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APPLE INC.

UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

SAN JOSE DIVISION

DOMINIQUE CAVALIER, KILEY KRZYZEK, KATHERINE WHEELER, MARLO RUSSELL, TERI GLAZEBROOK, and HEIDI FENTON, individually and on behalf of all others similarly situated,

Plaintiffs,

v.

APPLE INC., a California corporation,

Defendant.

Case No. 5:25-cv-713-PCP

DEFENDANT APPLE INC.'S NOTICE OF MOTION AND MOTION TO DISMISS PLAINTIFFS' FIRST AMENDED CLASS ACTION COMPLAINT; MEMORANDUM OF POINTS AND AUTHORITIES IN SUPPORT THEREOF

Date: October 9, 2025
Time: 10:00 a.m.
Dept.: Courtroom 8 – 4th Floor
Judge: Honorable P. Casey Pitts

FAC Filed: May 5, 2025

NOTICE OF MOTION AND MOTION TO DISMISS

TO PLAINTIFFS AND THEIR ATTORNEYS OF RECORD:

PLEASE TAKE NOTICE that on October 9, 2025, at 10:00 a.m., or as soon thereafter as the matter may be heard, before the Honorable P. Casey Pitts in Courtroom 8, in the United States District Court, Northern District of California, San Jose Division, 280 South First Street, San Jose, CA 95113, Defendant Apple Inc. ("Apple") will and hereby does move to dismiss Plaintiffs Dominique Cavalier, Kiley Krzyzek, Katherine Wheeler, Marlo Russell, Teri Glazebrook, and Heidi Fenton (collectively, "Plaintiffs") claims pursuant to Federal Rules of Civil Procedure 8(a), 9(b), 12(b)(1) and 12(b)(6).

This motion is based upon this Notice of Motion and Motion, the Memorandum of Points and Authorities in support thereof, the Request for Judicial Notice in Support of the Motion to Dismiss filed concurrently herewith, the Declaration of William F. Tarantino in Support of the Motion to Dismiss the First Amended Complaint filed concurrently herewith, all other pleadings and papers on file herewith, and such other argument and evidence as may be presented to the Court.

Dated: June 16, 2025

MORRISON & FOERSTER LLP

By: */s/ William F. Tarantino*
WILLIAM F. TARANTINO

Attorneys for Defendant
APPLE INC.

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MEMORANDUM OF POINTS AND AUTHORITIES

I. INTRODUCTION

In their FAC, Plaintiffs make broad changes to their allegations in an attempt to address the arguments raised in Apple's first Motion to Dismiss. The changes only serve to highlight the defects in Plaintiffs' pleading and cannot salvage their claims. While Plaintiffs' original Complaint alleged that three Apple Watch bands were defective based on a publication purportedly detecting trace levels of PFHxA—a chemical within the category of per- and polyfluoroalkyl substances ("PFAS," pronounced PEA-fass)—Plaintiffs' FAC now claims that only one category of Watch band, the Sport Band, allegedly contains PFHxA. Recognizing the deficiencies of the publication cited in their original Complaint, Plaintiffs' FAC now downplays that Paper's importance and references Plaintiffs' own testing of just one Watch Sport Band, again *without* attaching any test results. And while Plaintiffs' first Complaint challenged a litany of statements that Apple made about the health-tracking and environmental features of the Apple Watch, Plaintiffs' FAC abandons allegations related to those statements in favor of challenging new and different, though equally nonactionable, statements regarding the Apple Watch's exercise and sleep-tracking capabilities. Plaintiffs' claims remain deficient for a number of reasons.

As an initial matter, Plaintiffs still do not allege an injury in fact under Article III and therefore lack standing. They fail to sufficiently allege that the Apple Watch bands they purchased contain PFHxA, much less at any level that could cause harm. For similar reasons, Plaintiffs fail to allege facts sufficient to state a claim under 12(b)(6). Additionally, Plaintiffs' claims flunk the pleading standard of Rule 8, and their fraud-based claims fall short of the particularity that Rule 9(b) requires. Plaintiffs' affirmative misrepresentation claims are now based on entirely new alleged misrepresentations, but they still fail to allege *any* false or misleading statements related to the Sport Bands. Instead, they point only to vague, nonactionable statements purporting to advertise the Watch as suitable for continuous wear. Further, despite the benefit of amending their pleading, none of the named Plaintiffs even allege having seen or relied on any specific statement by Apple.

Plaintiffs' omissions-based claims fare no better. Plaintiffs make conclusory allegations regarding Watch Sport Bands posing an "unreasonable safety hazard," but Plaintiffs offer no facts to render such claims plausible. Plaintiffs' FAC relies on the Peaslee Paper and Plaintiffs' purported test results, neither of which supports Plaintiffs' claims. The study authored by Dr. Richard Peaslee (the "Peaslee Paper") that apparently set this lawsuit in motion (and that Plaintiffs now try to minimize) does not make clear that any PFHxA is present in Apple Watch bands at all, let alone in quantities that renders the bands unsafe in any way. In fact, the Peaslee Paper admits that that there is *no data* to establish that PFHxA in contact with skin poses any harm at all. Meanwhile, the testing commissioned by Plaintiffs (which Plaintiffs describe at a high level but the results of which they do not attach to the FAC) employed a harsh solvent extraction that does not in any way mimic typical use of the Apple Watch band and does not indicate how much, if any, PFHxA a user would actually be exposed to when wearing an Apple Watch Sport Band, let alone whether such exposure would be unsafe. Faced with these facts, Plaintiffs are left to make sweeping statements, unsupported by facts, in an effort to create a toxic scare where none exists. Moreover, Plaintiffs do not plausibly plead that the alleged presence of PFHxA is central to the Watch's function and have not alleged facts to establish Apple's knowledge of the alleged presence of PFHxA.

Plaintiffs' claims suffer from additional independent defects. Plaintiffs' negligent misrepresentation claim is barred by the economic loss doctrine; Plaintiffs' implied warranty claims are barred by Apple's Limited Warranty and belied by their own allegations; and their claim for unjust enrichment is duplicative of the earlier causes of action and is likewise deficient. Finally, Plaintiffs cannot state a claim for equitable relief because Plaintiffs have an adequate remedy at law. For these reasons and the reasons detailed below, all of Plaintiffs' claims should be dismissed with prejudice.

II. FACTUAL BACKGROUND

A. The Apple Watch Sport Band

The first generation Apple Watch launched in early 2015, featuring revolutionary new technologies and a pioneering user interface. Apple sells Watch bands that are designed to be

both durable and comfortable, and sells Watch bands both together with the Watch and separately. Customers can customize their Watch to fit their lifestyle and intended use by choosing their finish, Watch size, and band. The Apple Watch Sport Band is made of a custom, high performance fluoroelastomer, a type of synthetic rubber that offers superior resistance to heat and oils while maintaining a soft feel. (*See* FAC ¶¶ 98-99.)

Apple provides consumers with a wide variety of information about the technical specifications and testing of its products, as well as the Company's progress towards meeting certain environmental and sustainability goals. (*See* Declaration of William F. Tarantino in Support of Apple's Motion to Dismiss Plaintiffs' First Amended Complaint ("Tarantino Decl."), Ex. B.) As part of that progress, Apple made a public commitment to thoughtfully phasing out PFAS and is transparent about its efforts to identify PFAS, assess related safety risks, if any, and find suitable alternatives "in a way that does not result in regrettable substitutions." (*Id.* at 2.) The report expressly notes that "[i]t will take time for Apple to completely phase out PFAS from [its] products and processes" given "the challenges related to compiling a comprehensive catalog of PFAS use, identifying and developing non-PFAS alternatives that can meet the performance needs for certain critical applications, and taking into account the time needed for material qualification." (*Id.*)

B. The Peaslee Paper and Plaintiffs' Purported Testing

PFAS are defined as a "class of fluorinated organic chemicals containing at least one fully fluorinated carbon atom." *See* Cal. Health & Safety Code § 108970. PFAS have unique performance properties. For example, they are thermally stable and resist degradation. For this reason, PFAS have been used for decades in a variety of industrial and consumer applications. (*See* Tarantino Decl. Ex. B.) Plaintiffs' FAC alleges that the Apple Watch Sport Band contains a "toxic" amount of one type of PFAS, PFHxA. The factual allegations and purported testing underlying Plaintiffs' claims are insufficient at best.

First, Plaintiffs point to a four-page report published in Environmental Science & Technology Letters on December 18, 2024 (the "Peaslee Paper"), which purported to extract a specific PFAS, PFHxA, from certain smartwatch bands. (FAC ¶¶ 121-22.) The Peaslee Paper

tested a sample of 22 smartwatch bands from different manufacturers. (*See* Tarantino Decl. Ex. A.) The Paper used fluorine analysis as an indicator of the potential presence of PFAS and further tested a subset of smartwatch bands using strong chemical solvent extraction to identify the presence of 20 PFAS. But the Paper does not tie any specific smartwatch bands to any quantity of PFHxA and instead categorized the samples only by price point. Of the two smartwatch bands made of fluoroelastomers within the price point of the Apple Watch bands, one had *no* PFHxA present at all, and the other had a reported concentration of 659 nanograms/gram. The authors of the Peaslee Paper further recognized that there is currently "limited knowledge on the dermal absorption of PFHxA" and that the "toxicology of PFHxA after human exposure is also understudied." (*Id.* at Abstract, D.)

Second, recognizing that the Peaslee Paper did not support their claims, Plaintiffs claim to have commissioned a third-party test on a single Apple Watch Sport Band in their FAC. Notably, Plaintiffs did not test any of their own purchased products, and neither the test methodology nor the results are not provided with the FAC. Similar to the Peaslee Paper, this test apparently used a strong chemical solvent extraction process to identify PFAS in an Apple Watch Sport Band. (FAC ¶ 123.) This procedure does not mimic typical use of a Watch band and thus does not provide any evidence of any exposure to PFAS for Watch band users.

C. Plaintiffs' Amended Allegations

Plaintiffs claim that Apple Watch Sport Bands contain "unsafe and Elevated Levels of PFHxA" which "exceed Apple's own internal standards and other thresholds for safety…" (FAC ¶¶ 2-4). According to Plaintiffs, this renders Apple's advertising about the Apple Watch as "essential tools for health and wellness" misleading. (*See id.* ¶ 1.) Plaintiffs assert claims for violations of the Consumers Legal Remedies Act, California Civil Code § 1750, *et seq.* ("CLRA"); Unfair Competition Law, California Business & Professions Code § 17200, *et seq.* ("UCL"); False Advertising Law, California Business & Professions Code § 17500, *et seq.* ("FAL"); and consumer protection statutes under Illinois, Michigan, New York, and Pennsylvania law. Plaintiffs further allege breach of the implied warranty of merchantability under California, Illinois, Michigan, New York, and Pennsylvania law; and assert California common law claims

for fraud, fraudulent inducement, fraudulent concealment, fraudulent misrepresentation, negligent misrepresentation, and unjust enrichment.

Plaintiffs purport to assert claims on behalf of a putative nationwide class or, in the alternative, on behalf of California, Illinois, Michigan, New York, and Pennsylvania subclasses consisting of "[a]ll persons who purchased a new Class Product at retail in the United States" from Apple or an authorized reseller. (FAC ¶ 155.) Plaintiffs define "Class Product" as including an Apple Watch equipped with a fluoroelastomer Sport Band or a separately-purchased fluoroelastomer Apple Watch Sport Band.[1] (FAC at p. 3.)

III. LEGAL STANDARD

Rule 12(b)(1) of the Federal Rules of Civil Procedure requires a plaintiff to allege facts sufficient to show injury, causation, and redressability. *Pirozzi v. Apple Inc.*, 913 F. Supp. 2d 840, 846 (N.D. Cal. 2012). "[A]ctual reliance is required to demonstrate causation for purposes of Article III standing when the plaintiffs assert that their injury is the result of deceptive misrepresentations or omissions." *Phillips v. Apple Inc.*, No. 15-CV-04879-LHK, 2016 WL 1579693, at *6 (N.D. Cal. Apr. 19, 2016).

To survive a motion to dismiss, a complaint must allege facts to support a claim for relief that is "plausible on its face." *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 570 (2007); *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009). A pleading that offers only "labels and conclusions" or "a formulaic recitation of the elements of a cause of action" will not suffice. *Iqbal*, 556 U.S. at 678 (citation omitted). Claims grounded in fraud are subject to heightened pleading requirements under Rule 9(b). *See* Fed. R. Civ. P. 9(b) ("In alleging fraud or mistake, a party must state with particularity the circumstances constituting fraud or mistake.").

IV. ARGUMENT

A. Plaintiffs Lack Article III Standing

Plaintiffs fail to plead an actual injury and causation, and they therefore lack standing for

[1] Plaintiffs' UCL, FAL, and CLRA claims are brought on behalf of the putative California subclass. The claims for fraud, fraudulent inducement, fraudulent concealment or omission, fraudulent misrepresentation, negligent misrepresentation, and unjust enrichment are brought on behalf of the putative nationwide class or, in the alternative, on the state subclasses.

any of their claims. *See Spokeo, Inc. v. Robins*, 578 U.S. 330, 338 (2016) (Article III standing requires that "[t]he plaintiff must have (1) suffered an injury in fact, (2) that is fairly traceable to the challenged conduct of the defendant, and (3) that [the injury must be] likely to be redressed by a favorable judicial decision"). A facial challenge to standing under Rule 12(b)(1) "accepts the truth of the plaintiff's allegations but asserts that they 'are insufficient on their face to invoke federal jurisdiction'"; such challenges are adjudicated under the 12(b)(6) standard. *Leite v. Crane Co.*, 749 F.3d 1117, 1121 (9th Cir. 2014) (citationd omitted).

1. Plaintiffs Fail to Allege Injury in Fact

Plaintiffs' allegations of injury in fact are insufficient on their face, because their alleged injury is neither "concrete" nor "particularized." *Spokeo*, 578 U.S. at 339-40. Plaintiffs base their claims on an overpayment theory of injury, alleging that they would not have purchased the "Class Products or would have paid less for them than they did" if they had known that the products contained "toxic" levels of PFHxA. (FAC ¶¶ 4, 8.) Even presuming the facts alleged in Plaintiffs' FAC are true, Plaintiffs fail to adequately allege that Apple Watch bands they purchased contain PFHxA, let alone that the quantities alleged are harmful.

The only bases for Plaintiffs' conclusory allegation that the Apple Watch Sport Bands may contain PFHxA are (1) the Peaslee Paper, which anonymizes its results; and (2) Plaintiffs' purported testing of one Sport Band, the results of which they do not attach to the FAC. But these are insufficient to confer standing. As Apple discussed in its first Motion to Dismiss, at most, the Peaslee Paper may include testing of two Apple Watch bands, but the Paper does *not* specify which Apple Watch bands were tested *or* affirmatively link the testing results to any Apple Watch bands. In other words, because the Peaslee Paper does not specify its results as to the Apple Watch Sport Band at issue in Plaintiffs' FAC, it cannot serve as the basis for Plaintiffs' lawsuit. Moreover, Plaintiffs' purported testing of just *one* Sport Band under laboratory conditions using harsh solvents is also insufficient to confer standing. Courts in other jurisdictions routinely dismiss similar allegations for lack of standing.[2]

[2] Courts in other jurisdictions routinely dismiss similar allegations based on limited testing for lack of standing. *See, e.g.*, *Kell v. Lily's Sweets, LLC*, No. 23 Civ. 0147 (VM), 2024 WL

Nor do Plaintiffs allege anywhere in their FAC that *their* Apple Watch Sport Bands contained any PFHxA, much less the concentration of that PFHxA, the amount of PFHxA a user may be exposed to during normal use of a Sport Band, or the potential of that exposure to affect human health. Plaintiffs' theory that they overpaid for Sport Bands because they contained "toxic" PFHxA is therefore unsupported by their own allegations. *See, e.g.*, *Pels v. Keurig Dr. Pepper, Inc.*, No. 19-cv-03052-SI, 2019 WL 5813422, at *5 (N.D. Cal. Nov. 7, 2019) (dismissing claims because plaintiff "failed to plead a particularized injury by failing to plead the water *he* purchased contained violative arsenic levels").

