IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION

SLYDE ANALYTICS LLC,	)	Case No.
Plaintiff,	)	**JURY TRIAL DEMANDED**
v.	)	
APPLE INC.,	)	
Defendant.	)	

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Slyde Analytics LLC ("Slyde" or "Plaintiff") for its Complaint against Defendant Apple Inc. ("Apple" or "Defendant') for patent infringement alleges as follows:

THE PARTIES

1. Slyde is a limited liability company, organized and existing under the laws of the State of Texas, with its principal place of business located at 104 East Houston Street, Suite 170, Marshall, Texas 75670.

2. Defendant Apple is a corporation organized and existing under the laws of California. Apple is one of the leading smartwatch and mobile phone sellers in the United States and the world. Apple sells its products directly to consumers at physical Best Buy locations. There are multiple Best Buy locations in this District where Apple products are sold directly to customers, including at least: 823 North Creek Drive, Sherman, Texas 75092 (Grayson County), 2800 North Central Expressway, Plano, Texas 75074 (Collin County); 1751 North Central Expressway, Suite C, McKinney, Texas 75070 (Collin County); 3333 Preston Road, Suite 200, Frisco, Texas 75034 (Denton County); 5299 Eldorado Parkway, Frisco, Texas 75033 (Denton County); 1800 South Loop 288, Suite 102 Building 1; Denton, Texas 76205 (Denton County); 6060 Long Prairie Road,

Suite 500, Flower Mound, Texas 75028 (Denton County); 2601 South Stemmons Freeway, Suite 300, Lewisville, Texas 75067 (Denton County); 5885 East Freeway, Beaumont, Texas 77706 (Jefferson County); 8725 Memorial Boulevard, Port Arthur, Texas 77640 (Jefferson County); 869 NE Mall Boulevard, Hurst, Texas 76053 (Shelby County); 422 West Loop 281, Suite 100, Longview, Texas 75605 (Gregg County); 4210 Saint Michael Drive, Texarkana, Texas 75503 (Bowie County); 5514 South Broadway Avenue, Tyler, Texas 75703 (Smith County).[1]

3. Further, certain Best Buy locations within this District contain Apple Shops. According to Apple's website, "Apple Shops are Apple-designed outlets located within select Apple resellers and other retail stores. Many are staffed with Apple Solutions Consultants — trained Apple employees who can help you find the best solution."[2] Apple advertises on its website that the Best Buy located at 2800 North Central Expressway, Plano, Texas 75074-5415 (Collin County), contains an Apple Shop.[3] Apple further advertises on its website other Best Buy locations within this District that contain Apple Shops, including the store located at 190 East Stacy Road, Allen, Texas 75002-8734 (Collin County).[4]

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[1] https://stores.bestbuy.com/tx/sherman/823-n-creek-dr-1023.html#shop;
https://stores.bestbuy.com/tx/plano/2800-n-central-expy-202.html;
https://stores.bestbuy.com/tx/frisco/3333-preston-rd-180.html;
https://stores.bestbuy.com/tx/frisco/5299-eldorado-pkwy-1773.html;
https://stores.bestbuy.com/tx/beaumont/5885-eastex-fwy-238.html;
https://stores.bestbuy.com/tx/denton/1800-s-loop-288-827.html;
https://stores.bestbuy.com/tx/flower-mound/6060-long-prairie-rd-1038.html;
https://stores.bestbuy.com/tx/lewisville/2601-s-stemmons-fwy-258.html;
https://stores.bestbuy.com/tx/longview/422-w-loop-281-594.html;
https://stores.bestbuy.com/tx/mckinney/1751-n-central-expy-196.html;
https://stores.bestbuy.com/tx/port-arthur/8725-memorial-blvd-1545.html;
https://stores.bestbuy.com/tx/texarkana/4210-saint-michael-dr-605.html;
https://stores.bestbuy.com/tx/tyler/5514-s-broadway-ave-246.html

[2] *See* https://locate.apple.com/sales?pt=6&lat=33.021827697753906&lon=-96.69925689697266&address=Plano%2C+TX

[3] *Id.*

[4] *Id.*

Find Locations

Sales

Apple Stores and Apple Authorized Resellers

‹ Back to Home

Enter Location, City or Zipcode
Plano, TX

Select a product
Apple Watch
Change

Reset
Go

99 Apple Watch sales locations near Plano, TX.

Filters

1. VERIZON - COR - 7092801
741 N CENTRAL EXPY
PLANO, TX, 75075
iPhone iPad Watch Apple TV 0.9 mi

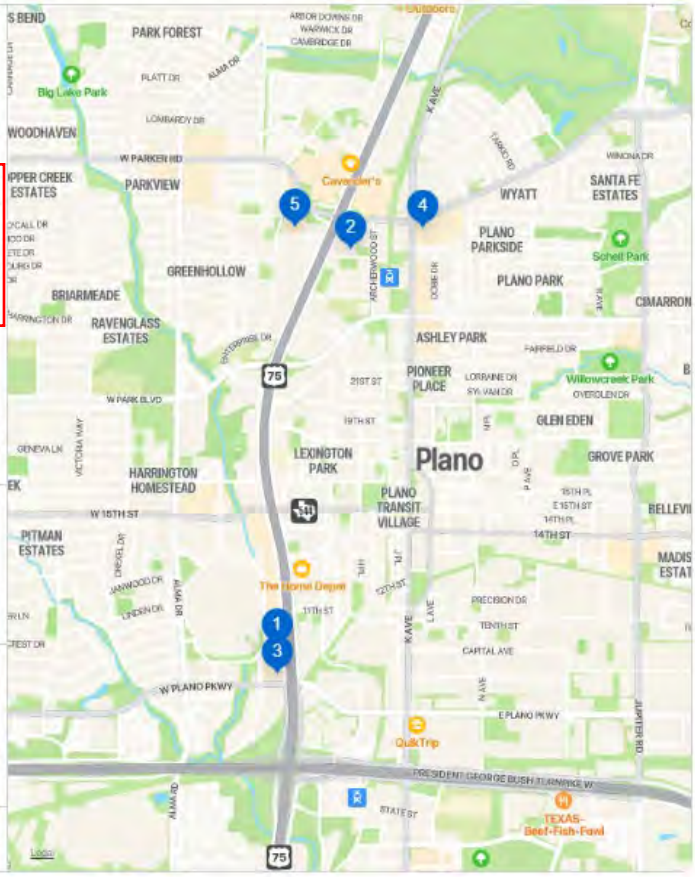
2. BEST BUY - 0202 APPLE SHOP
2800 N CENTRAL EXPY, PLANO TX
PLANO, TX, 75074-5415
iPhone Mac iPad Watch Apple TV HomePod iPod 1.0 mi

3. AT&T - COR - 0091901
701 N CENTRAL EXPY STE 400
PLANO, TX, 75075
iPhone iPad Watch 1.0 mi

4. T-MOBILE - COR - 8661
1110 PARKER ROAD EAST SUITE C
PLANO, TX, 75074
iPhone iPad Watch Apple TV 1.0 mi

5. TARGET STORE - 0067
120 W PARKER RD
PLANO, TX, 75075-2331
iPhone iPad Watch Apple TV HomePod iPod 1.2 mi

Next ›



APPLE SHOPS

Apple Shops are Apple-designed outlets located within select Apple resellers and other retail stores. Many are staffed with Apple Solutions Consultants — trained Apple employees who can help you find the best solution.

[5]

By way of further example, Best Buy also advertises on its website that the location in Plano, Texas, is an Apple Shop.

