sup>

117. To conduct the tests, each phone was placed underneath a tub containing specially formulated liquid intended to simulate the electrical properties of human body tissue.<sup>53</sup>

118. The laboratory used a base station simulator to place a call to the phone and adjusted the base station's settings to replicate the desired configuration, causing the phone to operate at full power.<sup>54</sup>

119. A probe attached to a robotic arm then moved in the liquid for eighteen minutes, taking 276 measurements of the radiofrequency radiation absorbed. The results constituted the Specific Absorption Rate, or SAR, which must be under the federal safety limit.<sup>55</sup>

120. Two tests were conducted on each phone. In the first tests, each device was placed the same distance away from the outside of the tub that the manufacturers selected when they tested the phone.<sup>56</sup>

121. In the second test, the phones were placed 2 millimeters from the tub, a smaller distance meant to reflect a phone being carried in a pants or shirt pocket, based on actual measurements of pieces of dress shirts, T-shirts, jeans, track pants and underwear.<sup>57</sup>

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<sup>51</sup> *Id.*

<sup>52</sup> *Id.*

<sup>53</sup> *Id.*

<sup>54</sup> *Id.*

<sup>55</sup> *Id.*

<sup>56</sup> *Id.*

<sup>57</sup> *Id.*



122. In a second round of testing in March 2019, a person touched or grasped the originally-tested iPhones, plus one additional one, for the duration of the process. This was action intended to activate sensors designed to reduce the phones' power.<sup>58</sup>

123. The results by model follow.

124. For the iPhone 7 models, in the original or standard test at 5 millimeters, the RF radiation exposure averaged 2.59 W/kg – more than the 1.6 W/kg limit. In the second or modified test at 5 millimeters, the RF radiation exposure averaged 3.225 W/kg – more than twice the federal exposure limit.<sup>59</sup> At 2 millimeters, results from the original and modified tests ranged from 3.5 W/kg to 7.15 W/kg.

KEY:  Federal exposure limit of 1.6 W/kg

#### Apple iPhone 7

##### Phone 1 - Standard test

Test distance	W/kg	
5mm from body	2.47	
2mm from body	7.15	

##### Phone 1 - Modified test

Test distance	W/kg	
5mm from body	3.46	
2mm from body	4.29	

##### Phone 2 - Standard test

Test distance	W/kg	
5mm from body	2.81	
2mm from body	3.5	

##### Phone 2 - Modified test

Test distance	W/kg	
5mm from body	3.26	
2mm from body	4.69	

##### Phone 3 - Standard test

Test distance	W/kg	
5mm from body	2.5	
2mm from body	3.55	

##### Phone 3 - Modified test

Test distance	W/kg	
5mm from body	2.91	
2mm from body	4.68	

##### Phone 4 - Modified test

Test distance	W/kg	
5mm from body	3.26	
2mm from body	5	

<sup>58</sup> *Id.*

<sup>59</sup> <https://www.chicagotribune.com/investigations/ct-cell-phone-radiation-testing-20190821-72qgu4nznlfda5kyuhteieh4da-story.html> (last accessed August 23, 2019).

125. The Apple iPhone X and iPhone 8 each scored three out of four tests above the federal limit of 1.6W/kg:

#### Apple iPhone X

##### Standard test

Test distance	W/kg
5mm from body	1.38
2mm from body	2.04

##### Modified test

Test distance	W/kg
5mm from body	2.19
2mm from body	2.01

#### Apple iPhone 8

##### Standard test

Test distance	W/kg
5mm from body	2.64
2mm from body	5.37

##### Modified test

Test distance	W/kg
5mm from body	1.1
2mm from body	2.64

126. When tested at 2 millimeters, the Samsung Galaxy S8 exceeded the federal limit by more than 500 percent:

#### Samsung Galaxy S9

##### Standard test

Test distance	W/kg
15mm from body	0.63
2mm from body	3.8

#### Samsung Galaxy S8

##### Standard test

Test distance	W/kg
10mm from body	1.53
2mm from body	8.22

#### Samsung Galaxy J3

##### Standard test

Test distance	W/kg
10mm from body	1.38
2mm from body	6.55

127. These results are not an aberration, but instead reflect actual emissions conducted by an FCC-accredited laboratory under the same conditions used by the manufacturers themselves.

128. Notwithstanding these results and the studies reflecting the dangers inherent at these levels, Defendants have failed to take steps to prevent this excessive RF radiation exposure, warn Plaintiffs and the Class of the dangers associated with using their products, and/or accurately disclose the RF radiation levels when the phones are used as marketed by Defendants.

#### 4. Testing initiated by Plaintiffs in 2019

129. In September 2019, Plaintiffs' counsel hired RF Exposure Lab in San Marcos, California to measure six different cellphone models, purchased brand new, for radiofrequency radiation.

130. As noted *supra*, RF Exposure Labs is an accredited testing lab recognized by the FCC and has conducted radiation tests for 15 years for wireless companies seeking FCC approval for new products.

131. From September 16, 2019 to October 1, 2019, six phones were tested: iPhone 7+, iPhone 8, iPhone XR, Samsung Galaxy S8, Galaxy S9, and Galaxy S10.

132. According to the lab, all the tests were done in accordance with FCC rules and guidelines.

133. The lab used the FCC ID number of each phone to access the SAR Evaluation Report that the phone manufacturer submitted to the FCC as part of the Equipment Authorization Application.

134. The lab identified the highest SAR value reported by the Defendant to the FCC in either the body-worn or hotspot/airplay RF radiation exposure condition.

135. The lab then tested each phone in the same configuration (band, frequency, technology, gap and channel) that yielded the highest reported SAR result.

136. In one phase of the testing, all phones were positioned at the same distance from the simulated body tissue that the manufacturers chose for their own tests.

137. To conduct the tests, each phone was placed underneath a tub containing specially formulated liquid intended to simulate the electrical properties of human body tissue.

1           138. The laboratory used a base station simulator to place a call to the phone and adjusted the  
2 base station's settings to replicate the desired configuration, causing the phone to operate at full  
3 power.

4           139. A probe attached to a robotic arm then moved in the liquid for eighteen minutes, taking  
5 276 measurements of the radiofrequency radiation absorbed. The results constituted the Specific  
6 Absorption Rate, or SAR, which must be under the federal safety limit.

7           140. Three tests were conducted on each phone. In the first test, each device was placed the  
8 same distance away from the outside of the tub that the manufacturers selected when they tested the  
9 phone.

10           141. In the second test, each phone was placed 2 millimeters from the tub, a smaller distance  
11 meant to reflect a phone being carried in a pants or shirt pocket, based on the measurements of pieces  
12 of dress shirts, T-shirts, jeans, track pants and underwear previously used for the Chicago Tribune  
13 tests.

14           142. In the third test, each phone was placed at 0mm, to simulate a person touching or  
15 grasping the phone.

16           143. The results by model follow.

17           144. For the iPhone 7+ model, for the test at 5 millimeters, the RF radiation exposure reached  
18 3.6 W/kg – more than twice the 1.6 W/kg limit. In the second test at 2 millimeters, the RF radiation  
19 exposure averaged 2.1123 W/kg and reached 4.87 W/kg, more than three times the federal exposure  
20 limit. At 0 millimeters, the RF radiation exposure averaged 3.034 W/kg and reached 5.87 W/kg, more  
21 than three times the federal exposure limit. A graphical depiction follows:

