### IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF TEXAS WACO DIVISION

MULLEN INDUSTRIES LLC,	Case No. 6:22-cv-00145		
Plaintiff,			
V.	JURY TRIAL DEMANDED		
APPLE INC.,			
Defendant.			

## **COMPLAINT FOR PATENT INFRINGEMENT**

Plaintiff Mullen Industries LLC ("Mullen Industries" or "Plaintiff") for its Complaint against Defendant Apple Inc. ("Apple" or "Defendant") for patent infringement under 35 U.S.C. § 271 relating to U.S. Patent Nos. 11,246,024 (the "'024 Patent"), 11,234,117 (the "'117 Patent"), 11,190,633 (the "'633 Patent"), 11,122,418 (the "'418 Patent"), 11,109,218 (the "'218 Patent"), 11,096,039 (the "'039 Patent"), 9,635,540 (the "'540 Patent"), 9,204,283 (the "'283 Patent"), and 8,374,575 (the "'575 Patent" and collectively, the "Patents-in-Suit") alleges as follows:

### **INTRODUCTION**

- 1. The Patents-in-Suit are directed to technological advancements and security improvements in regards to server systems and mobile devices including cellular phones, tablets, and smart watches. The Patents-in-Suit and additional patent pending technology arose from the research and development of Jeff Mullen and his company Mullen Industries LLC.
- 2. Jeff Mullen is an inventor, technologist, electrical and computer engineer, MBA graduate, and founder of multiple companies.
- 3. Jeff Mullen has innovated prolifically across a wide array of technologies since the early 2000s, including, for example, with regard to wireless and cellular communications systems

and devices, security improvements regarding the same, augmented reality and virtual reality devices, and autonomous defense systems.

- 4. By way of example, the Patents-in-Suit identify problems that existed in the art of mobile devices and global positioning system technology. *See, e.g.*, '418 Patent at 1:28-33. To address these problems, the Patents-in-Suit disclose technological advancements and security improvements in regards to, for example, "systems and methods ... for locating cellular phones ... [and] for allowing a user of a cellular phone ... to locate the position of a different user's cellular phone ... based upon requestor-assigned access rights." *See, e.g.*, '418 Patent at 1:37-43.
- 5. The Patents-in-Suit teach, for example, that "[i]n order for users to be identified by other users' cell phones or locating devices a user profile may need to be stored remotely from such devices. In such instances user profiles would be used as the locating identifier and the devices into which these profiles are logged into (recognized by) would allow for the user to be located." *Id.* at 9:53-65; *see also* 2:59-3:13, 11:3-24, 12:42-13:3.
- 6. The Patents-in-Suit disclose, for example, a backend server system that communicates with mobile devices to provide location-based services and features. For example, the Patents-in-Suit teach a mobile device that can receive and display location information regarding another mobile device by "contact[ing] the remote database, hav[ing] his/her identity recognized, hav[ing] his/her access rights for the requested user location determined, and, if the requesting user has the correct access rights, be[ing] provided with the requested user's location." *Id.* at 5:11-44.
- 7. The Patents-in-Suit describe additional technological advancements and security improvements in regards to server systems and mobile devices. For example, the Patents-in-Suit describe that "different types of access levels may be provided that allow a user to filter location

information to a different user." *See id.* at 1:49-54. Such access rights can vary, for example, by time (e.g., location is only accessible for a certain amount of time) or place (e.g., only an approximate location, but not an exact location, may be accessed). *Id.* at 1:55-2:2.

- 8. As additional examples, the Patents-in-Suit solve technical challenges related to receiving and providing event notifications and location-based information, such as location markers on a map, navigable directions, and distance information, on mobile devices with small display screens. *E.g.*, *id.* at 2:22-34, 8:6-21; '633 Patent at 1:47-2:11.
- 9. Jeff Mullen's patented innovations have been widely cited by others. By way of example, the Patents-in-Suit have been cited by others over 100 times in U.S. Patent Office proceedings, including in multiple proceedings involving Apple.
- 10. For example, on February 26, 2019, Apple cited Jeff Mullen's '575, '283, and '540 Patents directed to "Systems and Methods for Locating Cellular Phones and Security Measures for the Same." Each has a priority date of March 25, 2002—approximately ten years earlier than the earliest possible priority date of Apple's U.S. Patent Appln. No. 16/147,028 (U.S. Pub. No. 2019/0273652) directed to the same or similar location-based technologies now deployed in every Apple iPhone, iPad, Watch, and iPod touch device, and by Apple's iCloud server system.<sup>1</sup>
- 11. As another example, on information and belief Apple has possessed knowledge of Jeff Mullen's inventions at least as early as June 22, 2011 when the U.S. Patent Office cited Mullen's related U.S. Pub. No. 2006/0252431, which contains the same disclosure as Mullen's '575, '283, and '540 Patents, to Apple in Apple's U.S. Appln. No. 12/185,598 (U.S. Pub. No. 2010/0029302).

<sup>&</sup>lt;sup>1</sup> *E.g.*, <a href="https://www.apple.com/icloud/find-my/">https://support.apple.com/en-us/HT210514;</a>; <a href="https://support.apple.com/guide/watch/find-people-apd1132106dc/watchos">https://support.apple.com/guide/watch/find-people-apd1132106dc/watchos</a>.

### **THE PARTIES**

### MULLEN INDUSTRIES LLC

12. Plaintiff Mullen Industries LLC is a limited liability company organized and existing under the laws of the State of Delaware.

### APPLE INC.

- 13. Apple is a California corporation and maintains a place of business located at One Apple Park Way, Cupertino, California 95014, and may be served with process through its registered agent, CT Corporation System at 1999 Bryan Street, Suite 900, Dallas, Texas 75201.
- 14. Apple does business in Texas, directly and through intermediaries, and offers its products and/or services, including those accused herein of infringement, to customers and potential customers located in Texas, including in this District.
- 15. On information and belief, Apple maintains regular and established places of business within this District including at least the following locations: 12545 Riata Vista Circle, Austin, Texas 78727; 6900 W. Parmer Lane, Austin, Texas 78729; 12801 Delcour Drive, Austin, Texas 78727; 3121 Palm Way, Austin, Texas 78758; 2901 S. Capital of Texas Highway, Austin, Texas 78746. Upon information and belief, Apple employs individuals in this District involved in the research, development, sales, and marketing of its products and services that infringe the Patents-in-Suit.

### **JURISDICTION AND VENUE**

- 16. This is an action for patent infringement arising under the patent laws of the United States, 35 U.S.C. §§ 1, *et seq*. This Court has exclusive subject matter jurisdiction over this action under 28 U.S.C. §§ 1331 and 1338(a).
- 17. This Court has personal jurisdiction over Apple. Apple regularly conducts business and has committed acts of patent infringement within this District and the State of Texas that give

rise to this action and has established minimum contacts with this forum such that exercise of jurisdiction over Apple would not offend traditional notions of fair play and substantial justice. Apple has committed and continues to commit acts of infringement in this District and State by, among other things, offering to sell, selling, using, importing, and making products and services that infringe the Patents-in-Suit.

- 18. Venue is proper in this District under 28 U.S.C. §§ 1391 and 1400. Apple is registered to do business in Texas and, upon information and belief, Apple has transacted business in this District, has committed acts of direct infringement in this District, and has regular and established places of business in this District as set forth above.
- 19. On information and belief, Apple has thousands of employees based in the Western District of Texas and does business in this District and across the State of Texas.<sup>2</sup>
- 20. On information and belief, Apple's employees in this District include, for example, Software Engineers, Senior Software Engineers, Software Quality Engineers, iCloud Support Engineers, and iCloud Site Support Engineers. Accordingly, on information and belief, witnesses and documents relevant to this action are located in this District.
- 21. For example, Apple currently employs in the Austin metropolitan area several witnesses relevant to Apple's infringement of the Patents-in-Suit including, for example, a

<sup>&</sup>lt;sup>2</sup> See e.g., Apple checks in with 192-room hotel for billion-dollar Northwest Austin campus, published May 20, 2020 (https://austin.culturemap.com/news/city-life/05-20-20-apple-adds-surprising-element-to-1-billion-campus-in-northwest-austin/); Apple bites into North Austin with new \$1 billion campus and 5,000 potential jobs, published Dec. 13, 2018 (https://austin.culturemap.com/news/city-life/12-13-18-apple-bites-into-north-austin-with-new-1-billion-campus-and-5000-jobs/); Apple Press Release, Apple expands in Austin, published November 20, 2019 (https://www.apple.com/newsroom/2019/11/apple-expands-in-austin/); Apple getting big tax rebate from Williamson County with Austin expansion, published Dec. 18, 2018 (https://www.kvue.com/article/news/local/apple-could-get-big-tax-break-from-williamsoncounty-with-austin-expansion/269-623955430).

Software Engineer working on "Cloud Infrastructure," a "Senior Software Engineer – Data Science and Machine Learning" that "[l]ead[s] AppleCare in a large cross-functional initiative" involving "iCloud," a Software Quality Engineer providing "iCloud" support, an "iCloud Support Engineer," and an "iCloud Site Support Engineer" that "[r]esolve[s] iCloud technical requests from call center reports," "[a]nalyze[s] and identif[ies] trending or emerging issues with end users," and "[m]anage[s] community forums and postings."<sup>3</sup>

- 22. Apple also continues to expand its presence in this District including with regard to technology areas relevant to Apple's infringement of the Patents-in-Suit. For example, Apple currently has 600+ job openings in the Austin metropolitan area.<sup>4</sup>
- 23. In one example, Apple has listed a job opening in Austin, Texas for an "iCloud Support Engineering Readiness Project Manager," with responsibilities including serving as "the liason between Apple's contact centers, Engineering, Product Marketing, and Operations in order to provide the best possible customer support experience" in "[p]roduct areas of responsibility" including Apple "iCloud" and Apple "Find My."<sup>5</sup>
- 24. As another example, Apple has listed a job opening in Austin, Texas for an "Enterprise Application / Platform Software Engineer" to join the "Apple Identity Management team that's responsible for all of Apple's identity and access management" including with regard

6

<sup>&</sup>lt;sup>3</sup> See <a href="https://www.linkedin.com/in/semchyshyn/">https://www.linkedin.com/in/semchyshyn/</a>, <a href="https://www.linkedin.com/in/semchy

<sup>&</sup>lt;sup>4</sup> Careers at Apple, <a href="https://jobs.apple.com/en-us/search?sort=relevance&location=austin-metro-area-AUSMETRO">https://jobs.apple.com/en-us/search?sort=relevance&location=austin-metro-area-AUSMETRO</a> (last accessed January 7, 2022).

<sup>&</sup>lt;sup>5</sup> Careers at Apple, <a href="https://jobs.apple.com/en-us/details/200305125/icloud-support-engineering-readiness-project-manager?team=CUST">https://jobs.apple.com/en-us/details/200305125/icloud-support-engineering-readiness-project-manager?team=CUST</a> (last accessed January 7, 2022).

to Apple "iCloud" and the "security standards for protecting customer data with innovative software solutions."

- 25. As another example, Apple has listed a job opening in Austin, Texas for an "SOLR Engineer / Developer" to work on the Apple team that provides "data stores as a service ... working with iCloud."<sup>7</sup>
- 26. Venue in this District is also proper because Jeff Mullen, the sole member of the Plaintiff and the inventor of all of the Patents-in-Suit, resides in Glenshaw, Pennsylvania, and this District is more convenient for him than, for example, the Northern District of California.
- Apple is subject to this Court's jurisdiction pursuant to due process and the Texas Long Arm Statute due at least to its substantial business in this State and District, including (a) at least part of its past infringing activities, (b) regularly doing or soliciting business in Texas, and/or (c) engaging in persistent conduct and/or deriving substantial revenue from goods and services provided to customers in Texas.