[6]

Best Buy also advertises on its website that an Apple Shop is located at the store in Allen, Texas.[7]

4. Further, certain Best Buy locations, including those located in this District, are "Apple Authorized Service Providers."[8] The "Geek Squad Agents" at Best Buy locations are "Apple-trained and use genuine Apple parts on every repair."[9]

[5] https://locate.apple.com/sales?pt=6&lat=33.021827697753906&lon=-96.69925689697266&address=Plano%2C+TX
[6] https://stores.bestbuy.com/tx/plano/2800-n-central-expy-202.html
[7] https://stores.bestbuy.com/tx/allen/190-e-stacy-rd-1780.html
[8] https://www.bestbuy.com/site/services/apple-service-repair/pcmcat1554741516170.c?id=pcmcat1554741516170
[9] *Id.*

We are an Apple Authorized Service Provider.

Our Agents are Apple-trained, so you can trust us with all your Apple devices, no matter where you bought them.

[10]

Authorized Service Provider

We're an Apple Authorized Service Provider.

Guaranteed low price. Same-day services.

Our Geek Squad® Agents are Apple-trained and use genuine Apple parts on every repair.

[11]

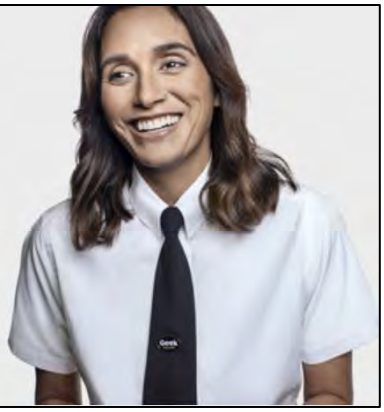
[10] https://www.bestbuy.com/site/apple-service-repair/apple-watch-service-repair/pcmcat1554832617549.c?id=pcmcat1554832617549

[11] https://www.bestbuy.com/site/services/apple-service-repair/pcmcat1554741516170.c?id=pcmcat1554741516170

Authorized Service Provider

We're your place for Apple authorized Apple Watch service and repairs.

Our Geek Squad® Agents are Apple-trained, so you can trust us with all your Apple devices at any Best Buy store near you.



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Apple Watch repairs at Best Buy.

Apple Watch battery replacement and screen repair.

If you're searching for "Apple Watch screen repair near me," look no further than your local Best Buy. Even though Apple Watch screens are designed with durable, scratch-resistant materials and have water-resistant capabilities of various depths depending on the model, accidents can happen. No matter where you purchased your Apple Watch, you can trust our Apple-trained technicians with all your Apple Watch repairs. As a full-service Apple Authorized Service Provider, we only use genuine Apple parts that meet high standards so that the repair to your watch is backed by Apple. Our highly skilled Geek Squad® Agents can fix Apple Watch screens and address problems with the speaker or mic; they can also repair your AirPods since you might be having trouble using them with your watch. Plus, we can perform Wi-Fi troubleshooting, diagnose software issues, help with operating system upgrades and take care of Apple Watch battery replacements. Whether you have the latest Apple Watch or an older model, bring in your cracked screen and our technicians trained in Apple Watch glass repair can make it as good as new with an Apple Watch screen replacement.

Scheduling your Apple Watch screen repair.

You may be wondering how Best Buy's repair fees compare to other service providers or if your Apple Watch repairs are covered under warranty. Rest assured that our Apple Watch repair costs match those of the Apple store. Also, while every Apple Watch comes with the Apple Limited Warranty for manufacturing defects, that warranty does vary by model. You can extend coverage on your watch for two to three additional years with the purchase of AppleCare+ for Apple Watch, which includes coverage for up to two incidents of accidental damage and technical support over the phone. You can add this extra protection when you purchase your Apple Watch or for a limited time thereafter. Additionally, you can save on the cost of Apple Watch repairs when you become a My Best Buy Total™ member.

Before you come in for an Apple Watch repair, first try to restart the device to see if that helps solve the problem you were experiencing. Another quick fix that sometimes works is unpairing your Apple Watch from your smartphone and then re-pairing it. If those steps don't provide positive results, reserve an appointment at a nearby Best Buy location. You can expedite your visit by making sure that your watch is fully charged and unpaired from your iPhone. Also, remove your Apple Watch band and store it with your charger for use once your repair is complete. If your other devices need attention, you can schedule Apple iPad repairs and iPhone repairs at the same time for added convenience. Be sure you know your Apple ID and password before you arrive to help make the process even smoother.

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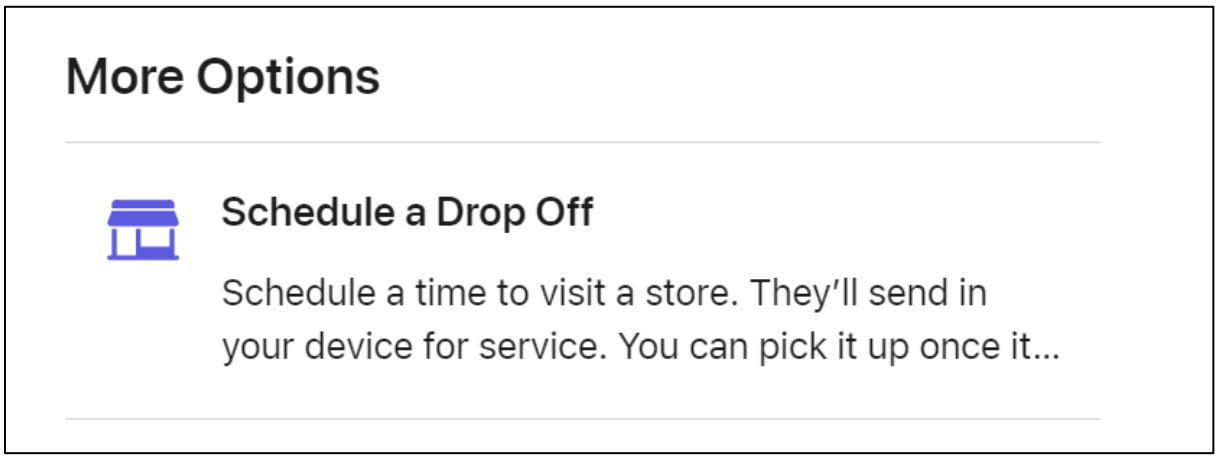
Apple touted the expansion of its "Apple authorized service network" at "nearly 1,000 Best Buy stores across the U.S. now providing expert service and repairs for Apple products."[14] Further, Apple states that "Apple-certified repairs at an Apple store or an authorized service provider are

