United States District Court
Northern District of California

UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

SAN JOSE DIVISION

CHRISTINA GRACE, et al.,

Plaintiffs,

v.

APPLE, INC.,

Defendant.

Case No. 17-CV-00551-LHK

ORDER DENYING APPLE'S MOTION FOR SUMMARY JUDGMENT

Re: Dkt. No. 278

Plaintiffs Christina Grace and Ken Potter (collectively, "Plaintiffs") bring this class action against Defendant Apple, Inc. ("Apple") for trespass to chattels and violation of California's Unfair Competition Law ("UCL"). Plaintiffs' action arises from the events of April 16, 2014, when Apple's FaceTime feature stopped working for owners of Apple's iPhone 4 and iPhone 4s devices who were running Apple's iOS 6 operating system. Before the Court is Apple's motion for summary judgment on both of Plaintiffs' claims. Having considered the parties' submissions, the relevant law, and the record in this case, the Court DENIES Apple's motion for summary judgment.

I. BACKGROUND

A. Factual Background

1. Apple's iPhone 4 and iPhone 4S and Apple's FaceTime

Apple is the designer, seller, and manufacturer of the iPhone smartphone. ECF No. 284-18, Expert Report of Mark Jones ("Jones Report"), at 63. Apple released the iPhone 4 device on June 7, 2010. ECF No. 36 ("FAC") ¶ 31. Apple released the iPhone 4S device on October 14, 2011. *Id.* ¶ 32. All iPhones, including the iPhone 4 and iPhone 4S, operate through a mobile operating system known as iOS, which runs the features and applications of the iPhone. Jones Report at 6. Apple typically releases major updates to iOS every year or so. *Id.* at 7. Prior to September 18, 2013—the day that Apple released the "iOS 7" operating system, which is discussed further below— iPhones operated on the "iOS 6" operating system or an earlier iOS operating system. *Id.* Apple devices come with a version of iOS preinstalled on the device, although the device user may install more recent iOS versions when Apple releases them. *Id.*

The iPhone 4 was the first iPhone device to offer a feature known as FaceTime, which Apple released in 2010. *Id.* at 14. FaceTime is a video and audio conferencing feature that allows iPhone users to communicate via video calls, as opposed to traditional audio calls. *Id.* FaceTime featured prominently in Apple's advertising campaign for the iPhone 4. *See* ECF No. 285, Ex. 1 (ad touting that FaceTime enables users to "[s]ee friends while you talk to them"); Ex. 2 (ad for iPhone 4 with text "Introducing FaceTime video calling. Smile.").

Initially, iPhone 4 and iPhone 4S devices used two methods to connect a FaceTime call: (1) the peer-to-peer method, and (2) the relay method. ECF No. 285, Ex. 6 at 600. The two connection methods occurred in parallel, although the peer-to-peer method was the default method. *Id.* The peer-to-peer method imposed no cost on Apple, but the relay method required Apple to pay for server space with Akamai Technologies ("Akamai"), which relayed the calls. ECF No. 285, Ex. 7 at 788. The more calls used the relay method, the more Apple paid Akamai. *Id.* As a result, Apple prioritized the peer-to-peer method, with approximately 80% of FaceTime calls in 2012 connected through the peer-to-peer method. *Id.*

2. iOS Security Features and Certificates

Apple designs iOS to include security features such as cryptographic keys and digital

certificates, which ensure the security of data transmitted on iOS. Jones Report at 7. One particular digital certificate, the iPhone Device CA certificate, is at issue in the instant case. Apple designed the iPhone Device CA certificate in 2007 as part of a certificate system used to verify the identity of iPhones. *Id.* at 8. On March 22, 2007, Apple set the iPhone Device CA certificate to expire after 14.5 years. ECF No. 277, Ex. 2 at 778. Four days later, on March 26, 2007, Apple amended the expiration date and set the iPhone Device CA certificate to expire after 7 years. ECF No. 277, Ex. 3 at 881.

According to Apple's security expert, Avi Rubin, certificates are designed with expiration dates for security reasons, because "the concern is that keys can get compromised over time." ECF No. 285, Ex. 27 ("Rubin Depo."), at 105:13-21. However, when a given certificate expires, any services that check that certificate's expiration date will fail. *Id.* at 176:1-4. Accordingly, Rubin testified that for "[m]any of the services, there's the expectation that they will renew the certificate and then the service won't fail." *Id.* at 176:11-14.

Notably, in 2010, Apple designed FaceTime to use the iPhone Device CA certificate. Jones Report at 24–25. FaceTime used the iPhone Device CA certificate to verify whether the device on the other end of a FaceTime call was also an Apple product, and thus compatible for a FaceTime connection. *Id.* at 24.

3. Apple is Forced to Use the Relay Method for All FaceTime Connections

On November 7, 2012, a jury found that Apple's use of the peer-to-peer method to connect FaceTime calls infringed patents owned by VirnetX, Inc. Jones Report at 27; *see* ECF No. 285, Ex. 10 at 2. The district court in the patent infringement case ordered Apple to pay VirnetX an ongoing royalty rate. *Id.* at 1. To avoid paying royalties to VirnetX, Apple eliminated the peer-to-peer method for FaceTime calls and instead used only the relay method. ECF No. 285, Ex. 11 at 220. Thus, beginning in June 2013, all FaceTime calls on devices using iOS 6 or earlier operating systems connected via the relay method 100% of the time. *Id.* However, Apple's shift to exclusive use of the relay method meant that Apple's fees to use Akamai's relay servers increased substantially. *Id.*

4. In iOS7, Apple Reduces its Reliance on the Relay Method

In early 2013, Apple began to explore options for decreasing relay usage for FaceTime calls in future versions of iOS, so as to avoid the increased fees associated with the relay method. ECF No. 285, Ex. 16. According to a March 2013 Apple presentation, Apple's explicit goal was to "[r]educe FaceTime relay usage as much as possible" because "Apple pays for all the relay bandwidth." ECF No. 285, Ex. 19 at 070. Thus, in iOS 7, released on September 18, 2013, Apple implemented a new peer-to-peer connection method for FaceTime, which avoided the relay method and reduced Apple's costs. ECF No. 285, Ex. 18; Jones Report at 30.