B. Plaintiffs Have Not Adequately Pled Claims on Behalf of a Nationwide Class

Plaintiffs seek to bring common law claims for fraud, fraudulent inducement, fraudulent concealment or omission, fraudulent misrepresentation, negligent misrepresentation, and unjust enrichment on behalf of a nationwide class, but fail to specify under which state law(s) Plaintiffs bring such claims. (*See* FAC ¶¶ 169-200.) "Plaintiffs failure to identify which state laws govern their common law claims means the claims brought on behalf of the nationwide class have not been adequately pled." *Augustine v. Talking Rain Beverage Co.*, 386 F. Supp. 3d 1317, 1333 (S.D. Cal. 2019); *see also Romero v. Flowers Bakeries, LLC*, No. 14-cv-05189-BLF, 2016 WL 469370, at *12 (N.D. Cal. Feb. 8, 2016) ("[C]ourts in this district have held that, due to variances among state laws, failure to allege which state law governs a common law claim is grounds for dismissal."). Therefore, the Court should dismiss Plaintiffs' claims brought on behalf of a

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1116651, at *2 (S.D.N.Y. Mar. 13, 2024) (dismissing claims of economic injury where third party tested just two or three samples of defendant's chocolate bars for lead); *Saedi v. Coterie Baby, Inc.*, No. 24cv3893 (DLC), 2024 WL 4388401, at *5 (S.D.N.Y. Oct. 3, 2024) (single test was insufficient to establish standing where plaintiff failed to link the test to the products plaintiff purchased); *Esquibel v. Colgate-Palmolive Co.,* No. 23-cv-00742-LTS, 2023 WL 7412169, at *2 (S.D.N.Y. Nov. 9, 2023) (plaintiffs did not allege that the products they purchased were tested nor indicate how many units of the product were tested, leaving the presence of PFAS in the purchased product nothing more than a "sheer possibility" (citation omitted)); *Onaka v. Shiseido Americas Corp.*, No. 21-cv-10665-PAC, 2023 WL 2663877, at *5 (S.D.N.Y. Mar. 28, 2023) (plaintiffs "provide[d] no facts from which the Court could extrapolate that their isolated testing should apply broadly to [d]efendant's [p]roducts"); *Gaminde v. Lang Pharma Nutrition, Inc.*, No. 1:18-cv-300 (GLS/DEP), 2019 WL 1338724, at *2 (N.D.N.Y. Mar. 25, 2019) (dismissing claims for lack of standing because it was "pure speculation" to allege that testing of two product samples could apply to product plaintiff purchased (citation omitted)).

nationwide class.

C. Plaintiffs Fail to Allege Facts Supporting Their Theory That Apple Watch Sport Bands Contain Harmful PFAS

Plaintiffs' FAC is based on their allegation that the Apple Watch Sport Bands contain "harmful" levels of PFHxA, but this speculative conclusion is devoid of factual support and is insufficient to state a claim under Rule 12(b)(6). *See Iqbal*, 556 U.S. at 678 ("[A] complaint must contain sufficient factual matter, accepted as true, to 'state a claim to relief that is plausible on its face.'" (citation omitted)). Plaintiffs' allegations are deficient because they fail to adequately allege that the amount of the PFHxA allegedly found in Apple Watch Sport Bands is even potentially harmful.

The only support Plaintiffs cite for their conclusory allegations are: (1) the Peaslee Paper, which anonymizes its results, and (2) Plaintiffs' purported testing of one Watch band, for which Plaintiffs do not attach their results. Neither of these can properly form the basis of Plaintiffs' claims. Given that the Peaslee Paper test results are anonymized, it would require a massive inferential leap to suggest that the Peaslee Paper found PFHxA in the Apple Watch Sport Band, which Plaintiffs challenge here. At most, the Peaslee Paper could report testing of two Apple Watch bands, but the Paper does not specify *which* Apple Watch bands were tested *or* affirmatively link the testing results to any Apple Watch bands. The results reported in the Peaslee Paper are not tied to any specific smartwatch brands; they are categorized only by price point and whether the bands are advertised as containing fluoroelastomers. In taking these classifications into account, it appears that the Peaslee Paper may have tested two smartwatch bands in the price point range of Apple Watch bands and that are advertised as containing fluoroelastomers (as the Sport Band is). One of those smartwatch bands purportedly showed the presence of PFHxA, whereas one did *not* detect *any* PFHxA at all.

Moreover, Plaintiffs' purported testing of just *one* Watch band under laboratory conditions using harsh solvents is also insufficient. Plaintiffs allege that the one Apple Watch Sport Band they tested "contained PFHxA at a concentration of 1020.114 ng/g (nanograms per gram)." (FAC ¶ 124). However, Plaintiffs fail to plausibly allege PFHxA are present in Sport

Watch Bands *at a harmful level*, which is itself a fatal pleading deficiency. *Bounthon v. Procter & Gamble Co.*, No. 23-cv-00765-AMO, 2024 WL 4495501, at *8-10 (N.D. Cal. Oct. 15, 2024); s*ee also Krakauer v. Recreational Equip., Inc.*, No. C22-5830-BHS, 2024 WL 1494489 , at *10 (W.D. Wash. Mar. 29, 2024) (omission claims failed "largely because he ha[d] not plausibly alleged that his raincoat contained dangerous PFAS in quantities sufficient to pose health risks").

Even putting aside issues with the methodology employed by Plaintiffs' testing and their barebones allegations regarding that unannexed testing, Plaintiffs' alleged finding of a PFHxA concentration of 1020.114 parts per billion is still *orders of magnitude* less than California's PFAS limitations for clothing and textiles, and Plaintiffs fail to allege at what levels they believe PFHxA is allegedly harmful. *See, e.g.*, Cal. Health & Safety Code § 108970(g)(2) (reflecting PFAS threshold of 100 parts per million, or 100,000 parts per billion). These deficiencies warrant dismissal. *See, e.g.*, *Davidson v. Sprout Foods, Inc.*, 106 F.4th 842, 853 (9th Cir. 2024) (affirming dismissal of claim where plaintiff did not explain at what levels the sugars at issue become harmful).

D. Plaintiffs' Fraud Claims Fail to Satisfy Rule 9(b)'s Heightened Pleading Requirement

Plaintiffs' claims, brought under the consumer protection statutes of various states, unequivocally sound in fraud. They are premised on the allegation that Apple either misrepresented or concealed facts regarding the alleged presence of "toxic" PFHxA in Apple Watch Sport Bands. *See Hamman v. Cava Grp., Inc.*, No. 22-cv-593-MMA (MSB), 2023 WL 3450654, at *7 (S.D. Cal. Feb. 8, 2023) (claims alleging that defendant's products are unfit for consumption due to PFAS "either allege fraud or sound in fraud"). Plaintiffs must therefore meet the heightened pleading requirements of Rule 9(b), which requires that they plead the "who, what, when, where, and how" of the alleged misrepresentation or omission, as well as "what is false or misleading about [the purportedly fraudulent] statement, and why it is false." *Yastrab v. Apple Inc.*, 173 F. Supp. 3d 972, 978 (N.D. Cal. 2016) (citation omitted). Plaintiffs cannot meet the pleading standard of Rule 8, let alone the heightened standard of Rule 9(b).

1. Plaintiffs' Affirmative Misrepresentation Claims Fail

a. Plaintiffs Fail to Allege Any Actionable Misrepresentation

Plaintiffs cite to entirely different alleged misrepresentations in their FAC than they did in their original Complaint. Despite their attempts to re-plead, Plaintiffs have again failed to identify any false or misleading statements related to Sport Bands. Plaintiffs point to generalized statements made by Apple, but such statements are not sufficient to support a claim of affirmative misrepresentation related to Sport Bands. "Generalized, vague, and unspecified assertions" are not actionable. *Anunziato v. eMachines, Inc.*, 402 F. Supp. 2d 1133, 1139 (C.D. Cal. 2005).[3]

Statements that Apple Watches are "essential tools for health and wellness" and "the ultimate health and fitness companions" are classic examples of non-actionable advertising because they are not specific and measurable. *See, e.g.*, *Taleshpour v. Apple Inc.*, 549 F. Supp. 3d 1033, 1040 (N.D. Cal. 2021) (statements that products are "revolutionary," "groundbreaking," or offer "breakthrough performance" are nonactionable); *Oestreicher v. Alienware Corp.*, 544 F.Supp.2d 964, 973 (N.D. Cal. 2008) ("higher performance" and "richer multimedia experience" non-actionable), *aff'd*, 322 F. App'x 489 (9th Cir. 2009). "[N]onspecific assertions [] regarding sustainability and safety" are similarly not actionable. *Krakauer*, 2024 WL 1494489, at *8. Plaintiffs challenge Apple's statements that the Apple Watch allows users to "[b]etter understand [their] daily health status," and "take [their] workouts to the next level." (FAC ¶ 144.) Such statements say nothing about specific, measurable characteristics, let alone any about safety. *See Maketa v. Target Corp.*, No. 24-cv-02576-RFL, 2024 WL 4311702, at *3 (N.D. Cal. Sept. 26, 2024) (statements such as "care for your everyday in every way" were too general to be

[3] The same is true in the other jurisdictions where Plaintiffs seek to certify a subclass for claims of fraud and negligent misrepresentation. *See Olson v. Major League Baseball*, 29 F.4th 59, 75 (2d Cir. 2022) (concluding that generalized statements are not actionable as a matter of law in misrepresentation claim and collecting example cases under New York law); *Coleman v. Sears, Roebuck & Co.*, 319 F. Supp. 2d 544, 551 (W.D. Pa. 2003) (identifying "non-specific statements" and "vague and general statements" as "not actionable as a matter of law" in a claim for fraudulent misrepresentation (citation omitted)); *Sanchez v. Walmart Inc.*, 733 F. Supp. 3d 653, 672 (N.D. Ill. 2024) ("[p]uffery encompasses 'vague, highly subjective, or exaggerated commercial statements or advertisements' that are nonactionable (citation omitted)); *Counts v. Gen. Motors, LLC*, 237 F. Supp. 3d 572, 597 (E.D. Mich. 2017) (collecting cases of nonactionable statements in fraudulent misrepresentation claims and concluding that "the more general the assertions, the more likely they are to be considered puffery").

actionable).

Moreover, Plaintiffs fail to specify which, if any, Watch bands the alleged misrepresentations relate to. All the representations identified in Plaintiffs' FAC relate to advertisements for the Apple Watch and its general functionality (*see* FAC ¶¶ 142-45), but none specify which Watches the advertisements relate to or refer to the Watch *bands* that Plaintiffs claim contain harmful PFAS. Therefore, Plaintiffs' misrepresentation claims fail for the additional reason that they fail to link the alleged misrepresentations to the specific accessory about which they now complain. *See Ang v. Bimbo Bakeries USA, Inc.*, No. 13-cv-01196-WHO, 2013 WL 5407039, at *3 (N.D. Cal. Sept. 25, 2013) (requiring plaintiffs to identify "with specificity the *precise* representations alleged to be illegal, fraudulent and misleading, as well as the *specific* products on which that language is found" under Rule 9(b)).

b. Plaintiffs Do Not Plead Exposure to or Reliance on Any Statements by Apple

Despite the fact that Apple called out this exact deficiency with Plaintiffs' original Complaint, Plaintiffs again fail to identify the specific statements on which they claim to have relied, and which allegedly caused them harm. Such deficiency dooms their ability to establish Article III standing and fails to meet Rule 9(b) pleading standards. *See Phillips*, 2016 WL 1579693, at *6 ("[C]ourts have held that actual reliance is required to demonstrate causation for purposes of Article III standing when the plaintiffs assert that their injury is the result of deceptive misrepresentations or omissions."); *Young v. Cree, Inc.*, No. 17-cv-06252-YGR, 2018 WL 1710181, at *6 (N.D. Cal. Apr. 9, 2018) ("In a deceptive advertising case involving allegations of fraud, 'Rule 9(b) requires that the plaintiff(s) identify specific advertisements and promotional materials; allege when the plaintiff(s) were exposed to the materials; and explain how such materials were false or misleading.'" (citation omitted)).

The FAC identifies several broad statements regarding Apple Watches generally, but Plaintiffs allege only that they relied on "marketing and advertisements from Apple that promoted the Apple Watch' [*sic*] various features." (FAC ¶¶ 15, 26, 37, 48, 59, 70.) Such blanket allegations of reliance, without details as to when, where, or how Plaintiffs saw any Apple

advertisement, are insufficient to meet Rule 9(b)'s standards. Courts dismiss claims where, as here, "[t]he complaint alleges a litany of misrepresentations and omissions, but it does not allege with particularity which marketing materials each plaintiff relied upon and when or whether the plaintiffs would have seen the information . . . had it been disclosed." *Almeida v. Apple, Inc.*, No. 21-cv-07109-VC, 2022 WL 1514665, at *1 (N.D. Cal. May 13, 2022); *see also Yastrab*, 173 F. Supp. 3d at 978 (dismissing plaintiffs' consumer protection claims for failure to meet Rule 9(b)'s specificity requirement where plaintiffs referenced only vague statements on Apple's website and its advertisements). Here, Plaintiffs fail to allege with particularity which marketing materials they relied upon and when and only vaguely reference reliance on Apple's website and advertisements. Therefore, their misrepresentation claims fail under Rule 9(b)'s heightened pleading standard.