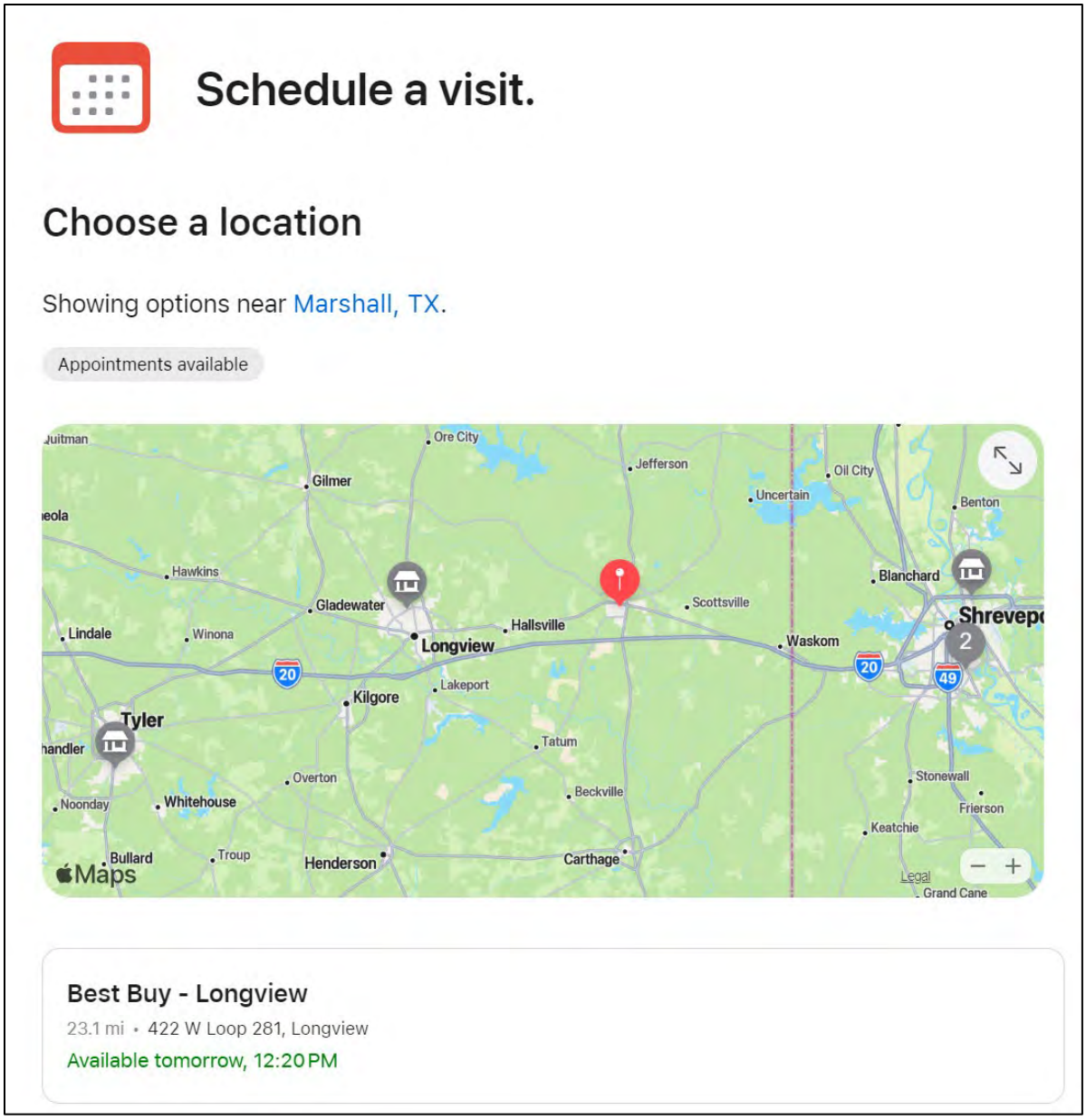
[12] https://www.bestbuy.com/site/apple-service-repair/apple-watch-service-repair/pcmcat1554832617549.c?id=pcmcat1554832617549
[13] *Id.*
[14] https://www.apple.com/newsroom/2019/06/apple-partners-with-best-buy-for-expanded-repair-service/

performed by trained experts who use genuine Apple parts. Every repair is backed by Apple."[15] When a customer or user seeks to schedule a repair from Apple's website, Apple directs its users to Best Buy locations within this District.



[16]

[15] *Id.*
[16] https://getsupport.apple.com/solutions



[17]

Apple advertises on its website these Best Buy locations as Apple Authorized Service Providers as certified "so you get the same professionalism and quality of repair you'd expect from Apple."[18]

[17] *Id.*
[18] https://getsupport.apple.com/solutions/schedule-repair/providers

JURISDICTION

5. 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 jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338(a).

6. This Court has specific and personal jurisdiction over Defendant consistent with the requirements of the Due Process Clause of the United States Constitution and the Texas Long Arm Statute. Upon information and belief, Defendant has sufficient minimum contacts with the forum because Defendant transacts substantial business in the State of Texas and in this Judicial District. Further, Defendant has, directly or through subsidiaries or intermediaries, committed and continues to commit acts of patent infringement in the State of Texas and in this Judicial District as alleged in this Complaint, alleged more particularly below.

7. Venue is proper in this Judicial District as to Defendant pursuant to 28 U.S.C. §§ 1400(b) and 1391(b) and (c) because Defendant is subject to personal jurisdiction in this Judicial District, has committed acts of patent infringement in this Judicial District, and has a regular and established place of business in this Judicial District. Defendant, through its own acts, makes, uses, sells, and/or offers to sell infringing products within this Judicial District, regularly does and solicits business in this Judicial District, and has the requisite minimum contacts with the Judicial District such that this venue is a fair and reasonable one.

PATENTS-IN-SUIT

8. On November 19, 2013, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 8,588,033 (the "'033 Patent") entitled "Wristwatch with Electronic Display". A true and correct copy of the '033 Patent is attached hereto as Exhibit A.

9. On May 16, 2017, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 9,651,922 (the "'922 Patent") entitled "Wristwatch with a Touch Screen and Method for Displaying on a Touch-Screen Watch". A true and correct copy of the '922 Patent is attached hereto as Exhibit B.

10. On October 31, 2017, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 9,804,678 (the "'678 Patent") entitled "Method and Circuit for Switching a Wristwatch from a First Power Mode to a Second Power Mode". A true and correct copy of the '678 Patent is attached hereto as Exhibit C.

11. On February 5, 2019, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 10,198,085 (the "'085 Patent") entitled "Method and Circuit for Switching a Wristwatch from a First Power Mode to a Second Power Mode". A true and correct copy of the '085 Patent is attached hereto as Exhibit D.

12. On April 26, 2016, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 9,320,457 (the "'457 Patent") entitled "Integrated Portable Device and Method Implementing an Accelerometer for Analyzing Biomechanical Parameters of a Stride". A true and correct copy of the '457 Patent is attached hereto as Exhibit E.

13. On January 23, 2018, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 9,873,018 (the "'018 Patent") entitled "Integrated Portable Device and Method Implementing an Accelerometer for Analyzing Biomechanical Parameters of a Stride". A true and correct copy of the '018 Patent is attached hereto as Exhibit F.

14. On January 3, 2017, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 9,536,134 (the "'134 Patent") entitled "Athletic Performance Monitoring Device". A true and correct copy of the '134 Patent is attached hereto as Exhibit G.

15. On June 27, 2023, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 11,687,809 (the "'809 Patent") entitled "Method and Apparatus for Predicting a Race Time". A true and correct copy of the '809 Patent is attached hereto as Exhibit H.

16. On January 16, 2024, the United State Patent and Trademark Office duly and legally issued U.S. Patent No. 11,875,696 (the "'696 Patent") entitled "Method and Device for Retrieving Biomechanical Parameters of a Stride." A true and correct copy of the '696 Patent is attached hereto as Exhibit I.

17. On January 5, 2021, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 10, 881,905 (the "'905 Patent") entitled "Integrated Portable Device and Method Implementing an Accelerometer for Detecting Asymmetries in a Movement of a User". A true and correct copy of the '905 Patent is attached as Exhibit J.

18. On December 5, 2023, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 11,833,391 (the "'391 Patent") entitled "Integrated Portable Device and Method Implementing an Accelerometer for Analyzing Biomechanical Parameters of a Stride". A true and correct copy of the '391 Patent is attached as Exhibit K.

19. Slyde is the sole and exclusive owner of all right, title, and interest in the '033 Patent, the '922 Patent, the '678 Patent, the '085 Patent, the '457 Patent, the '018 Patent, the '134 Patent, the '809 Patent, the '696 Patent, the '391 Patent, and the '905 Patent, (collectively, 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 patent infringement lawsuit. Slyde also has the right to recover all damages for past, present, and future infringement of the Patents-in-Suit and to seek injunctive relief as appropriate under the law.

20. Slyde has at all times complied with the marking provisions of 35 U.S.C. § 287 with respect to the Patents-in-Suit. Upon information and belief, prior assignees and licensees have also complied with the marking provisions of 35 U.S.C. § 287.

FACTUAL ALLEGATIONS

21. The Patents-in-Suit generally relate to methods and apparatuses related to wristwatches with a digital display, and smartphones.