### THE PATENTS-IN-SUIT

- 28. On January 25, 2022, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 11,234,117 (the "'117 Patent") entitled "Systems and Methods for Locating Cellular Phones and Security Measures for the Same." A true and correct copy of the '117 Patent is attached hereto as Exhibit 1.
- 29. On November 30, 2021, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 11,190,633 (the "'633 Patent") entitled "Systems and Methods for

7

<sup>&</sup>lt;sup>6</sup> Careers at Apple, <u>https://jobs.apple.com/en-us/details/200329128/enterprise-application-platform-software-engineer?team=SFTWR</u> (last accessed January 7, 2022).

<sup>&</sup>lt;sup>7</sup> Careers at Apple, <a href="https://jobs.apple.com/en-us/details/200263877/solr-engineer-developer?team=SFTWR">https://jobs.apple.com/en-us/details/200263877/solr-engineer-developer?team=SFTWR</a> (last accessed January 7, 2022).

Providing Remote Incoming Call Notification for Cellular Phones." A true and correct copy of the '633 Patent is attached hereto as Exhibit 2.

- 30. On September 14, 2021, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 11,122,418 (the "'418 Patent") entitled "Systems and Methods for Locating Cellular Phones and Security Measures for the Same." A true and correct copy of the '418 Patent is attached hereto as Exhibit 3.
- 31. On August 31, 2021, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 11,109,218 (the "'218 Patent") entitled "Systems and Methods for Locating Cellular Phones and Security Measures for the Same." A true and correct copy of the '218 Patent is attached hereto as Exhibit 4.
- 32. On August 17, 2021, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 11,096,039 (the "'039 Patent") entitled "Systems and Methods for Locating Cellular Phones and Security Measures for the Same." A true and correct copy of the ''039 Patent is attached hereto as Exhibit 5.
- 33. On April 25, 2017, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 9,635,540 (the "'540 Patent") entitled "Systems and Methods for Locating Cellular Phones and Security Measures for the Same." A true and correct copy of the '540 Patent is attached hereto as Exhibit 6.
- 34. On December 1, 2015, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 9,204,283 (the "283 Patent") entitled "Systems and Methods for Locating Cellular Phones and Security Measures for the Same." A true and correct copy of the '283 Patent is attached hereto as Exhibit 7.

- 35. On February 12, 2013, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 8,374,575 (the "'575 Patent") entitled "Systems and Methods for Locating Cellular Phones and Security Measures for the Same." A true and correct copy of the '575 Patent is attached hereto as Exhibit 8.
- 36. On February 8, 2022, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 11,246,024 (the "'024 Patent") entitled "Systems and Methods for Locating Cellular Phones and Security Measures for the Same." A true and correct copy of the '024 Patent is attached hereto as Exhibit 9.
- 37. Mullen Industries LLC is the sole and exclusive owner of all right, title, and interest in and to the Patents-in-Suit, and holds the exclusive right to take all actions necessary to enforce its rights to the Patents-in-Suit, including the filing of this action. Mullen Industries LLC also has the right to recover all damages for past, present, and future infringement of the Patents-in-Suit.
- 38. Pursuant to and because Plaintiff and Jeff Mullen have complied with 35 U.S.C. §§ 286 and 287(a), Plaintiff is entitled to six years of past damages for Apple's infringement. Plaintiff is also entitled to damages for Apple's continuing infringement from the present until the expiration of the last to expire of the Patents-in-Suit.

## COUNT I INFRINGEMENT OF U.S. PATENT NO. 11,234,117

- 39. All of the preceding paragraphs of this Complaint are incorporated by reference as if fully set forth herein.
- 40. Plaintiff has not licensed or otherwise authorized Apple to make, use, offer for sale, sell, export, or import any products that embody the inventions of the '117 Patent.
- 41. Apple has and continues to directly infringe the '117 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, by making,

using, offering to sell, selling, exporting from, and/or importing into the United States products that satisfy each and every limitation of one or more claims of the '117 Patent.

- 42. On information and belief, Apple's products that infringe the '117 Patent include at least the following versions and variants of Apple's iPhones: Apple iPhone 13 Pro Max, iPhone 13 Pro, iPhone 13, iPhone 13 mini, iPhone 12 Pro Max, iPhone 12 Pro, iPhone 12, iPhone 12 mini, iPhone SE (2nd generation), iPhone 11 Pro, iPhone 11 Pro Max, iPhone 11, iPhone XS, iPhone XS Max, iPhone XR, iPhone X, iPhone 8, iPhone 8 Plus, iPhone 7, iPhone 7 Plus, iPhone 6s, iPhone 6s Plus, iPhone 6, iPhone 6 Plus, iPhone SE (1st generation).
- 43. On information and belief, Apple's products that infringe the '117 Patent include at least the following versions and variants of Apple's iPads: Apple iPad Pro 12.9-inch (5th generation), iPad Pro 11-inch (3rd generation), iPad Pro 12.9-inch (4th generation), iPad Pro 11-inch (2nd generation), iPad Pro 12.9-inch (3rd generation), iPad Pro 11-inch, iPad Pro 12.9-inch (2nd generation), iPad Pro (10.5-inch), iPad Pro (9.7-inch), iPad Pro (12.9-inch), iPad Air (4th generation), iPad Air (3rd generation), iPad Air 2, iPad Air, iPad mini (6th generation), iPad mini (5th generation), iPad mini 3, iPad mini 2, iPad (9th generation), iPad (8th generation), iPad (7th generation), iPad (6th generation), iPad (5th generation).
- 44. On information and belief, Apple's products that infringe the '117 Patent include at least the following versions and variants of Apple's Watches: Apple Watch Series 7 (GPS + Cellular) Aluminum, Watch Nike Series 7 (GPS + Cellular), Watch Series 7 (GPS + Cellular) Stainless Steel, Watch Hermès Series 7 (GPS + Cellular), Watch Edition Series 7 (GPS + Cellular) Titanium, Watch Series 6 (GPS + Cellular) Aluminum, Watch Nike Series 6 (GPS + Cellular), Watch Series 6 (GPS + Cellular) Stainless Steel, Watch Hermès Series 6 (GPS + Cellular), Watch Edition Series 6 (GPS + Cellular) Titanium, Watch SE (GPS + Cellular) Aluminum, Watch Nike

SE (GPS + Cellular), Watch Series 5 (GPS + Cellular) Aluminum, Watch Nike Series 5 (GPS + Cellular), Watch Series 5 (GPS + Cellular) Stainless Steel, Watch Hermès Series 5 (GPS + Cellular), Watch Edition Series 5 (GPS + Cellular) Titanium, Watch Edition Series 5 (GPS + Cellular) Ceramic, Watch Series 4 (GPS + Cellular) Aluminum, Watch Nike+ Series 4 (GPS + Cellular), Watch Series 4 (GPS + Cellular) Stainless Steel, Watch Hermès Series 4 (GPS + Cellular), Watch Series 3 (GPS + Cellular) Aluminum, Watch Nike+ Series 3 (GPS + Cellular), Watch Series 3 (GPS + Cellular) Stainless Steel, Watch Hermès Series 3 (GPS + Cellular), Watch Edition Series 3 (GPS + Cellular). Collectively, the Apple products that infringe the '117 Patent are referred to as the "'117 Accused Products."

- 45. Apple has and continues to directly infringe at least independent claims 1, 15, 29, 42, and 73 of the '117 Patent. For example, Apple has and continues to directly infringe claim 1 of the '117 Patent by making, using, offering to sell, selling, and/or importing into the United States the '117 Accused Products, each of which comprises a wireless telephone.
- 46. For example, each Apple iPhone is capable of supporting telephonic communications over cellular networks including 5G and LTE. E.g.:<sup>8,9</sup>

### iPhone 13

Year introduced: 2021
Capacity: 128 GB, 256 GB, 512 GB
Colors: (PRODUCT)RED, starlight, midnight, blue, pink
Model numbers: A2482 (United States),
A2631 (Canada, Japan, Mexico, Saudi
Arabia), A2634 (mainland China, Hong Kong,
Macao), A2635 (Armenia, Belarus,
Kazakhstan, Kyrgyzstan, Russia), A2633
(other countires and regions)



Details: iPhone 13 has a 6.1-inch<sup>1</sup> all-screen Super Retina XDR display. The back is glass, and there's a

flat-edged anodized aluminum band around the frame. The side button is on the right side of the device. There are two 12 MP cameras on the back: Ultra Wide and Wide. There's a Dual-LED True Tone flash on the back and a SIM tray on the left side that holds a "fourth form factor" (4FF) nano-SIM card. The IMEI is etched on the SIM tray.

See the tech specs for iPhone 13.

<sup>&</sup>lt;sup>8</sup> https://support.apple.com/en-us/HT201296.

<sup>&</sup>lt;sup>9</sup> https://support.apple.com/kb/SP851?locale=en\_US (iPhone 13 – Technical Specifications).

#### All models

- o 5G (sub-6 GHz and mmWave)6
- Gigabit LTE with 4x4 MIMO and LAA6
- 47. Each cellular-capable Apple iPad is likewise capable of supporting telephonic communications over cellular networks including 5G and LTE. Each cellular-capable Apple iPad is capable of making telephone calls over a cellular network using, for example, Apple's FaceTime application. E.g.: 10,11,12

# iPad Pro 12.9-inch (5th generation)

- Year: 2021
- Capacity: 128 GB, 256 GB, 512 GB, 1 TB, 2 TB
- Model number (on the back cover):
   A2378 on the iPad Pro
   A2461 on the iPad Pro Wi-Fi +
   Cellular
   A2379 on the iPad Pro Wi-Fi +
   Cellular with mmWave
- A2462 on the iPad Pro Wi-Fi + Cellular (China mainland only)
- · Black front bezel
- Liquid Retina XDR display
- The nano-SIM tray is on the right side on iPad Pro Wi-Fi + Cellular
- Front TrueDepth camera, Wide camera, Ultra Wide camera
- LiDAR Scanner
- Face ID sensor

See the tech specs for iPad Pro 12.9-inch (5th generation).



<sup>&</sup>lt;sup>10</sup> https://support.apple.com/en-us/HT201471.

<sup>&</sup>lt;sup>11</sup> <u>https://support.apple.com/kb/SP844?locale=en\_US</u> (iPad Pro, 12.9-inch (5th generation) – Technical Specifications).

<sup>&</sup>lt;sup>12</sup> https://support.apple.com/guide/ipad/make-and-receive-calls-ipad6b71e29e/ipados.

■ Wi-Fi + Cellular models

Model A2301 and A2379:

5G NR (Bands n1, n2, n3, n5, n7, n8, n12, n20, n25, n28, n38, n40, n41, n66, n71, n77, n78, n79)<sup>4</sup>

5G NR mmWave (Bands n260, n261)

FDD-LTE (Bands 1, 2, 3, 4, 5, 7, 8, 11, 12, 13, 14, 17, 18, 19, 20, 21, 25, 26, 28, 29, 30, 32, 66, 71)

TD-LTE (Bands 34, 38, 39, 40, 41, 42, 46, 48)

UMTS/HSPA/HSPA+/DC-HSDPA (850, 900, 1700/2100, 1900, 2100 MHz)

GSM/EDGE (850, 900, 1800, 1900 MHz)

Data only<sup>5</sup>

Wi-Fi calling<sup>4</sup>

eSIM<sup>6</sup>

# Make and receive FaceTime calls on iPad

With an internet connection and an Apple ID, you can make and receive calls in the FaceTime app ...