2. Plaintiffs' Omissions and Fraudulent Concealment Claims Fail

Plaintiffs' omissions claims are barred because Plaintiffs have failed to allege the requisite knowledge or any basis for a duty to disclose.

a. Plaintiffs Do Not Adequately Allege Exclusive Presale Knowledge or Concealment

Plaintiffs' omissions and concealment claims fail because Plaintiffs do not make any non-conclusory allegations that Apple had actual, exclusive knowledge of the alleged presence of "dangerously high levels" of PFHxA in Sport Bands, nor do they point to any active concealment of such information by Apple.[4] (FAC ¶¶ 109, 136, 138.) To state a claim for common-law

[4] Apple reserves the right to argue that California's choice of law analysis applies, thus resulting in application of each individual state's laws. But, regardless of whether California law or the laws of the individual states applies, Plaintiffs' fraudulent omissions and concealment claims should be dismissed. *See Zottola v. Eisai Inc.*, 564 F. Supp. 3d 302, 317 (S.D.N.Y. 2021) (conclusory allegations that defendant knew about the defect were insufficient); *Smith v. Gen. Motors LLC*, 988 F.3d 873, 886 (6th Cir. 2021) ("[A] complaint must contain specific facts showing the manufacturer's knowledge of the defect that it allegedly fraudulently concealed. Mere assertions that a manufacturer's routine testing, along with customer feedback and increased warranty claims, should have alerted it to a dangerous defect are not enough to meet the 12(b)(6) pleading standard."); *Miller v. William Chevrolet/GEO, Inc.*, 976 N.E.2d 1, 14 (Ill. App. Ct. 2001) ("an action for fraudulent concealment logically demands that defendants have prior knowledge of the information that they are alleged to have suppressed"); *Laws v. Husqvarna Grp.*, No. 22-4588, 2023 WL 1767477, at *3 (E.D. Pa. Feb. 3, 2023) ("Simply stating that a product, purchased in the stream of commerce in a routine manner, ultimately malfunctioned is

fraudulent concealment or for a violation consumer fraud statutes based on an omission, a defendant "must have known of the defect at the time of sale for a plaintiff to state a claim." *Hauck v. Advanced Micro Devices, Inc.*, No. 18-CV-00447-LHK, 2019 WL 1493356, at *11 (N.D. Cal. Apr. 4, 2019), *aff'd*, 816 F. App'x 39 (9th Cir. 2020); *see also Resnick v. Hyundai Motor Am., Inc.,* No. CV 16-00593-BRO (PJWx), 2017 WL 1531192, at *17 (C.D. Cal. Apr. 13, 2017) ("[I]t is unclear to the Court how, absent sufficient allegations that Defendants were aware of the alleged paint defect at the time Plaintiffs purchased their vehicles, Defendants could have affirmatively concealed or suppressed any facts regarding the defect[.]"). "To show 'actual knowledge,' a plaintiff must allege 'how the defendant obtained knowledge of the specific defect . . . .'" *Castillo v. Prime Hydration LLC*, 748 F. Supp. 3d 757, 773 (N.D. Cal. 2024) (citation omitted). Generalized assertions that a manufacturer had "access to the aggregate information and data regarding the [alleged] risk" are "speculative and do[] not suggest how any tests or information could have alerted [the manufacturer] to the defect." *Id.* (citation omitted). Plaintiffs' allegations in the FAC about Apple's alleged knowledge are insufficient.

First, general claims that Apple's alleged knowledge about the presence of PFAS in its products is exclusive rings hollow in light of Apple's PFAS Phaseout Plan, which notes that Apple is *currently working* to remove PFAS from its products. (Tarantino Decl. Ex. B.) Given Apple's transparent acknowledgements of its *ongoing* efforts to restrict the use of PFAS in its products, Plaintiffs cannot contend that Apple had exclusive knowledge of any alleged PFAS or that it actively concealed such information. *See In re Plum Baby Food Litig.*, No. 4:21-CV-00913-YGR, 2024 WL 1354447, at *5 (N.D. Cal. Mar. 28, 2024) (finding no exclusive knowledge about the potential presence of heavy metals or percolate in baby food where defendant has disclosed on its own website that its products may contain heavy metals), *aff'd*, No. 24-2766, 2025 WL 1200700 (9th Cir. Apr. 25, 2025).

Second, Plaintiffs' allegations that Apple knew or should have known about the alleged presence of "dangerously high levels" of PFHxA are insufficient. To state an omissions or

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insufficient to support a fraud claim as it does not allege the manufacturer or seller had knowledge of the problem.").

fraudulent concealment claim, a defendant "must have known of the defect at the time of sale." *Hauck*, 2019 WL 1493356, at *11. An allegation that a defendant *should* have known about a defect is insufficient. *Morris v. BMW of N. Am., LLC*, No. C 07-02827 WHA, 2007 WL 3342612, at *6 (N.D. Cal. Nov. 7, 2007) (plaintiff must allege that the defendant had "actual knowledge" of the defect). Here, the FAC makes a formulaic recitation that Apple had "exclusive" or "full" knowledge regarding the Sport Band and that Apple knew or "should have known" about the alleged presence of "dangerously high levels" of PFHxA. (*See* FAC ¶¶ 109, 137, 138, 139, 173, 183, 191, 251.) Such conclusory allegations are insufficient to show actual knowledge by Apple of any purported defect with the Sport Bands. *See Oestreicher*, 544 F. Supp. 2d at 974 (holding that a rote allegation that defendant had "exclusive knowledge as the manufacturer" did not support claim that defendant was aware of a defect).

Plaintiffs additionally claim that Apple's suppliers "have directly reported and informed Apple that the Sport Bands contain dangerously high levels of toxic PFHxA." (FAC ¶ 138.) While Plaintiffs claim that Apple receives information from its suppliers regarding "materials used in its products," they do not include any factual support regarding what information was provided, or, more importantly, that Apple *actually knew* of any supposed "elevated levels" of PFHxA. (*Id.*) Further, Plaintiffs do not provide support for the allegation that Apple "knew or should have known of the human health hazards associated" with the alleged levels of PFHxA. (*See id.* ¶ 139.) As Plaintiffs note, Apple voluntarily establishes specifications for certain substances in its products. Those specifications may go above and beyond regulatory requirements (*see* Tarantino Decl. Ex. B), and the levels claimed here are far less than California's PFAS limitations for clothing and textiles (*see* Cal. Health & Safety Code § 108970(g)(2) (reflecting PFAS threshold of 100 parts per million)). There is no support for the premise that levels above Apple's voluntary specifications create a "human health hazard," or that Apple had knowledge of such hazard. Here, Plaintiffs do not allege at what level PFHxA is harmful to human health, or whether Sport Band users would have been exposed to such levels under typical use of a Sport Band. Their allegations that Apple knew or should have known of these alleged safety issues are insufficient to support their omissions or fraudulent concealment

claims. *See, e.g.*, *Resnick*, 2017 WL 1531192, at *14-16 ("[t]he fact[s] that Defendants had quality control programs in place," "that several consumers made anonymous complaints online," and that Defendant "did or should have conducted testing" are insufficient to establish knowledge of an alleged defect).

b. Plaintiffs Do Not Adequately Allege a Duty to Disclose

Plaintiffs' omissions claims also fail because Plaintiffs cannot allege that Apple had a duty to disclose the alleged presence of PFHxA in Sport Bands. "Not every omission or nondisclosure of fact is actionable." *Gutierrez v. Carmax Auto Superstores Cal.*, 19 Cal. App. 5th 1234, 1258 (2018), *as modified on denial of reh'g* (Feb. 22, 2018). To allege fraud by omission, the alleged omission must either be "contrary to a representation actually made by the defendant, or an omission of a fact the defendant was obliged to disclose." *Daugherty v. Am. Honda Motor Co.*, 144 Cal. App. 4th 824, 835 (2006). A duty to disclose arises only "when either (1) the defect at issue relates to an unreasonable safety hazard or (2) the defect is material, 'central to the product's function,' and the plaintiff alleges one of the four *LiMandri* factors." *Hammerling v. Google LLC*, 615 F. Supp. 3d 1069, 1085 (N.D. Cal. 2022) (citation omitted).[5] Critically, Plaintiffs have neither adequately alleged an unreasonable safety hazard, nor that the alleged issue is central to the product's function and that any of the four *LiMandri* factors are met.

Plaintiffs fail to plausibly allege an unreasonable safety hazard. As discussed above, the FAC does not allege at what level PFHxA is harmful to human health or at what levels a Sport Band user might be exposed to PFHxA in typical use conditions, let alone whether such exposure could be harmful. Plaintiffs continue to conflate claims about the hazards of PFHxA with safety research and regulatory guidance about all PFAS generally. (*See* FAC ¶ 127 (referring to a generic EPA advisory about broadly reducing exposure to PFAS and focused on drinking water contamination).) To state a claim, Plaintiffs need to allege that the particular chemical at issue is

[5] "The *LiMandri* factors are: (1) the defendant is in a fiduciary relationship with the plaintiff; (2) the defendant had exclusive knowledge of material facts not known to the plaintiff; (3) the defendant actively conceals a material fact from the plaintiff; or (4) the defendant makes partial representations but also suppresses some material facts." *Id.* (quoting *LiMandri v. Judkins*, 52 Cal. App. 4th 326, 336, (1997)); *see also Hodsdon v. Mars*, 891 F.3d 857, 861, 863 (9th Cir. 2018).

"unreasonably hazardous *at the particular levels* in the *specific Products* at issue in this case." *See In re Trader Joe's Co. Dark Chocolate Litig.*, 726 F. Supp. 3d 1150, 1170 (S.D. Cal. 2024) (emphasis added). They have failed to do so. Plaintiffs' third-party testing—which is not attached to the FAC—purports to identify concentrations of PFHxA detected on the one Watch band tested after a solvent extraction process. This is insufficient to allege that users are exposed to those purported levels of PFHxA in the Watch bands during normal use, let alone that users may be harmed as a result. *See Grausz v. Hershey Co.*, 713 F. Supp. 3d 818, 828 (S.D. Cal. 2024) (granting motion to dismiss because it was insufficient to "merely assert[] that lead and cadmium are carcinogens, that '[t]here may be no safe level of exposure to a carcinogen,' and that [] products contain some amount of these substances").

In light of the extreme conditions created to generate PFHxA detections, Plaintiffs cannot plausibly allege that the one tested Sport Band poses an unreasonable safety hazard to consumers generally, let alone that the Sport Bands the named Plaintiffs purchased pose any safety hazard. Courts have dismissed similar claims where Plaintiffs allege an unreasonable safety hazard but plead no facts to show that the presence of the substance is, in fact, hazardous. *See In re Trader Joe's Co. Dark Chocolate Litig.*, 726 F. Supp. 3d at 1170 (dismissing omissions claims due to disconnect between plaintiffs' allegations about potential harms posed by heavy metals and whether those heavy metals were unreasonably hazardous *at the particular levels in the specific products at issue*); *Krakauer*, 2024 WL 1494489, at *10 (plaintiff's omission claims failed "largely because he ha[d] not plausibly alleged that his raincoat contained dangerous PFAS in quantities sufficient to pose health risks").

Further, the FAC makes no plausible allegation that the Sport Bands contain a defect central to the Watch's function. Plaintiffs cannot plausibly allege that the presence of PFHxA in Sport Bands would prevent the Watches from performing their intended function as smartwatch. *See Hammerling*, 615 F. Supp. 3d at 1086 ("The question is not whether a defect "affects" the product, rather the question is: does the alleged defect prevent the product from "performing a critical or integral function," or render the product "incapable of use" for all users?"). Plaintiffs have therefore not alleged a duty to disclose the purported omissions, and their omissions and

concealment-based claims should be dismissed.

3. Plaintiff Cavalier's CLRA, FAL, and Common Law Claims are Untimely

Plaintiff Cavalier's claims under the CLRA and FAL, and claims for common law fraud, fraudulent inducement, fraudulent concealment, fraudulent misrepresentation, negligent misrepresentation, and unjust enrichment are independently deficient because they are untimely. These claims are, at most, subject to a three-year limitations period[6] and accrued on December 1, 2021, when Plaintiff Cavalier claims to have purchased her Apple Watch equipped with a Sport Band. (FAC ¶ 13.) This suit was brought more than three years later. Plaintiffs claim that the discovery rule, fraudulent concealment doctrine, and estoppel apply to toll their statutes of limitations. Plaintiffs have not sufficiently pled that any of these exceptions apply to Cavalier's otherwise barred claims; therefore, Plaintiff Cavalier's claims should be dismissed.

First, Plaintiffs fail to allege facts to establish that the discovery rule applies. "[A] plaintiff whose complaint shows on its face that his claim would be barred without the benefit of the discovery rule must specifically plead facts to show (1) the time and manner of discovery and (2) the inability to have made earlier discovery despite reasonable diligence." *Nguyen v. Nissan N. Am., Inc.*, 487 F. Supp. 3d 845, 856 (N.D. Cal. 2020) (citation omitted). Plaintiff Cavalier does not make *any* allegations regarding when or how she discovered her alleged economic injury, and Plaintiffs claim only that they "could not have discovered through the exercise of reasonable diligence that Defendant was concealing and omitting the Elevated Levels of PFHxA." (FAC ¶ 148.) The complete failure to allege time and manner of discovery and conclusory allegations regarding reasonable diligence are insufficient to toll the statute of limitations through the discovery rule. *See Clark v. Hershey Co.*, No. C 18-06113 WHA, 2019 WL 913603, at *7 (N.D. Cal. Feb. 25, 2019) (plaintiffs did not sufficiently plead delayed discovery rule because

[6] The CLRA, FAL and common law claims of fraud, fraudulent inducement, fraudulent concealment, fraudulent misrepresentation and unjust enrichment have three-year statutes of limitations. *See* Cal. Civ. Code § 1783; Cal. Civ. Proc. Code § 338(d); *Vera v. REL-BC, LLC*, 66 Cal. App. 5th 57, 65-67 (2021) (fraud claims); *FDIC v. Dintino*, 167 Cal. App. 4th 333, 347 (2008) (unjust enrichment claims). Plaintiff Cavalier's negligent misrepresentation claim has a two-year statute of limitations under California law. *See* Cal. Civ. Proc. Code § 339(1).

there were no allegations about how they discovered the alleged unlawful labeling); *Allred v. Frito-Lay N. Am., Inc.,* No. 17-CV-1345 JLS (BGS), 2018 WL 1185227, at *7 (S.D. Cal. Mar. 7, 2018) (discovery rule did not apply where plaintiffs did not allege facts as to why or how they discovered the alleged labeling issues).

Nor have Plaintiffs adequately alleged fraudulent concealment tolling or estoppel. To invoke the doctrine of fraudulent concealment, Plaintiffs must plead with particularity under Rule 9(b) "(1) the substantive elements of fraud, and (2) an excuse for late discovery of the facts." *Garcia v. Gen. Motors LLC*, No. 1:18-cv-01313-LJO-BAM, 2018 WL 6460196, at *6 (E.D. Cal. Dec. 10, 2018) (citation omitted). "The second element requires the plaintiff to allege '(1) when the fraud was discovered; (2) the circumstances under which it was discovered; and (3) that the plaintiff was not at fault for failing to discover it or had no actual or presumptive knowledge of facts sufficient to put him on inquiry.'" *Id.* (citation omitted). For the same reasons Plaintiffs' fraudulent concealment and omissions claims fail, Plaintiffs have similarly failed to plead the substantive elements of fraudulent concealment for the purposes of tolling. And, as stated above, Plaintiff Cavalier has not pled any facts about when the alleged fraud was discovered or under which circumstances. Fraudulent concealment tolling thus does not apply. *Yumul v. Smart Balance, Inc.*, 733 F. Supp. 2d 1117, 1133 (C.D. Cal. 2010) (no delayed discovery rule or fraudulent concealment where plaintiff failed to allege when and under what circumstances the fraud was discovered, and the basis for claim that defendant fraudulently concealed facts).

Further, fraudulent concealment and estoppel generally require allegations of "active conduct by a defendant, above and beyond the wrongdoing upon which the plaintiff's claim is filed, to prevent the plaintiff from suing in time." *Felix v. Anderson*, No. 14-cv-03809-HSG, 2016 WL 3540980, at *4 (N.D. Cal. June 29, 2016) (citation omitted); *see also Lucas v. Breg, Inc.*, 212 F. Supp. 3d 950, 961-62 (S.D. Cal. 2016) (defendant not estopped from raising statute of limitations defense where the only conduct plaintiffs point to are defendants' alleged and challenged misrepresentations and omissions); *Whitney Holdings v. Givotovsky*, 988 F. Supp. 732, 746-47 (S.D.N.Y. 1997) (equitable estoppel not appropriate where the grounds for invoking estoppel were not separate and apart from the grounds for the substantive claim). The only

conduct Plaintiffs point to in support of fraudulent concealment and estoppel is the very conduct that gives rise to the allegations in this lawsuit, namely, the alleged misrepresentations or omissions regarding the presence of PFHxA in the Sport Bands. Plaintiffs therefore fail to plead active conduct by Apple "above and beyond the wrongdoing upon which" Plaintiffs' claims are based, as required to plead equitable estoppel and fraudulent concealment tolling. *Felix*, 2016 WL 3540980, at *4 (citation omitted).