22. The ’033 Patent generally relates to technology involving a wristwatch with an electronic display that displays a simulation of the movement of a mechanical watch. The technology described in the ’033 Patent was developed by famed watch designers Pascal Pozzo Di Borgo and Jorg Hysek. For example, the technology is implemented by infringing smartwatches with an electronic display allowing for the display of a simulated mechanical watch movement including, but not limited to, the Apple Watch Series 4, Apple Watch Series 5, Apple Watch SE (first version), Apple Watch Series 6, Apple Watch Series 7, Apple Watch SE (second version), Apple Watch Series 8, Apple Watch Ultra 1, Apple Watch Series 9, Apple Watch Ultra 2, iPhone XR, iPhone XS, iPhone XS Max, iPhone 11, iPhone 11 Pro, iPhone 11 Pro Max, iPhone SE (2nd gen), iPhone 12, iPhone 12 mini, iPhone 12 Pro, iPhone 12 Pro Max, iPhone 13, iPhone 13 mini, iPhone 13 Pro, iPhone Pro Max, iPhone SE (3rd gen), iPhone 14, iPhone 14 Plus, iPhone 14 Pro, iPhones 14 Pro Max, iPhone 15, iPhone 15 Plus, iPhone 15 Pro, iPhone 15 Pro Max, alone or in combination with certain applications and operating systems, (the “Accused Products”), among other products.

23. The ’922 Patent generally relates to technology involving a wristwatch with a digital matrix display, a sheet of touch-sensitive glass, and a processing circuit for interpreting signals from the touch-sensitive glass in order to make changes to what is displayed on the digital

matrix display. The technology described in the ’922 Patent was developed by famed watch designers Pascal Pozzo Di Borgo and Jorg Hysek. For example, the technology is implemented by infringing smartwatches with a digital display including, but not limited to, the Accused Products, among other products.

24. The ’678 Patent and ’085 Patent generally relate to technology involving a wristwatch with a display which can operate in a plurality of power modes, wherein the wristwatch switches from a first power mode to a second power mode upon the detection of a gesture or wristturn through the use of a sensor. The technology described in the ’678 Patent and ’085 Patent was developed by Alex Bezinge, Adrian Mohni, Daniel Pfeifer, and Musa Dogan. For example, the technology is implemented by infringing smartwatches with a digital display and associated software including, not limited to, the Accused Products, among other products.

25. The ’457 Patent and ’018 Patent generally relate to technology involving a device for analyzing the biomechanical parameters of the stride of a runner. The technology described in the ’457 Patent and ’018 Patent was developed by Patrick Flaction, Jacques Quievre, and Jean-Benoit Morin. For example, the technology is implemented by infringing devices with a power source, accelerometer, chronograph, and digital processor for measuring parameters associated with a runner’s stride including, but not limited to, the Accused Products, among other products.

26. The ’134 Patent generally relates to technology involving an athletic performance monitoring device with an accelerometer wirelessly connected to a user-worn device with a processing system to provide athletic performance information. The technology described in the ’134 Patent was developed by Patrick Flaction. For example, the technology is implemented by infringing smartwatches with a digital display including, but not limited to, the Accused Products, among other products.

27. The'696 Patent generally relates to a method and apparatus for determining the biomechanical parameters of a runner's stride using an accelerometer device worn on the runner's body. The technology described in the '696 Patent was developed by Jérôme Corre, Steve DeVènes, Frédéric Lamon, Stefan Hochuli Paychère, and Christophe Ramstein. For example, the technology is implemented by infringing devices with an accelerometer measuring parameters associated with a runner's stride including, but not limited to, the Accused Products, among other products.

28. The '809 Patent generally relates to a method and apparatus for predicting a race time, a probability of achieving a target time by the end of a race, and/or measurement of an athlete's pace relative to the target time. The technology described in the '809 Patent was developed by Cyrille Gindre, Frederic Lamon. Christophe Ramstein, and Patrick Flaction. For example, the technology is implemented by infringing devices that monitor an athlete's pace in various types of exercises including, but not limited to, the Accused Products, among other products.

29. The '391 Patent relates to a method for determining the biomechanical parameters of a runner's stride using an accelerometer device. The technology described in the '391 Patent was developed by Patrick Flaction, Jacques Quievre, and Jean-Benoit Morin. For example, the technology is implemented by infringing devices with a power source, accelerometer, chronograph, and digital processor for measuring parameters associated with a runner's stride including, but not limited to, the Accused Products, among other products.

30. The '905 Patent general relates to a method and apparatus for detecting asymmetries in a user's stride. The technology described in the '905 Patent was developed by Patrick Flaction, Jacques Quievre, and Jean-Benoit Morin. For example, the technology is

implemented by infringing devices that monitor the steadiness of a user's stride including, but not limited to, the Accused Products, among other products.

31. Apple has infringed and is continuing to infringe the Patents-in-Suit by making, using, selling, offering to sell, and/or importing, and by actively inducing others to make, use, sell, offer to sell, and/or importing, products including, but not limited, to smart watches with electronic displays and associated software.

COUNT I
(Infringement of the '678 Patent)

32. Paragraphs 1 through 31 are incorporated by reference as if fully set forth herein.

33. Slyde has not licensed or otherwise authorized Defendant to make, use, offer for sale, sell, or import any products that embody the inventions of the '678 Patent.

34. Defendant has and continues to directly infringe the '678 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, and/or importing into the United States products that satisfy each and every limitation of one or more claims of the '678 Patent. Such products include smartwatches with gesture detection for switching power modes including, but not limited to, the Apple Watch Ultra 2, among other products.

35. For example, Defendant has and continues to directly infringe at least claim 14 of the '678 Patent by making, using, offering to sell, selling, and/or importing into the United States products that include smartwatches with gesture detection for switching power modes, such as the Apple Watch Ultra 2, among other products.

36. For example, the Apple Watch Ultra 2 comprises a wristwatch which can be operated in a plurality of power modes including a first power mode and a second power mode (*e.g.*, "sleep" or "awake" and/or "low power mode" or "normal power mode").

Always On

Always On lets Apple Watch Ultra display the watch face and time, even when your wrist is down. When you raise your wrist, Apple Watch Ultra functions fully.

Note: When Apple Watch Ultra is in Low Power Mode, Always On is turned off. To see the watch face, tap the display.

1. Open the Settings app on your Apple Watch Ultra.
2. Tap Display & Brightness, then tap Always On.
3. Turn on Always On, then tap the following options to configure them:
   - *Show Complication Data:* Choose the complications that show data when your wrist is down.
   - *Show Notifications:* Choose the notifications that are visible when your wrist is down.
   - *Show Apps:* Choose the apps that are visible when your wrist is down.

Wake the Apple Watch Ultra display

By default, you can wake the Apple Watch Ultra display in these ways:

- Raise your wrist. Your Apple Watch Ultra sleeps again when you lower your wrist.
- Tap the display or press the Digital Crown.
- Turn the Digital Crown upward.

If you don't want your Apple Watch Ultra to wake when you raise your wrist or turn the Digital Crown, open the Settings app on your Apple Watch Ultra, go to Display & Brightness, then turn off Wake on Wrist Raise and Wake On Crown Rotation.

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37. The Apple Watch Ultra 2 comprises a display (*i.e.*, the always-on retina display).[20] The Apple Watch Ultra 2 comprises a microcontroller (*e.g.*, the S9 SiP).[21] The Apple Watch Ultra 2 comprises a touch panel underneath a cover glass of the wristwatch for detecting a gesture on the cover glass. The Apple Watch Ultra 2 comprises a touch controller for interpreting a touch signal provided by the touch panel and for converting the signals into command signals. The Apple Watch Ultra 2 comprises an inertial sensor comprising an accelerometer and a processor, said accelerometer being arranged for generating an acceleration signal and the processor being arranged for discriminating between gesture and no gesture based on a direction of the acceleration signal as measured by the accelerometer being a three dimensional accelerometer, and on a slope

[19] https://support.apple.com/guide/watch-ultra/turn-on-and-wake-apple-watch-ultra-apd748b87e2a/10.0/watchos/10.0

[20] https://www.apple.com/apple-watch-ultra-2/?afid=p238%7CsfkfRV8pK-dc_mtid_20925qtb42335_pcrid_686763229403_pgrid_155088240124_pexid__&cid=wwa-us-kwgo-watch-slid---Brand-AppleWatchUltra2-WatchNewYear-

[21] *Id.*

or frequency of the acceleration signal, while the microcontroller and the touch controller are in a sleep power mode.