Note: You must set up FaceTime before you can make and receive calls.

On iPad Wi-Fi + Cellular models, you can also make FaceTime calls over a cellular data connection, which may incur additional charges. To turn this feature off, go to Settings Set > Cellular, then turn off FaceTime. See View or change cellular data settings on iPad (Wi-Fi + Cellular models).

48. Each cellular-capable Apple Watch is also capable of supporting telephonic communications over cellular networks including LTE and UMTS. E.g.:<sup>13,14,15</sup>

Apple Watch Series 7 (GPS + Cellular) Aluminum



41mm case (Model: A2475 North America; A2476 Europe, Asia Pacific, and China mainland)
45mm case (Model: A2477 North America; A2478 Europe, Asia Pacific, and China mainland)
Midnight, Starlight, Green, Blue, or (PRODUCT) RED aluminum with a red ring on the Digital Crown Ion-X glass, Retina display, and ceramic back

<sup>13</sup> https://support.apple.com/en-us/HT204507.

<sup>&</sup>lt;sup>14</sup> <u>https://support.apple.com/kb/SP860?locale=en\_US</u> (Apple Watch Series 7 – Technical Specifications).

https://support.apple.com/guide/watch/make-phone-calls-apdc38d7a95e/watchos; https://support.apple.com/en-us/HT205547; https://www.imore.com/how-make-facetime-call-apple-watch.

#### Connectivity

- LTE and UMTS<sup>6</sup>
  - GPS + Cellular models

Learn more about available carriers

Wi-Fi

802.11b/g/n 2.4GHz and 5GHz

Bluetooth 5.0

### Make phone calls on Apple Watch

- Ask Siri. Say something like:
- "Call Max"
- "Dial 555 555 2949"
- · "Call Pete FaceTime audio"

#### Make a call

- 1. Open the Phone app 😵 on your Apple Watch.
- 2. Tap Contacts, then turn the Digital Crown to scroll.
- 3. Tap the contact you want to call, then tap the phone button.
- 4. Tap FaceTime Audio to start a FaceTime audio call, or tap a phone number.
- 5. Turn the Digital Crown to adjust volume during the call.
- 49. Each of the '117 Accused Products comprises a processor. For example, each Apple iPhone 13 includes an A15 Bionic system-on-chip. E.g.: 16,17

### Chip

- A15 Bionic chip
- New 6-core CPU with 2 performance and 4 efficiency cores
- New 4-core GPU
- New 16-core Neural Engine

<sup>&</sup>lt;sup>16</sup> <u>https://support.apple.com/kb/SP851?locale=en\_US</u> (iPhone 13 – Technical Specifications).

<sup>&</sup>lt;sup>17</sup> https://www.techinsights.com/blog/teardown/apple-iphone-13-pro-teardown.

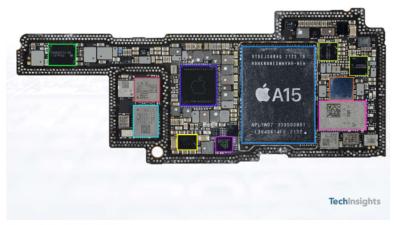


Figure 1. Apple iPhone Pro Board Shot

50. As another example, each cellular-capable Apple iPad Pro, 12.9 inch (5<sup>th</sup> generation) includes an M1 system-on-chip. E.g.:<sup>18,19</sup>

### Chip

- Apple M1 chip
- 8-core CPU with 4 performance cores and 4 efficiency cores
- 8-core GPU
- 16-core Neural Engine
- 8GB RAM on models with 128GB, 256GB, or 512GB storage
- 16GB RAM on models with 1TB or 2TB storage



<sup>&</sup>lt;sup>18</sup> <u>https://support.apple.com/kb/SP844?locale=en\_US</u> (iPad Pro, 12.9-inch (5<sup>th</sup> generation) – Technical Specifications).

<sup>&</sup>lt;sup>19</sup> https://www.techinsights.com/blog/teardown/apple-ipad-pro-teardown.

51. As another example, each cellular-capable Apple Watch Series 7 includes an Apple S7 system-on-chip. E.g.:<sup>20,21</sup>

### Chip

- S7 with 64-bit dual-core processor
- W3
   Apple wireless chip
- U1 chip (Ultra Wideband)<sup>12</sup>



- 52. Each of the '117 Accused Products comprises a positioning system for determining a location of the device. For example, each Apple iPhone, cellular-capable Apple iPad, and cellular-capable Apple Watch includes a global positioning system.<sup>22</sup>
- 53. Each of the '117 Accused Products comprises memory storing programming. For example, each Apple iPhone, cellular-capable Apple iPad, and cellular-capable Apple Watch includes memory storing programming capable of providing location-based services and features including, for example, Apple Find My or Find My Friends and Apple Maps (Apple iPhones and

 $<sup>^{20}</sup>$  <u>https://support.apple.com/kb/SP860?locale=en\_US</u> (Apple Watch Series 7 – Technical Specifications).

<sup>&</sup>lt;sup>21</sup> https://www.ifixit.com/Teardown/Apple+Watch+Series+7+Teardown/145524.

<sup>&</sup>lt;sup>22</sup> E.g., <a href="https://support.apple.com/kb/SP851?locale=en\_US">https://support.apple.com/kb/SP851?locale=en\_US</a> (iPhone 13 – Technical Specifications); <a href="https://support.apple.com/kb/SP844?locale=en\_US">https://support.apple.com/kb/SP860?locale=en\_US</a> (Apple Watch Series 7 – Technical Specifications).

iPads), or Apple Find People and Apple Maps (Apple Watches). E.g.: 23,24





The Find My app makes it easy to keep track of your Apple devices. Locate items you've attached AirTag to. And keep up with friends and family. It works on iPhone, iPad, and Mac — even if your missing devices are offline. And your privacy is protected every step of the way.

Find your stuff on iCloud.com 7

# Find your friends.

Invite friends and family members to share their locations. So you can keep in touch with one another, coordinate around an event, or know when a family member has arrived home safely.

See where everyone is on a map.

you to find each other and stay connected. Share your location for an hour, a day, or indefinitely — it's up to you.



<sup>&</sup>lt;sup>23</sup> <u>https://www.apple.com/icloud/find-my/; https://www.apple.com/apple-watch-series-7/.</u>

<sup>&</sup>lt;sup>24</sup> https://www.apple.com/maps/.



54. Each of the '117 Accused Products comprises programming capable of providing the location of the device to a remote server. For example, each Apple iPhone, cellular-capable Apple iPad, and cellular-capable Apple Watch programmed with Apple Find My, Find My Friends, or Find People is capable of providing the location of the iPhone, iPad, or Watch, respectively, to an Apple iCloud server. E.g.:<sup>25,26</sup>

# Find friends and share your location with Find My

Learn how to use the Find My app to share your location with friends and family members. You can even set up location-based notifications so you know if someone left a location or just got home.



The Find My app combines Find My iPhone and Find My Friends into a single app in the latest versions of iOS, iPadOS, and macOS. If you need help finding it, use Search on your iPhone, iPad, or iPod touch or use Spotlight on your Mac. You can also share locations on iCloud.com.

### Share your location

When Share My Location is turned on, you can share your location with friends, family, and contacts from your iPhone, iPad, or iPod touch with Find My. You can also share your location in the Find People app on watchOS 6 or later with Apple Watch models that have GPS and cellular and are paired with your iPhone.

<sup>&</sup>lt;sup>25</sup> https://support.apple.com/en-us/HT210514; https://www.apple.com/icloud/find-my/; https://support.apple.com/guide/watch/find-people-apd1132106dc/watchos#:~:text=Open%20the%20Find%20People%20app%20on%20your%20Apple%20Watch%20to,return%20to%20your%20friends%20list.

<sup>&</sup>lt;sup>26</sup> https://www.apple.com/icloud/; https://www.apple.com/legal/privacy/data/en/location-services/; https://www.apple.com/legal/privacy/law-enforcement-guidelines-us.pdf.

### Share with people

- 1. Open the Find My app and select the People tab
- 2. Select Share My Location or Start Sharing Location.
- 3. Enter the name or phone number of the person you want to share your location with.
- 4. Select Send.
- 5. Choose to share your location for One Hour, Until End of Day, or Share Indefinitely.
- 6. Select OK.

When you share your location with someone, they have the option to share their location back.





# The best place for all your photos, files, and more.

iCloud is built into every Apple device. That means all your stuff — photos, files, notes, and more — is safe, up to date, and available wherever you are. Everyone gets 5GB of free iCloud storage to start. And you can upgrade to iCloud+anytime for powerful new features and more storage.\*

55. Each of the '117 Accused Products comprises programming capable of instructing said remote server to change a list of users on said remote server for a profile associated with said device that are allowed to access said location by way of said remote server providing said location from said remote server to at least one of said users of said list of users, wherein each user of said list of users is representative of one of a plurality of wireless telephones. For example, each Apple iPhone, cellular-capable Apple iPad, and cellular-capable Apple Watch programmed with Apple Find My, Find My Friends, or Find People includes options to add and/or remove individuals who can access the iPhone's, iPad's, or Watch's location from Apple's iCloud server. Such options, when selected, instruct Apple's iCloud server to change in a profile associated with the device a

list of users authorized to view the device's location data, where each such authorized user is associated with a wireless telephone (iPhone, iPad, or Watch).<sup>27</sup>

56. Each Apple iPhone, cellular-capable Apple iPad, and cellular-capable Apple Watch programmed with Apple Find My, Find My Friends, or Find People includes, for example, an option to share the device's location (e.g., "Share My Location") with a user of another device, which when selected instructs Apple's iCloud server to add the selected user to the list of users authorized to view the device's location data. As another example, each such device is capable of displaying an option to share the device's location when another device shares its location with the device (e.g., option to "Share" the device's location with a device associated with a user), which when selected instructs Apple's iCloud server to add the selected user to the list of users authorized to view the device's location data. As additional examples, each such device is capable of displaying options to stop sharing the device's location with everyone, or a particular user. E.g.:<sup>28</sup>



<sup>&</sup>lt;sup>27</sup> https://support.apple.com/en-us/HT210514; https://www.apple.com/icloud/find-my/.

<sup>&</sup>lt;sup>28</sup> *Id*.

### Stop sharing your location

To stop sharing your location with everyone, follow these steps. You can also stop sharing with a specific person, or turn off Allow Friend Requests.

- 1. Open the Find my app.
- 2. Select the Me tab.
- 3. Turn off Share My Location.

#### Stop sharing with one person

- 1. Open the Find My app and select the People tab.
- 2. Choose the person you want to stop sharing your location with.
- 3. Scroll down and select Stop Sharing My Location.
- 57. Each of the '117 Accused Products comprises programming capable of receiving and displaying directional information to one of said plurality of wireless telephones, wherein said directional information is representative of directions between said location and a second location associated with said one of said plurality of wireless telephones. For example, each Apple iPhone, cellular-capable Apple iPad, and cellular-capable Apple Watch programmed with Apple Maps and Apple Find My, Find My Friends, or Find People is capable of displaying the locations of the wireless telephones associated with the device user's friends, and upon selection of one of such wireless telephones, displaying an option to receive and display directions from the location of the iPhone, iPad, or Watch to the selected wireless telephone. E.g.:<sup>29</sup>

29	Id.		
	ıu.		

### Locate a friend

1. Open the Find My app and select the People tab.



- 2. Under People, choose the name of your friend who is sharing their location with you.
- 3. Choose Directions to open Maps and then follow the directions to arrive at your friends location.
- 58. Plaintiff has suffered damages as a result of Apple's infringement of the '117 Patent in an amount to be proved at trial.
- 59. Plaintiff should be awarded damages in accordance with 35 U.S.C. §§ 271, 281, and 284, in an amount adequate to compensate for Apple's infringement of the '117 Patent, but in no event less than a reasonable royalty for the use made of the inventions by Apple together with interest and costs as fixed by the Court.