However, some iPhone 4 and iPhone 4S users resisted upgrading to iOS 7, as there is evidence that the processors in the iPhone 4 and iPhone 4S were not well suited for iOS 7, and iPhone 4 and iPhone 4S users experienced performance regressions in iOS7. Jones Report at 63–65. Moreover, iPhone users who transitioned to iOS 7 could not revert back to earlier versions of iOS 7. ECF No. 66 ("Answer"), ¶ 79. Thus, iPhone 4 and iPhone 4S users who did not upgrade to iOS7 were still using the more expensive (to Apple) relay method for FaceTime calls.

5. Apple Recognizes That the iPhone Device CA Certificate Will Expire and That FaceTime Will Fail Absent a Solution

As early as February 2013, Apple became aware that the iPhone Device CA certificate would expire on April 16, 2014. *See* ECF No. 285, Ex. 33 at 801. According to Apple engineer Gigi Choy, Apple's Public Key Infrastructure ("PKI") services team "issue[s] and manage[s] digital certificates for Apple," and checks the expiration dates of digital certificates. ECF No. 285, Ex. 31 ("Choy Depo."), 22:5-10. As part of the process, the PKI services team determines whether a certificate is still needed and helps determine whether to create "a new version of that certificate when their certificate expires." *Id.* at 125:8-13.

Apple began that certificate expiration review process with the iPhone Device CA certificate. In an April 2013 email, Choy stated that Apple needed to determine "what may break" when the iPhone Device CA certificate expired on April 16, 2014, and mitigate any service outages: "The desire is to identify what may break when the iPhone Device SubCA [iPhone

Device CA certificate] expires and determine if there is anything can be done to mitigate potential service outages. We should probably also determine the plan for renewing this SubCA before its expiration." ECF No. 285, Ex. 32 at 810. By October 2013, Apple's PKI team was aware that FaceTime and any other Apple service that checked the expiration date of the iPhone Device CA certificate would fail when the iPhone Device CA certificate expired: "The first issue is that the CA expires April 16, 2014. As a consequence, services that check certificate expiration (as FaceTime is known to do so) will cease to function when the date comes." ECF No. 285, Ex. 37 at 224. Apple referred to the pending certificate expiration and its effect on FaceTime as a "time bomb": "[T]he goal is to see if there's just one issue/case we still have to fix, or if there are multiple time bombs in iOS or OS X." ECF No. 285, Ex. 40 at 120.

Apple's inquiry into what services would be affected by the iPhone Device CA certificate expiration was consistent with its practice and industry practice. Choy testified that "[i]f a service is expecting a certificate to be used, then – and they continue – and they expect going forward it will also continue to be used, then, I mean, that's a case of when they – why they would need to renew." Choy Depo. at 143:19-24. Likewise, Apple's computing expert, Avi Rubin, testified that renewing certificates is standard industry practice:

> And so if Apple didn't do something like issuing certificates, then calls would fail. But that's – that's really standard in the industry, because anytime you have expirations, the idea is that you want to issue new certificates or new keys in order to continue using the system. So it's not uncommon to have certificates that expire and then to renew them before something goes wrong.

Rubin Depo. at 187:15-24. In fact, Choy testified that she could not recall any instance when Apple allowed a certificate to expire:

> **Q**: Can you think of any time when Apple allowed a certificate to expire despite knowing that the expiration would cause an application to cease to function on customer devices?
> **A**: I can say that I don't recall when we've had a Sub-CA certificate expiration and we didn't take action on it.

Choy Depo. at 288:3-10.

Apple developed a solution to avoid a FaceTime service outage only in iOS7, but not in

iOS6. On November 14, 2013, Apple released an iOS 7 update named iOS 7.0.4, in which Apple programmed FaceTime to ignore the iPhone Device Sub-CA certificate expiration date. Jones Report at 41–42. As a result, FaceTime would not fail when a device was running iOS 7.0.4 (or subsequent updates to iOS 7). *Id.* Apple also ensured that another Apple service, iMessage, would continue working on all Apple devices. ECF No. 285, Ex. 48 at 492–93.

In an internal email, Apple recognized that Apple could have resolved the certificate expiration issue for iOS6 users by "changing the FT [FaceTime] code." ECF No. 285, Ex. 45 at 991. Plaintiffs' expert Richard Jones also testified that Apple could have "created new certificates for at least portions of the chain and used those with updated expiration dates" to resolve the issue for iOS 6 users." Jones Depo. at 70:21-24. In an October 2013 email, Apple stated that "[f]or iOS customers who do not want to update to iOS7, we will investigate providing a separate tool to resolve." ECF No. 285, Ex. 47 at 277. However, Apple did not implement such a tool or any other solution. Thus, Apple recognized that its decision not to address the certificate expiration issue for iOS6 "will force folks with older devices to update to iOS7" and leave those users with "no recourse." *Id.* at 276; ECF No. 285, Ex. 45 at 991.

6. FaceTime Breaks for iOS6 Users on April 16, 2014

On April 16, 2014, FaceTime broke for iPhone 4 and iPhone 4S users on iOS6 (hereinafter, the "FaceTime break"). That same day, Apple employee David Biderman reported in an email that "[t]he certificate expirations started at: Apr 16 22:54:46 2014 GMT, impacting users that haven't upgraded to the most recent releases which contain the certificate fix." ECF No. 285, Ex. 50 at 956. As a result, iPhone 4 and iPhone 4S users using iOS6 complained to Apple that FaceTime had broken for them. *See, e.g.*, ECF No. 285, Exs. 54 & 55.

The FaceTime break to iOS6 reduced Apple's reliance on the relay method of FaceTime connections, which imposed greater costs on Apple than the peer-to-peer method implemented in iOS7. In an email sent the day after the FaceTime break, Apple engineer Lionel Gentil explained that the FaceTime break had already reduced the number of relay method connections because iOS6—which required use of the relay method—no longer supported FaceTime. Specifically,

Gentil wrote: "Yes all users with 6.0 and older can't make FaceTime any longer." ECF No. 285, Ex. 48 at 488. Gentil further explained that users with iOS6 "are basically screwed? (for lack of a better word) and they represented ~30% of our relay traffic." *Id.* In his notes from April 17, 2014, Apple engineer Dallas DeAtley wrote, "iPhone Device CA expired, hilarity ensues." ECF No. 285, Ex. 43 at 267.