Accordingly, Plaintiff Cavalier's CLRA, FAL, and common law claims are barred by the applicable statutes of limitation and should be dismissed.

E. Plaintiffs' Implied Warranty Claims Fail as a Matter of Law

Plaintiffs bring implied warranty of merchantability claims under California, Illinois, Michigan, New York, and Pennsylvania law, arguing that the Apple Watch Sport Bands are not fit for their "purpose of prolonged wear and use during exercise" because of the presence of PFHxA in Sport Bands. (*See* FAC Counts 8, 10, 12, 15, and 17.) These claims fail as a matter of law for a number of reasons.

First, all of Plaintiffs' implied warranty claims are barred under the terms of Apple's One (1) Year Limited Warranty, which covers the Apple Watch and corresponding accessories, like the Sport Band, and disclaims all other warranties, including the implied warranty of merchantability. The Limited Warranty warrants "the Apple-branded hardware product and Apple-branded accessories contained in the original packaging… against defects in materials and workmanship when used normally in accordance with Apple's published guidelines for a period of ONE (1) YEAR from the date of original retail purchase by the end-user purchaser." (Tarantino Decl. Exs. C, D at 1-2.) And the Limited Warranty clearly and effectively disclaims all implied warranties:

> "TO THE EXTENT PERMITTED BY LAW, THIS WARRANTY AND THE REMEDIES SET FORTH ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, REMEDIES AND CONDITIONS, WHETHER ORAL, WRITTEN, STATUTORY, EXPRESS OR IMPLIED. APPLE DISCLAIMS ALL STATUTORY AND IMPLIED WARRANTIES INCLUDING WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND WARRANTIES AGAINST HIDDEN OR LATENT DEFECTS, TO THE EXTENT PERMITTED BY LAW."

(*Id.*) Courts in this district have consistently enforced Apple's Limited Warranty and have held that it expressly disclaims implied warranties.[7] *See, e.g.*, *Minkler v. Apple, Inc.*, 65 F. Supp. 3d 810, 819 (N.D. Cal. 2014) ("Apple's [Limited] Warranty disclaimed all implied warranties in accordance with California law because it stated in clear language and capitalized formatting that Apple 'disclaims all statutory and implied warranties, including without limitation, warranties of merchantability and fitness for a particular purpose and warranties against hidden or latent defects.'"); *Ocampo v. Apple Inc.*, No. 5:20-cv-05857-EJD, 2022 WL 767614, at *5 (N.D. Cal. Mar. 14, 2022) (holding that the disclaimer in Apple's Limited Warranty is enforceable and dismissing implied warranty claims accordingly); *see also Smith v. Apple, Inc.*, No. 21-cv-09527-HSG, 2023 WL 2095914, at *6 (N.D. Cal. Feb. 17, 2023) (dismissing implied warranty claims with prejudice because of Apple's conspicuous Limited Warranty); *Smith v. Apple, Inc.*, 583 F. Supp. 3d 554, 567 (S.D.N.Y. 2022) (same under New York law); *Davidson v. Apple, Inc.*, No. 16-CV-04942-LHK, 2017 WL 976048, at *15 (N.D. Cal. Mar. 14, 2017) (same under Illinois law).[8]

Second, Plaintiffs' implied warranty claims would fail even if Apple did not offer the Limited Warranty because the implied warranty of merchantability does not "impose a general

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[7] Illinois, Michigan, New York, and Pennsylvania similarly permit disclaimer of the implied warranty of merchantability. *See, e.g.*, *In re Sony Gaming Networks & Customer Data Sec. Breach Litig.*, 996 F. Supp. 2d 942, 981, 983 (S.D. Cal. 2014) (Michigan and New York law permit the waiver of implied warranties); *Robinson v. Freightliner LLC*, No. 08-cv-761, 2009 WL 10718876, at *8 (M.D. Pa. Sept. 28, 2009) ("It is well established that a seller may disclaim the implied warranty of merchantability if the disclaimer is in writing and conspicuous."); *Accurate Transmissions, Inc. v. Sonnax Indus., Inc.*, No. 04 C 7441, 2007 WL 1773195, at *2 (N.D. Ill. June 14, 2007) (under 810 ILCS 5/2-316(2), a seller may exclude or modify the implied warranty of merchantability by using conspicuous language).

[8] Notably, Plaintiffs Kryzek and Fenton appear to be within the one-year Limited Warranty period, but do not allege that they ever sought to obtain replacement of their Sport Bands from Apple pursuant to the Limited Warranty. (FAC ¶¶ 24, 68.) This dooms their implied warranty claims. *See, e.g.*, *Frenzel v. AliphCom*, 76 F. Supp. 3d 999, 1020 (N.D. Cal. 2014) (dismissing breach of implied warranty claim under California Commercial Code section 2314 where plaintiff "has not alleged that [defendant] refused to repair or replace his device during the applicable warranty period"). And Plaintiff Russell's implied warranty claim under Michigan law fares no better, given Russell allegedly purchased an Apple Watch in 2023 but does not allege that she contacted Apple during the warranty period. *See, e.g.*, *In re Gen. Motors Air Conditioning Mktg. & Sales Practices Litig.*, 406 F.Supp.3d 618, 628 (E.D. Mich. 2019) ("To maintain a claim for breach of an express or implied warranty, a plaintiff must, among other things, 'seek warranty service within the [] period contained in the . . . [w]arranty.'" (citation omitted)).

requirement that goods precisely fulfill the expectation of the buyer," and Plaintiffs fail to plausibly allege that the Sport Band breaches the implied warranty of merchantability. *Viggiano v. Hansen Nat. Corp.*, 944 F. Supp. 2d 877, 896 (C.D. Cal. 2013) (citation omitted) (applying California law). To state a claim for breach of the implied warranty of merchantability, Plaintiffs must show that the device lacked "the most basic degree of fitness for ordinary use." *Gagetta v. Walmart, Inc.*, 646 F. Supp. 3d 1164, 1178 (N.D. Cal. 2022) (citation omitted).[9] Plaintiffs do not and cannot allege that the Apple Watch Sport Bands failed to meet a minimum level of quality or somehow failed to act as Watch bands supporting the Apple Watch hardware.

Third, Plaintiffs' implied warranty claims fail for lack of privity. Under California law, a plaintiff must plead vertical privity to maintain an implied warranty claim, but generally, "an end consumer . . . who buys from a retailer is not in privity with a manufacturer." *Clemens v. DaimlerChrysler Corp.*, 534 F.3d 1017, 1023 (9th Cir. 2008). The same is true in Illinois and New York, but Plaintiffs allege that they bought through retailers and not directly from Apple. *See, e.g.*, *Voelker v. Porsche Cars N. Am., Inc.*, 353 F.3d 516, 525 (7th Cir. 2003) (applying Illinois law); *Kyszenia v. Ricoh USA, Inc.*, 583 F. Supp. 3d 350, 365 (E.D.N.Y. 2022) (applying New York law). While Plaintiffs allege that the privity requirement should not apply because they are third-party beneficiaries (*see* FAC ¶¶ 84-85), Plaintiffs seemingly misunderstand how this exception works; a person seeking to enforce a contract as a third-party beneficiary must plead a contract which was expressly made for his benefit and one in which it clearly appears that he was a beneficiary." *Schauer v. Mandarin Gems of Cal., Inc.*, 125 Cal.App.4th 949, 957 (2005); *see also Dixon v. Ford Motor Co.*, No. 14-CV-6135 (JMA)(ARL), 2015 WL 6437612, at *6 (E.D.N.Y. Sept. 30, 2015) (dismissing third-party beneficiary claim where the "complaint does

[9] Plaintiffs must make this same showing for their breach of implied warranty claims pled under Illinois, Michigan, New York and Pennsylvania law. *See Rudy v. D.F. Stauffer Biscuit Co.*, 666 F. Supp. 3d 706, 721-22 (N.D. Ill. 2023) (merchantability only requires that goods satisfy a minimum level of quality); *Duncan v. Kahala Franchising, L.L.C.*, 732 F. Supp. 3d 255, 268 (E.D.N.Y. 2024) (same under New York law); *Osness v. Lasko Prods., Inc.*, 868 F. Supp. 2d 402, 414 (E.D. Pa. 2012) (under Pennsylvania law, merchantability requires only that goods be of "reasonable quality"); *Computer Network, Inc. v. AM Gen. Corp.*, 696 N.W.2d 49, 56 (Mich. Ct. App. 2005) (under Michigan law, "[t]he warranty of merchantability is that goods are of average quality in the industry").

not cite any contractual provisions in the alleged contracts between [defendant] and its dealerships that indicate plaintiff is a third-party beneficiary of those contracts"). Here, Plaintiffs cannot plausibly allege that Apple entered into contracts with its distributors expressly for Plaintiffs' benefit, and their implied warranty claims should be dismissed for lack of privity.

F. Plaintiffs' Claim for Negligent Misrepresentation Is Barred by the Economic Loss Doctrine

The economic loss doctrine bars Plaintiffs' claim seeking damages for negligent misrepresentation. "The economic loss doctrine provides that a plaintiff's tort recovery of economic damages is barred unless such damages are accompanied by some form of harm to person or property, or the action falls under an exception." *Strumlauf v. Starbucks Corp.*, 192 F. Supp. 3d 1025, 1035 (N.D. Cal. 2016) (citing *N. Am. Chem. Co. v. Superior Ct.*, 59 Cal. App. 4th 764, 777 (1997). Plaintiffs have incurred no physical harm to person or property as a result of Apple's alleged misrepresentations. And Plaintiffs do not allege that their claim falls under any exception to the economic loss doctrine and, thus, must be dismissed. *See In re Trader Joe's Tuna Litig.*, 289 F. Supp. 3d 1074, 1091-92 (C.D. Cal. 2017) (barring a negligent misrepresentation claim pursuant to the economic loss doctrine because plaintiff had incurred no injury to person or property as a result of the alleged misrepresentation on tuna can labels); *Quiroz v. Sabatino Truffles N.Y., LLC*, No. SA CV 17-0783-DOC (KES), 2017 WL 8223648, at *6 (C.D. Cal. Sept. 18, 2017) ("[I]n the context of class action lawsuits involving fraudulent or misleading representations on products, district courts regularly invoke the economic loss doctrine to bar negligent misrepresentation claims where some form of physical harm is not alleged.").

G. Plaintiffs Fail to State a Claim for Unjust Enrichment and Under the UCL "Unfair" Prong

Plaintiffs seek remedies under unjust enrichment and the UCL's "unfair" and "unlawful" prong based on the same facts as their other claims. Because Plaintiffs do not "allege any theories of unfair practices that are independent of [their] other claims," their unjust enrichment and UCL unfair and unlawful claims must fail too. *Maketa*, 2024 WL 4311702, at *4. This is

because "[g]enerally, where conduct that comprises the UCL fraudulent or unlawful prongs is the same conduct as the unfair prong, 'the unfair prong of the UCL cannot survive if the claims under the other two prongs of the UCL do not survive.'" *In re Plum Baby Food Litig.*, 2024 WL 1354447, at *7 (citation omitted). And because Plaintiffs' UCL unlawful prong claim hinges on their deficient CLRA, FAL, and common law fraud claims, the UCL unlawful prong claim must also be dismissed. *See Hadley v. Kellogg Sales Co.*, 243 F. Supp. 3d 1074, 1094-96 (N.D. Cal. 2017) (dismissing UCL claim where plaintiff alleged the same fraudulent conduct for the unlawful prong as under his deficient FAL and CLRA claims). Unjust enrichment claims premised on the same factual allegations and pleading the same damages as other claims under California law must similarly be dismissed. *See Hawkins v. Shimano N. Am. Bicycle Inc.*, 729 F. Supp. 3d 989, 1029 (C.D. Cal. 2024).

H. Plaintiffs' Claims for Equitable Relief Must Be Dismissed Because Plaintiffs Have an Adequate Remedy at Law

Plaintiffs' UCL, FAL, and unjust enrichment claims must be dismissed in their entirety, and their claims under other state consumer protection statutes must be dismissed to the extent they seek equitable relief, because Plaintiffs have an adequate remedy at law. Plaintiffs seek an injunction, damages, restitution, and disgorgement of profits under the UCL, but this is improper. (FAC ¶¶ 232-33.) "A UCL action is equitable in nature; damages cannot be recovered," and neither can non-restitutionary disgorgement of profits. *Korea Supply Co. v. Lockheed Martin Corp.*, 29 Cal. 4th 1134, 1144 (2003); *SkinMedica, Inc. v. Histogen Inc.*, 869 F. Supp. 2d 1176, 1184-85 (S.D. Cal. 2012). Similarly, Plaintiffs seek damages, restitution, and disgorgement for their FAL claim (FAC ¶ 241), but this is equally impermissible because the "recovery of damages is not authorized" under the FAL. *Buckland v. Threshold Enters, Ltd.*, 155 Cal. App. 4th 798, 819, *as modified* (Oct. 22, 2007).

Even if Plaintiffs amend their complaint (for a *second* time) to seek only equitable relief under the UCL and FAL, a federal court only has jurisdiction over a request for equitable relief if plaintiffs have no adequate legal remedy. *Guzman v. Polaris Indus. Inc.*, 49 F.4th 1308, 1313 (9th Cir. 2022). Plaintiffs allege that they have no adequate remedy at law because: (1) the statute

of limitations under the UCL is longer than that of the FAL and CLRA; (2) the scope of actionable misconduct under the UCL's unfair prong is broader than the other causes of action; and (3) discovery has not commenced, so equitable relief is necessary. (FAC ¶ 234.) But none of these facts makes Plaintiffs' remedy at law inadequate. As the *Guzman* court explained, district courts are required to dismiss equitable claims where a plaintiff "had an adequate remedy at law through his CLRA claim for damages, even though he could no longer pursue it" as it was time-barred. 49 F.4th at 1312. Indeed, "several courts have rejected the argument that a longer statute of limitations under the UCL renders legal claims based on the same underlying alleged actions inadequate." *Scott v. Cintas Corp.*, No. 3:23-cv-05764-JSC, 2024 WL 3304793, at *8 (N.D. Cal. July 3, 2024) (citation omitted).

Moreover, it is immaterial to the adequacy analysis that the scope of the UCL's unfair prong is allegedly broader than other causes of action, because plaintiffs' "factual allegations must provide a plausible basis to conclude that the same amount of money for the exact same harm is inadequate or incomplete." *Phillips v. Brooklyn Bedding LLC*, No. 23-cv-03781-RFL, 2024 WL 2830663, at *1 (N.D. Cal. Mar. 28, 2024) (citation omitted). Nor does the fact that discovery has not yet commenced move the needle on the inadequacy analysis. If it did, courts would never need to grapple with the inadequacy of legal remedies at the pleadings stage because plaintiffs could always assert that discovery would be needed, and the Ninth Circuit's holdings in *Guzman* and *Sonner v. Premier Nutrition Corp.*, 971 F.3d 834 (9th Cir. 2020) would be meaningless.