### COUNT II INFRINGEMENT OF U.S. PATENT NO. 11,190,633

- 60. Plaintiff references and incorporates by reference the preceding paragraphs of this Complaint as if fully set forth herein.
- 61. Plaintiff has not licensed or otherwise authorized Apple to make, use, offer for sale, sell, export, or import any products that embody the inventions of the '633 Patent.
- 62. Apple has and continues to directly infringe the '633 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, by making, using, offering to sell, selling, exporting from, and/or importing into the United States products

that satisfy each and every limitation of one or more claims of the '633 Patent.

- On information and belief, Apple's products that infringe the '633 Patent include 63. at least the following versions and variants of Apple's Watches: Apple Watch Series 7 (GPS and GPS + Cellular Aluminum), Watch Nike Series 7 (GPS and GPS + Cellular), Watch Series 7 (GPS + Cellular) Stainless Steel, Watch Hermès Series 7 (GPS + Cellular), Watch Edition Series 7 (GPS + Cellular) Titanium, Watch Series 6 (GPS and GPS + Cellular Aluminum), Watch Nike Series 6 (GPS and GPS + Cellular), Watch Series 6 (GPS + Cellular) Stainless Steel, Watch Hermès Series 6 (GPS + Cellular), Watch Edition Series 6 (GPS + Cellular) Titanium, Watch SE (GPS and GPS + Cellular Aluminum), Watch Nike SE (GPS and GPS + Cellular), Watch Series 5 (GPS and GPS + Cellular Aluminum), Watch Nike Series 5 (GPS and GPS + Cellular), Watch Series 5 (GPS + Cellular) Stainless Steel, Watch Hermès Series 5 (GPS + Cellular), Watch Edition Series 5 (GPS + Cellular) Titanium, Watch Edition Series 5 (GPS + Cellular) Ceramic, Watch Series 4 (GPS and GPS + Cellular Aluminum), Watch Nike+ Series 4 (GPS and GPS + Cellular), Watch Series 4 (GPS + Cellular) Stainless Steel, Watch Hermès Series 4 (GPS + Cellular), Watch Series 3 (GPS and GPS + Cellular Aluminum), Watch Nike+ Series 3 (GPS and GPS + Cellular), Watch Series 3 (GPS + Cellular) Stainless Steel, Watch Hermès Series 3 (GPS + Cellular), Watch Edition Series 3 (GPS + Cellular). Collectively, the Apple products that infringe the '633 Patent are referred to as the "'633 Accused Products."
- 64. Apple has and continues to directly infringe at least independent claim 1 of the '633 Patent. For example, Apple has and continues to directly infringe claim 1 of the '633 Patent by making, using, offering to sell, selling, and/or importing into the United States the '633 Accused Products, each of which comprises a watch for use with a mobile telephonic device that provides

notification of an incoming call. For example, each Apple Watch is a watch for use with an iPhone, where the Apple Watch notifies a user of an incoming call to the iPhone. E.g.:<sup>30,31</sup>



### Answer phone calls on Apple Watch

WARNING: For important information about avoiding distractions that could lead to dangerous situations, see Important safety information for Apple Watch.

### Answer a call

When you hear or feel the call notification, raise your wrist to see who's calling.

- Send a call to voicemail: Tap the red Decline button in the incoming call notification.
- Answer on your Apple Watch: Tap the Answer button to talk using the built-in microphone and speaker
  or a Bluetooth device paired with your Apple Watch.
- Answer using your iPhone or send a text message instead: Tap \*\*\*, then tap an option. If you tap
  Answer on iPhone, the call is placed on hold and the caller hears a repeated sound until you answer on
  your paired iPhone

If you can't find your iPhone, touch and hold the bottom of the screen, swipe up, then tap  $\mathbb{O}$  on your Apple Watch.



65. Each of the '633 Accused Products comprises a watch band, a second watch band, and a buckle, where said buckle is coupled to said second watch band. E.g.:<sup>32</sup>

<sup>30</sup> https://www.apple.com/watch/.

<sup>&</sup>lt;sup>31</sup> https://support.apple.com/guide/watch/phone-apd32b6c5658/watchos.

<sup>32</sup> https://www.apple.com/shop/watch/bands.



66. Each of the '633 Accused Products comprises a device operable to receive first wireless communication signals associated with a first event and second wireless communication signals associated with a second event from said mobile telephonic device, wherein said first event and second event are different. For example, each Apple Watch is operable to receive wireless communication signals from an iPhone associated with notification events. Such notification events include, for example, an incoming call, missed call, voice message, text message, reminder, and calendar notification, which are different events. E.g.:<sup>33</sup>



 $<sup>{\</sup>color{blue}{}^{33}} \, \underline{https://support.apple.com/guide/watch/phone-apd32b6c5658/watchos;}$ 

https://computers.tutsplus.com/tutorials/tips-and-tricks-for-getting-the-most-out-of-apple-watch-

cms-23888; https://finertech.com/2015/05/28/apple-watch-can-listen-to-voicemails/;

https://www.wareable.com/apple/how-to-set-up-manage-clear-mute-apple-watch-notifications-

<sup>7862;</sup> https://www.iphonetricks.org/how-to-use-reminders-on-apple-watch/;

https://www.iphonetricks.org/apple-watch-calendar-app-features-and-settings/.



- 67. Each of the '633 Accused Products comprises a battery. 34
- 68. Each of the '633 Accused Products comprises motion sensing operable to distinguish between a plurality of different types of motion. For example, each Apple Watch includes an accelerometer, a gyroscope, and a global positioning system operable for use to distinguish between a plurality of different types of motion.<sup>35</sup> Apple Watches also include AssistiveTouch sensing to convert different types of hand gestures into action commands. E.g.:<sup>36</sup>



<sup>&</sup>lt;sup>34</sup> E.g., <a href="https://support.apple.com/kb/SP860?locale=en\_US">https://support.apple.com/kb/SP860?locale=en\_US</a> (Apple Watch Series 7 – Technical Specifications); <a href="https://www.apple.com/watch/battery/">https://www.apple.com/watch/battery/</a>.

<sup>&</sup>lt;sup>35</sup> E.g., <a href="https://support.apple.com/kb/SP860?locale=en\_US">https://support.apple.com/kb/SP860?locale=en\_US</a> (Apple Watch Series 7 – Technical Specifications); <a href="https://support.apple.com/en-us/HT207941">https://support.apple.com/en-us/HT207941</a>; <a href="https://developer.apple.com/design/human-interface-guidelines/watchos/interaction/accelerometer-and-gyroscope/">https://developer.apple.com/design/human-interface-guidelines/watchos/interaction/accelerometer-and-gyroscope/</a>.

<sup>&</sup>lt;sup>36</sup> https://support.apple.com/guide/watch/assistivetouch-apdec70bfd2d/watchos.

AssistiveTouch helps you use Apple Watch if you have difficulty touching the screen or pressing the buttons. The built-in sensors on Apple Watch can help you answer calls, control an onscreen pointer, and launch a menu of actions—all through hand gestures.

Using gestures with AssistiveTouch, you can perform these and other actions:

- · Tap the display
- · Press and turn the Digital Crown
- · Swipe between screens
- · Hold the side button
- · Access Notification Center, Control Center, and the Dock
- · Show apps
- · Use Apple Pay
- · Confirm double-clicks of the side button
- · Activate Siri

### Use AssistiveTouch with Apple Watch

With AssistiveTouch and Hand Gestures turned on, navigate your Apple Watch using the following default gestures:

- · Pinch: Forward
- · Double-pinch: Back
- Clench: Tap
- Double-clench: Show the Action Menu
- 69. Each of the '633 Accused Products is operable to provide first user-perceivable notification signals that are dependent upon said received first communication signals, and said device is operable to provide second user perceivable notification signals that are dependent upon said second communication signals. For example, each Apple Watch is operable to provide various visual displays as well as audio and haptic signals that can be perceived by a user and that correspond to various respective notifications regarding the user's iPhone. E.g.:<sup>37</sup>

# Notifications on your Apple Watch

Customize when and how you get notifications on your Apple Watch, so you can respond right away or check at your convenience.

<sup>&</sup>lt;sup>37</sup> https://support.apple.com/en-us/HT204791; https://support.apple.com/en-us/HT204793.

### Manage notifications

Your Apple Watch notifications mirror your iPhone settings, but you can customize the settings for each app. In watchOS 5 and later, notifications can be organized by app and grouped in stacks in Notification Center. For example, all your activity notifications can appear in a stack. You can also choose whether or not you get alerts for notifications, so they appear silently or not at all.

# How to change how you get notifications on your Apple Watch

- 1. Touch and hold the top of the watch face.
- 2. Wait for Notification Center to show, then swipe down.
- 3. Swipe left on a notification, then tap the more button \*\*\*.
- 4. If you don't want to hear sounds or haptic alerts for that app, tap Deliver Quietly. Notifications for that app go directly to Notification Center on both your Apple Watch and iPhone, instead of showing you a notification with a sound or haptic alert.
- If you don't want to get notifications for that app, tap Turn Off on Apple Watch

To see or hear these notifications again, swipe left on a notification from the app, tap the more icon \*\*\*, then tap Deliver Prominently.



- 70. Plaintiff has suffered damages as a result of Apple's infringement of the '633 Patent in an amount to be proved at trial.
- 71. Plaintiff should be awarded damages in accordance with 35 U.S.C. §§ 271, 281, and 284 in an amount adequate to compensate for Apple's infringement of the '633 Patent but in no event less than a reasonable royalty for the use made of the inventions by Apple, together with interest and costs as fixed by the Court.

### <u>COUNT III</u> INFRINGEMENT OF U.S. PATENT NO. 11,122,418

- 72. Plaintiff references and incorporates by reference the preceding paragraphs of this Complaint as if fully set forth herein.
- 73. Plaintiff has not licensed or otherwise authorized Apple to make, use, offer for sale, sell, export, or import any products that embody the inventions of the '418 Patent.
- 74. Apple has and continues to directly infringe the '418 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, by making, using, offering to sell, selling, exporting from, and/or importing into the United States products that satisfy each and every limitation of one or more claims of the '418 Patent.