Two months later, Apple engineer Patrick Gates asked other Apple employees why Apple's use of the relay method for FaceTime connections had decreased: "I'm looking at the Akamai contract for the next year. I understand we did something in April around iOS6 to reduce relay utilization. Does this ring a bell for any of you? Got details?" ECF No. 285, Ex. 69 at 003. In response, Apple's Gokul Thirumulai explained that Apple had "broken" FaceTime for iOS6 users: "iOS6 was the biggest user of relay bandwidth – all calls going over relay. iOS7 uses significantly less – most calls drop back down after relay. We *broke* all iOS6, and the only way to get FaceTime working again is to upgrade to iOS7." ECF No. 285, Ex. 9 at 794 (emphasis added).

B. Procedural History

On February 2, 2017, Grace filed a putative class action complaint in this Court against Apple. ECF No. 1. The complaint alleged causes of action against Apple for (1) trespass to chattels, and (2) violations of the UCL. *See id.* ¶ 1.

On March 22, 2017, Apple moved to dismiss the complaint. ECF No. 33. Rather than oppose Apple's motion to dismiss, Grace filed a first amended complaint ("FAC") on April 5, 2017. ECF No. 36. The FAC added Potter as a named Plaintiff. Potter alleged that he upgraded to iOS 7 on one of his iPhone 4 devices, and that Potter experienced lost functionality as a result of his upgrade. *Id.*

Grace's amendment of the complaint on April 5, 2017 was an amendment as of right under Federal Rule of Civil Procedure 15(a)(1)(B) because Grace amended the complaint within 21 days of Apple's motion to dismiss the original complaint. *See* Fed. R. Civ. P. 15(a)(1)(B). Thus, on April 6, 2017, the Court denied as moot Apple's motion to dismiss the original complaint. *See* ECF No. 37.

On April 19, 2017, Apple filed a motion to dismiss the FAC. ECF No. 38. On May 3, 2017, Plaintiffs filed an opposition to Apple's motion to dismiss. ECF No. 47. On May 10, 2017, Apple filed a reply. ECF No. 50.

On July 28, 2017, the Court denied Apple's motion to dismiss. *Grace v. Apple, Inc.*, 2017 WL 3232464 (N.D. Cal. July 28, 2017). The Court found that Plaintiffs possessed Article III standing, that Plaintiffs had stated claims for violation of the UCL's "unfair" prong and trespass to chattels, and that Plaintiffs had adequately alleged entitlement to restitution and injunctive relief. *Id.* at *6–16.

Specifically, Apple argued that Plaintiffs had failed to allege entitlement to restitutionary relief, as is required under the UCL. *Id.* at *15. However, Plaintiffs alleged that they "'conferred a financial benefit to Apple by purchasing iPhone 4 and 4S devices with the FaceTime feature,' but that Plaintiffs were deprived of the benefit of their bargain with Apple because Apple disabled FaceTime for Plaintiffs' iPhones, which caused Plaintiffs to suffer 'diminution in the value of their' iPhones." *Id.* (quoting FAC ¶¶ 131–134). The Court held that Plaintiffs' allegations were sufficient to allege entitlement to restitution under the UCL because "Plaintiffs seek to recover in restitution the 'profits [that Apple] unfairly obtained' from Plaintiffs as a result of Apple's intentional and permanent disabling of FaceTime for iOS6 and earlier operating systems." *Id.* (quoting *Pom Wonderful LLC v. Welch Foods, Inc.*, 2009 WL 5184422, at *2 (C.D. Cal. Dec. 21, 2009)).

On May 4, 2018, Plaintiffs filed a motion for class certification. ECF No. 174. Plaintiffs sought to certify a nationwide class under Rule 23(b)(2) and Rule 23(b)(3). Plaintiffs defined the class as the following:

> All owners of Apple iPhone 4 or Apple iPhone 4S devices in the United States who on April 16, 2014, had iOS 6 or earlier operating systems on their iPhone 4 or iPhone 4S devices.

Id. at vii. In the alternative, Plaintiffs sought to certify a California class under Rule 23(b)(2) and Rule 23(b)(3). Plaintiffs defined the class as the following:

> All owners of Apple iPhone 4 or Apple iPhone 4S devices in California who on April

> 16, 2014, had iOS 6 or earlier operating systems on their iPhone 4 or iPhone 4S devices.

Id. On June 15, 2018, Apple filed its opposition. ECF No. 201. On July 13, 2018, Plaintiffs filed their reply. ECF No. 225.

On July 19, 2018, Plaintiffs filed a motion to strike the Declaration of Dr. Avi Rubin, Apple's technical expert. ECF No. 233. On August 2, 2018, Apple filed its opposition. ECF No. 242. On August 9, 2018, Plaintiffs filed their reply. ECF No. 246. On July 20, 2018, Apple filed objections to evidence submitted in connection with Plaintiffs' reply. ECF No. 235.

On September 18, 2018, the Court granted in part and denied in part Plaintiffs' motion for class certification. *Grace v. Apple*, 328 F.R.D. 320 (N.D. Cal. 2018). The Court granted certification of the California class, but denied certification of the nationwide class. *Id.* at 348–49. The Court exercised its discretion to amend the class definition to exclude owners of jailbroken iPhones, and certified a class as follows:

> All owners of non-jailbroken Apple iPhone 4 or Apple iPhone 4S devices in California who on April 16, 2014, had iOS 6 or earlier operating systems on their iPhone 4 or iPhone 4S devices.