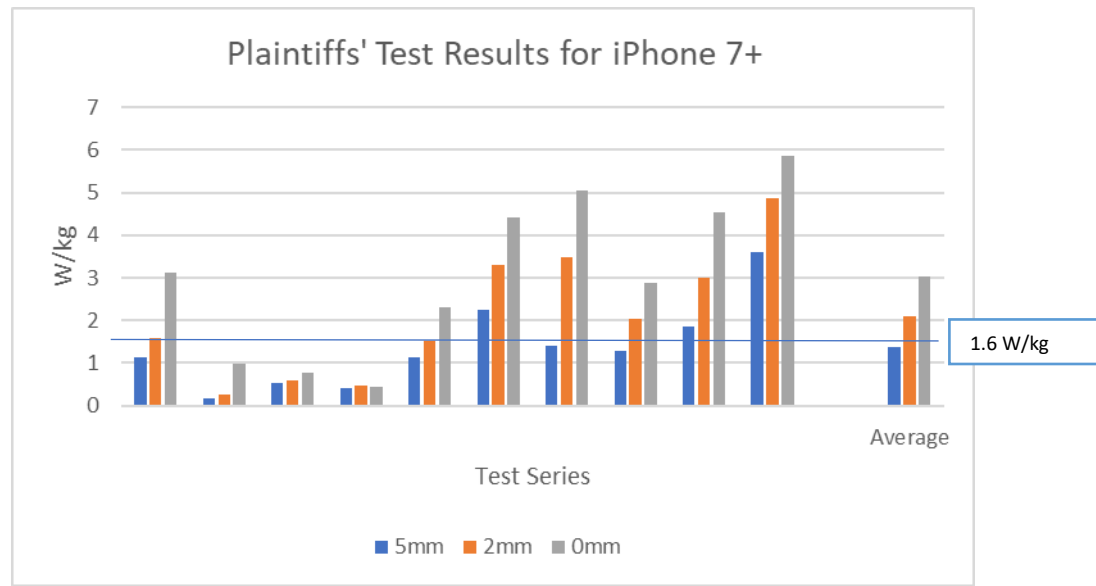
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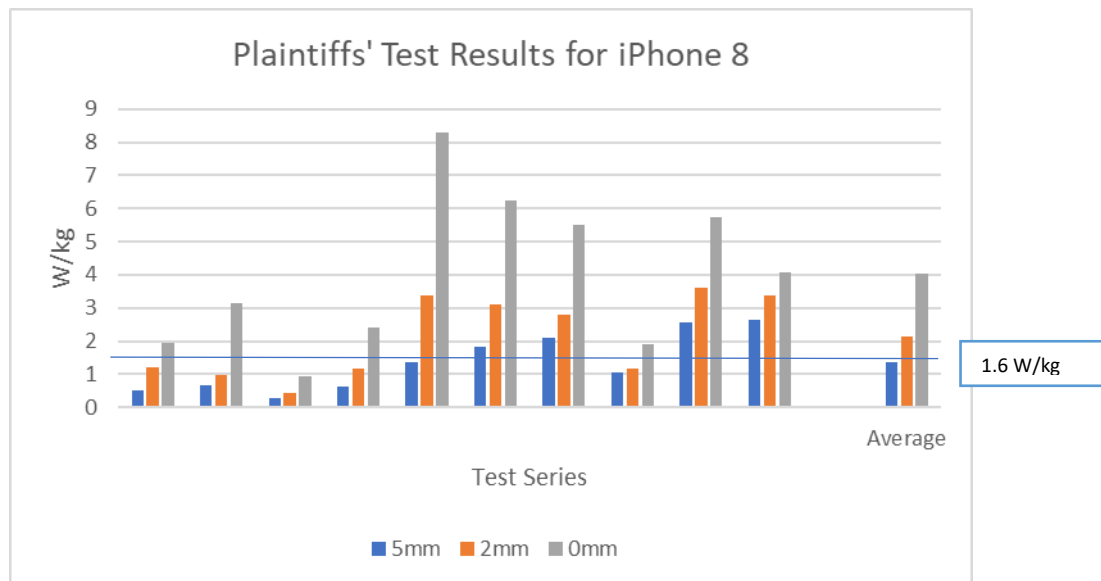
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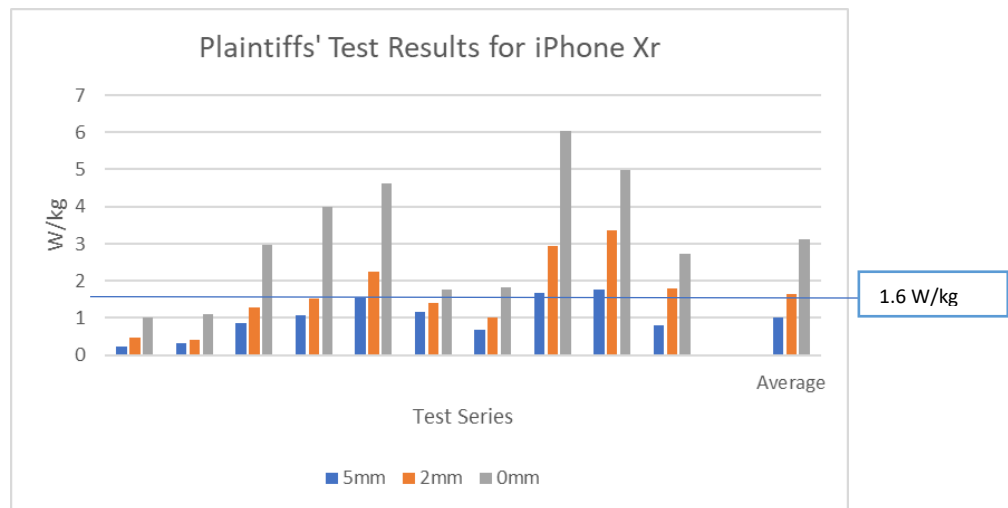
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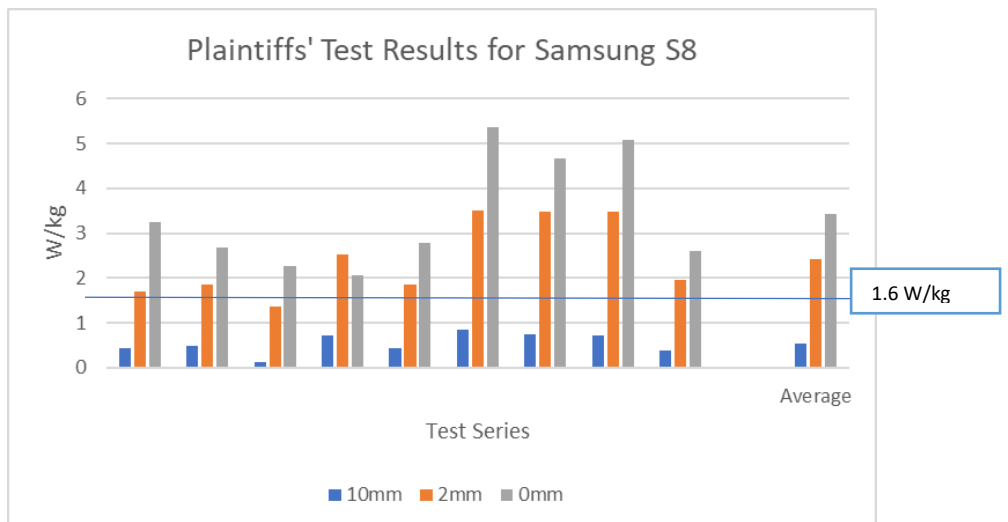
12 145. For the iPhone 8 model, for the test at 5 millimeters, the RF radiation exposure reached  
 13 2.57 W/kg – more than the 1.6 W/kg limit. In the second test at 2 millimeters, the RF radiation  
 14 exposure averaged 2.1251 W/kg and reached 3.61 W/kg, more than twice the federal exposure limit.  
 15 At 0 millimeters, the RF radiation exposure averaged 4.023 W/kg and reached 8.3 W/kg, 500 percent  
 16 more than the federal exposure limit. A graphical depiction follows:



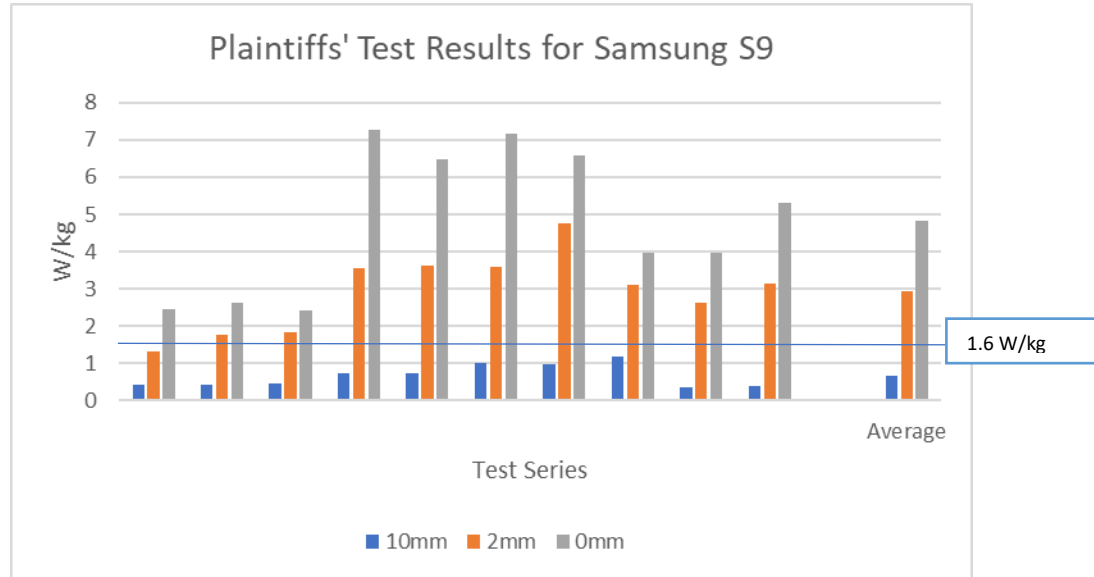
146. For the iPhone XR model, for the test at 5 millimeters, the RF radiation exposure reached 1.76 W/kg – more than the 1.6 W/kg limit. In the second test at 2 millimeters, the RF radiation exposure averaged reached 3.35 W/kg, more than twice the federal exposure limit. At 0 millimeters, the RF radiation exposure averaged 3.108 W/kg and reached 6.05 W/kg, nearly 400 percent more than the federal exposure limit.



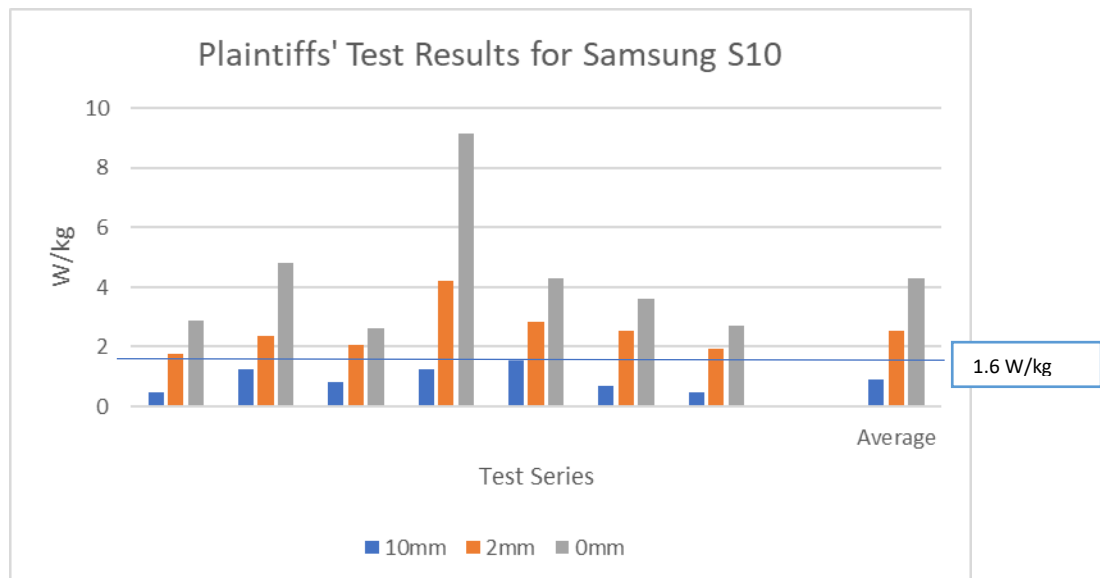
147. For the Samsung S8, for the test at 2 millimeters, the RF radiation exposure averaged 2.41 W/kg and reached 3.49 W/kg, more than twice the federal exposure limit. At 0 millimeters, the RF radiation exposure averaged 3.416 W/kg and reached 5.08 W/kg, more than three times the federal exposure limit.



148. For the Samsung S9, for the test at 2 millimeters, the RF radiation exposure averaged 2.929 W/kg and reached 4.75 W/kg, nearly three times the federal exposure limit. At 0 millimeters, the RF radiation exposure averaged 4.829 W/kg and reached 7.28 W/kg, 450 percent more than the federal exposure limit.



149. For the Samsung S10, for the test at 2 millimeters, the RF radiation exposure averaged 2.537 W/kg and reached 4.22 W/kg, nearly three times the federal exposure limit. At 0 millimeters, the RF radiation exposure averaged 4.294 W/kg and reached 9.17 W/kg, nearly 600 percent more than the federal exposure limit.