Sensors:

- Electrical heart sensor and ECG app[1]
- Third-generation optical heart sensor
- High and low heart rate notifications[1]
- Irregular rhythm notifications[2]
- Sleep stages
- Temperature sensing[3]
- Depth gauge ±1m accuracy and app
- Water temperature sensor
- Compass with Waypoints and Backtrack
- Always-on altimeter
- High-g accelerometer
- High dynamic range gyroscope
- Ambient light sensor

[22]

38. The Apple Watch Ultra 2 comprises a touch controller, wherein a touch controller is commanded so as to be switched to the second power mode upon gesture detection by the inertial sensor and for detecting a tap gesture on the cover glass with the touch panel. The Apple Watch Ultra 2 comprises a microcontroller, wherein the microcontroller is arranged for controlling a display of indication on the display and commanded to be switched to the second power mode upon a tap gesture detection by the touch controller and for discriminating between gesture and no gesture based at least on signals from the touch panel.

39. For example, the Apple Watch Ultra 2 has power saving modes, wherein the user wearing the Apple Watch Ultra 2 can turn the screen from "sleep" to "awake," for example, by raising the wrist upon which the watch is worn or tapping the screen.

[22] https://support.apple.com/kb/SP906?locale=en_US

Wake the Apple Watch Ultra display

By default, you can wake the Apple Watch Ultra display in these ways:

- Raise your wrist. Your Apple Watch Ultra sleeps again when you lower your wrist.
- Tap the display or press the Digital Crown.
- Turn the Digital Crown upward.

If you don't want your Apple Watch Ultra to wake when you raise your wrist or turn the Digital Crown, open the Settings app on your Apple Watch Ultra, go to Display & Brightness, then turn off Wake on Wrist Raise and Wake On Crown Rotation.[23]

40. Defendant has and continues to indirectly infringe one or more claims of the '678 Patent by knowingly and intentionally inducing others, including Apple customers and end-users, to directly infringe, either literally or under the doctrine of equivalents, by making, using, offering to sell, selling, and/or importing into the United States products that include infringing technology, such as smartwatches with gesture detection for switching power modes.

41. Defendant, with knowledge that these products, or the use thereof, infringe the '678 Patent at least as of the date of this Complaint,[24] knowingly and intentionally induced, and continues to knowingly and intentionally induce, direct infringement of the '678 Patent by providing these products to end-users for use in an infringing manner. Alternatively, on information and belief, Defendant has adopted a policy of not reviewing the patents of others, including specifically those related to Defendant's specific industry, thereby remaining willfully blind to the Patent-in-Suit at least as early as the issuance of the Patents-in-Suit.

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[23] https://support.apple.com/guide/watch-ultra/turn-on-and-wake-apple-watch-ultra-apd748b87e2a/10.0/watchos/10.0

[24] Apple cited the '678 Patent family in relation to thirty-one (31) of its own U.S. patent applications and granted patents. Apple, therefore, had knowledge of the '678 Patent as of its earliest citation, which was in relation to U.S. Patent No. 7,469,381, published on December 23, 2008.

42. Defendant has induced infringement by others, including end-users, with the intent to cause infringing acts by others or, in the alternative, with the belief that there was a high probability that others, including end-users, infringe the ’678 Patent, but while remaining willfully blind to the infringement. Defendant has and continues to induce infringement by its customers and end-users by supplying them with instructions on how to operate the infringing technology in an infringing manner, while also making publicly available information on the infringing technology via Defendant’s website, product literature and packaging, and other publications.

43. Slyde has suffered damages as a result of Defendant’s direct and indirect infringement of the ’678 Patent in an amount to be proven at trial.

44. Slyde has suffered, and will continue to suffer, irreparable harm as a result of Defendant’s infringement of the ’678 Patent, for which there is no adequate remedy at law, unless Defendant’s infringement is enjoined by this Court.

COUNT II
(Infringement of the ’085 Patent)

45. Paragraphs 1 through 31 are incorporated by reference as if fully set forth herein.

46. Slyde has not licensed or otherwise authorized Defendant to make, use, offer for sale, sell, or import any products that embody the inventions of the ’085 Patent.

47. Defendant has and continues to directly infringe the ’085 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, and/or importing into the United States products that satisfy each and every limitation of one or more claims of the ’085 Patent. Such products include smartwatches which detect orientation and switch power modes including, but not limited to, the Apple Watch Ultra 2, among other products.

48. For example, Defendant has and continues to directly infringe at least claim 1 of the ’085 Patent by making, using, offering to sell, selling, and/or importing into the United States products that include smartwatches which detect orientation and switch power modes, such as the Apple Watch Ultra 2, among other products.

49. For example, the Apple Watch Ultra 2 performs a method for switching a wristwatch from a first power mode to a second power mode (*e.g.*, “sleep” or “awake” and/or “low power mode” or “normal power mode”).

Always On

Always On lets Apple Watch Ultra display the watch face and time, even when your wrist is down. When you raise your wrist, Apple Watch Ultra functions fully.

Note: When Apple Watch Ultra is in Low Power Mode, Always On is turned off. To see the watch face, tap the display.

1. Open the Settings app on your Apple Watch Ultra.
2. Tap Display & Brightness, then tap Always On.
3. Turn on Always On, then tap the following options to configure them:
   - *Show Complication Data:* Choose the complications that show data when your wrist is down.
   - *Show Notifications:* Choose the notifications that are visible when your wrist is down.
   - *Show Apps:* Choose the apps that are visible when your wrist is down.

Wake the Apple Watch Ultra display

By default, you can wake the Apple Watch Ultra display in these ways:

- Raise your wrist. Your Apple Watch Ultra sleeps again when you lower your wrist.
- Tap the display or press the Digital Crown.
- Turn the Digital Crown upward.

If you don't want your Apple Watch Ultra to wake when you raise your wrist or turn the Digital Crown, open the Settings app on your Apple Watch Ultra, go to Display & Brightness, then turn off Wake on Wrist Raise and Wake On Crown Rotation.

25

50. The Apple Watch Ultra 2 performs the step of using an accelerometer for detecting a wristturn.

Sensors:

- Electrical heart sensor and ECG app[1]
- Third-generation optical heart sensor
- High and low heart rate notifications[1]
- Irregular rhythm notifications[2]
- Sleep stages
- Temperature sensing[3]
- Depth gauge ±1m accuracy and app
- Water temperature sensor
- Compass with Waypoints and Backtrack
- Always-on altimeter
- High-g accelerometer
- High dynamic range gyroscope
- Ambient light sensor

[26]

51. The Apple Watch Ultra 2 performs the step of switching the wristwatch from the first power mode to the second power mode when a wristturn has been detected. The Apple Watch Ultra 2 performs the step of detecting a wristturn which comprises detecting that an orientation of the wristwatch is in a starting position, wherein the step of detecting that the orientation is in a starting position comprises detecting that the orientation of the wristwatch is held within a first range for a defined time. The Apple Watch Ultra 2 performs the step of detecting that an orientation of the wristwatch is then in a final position, wherein the step of detecting that the orientation is in the final position comprises detecting that the orientation is in a second range different from the first range. In response to a detection that the orientation of the wristwatch is in the second range, the Apple Watch Ultra 2 performs the step of detecting that the wristwatch

[25] https://support.apple.com/guide/watch-ultra/turn-on-and-wake-apple-watch-ultra-apd748b87e2a/10.0/watchos/10.0

[26] https://support.apple.com/kb/SP906?locale=en_US

remains substantially immobile during a predetermined duration and that a duration between the starting position and the final position is in a predefined range.