- 75. On information and belief, Apple's products that infringe the '418 Patent include at least the following versions and variants of Apple's iPhones: Apple iPhone 13 Pro Max, iPhone 13 Pro, iPhone 13, iPhone 13 mini, iPhone 12 Pro Max, iPhone 12 Pro, iPhone 12, iPhone 12 mini, iPhone SE (2nd generation), iPhone 11 Pro, iPhone 11 Pro Max, iPhone 11, iPhone XS, iPhone XS Max, iPhone XR, iPhone X, iPhone 8, iPhone 8 Plus, iPhone 7, iPhone 7 Plus, iPhone 6s, iPhone 6s Plus, iPhone 6, iPhone 6 Plus, iPhone SE (1st generation).
- 76. On information and belief, Apple's products that infringe the '418 Patent include at least the following versions and variants of Apple's iPads: Apple iPad Pro 12.9-inch (5th generation), iPad Pro 11-inch (3rd generation), iPad Pro 12.9-inch (4th generation), iPad Pro 11-inch (2nd generation), iPad Pro 12.9-inch (3rd generation), iPad Pro 11-inch, iPad Pro 12.9-inch (2nd generation), iPad Pro (10.5-inch), iPad Pro (9.7-inch), iPad Pro (12.9-inch), iPad Air (4th generation), iPad Air (3rd generation), iPad Air 2, iPad Air, iPad mini (6th generation), iPad mini (5th generation), iPad mini 3, iPad mini 2, iPad (9th generation), iPad (8th generation), iPad (7th generation), iPad (6th generation), iPad (5th generation).
- 77. On information and belief, Apple's products that infringe the '418 Patent include at least the following versions and variants of Apple's Watches: Apple Watch Series 7 (GPS and GPS + Cellular Aluminum), Watch Nike Series 7 (GPS and GPS + Cellular), Watch Series 7 (GPS + Cellular) Stainless Steel, Watch Hermès Series 7 (GPS + Cellular), Watch Edition Series 7 (GPS + Cellular) Titanium, Watch Series 6 (GPS and GPS + Cellular Aluminum), Watch Nike Series 6 (GPS and GPS + Cellular), Watch Series 6 (GPS + Cellular) Stainless Steel, Watch Hermès Series 6 (GPS + Cellular), Watch Edition Series 6 (GPS + Cellular) Titanium, Watch SE (GPS and GPS + Cellular Aluminum), Watch Nike SE (GPS and GPS + Cellular), Watch Series 5 (GPS and GPS + Cellular Aluminum), Watch Nike Series 5 (GPS and GPS + Cellular), Watch Series 5 (GPS and GPS + Cellular)

Cellular) Stainless Steel, Watch Hermès Series 5 (GPS + Cellular), Watch Edition Series 5 (GPS + Cellular) Titanium, Watch Edition Series 5 (GPS + Cellular) Ceramic, Watch Series 4 (GPS and GPS + Cellular Aluminum), Watch Nike+ Series 4 (GPS and GPS + Cellular), Watch Series 4 (GPS + Cellular) Stainless Steel, Watch Hermès Series 4 (GPS + Cellular), Watch Series 3 (GPS and GPS + Cellular), Watch Series 3 (GPS + Cellular) Stainless Steel, Watch Hermès Series 3 (GPS + Cellular), Watch Edition Series 3 (GPS + Cellular) Stainless Steel, Watch Hermès Series 3 (GPS + Cellular), Watch Edition Series 3 (GPS + Cellular).

- 78. On information and belief, Apple's products that infringe the '418 Patent include at least the following versions and variants of Apple's iPod touch devices: iPod touch (7th generation), iPod touch (6th generation), iPod touch (5th generation). Collectively, the Apple products that infringe the '418 Patent are referred to as the "'418 Accused Products."
- 79. Apple has and continues to directly infringe at least independent claim 1 of the '418 Patent. For example, Apple has and continues to directly infringe claim 1 of the '418 Patent by making, using, offering to sell, selling, and/or importing into the United States the '418 Accused Products, each of which comprises a system that is capable of providing location-based services and features. For example, each Apple iPhone, Apple iPad, Apple Watch, and Apple iPod touch stores in memory programming capable of providing location-based services and features including, for example, Apple Find My or Find My Friends and Apple Maps (iPhones, iPod touch devices, and iPads), or Apple Find People and Apple Maps (Apple Watches).
- 80. Each of the '418 Accused Products comprises a first wireless device, wherein a location of said first wireless device is operable of being determined. For example, each such Apple iPhone, iPad, and Watch includes a global positioning system operable to determine a location of the iPhone, iPad, or Watch, respectively. In addition, each Apple iPod touch is operable

to determine a location of the iPod touch device on the basis of, for example, the location of Wi-Fi signals in the vicinity of the device.<sup>38</sup>

81. Each of the '418 Accused Products is operable to provide said location of said first wireless device to a remote system, which location is operable of being requested by a second wireless device outside of a call for communication between said first wireless device and said second wireless device. For example, each Apple iPhone, Apple iPad, Apple Watch, and Apple iPod touch programmed with Apple Find My, Find My Friends, or Find People is capable of providing the location of the iPhone, iPad, Watch, or iPod touch, respectively, to an Apple iCloud remote system. The location is operable to be requested by a second wireless device from within the Apple Find My, Find My Friends, or Find People application, and outside of a call for communication between the first wireless device and the second wireless device.

82. Each of the '418 Accused Products is operable to provide a permission by said first wireless device for said second wireless device to access location information about said location, wherein said permission is operable of being stored in said remote system and said remote system is located remotely from said first and second wireless devices. For example, each Apple iPhone, Apple iPad, Apple Watch, and Apple iPod touch programmed with Apple Find My, Find My Friends, or Find People is operable to provide, for storage in Apple's iCloud remote system, a permission for the second wireless device to access location information about the iPhone, iPad, Watch, or iPod touch's location. Each Apple iPhone, Apple iPad, Apple Watch, and Apple iPod touch programmed with Apple Find My, Find My Friends, or Find People includes, for example, options to add and/or remove devices that can access the iPhone's, iPad's, Watch, or iPod touch's

31

<sup>&</sup>lt;sup>38</sup> https://www.second-sense.org/2016/11/ipod-touch-low-cost-alternative/; https://support.apple.com/kb/SP796?locale=en\_US.

location from Apple's iCloud remote system. Such options, when selected, instruct Apple's iCloud remote system to change the one or more wireless devices (iPhones, iPads, Watches, or iPod touch devices) authorized to view the first wireless device's location data. As another example, each such device is capable of displaying an option to share the device's location when another device shares its location with the device (e.g., option to "Share" the device's location with a device associated with another user), which when selected instructs Apple's iCloud remote server system to add the selected device (associated with the selected user) to the list of devices authorized to view the first wireless device's location data.<sup>39</sup>

83. Each of the '418 Accused Products is operable to provide a permission operable of being stored in said remote system, said permission being for said second wireless device to access location information about said location of said first wireless device, wherein said location information about said location is operable of being provided from said remote system to said second wireless device in accordance with said permission outside of said call. For example, each Apple iPhone, Apple iPad, Apple Watch, and Apple iPod touch programmed with Apple Maps and Apple Find My, Find My Friends, or Find People is operable to provide said permission and said location information for storage in Apple's iCloud remote system, which location information is operable of being provided from Apple's iCloud remote system to said second wireless device in accordance with said permission outside of said call.

84. Each of the '418 Accused Products is operable to provide a first map provided with respect to said location. For example, each Apple iPhone, Apple iPad, Apple Watch, and Apple iPod touch programmed with Apple Maps and Apple Find My, Find My Friends, or Find People is capable of providing for display on the iPhone, iPad, Watch, or iPod touch, respectively, a first

\_

<sup>&</sup>lt;sup>39</sup> E.g., https://support.apple.com/en-us/HT210514.

map provided with respect to the location of the first wireless device. This includes, for example, an Apple Find My, Find My Friends, or Find People display that displays a map identifying the device's location with a blue spot and in relation to the locations of friends in the device's "People" list. As another example, this includes a Find My, Find My Friends, or Find People display that displays a map identifying the device's location with a blue spot centered within the map and accessed by selecting the "Me" option in the bottom-right side of the display. As another example, this includes an Apple Maps display that displays a map identifying the device's location with a blue spot and as the origin of a travel route in relation to the location of a friend in the device's "People" list, which display is displayed upon a user of the device selecting "Directions" regarding the friend in Apple Find My, Find My Friends, or Find People which launches Apple Maps.

- 85. Plaintiff has suffered damages as a result of Apple's infringement of the '418 Patent in an amount to be proved at trial.
- 86. Plaintiff should be awarded damages in accordance with 35 U.S.C. §§ 271, 281, and 284 in an amount adequate to compensate for Apple's infringement of the '418 Patent but in no event less than a reasonable royalty for the use made of the inventions by Apple, together with interest and costs as fixed by the Court.

## COUNT IV INFRINGEMENT OF U.S. PATENT NO. 11,109,218

- 87. Plaintiff references and incorporates by reference the preceding paragraphs of this Complaint as if fully set forth herein.
- 88. Plaintiff has not licensed or otherwise authorized Apple to make, use, offer for sale, sell, export, or import any products that embody the inventions of the '218 Patent.
- 89. Apple has and continues to directly infringe the '218 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, by making,

using, offering to sell, selling, exporting from, and/or importing into the United States products that satisfy each and every limitation of one or more claims of the '218 Patent.

- 90. On information and belief, Apple's products that infringe the '218 Patent include at least the following versions and variants of Apple's iPhones: Apple iPhone 13 Pro Max, iPhone 13 Pro, iPhone 13, iPhone 13 mini, iPhone 12 Pro Max, iPhone 12 Pro, iPhone 12, iPhone 12 mini, iPhone SE (2nd generation), iPhone 11 Pro, iPhone 11 Pro Max, iPhone 11, iPhone XS, iPhone XS Max, iPhone XR, iPhone X, iPhone 8, iPhone 8 Plus, iPhone 7, iPhone 7 Plus, iPhone 6s, iPhone 6s Plus, iPhone 6, iPhone 6 Plus, iPhone SE (1st generation).
- 91. On information and belief, Apple's products that infringe the '218 Patent include at least the following versions and variants of Apple's iPads: Apple iPad Pro 12.9-inch (5th generation), iPad Pro 11-inch (3rd generation), iPad Pro 12.9-inch (4th generation), iPad Pro 11-inch (2nd generation), iPad Pro 12.9-inch (3rd generation), iPad Pro 11-inch, iPad Pro 12.9-inch (2nd generation), iPad Pro (10.5-inch), iPad Pro (9.7-inch), iPad Pro (12.9-inch), iPad Air (4th generation), iPad Air (3rd generation), iPad Air 2, iPad Air, iPad mini (6th generation), iPad mini (5th generation), iPad mini 4, iPad mini 3, iPad mini 2, iPad (9th generation), iPad (8th generation), iPad (7th generation), iPad (6th generation), iPad (5th generation). Collectively, the Apple products that infringe the '218 Patent are referred to as the "'218 Accused Products."
- 92. Apple has and continues to directly infringe at least independent claim 11 of the '218 Patent. For example, Apple has and continues to directly infringe claim 11 of the '218 Patent by making, using, offering to sell, selling, and/or importing into the United States the '218 Accused Products, each of which comprises a system capable of providing location-based services and features. For example, each Apple iPhone and Apple iPad stores in memory programming capable

of providing location-based services and features including, for example, Apple Find My or Find My Friends and Apple Maps.

93. Each of the '218 Accused Products comprises a wireless telephonic device. For example, each Apple iPhone is capable of supporting telephonic communications over cellular networks including 5G and LTE. Each cellular-capable Apple iPad is likewise capable of supporting telephonic communications over a cellular networks including 5G and LTE. Each cellular-capable Apple iPad is capable of making telephone calls over a cellular network using, for example, Apple's FaceTime application.