150. These results are not an aberration, but instead reflect actual emissions conducted by an FCC-accredited laboratory under the same conditions used by the manufacturers themselves.

151. Notwithstanding these results and the studies reflecting the dangers inherent at these levels, Defendants have failed to take steps to prevent this excessive RF radiation exposure, to accurately disclose the manner in which the phones may be used to avoid excessive RF radiation exposure, or to warn Plaintiffs and the Class of the dangers associated with using their products.

**E. Surveys Show Consumers Are Not Aware of the Risks of Using Their Smartphones in the Ways Marketed by Defendants**

152. In a July 2016 report entitled “Radiofrequency Exposure and the Health of Children,” France’s National Agency of Health Security of Food, Environment and Labour (ANSES) conceded that the public is largely unaware of instructions to keep distance between cell phones and one’s head and body.<sup>60</sup>

153. ANSES explained that, in addition to being held against the cheek between the mouth and the ear for phone conversations, smartphones “are now used especially as objects of entertainment in order to listen to music, watch films or play video games. In these conditions, the phones are no longer placed close to the head but in the hands, in front of the face, near the body (trunk) or in clothes pockets (legs, chest). . . .”<sup>61</sup>

154. ANSES stated that it was “unlikely that people, especially children, are aware of the conditions of use close to the body, as defined by manufacturers.”<sup>62</sup>

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<sup>60</sup> <https://ehtrust.org/cell-phone-radiation-scandal-french-government-data-indicates-cell-phones-exposeconsumers-radiation-levels-higher-manufacturers-claim/> (last accessed December 4, 2019).

<sup>61</sup> French Agency for Food, Environmental and Occupational Health & Safety Opinion and Report, “Exposure to Radio Frequencies and Child Health,” English Translation for Section 4.3.3 Exposure data specific to mobile telephones carried close to the body, Pages 71 to 73, available at [https://ehtrust.org/wp-content/uploads/Translated\\_Section\\_ANSES\\_Report.pdf](https://ehtrust.org/wp-content/uploads/Translated_Section_ANSES_Report.pdf) (last accessed September 4, 2019). The full report in French is available at <https://www.anses.fr/en/system/files/AP2012SA0091Ra.pdf> (last accessed September 4, 2019).

<sup>62</sup> <https://ehtrust.org/cell-phone-radiation-scandal-french-government-data-indicates-cell-phones-exposeconsumers-radiation-levels-higher-manufacturers-claim/> (last accessed December 5, 2019).



155. ANSES explained that testing is conducted generally at 15 mm away from the body, but that the separation between the body and the phone placed in a shirt pocket, for example, may be in fact only a few mm.<sup>63</sup>

156. In March 2017, a research report was released by Mission Research called the “2017 Cell Phone Risk-Knowledge Study” of 11,000 Canadians.<sup>64</sup>

157. The study found that most people carry their phones against their body, including 81% of men and 93% of individuals between the ages of 18-24.<sup>65</sup>

158. Just 6% of the survey respondents were “definitely aware” of cell phone warnings regarding the distance cell phones should be kept from the body.<sup>66</sup>

159. Significantly: “If they knew it was recommended they carry their phone at least five to 15 mm away from their body to stay within tested radiofrequency exposure levels, 75% of Canadian mobile phone users say they would stop carrying their phone any closer than that.”<sup>67</sup>

## VI. CLASS ACTION ALLEGATIONS

160. The Apple Plaintiffs bring this action as a class action pursuant to Federal Rules of Civil Procedure 23(a), 23(b) and/or 23(c) on behalf of themselves and all others similarly situated as members of the following “Apple Class”: “All persons who have owned or leased an iPhone for personal or household use in the United States.”

161. The Samsung Plaintiffs bring this action as a class action pursuant to Federal Rules of Civil Procedure 23(a), 23(b) and/or 23(c) on behalf of themselves and all others similarly situated as members of the following “Samsung Class”: “All persons who have owned or leased a Samsung smartphone for personal or household use in the United States.”

162. Additionally, Apple Plaintiffs Perlman, Hall, Goodwin, Coletti, Boggs, Zide, Gomolekoff, Ryan, Wellington, Sundell, Maekawa, Jacobs, Allen, Hornick, Weiler, Koppin, Faeryn,

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<sup>63</sup> [https://ehtrust.org/wp-content/uploads/Translated\\_Section\\_ANSES\\_Report.pdf](https://ehtrust.org/wp-content/uploads/Translated_Section_ANSES_Report.pdf)

<sup>64</sup> <https://ehtrust.org/wp-content/uploads/Marketplace-2017-Cell-Phone-Risk-Knowledge-Study.pdf>

<sup>65</sup> Id. at 4.

<sup>66</sup> Id. at 6.

<sup>67</sup> <https://ehtrust.org/wp-content/uploads/Marketplace-2017-Cell-Phone-Risk-Knowledge-Study.pdf>, at 8.

Kunze, Benjamin, and Cischke (“Apple Warranty Subclass Representatives”) bring this action as a class action pursuant to Federal Rules of Civil Procedure 23(a), 23(b), and/or 23(c) on behalf of themselves and all others similarly situated as members of the following “Apple Warranty Subclass”:

All persons residing in Alaska, Arkansas, California, Colorado, Delaware, District of Columbia, Georgia, Hawaii, Illinois, Indiana, Iowa, Kansas, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, North Dakota, Oklahoma, Pennsylvania, Rhode Island, South Carolina, South Dakota, Texas, Utah, Vermont, Virginia, West Virginia, and/or Wyoming who have owned or leased an iPhone for personal or household use.

163. And, Samsung Plaintiffs Benjamin, Chad Smith, Faeryn, and Sarah Smith (“Samsung Warranty Subclass Representatives”) bring this action as a class action pursuant to Federal Rules of Civil Procedure 23(a), 23(b), and/or 23(c) on behalf of themselves and all others similarly situated as members of the following “Samsung Warranty Subclass”:

All persons residing in Alaska, Arkansas, California, Colorado, Delaware, District of Columbia, Georgia, Hawaii, Illinois, Indiana, Iowa, Kansas, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, North Dakota, Oklahoma, Pennsylvania, Rhode Island, South Carolina, South Dakota, Texas, Utah, Vermont, Virginia, West Virginia, and Wyoming who have owned or leased a Samsung smartphone for personal or household use.

164. Specifically excluded from the proposed Classes are Defendants, any of their past, present or future officers, directors, trustees, agents, representatives, employees, principals, trusts, partners, joint ventures or controlled entities; any successors, assigns, heirs or other persons or entities related to or affiliated with Defendants; the Judge assigned to this action; and any member of the Judge’s immediate family.

165. **Numerosity.** The members of the Classes are so numerous as to render their individual joinder impracticable. Although the precise number of Class members is unknown, based upon information and belief Plaintiffs allege that the Class contains millions of members.

166. The true number of smartphones sold and/or Class members is known by Defendants and/or third-party wireless carriers, however. Thus, Class members may be notified of the pendency of this action through electronic mail, first class mail and/or by published notice.

167. ***Existence and Predominance of Common Questions of Law and Fact.*** Common questions of law and fact applicable to all members of the Classes predominate over any questions affecting only individual Class members. These common legal and factual questions include, but are not limited to, the following:

- a. Whether Apple and Samsung marketed their smartphones to be used and carried on and in close proximity to the human body;
- b. Whether Apple and Samsung knew the extent of RF radiation exposure from their smartphones when used on or in close proximity to the human body;
- c. Whether Defendants misrepresented or omitted to state the RF radiation exposure from their smartphones when used on or in close proximity to the human body;
- d. Whether Defendants owed a duty to Plaintiffs and Class members to disclose the actual RF radiation exposure of their smartphones when used on or in close proximity to the human body;
- e. Whether Defendants intentionally misrepresented the safety of the Plaintiffs' and Class members' smartphones;
- f. Whether Apple and Samsung represented and/or warranted that their smartphones were safe for ordinary use;
- g. Whether the smartphones were safe for ordinary use;
- h. Whether Defendants breached the implied warranty of merchantability regarding their smartphones;
- i. Whether the RF radiation from the smartphones placed Plaintiffs and Class members at risk for cancer and other health problems;
- j. Whether Plaintiffs or Class Members are entitled to medical monitoring;

1 k. Whether Plaintiffs and the members of the Class have sustained financial loss,  
2 and the proper measure of any such financial loss;

3 l. Whether Plaintiffs and the members of the Class are entitled to restitution;

4 m. Whether Plaintiffs and the members of the Class are entitled to damages, and the  
5 proper measure of any such damages.

6 168. **Typicality.** Plaintiffs' claims are typical of those held by the other members of the Class  
7 in that each of them owns one of Defendants' smartphones, used them on or in close proximity to  
8 their skin, and were not told by Defendants of the actual RF radiation exposure from doing so.

9 169. **Adequacy of Representation.** Plaintiffs will fairly and adequately protect the interests of  
10 the Classes. Plaintiffs have retained trial counsel highly experienced in complex litigation including  
11 complex consumer class action litigation, and Plaintiffs intend to vigorously prosecute this action.  
12 Plaintiffs have no interests in this action that are adverse or antagonistic to the interests of the Class.

13 170. **Superiority.** Class action litigation is superior to all other available means for the fair  
14 and efficient adjudication of this controversy. The damages, harm and financial detriment suffered by  
15 individual members of the Class are relatively minor compared to the burden and expense that would  
16 be entailed by individual prosecution of their claims against Defendants.

17 171. It would thus be practically impossible for the members of the Class, on an  
18 individualized basis, to effectively seek and obtain redress for the wrongs committed against them. In  
19 addition, even if the Class members could—and realistically would be willing—to pursue such  
20 individualized litigation, this Court likely could not reasonably sustain the imposition on resources  
21 that individualized litigation over this controversy would entail.

22 172. Further, individualized litigation would create the danger of inconsistent or  
23 contradictory judgments arising from the identical factual predicate.

24 173. Individualized litigation would also result in a substantial increase in the time and  
25 expense required of the parties and the Court to address the issues raised by this litigation.

26 174. By contrast, litigation of the controversy outlined herein as a class action provides the  
27 benefits of adjudication of these issues in a single, unitary proceeding, provides substantial economies  
28

1 of scale, allows comprehensive supervision of the legal and factual issues raised herein by a single  
2 court, and presents no unusual management difficulties under the circumstances presented here.