The reality is that Plaintiffs bring claims under the CLRA and seek damages for Plaintiffs' common law claims for fraud by concealment (FAC ¶ 177), fraud by misrepresentation (*id.* ¶ 186), negligent misrepresentation (*id.* ¶ 193), and under the UCL (*id.* ¶ 232), and other state law consumer protection claims (*id.* ¶¶ 289, 315, 335, 344, 365).[10] Since Plaintiffs acknowledge that an adequate legal remedy for past harms exists, their claims seeking equitable relief for the exact

[10] While Plaintiffs do not seek damages under the CLRA, Plaintiffs may not create an inadequacy of a legal remedy by choosing not to pursue a claim for damages. *Sonner*, 971 F.3d at 837-38.

same conduct should be dismissed. *See Price v. Apple, Inc.,* No. 21-cv-02846-HSG, 2022 WL 1032472, at *7 (N.D. Cal. Apr. 6, 2022) (dismissing equitable relief claims where plaintiff sought "compensation under the UCL and CLRA for the exact same conduct that form[ed] the basis of his equitable relief claims," and therefore had an adequate remedy at law).

V. CONCLUSION

For the foregoing reasons, Apple respectfully requests that the Court grant Apple's motion to dismiss Plaintiffs' First Amended Complaint in its entirety, with prejudice.

Dated: June 16, 2025

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UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

SAN JOSE DIVISION

DOMINIQUE CAVALIER, KILEY KRZYZEK, KATHERINE WHEELER, MARLO RUSSELL, TERI GLAZEBROOK, and HEIDI FENTON, individually and on behalf of all others similarly situated,

Plaintiffs,

v.

APPLE INC., a California corporation,

Defendant.

Case No. 5:25-cv-713-PCP

DECLARATION OF WILLIAM F. TARANTINO IN SUPPORT OF DEFENDANT APPLE INC.'S MOTION TO DISMISS PLAINTIFFS' FIRST AMENDED CLASS ACTION COMPLAINT

Date: October 9, 2025
Time: 10:00 a.m.
Dept.: Courtroom 8 – 4th Floor
Judge: Honorable P. Casey Pitts

FAC Filed: May 5, 2025

I, WILLIAM F. TARANTINO, hereby declare as follows:

1. I am an attorney admitted to practice in the State of California and before this Court, and I am a partner of the law firm of Morrison & Foerster LLP, counsel of record for Defendant Apple Inc. ("Apple"). I make this declaration in support of Apple's Motion to Dismiss Plaintiffs' First Amended Class Action Complaint. I have personal knowledge of the facts set forth below based on information provided by Apple and, if called as a witness, could testify competently about them.

2. Attached as **Exhibit A** is a true and correct copy of the article: Alyssa Wicks, Heather D. Whitehead, and Graham F. Peaslee, *Presence of Perfluorohexanoic Acid in Fluoroelastomer Watch Bands*, 12 ENVIRONMENTAL SCIENCE & TECHNOLOGY LETTERS 1 (Dec. 18, 2024) (the "Peaslee Paper"), available at https://pubs.acs.org/doi/10.1021/acs.estlett.4c00907 (last visited June 16, 2025).

3. Attached as **Exhibit B** is a true and correct copy of the document titled "Apple's Commitment To Phasing Out Per- And Polyfluoroalkyl Substances (PFAS)" ("Apple's PFAS Phaseout Commitment"), available at https://www.apple.com/environment/pdf/Apple_PFAS_Commitment_November-2022.pdf (last visited June 16, 2025).

4. Attached as **Exhibit C** is a true and correct copy of Apple's English-language One (1) Year Limited Warranty for Apple Branded Products operative from November 19, 2021 to April 21, 2022, available at https://www.apple.com/legal/warranty/products/warranty-us.html.

5. Attached as **Exhibit D** is a true and correct copy of Apple's English-language One (1) Year Limited Warranty for Apple Branded Products operative from April 22, 2022 to present, available at https://www.apple.com/legal/warranty/products/warranty-us.html.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

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Executed this 16th day of June, 2025, at San Francisco, California.

By: */s/ William F. Tarantino*
William F. Tarantino

Exhibit A

Environmental Science & Technology Letters

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Letter

Presence of Perfluorohexanoic Acid in Fluoroelastomer Watch Bands

Alyssa Wicks, Heather D. Whitehead, and Graham F. Peaslee*

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ABSTRACT: Many "smart" and "fitness" watch bands are advertised to contain fluoroelastomers, a type of synthetic rubber designed to be resilient against skin oils and sweat. Fluoroelastomers, which are considered a polymeric form of per- and polyfluoroalkyl substances (PFAS), have historically involved the use of shorter-chain PFAS as surfactants in the polymerization process. In this study, 22 watch bands were analyzed across numerous brands and price points for the presence of PFAS. Products were first screened for total fluorine using particle-induced gamma-ray emission spectroscopy on the surface of these bands, and 15 of the 22 watch bands contained total F concentrations >1% fluorine, suggesting the widespread use of fluoroelastomers in this product category. Watch bands then underwent solvent extraction and targeted LC-MS/MS analysis for 20 PFAS. Perfluorohexanoic acid (PFHxA) was the most frequently detected compound with concentrations from <LoD to 16662 ng/g. A subset of six watch bands also underwent direct total oxidative precursor (dTOP) assay to determine the presence of PFAS precursors. The very high concentrations of PFHxA readily extractable from the surfaces of fluoroelastomer watch bands, together with the current limited knowledge on the dermal absorption of PFHxA, demonstrate the need for more comprehensive exposure studies of PFHxA.

KEYWORDS: *PFAS, PFHxA, fluoroelastomers, PIGE, LC-MS/MS, dTOP Assay*

INTRODUCTION

Per- and polyfluoroalkyl substances (PFAS) are a class of anthropogenic compounds containing over 14,000 individual compounds. PFAS are commonly used in various industrial processes and are added to consumer products, including nonstick cookware, food packaging, cosmetics, and textiles.[1−4] Fluoroelastomers are a subclass of polymeric PFAS used to form synthetic rubbers that are resistant to chemical or thermal degradation. When used in textiles and wearable devices, fluoroelastomers are designed to help the material retain its color and endure contact with oils in the skin, sweat, and personal care products such as sunscreen and hand lotion.[5] The use of PFAS in consumer products can potentially lead to various routes of PFAS exposure including ingestion, inhalation, and dermal absorption.

Dermal absorption of PFAS is poorly described, with few studies investigating a limited number of PFAS. In one study conducted on a human subject, Abraham and Monien monitored the absorption of PFOA through an applied sunscreen spiked with ^{13}C4-PFOA for 48 h in a single participant. The participant's plasma levels showed an estimated 1.6% of PFOA was dermally absorbed over the course of 115 days.[6] Recently, Ragnarsdóttir et al. examined the absorbed fraction of C5−C14 PFCAs and C4−C9 PFSAs using *in vitro* 3D human skin equivalent models and found PFPeA absorbed at the greatest rate of 58.9%, with rates decreasing as chain length increased.[7] Two experiments in mice models have shown that radiolabeled PFOA and PFHxA are extracted from blood serum by all examined organs, with PFHxA being absorbed at a greater rate in most organs.[8,9] These limited studies suggest that dermal absorption of PFAS may represent a significant exposure route for short-chain PFAS when used in consumer products that are in contact with the skin.

During the polymerization process of all fluoropolymers, including fluoroelastomers, surfactants may be introduced to prevent agglomeration or coagulation of the growing emulsion particle. Historically, PFOA was a commonly used surfactant in fluoropolymer production.[10,11] Following industrial phase-out of PFOA beginning in the mid-2000s, other fluorinated compounds, including PFBA and PFHxA, have been used as

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surfactants in fluoropolymer production.[12,13] Surfactants are intended to aide in mixing the monomers and are not expected to become part of the polymer itself.[10,11] At the completion of the polymerization process, the surfactant is washed out of the polymer mixture; however residual surfactant may remain.[10,11]

Many studies have examined the occurrence of specific PFAS resulting from the use of fluoropolymers in consumer goods using targeted analysis techniques, though the occurrence of PFAS in smart and fitness watch bands has not been reported to date. While some smart and fitness watch bands are advertised as silicone-based polymers, many smart watches are advertised as containing fluoroelastomers.[14,15] In 2019, an estimated 21% of Americans wore a smart watch or fitness tracker.[16] These products are worn against the skin for extended periods of time, and a 2020 study on consumer engagement with smartwatches found that participants wore the product for a median of 11.2 h per day.[14]

This work presents an investigation into the occurrence of PFAS in U.S. fitness and smart watch bands with and without a suspected fluoroelastomer presence. In total, 22 watch bands of various brands and price points were screened for the presence of fluorine using particle-induced gamma-ray emission (PIGE) spectroscopy. PIGE has been used previously to measure total fluorine concentrations in numerous other consumer products, including food packaging,[17] textiles,[18,19] and cosmetics.[3] Samples were then subjected to extraction and liquid chromatography-tandem mass spectrometry (LC-MS/MS) for targeted PFAS analysis of 20 analytes. Finally, a subset of samples underwent a direct total oxidative precursor (dTOP) assay to determine the presence of any PFAS precursors.

METHODS AND MATERIALS

Materials. LC-MS/MS grade methanol (A456-4), LC-MS/MS grade acetonitrile (A955-4), and formic acid (14793-2500) were purchased from Fisher Scientific (Waltham, MA). Ultrapure water was used for sample and LC-MS/MS solvent preparation. Ammonium acetate (5438340100), ammonium hydroxide (221228), and Whatman 1 filter paper were purchased from Sigma-Aldrich (St. Louis, MO). Twenty-one native standards (PFAC-MXC), 13 isotopically labeled standards (MPFAC-C-ES), native 6:2 fluorotelomersulfonic acid (6:2 FTS), and isotopically labeled 6:2 FTS (M2-6:2FTS) were purchased from Wellington Laboratories (Guelph, ON). QuEChERS extraction salts (5982-6555), QuEChERS dispersive SPE kit (5982-5258), polypropylene HPLC vials (5191-8150), and polypropylene HPLC caps (5191-8151) were purchased from Agilent Technologies (Santa Clara, CA). Poly(ether) sulfone syringe filters (76479-022) and 3-mL Luer Lock syringes (53548-017) were purchased from VWR (Radnor, PA). Oasis WAX cartridges (186002492) were purchased from Waters (Milford, MA).

Sample Collection. A total of 22 samples were acquired either through purchase or by donation for analysis and consisted of numerous brands (Table S1). Watch bands were purchased online from Best Buy and Amazon in 2023. Bands acquired through donation consisted of both worn and unworn bands and ranged in year of purchase from 2018 to 2023. Over half of the samples (13 of the 22) were advertised as containing fluoroelastomers. Table S2 notes whether bands were new or used and if advertised as containing fluoroelastomers.

PIGE Analysis. PIGE analysis was conducted as described in Whitehead et al.[3] Briefly, samples were cut to a length of ∼2 in. and were mounted on plastic target frames for ion beam analysis at the St. Andre Facility within the Notre Dame Nuclear Science Laboratory. A 3.95 MeV beam of protons with a current of ∼75 nA bombarded each sample *ex vacuo* for 3 min. Paper standards consisting of NaF solutions (0−750 ppm) spiked on Whatman 1 filter paper were run daily with the watch band samples to allow for rough quantification of the F concentrations. Samples whose fluorine signals saturated the detector were rerun at a current of ∼7 nA for 10 s and roughly quantified using the paper external standards. While PIGE is precise to within 10% on most total fluorine measurements, high deadtimes for signal acquisition render measurements above 10% F significantly less precise.

LC-MS/MS Sample Preparation. All 22 watch bands were prepared for targeted analysis by cutting ∼0.1 g from each band. Samples then underwent a modified QuEChERS extraction method as described in Whitehead and Peaslee and detailed in the Supporting Information.[20]

dTOP Assay. The following procedure was adapted from Göckener et al.[21] Full details are found in the Supporting Information. Briefly, six watch bands were chosen to undergo dTOP in triplicate using 6:2 FTS to track precursor degradation with 6 mL of 200 mM potassium persulfate in water and 6 mL of 500 mM sodium hydroxide in water. Samples were placed uncapped but tightly covered with aluminum foil in an oven set at 80 °C for 16 h. After cooling, 10 ng of both isotopically labeled 6:2 FTS and MPFAC-C-ES mix were added to each sample, and samples were pH adjusted with glacial acetic acid to pH 7 prior to solvent exchange using weak-anion exchange SPE. Samples were filtered with a 0.45 μm PES syringe filter, and 250 μL was transferred to a polypropylene HPLC vial for LC-MS/MS analysis.

LC-MS Analysis and QA/QC. A targeted analysis method for 20 analytes described in Whitehead et al. was used.[20] Detailed information on LC-MS/MS analysis is provided in the Supporting Information. Analysis was performed on an Agilent 1290 Infinity II UHPLC system coupled to an Agilent 6470B triple-quadrupole mass spectrometer. A complete list of measured analytes can be found in Table S3, and internal standard pairings are found in Table S4. Chromatographic and ion source parameters are listed in Table S5, and complete dMRM parameters are compiled in Table S6. Limits of detection and quantification for each analyte can be found in Table S7. Complete QA/QC information is given in the Supporting Information. Precision and accuracy values of continuing calibration checks had precision and accuracy values falling within 69−135% of the expected values. Interday relative standard deviations varied from 0.1 to 18.0% (median 6.0%). Average recoveries of isotopically labeled internal standards in samples ranged from 56 to 119% (median 83%). Samples were corrected for recovery by using the appropriate internal standards (Table S4).

RESULTS AND DISCUSSION

Total Fluorine Screening Using PIGE. A total of 22 watch bands were analyzed for their total fluorine content using PIGE. All 13 of the bands advertised as containing fluoroelastomers demonstrated total fluorine >25% on their surface, with values ranging from 28.5 to 90.7% fluorine. Only 2 of the 9 bands not advertised to contain fluoroelastomers had percent-level F, returning concentrations of 28.1% (M8) and 49.7% (E3). We also considered fluorination trends in relation to the price of each watch band. Watch bands were categorized

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into three categories: inexpensive (I, <$15), midrange (M, $15−30), and expensive (E, >$30). Figure S1 shows the breakdown of fluorine concentration by percentage, and complete PIGE results can be found in Table S8. All three bands in the expensive category contained percent level fluorine and ranged from 49.7 to 90.7% fluorine. In the middle price range, 12 of 14 bands contained percent level fluorine, ranging from nondetect to 75.1% fluorine. Lastly, all five of the inexpensive bands contained less than 1% fluorine on their surface, suggesting they are unlikely to contain a fluoroelastomer. These results suggests that fluoroelastomers are found in higher priced watch bands (>$15) presumably due to their increased cost to manufacture.

Targeted Analysis Using LC-MS/MS. All 22 watch bands were extracted for targeted LC-MS/MS analysis. PFHxA was the most commonly detected compound with 41% frequency, and its concentrations for each sample are shown in Table 1.

Table 1. Summary of Total Fluorine Concentrations (% F) Measured by PIGE, PFHxA Concentrations Measured by LC-MS/MS (ng/g), and Sum of Concentrations of 20 Targeted PFAS Compounds (ng/g) Measured by LC-MS/MS for Each Sample[a]

Sample ID	PIGE (% F)	PFHxA concentration (ng/g)	Sum of 20 PFAS concentrations (ng/g)
I1	0.2	0	0
I2*	0.0	0	8
I3	0.0	0	0
I4	0.0	0	0
I5	0.0	0	0
M1*	67.9	773	773
M2	31.8	5366	5366
M3	75.1	0	0
M4	57.8	1336	1336
M5	31.1	5865	5865
M6	28.5	0	0
M7	30.4	0	0
M8	28.1	0	0
M9	38.6	3	3
M10	0.0	0	0
M11	0.1	0	1
M12	71.7	0	0
M13	33.5	16662	16662
M14	68.5	304	304
E1	54.7	0	0
E2	90.7	659	659
E3	49.7	181	181

[a]Shaded samples were advertised as containing fluoroelastomers. Sample IDs marked with asterisks were worn bands. Note that 0.1% = 1,000,000 ng/g.