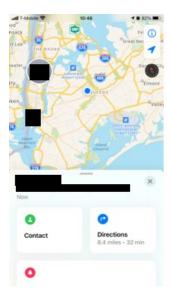
94. Each of the '218 Accused Products is operable to provide a display screen after a request from said wireless telephonic device for access to a first location of a first wireless device, wherein said display screen includes a map provided from a perspective of said wireless telephonic device. For example, each Apple iPhone and cellular-capable Apple iPad programmed with Apple Find My or Find My Friends is capable of requesting a location of a first wireless device from an Apple iCloud server when, for example, a user of the iPhone or iPad accesses the Find My or Find My Friends application. After each such iPhone and iPad requests access to the first location of the first wireless device, each such iPhone and iPad is operable to provide a display screen that includes a map provided from a perspective of the iPhone or iPad, respectively. 40

95. Each of the '218 Accused Products is operable to provide such a display screen that includes indicia on said map representative of said first location, indicia on said map representative of a second user according to a second location obtained from a second wireless device, a distance from said wireless telephonic device to said first location, a compass, an address of said first location, and a travel time based on at least the first location and the location of said wireless

\_

 $<sup>^{40}~</sup>E.g., \underline{https://support.apple.com/en-us/HT210514}.$ 

telephonic device. This includes, for example, a Find My or Find My Friends display that displays a map including a compass and identifying the iPhone or iPad's location with a blue spot and in relation to the locations of the wireless devices of friends in the iPhone or iPad's "People" list. The display further includes an address of said first location of the first wireless device, a distance from the iPhone or iPad to the first location (e.g., "8.4 miles"), and a travel time based on the first location and the location of the iPhone or iPad (e.g., "32 min"). E.g.:<sup>41</sup>



- 96. Plaintiff has suffered damages as a result of Apple's infringement of the '218 Patent in an amount to be proved at trial.
- 97. Plaintiff should be awarded damages in accordance with 35 U.S.C. §§ 271, 281, and 284 in an amount adequate to compensate for Apple's infringement of the '218 Patent but in no event less than a reasonable royalty for the use made of the inventions by Apple, together with interest and costs as fixed by the Court.

\_

<sup>&</sup>lt;sup>41</sup> Redacted Apple iPhone Find My display.

### COUNT V INFRINGEMENT OF U.S. PATENT NO. 11,096,039

- 98. Plaintiff references and incorporates by reference the preceding paragraphs of this Complaint as if fully set forth herein.
- 99. Plaintiff has not licensed or otherwise authorized Apple to make, use, offer for sale, sell, export, or import any products that embody the inventions of the '039 Patent.
- 100. Apple has and continues to directly infringe the '039 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, by making, using, offering to sell, selling, exporting from, and/or importing into the United States products that satisfy each and every limitation of one or more claims of the '039 Patent.
- 101. On information and belief, Apple's products that infringe the '039 Patent include each Apple iCloud server system (the "'039 Accused Products").
- 102. Apple has and continues to directly infringe at least independent claim 1 of the '039 Patent. For example, Apple has and continues to directly infringe claim 1 of the '039 Patent by making, using, offering to sell, selling, and/or importing into the United States the '039 Accused Products, each of which comprises a system that allows Apple devices such as iPhones, iPads, Apple Watches, and Apple iPod touch devices to access, for example, location-based services and features including Apple Find My or Find My Friends and Apple Maps (iPhones, iPads, and iPod touch devices), or Apple Find People and Apple Maps (Apple Watches). 42
- 103. Each of the '039 Accused Products comprises a remote system, wherein user information is operable to be identified from a plurality of different user information by receiving at least a manually entered login from a first wireless device associated with said user information and a manually entered password associated with said login. For example, Apple's iCloud server

<sup>&</sup>lt;sup>42</sup> E.g., https://www.apple.com/icloud/find-my/; https://www.apple.com/icloud/.

system is operable to receive from each Apple iPhone, Apple iPad, Apple Watch, and Apple iPod touch device programmed with Apple Find My, Find My Friends, or Find People a user's manually input login in the form of a user's Apple ID as well as the password associated with the user's Apple ID. E.g.: <sup>43</sup>

### Sign in with your Apple ID

Your Apple ID is the account that you use to access all Apple services and make all of your devices work together seamlessly. After you log in, you can use the App Store, iCloud, iMessage, Apple Music, Apple TV+, and more.

# Sign in on your iPhone, iPad, or iPod touch 1. Open the Settings app. 2. Tap Sign in to your [device].



- 3. Enter your Apple ID and password.
- If prompted, enter the six-digit verification code sent to your trusted device or phone number and complete sign in.

If you're already signed in to iCloud on the iPhone paired with your Apple Watch, you will automatically be signed in to that Apple ID. Learn more about how to set up and sign in to your Apple Watch.

104. Each of the '039 Accused Products is operable to record a location of said first wireless device after said user information has been identified on said first wireless device and said location is associated with said user information and provided by said first wireless device to

<sup>&</sup>lt;sup>43</sup> E.g., <a href="https://www.apple.com/icloud/find-my/">https://support.apple.com/en-us/HT204053</a>; <a href="https://support.apple.com/en-us/HT204505">https://support.apple.com/en-us/HT204505</a>.

said remote system. For example, on information and belief, Apple's iCloud server system stores a history of and can provide a device's "last known location ... for up to 24 hours." <sup>44</sup>

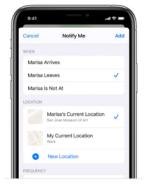
Each of the '039 Accused Products is operable to provide a location-based event 105. based, at least in part, on said location of said first wireless device, wherein said location-based event is operable to be manually pre-selected from a list of at least three types of location-based events on a device, and a location-based event notification is operable to be provided on said device as a result of, at least in part, location access rights of said device from said first wireless device. For example, Apple's iCloud server system is operable to provide location-based events as a result of user selection of options displayed on Apple iPhones, iPads, Apple Watches, and iPod touch devices. Each such device is operable to display a list of at least three types of selectable locationbased events, including at least events corresponding to whether a first wireless device such as an iPhone, iPad, Watch, or iPod touch (i) arrives at a location, (ii) leaves a location, or (iii) is not at a location at an expected time, as well as location-based events corresponding to whether the wireless device on which the list of selectable location-based events is displayed (iv) arrives at a location corresponding to a location of the first wireless device, (v) leaves a location corresponding to a location of the first wireless device, (vi) arrives at a different location, or (vii) leaves a different location. At least location-based events (i) – (v) are based, at least in part, on a location of the first wireless device and only devices that have location access rights from the first wireless device can receive notifications of such events. E.g.:<sup>45</sup>

<sup>&</sup>lt;sup>44</sup> E.g., <a href="https://support.apple.com/guide/icloud/locate-a-device-mmfc0f2442/icloud;">https://support.apple.com/guide/icloud/locate-a-device-mmfc0f2442/icloud;</a> <a href="https://support.apple.com/guide/icloud/locate-a-device-mmfc0f2442/icloud/locate-a-device-mmfc0f2442/icloud/locate-a-device-mmfc0f2442/icloud/locate-a-device-mmfc0f2442/icloud/locate-a-device-mmfc0f2442/icloud/locate-a-device-mmfc0f2442/icloud/locate-a-device-mmfc0f2442/icloud/locate-a-device-mmfc0f2442/icloud/locate-a-device-mmfc0f2442/icloud/locate-a-device-mmfc0f2442/icloud/locate-a-device-mmfc0f2442/icloud/locate-a-device-mmfc0f2442/icloud/locate-a-device-mmfc0f2442/icloud/locate-a-device-mmfc0f2442/icloud/locate-a-device-mmfc0f2442/icloud/locate-a-device-mmf

<sup>&</sup>lt;sup>45</sup> https://support.apple.com/en-us/HT210514; https://www.idownloadblog.com/2020/09/23/find-people-find-my-friends-apple-watch/; https://support.apple.com/guide/watch/find-people-apd1132106dc/watchos.

#### Get notified when a friend arrives at, leaves, or isn't at a location

- 1. Open the Find My app and select the People tab.
- 2. Select the person you want to share notifications with
- 3. Scroll down and under Notifications, tap Add.
- Tap Notify Me to get notified of a friend's location change.\* Tap Notify Friend to notify a friend of your location change.
- Under When, select Arrives, Leaves, or Is Not At. If you're sharing your location change, select I Arrive
  or I Leave.
- 6. Under Location, tap to select your current location, or tap New Location to select a different location.

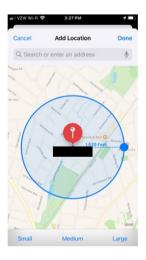


- 7. Under Frequency, select Only Once or Every Time
- \* Your friend will be notified when you set a location-based notification.

106. Each of the '039 Accused Products is operable to provide at least three types of location-based events, wherein a first one of said at least three types of location-based events is, at least in part, region-based, and a second one of said at least three types of location-based events is, at least in part, distance-based. For example, Apple's iCloud server system is operable to provide location-based events as a result of user selection of options displayed on Apple iPhones, iPads, Apple Watches, and iPod touch devices. Each of the events (i) – (vii) enumerated above is, at least in part, region based because each such defined location has defined characteristics albeit not necessarily a precise or pinpoint position. For example, a location can be defined as an area having "Small", "Medium", or "Large" radius. In addition, at least events (i) – (v) are, at least in part, distance based because they can relate to the distance between the device and the first wireless device (e.g., notifying either the wireless device or the second wireless device when the

 $<sup>^{46}</sup>$  E.g., <u>https://support.apple.com/guide/ipad/notified-friends-change-location-ipad4c370380/ipados.</u>

two devices are at the same location (there is no distance between them) or not at the same location (there is distance between them)). All of the above events can also be, at least in part, distance-based because a user can define each such location as having a radius corresponding to a specific distance (e.g., user adjustment of such radius to "1,620 feet"). E.g.:<sup>47</sup>



- 107. Plaintiff has suffered damages as a result of Apple's infringement of the '039 Patent in an amount to be proved at trial.
- 108. Plaintiff should be awarded damages in accordance with 35 U.S.C. §§ 271, 281, and 284 in an amount adequate to compensate for Apple's infringement of the '039 Patent but in no event less than a reasonable royalty for the use made of the inventions by Apple, together with interest and costs as fixed by the Court.

### COUNT VI INFRINGEMENT OF U.S. PATENT NO. 9,635,540

109. Plaintiff references and incorporates by reference the preceding paragraphs of this Complaint as if fully set forth herein.

<sup>&</sup>lt;sup>47</sup> Redacted iPhone Find My display.

- 110. Plaintiff has not licensed or otherwise authorized Apple to make, use, offer for sale, sell, export, or import any products, or to perform any processes or methods, that embody the inventions of the '540 Patent.
- 111. Apple has and continues to directly infringe the '540 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, by performing processes or methods that satisfy each and every limitation of one or more claims of the '540 Patent.
- 112. On information and belief, Apple's infringement the '540 Patent includes Apple's performance of processes or methods in connection with providing location-based services and features through Apple's iCloud server system to Apple end-user devices including iPhones, iPads, Apple Watches, and Apple iPod touch devices (the "'540 Accused Processes").
- 113. Apple has and continues to directly infringe at least independent claim 1 of the '540 Patent. Apple has and continues to directly infringe claim 1 of the '540 Patent by performing the '540 Accused Processes, each of which includes a method of mobile-to-mobile locating. For example, Apple's iCloud server system provides location-based services and features to Apple devices through Apple Find My or Find My Friends and Apple Maps (iPhones, iPads, and iPod touch devices), or Apple Find People and Apple Maps (Apple Watches).
- 114. Each of the '540 Accused Processes comprises requesting a location of a first wireless device by a second wireless device from a server located remotely from said first and second wireless devices. For example, Apple's iCloud server system is a remote system relative to mobile devices including iPhones, iPads, Apple Watches, and Apple iPod touch devices programmed with Apple Maps and Apple Find My, Find My Friends, or Find People, each of which is a wireless device. Apple's iCloud server system requests a location of a first wireless

device, for example, by retrieving such location from iCloud server system memory or storage, in

order to provide such location to a second wireless device (e.g., iPhone, iPad, Apple Watch, or

Apple iPod touch device) that requests such location. Each such iPhone, iPad, Apple Watch, and

Apple iPod touch device is capable of requesting a location of a first wireless device from an Apple

iCloud server when, for example, a user of the wireless telephone accesses the Apple Find My,

Find My Friends, or Find People application.<sup>48</sup>

115. Each of the '540 Accused Processes comprises determining that said second

wireless device does not have location access rights for said first wireless device, and asking said

second wireless device if said location access rights are to be requested from said first wireless

device after determining that said second wireless device does not have said location access rights

for said first wireless device. For example, when a user of an iPhone, iPad, iPod touch, or Apple

Watch programmed with Apple Find My, Find My Friends, or Find People has shared its location

with the first wireless device and the Apple iCloud server system determines that either the first

wireless device has not yet provided reciprocal location access rights or the first wireless device

has revoked the second wireless device's location access rights, the Apple iCloud server system

causes each such Apple iPhone, iPad, iPod touch, and Apple Watch to display an option to request

location access rights from the first wireless device (e.g., the display of an option to "Ask to Follow

Location" or "Ask for Location").49

116. Each of the '540 Accused Processes comprises requesting that said location access

rights be assigned for said second wireless device by said first wireless device, and assigning said

<sup>48</sup> E.g., <a href="https://support.apple.com/en-us/HT210514">https://support.apple.com/en-us/HT210514</a>;

https://support.apple.com/guide/icloud/locate-a-device-mmfc0f2442/icloud;

https://9to5mac.com/2021/06/07/ios-15-find-my-network-can-find-your-iphone-when-it-is-

powered-off/; https://www.apple.com/legal/privacy/law-enforcement-guidelines-us.pdf.