3 175. Damages may be calculated from the data maintained in Defendants' and third-party  
4 carriers' records, so that the cost of administering a recovery for the Class can be minimized. The  
5 precise measure of damages available to Plaintiffs and the Class, however, is not a barrier to class  
6 certification.

## 7 **VII. CLAIMS ALLEGED**

### 8 **COUNT I**

#### 9 **NEGLIGENT MISPRESENTATION AGAINST APPLE**

10 176. The Apple Plaintiffs incorporate by reference all preceding and subsequent paragraphs  
11 of this Complaint as if fully set forth here.

12 177. Apple had a duty to communicate accurate information to Plaintiffs about the RF  
13 radiation exposure from their iPhones.

14 178. Defendant intentionally misrepresented the safety of the iPhones, assuring Class  
15 Members that the iPhones had been adequately tested and were safe to use on and in close proximity  
16 to their bodies at all hours of the day and night, despite knowing that the RF radiation exposure  
17 exceeded federal limits when used in this manner and was linked to cancer and other health risks.

18 179. Even when repeatedly faced with a wealth of warnings from scientists and the dangers  
19 associated with RF radiation exposure from smartphones, Defendant continues to make no effort to  
20 protect or warn current or prospective owners of its iPhones. Rather, Defendant has turned a blind eye  
21 to these inconvenient truths, opting to double-down on statements that the iPhones are safe to use  
22 without restriction on placement.

23 180. Plaintiffs, in reliance on Defendant's claims regarding the ways in which the iPhone was  
24 safe to and should be used, continued to use and place the iPhone on and in close proximity to their  
25 bodies.

26 181. Plaintiffs' reliance was justified given Defendant's superior position of authority and  
27 knowledge.  
28

182. As a result, on information and belief, Plaintiffs have been exposed to harmful levels of RF radiation that could negatively affect their health for many years to come.

183. Plaintiffs and Class members are thus entitled to the establishment of a medical monitoring program that includes, among other things: (1) Notifying all Class Members of the RF radiation exposure from Defendant's smartphones when used on or in close proximity to the human body; (2) Establishing a trust fund, in an amount to be determined, to pay for the medical monitoring of all Class members to diagnose conditions resulting from RF radiation exposure.

**COUNT II**  
**NEGLIGENT MISPRESENTATION AGAINST SAMSUNG**

184. The Samsung Plaintiffs incorporate by reference all preceding and subsequent paragraphs of this Complaint as if fully set forth here.

185. Samsung had a duty to communicate accurate information to Plaintiffs about the RF radiation exposure from their iPhones.

186. Defendant intentionally misrepresented the safety of the iPhones, assuring Class Members that the iPhones had been adequately tested, and were safe to use on and in close proximity to their bodies at all hours of the day and night, despite knowing that the RF radiation exposure exceeded federal limits when used in this manner and was linked to cancer and other health risks..

187. Even when repeatedly faced with a wealth of warnings from scientists and the dangers associated with RF radiation exposure from smartphones, Defendant continues to make no effort to protect or warn current or prospective owners of its iPhones. Rather, Defendant has turned a blind eye to these inconvenient truths, opting to double-down on statements that the iPhones are safe to use without restriction on placement.

188. Plaintiffs, in reliance on Defendant's claims regarding the ways in which the iPhone was safe to and should be used, continued to use and place the iPhone on and in close proximity to their bodies.

189. Plaintiffs' reliance was justified given Defendant's superior position of authority and knowledge.



**COUNT IV**  
**NEGLIGENCE AGAINST SAMSUNG**

198. The Samsung Plaintiffs incorporate by reference all preceding and subsequent paragraphs of this Complaint as if fully set forth here.

199. Samsung owed Plaintiffs a duty to exercise reasonable care in selling smartphones that emitted RF radiation at safe levels when placed on or in close proximity to their bodies.

200. Defendant failed to exercise reasonable care when, after knowingly designing and manufacturing iPhones whose RF radiation exposure exceeded safe limits when used on or in close proximity to the human body, it did not take any measures to warn or protect Plaintiffs and Class members from RF radiation exposure and, instead, covered up any risks by misrepresenting the safety of the smartphones.

201. Defendant knew or should have known that Plaintiffs and the Class members would foreseeably suffer injury from RF radiation exposure as a result of Defendant's failure to exercise ordinary care.

202. Defendant's negligence proximately caused Plaintiffs' and the Class members' damages and their increased risk of harm as documented herein.

203. Plaintiffs and Class members are thus entitled to the establishment of a medical monitoring program that includes, among other things: (1) Notifying all Class Members of the RF radiation exposure from Defendant's smartphones when used on or in close proximity to the human body; (2) Establishing a trust fund, in an amount to be determined, to pay for the medical monitoring of all Class members to diagnose conditions resulting from RF radiation exposure.

**COUNT V**  
**VIOLATIONS OF THE CALIFORNIA UNFAIR COMPETITION LAW (CAL. BUS. & PROF. CODE § 17200 ET SEQ.) AGAINST APPLE**

204. The Apple Plaintiffs incorporate by reference all preceding and subsequent paragraphs as though fully set forth herein.

205. This claim is brought by the Apple Plaintiffs on behalf of the nationwide Apple Class.

206. California's Unfair Competition Law (UCL), CAL. BUS. & PROF. CODE § 17200 et seq., proscribes acts of unfair competition, including "any unlawful, unfair or fraudulent business act



1 or practice and unfair, deceptive, untrue or misleading advertising.” Defendant’s conduct, as  
2 described herein, was and is in violation of the UCL.

3 207. Defendant’s conduct violates the UCL in at least the following ways: Defendant failed  
4 to disclose that its smartphones (i) emitted RF radiation when used or carried on or in close proximity  
5 to the human body at unsafe levels and/or at levels that exceeded federal limits; and (ii) that the RF  
6 radiation exposure was far worse than a reasonable consumer would expect given the premium paid  
7 for these smartphones over a cellphone.

8 208. Defendant intentionally and knowingly misrepresented material facts regarding its  
9 smartphones with an intent to mislead Plaintiffs and the Class.

10 209. In purchasing or leasing the smartphones, Plaintiffs and the other Class members were  
11 deceived by Defendant’s failure to disclose that the phones emitted RF radiation when used or carried  
12 on or in close proximity to the human body at unsafe levels and/or at levels that exceeded federal  
13 limits.

14 210. Plaintiffs relied upon Defendant’s false misrepresentations when purchasing their  
15 phones and as a result suffered an injury-in-fact and lost money.

16 211. Plaintiffs relied on Defendant’s material representations and/or omissions that the  
17 smartphones they were purchasing were safe to use and free from defects.

18 212. Defendant owed Plaintiffs and the Class a duty to disclose the truth about its the RF  
19 radiation exposure from its smartphones, because Defendant: (i) possessed exclusive knowledge of  
20 the levels of RF radiation emitted from its phones; and (ii) misrepresented and/or made incomplete  
21 representations concerning the levels of RF radiation when the phones were used or carried on or in  
22 close proximity to the body.

23 213. Plaintiffs and the other Class members were injured and suffered ascertainable loss,  
24 injury-in-fact, and/or actual damage as a proximate result of Defendant’s conduct in that Plaintiffs and  
25 the other Class members overpaid for their smartphones, and/or their smartphones have suffered a  
26 diminution in value. These injuries are the direct and natural consequence of Defendant’s  
27 misrepresentations and omissions.  
28

214. Defendant's violations present a continuing risk to Plaintiffs as well as to the general public. Defendant's unlawful acts and practices complained of herein affect the public interest.

215. Absent those misrepresentations and omissions, Plaintiffs and the other Class members would not have purchased or leased these smartphones, would not have purchased or leased these smartphones at the prices they paid, and/or would have purchased or leased less expensive alternative cellphones that did not emit RF radiation at unsafe levels.

216. Accordingly, Plaintiffs and the other Class members have suffered injury in fact, including lost money or property, as a result of Defendant's misrepresentations and omissions.

217. Plaintiffs request that this Court enter such orders or judgments as may be necessary to restore to Plaintiffs and members of the Class any money it acquired by unfair competition, including restitution and/or restitutionary disgorgement, as provided in CAL. BUS. & PROF. CODE § 17203 and CAL. CIV. CODE § 3345; and for such other relief as may be appropriate.

**COUNT VI**  
**VIOLATIONS OF THE CALIFORNIA UNFAIR COMPETITION LAW (CAL. BUS. & PROF. CODE § 17200 ET SEQ.) AGAINST SAMSUNG**

218. The Samsung Plaintiffs incorporate by reference all preceding and subsequent paragraphs as though fully set forth herein.

219. This claim is brought by the Samsung Plaintiffs on behalf of the nationwide Samsung Class.

220. California's Unfair Competition Law (UCL), CAL. BUS. & PROF. CODE § 17200 et seq., proscribes acts of unfair competition, including "any unlawful, unfair or fraudulent business act or practice and unfair, deceptive, untrue or misleading advertising." Defendant's conduct, as described herein, was and is in violation of the UCL.

221. Defendant's conduct violates the UCL in at least the following ways: Defendant failed to disclose that its smartphones (i) emitted RF radiation when used or carried on or in close proximity to the human body at unsafe levels and/or levels that exceeded federal limits; and (ii) that the RF radiation exposure was far worse than a reasonable consumer would expect given the premium paid for these smartphones over a cellphone.

1           222. Defendant intentionally and knowingly misrepresented material facts regarding its  
2 smartphones with an intent to mislead Plaintiffs and the Class.

3           223. In purchasing or leasing Defendant's smartphones, Plaintiffs and the other Class  
4 members were deceived by Defendant's failure to disclose that the phones emitted RF radiation when  
5 used or carried on or in close proximity to the human body at unsafe levels and/or levels that  
6 exceeded federal limits.

7           224. Plaintiffs relied upon Defendant's false misrepresentations when purchasing their  
8 phones and as a result suffered an injury-in-fact and lost money.

9           225. Plaintiffs relied on Defendant's material representations and/or omissions that its  
10 smartphones they were purchasing were safe to use and free from defects.

11           226. Defendant owed Plaintiffs and the Class a duty to disclose the truth about its the RF  
12 radiation exposure from its smartphones, because Defendant: (i) possessed exclusive knowledge of  
13 the levels of RF radiation emitted from its phones; and (ii) misrepresented and/or made incomplete  
14 representations concerning the levels of RF radiation when the phones were used or carried on or in  
15 close proximity to the body.