For samples with detectable PFHxA, the median concentration was 773 ng/g. This value is very high in comparison to other recent studies of cosmetics, food packaging, school uniforms, firefighter turnout gear, and fluorinated containers, which combined had observed PFHxA concentrations ranging from <LoD to 199 ng/g.[3,17,19,20,22] In addition to PFHxA, PFPeA was detectable in two watch bands, with concentrations of 0.8 and 1.4 ng/g. One watch band (I2) also had measurable concentrations of PFHpA, PFOA, PFNA, PFDA, and PFUnDA. This watch band was one of two worn bands, and measured PFAS may have adsorbed to the band over time with wear. Complete targeted LC-MS/MS results can be found in Table S9.

dTOP Assay. As shown in Figure S2, all measured PFHxA concentrations are several orders of magnitude smaller than total fluorine concentrations measured with PIGE. Due to the disparity in these concentrations, total oxidative precursor (TOP) assay was performed on a subset of samples to estimate the presence of PFAS precursors. In a traditional TOP assay, aqueous samples undergo persulfate oxidation under heat and alkaline conditions to convert PFAS precursors to intermediates or terminal oxidation products that are detectable with targeted LC-MS/MS analysis.[23] This procedure has been modified to be performed directly on samples in an effort to overcome potential losses during extraction[21] and account for nonextractable precursors, including those that may be polymeric.[24] The modified procedure, termed direct total oxidative precursor (dTOP), was chosen for watch band samples as the percent level total F measurements suggest that these samples may contain polymeric PFAS.

For this analysis, three watch bands with high detectable PFAS concentrations (M1, M4, M13) and three watch bands with low or no detectable PFAS via LC-MS/MS (M11, M12, E1) were chosen to undergo the dTOP assay. All six watch bands had detectable PFAS concentrations as a result of either QuEChERS or dTOP extraction, with concentrations ranging from 3 to 2016 ng/g. Similar to the results of the QuEChERS extracts for these samples, PFHxA was the predominant measured PFAS via dTOP, observed in all six samples with concentrations between 2 and 2008 ng/g (Figure S3). The three bands with high PFHxA concentrations from original extraction had dTOP total PFAS concentrations of 253−2016 ng/g, whereas the three bands with low/no detectable PFAS from original extraction ranged in concentration from 3 to 24 ng/g in dTOP.

QuEChERS and dTOP Assay Comparison. Interestingly, the dTOP extracts produced less total targeted PFAS than the QuEChERS extracts (Figure 1). In an effort to explain these results, two follow-up experiments were conducted. First, 6:2 FTS was spiked into triplicate samples of M13 that were then subjected to QuEChERS extraction. The recovery of 6:2 FTS was 96 ± 3% demonstrating that QuEChERS is unlikely to convert PFCA precursors during extraction.

Second, to track the rate of oxidation, triplicate samples of M13 spiked with 1 ng of native 6:2 FTS were allowed to undergo dTOP for 0, 15, and 60 min. The percentage of spiked native 6:2 FTS was tracked for samples that contained oxidant, but no heat was applied (0 min), and samples containing oxidant were placed in an oven at 85 °C for 15 or 60 min. Percent recoveries of spiked native 6:2 FTS 107 ± 4%, 102 ± 4%, and <4% for 0, 15, and 60 min, respectively. These results are consistent with Patch et al. in which nearly 100% conversion of 6:2 FTS was observed after 60 min in TOP assay experiments.[25] After 60 min, 630 ± 50 ng/g of PFHxA was measured in these samples, in comparison to the 2000 ± 300 ng/g of PFHxA observed in M13 after 16 h at 80 °C. These results suggest that the "timer" precursor of 6:2 FTS was able to be fully oxidized after an hour as it was loose and readily accessible to the oxidant, whereas the PFHxA precursors were not as easily oxidized to terminal PFCAs.

Impact of Results. The significance of these results lies in the very high concentration of PFHxA that can be readily extracted from the surfaces of watch bands made from fluoroelastomers. There are at least two possible explanations for the observation of highly extractable PFHxA in watch bands. The first is that PFHxA is present as a residual

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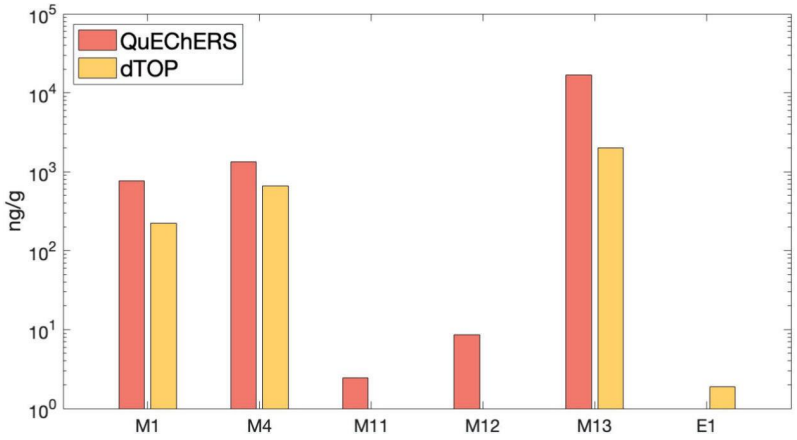

Figure 1. Comparison of PFHxA concentrations measured from select watch bands via QuEChERS and dTOP extraction methodologies. Sample ID is given on the *x*-axis, and the *y*-axis is log-scaled to display targeted concentrations.

surfactant from the emulsion polymerization process of fluoroelastomers. Samples with high percent F from PIGE measurements but not containing detectable PFHxA may have another PFAS compound being used as a surfactant that is not included in the 20 compounds in our targeted method. Another possibility includes PFHxA released from a side-chain fluorinated polymer (SFP). However, literature suggests the SFPs post-TOP typically degrade into a mixture of PFAAs and not just to a single predominant PFAS[24,26] as seen in this work. The predominance of just one PFAS in the targeted analysis (PFHxA) measured at part-per-million concentrations (see Table 1), also suggests it is an integral part of the manufacturing process.

The thousands of ng/g of PFHxA available, paired with watch band users often wearing these items for more than 12 h per day, poses an opportunity for significant transfer to the dermis and subsequent human exposure. Additionally, several of these watch bands were advertised as "sports and fitness" monitors, implying that the wearer may be exercising with them, which means additional sweat contact and open skin pores. While the extraction of watch bands in sweat was outside the scope of this study, Wu et al. found that ~86% of PFHxA extracted from children's car seats in 4:1 hexane:isopropanol followed by 1:1 methanol:acetonitrile was also extractable with synthetic sweat.[27] This, combined with a recent report showing more than 50% of a PFHxA exposure dose being dermally absorbed (and more that 36% entering the bloodstream) by an *in vitro* human skin equivalent model,[7] suggest that watch bands may represent a significant exposure route.

The toxicology of PFHxA after human exposure is also understudied. Plasma and serum are primarily analyzed in studies measuring PFAS in blood, although certain PFAS differentially partition into plasma, serum, and blood cells based on their physicochemical properties. One study reported PFHxA was the third highest PFAS concentration measured in whole blood samples but was not measured above the detection limits in paired serum or plasma samples.[28] This observation warrants further studies of PFHxA in human populations.

In 2023, the U.S. Environmental Protection Agency (EPA) released a finalized Integrated Risk Information System (IRIS) human health assessment on the toxicity of PFHxA and identified likely hepatic, developmental, hematopoietic, and endocrine effects in humans exposed to PFHxA.[29] Additionally, in 2024, the European Chemicals Agency introduced a PFHxA restriction under REACH to ban the sale and use of PFHxA in various consumer and industrial products, including consumer textiles, citing expansive environmental and human monitoring data to support its restriction.[30] As environmental monitoring, biomonitoring, and toxicity data increase in coming years, it is likely that PFHxA faces increasing restriction and regulation in consumer goods. These current and possible restrictions, together with the observation of a direct exposure pathway to high concentrations of PFHxA applied to human skin, highlight a critical need for a more comprehensive exposure study of PFHxA that arises from fluoroelastomer watch bands worn on human skin.

■ ASSOCIATED CONTENT

Supporting Information

The Supporting Information is available free of charge at https://pubs.acs.org/doi/10.1021/acs.estlett.4c00907.

Additional experimental and quality control details, as well as parameters used for the LC-MS/MS analysis. List of watch band brands tested. Full results of PIGE and targeted LC-MS/MS analyses. Figures examining trends observed in samples. (PDF)

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Notes

The authors declare no competing financial interest.

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Exhibit B

Apple's commitment to phasing out per- and polyfluoroalkyl substances (PFAS)

November 2022

Executive summary

At Apple, we have a long history of leading in the removal of potentially harmful substances. This means proactively restricting hazardous substances and using safer materials in Apple products and manufacturing processes to ensure the well-being of our employees, our customers, people in our supply chain, and the planet, while driving change that goes beyond what is required for regulatory compliance. We've done so since the late 1990s, rigorously assessing chemicals and removing those that don't align with our goals, such as replacing PVC with safer thermoplastic elastomers and eliminating brominated flame retardants from thousands of enclosures, cables, circuit boards, and connectors. As part of our long-standing commitment to design products that are better for the environment and for people, we're releasing this white paper to detail our commitment to phase out our use of per- and polyfluoroalkyl substances (PFAS). As part of this effort, we plan to engage all of our supply chain partners to restrict PFAS from our products and manufacturing processes and to develop safer alternatives that not only maintain, but may even enhance, the performance of Apple products.

The environmental implications of the use of PFAS are significant, and we're responding with focus and dedication. We want to thoughtfully phase out PFAS in a way that does not result in regrettable substitutions. We're prioritizing our phaseout activities on applications that result in the highest volumes of PFAS reductions and the most meaningful environmental impact. It will take time for Apple to completely phase out PFAS from our products and processes because of the challenges related to compiling a comprehensive catalog of PFAS use, identifying and developing non-PFAS alternatives that can meet the performance needs for certain critical applications, and taking into account the time needed for material qualification. This paper details our plan to phase out PFAS from our products.

Introduction

Apple has led the industry in removing harmful substances from our product designs, and we go to great lengths to make sure these substances stay out of our products. We've built an infrastructure to do this work, including the rigorous requirements defined in our Regulated Substances Specification (RSS), which describes Apple's global restrictions on the use of many chemical substances or materials in Apple products, accessories, manufacturing processes, and packaging used for shipping products to Apple's end customers. To find a replacement for PVC and phthalates, for example, we and our suppliers invested in four years of research and development to create power cords and headphone cables that had both the performance and the chemistry that met Apple standards. This deep commitment to safer chemistries led us to innovate new solutions, while other companies are still using PVC and phthalates in their cables.

We are proud and humbled to report that our work to develop and use safer chemicals in our products has been recognized. Apple has received the #1 rank and an A+ rating from Mind the Store, an external campaign that evaluates the largest retailers in North America on how they ensure the chemical safety of their products and packaging, for the past three years. In 2021, for the second year in a row, we received the EPA Safer Choice Partner of the Year Award, recognizing our work to scale the use of safer process chemicals and protect those working in our supply chain. Apple was the first consumer electronics company to receive this recognition.

Our commitment to creating the highest-quality products that are also better for the environment and for people requires diligent work, beginning with collecting comprehensive chemical composition information for the substances used to make our products, as well as the process chemicals. We do this in several ways. First, our Full Material Disclosure (FMD) program, which was launched in 2016, maps the chemicals in the materials used in our products. In addition to understanding our product chemistry, our Chemical Safety Disclosure (CSD) program advances disclosure around the chemistries used in manufacturing processes

by our suppliers for Apple products, identifying how chemicals are used, how they're stored, and how employees are protected. And at our Environmental Testing Lab, we evaluate the safety of our products and materials through chemical analyses, identifying potentially harmful chemicals so we can make the right decisions when it comes to potential toxicological risks. Our FMD and CSD programs and chemical analyses represent our ongoing efforts to monitor materials against the strict requirements of our Regulated Substances Specification.

The creation of our FMD and CSD programs has been a unique, innovative approach to a challenge faced across our industry. Identifying opportunities to reduce toxicological risk — and potentially develop new chemistries — requires deep knowledge of product and process chemistries. The data we collect from our disclosure programs and Environmental Testing Lab helps inform material selection decisions across our product life cycle. And we continue to innovate. We're using machine learning to digitize data from chemical tests so this information can be more easily assessed. We're also advocating for an industry standard to help encourage the digital exchange of this important information. Through these efforts and by sharing with others in the industry what we've learned in the process of creating these systems, we're not only improving the safety of our products, but we're also leading the push for transformational change across the broader electronics industry.

Background on PFAS

Per- and polyfluoroalkyl substances (PFAS) are a large class of thousands of synthetic chemicals. They all contain carbon-fluorine bonds, which are one of the strongest chemical bonds known. PFAS are widely used because they have unique performance properties. For instance, they're extremely chemically and thermally stable, with high resistance to degradation and oxidation. Many of them also have surfactant properties and functions that make them ideal as water and grease repellents.

Some of the major industry sectors using PFAS include aerospace and defense, automotive, aviation, food contact materials, textiles, leather and apparel, construction and household products, electronics, firefighting, food processing, and medical products (1). The same desirable physical and chemical properties that have led to their widespread use also have a troubling downside — because PFAS resist degradation and are highly persistent, they break down very slowly in the environment. Scientific studies have linked high-level exposure to some PFAS to harmful health effects in humans and animals, and more research is ongoing to understand adverse health outcomes from exposures to PFAS (2).

Our goal is always to ensure that everyone who makes, uses, or recycles an Apple product can do so safely, and our efforts to phase out PFAS from our products and processes is in line with this broader commitment. We're focusing our efforts on actions that have the potential for the greatest impact, triggering positive ripple effects both inside and outside of Apple. This is why we're prioritizing our phaseout activities on applications that result in the highest volumes of PFAS reduction and the most meaningful environmental impact.

[1] European Union. (n.d.). *Perfluoroalkyl chemicals (PFASs).* ECHA. https://echa.europa.eu/hot-topics/perfluoroalkyl-chemicals-pfas.

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Apple's PFAS phase out commitment

Apple eliminated two PFAS members, perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS), from our products by restricting their use in 2010 and 2013, respectively. We were proactive on this step, taking action ahead of global requirements, because research at the time showed that these chemicals remain persistent in the environment, and exposure to high, unsafe levels of PFOA or PFOS in drinking water may result in adverse health effects.

In our 2021 update of the Regulated Substances Specification, Apple added restrictions for perfluorocarboxylic acids C9-C14 (PFCA), their salts, and related substances, as well as perfluorohexanoic acid (PFHxS), its salts, and related substances, from use in all homogeneous materials in Apple products. We also updated restriction thresholds for PFOA and updated the restriction group to include "its salts, and PFOA-related compounds," and expanded the scope of the PFOS restriction.