Id. at 351. The Court appointed Potter, as to his 16 GB iPhone 4 only, and Grace as class representatives. *Id.* The Court also denied Plaintiffs' motion to strike Dr. Rubin's declaration. *Id.*

In its opposition to Plaintiffs' motion for class certification, Apple contested Plaintiffs' entitlement to restitution under the UCL, as Apple had done in its motion to dismiss the FAC. *See* ECF No. 201 at 17 (arguing that "Plaintiffs make no effort to present a classwide restitution model for its UCL claim"). Apple argued that Plaintiffs' use of a "diminution in value damages model" does not measure the amount that Plaintiffs overpaid for their iPhones. *Id.* at 342. Accordingly, Apple argued, Plaintiffs' damages model does not align with Plaintiffs' theory of liability under the UCL, in violation of *Comcast Corp. v. Behrend*, 569 U.S. 27, 35 (2013). *Id.*

However, the Court rejected Apple's argument because Plaintiffs' damages model is tied to the FaceTime break, the event that rendered Plaintiffs' phones worth less than their purchase price: "Consequently, comparing the market value of the iPhone 4 and iPhone 4S before and after

that information was revealed—*i.e.* before and after the FaceTime break—seems an accurate way of determining how much class members lost as a result of the FaceTime break." *Id.* As a result, the Court found that Plaintiffs' damages model accurately measures restitution and aligns with Plaintiffs' theory of liability under the UCL. *Id.* at 343.

On October 2, 2018, Plaintiffs filed a motion for leave to (1) file a motion for reconsideration of the Court's class certification order; (2) file a motion to amend the class; and (3) file a second amended complaint. ECF No. 276. On October 16, 2018, Apple filed its opposition to Plaintiffs' motion for leave. ECF No. 282. On October 22, 2018, the Court denied Plaintiffs' motion for leave. ECF No. 287.

On October 4, 2018, Apple filed the instant motion for summary judgment. ECF No. 278 ("Mot."). On October 18, 2018, Plaintiffs filed their opposition. ECF No. 285 ("Opp."). On October 25, 2018, Apple filed its reply. ECF No. 289 ("Reply").

On November 6, 2018, Plaintiffs petitioned the Ninth Circuit for permission to appeal the Court's order granting in part and denying in part class certification under Federal Rule of Civil Procedure 23(f). ECF No. 290. Specifically, Plaintiffs requested the Ninth Circuit's permission to appeal the Court's denial of certification of the nationwide class. ECF No. 290-1.

On November 9, 2018, the Court stayed the case pending the Ninth Circuit's ruling on Plaintiffs' Rule 23(f) petition. ECF No. 291. On March 20, 2019, the Ninth Circuit denied Plaintiffs' Rule 23(f) petition. ECF No. 295.

On April 26, 2019, the Court filed a proposed case schedule for the remainder of the case through trial. ECF No. 299. On April 29, 2019, the parties filed a statement regarding their availability for trial in 2020. ECF No. 300. On April 29, 2019, the Court lifted the stay in this case and set August 8, 2019 as the hearing date on Apple's instant motion for summary judgment. ECF Nos. 301, 302. The operative briefs on Apple's instant motion for summary judgment are the briefs that the parties filed before the Court stayed the case. *See* ECF Nos. 278, 285, 289.

II. LEGAL STANDARD

Summary judgment is proper where the pleadings, discovery, and affidavits show that

there is "no genuine dispute as to any material fact and [that] the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). Material facts are those which may affect the outcome of the case. *See Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). A dispute as to a material fact is genuine if there is sufficient evidence for a reasonable jury to return a verdict for the nonmoving party. *See id.*

The Court will grant summary judgment "against a party who fails to make a showing sufficient to establish the existence of an element essential to that party's case, and on which that party will bear the burden of proof at trial [,] . . . since a complete failure of proof concerning an essential element of the nonmoving party's case necessarily renders all other facts immaterial." *See Celotex Corp. v. Catrett*, 477 U.S. 317, 322–23 (1986). The moving party bears the initial burden of identifying those portions of the record that demonstrate the absence of a genuine issue of material fact. *Id.* The burden then shifts to the nonmoving party to "go beyond the pleadings, and by [his] own affidavits, or by the depositions, answers to interrogatories, and admissions on file, designate specific facts showing that there is a genuine issue for trial." *See id.* at 324 (internal quotations omitted).

For purposes of summary judgment, the Court must view the evidence in the light most favorable to the nonmoving party; if the evidence produced by the moving party conflicts with evidence produced by the nonmoving party, the court must assume the truth of the evidence submitted by the nonmoving party. *See Leslie v. Grupo ICA*, 198 F.3d 1152, 1158 (9th Cir. 1999). The Court's function on a summary judgment motion is not to make credibility determinations or weigh conflicting evidence with respect to a disputed material fact. *See T.W. Elec. Serv. v. Pac. Elec. Contractors Ass'n*, 809 F.2d 626, 630 (9th Cir. 1987).

III. DISCUSSION

Apple moves for summary judgment on both of Plaintiffs' remaining claims, for (1) trespass to chattels; and (2) violation of the unfair prong of California's UCL. The Court discusses each of Plaintiffs' claims in turn.

A. Plaintiffs' Trespass to Chattels Claim

Plaintiffs allege that Apple committed the tort of trespass to chattels when Apple "intentionally interfered with Plaintiffs' and the Class members' use of their iPhone 4 and iPhone 4S devices by implementing the FaceTime Break, which caused FaceTime to cease to function on all such devices." FAC ¶ 125. Apple raises two arguments for why Plaintiffs' trespass to chattels claim fails as a matter of law. First, Apple contends that Plaintiffs have not shown that Apple took an "affirmative act" to interfere with Plaintiffs' iPhones. Second, Apple contends that the economic loss rule bars Plaintiffs' trespass to chattels claim. For the reasons explained below, neither of Apple's arguments is persuasive.

1. Trespass to Chattels Requires an Intentional Interference with Personal Property

Under California law, trespass to chattels "lies where an intentional interference with the possession of personal property has proximately caused injury." *Intel Corp. v. Hamidi*, 30 Cal. 4th 1342, 1350–51 (2003). The California Supreme Court has explained that "while a harmless use or touching of personal property may be a technical trespass (see Rest. 2d of Torts, § 217), an interference (not amounting to dispossession) is not actionable under modern California and broader American law without a showing of harm." *Id.* at 1351. To show injury in the context of trespass to a computer system or other similar devices, a plaintiff must show that a trespass to chattels "(1) caused physical damage to the personal property, (2) impaired the condition, quality, or value of the personal property, or (3) deprived plaintiff of the use of personal property for a substantial time." *Fields v. Wise Media, LLC*, 2013 WL 5340490, at *4 (N.D. Cal. Sept. 24, 2013). Finally, the defendant's interfering act must have been intentional. *Crab Boat Owners Ass'n v. Hartford Ins. Co. of the Midwest*, 2004 WL 2600455, at *3 (N.D. Cal. Nov. 15, 2004) ("It is clear that California law requires intent as an element of trespass to chattels.").