16           227. Plaintiffs and the other Class members were injured and suffered ascertainable loss,  
17 injury-in-fact, and/or actual damage as a proximate result of Defendant's conduct in that Plaintiffs and  
18 the other Class members overpaid for their smartphones, and/or their smartphones have suffered a  
19 diminution in value. These injuries are the direct and natural consequence of Defendant's  
20 misrepresentations and omissions.

21           228. Defendant's violations present a continuing risk to Plaintiffs as well as to the general  
22 public. Defendant's unlawful acts and practices complained of herein affect the public interest.

23           229. Absent those misrepresentations and omissions, Plaintiffs and the other Class members  
24 would not have purchased or leased these smartphones, would not have purchased or leased these  
25 smartphones at the prices they paid, and/or would have purchased or leased less expensive alternative  
26 cellphones that did not emit RF radiation exposure at unsafe levels.

27           230. Accordingly, Plaintiffs and the other Class members have suffered injury in fact,  
28 including lost money or property, as a result of Defendant's misrepresentations and omissions.



1 representations concerning the levels of RF radiation when the phones were used or carried on or in  
2 close proximity to the body.

3 240. Plaintiffs and the other Class members relied on Defendant's material representations  
4 and/or omissions that its smartphones they were purchasing were safe to use and free from defects.

5 241. Defendant's conduct proximately caused injuries to Plaintiffs and the other Class  
6 members.

7 242. Plaintiffs and the other Class members were injured and suffered ascertainable loss,  
8 injury-in-fact, and/or actual damage as a proximate result of Defendant's conduct in that Plaintiffs and  
9 the other Class members overpaid for their smartphones, and/or their smartphones have suffered a  
10 diminution in value. These injuries are the direct and natural consequence of Defendant's  
11 misrepresentations and omissions.

12 243. Defendant's misrepresentations and omissions alleged herein caused Plaintiffs and the  
13 other Class members to make their purchases or leases of smartphones.

14 244. Absent those misrepresentations and omissions, Plaintiffs and the other Class members  
15 would not have purchased or leased these smartphones, would not have purchased or leased these  
16 smartphones at the prices they paid, and/or would have purchased or leased less expensive alternative  
17 cellphones that did not emit RF radiation exposure at unsafe levels.

18 245. Plaintiffs were deceived by Apple's failure to disclose the true nature of its  
19 Smartphones.

20 246. Plaintiffs demand judgment against Defendant under the CLRA for injunctive relief as  
21 may be appropriate and an award of attorneys' fees and costs.

22 247. Plaintiffs have provided Defendant with notice of its violations of the CLRA pursuant to  
23 CAL. CIV. CODE § 1782(a). The notice was transmitted to Defendant on August 23, 2019.

24 248. Because thirty days have passed since this letter was transmitted, and Defendant has  
25 failed to adequately address the violations alleged herein, Plaintiffs also seek damages, restitution,  
26 attorneys' fees and costs under the CLRA.

27 //

28 //

**COUNT VIII**  
**VIOLATIONS OF THE CALIFORNIA CONSUMERS LEGAL REMEDIES ACT (CAL. CIV. CODE. §§ 1750, ET SEQ.) AGAINST SAMSUNG**

249. The Samsung Plaintiffs incorporate by reference all preceding and subsequent paragraphs as though fully set forth herein.

250. This claim is brought by the Samsung Plaintiffs on behalf of the nationwide Samsung Class.

251. Defendant violated the California Consumers Legal Remedies Act (“CLRA”) in numerous respects. Defendant failed to disclose that its smartphones (i) emitted RF radiation when used or carried on or in close proximity to the human body at unsafe levels and/or levels that exceeded federal limits; and (ii) that the RF radiation exposure was far worse than a reasonable consumer would expect given the premium paid for these smartphones over a cellphone.

252. Defendant intentionally and knowingly misrepresented material facts regarding its smartphones with an intent to mislead Plaintiffs and the Class.

253. In purchasing or leasing Defendant’s smartphones, Plaintiffs and the other Class members were deceived by Defendant’s failure to disclose that the phones emitted RF radiation when used or carried on or in close proximity to the human body at unsafe levels and/or levels that exceeded federal limits.

254. Plaintiffs and Class members reasonably relied upon Defendant's false misrepresentations and omissions. They had no way of knowing that Defendant's representations were false and gravely misleading. Plaintiffs and Class members did not, and could not, unravel Defendant's deception on their own.

255. Defendant knew or should have known that its conduct violated the CLRA.

256. Defendant owed Plaintiffs and the Class a duty to disclose the truth about its the RF radiation exposure from its smartphones, because Defendant: (i) possessed exclusive knowledge of the levels of RF radiation emitted from its phones; and (ii) misrepresented and/or made incomplete representations concerning the levels of RF radiation when the phones were used or carried on or in close proximity to the body.

1           257. Plaintiffs and the other Class members relied on Defendant's material representations  
2 and/or omissions that its smartphones they were purchasing were safe to use and free from defects.

3           258. Defendant's conduct proximately caused injuries to Plaintiffs and the other Class  
4 members.

5           259. Plaintiffs and the other Class members were injured and suffered ascertainable loss,  
6 injury-in-fact, and/or actual damage as a proximate result of Defendant's conduct in that Plaintiffs and  
7 the other Class members overpaid for their smartphones, and/or their smartphones have suffered a  
8 diminution in value. These injuries are the direct and natural consequence of Defendant's  
9 misrepresentations and omissions.

10          260. Defendant's misrepresentations and omissions alleged herein caused Plaintiffs and the  
11 other Class members to make their purchases or leases of their smartphones.

12          261. Absent those misrepresentations and omissions, Plaintiffs and the other Class members  
13 would not have purchased or leased these smartphones, would not have purchased or leased these  
14 smartphones at the prices they paid, and/or would have purchased or leased less expensive alternative  
15 cellphones that did not emit RF radiation exposure at unsafe levels.

16          262. Plaintiffs were deceived by Samsung's failure to disclose the true nature of its  
17 smartphones.

18          263. Plaintiffs demand judgment against Defendant under the CLRA for injunctive relief as  
19 may be appropriate and an award of attorneys' fees and costs.

20          264. Plaintiffs have provided Defendant with notice of its violations of the CLRA pursuant to  
21 CAL. CIV. CODE § 1782(a). The notice was transmitted to Defendant on August 23, 2019.

22          265. Because thirty days have passed since this letter was transmitted, and Defendant has  
23 failed to adequately address the violations alleged herein, Plaintiffs also seek damages, restitution,  
24 attorneys' fees and costs under the CLRA.

25 //

26 //

27 //

28 //

**COUNT IX**  
**VIOLATIONS OF THE CALIFORNIA FALSE ADVERTISING LAW (CAL. BUS. & PROF. CODE § 17500 ET SEQ.) AGAINST APPLE**

266. Plaintiffs incorporate by reference all preceding and subsequent paragraphs as though fully set forth herein.

267. This claim is brought by the Apple Plaintiffs on behalf of members of the Apple Class.

268. CAL. BUS. & PROF. CODE § 17500 states: "It is unlawful for any . . . corporation . . . with intent directly or indirectly to dispose of real or personal property . . . to induce the public to enter into any obligation relating thereto, to make or disseminate or cause to be made or disseminated . . . from this state before the public in any state, in any newspaper or other publication, or any advertising device, . . . or in any other manner or means whatever, including over the Internet, any statement . . . which is untrue or misleading, and which is known, or which by the exercise of reasonable care should be known, to be untrue or misleading."

269. Defendant failed to disclose that its smartphones (i) emitted RF radiation when used or carried on or in close proximity to the human body at unsafe levels and/or levels that exceeded federal limits; and (ii) that the RF radiation exposure was far worse than a reasonable consumer would expect given the premium paid for these smartphones over a cellphone.

270. Defendant caused to be made or disseminated through California and the United States, through advertising, marketing and other publications, statements that were untrue or misleading, and which were known, or which by the exercise of reasonable care should have been known to Defendant, to be untrue and misleading to consumers, including Plaintiffs and the other Class members.

271. Defendant has violated § 17500 because the misrepresentations and omissions regarding the functionality, reliability, and safety of its smartphones as set forth in this Complaint were material and likely to deceive a reasonable consumer.

272. Plaintiffs and the other Class members have suffered an injury in fact, including the loss of money or property, as a result of Defendant's unfair, unlawful, and/or deceptive practices. In purchasing or leasing the smartphones, Plaintiffs and the other Class members relied on the



1 misrepresentations and/or omissions of Defendant with respect to the functionality, reliability, and  
2 safety of its smartphones.

3 273. Defendant's representations turned out not to be true because its smartphones emit  
4 unsafe levels of RF radiation and/or levels that exceeded federal limits when used or carried on or in  
5 close proximity to the body.

6 274. Had Plaintiffs and the other Class members known this, they would not have purchased  
7 or leased their smartphones and/or paid as much for them. Accordingly, Plaintiffs and the other Class  
8 members overpaid for their smartphones.

9 275. All the wrongful conduct alleged herein occurred, and continues to occur, in the conduct  
10 of Defendant's business.

11 276. Defendant's wrongful conduct is part of a pattern or generalized course of conduct that  
12 is still perpetuated and repeated, both in the State of California and nationwide.

13 277. The facts concealed and omitted by Defendant to Plaintiffs and the other Class members  
14 are material in that a reasonable consumer would have considered them to be important in deciding  
15 whether to purchase or lease Defendant's smartphones or pay a lower price. Had Plaintiffs and the  
16 other Class members known of the higher RF radiation exposure at the time they purchased or leased  
17 their smartphones, they would not have purchased or leased those smartphones, or would have paid  
18 substantially less than they did.

19 278. Plaintiffs' and the other Class members' injuries were proximately caused by  
20 Defendant's fraudulent and deceptive business practices.

21 279. Plaintiffs, individually and on behalf of the other Class members, request that this Court  
22 enter such orders or judgments as may be necessary to restore to Plaintiffs and the other Class  
23 members any money Defendant acquired by unfair competition, including restitution and/or  
24 restitutionary disgorgement, and for such other relief as may be appropriate.

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**COUNT X**  
**VIOLATIONS OF THE CALIFORNIA FALSE ADVERTISING LAW (CAL. BUS. & PROF. CODE § 17500 ET SEQ.) AGAINST SAMSUNG**

280. The Samsung Plaintiffs incorporate by reference all preceding and subsequent paragraphs as though fully set forth herein.