In our ongoing effort to ensure the safety of our products, our assessment system alerted us that PFAS as a class of substances would not meet our stringent life-cycle requirements for materials used in our products. We started with an assessment of the PFAS class with the highest use volume in our products — the fluoropolymers. While our analysis indicated that these materials are safe during product use, we felt it important to broaden our scope to consider manufacturing along the supply chain. We concluded that our goal needs to restrict the use of all PFAS compounds.

A complete phaseout of PFAS from Apple products and processes will take time. We need to compile a comprehensive catalog of PFAS use in electronics, identify and develop non-PFAS alternatives that can meet the performance needs for certain critical applications, and take into account the time needed for material qualification. Lastly we need to ensure that the non-PFAS alternatives do not result in regrettable substitutions — where alternatives are as harmful as, or even more harmful than, the PFAS being replaced. These steps are described in more detail below:

1. Compiling a comprehensive catalog of PFAS use in electronics

Through the FMD and CSD disclosure programs, as well as our direct supplier engagement, we're creating a comprehensive, detailed inventory of PFAS used to make our products. Our current understanding, which will continue to evolve as we capture more data through FMD, supplier reporting, and material mapping, is that PFAS are used across the following applications: coatings for durability, ingress protection, oleophobic properties, and corrosion protection; plastics for water repellency, insulation, lamination, water sealing, and flame safety; technology-specific applications in batteries, image sensors, displays, light management films, and capacitors; and other materials such as adhesives, inks, and pressure-sensitive tapes.

We're engaging with policymakers to ensure that rigorous restrictions are placed on discretionary uses of PFAS, while providing time-limited exemptions for critical applications where no alternatives exist yet, and leveraging the time-limited status of the exemptions to challenge industry to expedite research into alternatives.

We're also helping the industry prepare guidance to make it easier for small and medium-size companies to find out where PFAS may be used in components and manufacturing processes in their supply chains. We're working with the NGO ChemSec and industry associations in Europe and the U.S. to prepare comprehensive lists of all known uses of PFAS in electronics. In addition, we've presented case studies on the complexity of PFAS uses in the electronics industry at workshops with the European Commission and the chemicals industry.

2. Identifying and developing non-PFAS alternatives that can meet the performance needs for critical applications

We're implementing detailed plans with our existing suppliers on the stages and timeframes needed to establish possible substitute materials for specific applications, and we're partnering with new suppliers to develop new materials and technologies. We're also conducting a search to identify current academic and industry research projects developing viable non-PFAS alternatives for electronics applications.

As possible alternatives are identified and we have line of sight on material qualification and build integration, we'll commit to targets for specific phaseout of select PFAS applications

We're also engaging with research and development projects led by expert research institutes across the world to prototype innovative alternative technologies that may be able to replace PFAS. Our analysis of current academic and industry research projects has also identified areas where new innovations are needed to develop the next generation of PFAS-free alternatives in the electronics industry. To build these future technologies, Apple is committing to drive innovation to develop solutions for prioritized applications by funding the needed research.

3. Ensuring that non-PFAS alternatives do not result in regrettable substitutions

We're generating comprehensive chemical hazard assessments using globally recognized methodologies like the U.S. EPA Safer Choice Standard and Criteria, GreenScreen® for Safer Chemicals, and the ChemFORWARD GHS-based hazard banding system to characterize chemical hazards of non-PFAS alternatives across a suite of human health and environmental endpoints. Chemical selection decisions made without a thorough understanding of the potential health and environmental hazards of the substances of interest can lead to unintended consequences of regrettable substitutions. We'll drive innovation to ensure that safer materials are used, in line with our commitment to smarter chemistry.

Conclusion

The well-being of our employees, our customers, people in our supply chain, and the planet is our top priority, which is why we're committed to using safer materials. As with our other efforts to phase out chemistries that don't meet our goals, phasing out PFAS from our products and manufacturing processes requires focus and leadership. We're committed to working with our suppliers and material manufacturing partners to create safer and sustainable alternatives to PFAS for use in our products and across the entire industry.

Exhibit C

Apple Watch - View Warranty version

Apple One (1) Year Limited Warranty

For Apple Branded Product Only

IMPORTANT: BY USING YOUR APPLE-BRANDED HARDWARE PRODUCT YOU ARE AGREEING TO BE BOUND BY THE TERMS OF THE APPLE ONE (1) YEAR LIMITED WARRANTY ("WARRANTY") AS SET OUT BELOW.

DO NOT USE YOUR PRODUCT UNTIL YOU HAVE READ THE TERMS OF THE WARRANTY. IF YOU DO NOT AGREE TO THE TERMS OF THE WARRANTY, DO NOT USE THE PRODUCT AND RETURN IT WITHIN THE RETURN PERIOD STATED IN APPLE'S RETURN POLICY (FOUND AT www.apple.com/legal/sales_policies/) TO THE APPLE OWNED RETAIL STORE OR THE AUTHORIZED DISTRIBUTOR WHERE YOU PURCHASED IT FOR A REFUND.

HOW CONSUMER LAW RELATES TO THIS WARRANTY

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY HAVE OTHER RIGHTS THAT VARY FROM STATE TO STATE (OR BY COUNTRY OR PROVINCE). OTHER THAN AS PERMITTED BY LAW, APPLE DOES NOT EXCLUDE, LIMIT OR SUSPEND OTHER RIGHTS YOU MAY HAVE, INCLUDING THOSE THAT MAY ARISE FROM THE NONCONFORMITY OF A SALES CONTRACT. FOR A FULL UNDERSTANDING OF YOUR RIGHTS YOU SHOULD CONSULT THE LAWS OF YOUR COUNTRY, PROVINCE OR STATE.

WARRANTY LIMITATIONS SUBJECT TO CONSUMER LAW

TO THE EXTENT PERMITTED BY LAW, THIS WARRANTY AND THE REMEDIES SET FORTH ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, REMEDIES AND CONDITIONS, WHETHER ORAL, WRITTEN, STATUTORY, EXPRESS OR IMPLIED. APPLE DISCLAIMS ALL STATUTORY AND IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND WARRANTIES AGAINST HIDDEN OR LATENT DEFECTS, TO THE EXTENT PERMITTED BY LAW. IN SO FAR AS SUCH WARRANTIES CANNOT BE DISCLAIMED, APPLE LIMITS THE DURATION AND REMEDIES OF SUCH WARRANTIES TO THE DURATION OF THIS EXPRESS WARRANTY AND, AT APPLE'S OPTION, THE REPAIR OR REPLACEMENT SERVICES DESCRIBED BELOW. SOME STATES (COUNTRIES AND PROVINCES) DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY (OR CONDITION) MAY LAST, SO THE LIMITATION DESCRIBED ABOVE MAY NOT APPLY TO YOU.

WHAT IS COVERED BY THIS WARRANTY?

Apple Inc. of One Apple Park Way, Cupertino, California, U.S.A. 95014 ("Apple") warrants the Apple-branded hardware product and Apple-branded accessories contained in the original packaging ("Apple Product") against defects in materials and workmanship when used normally in accordance with Apple's

published guidelines for a period of ONE (1) YEAR from the date of original retail purchase by the end-user purchaser ("Warranty Period"). Apple's published guidelines include but are not limited to information contained in technical specifications, user manuals and service communications.

WHAT IS NOT COVERED BY THIS WARRANTY?

This Warranty does not apply to any non-Apple branded hardware products or any software, even if packaged or sold with Apple hardware. This does not affect your rights under applicable consumer law. Manufacturers, suppliers, or publishers, other than Apple, may provide their own warranties to you – please contact them for further information. Software distributed by Apple with or without the Apple brand (including, but not limited to system software) is not covered by this Warranty. Please refer to the licensing agreement accompanying the software for details of your rights with respect to its use. Apple does not warrant that the operation of the Apple Product will be uninterrupted or error-free. Apple is not responsible for damage arising from failure to follow instructions relating to the Apple Product's use.

This Warranty does not apply: (a) to consumable parts, such as batteries or protective coatings that are designed to diminish over time, unless failure has occurred due to a defect in materials or workmanship; (b) to cosmetic damage, including but not limited to scratches, dents and broken plastic on ports unless failure has occurred due to a defect in materials or workmanship; (c) to damage caused by use with a third party component or product that does not meet the Apple Product's specifications (Apple Product specifications are available at www.apple.com under the technical specifications for each product and also available in stores); (d) to damage caused by accident, abuse, misuse, fire, earthquake or other external cause; (e) to damage caused by operating the Apple Product outside Apple's published guidelines; (f) to damage caused by service (including upgrades and expansions) performed by anyone who is not a representative of Apple or an Apple Authorized Service Provider ("AASP"); (g) to an Apple Product that has been modified to alter functionality or capability without the written permission of Apple; (h) to defects caused by normal wear and tear or otherwise due to the normal aging of the Apple Product, (i) if any serial number has been removed or defaced from the Apple Product, or (j) if Apple receives information from relevant public authorities that the product has been stolen or if you are unable to deactivate passcode-enabled or other security measures designed to prevent unauthorized access to the Apple Product, and you cannot prove in any way that you are the authorized user of the product (e.g., by presenting proof of purchase).

IMPORTANT RESTRICTION.

Apple may restrict warranty service for hardware products to the country where Apple or its Authorized Distributors originally sold the device.

YOUR RESPONSIBILITIES

YOU SHOULD MAKE PERIODIC BACKUP COPIES OF THE INFORMATION CONTAINED ON THE APPLE PRODUCT STORAGE MEDIA TO PROTECT THE CONTENTS AND AS A PRECAUTION AGAINST POSSIBLE OPERATIONAL FAILURES.

Before receiving warranty service, Apple or its agents may require that you furnish proof of purchase details, respond to questions designed to assist with diagnosing potential issues and follow Apple's procedures for obtaining warranty service. Before submitting your Apple Product for warranty service you should maintain a separate backup copy of the contents of its storage media, remove all personal information that you want to protect and disable all security passwords.

DURING WARRANTY SERVICE THE CONTENTS OF THE STORAGE MEDIA WILL BE DELETED AND REFORMATTED. APPLE AND ITS AGENTS ARE NOT RESPONSIBLE FOR ANY LOSS OF SOFTWARE PROGRAMS, DATA OR OTHER INFORMATION CONTAINED ON THE STORAGE MEDIA OR ANY OTHER PART OF THE APPLE PRODUCT SERVICED.

Following warranty service your Apple Product or a replacement device will be returned to you as your Apple Product was configured when originally purchased, subject to applicable updates. Apple may install system software updates as part of warranty service that will prevent the Apple Product from reverting to an earlier version of the system software. Third party applications installed on the Apple Product may not be compatible or work with the Apple Product as a result of the system software update. You will be responsible for reinstalling all other software programs, data and information. Recovery and reinstallation of other software programs, data and information are not covered under this Warranty.

Important: Do not attempt to open the Apple Product or remove any protective caps attached to the Apple Product. Opening the Apple Product or removing protective caps may cause damage that is not covered by this Warranty. Only Apple or an AASP should perform service on this Apple Product.

WHAT WILL APPLE DO IN THE EVENT THE WARRANTY IS BREACHED?

If during the Warranty Period you submit a claim to Apple or an AASP in accordance with this warranty, Apple will, at its option:

(i) repair the Apple Product using new or previously used Apple genuine parts that have been tested and passed Apple functional requirements,

(ii) replace the Apple Product with a replacement product of the same model (or with your consent a product that has the same or substantially similar features as the original product – e.g., a different model with the same features, or the same model in a different color) that is new or comprised of new and/or previously used Apple genuine parts and has been tested and passed Apple functional requirements, or

(iii) exchange the Apple Product for a refund of your purchase price.

Apple may request that you replace certain user-installable parts or Apple Products. A replacement part or Apple Product, including a user-installable part that has been installed in accordance with instructions provided by Apple, assumes the remaining term of the Warranty or ninety (90) days from the date of replacement or repair, whichever provides longer coverage for you. When an Apple Product or part is replaced or a refund provided, any replacement item becomes your property and the replaced or refunded item becomes Apple's property.

HOW TO OBTAIN WARRANTY SERVICE?

Please access and review the online help resources described below before seeking warranty service. If the Apple Product is still not functioning properly after making use of these resources, please contact an Apple representative or, if applicable, an Apple owned retail store ("Apple Retail") or AASP, using the information provided below. An Apple representative or AASP will help determine whether your Apple Product requires service and, if it does, will inform you how Apple will provide it. When contacting Apple via telephone, other charges may apply depending on your location.

Online information with details on obtaining warranty service is provided below.

WARRANTY SERVICE OPTIONS

Apple will provide warranty service through one or more of the following options:

(i) Carry-in service. You may return your Apple Product to an Apple Retail or AASP location offering carry-in service. Service will be performed at the location, or Apple Retail or an AASP may send your Apple Product to an Apple Repair Service (“ARS”) location to be serviced. Once you are notified that service is complete, you will retrieve the Apple Product from the Apple Retail or AASP location without delay unless Apple notifies you that the Apple Product will be sent directly to your location from the ARS location.

(ii) Mail-in service. If Apple determines that your Apple Product is eligible for mail-in service, Apple will send you prepaid waybills and if applicable, packaging material and instructions on how to properly pack

and address your Apple product, so that you may ship your Apple Product to an ARS or AASP location. Instructions may be sent to you via email or in hard copy with the packaging material. Once service is complete, the ARS or AASP location will return the Apple Product to you. Apple will pay for shipping to and from your location if all instructions regarding the method of packaging and shipping the Apple Product are followed.

(iii) Do-it-yourself (DIY) parts service. DIY parts service allows you to service your own Apple Product. If DIY parts service is available in the circumstances, the following process will apply.

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

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

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

Apple reserves the right to change the method by which Apple may provide warranty service to you, and your Apple Product's eligibility to receive a particular method of service. Service will be limited to the options available in the country where service is requested. Service options, parts availability and response times may vary according to country. Apple may use Apple Products or replacement parts for service that are sourced from a country that is different from the country from which the Apple Product or original parts were sourced. You may be responsible for shipping and handling charges if the Apple Product cannot be serviced in the country it is in. If you seek service in a country that is not the original country of purchase, you will comply with all applicable import and export laws and regulations and be responsible for all custom duties, V.A.T. and other associated taxes and charges. Where international service is available, Apple may repair or replace Apple Products and parts with comparable Apple Product and parts that comply with local standards.

LIMITATION OF LIABILITY

EXCEPT AS PROVIDED IN THIS WARRANTY AND TO THE MAXIMUM EXTENT PERMITTED BY LAW, APPLE IS NOT RESPONSIBLE FOR DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OF WARRANTY OR CONDITION, OR UNDER ANY OTHER LEGAL THEORY, INCLUDING BUT NOT LIMITED TO LOSS OF USE; LOSS OF REVENUE; LOSS OF ACTUAL OR ANTICIPATED PROFITS (INCLUDING LOSS OF PROFITS ON CONTRACTS); LOSS OF THE USE OF MONEY; LOSS OF ANTICIPATED SAVINGS; LOSS OF BUSINESS; LOSS OF OPPORTUNITY; LOSS OF GOODWILL; LOSS OF REPUTATION; LOSS OF, DAMAGE TO, COMPROMISE OR CORRUPTION OF DATA; OR ANY INDIRECT OR CONSEQUENTIAL LOSS OR DAMAGE HOWSOEVER CAUSED INCLUDING THE REPLACEMENT OF EQUIPMENT AND PROPERTY, ANY COSTS OF RECOVERING, PROGRAMMING, OR REPRODUCING ANY PROGRAM OR DATA STORED IN OR USED WITH THE APPLE PRODUCT OR ANY FAILURE TO MAINTAIN THE CONFIDENTIALITY OF INFORMATION STORED ON THE APPLE PRODUCT.