2. Plaintiffs Have Identified A Genuine Dispute of Material Fact as to Whether Apple Intentionally Interfered with Plaintiffs' iPhones

Plaintiffs' theory is that Apple intentionally interfered with Plaintiffs' iPhones when Apple failed to renew the iPhone Device CA certificate for iOS 6 users with full knowledge that Apple's failure would cause the FaceTime break for iOS6 users. Opp. at 12. Apple contends that

Plaintiffs cannot show that Apple intentionally interfered with Plaintiffs' iPhones because Apple took no post-sale "affirmative act" and because the "alleged trespass here was a function of the way Plaintiffs' phones were programmed as of the date of purchase." Mot. at 8. Apple does not dispute that the FaceTime break caused Plaintiffs harm.

Apple's argument that a trespass to chattels claim requires an affirmative post-purchase act is unsupported by the case law. In *Baggett v. Hewlett-Packard Co.*, 582 F. Supp. 2d 1261 (C.D. Cal. 2007), the plaintiff's theory was that the defendant interfered with plaintiff's property by preprogramming defendant's printer cartridges to indicate that the cartridges were "empty," even when ink remained. *Id.* at 1264. The defendant argued that trespass to chattels requires an "affirmative act," such as one of defendant's employees physically tampering with plaintiff's cartridge. *Id.* at 1269. However, the *Baggett* court stated that defendant's argument "misstates California law on trespass to chattels," and that California law permits "trespass to chattel claims based on automated systems." *Id.* Thus, defendant's intentional decision to pre-program its printer to stop printing even when ink remained, which deprived plaintiff of his remaining ink, could constitute a trespass to chattels. *Id.* at 1270; *see also In re Apple Inc. Device Performance Litig.*, 347 F. Supp. 3d 434, 455 (N.D. Cal. 2018) (holding that plaintiffs' allegations that Apple's iOS updates "were designed to slow [plaintiffs'] iPhones processing speed" sufficed to state a claim for trespass to chattels).

Similarly, in *In re: Lenovo Adware Litig.*, 2016 WL 6277245 (N.D. Cal. Oct. 27, 2016), the plaintiffs alleged that Lenovo pre-installed adware on Lenovo computers and that the adware reduced the computers' battery life and rendered plaintiffs vulnerable to third-party hackers. *Id.* at *1–2. The district court concluded that those allegations were sufficient to allege an intentional interference that caused a measurable loss. *Id.* at *9. *See also eBay v. Bidder's Edge*, 100 F. Supp. 2d 1058, 1070 (N.D. Cal. 2000) (holding that defendant's use of an automated computer program to crawl plaintiff's website constituted intentional interference). Therefore, a defendant's pre-purchase act intended to interfere with a plaintiff's personal property can constitute a trespass to chattels.

In the instant case, Apple contends that the aforementioned cases are inapplicable because any alleged interference resulted from unintentional acts, and Plaintiffs cannot identify any post-purchase acts that Apple took to interfere with Plaintiffs' iPhones. Apple focuses solely on its conduct before Plaintiffs purchased their iPhones. In 2007, Apple designed the iPhone Device CA certificate and set the certificate to expire in 2014. ECF No. 277, Ex. 3. In 2010, Apple designed FaceTime to check the expiration date of the iPhone Device CA certificate. Jones Report at 24–25. At neither point did Apple intend to interfere with FaceTime or Plaintiffs' iPhones.

Thus, Apple analogizes Apple's design decisions to *Kandel v. Brother International Corp.*, 2009 WL 9100406 (C.D. Cal. Feb. 13, 2009), in which the plaintiff alleged that defendant designed its printers "not to allow full usage of the toner in printer cartridges and alleged misrepresentations about this functionality." *Id.* at *1. The district court concluded that without a post-purchase act, the plaintiffs could state a claim: "There is no allegation that Defendants did anything after the sale of the printers or toner cartridges to effect a trespass." *Id. Kandel* thus appears to conflict with *Baggett* and *In re: Lenovo*, both of which permitted trespass to chattels claims based on pre-sale design decisions intentionally made to cause later inference with the plaintiffs' personal property.

However, even if *Kandel* is a correct statement of the law, the instant case is not like *Kandel*. Plaintiffs' theory is not that Apple's 2007 and 2010 design decisions constitute trespass to chattels. Rather, Plaintiffs' theory is that Apple engaged in a "months-long course of conduct" in 2013 and 2014"—after Plaintiffs purchased their iPhones—to intentionally interfere with Plaintiffs' iPhones. Furthermore, Plaintiffs have identified evidence that could show that Apple engaged in intentional post-sale conduct to interfere with Plaintiffs' use of FaceTime on their iPhones.

Specifically, Apple regularly reviewed certificate expiration dates to ensure that no Apple services would fail if a certificate expired, and Apple engineer Gigi Choy could not recall a single instance when Apple "had a Sub-CA certificate expiration and we didn't take action on it." Choy Depo. at 288:3-10. Likewise, Apple's expert Avi Rubin testified that "anytime you have

expirations, the idea is that you want to issue new certificates or new keys in order to continue using the system." Rubin Depo. at 187:15-24.

Apple also knew by October 2013 that the iPhone Device CA certificate's expiration would cause FaceTime to fail on April 16, 2014. ECF No. 285, Ex. 37 at 224 ("services that check certificate expiration (as FaceTime is known to do so) will cease to function when the date comes"). Apple resolved the certificate expiration issue for iOS7, but not for iOS6. Jones Report at 41–42. Apple was aware that its decision would break FaceTime for iOS6 users and would "force folks with older devices to update to iOS7." ECF No. 285, Ex. 47 at 276. Thus, after the FaceTime break, an Apple engineer stated that Apple "broke" FaceTime: "We *broke* all iOS6, and the only way to get FaceTime working again is to upgrade to iOS7." ECF No. 285, Ex. 9 at 794.