281. This claim is brought by the Samsung Plaintiffs on behalf of the nationwide Samsung Class.

282. Plaintiffs incorporate by reference all paragraphs as though fully set forth herein.

283. This claim is brought by the Samsung Plaintiffs on behalf of purchasers who are members of the Samsung Class.

284. CAL. BUS. & PROF. CODE § 17500 states: "It is unlawful for any . . . corporation . . . with intent directly or indirectly to dispose of real or personal property . . . to induce the public to enter into any obligation relating thereto, to make or disseminate or cause to be made or disseminated . . . from this state before the public in any state, in any newspaper or other publication, or any advertising device, . . . or in any other manner or means whatever, including over the Internet, any statement . . . which is untrue or misleading, and which is known, or which by the exercise of reasonable care should be known, to be untrue or misleading."

285. Defendant failed to disclose that the that its smartphones (i) emitted RF radiation when used or carried on or in close proximity to the human body at unsafe levels and/or levels that exceeded federal limits; and (ii) that the RF radiation exposure was far worse than a reasonable consumer would expect given the premium paid for these smartphones over a cellphone.

286. Defendant caused to be made or disseminated through California and the United States, through advertising, marketing and other publications, statements that were untrue or misleading, and which were known, or which by the exercise of reasonable care should have been known to Defendant, to be untrue and misleading to consumers, including Plaintiffs and the other Class members.

1           287. Defendant has violated § 17500 because the misrepresentations and omissions regarding  
2 the functionality, reliability, and safety of the smartphones as set forth in this Complaint were material  
3 and likely to deceive a reasonable consumer.

4           288. Plaintiffs and the other Class members have suffered an injury in fact, including the loss  
5 of money or property, as a result of Defendant's unfair, unlawful, and/or deceptive practices. In  
6 purchasing or leasing their smartphones, Plaintiffs and the other Class members relied on the  
7 misrepresentations and/or omissions of Defendant with respect to the functionality, reliability, and  
8 safety of the smartphones.

9           289. Defendant's representations turned out not to be true because its smartphones emit  
10 unsafe levels of RF radiation and/or levels that exceeded federal limits when used or carried on or in  
11 close proximity to the body.

12           290. Had Plaintiffs and the other Class members known this, they would not have purchased  
13 or leased their smartphones and/or paid as much for them. Accordingly, Plaintiffs and the other Class  
14 members overpaid for their smartphones.

15           291. All of the wrongful conduct alleged herein occurred, and continues to occur, in the  
16 conduct of Defendant's business.

17           292. Defendant's wrongful conduct is part of a pattern or generalized course of conduct that  
18 is still perpetuated and repeated, both in the State of California and nationwide.

19           293. The facts concealed and omitted by Defendant to Plaintiffs and the other Class members  
20 are material in that a reasonable consumer would have considered them to be important in deciding  
21 whether to purchase or lease the smartphones or pay a lower price. Had Plaintiffs and the other Class  
22 members known of the higher RF radiation exposure at the time they purchased or leased their  
23 smartphones, they would not have purchased or leased those smartphones, or would have paid  
24 substantially less than they did.

25           294. Plaintiffs' and the other Class members' injuries were proximately caused by  
26 Defendant's fraudulent and deceptive business practices.

27           295. Plaintiffs, individually and on behalf of the other Class members, request that this Court  
28 enter such orders or judgments as may be necessary to restore to Plaintiffs and the other Class

members any money Defendant acquired by unfair competition, including restitution and/or restitutionary disgorgement, and for such other relief as may be appropriate.

**COUNT XI**  
**ALTERNATIVE COUNT FOR VIOLATION OF STATE CONSUMER PROTECTION ACTS**  
**AGAINST APPLE**

296. Plaintiffs incorporate by reference all preceding and subsequent paragraphs of this Complaint as if fully set forth herein.

297. At all times relevant hereto, Defendant designed, manufactured, produced, marketed and/or sold its smartphones.

298. The Apple Plaintiffs bring this alternative Count against Apple, individually, and on behalf of all similarly situated residents of each of the 50 states for violations of the state consumer protection acts including:

- a. the Alaska Unfair Trade Practices and Consumer Protection Act, Alaska Stat. § 45.50.471, et seq.;
- b. the Arizona Consumer Fraud Act, Ariz. Rev. Stat. §§ 44-1521, et seq.;
- c. the Arkansas Deceptive Trade Practices Act, Ark. Code § 4-88-101, et seq.;
- d. the California Unfair Competition Law, Bus. & Prof. Code §§ 17200, et seq. and 17500, et seq.;
- e. the California Consumers Legal Remedies Act, Cal. Civ. Code § 1750, et seq.;
- f. the Colorado Consumer Protection Act, Colo. Rev. Stat. Ann. § 6-1-101, et seq.;
- g. the Connecticut Unfair Trade Practices Act, Conn. Gen Stat. Ann. § 42-110, et seq.;
- h. the Delaware Consumer Fraud Act, 6 Del. Code § 2513, et seq.;
- i. the D.C. Consumer Protection Procedures Act, D.C. Code § 28-3901, et seq.;
- j. the Florida Deceptive and Unfair Trade Practices Act, Fla. Stat. Ann. § 501.201, et seq.;
- k. the Georgia Fair Business Practices Act, Ga. Code Ann. § 10-1-390, et seq.;
- l. the Hawaii Unfair Competition Law, Haw. Rev. Stat. § 480-2, et seq.;
- m. the Idaho Consumer Protection Act, Idaho Code. Ann. § 48-601, et seq.;

- n. the Illinois Consumer Fraud and Deceptive Business Practices Act, 815 ILCS 501/1, et seq.;
- o. the Indiana Deceptive Consumer Sales Act, Ind. Code § 24-5-0.5-2, et seq.;
- p. the Kansas Consumer Protection Act, Kan. Stat. Ann. § 50-623, et seq.;
- q. the Kentucky Consumer Protection Act, Ky. Rev. Stat. Ann. § 367.110, et seq.;
- r. the Louisiana Unfair Trade Practices and Consumer Protection Law, LSA-R.S. 51:1401, et seq.;
- s. the Maine Unfair Trade Practices Act, Me. Rev. Stat. Ann. Tit. 5, § 207, et seq.;
- t. the Maryland Consumer Protection Act, Md. Code Ann. Com. Law, § 13-301, et seq.;
- u. the Massachusetts Regulation of Business Practices for Consumers Protection Act, Mass. Gen Laws Ann. Ch. 93A, et seq.;
- v. the Michigan Consumer Protection Act, Mich. Comp. Laws Ann. § 445.901, et seq.;
- w. the Minnesota Prevention of Consumer Fraud Act, Minn. Stat. § 325F, et seq.;
- x. the Missouri Merchandising Practices Act, Mo. Rev. Stat. § 407, et seq.;
- y. the Nebraska Consumer Protection Act, Neb. Rev. St. §§ 59-1601, et seq.;
- z. the Nevada Deceptive Trade Practices Act, Nev. Rev. Stat. § 41.600, et seq.;
- aa. the New Hampshire Regulation of Business Practices for Consumer Protection, N.H. Rev. Stat. § 358-A:1, et seq.;
- bb. the New Jersey Consumer Fraud Act, N.J. Stat. Ann. § 56:8, et seq.;
- cc. the New Mexico Unfair Practices Act, N.M. Stat. Ann. § 57-12-1, et seq.;
- dd. the New York Consumer Protection from Deceptive Acts and Practices, N.Y. Gen. Bus. Law § 349, et seq.;
- ee. the North Carolina Unfair and Deceptive Trade Practices Act, N.C. Gen Stat. § 75-1.1, et seq.;
- ff. the North Dakota Consumer Fraud Act, N.D. Cent. Code § 51-15, et seq.;
- gg. the Ohio Consumer Sales Practices Act, Ohio Rev. Code Ann. § 1345.01, et seq.;
- hh. the Oklahoma Consumer Protection Act, Okla. Stat. tit. 15 § 751, et seq.;
- ii. the Oregon Unlawful Trade Practices Act, Or. Rev. Stat. § 646.605, et seq.;

1           jj. the Pennsylvania Unfair Trade Practices and Consumer Protection Law, 73 P.S. § 201-  
2           1, et seq.;

3           kk. the Rhode Island Deceptive Trade Practices Act, R.I. Gen. Laws § 6-13.1-5.2(B), et  
4           seq.;

5           ll. the South Carolina Unfair Trade Practices Act, S.C. Code Ann. §§ 39-5- 10, et seq.;

6           mm. the South Dakota Deceptive Trade Practices and Consumer Protection, S.D. Codified  
7           Laws § 37-24-1, et seq.;

8           nn. the Tennessee Consumer Protection Act, Tenn. Code Ann. § 47-18-101, et seq.;

9           oo. the Texas Deceptive Trade Practices-Consumer Protection Act, Tex. Code Ann., Bus. &  
10          Con. § 17.41, et seq.;

11          pp. the Utah Consumer Sales Practices Act, Utah Code. Ann. § 13-11-175, et seq.;

12          qq. the Vermont Consumer Fraud Act, 9 V.S.A. § 2451, et seq.;

13          rr. the Virginia Consumer Protection Act of 1977, Va. Code Ann. § 59.1-199, et seq.;

14          ss. the Washington Consumer Protection Act, Wash. Rev. Code § 19.86.010, et seq.;

15          tt. the West Virginia Consumer Credit and Protection Act, W. Va. Code § 46A, et seq.;

16          uu. the Wisconsin Deceptive Trade Practices Act, Wis. Stat. § 100.18, et seq.; and

17          vv. the Wyoming Consumer Protection Act, Wyo. Stat. Ann. § 40-12-101, et seq.

18          299. The acts, practices, misrepresentations and omissions by Defendant described above,  
19          and Defendant's dissemination of deceptive and misleading advertising and marketing materials in  
20          connection therewith, occurring in the course of conduct involving trade or commerce, constitute  
21          unfair methods of competition and unfair or deceptive acts or practices within the meaning of each of  
22          the above-enumerated statutes.

23          300. Defendant's acts and practices created a likelihood of confusion or of misunderstanding  
24          and misled, deceived or damaged Plaintiffs and members of the Class in connection with the sale or  
25          advertisement of its smartphones. Defendant's conduct also constituted the use or employment of  
26          deception, fraud, false pretense, false promise, misrepresentation, or knowingly concealing,  
27          suppressing, or omitting a material fact with intent that others rely upon the concealment, suppression  
28

1 or omission in connection with the sale or advertisement of goods or services whether or not a person  
2 has in fact been misled, deceived or damaged in violation of each of the above-enumerated statutes.