52. For example, the Apple Watch Ultra 2 has power saving modes, wherein the user wearing the Apple Watch Ultra 2 can turn the screen from "off" to "on" by changing its orientation, such as through a wristturn.

> **Wake the Apple Watch Ultra display**
>
> By default, you can wake the Apple Watch Ultra display in these ways:
>
> - Raise your wrist. Your Apple Watch Ultra sleeps again when you lower your wrist.
> - Tap the display or press the Digital Crown.
> - Turn the Digital Crown upward.
>
> If you don't want your Apple Watch Ultra to wake when you raise your wrist or turn the Digital Crown, open the Settings app on your Apple Watch Ultra, go to Display & Brightness, then turn off Wake on Wrist Raise and Wake On Crown Rotation.[27]

53. Defendant has and continues to indirectly infringe one or more claims of the '085 Patent by knowingly and intentionally inducing others, including Apple customers and end-users, to directly infringe, either literally or under the doctrine of equivalents, by making, using, offering to sell, selling, and/or importing into the United States products that include infringing technology, such as smartwatches which detect orientation and switch power modes.

54. Defendant, with knowledge that these products, or the use thereof, infringe the '085 Patent at least as of the date of this Complaint,[28] knowingly and intentionally induced, and

[27] https://support.apple.com/guide/watch-ultra/turn-on-and-wake-apple-watch-ultra-apd748b87e2a/10.0/watchos/10.0

[28] Apple cited to the '033 Patent family in relation to thirty-two (32) of its own U.S. patent applications and granted patents. Apple, therefore, had knowledge of the '033 Patent as of its earliest citation, which was in relation to U.S. Patent No. 7,469,381, published on December 23, 2008.

continues to knowingly and intentionally induce, direct infringement of the ’085 Patent by providing these products to end-users for use in an infringing manner. Alternatively, on information and belief, Defendant has adopted a policy of not reviewing the patents of others, including specifically those related to Defendant’s specific industry, thereby remaining willfully blind to the Patent-in-Suit at least as early as the issuance of the Patents-in-Suit.

55. Defendant has induced infringement by others, including end-users, with the intent to cause infringing acts by others or, in the alternative, with the belief that there was a high probability that others, including end-users, infringe the ’085 Patent, but while remaining willfully blind to the infringement. Defendant has and continues to induce infringement by its customers and end-users by supplying them with instructions on how to operate the infringing technology in an infringing manner, while also making publicly available information on the infringing technology via Defendant’s website, product literature and packaging, and other publications.

56. Slyde has suffered damages as a result of Defendant’s direct and indirect infringement of the ’085 Patent in an amount to be proven at trial.

57. Slyde has suffered, and will continue to suffer, irreparable harm as a result of Defendant’s infringement of the ’085 Patent, for which there is no adequate remedy at law, unless Defendant’s infringement is enjoined by this Court.

COUNT III
(Infringement of the ’033 Patent)

58. Paragraphs 1 through 31 are incorporated by reference as if fully set forth herein.

59. Slyde has not licensed or otherwise authorized Defendant to make, use, offer for sale, sell, or import any products that embody the inventions of the ’033 Patent.

60. Defendant has and continues to directly infringe the ’033 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, and/or importing into the United States products that satisfy each and every limitation of one or more claims of the ’033 Patent. Such products include smartwatches with an electronic display allowing for the display of simulated mechanical watch movement including, but not limited to, the Apple Watch Ultra 2, among other products.

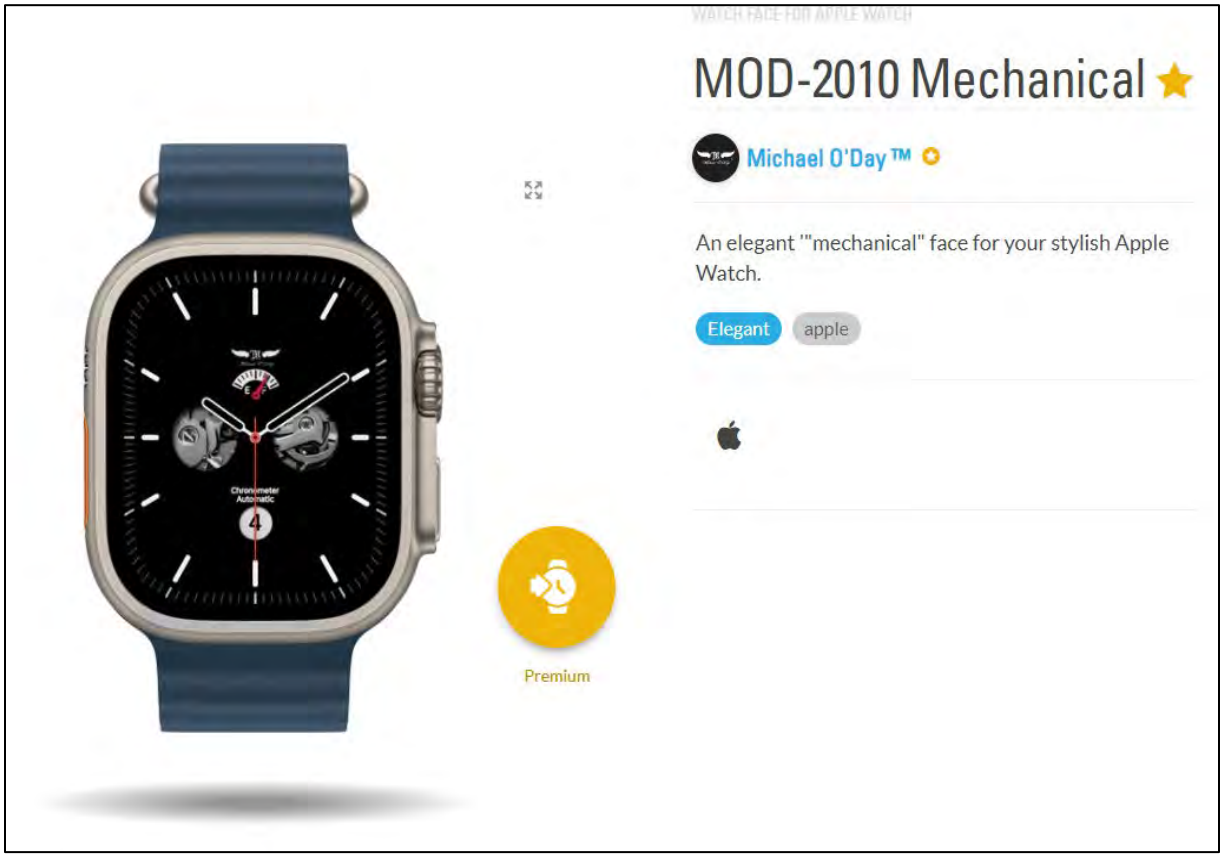
61. For example, Defendant has and continues to directly infringe at least claim 1 of the ’033 Patent by making, using, offering to sell, selling, and/or importing into the United States products that include smartwatches with an electronic display allowing for the display of simulated mechanical watch movement including, but not limited to, the Apple Watch Ultra 2, among other products.

62. For example, the Apple Watch Ultra 2 is a wristwatch comprising a watchcase, an electronic display in said watchcase, and a quartz oscillator. The Apple Watch Ultra 2 comprises a microcontroller being arranged for reproducing on the electronic display the simulation of a mechanical watch movement comprising a gear train, the simulation being visible so as to indicate the time, the microcontroller being further arranged for synchronizing the displayed time by the displayed mechanical movement with that of the quartz oscillator. Through the use of a microcontroller on the Apple Watch Ultra 2, the Apple Watch Ultra 2 reproduces on the electronic display a simulation of the mechanical movement, including a gear train. The Apple Watch Ultra 2 comprises a microcontroller arranged to synchronize the displayed time by the displayed mechanical movement with that of the quartz oscillator.