Viewing the record in the light most favorable to Plaintiffs, the above evidence—including Apple's own characterization that Apple "broke" FaceTime—raises the inference that Apple intentionally interfered with Plaintiffs' use of FaceTime on their iPhones. Apple knew that FaceTime would break upon the iPhone Device CA certificate's expiration, but chose to remedy the certificate expiration issue only for iOS7.

Moreover, the day after the April 16, 2014 FaceTime break, an Apple engineer highlighted that the FaceTime break had reduced Apple's dependence on the more expensive relay method for FaceTime connections because iOS6 users "represented ~30% of our relay traffic." ECF No. 285, Ex. 48 at 488. Thus, the FaceTime break achieved Apple's goal to "[r]educe FaceTime relay usage as much as possible" because "Apple pays for all the relay bandwidth." ECF No. 285, Ex. 19 at 070. From that evidence, a reasonable jury could conclude that Apple intentionally interfered with Plaintiffs' iPhones to reduce Apple's relay method costs. *See Hamidi*, 30 Cal. 4th at 1350 (holding that "an intentional interference with the possession of personal property" constitutes a trespass to chattels).

To the extent that Apple contends that Plaintiffs' theory expands trespass to chattels to include any instance in which a defendant fails to remedy a design defect, Apple ignores that the tort of trespass to chattels requires an "intentional interference." *Hamidi*, 30 Cal. 4th at 1350.

Thus, a defendant's failure to remedy a design defect, without evidence of the defendant's intent to interfere with the plaintiff's property, would not give rise to a trespass to chattels claim. In the instant case, Plaintiffs have identified evidence that could prove Apple's intent to interfere with Plaintiffs' iPhones. Accordingly, the Court rejects Apple's first argument for summary judgment on Plaintiffs' trespass to chattels claim.

3. The Economic Loss Rule Does Not Bar Plaintiffs' Trespass to Chattels Claim

Second, Apple contends that even if Apple committed a trespass to chattels, the economic loss rule bars Plaintiff from recovery. Plaintiffs argue that the economic loss rule is inapplicable because Plaintiffs' trespass to chattels claim relies on Apple's violation of duties separate from any contract or commercial transaction. The Court agrees with Plaintiffs.

Under the economic loss rule, "purely economic losses are not recoverable in tort." *NuCal Foods, Inc. v. Quality Egg LLC*, 918 F. Supp. 2d 1023, 1028 (E.D. Cal. 2013) (citing *S.M. Wilson & Co. v. Smith Int'l, Inc.*, 587 F.2d 1363, 1376 (9th Cir. 1978)); *see also Robinson Helicopter Co. v. Dana Corp.*, 34 Cal. 4th 979, 988 (2004) ("The economic loss rule requires a purchaser to recover in contract for purely economic loss due to disappointed expectations, unless he can demonstrate harm above and beyond a broken contractual promise."). The purpose of the economic loss rule is to "prevent[ ] the law of contract and the law of tort from dissolving one into the other." *Robinson Helicopter*, 34 Cal. 4th at 988 (citation omitted). However, the economic loss rule does not apply when a plaintiff's tort claims are "independent of the contract arising from principles of tort law." *Id.* at 989. In addition, the California Supreme Court explained in *Robinson* that "focusing on intentional conduct gives substance to the proposition that a breach of contract is tortious only when some independent duty arising from tort law is violated." *Id.* at 990 (citation omitted).

Another court in this district has recently addressed the application of the economic loss rule to trespass to chattels. In *In re Apple*, the plaintiffs alleged that after they purchased their iPhones, certain of Apple's iOS updates caused plaintiffs' iPhones to work more slowly, which the court held was sufficient to state a claim for trespass to chattels. 347 F. Supp. 3d at 455. As in the

instant case, Apple also contended that the economic loss rule barred the plaintiffs' claims. *Id.* The district court explained that "courts have applied the economic loss rule to trespass claims when the duty arises solely out of a contract." *Id.* However, in *In re Apple*, because the plaintiffs alleged that Apple's trespass to chattels occurred after the plaintiffs purchased their iPhones and thus "separate and apart from any breach of contract," the economic loss rule did not apply. *Id.*

In the instant case, too, the economic loss rule does not apply because Apple had an independent tort duty not to intentionally interfere with Plaintiffs' possession of their iPhones. Plaintiffs' trespass to chattels claim arises not from a contract, but from Apple's intentional, post-purchase conduct. Plaintiffs have identified evidence that even though Apple regularly renewed certificates to avoid service outages, and even though Apple knew that FaceTime would cease to operate when the iPhone Device CA certificate expired, Apple resolved the certificate expiration issue only for iOS7 users and not for iOS6 users.

Plaintiffs' claim is thus unlike the claim in *Correia*, upon which Apple relies. In *Correia*, the district court held that "trespass to chattel and conversion claims arising from the defendant's design of a product are barred by California's economic loss rule," because a claim that a product was defective as sold sounds in contract. *Correia v. Johnson & Johnson Consumer Inc.*, 2019 WL 2120967, at *5 (C.D. Cal. May 9, 2019). By contrast, in the instant case, Plaintiffs' theory is not that their iPhones were defective as sold, but rather that Apple intentionally interfered with Plaintiffs' iPhones *after* purchase. Because Plaintiffs have identified evidence from which a jury could conclude that such a post-purchase trespass occurred, the economic loss rule is inapplicable.

Therefore, the Court DENIES Apple's motion for summary judgment on Plaintiffs' trespass to chattels claim.

B. Whether Plaintiffs' Damages Model is Satisfactory under the UCL

The Court next addresses Plaintiffs' UCL claim. Plaintiffs allege that Apple violated the UCL because Apple's FaceTime break was "unfair" and "without any acceptable justification, whether business or otherwise." FAC ¶ 132. Apple moves for summary judgment on the basis that Plaintiffs' damages model fails to measure restitution, the only relief available to the class

under the UCL.