THE FOREGOING LIMITATION SHALL NOT APPLY TO DEATH OR PERSONAL INJURY CLAIMS, OR ANY STATUTORY LIABILITY FOR INTENTIONAL AND GROSS NEGLIGENT ACTS AND/OR OMISSIONS. APPLE DISCLAIMS ANY REPRESENTATION THAT IT WILL BE ABLE TO REPAIR ANY APPLE DEVICE UNDER THIS

WARRANTY OR REPLACE THE APPLE PRODUCT WITHOUT RISK TO OR LOSS OF INFORMATION STORED IN THE APPLE PRODUCT.

SOME STATES (COUNTRIES AND PROVINCES) DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

GENERAL

No Apple reseller, agent, or employee is authorized to make any modification, extension, or addition to this Warranty. If any term is held to be illegal or unenforceable, the legality or enforceability of the remaining terms shall not be affected or impaired. This Warranty is governed by and construed under the laws of the country in which the Apple Product purchase took place. Apple or its successor in title is the warrantor under this Warranty.

ONLINE INFORMATION

More information of the following is available online:

International Support Information

www.apple.com/support/country

Authorized Distributors

support.apple.com/kb/HT1434

Apple Authorized Service Providers

support.apple.com/kb/HT1937

support.apple.com/kb/HT1434

Apple Retail Store

www.apple.com/retail/storelist/

Apple Support and Service

www.apple.com/support/contact/phone_contacts.html

Apple Complimentary Support

www.apple.com/support/country/?dest=complimentary

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Filemaker Legal Information

Support Communities Terms of Use

Apple Pay Check Class Action Settlement

Foreman Class Action Settlement

Enterprise

Apple Business Manager

Data Transfer Agreements

More ways to shop: Find an Apple Store or other retailer near you. Or call 1-800-MY-APPLE.

Exhibit D

Apple Watch - View Warranty version

Apple One (1) Year Limited Warranty

For Apple Branded Product Only

IMPORTANT: BY USING YOUR APPLE-BRANDED HARDWARE PRODUCT YOU ARE AGREEING TO BE BOUND BY THE TERMS OF THE APPLE ONE (1) YEAR LIMITED WARRANTY ("WARRANTY") AS SET OUT BELOW.

DO NOT USE YOUR PRODUCT UNTIL YOU HAVE READ THE TERMS OF THE WARRANTY. IF YOU DO NOT AGREE TO THE TERMS OF THE WARRANTY, DO NOT USE THE PRODUCT AND RETURN IT WITHIN THE RETURN PERIOD STATED IN APPLE'S RETURN POLICY (FOUND AT www.apple.com/legal/sales_policies/) TO THE APPLE OWNED RETAIL STORE OR THE AUTHORIZED DISTRIBUTOR WHERE YOU PURCHASED IT FOR A REFUND.

HOW CONSUMER LAW RELATES TO THIS WARRANTY

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY HAVE OTHER RIGHTS THAT VARY FROM STATE TO STATE (OR BY COUNTRY OR PROVINCE). OTHER THAN AS PERMITTED BY LAW, APPLE DOES NOT EXCLUDE, LIMIT OR SUSPEND OTHER RIGHTS YOU MAY HAVE, INCLUDING THOSE THAT MAY ARISE FROM THE NONCONFORMITY OF A SALES CONTRACT. FOR A FULL UNDERSTANDING OF YOUR RIGHTS YOU SHOULD CONSULT THE LAWS OF YOUR COUNTRY, PROVINCE OR STATE.

WARRANTY LIMITATIONS SUBJECT TO CONSUMER LAW

TO THE EXTENT PERMITTED BY LAW, THIS WARRANTY AND THE REMEDIES SET FORTH ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, REMEDIES AND CONDITIONS, WHETHER ORAL, WRITTEN, STATUTORY, EXPRESS OR IMPLIED. APPLE DISCLAIMS ALL STATUTORY AND IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND WARRANTIES AGAINST HIDDEN OR LATENT DEFECTS, TO THE EXTENT PERMITTED BY LAW. IN SO FAR AS SUCH WARRANTIES CANNOT BE DISCLAIMED, APPLE LIMITS THE DURATION AND REMEDIES OF SUCH WARRANTIES TO THE DURATION OF THIS EXPRESS WARRANTY AND, AT APPLE'S OPTION, THE REPAIR OR REPLACEMENT SERVICES DESCRIBED BELOW. SOME STATES (COUNTRIES AND PROVINCES) DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY (OR CONDITION) MAY LAST, SO THE LIMITATION DESCRIBED ABOVE MAY NOT APPLY TO YOU.

WHAT IS COVERED BY THIS WARRANTY?

Apple Inc. of One Apple Park Way, Cupertino, California, U.S.A. 95014 ("Apple") warrants the Apple-branded hardware product and Apple-branded accessories contained in the original packaging ("Apple Product") against defects in materials and workmanship when used normally in accordance with Apple's

published guidelines for a period of ONE (1) YEAR from the date of original retail purchase by the end-user purchaser ("Warranty Period"). Apple's published guidelines include but are not limited to information contained in technical specifications, user manuals and service communications.

WHAT IS NOT COVERED BY THIS WARRANTY?

This Warranty does not apply to any non-Apple branded hardware products or any software, even if packaged or sold with Apple hardware. This does not affect your rights under applicable consumer law. Manufacturers, suppliers, or publishers, other than Apple, may provide their own warranties to you – please contact them for further information. Software distributed by Apple with or without the Apple brand (including, but not limited to system software) is not covered by this Warranty. Please refer to the licensing agreement accompanying the software for details of your rights with respect to its use. Apple does not warrant that the operation of the Apple Product will be uninterrupted or error-free. Apple is not responsible for damage arising from failure to follow instructions relating to the Apple Product's use.

This Warranty does not apply: (a) to consumable parts, such as batteries or protective coatings that are designed to diminish over time, unless failure has occurred due to a defect in materials or workmanship; (b) to cosmetic damage, including but not limited to scratches, dents and broken plastic on ports unless failure has occurred due to a defect in materials or workmanship; (c) to damage caused by use with a third party component or product that does not meet the Apple Product's specifications (Apple Product specifications are available at www.apple.com under the technical specifications for each product and also available in stores); (d) to damage caused by accident, abuse, misuse, fire, earthquake or other external cause; (e) to damage caused by operating the Apple Product outside Apple's published guidelines; (f) to damage caused by service (including upgrades and expansions) performed by anyone who is not a representative of Apple or an Apple Authorized Service Provider ("AASP"); (g) to an Apple Product that has been modified to alter functionality or capability without the written permission of Apple; (h) to defects caused by normal wear and tear or otherwise due to the normal aging of the Apple Product, (i) if any serial number has been removed or defaced from the Apple Product, or (j) if Apple receives information from relevant public authorities that the product has been stolen or if you are unable to deactivate passcode-enabled or other security measures designed to prevent unauthorized access to the Apple Product, and you cannot prove in any way that you are the authorized user of the product (e.g., by presenting proof of purchase).

IMPORTANT RESTRICTION.

Apple may restrict warranty service for hardware products to the country where Apple or its Authorized Distributors originally sold the device.

YOUR RESPONSIBILITIES

YOU SHOULD MAKE PERIODIC BACKUP COPIES OF THE INFORMATION CONTAINED ON THE APPLE PRODUCT STORAGE MEDIA TO PROTECT THE CONTENTS AND AS A PRECAUTION AGAINST POSSIBLE OPERATIONAL FAILURES.

Before receiving warranty service, Apple or its agents may require that you furnish proof of purchase details, respond to questions designed to assist with diagnosing potential issues and follow Apple's procedures for obtaining warranty service. Before submitting your Apple Product for warranty service you should maintain a separate backup copy of the contents of its storage media, remove all personal information that you want to protect and disable all security passwords.

DURING WARRANTY SERVICE THE CONTENTS OF THE STORAGE MEDIA WILL BE DELETED AND REFORMATTED. APPLE AND ITS AGENTS ARE NOT RESPONSIBLE FOR ANY LOSS OF SOFTWARE PROGRAMS, DATA OR OTHER INFORMATION CONTAINED ON THE STORAGE MEDIA OR ANY OTHER PART OF THE APPLE PRODUCT SERVICED.

Following warranty service your Apple Product or a replacement device will be returned to you as your Apple Product was configured when originally purchased, subject to applicable updates. Apple may install system software updates as part of warranty service that will prevent the Apple Product from reverting to an earlier version of the system software. Third party applications installed on the Apple Product may not be compatible or work with the Apple Product as a result of the system software update. You will be responsible for reinstalling all other software programs, data and information. Recovery and reinstallation of other software programs, data and information are not covered under this Warranty.

Important: Do not attempt to open the Apple Product or remove any protective caps attached to the Apple Product. Opening the Apple Product or removing protective caps may cause damage that is not covered by this Warranty. Only Apple or an AASP should perform service on this Apple Product.

WHAT WILL APPLE DO IN THE EVENT THE WARRANTY IS BREACHED?

If during the Warranty Period you submit a claim to Apple or an AASP in accordance with this warranty, Apple will, at its option:

(i) repair the Apple Product using new or previously used Apple genuine parts that have been tested and passed Apple functional requirements,

(ii) replace the Apple Product with a replacement product of the same model (or with your consent a product that has the same or substantially similar features as the original product – e.g., a different model with the same features, or the same model in a different color) that is new or comprised of new and/or previously used Apple genuine parts and has been tested and passed Apple functional requirements, or

(iii) exchange the Apple Product for a refund of your purchase price.

Apple may request that you replace certain user-installable parts or Apple Products. A replacement part or Apple Product, including a user-installable part that has been installed in accordance with instructions provided by Apple, assumes the remaining term of the Warranty or ninety (90) days from the date of replacement or repair, whichever provides longer coverage for you. When an Apple Product or part is replaced or a refund provided, any replacement item becomes your property and the replaced or refunded item becomes Apple's property.

HOW TO OBTAIN WARRANTY SERVICE?

Please access and review the online help resources described below before seeking warranty service. If the Apple Product is still not functioning properly after making use of these resources, please contact an Apple representative or, if applicable, an Apple owned retail store ("Apple Retail") or AASP, using the information provided below. An Apple representative or AASP will help determine whether your Apple Product requires service and, if it does, will inform you how Apple will provide it. When contacting Apple via telephone, other charges may apply depending on your location.

Online information with details on obtaining warranty service is provided below.

WARRANTY SERVICE OPTIONS

Apple will provide warranty service through one or more of the following options:

(i) Carry-in service. You may return your Apple Product to an Apple Retail or AASP location offering carry-in service. Service will be performed at the location, or Apple Retail or an AASP may send your Apple Product to an Apple Repair Service (“ARS”) location to be serviced. Once you are notified that service is complete, you will retrieve the Apple Product from the Apple Retail or AASP location without delay unless Apple notifies you that the Apple Product will be sent directly to your location from the ARS location.

(ii) Mail-in service. If Apple determines that your Apple Product is eligible for mail-in service, Apple will send you prepaid waybills and if applicable, packaging material and instructions on how to properly pack and address your Apple product, so that you may ship your Apple Product to an ARS or AASP location.

Instructions may be sent to you via email or in hard copy with the packaging material. Once service is complete, the ARS or AASP location will return the Apple Product to you. Apple will pay for shipping to and from your location if all instructions regarding the method of packaging and shipping the Apple Product are followed.

(iii) Do-it-yourself (DIY) parts service. DIY parts service allows you to service your own Apple Product. If DIY parts service is available in the circumstances, the following process will apply.

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

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

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

Apple reserves the right to change the method by which Apple may provide warranty service to you, and your Apple Product's eligibility to receive a particular method of service. Service will be limited to the options available in the country where service is requested. Service options, parts availability and response times may vary according to country. Apple may use Apple Products or replacement parts for service that are sourced from a country that is different from the country from which the Apple Product or original parts were sourced. You may be responsible for shipping and handling charges if the Apple Product cannot be serviced in the country it is in. If you seek service in a country that is not the original country of purchase, you will comply with all applicable import and export laws and regulations and be responsible for all custom duties, V.A.T. and other associated taxes and charges. Where international service is available, Apple may repair or replace Apple Products and parts with comparable Apple Product and parts that comply with local standards.

LIMITATION OF LIABILITY

EXCEPT AS PROVIDED IN THIS WARRANTY AND TO THE MAXIMUM EXTENT PERMITTED BY LAW, APPLE IS NOT RESPONSIBLE FOR DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OF WARRANTY OR CONDITION, OR UNDER ANY OTHER LEGAL THEORY, INCLUDING BUT NOT LIMITED TO LOSS OF USE; LOSS OF REVENUE; LOSS OF ACTUAL OR ANTICIPATED PROFITS (INCLUDING LOSS OF PROFITS ON CONTRACTS); LOSS OF THE USE OF MONEY; LOSS OF ANTICIPATED SAVINGS; LOSS OF BUSINESS; LOSS OF OPPORTUNITY; LOSS OF GOODWILL; LOSS OF REPUTATION; LOSS OF, DAMAGE TO, COMPROMISE OR CORRUPTION OF DATA; OR ANY INDIRECT OR CONSEQUENTIAL LOSS OR DAMAGE HOWSOEVER CAUSED INCLUDING THE REPLACEMENT OF EQUIPMENT AND PROPERTY, ANY COSTS OF RECOVERING, PROGRAMMING, OR REPRODUCING ANY PROGRAM OR DATA STORED IN OR USED WITH THE APPLE PRODUCT OR ANY FAILURE TO MAINTAIN THE CONFIDENTIALITY OF INFORMATION STORED ON THE APPLE PRODUCT.

THE FOREGOING LIMITATION SHALL NOT APPLY TO DEATH OR PERSONAL INJURY CLAIMS, OR ANY STATUTORY LIABILITY FOR INTENTIONAL AND GROSS NEGLIGENT ACTS AND/OR OMISSIONS. APPLE DISCLAIMS ANY REPRESENTATION THAT IT WILL BE ABLE TO REPAIR ANY APPLE DEVICE UNDER THIS WARRANTY OR REPLACE THE APPLE PRODUCT WITHOUT RISK TO OR LOSS OF INFORMATION STORED IN THE APPLE PRODUCT.

SOME STATES (COUNTRIES AND PROVINCES) DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

GENERAL

No Apple reseller, agent, or employee is authorized to make any modification, extension, or addition to this Warranty. If any term is held to be illegal or unenforceable, the legality or enforceability of the remaining terms shall not be affected or impaired. This Warranty is governed by and construed under the laws of the country in which the Apple Product purchase took place. Apple or its successor in title is the warrantor under this Warranty.

ONLINE INFORMATION

More information of the following is available online:

International Support Information

www.apple.com/support/country

Authorized Distributors

support.apple.com/kb/HT1434

Apple Authorized Service Providers

support.apple.com/kb/HT1937

support.apple.com/kb/HT1434

Apple Retail Store

www.apple.com/retail/storelist/

Apple Support and Service

www.apple.com/support/contact/phone_contacts.html

Apple Complimentary Support

www.apple.com/support/country/?dest=complimentary

010122-Warranty-US-v1.5

Apple's Bag Check Class Action Settlement

Foreman Class Action Settlement

Apple's Business Manager Data Transfer Agreements

More ways to shop: Find an Apple Store or other retailer near you. Or call 1-800-MY-APPLE.

 Privacy Policy Terms of Use Sales and Refunds Legal Site Map United States