63. For example, Defendant permits the sale and download of digital watch faces for the Apple Watch Ultra 2 through mobile apps through the Apple Store. One example of the third-party application available on the Apple Store is Facer.[29] Through the Facer mobile application,

[29] https://apps.apple.com/us/app/watch-faces-by-facer/id1057071179

Apple Watch Ultra 2 users can download watch faces that simulated mechanical watch movements.



[30]

64. Defendant has and continues to indirectly infringe one or more claims of the '033 Patent by knowingly and intentionally inducing others, including Apple customers and end-users, to directly infringe, either literally or under the doctrine of equivalents, by making, using, offering to sell, selling, and/or importing into the United States products that include infringing technology, such as smartwatches with an electronic display allowing for the display of simulated mechanical watch movement.

[30] https://www.facer.io/watchface/59bmeI6A8q?watchModel=applewatchultra2ocean

65. Defendant, with knowledge that these products, or the use thereof, infringe the '033 Patent at least as of the date of this Complaint,[31] knowingly and intentionally induced, and continues to knowingly and intentionally induce, direct infringement of the '033 Patent by providing these products to end-users for use in an infringing manner. Alternatively, on information and belief, Defendant has adopted a policy of not reviewing the patents of others, including specifically those related to Defendant's specific industry, thereby remaining willfully blind to the Patent-in-Suit at least as early as the issuance of the Patents-in-Suit.

66. Defendant has induced infringement by others, including end-users, with the intent to cause infringing acts by others or, in the alternative, with the belief that there was a high probability that others, including end-users, infringe the '033 Patent, but while remaining willfully blind to the infringement. Defendant has and continues to induce infringement by its customers and end-users by supplying them with instructions on how to operate the infringing technology in an infringing manner, while also making publicly available information on the infringing technology via Defendant's website, product literature and packaging, and other publications.

67. Slyde has suffered damages as a result of Defendant's direct and indirect infringement of the '033 Patent in an amount to be proven at trial.

68. Slyde has suffered, and will continue to suffer, irreparable harm as a result of Defendant's infringement of the '033 Patent, for which there is no adequate remedy at law, unless Defendant's infringement is enjoined by this Court.

[31] Apple cited either directly to the '033 Patent or the '033 Patent family in relation to thirty-two (32) of its own U.S. patent applications and granted patents. Apple, therefore, had knowledge of the '033 Patent as of its earliest citation, which was in relation to U.S. Patent No. 7,469,381, published on December 23, 2008.

COUNT IV
(Infringement of the ’922 Patent)

69. Paragraphs 1 through 31 are incorporated by reference as if fully set forth herein.

70. Slyde has not licensed or otherwise authorized Defendant to make, use, offer for sale, sell, or import any products that embody the inventions of the ’922 Patent.

71. Defendant has and continues to directly infringe the ’922 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, and/or importing into the United States products that satisfy each and every limitation of one or more claims of the ’922 Patent. Such products include smartwatches with a digital display and touch-sensitive glass which allows for the selection of cards including, but not limited to, the Apple Watch Ultra 2, among other products.

72. For example, Defendant has and continues to directly infringe at least claim 1 of the ’922 Patent by making, using, offering to sell, selling, and/or importing into the United States products that include smartwatches with a digital display and touch-sensitive glass which allows for the selection of cards including, but not limited to, the Apple Watch Ultra 2, among other products.

73. For example, the Apple Watch Ultra 2 is a wristwatch comprising a digital matrix display (*i.e.*, the Always-On Retima display).[32] The Apple Watch Ultra 2 comprises a sheet of touch-sensitive glass. The Apple Watch Ultra 2 comprises a processing circuit specifically laid out so as to interpret the signals from the touch-sensitive glass, for selecting a card from several available cards depending on these signals and for displaying said card on the entire digital matrix

[32] https://www.apple.com/apple-watch-ultra-2/?afid=p238%7CsfkfRV8pK-dc_mtid_20925qtb42335_pcrid_686763229403_pgrid_155088240124_pexid__&cid=wwa-us-kwgo-watch-slid---Brand-AppleWatchUltra2-WatchNewYear-

display. The Apple Watch Ultra 2 comprises touch-sensitive glass, wherein said touch-sensitive glass is a two-dimensional glass for detecting a movement of at least one finger at any place on the touch-sensitive glass along at least two different directions. The Apple Watch Ultra 2 comprises a processing circuit, wherein said processing circuit is specifically laid out so as to cause several available cards to scroll past in order to lastingly replace the initially displayed card with a replacement card selected between several available cards, wherein each card of the several available cards has a distinct fixed or periodically refreshed image. The size of the image corresponds to the size of said digital matrix display so that the displayed card occupies the whole of said digital matrix display. One card of the several available cards occupying the entire digital matrix display is immediately and without further user intervention replaced after the scrolling by a different card of the several available cards that occupies the entire digital matrix display. The Apple Watch Ultra 2 comprises a processing circuit, wherein the processing circuit is further laid out so that the replacement card is dependent from the initially displayed card and from the direction of the movement and is independent from the starting point and end point of the movement on the digital matrix display.

74. For example, a user can change the face of the Apple Watch Ultra 2 by touching and holding the watches screen until it enters "Edit mode". The user can then swipe left or right with their finger to select a new watch face, thus changing the watch's display.

75. Defendant has and continues to indirectly infringe one or more claims of the '922 Patent by knowingly and intentionally inducing others, including Apple customers and end-users, to directly infringe, either literally or under the doctrine of equivalents, by making, using, offering to sell, selling, and/or importing into the United States products that include infringing technology, such smartwatches with a digital display and touch-sensitive glass which allows for the selection

of cards.

76. Defendant, with knowledge that these products, or the use thereof, infringe the '922 Patent at least as of the date of this Complaint,[33] knowingly and intentionally induced, and continues to knowingly and intentionally induce, direct infringement of the '922 Patent by providing these products to end-users for use in an infringing manner. Alternatively, on information and belief, Defendant has adopted a policy of not reviewing the patents of others, including specifically those related to Defendant's specific industry, thereby remaining willfully blind to the Patent-in-Suit at least as early as the issuance of the Patents-in-Suit.

77. Defendant has induced infringement by others, including end-users, with the intent to cause infringing acts by others or, in the alternative, with the belief that there was a high probability that others, including end-users, infringe the '922 Patent, but while remaining willfully blind to the infringement. Defendant has and continues to induce infringement by its customers and end-users by supplying them with instructions on how to operate the infringing technology in an infringing manner, while also making publicly available information on the infringing technology via Defendant's website, product literature and packaging, and other publications.

78. Slyde has suffered damages as a result of Defendant's direct and indirect infringement of the '922 Patent in an amount to be proven at trial.

79. Slyde has suffered, and will continue to suffer, irreparable harm as a result of Defendant's infringement of the '922 Patent, for which there is no adequate remedy at law, unless Defendant's infringement is enjoined by this Court.

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[33] Apple cited either directly to the '922 Patent or the '922 Patent family in relation to eighty-two (82) of its own U.S. patent applications and granted patents. Apple, therefore, had knowledge of the '922 Patent as of its earliest citation, which was in relation to U.S. Patent No. 7,469,381, published on December 23, 2008.

COUNT V
(Infringement of the ’457 Patent)

80. Paragraphs 1 through 31 are incorporated by reference as if fully set forth herein.

81. Slyde has not licensed or otherwise authorized Defendant to make, use, offer for sale, sell, or import any products that embody the inventions of the ’457 Patent.