3 301. Plaintiffs, on behalf of themselves and the other Class members, seek monetary  
4 damages, treble damages and such other and further relief as set forth in each of the above enumerated  
5 statutes.

6 **COUNT XII**  
7 **ALTERNATIVE COUNT FOR VIOLATION OF STATE CONSUMER PROTECTION ACTS**  
8 **AGAINST SAMSUNG**

9 302. Plaintiffs incorporate by reference all preceding and subsequent paragraphs of this  
10 Complaint as if fully set forth herein.

11 303. The Samsung Plaintiffs bring this alternative Count against Samsung, individually, and  
12 on behalf of all similarly situated residents of each of the 50 states for violations of the state consumer  
13 protection acts including:

- 14 a. the Alaska Unfair Trade Practices and Consumer Protection Act, Alaska Stat. §  
15 45.50.471, et seq.;
- 16 b. the Arizona Consumer Fraud Act, Ariz. Rev. Stat. §§ 44-1521, et seq.;
- 17 c. the Arkansas Deceptive Trade Practices Act, Ark. Code § 4-88-101, et seq.;
- 18 d. the California Unfair Competition Law, Bus. & Prof. Code §§ 17200, et seq. and 17500,  
19 et seq.;
- 20 e. the California Consumers Legal Remedies Act, Cal. Civ. Code § 1750, et seq.;
- 21 f. the Colorado Consumer Protection Act, Colo. Rev. Stat. Ann. § 6-1-101, et seq.;
- 22 g. the Connecticut Unfair Trade Practices Act, Conn. Gen Stat. Ann. § 42- 110, et seq.;
- 23 h. the Delaware Consumer Fraud Act, 6 Del. Code § 2513, et seq.;
- 24 i. the D.C. Consumer Protection Procedures Act, D.C. Code § 28-3901, et seq.;
- 25 j. the Florida Deceptive and Unfair Trade Practices Act, Fla. Stat. Ann. § 501.201, et seq.;
- 26 k. the Georgia Fair Business Practices Act, Ga. Code Ann. § 10-1-390, et seq.;
- 27 l. the Hawaii Unfair Competition Law, Haw. Rev. Stat. § 480-2, et seq.;
- 28 m. the Idaho Consumer Protection Act, Idaho Code. Ann. § 48-601, et seq.;

- n. the Illinois Consumer Fraud and Deceptive Business Practices Act, 815 ILCS 501/1, et seq.;
- o. the Indiana Deceptive Consumer Sales Act, Ind. Code § 24-5-0.5-2, et seq.;
- p. the Kansas Consumer Protection Act, Kan. Stat. Ann. § 50-623, et seq.;
- q. the Kentucky Consumer Protection Act, Ky. Rev. Stat. Ann. § 367.110, et seq.;
- r. the Louisiana Unfair Trade Practices and Consumer Protection Law, LSA-R.S. 51:1401, et seq.;
- s. the Maine Unfair Trade Practices Act, Me. Rev. Stat. Ann. Tit. 5, § 207, et seq.;
- t. the Maryland Consumer Protection Act, Md. Code Ann. Com. Law, § 13-301, et seq.;
- u. the Massachusetts Regulation of Business Practices for Consumers Protection Act, Mass. Gen Laws Ann. Ch. 93A, et seq.;
- v. the Michigan Consumer Protection Act, Mich. Comp. Laws Ann. § 445.901, et seq.;
- w. the Minnesota Prevention of Consumer Fraud Act, Minn. Stat. § 325F, et seq.;
- x. the Missouri Merchandising Practices Act, Mo. Rev. Stat. § 407, et seq.;
- y. the Nebraska Consumer Protection Act, Neb. Rev. St. §§ 59-1601, et seq.;
- z. the Nevada Deceptive Trade Practices Act, Nev. Rev. Stat. § 41.600, et seq.;
- aa. the New Hampshire Regulation of Business Practices for Consumer Protection, N.H. Rev. Stat. § 358-A:1, et seq.;
- bb. the New Jersey Consumer Fraud Act, N.J. Stat. Ann. § 56:8, et seq.;
- cc. the New Mexico Unfair Practices Act, N.M. Stat. Ann. § 57-12-1, et seq.;
- dd. the New York Consumer Protection from Deceptive Acts and Practices, N.Y. Gen. Bus. Law § 349, et seq.;
- ee. the North Carolina Unfair and Deceptive Trade Practices Act, N.C. Gen Stat. § 75-1.1, et seq.;
- ff. the North Dakota Consumer Fraud Act, N.D. Cent. Code § 51-15, et seq.;
- gg. the Ohio Consumer Sales Practices Act, Ohio Rev. Code Ann. § 1345.01, et seq.;
- hh. the Oklahoma Consumer Protection Act, Okla. Stat. tit. 15 § 751, et seq.;
- ii. the Oregon Unlawful Trade Practices Act, Or. Rev. Stat. § 646.605, et seq.;



1           jj. the Pennsylvania Unfair Trade Practices and Consumer Protection Law, 73 P.S. § 201-  
2           1, et seq.;

3           kk. the Rhode Island Deceptive Trade Practices Act, R.I. Gen. Laws § 6-13.1-5.2(B), et  
4           seq.;

5           ll. the South Carolina Unfair Trade Practices Act, S.C. Code Ann. §§ 39-5- 10, et seq.;

6           mm. the South Dakota Deceptive Trade Practices and Consumer Protection, S.D.  
7           Codified Laws § 37-24-1, et seq.;

8           nn. the Tennessee Consumer Protection Act, Tenn. Code Ann. § 47-18-101, et seq.;

9           oo. the Texas Deceptive Trade Practices-Consumer Protection Act, Tex. Code Ann., Bus. &  
10          Con. § 17.41, et seq.;

11          pp. the Utah Consumer Sales Practices Act, Utah Code. Ann. § 13-11-175, et seq.;

12          qq. the Vermont Consumer Fraud Act, 9 V.S.A. § 2451, et seq.;

13          rr. the Virginia Consumer Protection Act of 1977, Va. Code Ann. § 59.1-199, et seq.;

14          ss. the Washington Consumer Protection Act, Wash. Rev. Code § 19.86.010, et seq.;

15          tt. the West Virginia Consumer Credit and Protection Act, W. Va. Code § 46A, et seq.;

16          uu. the Wisconsin Deceptive Trade Practices Act, Wis. Stat. § 100.18, et seq.; and

17          vv. the Wyoming Consumer Protection Act, Wyo. Stat. Ann. § 40-12-101, et seq.

18          304. The acts, practices, misrepresentations and omissions by Defendant described above,  
19          and Defendant's dissemination of deceptive and misleading advertising and marketing materials in  
20          connection therewith, occurring in the course of conduct involving trade or commerce, constitute  
21          unfair methods of competition and unfair or deceptive acts or practices within the meaning of each of  
22          the above-enumerated statutes.

23          305. Defendant's acts and practices created a likelihood of confusion or of misunderstanding  
24          and misled, deceived or damaged Plaintiffs and members of the Class in connection with the sale or  
25          advertisement of its smartphones. Defendant's conduct also constituted the use or employment of  
26          deception, fraud, false pretense, false promise, misrepresentation, or knowingly concealing,  
27          suppressing, or omitting a material fact with intent that others rely upon the concealment, suppression  
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1 or omission in connection with the sale or advertisement of goods or services whether or not a person  
2 has in fact been misled, deceived or damaged in violation of each of the above-enumerated statutes.

3 306. Plaintiffs, on behalf of themselves and the other Class members, seek monetary  
4 damages, treble damages and such other and further relief as set forth in each of the above enumerated  
5 statutes.

6 **COUNT XIII**  
**UNJUST ENRICHMENT AGAINST APPLE**

7 307. Plaintiffs repeat and re-allege all preceding and subsequent paragraphs as if fully set  
8 forth herein. The Apple Plaintiffs bring this Count against Apple on behalf of the Apple Class.

9 308. At all times relevant hereto, Defendant designed, manufactured, produced, marketed  
10 and/or sold its smartphones.

11 309. Apple has benefitted from its unlawful acts by receiving payments for the sale of its  
12 smartphones.

13 310. Plaintiffs and members of the Class conferred non-gratuitous benefits upon Defendant,  
14 without knowledge that Defendant's smartphones emitted RF radiation at unsafe levels and/or at  
15 levels that exceeded federal limits when used or carried or in close proximity to the human body.

16 311. Defendant appreciated, or had knowledge of, the non-gratuitous benefits conferred upon  
17 it by Plaintiffs and members of the Class.

18 312. Defendant accepted or retained the non-gratuitous benefits conferred by Plaintiffs and  
19 members of the Class, with full knowledge and awareness that, as a result of Defendant's  
20 unconscionable wrongdoing, Plaintiffs and members of the Class were not receiving product of high  
21 quality, nature, fitness or value that had been represented by Defendant and reasonable consumers  
22 would have expected.

23 313. Retaining the non-gratuitous benefits conferred upon Defendant by Plaintiffs and  
24 members of the Class under these circumstances made Defendant's retention of the non-gratuitous  
25 benefits unjust and inequitable.

26 314. Because Defendant's retention of the non-gratuitous benefits conferred by Plaintiffs and  
27 members of the Class is unjust and inequitable, Plaintiffs and members of the Class are entitled to,  
28

1 and hereby seek disgorgement and restitution of Defendant's wrongful profits, revenue, and benefits  
2 in a manner established by the Court.

3 **COUNT XIV**  
4 **UNJUST ENRICHMENT AGAINST SAMSUNG**

5 315. Plaintiffs repeat and re-allege all preceding and subsequent paragraphs as if fully set  
6 forth herein. The Samsung Plaintiffs bring this Count against Samsung on behalf of the Samsung  
7 Class.

8 316. At all times relevant hereto, Defendant designed, manufactured, produced, marketed  
9 and/or sold its smartphones.

10 317. Samsung has benefitted from its unlawful acts by receiving payments for the sale of its  
11 smartphones.

12 318. Plaintiffs and members of the Class conferred non-gratuitous benefits upon Defendant,  
13 without knowledge that Defendant's smartphones emitted RF radiation at unsafe levels and/or at  
14 levels that exceeded federal limits when used or carried or in close proximity to the human body.

15 319. Defendant appreciated, or had knowledge of, the non-gratuitous benefits conferred upon  
16 it by Plaintiffs and members of the Class.