<sup>49</sup> E.g., https://support.apple.com/en-us/HT210514.

location access rights on said server to said second wireless device by said first wireless device.

For example, Apple's iCloud server system issues a request to the first wireless device to provide

location access rights to the second wireless device after the second wireless device requests

location access rights from the first access device by selecting an option to "Ask to Follow

Location" or "Ask for Location." In response to such a request from the Apple iCloud server

system, the first wireless device displays an option (e.g., "Share" option) to allow location access

rights for the second wireless device, selection of which issues an instruction to the Apple iCloud

server system to grant location access rights to the second wireless device. 50

117. Each of the '540 Accused Processes comprises storing said location access rights

on said server, determining said access rights assigned by said first wireless device to said second

wireless device on said server, and providing said location from said server to said second wireless

device dependent upon said access rights. For example, Apple's iCloud server system stores said

location access rights on the iCloud server system, and determines whether said second wireless

device such as an Apple iPhone, Apple iPad, Apple iPod touch, and Apple Watch programmed

with Apple Find My, Find My Friends, or Find People has location access rights for the first

wireless device before providing a location of the first wireless device to the second wireless

device. Apple's iCloud server system provides said location to said second wireless device after

a user of the first wireless device authorizes the second wireless device to access the first wireless

device's location.51

118. Plaintiff has suffered damages as a result of Apple's infringement of the '540 Patent

in an amount to be proved at trial.

<sup>50</sup> E.g., https://support.apple.com/en-us/HT210514.

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

119. Plaintiff should be awarded damages in accordance with 35 U.S.C. §§ 271, 281, and 284 in an amount adequate to compensate for Apple's infringement of the '540 Patent but in no event less than a reasonable royalty for the use made of the inventions by Apple, together with interest and costs as fixed by the Court.

### COUNT VII INFRINGEMENT OF U.S. PATENT NO. 9,204,283

- 120. Plaintiff references and incorporates by reference the preceding paragraphs of this Complaint as if fully set forth herein.
- 121. Plaintiff has not licensed or otherwise authorized Apple to make, use, offer for sale, sell, export, or import any products, or to perform any processes or methods, that embody the inventions of the '283 Patent.
- 122. Apple has and continues to directly infringe the '283 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, by performing processes or methods that satisfy each and every limitation of one or more claims of the '283 Patent.
- 123. On information and belief, Apple's infringement the '283 Patent includes Apple's performance of processes or methods in connection with providing location-based services and features through Apple's iCloud server system to Apple end-user devices including iPhones, iPads, Apple Watches, and Apple iPod touch devices (the "'283 Accused Processes").
- 124. Apple has and continues to directly infringe at least independent claims 1, 8, and 15 of the '283 Patent. For example, Apple has and continues to directly infringe claim 1 of the '283 Patent by performing the '283 Accused Processes. Apple's iCloud server system provides location-based services and features to Apple devices through Apple Find My or Find My Friends

and Apple Maps (iPhones, iPads, and iPod touch devices), or Apple Find People and Apple Maps (Apple Watches).

125. Each of the '283 Accused Processes comprises displaying on a first wireless telephonic device a plurality of users, wherein each one of said plurality of users is associated to a different one of a plurality of wireless telephonic devices. For example, Apple's iCloud server system provides for display on the first wireless telephonic device location information for "People" whose location is tracked by the first wireless telephonic device programmed with Apple Find My, Find My Friends, or Find People. Apple's iCloud server system provides such information for display on the first wireless telephonic device in response to a user of the first wireless telephonic device accessing Apple Find My, Find My Friends, or Find People. <sup>52</sup>

126. Each of the '283 Accused Processes comprises receiving on said first wireless telephonic device a first manual input in a form of a selection of one of said plurality of users. For example, each Apple iPhone, cellular-capable Apple iPad, and cellular-capable Apple Watch programmed with Apple Find My, Find My Friends, or Find People is capable of receiving a selection on said first wireless telephonic device a first manual input in a form of a selection of one of said plurality of users. For example, each user in the wireless telephonic device's display of "People" is selectable by manual input. Each such selection is, in turn, received by Apple's iCloud server system.

127. Each of the '283 Accused Processes comprises receiving on said first wireless telephonic device an input in a form of a login and a second manual input in a form of a password. For example, each Apple iPhone, cellular-capable Apple iPad, and cellular-capable Apple Watch programmed with Apple Find My, Find My Friends, or Find People requires a user of the device

<sup>&</sup>lt;sup>52</sup> E.g., https://support.apple.com/en-us/HT210514.

to manually input a login in the form of a user's Apple ID as well as the password associated with the user's Apple ID, which are, in turn, received by Apple's iCloud server system for use in identifying the device.<sup>53</sup>

Each of the '283 Accused Processes comprises determining whether to allow access of location information for said one of said plurality of wireless telephonic devices associated to said selected one of said plurality of users, wherein said determination includes identifying said user of said first wireless telephonic device from said plurality of users using said login and determining said password is associated with said login and determining whether said selected one of said plurality of users has provided access rights for said location information to said user of said first wireless telephonic device, and said first wireless telephonic device is operable to assign location access rights to said one of said plurality of wireless telephonic devices associated with said selected one of said plurality of users for obtaining a location of said first wireless telephonic device. For example, the Apple iCloud server system receives the password and Apple ID associated with each Apple iPhone, cellular-capable Apple iPad, and cellular-capable Apple Watch programmed with Apple Find My, Find My Friends, or Find People, and the Apple iCloud server system determines on the basis of such information whether the device that provided such information is authorized to access location information corresponding to other devices. Each user device is operable to assign location access rights to other devices. According to such defined location access rights, Apple's iCloud server system only permits specific authenticated Apple users associated with specific Apple IDs to access other devices' location information.<sup>54</sup>

<sup>&</sup>lt;sup>53</sup> E.g., <a href="https://www.apple.com/icloud/find-my/">https://support.apple.com/en-us/HT204053</a>; <a href="https://support.apple.com/en-us/HT204505">https://support.apple.com/en-us/HT204505</a>.

<sup>&</sup>lt;sup>54</sup> E.g., https://support.apple.com/en-us/HT210514.

- 129. Each of the '283 Accused Processes comprises transmitting said location information from a server to said first wireless telephonic device. For example, after the Apple iCloud server system determines that the selected one of the plurality of users has provided access rights for the location information that permit the first wireless telephonic device to access such location information, the iCloud server system transmits the location information to the first wireless telephonic device and continues to do so in order to provide location updates.
- 130. Each of the '283 Accused Processes comprises displaying said location information on said first wireless device. For example, Apple's iCloud server system provides for display on the first wireless telephonic device location information for "People" whose location is tracked by the first wireless telephonic device programmed with Apple Find My, Find My Friends, or Find People, and for which the first wireless telephonic device possesses location access rights.
- 131. Plaintiff has suffered damages as a result of Apple's infringement of the '283 Patent in an amount to be proved at trial.
- 132. Plaintiff should be awarded damages in accordance with 35 U.S.C. §§ 271, 281, and 284 in an amount adequate to compensate for Apple's infringement of the '283 Patent but in no event less than a reasonable royalty for the use made of the inventions by Apple, together with interest and costs as fixed by the Court.

## COUNT VIII INFRINGEMENT OF U.S. PATENT NO. 8,374,575

- 133. Plaintiff references and incorporates by reference the preceding paragraphs of this Complaint as if fully set forth herein.
- 134. Plaintiff has not licensed or otherwise authorized Apple to make, use, offer for sale, sell, export, or import any products, or to perform any processes or methods, that embody the inventions of the '575 Patent.

- 135. Apple has and continues to directly infringe the '575 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, by performing processes or methods that satisfy each and every limitation of one or more claims of the '575 Patent.
- 136. On information and belief, Apple's infringement the '575 Patent includes Apple's performance of processes or methods in connection with providing location-based services and features through Apple's iCloud server system to Apple end-user devices including iPhones, iPads, Apple Watches, and Apple iPod touch devices (the "'575 Accused Processes").
- 137. Apple has and continues to directly infringe at least independent claims 1, 13, 30, and 38 of the '575 Patent. For example, Apple has and continues to directly infringe claim 30 of the '575 Patent by performing the '575 Accused Processes. Apple's iCloud server system provides location-based services and features to Apple devices through Apple Find My or Find My Friends and Apple Maps (iPhones and iPads), or Apple Find People and Apple Maps (Apple Watches).
- 138. Each of the '575 Accused Processes comprises obtaining a location of a first wireless telephone. For example, Apple's iCloud server system obtains a device location from Apple devices including iPhones, cellular-capable iPads, and cellular capable Watches, each of which is a wireless telephone and includes a global positioning system for determining the device's location.
- 139. Each of the '575 Accused Processes comprises changing, at the direction of said first wireless telephone, a list of users on a remote server for a profile associated with said first wireless telephone that are allowed to access said location, wherein each user of said list of users is representative of one of a plurality of wireless telephones. For example, Apple's iCloud server system changes, at the direction of each Apple iPhone, cellular-capable Apple iPad, and cellular-

capable Apple Watch programmed with Apple Find My, Find My Friends, or Find People, a list

of users for a profile associated with the iPhone, iPad, or Watch that are allowed to access the

location of the iPhone, iPad, or Watch. Each such Apple iPhone, cellular-capable Apple iPad, and

cellular-capable Apple Watch programmed with Apple Find My, Find My Friends, or Find People

includes options to add and/or remove individuals who can access the iPhone's, iPad's, or Watch's

location from Apple's iCloud server. Such options, when selected, instruct Apple's iCloud server

system to change in a profile associated with the device a list of users authorized to view the

device's location data, where each such authorized user is associated with another wireless

telephone.55

140. Each of the '575 Accused Processes comprises transmitting said location from said

remote server to at least one of said users of said list of users. For example, Apple's iCloud server

system is capable of transmitting the location of an Apple iPhone, cellular-capable Apple iPad, or

cellular-capable Apple Watch to at least one of the users of the list of users that are authorized to

access the location of the iPhone, iPad, or Watch. 56

141. Each of the '575 Accused Processes comprises determining a second location

associated with one of said plurality of wireless telephones. For example, Apple's iCloud server

system determines the location of each Apple iPhone, cellular-capable Apple iPad, and cellular-

capable Apple Watch programmed with Apple Find My, Find My Friends, or Find People for

which location sharing is enabled.<sup>57</sup>

142. Each of the '575 Accused Processes comprises providing directional information

to said one of said plurality of wireless telephones, wherein said directional information is

<sup>55</sup> E.g., https://support.apple.com/en-us/HT210514.