1. California's UCL Permits Recovery Only of Injunctive Relief and Restitution

California's UCL prohibits unfair competition, including "any unlawful, unfair or fraudulent business act or practice and unfair, deceptive, untrue or misleading advertising." Cal. Bus & Prof. Code § 17200. The UCL creates a cause of action for business practices that are (1) unlawful, (2) unfair, or (3) fraudulent. Each "prong" of the UCL provides a separate and distinct theory of liability. *Lozano v. AT & T Wireless Servs., Inc.*, 504 F.3d 718, 731 (9th Cir. 2007). Plaintiffs proceed under the unfair prong of the UCL. FAC ¶ 130. Under the UCL, "[p]revailing plaintiffs are generally limited to injunctive relief and restitution." *Zhang v. Superior Court*, 57 Cal. 4th 364, 371 (2013). In the instant case, the Court declined to certify an injunctive class under Rule 23(b)(2). *Grace*, 328 F.R.D. at 349–50. As such, Plaintiffs are only entitled to seek restitution under the UCL.

2. The Court Has Already Rejected Apple's Challenge to Plaintiffs' UCL Restitution Damages Model

Plaintiffs' damages model is set forth in the expert report of Dr. Justine Hastings. ECF No. 278-8 ("Hastings Report"). Hastings calculates restitution by comparing the resale value of Plaintiffs' iPhones before the Facetime break to the resale value of Plaintiffs' iPhones after the FaceTime break: "I use data on the market value of used phones from the competitive market for used phone sales and multivariate regression analysis to measure the diminution in value to iPhone 4 and iPhone 4S devices caused by the Break." Hastings Report ¶ 24. Hastings explains that her econometric model "yields reliable estimates of aggregate damages and restitution measured by diminution in value of the Proposed Class Member's iPhone 4 and iPhone 4S devices caused by the Break." *Id.* ¶ 7.

"The object of restitution is to restore the status quo by returning to the plaintiff funds in which he or she has an ownership interest." *Korea Supply Co. v. Lockheed Martin Corp.*, 29 Cal. 4th 1134, 1149 (2003). "Under the UCL, an individual may recover profits unfairly obtained to the extent that these profits represent monies given to the defendant or benefits in which the

plaintiff has an ownership interest." *Pom Wonderful*, 2009 WL 5184422, at *2. Restitution "must be of a measurable amount to restore to the plaintiff what has been acquired by violations of the statutes." *Pulaski & Middleman, LLC v. Google, Inc.*, 802 F.3d 979, 988 (9th Cir. 2015) (quoting *Colgan v. Leatherman Tool Grp., Inc.*, 135 Cal. App. 4th 663, 698 (2006)). "UCL and FAL restitution is based on what a purchaser would have paid at the time of purchase had the purchaser received all the information." *Id.* at 989. However, the UCL is "particularly forgiving" when it comes to classwide damages. *Lambert v. Nutraceutical Corp.*, 870 F.3d 1170, 1183 (9th Cir. 2017), *rev'd on other grounds, sub nom. Nutraceutical Corp. v. Lambert*, 139 S. Ct. 710 (2019). California "requires only that some reasonable basis of computation of damages be used, and the damages may be computed even if the result reached is an approximation." *Id.* (internal quotation marks omitted). California courts have "very broad discretion" to determine UCL damages. *Wiener v. Dannon Co.*, 255 F.R.D. 658, 670 (C.D. Cal. 2009).

Apple contends that Plaintiffs' damages model does not present an acceptable measure of restitution. However, at the motion to dismiss and class certification stages, the Court rejected Apple's nearly identical arguments. In Apple's motion to dismiss the FAC, Apple argued that Plaintiffs' allegations that their iPhones lost resale value due to the FaceTime break were insufficient to allege entitlement to restitution. ECF No. 38 at 17–18. However, the Court rejected Apple's argument. Plaintiffs alleged that Plaintiffs "were deprived of the benefit of their bargain with Apple because Apple disabled FaceTime for Plaintiffs' iPhones, which caused Plaintiffs to suffer 'diminution in the value of their' iPhones." *Grace*, 2017 WL 3232464, at *15 (citing FAC ¶¶ 131–34). Based on those allegations of diminution in value, the Court held that "Plaintiffs seek to recover in restitution the 'profits [that Apple] unfairly obtained' from Plaintiffs as a result of Apple's intentional and permanent disabling of FaceTime for iOS6 and earlier operating systems." *Id.* (quoting *Pom Wonderful*, 2009 WL 5184422, at *2.

In Apple's opposition to Plaintiffs' motion for class certification, Apple again contested Plaintiffs' entitlement to restitution under the UCL. Apple argued that "Plaintiffs make no effort to present a classwide restitution model for its UCL claim." ECF No. 201 at 17. Specifically,

Apple argued that Plaintiffs' "diminution in value damages model" in Hastings' expert report does not measure the amount Plaintiffs overpaid for their iPhones, in violation of *Comcast Corp. v. Behrend*, 569 U.S. 27, 35 (2013). Under *Comcast*, a court must evaluate whether a class damages model "measure[s] only those damages attributable" to the plaintiffs' theory of liability. *Id.*

The Court rejected Apple's argument that Plaintiffs' damages model does not measure restitution under the UCL. The Court explained that California law "requires only that some reasonable basis of computation of damages be used, and the damages may be computed even if the result reached is an approximation." *Grace*, 328 F.R.D. at 342 (quoting *Pulaski*, 802 F.3d at 988). In the instant case, Plaintiffs' theory is that the FaceTime break violated the UCL. Thus, the Court held that "comparing the market value of the iPhone 4 and iPhone 4S before and after that information was revealed—*i.e.* before and after the FaceTime break—seems an accurate way of determining how much class members lost as a result of the FaceTime break." *Id.* Accordingly, the Court concluded that Dr. Hastings' damages model aligns with Plaintiffs' UCL theory of liability, measures restitution, and complies with *Comcast*. *Id.* at 343.