17 320. Defendant accepted or retained the non-gratuitous benefits conferred by Plaintiffs and  
18 members of the Class, with full knowledge and awareness that, as a result of Defendant's  
19 unconscionable wrongdoing, Plaintiffs and members of the Class were not receiving product of high  
20 quality, nature, fitness or value that had been represented by Defendant and reasonable consumers  
21 would have expected.

22 321. Retaining the non-gratuitous benefits conferred upon Defendant by Plaintiffs and  
23 members of the Class under these circumstances made Defendant's retention of the non-gratuitous  
24 benefits unjust and inequitable.

25 322. Because Defendant's retention of the non-gratuitous benefits conferred by Plaintiffs and  
26 members of the Class is unjust and inequitable, Plaintiffs and members of the Class are entitled to,  
27 and hereby seek disgorgement and restitution of Defendant's wrongful profits, revenue, and benefits  
28 in a manner established by the Court.

**COUNT XV**  
**BREACH OF IMPLIED WARRANTY OF MERCHANTABILITY AGAINST APPLE**

323. The Apple Warranty Subclass Representatives repeat and re-allege all preceding and subsequent paragraphs as if fully set forth herein.

324. The Apple Warranty Subclass Representatives bring this action behalf of themselves and the Apple Warranty Subclass for violations of the following statutes:

- a. Alaska Stat. § 45.02.314;
- b. Ark. Code. Ann. § 4-2-314;
- c. Cal. Civ. Code, § 1792 and Cal. Comm. Code § 2314;
- d. Colo. Rev. Stat. § 4-2-314;
- e. Del. Code Ann. Tit. 6, § 2-314;
- f. D.C. Code § 28:2-314;
- g. Ga. Code Ann. § 11-2-314;
- h. Haw. Rev. Stat. § 490:2-314;
- i. 810 ILCS 5/1-101, *et seq.*;
- j. Ind. Code Ann. § 26-1-2-314;
- k. Iowa Code § 554.2314;
- l. Kan. Stat. Ann. § 84-2-314;
- m. La. Civ. Code Ann. Art. § 2520;
- n. Me. Rev. Stat. tit. 11, § 2-314;
- o. Md. Code Ann., Com. Law § 2-314;
- p. Mass. Ann. Laws Ch. 106, § 2-314;
- q. Michigan Code § 440.2314;
- r. Minn. Stat. § 336.2-314;
- s. Miss. Code Ann. § 75-2-314;
- t. Mo. Rev. Stat. § 400.2-314;
- u. Mont. Code Ann. § 30-2-314;
- v. Neb. U.C.C. § 2-314;
- w. Nev. Rev. Stat. U.C.C. § 104.2314;

- x. N.H. Rev. Ann. § 382-A:2-314;
- y. N.J. Stat. Ann. § 12A:2-314;
- z. N.M. Stat. Ann. § 55-2-314;
- aa. N.D. Stat. § 41-02-314;
- bb. Okla. Stat. tit. 12A § 2-314;
- cc. 13 Pa. C.S. § 2314;
- dd. R.I. Gen. Laws § 6A-2-314;
- ee. S.C. Code Ann. § 36-2-314;
- ff. S.D. Stat. § 57A-2-314;
- gg. Tex. Bus. & Com. Code Ann. § 2-314;
- hh. Utah Code Ann. § 70A-2-314
- ii. Vt. Stat. Ann. 9A § 2-314;
- jj. Va. Code Ann. § 8.2-314;
- kk. W. Va. Code § 46-2-314;
- ll. Wyo. Stat. § 34.1-2-314.

325. Plaintiffs have provided Defendant with notice of its breach of implied warranties under any states where such notice is required.

326. Plaintiffs purchased Apple smartphone products manufactured by Apple which, at all relevant times, was in the business of designing, manufacturing, and selling smartphones. Under the above statutes, a warranty of merchantability is implied in every contract for the sale of goods, i.e., that the product is fit for the ordinary purposes for which it is used and that it measures up to the representations stated by its manufacturer.

327. Defendant, through the acts and omissions alleged herein in the sale, marketing, and promotion of Apple smartphone products, impliedly warranted that, *inter alia*, its smartphones (a) are safe and appropriate for ordinary use, including use and carrying against the skin and in close proximity to the body; (b) emit less than 1.6 W/kg of RF radiation during use; and/or (c) comply with FCC RF radiation regulations.

1           328. Apple's representations and warranties were false, misleading, and inaccurate in that its  
2     smartphone products are not fit for their intended purpose as a phone and computing device that can  
3     be safely carried and used against the skin and near the body. In fact, using the devices reasonably,  
4     foreseeably, and in that manner subjects the user to an increased risk of RF radiation that can cause  
5     detrimental health effects and diseases, including cancer. As such, Apple's smartphones are unfit for  
6     their ordinary purpose.

7           329. Apple knew or had reason to know of these material facts, and wrongfully and  
8     fraudulently concealed these material facts from Plaintiffs and the Apple Warranty Subclass. Plaintiffs  
9     and the Apple Warranty Subclass were induced to purchase and use their Apple smartphone products  
10    against and/or near their body, subjecting them to an increased risk of harm.

11          330. Plaintiffs have had sufficient direct dealings with either Apple or its agents, including by  
12    way of the express warranties issued by Apple to Plaintiffs, to establish privity of contract between  
13    Apple and Plaintiffs.

14          331. Nonetheless, privity is not required here because, to the extent that Plaintiffs did not  
15    purchase their smartphones directly from Apple, Plaintiffs are intended third-party beneficiaries of  
16    contracts between Apple and the retailers who sold Plaintiffs their smartphones and, specifically, of  
17    Apple's implied warranties. Plaintiffs are Apple's intended consumers; retailers were not intended to  
18    be the ultimate consumers of Apple's smartphones and have no rights under the warranty agreements  
19    that Apple provided with the smartphones, which were designed for and intended to benefit the ultimate  
20    consumers only.

21          332. Apple's breach of implied warranty proximately caused Plaintiffs and the Apple Warranty  
22    Subclass members to suffer damages.

23          333. Plaintiffs, on behalf of themselves and the Apple Warranty Subclass, seek monetary  
24    damages, treble damages, costs, attorneys' fees, and such other and further relief as set forth in each of  
25    the above enumerated statutes.

26    //

27    //

28    //

**COUNT XVI**  
**BREACH OF IMPLIED WARRANTY OF MERCHANTABILITY AGAINST SAMSUNG**

334. The Samsung Warranty Subclass Representatives repeat and re-allege all preceding and subsequent paragraphs as if fully set forth herein.

335. The Samsung Warranty Subclass Representatives bring this claim on behalf of themselves and the Samsung Warranty Subclass for violations of the following statutes:

- a. Alaska Stat. § 45.02.314;
- b. Ark. Code. Ann. § 4-2-314;
- c. Cal. Civ. Code, § 1792 and Cal. Comm. Code § 2314;
- d. Colo. Rev. Stat. § 4-2-314;
- e. Del. Code Ann. Tit. 6, § 2-314;
- f. D.C. Code § 28:2-314;
- g. Ga. Code Ann. § 11-2-314;
- h. Haw. Rev. Stat. § 490:2-314;
- i. 810 ILCS 5/1-101, *et seq.*;
- j. Ind. Code Ann. § 26-1-2-314;
- k. Iowa Code § 554.2314;
- l. Kan. Stat. Ann. § 84-2-314;
- m. La. Civ. Code Ann. Art. § 2520;
- n. Me. Rev. Stat. tit. 11, § 2-314;
- o. Md. Code Ann., Com. Law § 2-314;
- p. Mass. Ann. Laws Ch. 106, § 2-314;
- q. Michigan Code § 440.2314;
- r. Minn. Stat. § 336.2-314;
- s. Miss. Code Ann. § 75-2-314;
- t. Mo. Rev. Stat. § 400.2-314;
- u. Mont. Code Ann. § 30-2-314;
- v. Neb. U.C.C. § 2-314;
- w. Nev. Rev. Stat. U.C.C. § 104.2314;

- x. N.H. Rev. Ann. § 382-A:2-314;
- y. N.J. Stat. Ann. § 12A:2-314;
- z. N.M. Stat. Ann. § 55-2-314;
- aa. N.D. Stat. § 41-02-314;
- bb. Okla. Stat. tit. 12A § 2-314;
- cc. 13 Pa. C.S. § 2314;
- dd. R.I. Gen. Laws § 6A-2-314;
- ee. S.C. Code Ann. § 36-2-314;
- ff. S.D. Stat. § 57A-2-314;
- gg. Tex. Bus. & Com. Code Ann. § 2-314;
- hh. Utah Code Ann. § 70A-2-314
- ii. Vt. Stat. Ann. 9A § 2-314;
- jj. Va. Code Ann. § 8.2-314;
- kk. W. Va. Code § 46-2-314;
- ll. Wyo. Stat. § 34.1-2-314.

336. Plaintiffs have provided Defendant with notice of its breach of implied warranties under any states where such notice is required.

337. Plaintiffs purchased Samsung smartphone products manufactured by Samsung which, at all relevant times, was in the business of designing, manufacturing, and selling smartphones. Under the above statutes, a warranty of merchantability is implied in every contract for the sale of goods, i.e., that the product is fit for the ordinary purposes for which it is used and that it measures up to the representations stated by its manufacturer.

338. Defendant, through the acts and omissions alleged herein in the sale, marketing, and promotion of Samsung smartphone products, impliedly warranted that, *inter alia*, its smartphones (a) are safe and appropriate for ordinary use, including use and carrying against the skin and in close proximity to the body; (b) emit less than 1.6 W/kg of RF radiation during use; and/or (c) comply with FCC RF radiation regulations.





- 1 A. Certifying the classes and appointing the respective Plaintiffs as Class Representatives  
2 and their counsel as Class Counsel;  
3 B. Finding against Defendants on liability;  
4 C. Establishing a medical monitoring fund;  
5 D. Awarding damages suffered by Plaintiffs and the Class, and restitution to Plaintiffs and  
6 the Class of all monies wrongfully obtained by Defendant;  
7 E. Granting appropriate injunctive relief;  
8 F. Awarding reasonable attorneys' fees and costs incurred in prosecuting this action, and  
9 G. Such other and further relief that the Court deems just and proper.

10 **JURY DEMAND**

11 Plaintiffs demand a trial by jury on all claims so triable.

12 Respectfully submitted,

13 DATED: December 5, 2019

14 By: /s/ Elizabeth A. Fegan

Elizabeth A. Fegan (*pro hac vice*)

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