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

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

representative of directions between said location and said second location. For example, Apple's iCloud server system provides directional information to each Apple iPhone, cellular-capable Apple iPad, and cellular-capable Apple Watch programmed with Apple Find My, Find My Friends, or Find People. Apple's iCloud server system provides for display on each such Apple device the locations of the wireless telephones associated with the device user's friends. Upon a user's selection of an option to receive "Directions" to one of such wireless telephones, Apple's iCloud server system provides for display on each such Apple device directions from the location of the iPhone, iPad, or Watch to the selected wireless telephone. E.g.:<sup>58</sup>

### Locate a friend

1. Open the Find My app and select the People tab.



- 2. Under People, choose the name of your friend who is sharing their location with you.
- 3. Choose Directions to open Maps and then follow the directions to arrive at your friends location.
- 143. Plaintiff has suffered damages as a result of Apple's infringement of the '575 Patent in an amount to be proved at trial.
- 144. Plaintiff should be awarded damages in accordance with 35 U.S.C. §§ 271, 281, and 284 in an amount adequate to compensate for Apple's infringement of the '575 Patent but in

<sup>&</sup>lt;sup>58</sup> *Id*.

no event less than a reasonable royalty for the use made of the inventions by Apple, together with interest and costs as fixed by the Court.

### COUNT IX INFRINGEMENT OF U.S. PATENT NO. 11,246,024

- 145. Plaintiff references and incorporates by reference the preceding paragraphs of this Complaint as if fully set forth herein.
- 146. Plaintiff has not licensed or otherwise authorized Apple to make, use, offer for sale, sell, export, or import any products that embody the inventions of the '024 Patent.
- 147. Apple has and continues to directly infringe the '024 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, by making, using, offering to sell, selling, exporting from, and/or importing into the United States products that satisfy each and every limitation of one or more claims of the '024 Patent.
- 148. On information and belief, Apple's products that infringe the '024 Patent include each Apple iCloud server system (the "'024 Accused Products").
- 149. Apple has and continues to directly infringe at least independent claims 1, 24, and 45 of the '024 Patent. For example, Apple has and continues to directly infringe claim 1 of the '024 Patent by making, using, offering to sell, selling, and/or importing into the United States the '024 Accused Products, each of which comprises a system that allows Apple devices such as iPhones, iPads, and Apple Watches to access, for example, location-based services and features including Apple Find My or Find My Friends and Apple Maps (iPhones and iPads), or Apple Find People and Apple Maps (Apple Watches).<sup>59</sup>
- 150. Each of the '024 Accused Products comprises a remote system comprising a server, the remote system capable of communicating with wireless telephones over a communications

<sup>&</sup>lt;sup>59</sup> E.g., https://www.apple.com/icloud/find-my/; https://www.apple.com/icloud/.

network. For example, Apple's iCloud server system is operable to receive from each Apple iPhone, Apple iPad, and Apple Watch programmed with Apple Find My, Find My Friends, or Find People over a communications network.<sup>60</sup>

- 151. Each of the '024 Accused Products is capable of obtaining a location of a first wireless telephone.<sup>61</sup> For example, on information and belief, Apple's iCloud server system stores a history of and can provide a device's "last known location ... for up to 24 hours."<sup>62</sup>
- 152. Each of the '024 Accused Products is capable of changing, at the direction of said first wireless telephone, a list of users for a profile associated with said first wireless telephone that are allowed to access said location, wherein each user of said list of users is representative of one of a plurality of wireless telephones. For example, each Apple iPhone, cellular-capable Apple iPad, and cellular-capable Apple Watch programmed with Apple Find My, Find My Friends, or Find People includes options to add and/or remove individuals who can access the iPhone's, iPad's, or Watch's location from Apple's iCloud server system. In response to selection of such options on said first wireless telephone, Apple's iCloud server system is operable to change a list of users for a profile associated with said first wireless telephone that are allowed to access said location, where each user of said list of users is representative of one of a plurality of wireless telephones (iPhone, iPad, or Watch).<sup>63</sup>
- 153. For example, Apple's iCloud server system is capable of adding a selected user to the list of users authorized to view the first wireless telephone's location data when an option to

<sup>&</sup>lt;sup>60</sup> E.g., *id*.

<sup>&</sup>lt;sup>61</sup> E.g., *id*.

<sup>&</sup>lt;sup>62</sup> E.g., <a href="https://support.apple.com/guide/icloud/locate-a-device-mmfc0f2442/icloud;">https://support.apple.com/guide/icloud/locate-a-device-mmfc0f2442/icloud;</a>; <a href="https://stps://support.apple.com/guide/icloud/locate-a-device-mmfc0f2442/icloud;">https://support.apple.com/guide/icloud/locate-a-device-mmfc0f2442/icloud;</a>; <a href="https://support.apple.com/guide/icloud/locate-a-device-mmfc0f2442/icloud;">https://support.apple.com/guide/icloud/locate-a-device-mmfc0f2442/icloud;</a>; <a href="https://support.apple.com/guide/icloud/locate-a-device-mmfc0f2442/icloud/locate-a-device-mmfc0f2442/icloud/locate-a-device-mmfc0f2442/icloud/locate-a-device-mmfc0f2442/icloud/locate-a-device-mmfc0f2442/icloud/locate-a-device-mmfc0f2442/icloud/locate-a-device-mmfc0f2442/icloud/locate-a-device-mmfc0f2442/icloud/locate-a-device-mmfc0f2442/icloud/locate-a-device-mmfc0f2442/icloud/locate-a-device-mmfc0f2442/icloud/locate-a-device-mmfc0f2442/icloud/locate-a-device-mmfc0f2442/icloud/locate-a-device-mmfc0f2442/icloud/locate-a-device-mmfc0f2442/icloud/loc

<sup>&</sup>lt;sup>63</sup> E.g., <a href="https://support.apple.com/en-us/HT210514">https://support.apple.com/en-us/HT210514</a>; <a href="https://www.apple.com/icloud/find-my/">https://www.apple.com/icloud/find-my/</a>.

share the first wireless telephone's location (e.g., "Share My Location") with a user of another wireless telephone is selected on the first wireless telephone (e.g., an Apple iPhone, cellular-capable Apple iPad, or cellular-capable Apple Watch programmed with Apple Find My, Find My Friends, or Find People). As another example, Apple's iCloud server system is capable of adding a selected user to the list of users authorized to view the first wireless telephone's location data upon selection on the first wireless telephone of an option to share the first wireless telephone's location with the selected user (e.g., "Share"), which option is displayed on the first wireless telephone in response to the user of another wireless telephone sharing the user's location with the user of the first wireless telephone. As additional examples, Apple's iCloud server system is capable of removing users from the list of users that are allowed to access said location of said first wireless telephone in response to selection on the first wireless telephone of options to stop sharing the first wireless telephone's location with everyone, or a particular user. 64

154. Each of the '024 Accused Products is capable of transmitting said location to at least one of said users of said list of users over said communications network. For example, Apple's iCloud server system is capable of transmitting the location of an Apple iPhone, cellular-capable Apple iPad, or cellular-capable Apple Watch to at least one of the users of the list of users that are authorized to access the location of the iPhone, iPad, or Watch.<sup>65</sup>

155. Each of the '024 Accused Products is capable of determining a second location associated with one of said plurality of wireless telephones. For example, Apple's iCloud server system is capable of determining the location of each Apple iPhone, cellular-capable Apple iPad, and cellular-capable Apple Watch programmed with Apple Find My, Find My Friends, or Find

.

<sup>&</sup>lt;sup>64</sup> E.g., id.

<sup>&</sup>lt;sup>65</sup> E.g., <u>https://www.apple.com/icloud/find-my/; https://www.apple.com/icloud/.</u>

People for which location sharing is enabled.<sup>66</sup>

156. Each of the '024 Accused Products is capable of providing directional information to said one of said plurality of wireless telephones, wherein said directional information is representative of directions between said second location and said location. For example, Apple's iCloud server system is capable of providing directional information to each Apple iPhone, cellular-capable Apple iPad, and cellular-capable Apple Watch programmed with Apple Find My, Find My Friends, or Find People. Apple's iCloud server system is capable of providing for display on each such Apple iPhone, cellular-capable Apple iPad, and cellular-capable Apple Watch the locations of the wireless telephones associated with the device user's friends. Upon a user's selection of an option to receive "Directions" to one of such wireless telephones, Apple's iCloud server system is capable of providing for display on each such Apple iPhone, cellular-capable Apple iPad, and cellular-capable Apple Watch directions from the location of the iPhone, iPad, or Watch to the selected wireless telephone.<sup>67</sup>

- 157. Plaintiff has suffered damages as a result of Apple's infringement of the '024 Patent in an amount to be proved at trial.
- 158. Plaintiff should be awarded damages in accordance with 35 U.S.C. §§ 271, 281, and 284 in an amount adequate to compensate for Apple's infringement of the '024 Patent but in no event less than a reasonable royalty for the use made of the inventions by Apple, together with interest and costs as fixed by the Court.

<sup>66</sup> E.g., id.

<sup>&</sup>lt;sup>67</sup> E.g., <a href="https://support.apple.com/en-us/HT210514">https://support.apple.com/en-us/HT210514</a>; <a href="https://www.apple.com/icloud/find-my/">https://www.apple.com/icloud/find-my/</a>.

### PRAYER FOR RELIEF

WHEREFORE, Plaintiff respectfully requests that this Court enter:

- A. A judgment in favor of Plaintiff that Apple has infringed, either literally and/or under the doctrine of equivalents, one or more claims of each Patent-in-Suit;
- B. An order permanently enjoining Apple, its parents, subsidiaries, affiliates, divisions, officers, agents, servants, employees, directors, partners, representatives, all individuals and entities in active concert and/or participation with it, and all individuals and/or entities within its control from engaging in the aforesaid unlawful acts of infringement;
- C. An award of damages resulting from Apple's acts of infringement in accordance with 35 U.S.C. § 284;
- D. A judgment and order finding that this is an exceptional case within the meaning of 35 U.S.C. § 285 and awarding to Plaintiff its reasonable attorneys' fees against Apple; and
- E. Any and all other relief as the Court may deem just and proper.

### **DEMAND FOR JURY TRIAL**

Plaintiff requests a trial by jury of all issues so triable.

Dated: February 9, 2022

### /s/ Stafford Davis

Stafford Davis
State Bar No. 24054605
sdavis@stafforddavisfirm.com
Catherine Bartles
State Bar No. 24104849
cbartles@stafforddavisfirm.com
THE STAFFORD DAVIS FIRM, PC
815 South Broadway Avenue
Tyler, Texas 75701
Tel: 903-593-7000

Tel: 903-593-7000 Fax: 903-705-7369

Peter F. Snell (pro hac vice forthcoming) MINTZ LEVIN COHN FERRIS GLOVSKY AND POPEO, P.C. 666 Third Avenue New York, NY 10017 (212) 935-3000 pfsnell@mintz.com

Attorneys for Plaintiff Mullen Industries LLC