3. Plaintiffs' UCL Restitution Damages Model Has Not Changed and Remains Aligned with Plaintiffs' Theory of Liability

Apple acknowledges that the Court's class certification order addressed and rejected Apple's argument that Plaintiffs' damages model does not align with Plaintiffs' UCL claim. *See* Reply at 9. Moreover, Apple does not contest that Hastings' expert report—which sets forth Plaintiffs' UCL damages model—has not changed. Yet Apple contends that new evidence, in the form of Hastings' second deposition, requires the Court to reject Hastings' damages model as a matter of law. Apple cites no case in which a district court has reconsidered its *Comcast* analysis or rejected a UCL damages model for the first time on a motion for summary judgment. Regardless, Apple's argument for summary judgment fails on its merits.

Plaintiffs' theory is that the FaceTime break deprived Plaintiffs of the benefit of their bargain. Accordingly, Plaintiffs' damages model measures how the FaceTime break impacted the resale value of Plaintiffs' iPhones. Specifically, Hastings compares the resale value of Plaintiffs'

iPhones before the FaceTime break to the resale value of Plaintiffs' iPhones after the FaceTime break. Hastings Report ¶ 24. This model estimates "restitution measured by diminution in value of the Proposed Class Member's iPhone 4 and iPhone 4S devices caused by the Break." *Id.* ¶ 7.

In her second deposition, Hastings testified about this model. Hastings was asked "Are you offering an opinion on what class members would have paid for their iPhone 4 or 4S's had they known that 4 and 4S's with iOS 6 or earlier operating systems could stop working on April 16, 2014?" In response, Hastings testified that she was not offering such an opinion: "I am offering an opinion on aggregate class-wide damages measured by diminution in value. I am not offering an opinion on benefit-of-the-bargain damages." ECF No. 285-78 ("Hastings Depo.") at 138:8-139:9.

Apple contends that Hastings' damages model is insufficient because Hastings does not directly measure benefit of the bargain damages. However, benefit of the bargain damages, or "the difference between the price paid and actual value received is *a* measure of restitution, not the exclusive measure." *In re Tobacco Cases II*, 240 Cal. App. 4th 779, 792 (2015) (emphasis in original). In the instant case, Hastings compares the resale price of Plaintiffs' iPhones before the FaceTime break to the resale price of Plaintiffs' iPhones after the FaceTime break to measure restitution. By focusing on the direct effect of the FaceTime break, Hastings' model provides a reasonable approximation of how much Plaintiffs overpaid for their iPhones based on the FaceTime break.

A recent published Ninth Circuit opinion underscores that a plaintiff need not *directly* measure benefit of the bargain damages to advance a suitable restitution damages model under California law. *Nguyen v. Nissan N. Am., Inc.*, __ F.3d __, 2019 WL 3368918 (9th Cir. 2019). In *Nguyen*, the plaintiff's damages model proposed to use "the cost of replacing [] a defective component" as "a proxy for his overpayment of the vehicle at the point of sale." *Id.* at *3, 7. Thus, as in the instant case, the plaintiff proposed a damages model that measured the effect of a post-purchase event (in *Nguyen*, the defect's manifestation). The Ninth Circuit approved the plaintiff's damages model as "a reasonable basis of computation" for what the plaintiff would

have paid if the plaintiff knew about the component defect at the point of sale. *Id.* at *4–5. Like the damages model in *Nguyen*, Plaintiffs' damages model measures the effect of the post-purchase event—in this case, the FaceTime break. Accordingly, Plaintiffs' damages model provides "a reasonable basis of computation" for how much Plaintiffs overpaid to Apple. *Nguyen*, 2019 WL 3368918, at *4.

Furthermore, Plaintiffs' damages model satisfies the three basic principles for measuring restitution under California law, as identified in *In re Tobacco Cases II*, 240 Cal. App. 4th 779. *Accord Chowning v. Kohl's Dep't Stores, Inc.*, 2016 WL 1072129, at *6 (C.D. Cal. Mar. 15, 2016) (relying on *In re Tobacco Cases II* principles). First, restitution does not permit an award of monetary relief solely to deter a defendant. *In re Tobacco Cases II*, 240 Cal. App. 4th at 793. Apple makes no argument that Plaintiffs' damages model will generate an award solely designed to deter Apple from future misconduct. Second, restitution must account for the benefits that the plaintiff received at the time of purchase. *Id.* at 796. In the instant case, Plaintiffs do not seek to recover the entire purchase price of their iPhones, but only the excess portion that Plaintiffs paid to Apple based on Plaintiffs' expectation of continued FaceTime operation. Finally, restitution must also represent a measurable loss to the plaintiff. *Id.* at 801. In the instant case, Plaintiffs' damages model aims to measure what Plaintiffs lost and Apple gained as a result of the FaceTime break.

Finally, Apple's two primary cases are inapposite. Apple relies on this Court's decision in *Smit v. Charles Schwab & Co.*, 2011 WL 846697 (N.D. Cal. Mar. 8, 2011). However, in *Smit*, unlike in the instant case, the Court concluded that when the plaintiffs invested in the defendant's investment fund, the plaintiffs never actually transferred any monetary interest to the defendants. *Id.* at *10. Thus, because the plaintiffs had not paid any money to the defendant, plaintiffs had not overpaid any money and could not recover in restitution. *Id.* By contrast, it is undisputed that Plaintiffs paid money to Apple for Plaintiffs' iPhones.

Apple Inc. v. Superior Court, 19 Cal. App. 5th 1101 (2018), is also inapposite. That case concerned the admissibility of expert opinion evidence at class certification in California state court, not the type of UCL damages model sufficient to survive summary judgment in federal

court. *Id.* at 1106. Apple does not challenge Hastings' opinions as inadmissible. To the extent that Apple believes Hastings' opinions are misguided, "the appropriate way to discredit [Hastings'] theory [is] through competing evidence and incisive cross-examination" at trial. *Murray v. S. Route Maritime SA*, 870 F.3d 915, 922 (9th Cir. 2017).

Accordingly, the Court again rejects Apple's argument that Plaintiffs' damages model is an inadequate measurement of restitution under the UCL. Therefore, the Court DENIES Apple's motion for summary judgment on Plaintiffs' UCL claim.

IV. CONCLUSION

For the foregoing reasons, the Court DENIES Apple's motion for summary judgment.

IT IS SO ORDERED.

Dated: August 21, 2019

Lucy H. Koh

LUCY H. KOH
United States District Judge

United States District Court
Northern District of California