82. Defendant has and continues to directly infringe the ’457 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, and/or importing into the United States products that satisfy each and every limitation of one or more claims of the ’475 Patent. Such products include devices and associated software for analyzing the biomechanical parameters of the stride of a runner, which include a power source, accelerometer, chronograph, belt, display, and digital processor to measure parameters associated with a runner’s stride including, but not limited to, the Apple Watch Ultra 2, among other products.

83. For example, Defendant has and continues to directly infringe at least claim 1 of the ’457 Patent by making, using, offering to sell, selling, and/or importing into the United States products that include devices and associated software for analyzing the biomechanical parameters of the stride of a runner, which include a power source, accelerometer, chronograph, belt, display, and digital processor to measure parameters associated with a runner’s stride including, but not limited to, the Apple Watch Ultra 2, among other products.

84. For example, the Apple Watch Ultra 2 comprises a device designed for analyzing biomechanical parameters of a stride of a runner (*e.g.,* run tracking software, such as the Workout App). Apple Watch Ultra 2 comprises a self-sufficient electric power source. For example, the

Apple Watch Ultra 2 has a built-in rechargeable lithium-ion battery.[34]

85. The Apple Watch Ultra 2 comprises a triaxial accelerometer capable of supplying at least one sequence of acceleration data in at least the vertical direction whilst the runner travels a distance on a running course. For example, the Apple Watch Ultra 2 comprises an acceleration sensor that, upon information and belief, is a triaxial accelerometer:

Sensors:

- Electrical heart sensor and ECG app[1]
- Third-generation optical heart sensor
- High and low heart rate notifications[1]
- Irregular rhythm notifications[2]
- Sleep stages
- Temperature sensing[3]
- Depth gauge ±1m accuracy and app
- Water temperature sensor
- Compass with Waypoints and Backtrack
- Always-on altimeter
- High-g accelerometer
- High dynamic range gyroscope
- Ambient light sensor

[35]

86. The Apple Watch Ultra 2 comprises a chronograph. The Apple Watch Ultra 2 comprises a belt (*e.g.*, wristband). The Apple Watch Ultra 2 comprises a display (the always-on retina display).[36]

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[34] https://support.apple.com/kb/SP906?locale=en_US

[35] https://support.apple.com/kb/SP906?locale=en_US

[36] https://www.apple.com/apple-watch-ultra-2/?afid=p238%7CsfkfRV8pK-dc_mtid_20925qtb42335_pcrid_686763229403_pgrid_155088240124_pexid__&cid=wwa-us-kwgo-watch-slid---Brand-AppleWatchUltra2-WatchNewYear-

87. The Apple Watch Ultra 2 and associated software comprises a digital processor (*e.g.*, the S9 SiP)[37] programmed for calculating, during or at the end of the run, biomechanical parameters of the stride of the runner on the basis of the acceleration data, of the distance and for the duration counted by the chronograph, and for displaying the parameters on the display, wherein the biomechanical parameters of the stride comprises the vertical oscillation of the center of gravity of the runner between a lowest position and a highest vertical position of the center of gravity of the runner, and includes the distance the center of gravity lowers and the distance the center of gravity elevates in a stride, and the sum of the lowering of the center of gravity of the runner from a first highest vertical position to a second lowest vertical position and of the elevation of the center of gravity of the runner from the second lowest vertical position to the first highest vertical position. For example, the Apple Watch Ultra 2, using its acceleration sensor, tracks a variety of running metrics regarding the user, including stride length, cadence, and other running information:

[37] *Id.*

Running metrics on Apple Watch Ultra

Workout views for Outdoor Run workouts

The Outdoor Run workout includes these metrics:

- *Metrics:* Current heart rate, rolling mile, average pace, distance
- *Metrics 2:* Running cadence, stride length, ground contact time, vertical oscillation
- *Heart Rate Zones:* Current heart rate, time in zone, heart rate average
- *Split:* Split number, split pace, split distance, current heart rate
- *Segment:* Segment number, segment pace, segment distance, current heart rate
- *Elevation:* Elevation profile over the last 30 minutes, elevation gained, current elevation
- *Power:* Power profile over the last 30 minutes, current power, running cadence
- *Activity rings:* Move, exercise, stand

About running form and running power

Apple Watch Ultra can help measure and display elements of your running form. They include the following:

- *Vertical oscillation:* The amount your torso moves vertically with each step while running, measured in centimeters (cm).
- *Ground contact time:* The length of time your foot is in contact with the ground when running, measured in milliseconds (ms).
- *Stride length:* The distance covered per running step, measured in meters (m).

Apple Watch Ultra can also help measure your running power during an Outdoor Run workout. Running power measures the output of the work you're doing when you run, measured in watts.

[38]

[38] https://support.apple.com/guide/watch-ultra/running-metrics-apd1f24d4d35/10.0/watchos/10.0

88. The Apple Watch Ultra 2 and associated software calculate the biomechanical parameters at each stride, and the digital processor is programmed for calculating an average, per stride, of the calculated biomechanical parameters of the stride. Upon information and belief, the Apple Watch Ultra 2 and associated software obtain the lowering of the center of gravity as a function of maximum bearing force, of contact time and of the runner's mass, wherein the maximum bearing force is multiplied by the square of the contact time and divided by the runner's mass and wherein the function includes at least a constant. For example, as shown above, the Apple Watch Ultra 2 tracks and calculates various running information, such as stride and running cadence.

89. Defendant has and continues to indirectly infringe one or more claims of the '457 Patent by knowingly and intentionally inducing others, including Apple customers and end-users, to directly infringe, either literally or under the doctrine of equivalents, by making, using, offering to sell, selling ,and/or importing into the United States products that include infringing technology, such as devices and associated software for analyzing the biomechanical parameters of the stride of a runner, which include a power source, accelerometer, chronograph, belt, display, and digital processor to measure parameters associated with a runner's stride.

90. Defendant, with knowledge that these products, or the use thereof, infringe the '457 Patent at least as of the date of this Complaint,[39] knowingly and intentionally induced, and continues to knowingly and intentionally induce, direct infringement of the '457 Patent by providing these products to end-users for use in an infringing manner. Alternatively, on

[39] Apple cited to the '457 Patent family in relation to one of its own U.S. patent applications. Apple, therefore, had knowledge of the '457 Patent as of the citation, which was in relation to U.S. Patent Application No.17/356,355, published on December 23, 2021, and is still pending before the U.S. Patent and Trademark Office.

information and belief, Defendant has adopted a policy of not reviewing the patents of others, including specifically those related to Defendant's specific industry, thereby remaining willfully blind to the Patent-in-Suit at least as early as the issuance of the Patents-in-Suit.

91. Defendant has induced infringement by others, including end-users, with the intent to cause infringing acts by others or, in the alternative, with the belief that there was a high probability that others, including end-users, infringe the '457 Patent, but while remaining willfully blind to the infringement. Defendant has and continues to induce infringement by its customers and end-users by supplying them with instructions on how to operate the infringing technology in an infringing manner, while also making publicly available information on the infringing technology via Defendant's website, product literature and packaging, and other publications.

92. Slyde has suffered damages as a result of Defendant's direct and indirect infringement of the '457 Patent in an amount to be proven at trial.

93. Slyde has suffered, and will continue to suffer, irreparable harm as a result of Defendant's infringement of the '457 Patent, for which there is no adequate remedy at law, unless Defendant's infringement is enjoined by this Court.

COUNT VI
(Infringement of the '018 Patent)

94. Paragraphs 1 through 31 are incorporated by reference as if fully set forth herein.

95. Slyde has not licensed or otherwise authorized Defendant to make, use, offer for sale, sell, or import any products that embody the inventions of the '018 Patent.

96. Defendant has and continues to directly infringe the '018 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, and/or importing into the United States products that satisfy each and every limitation of one or more claims of the '018 Patent. Such products include devices and

associated software for analyzing the biomechanical parameters of a stride of a runner, which include a power source, accelerometer, GPS receiver, chronograph, and digital processor programmed to measure parameters associated with a runner's stride including, but not limited to, the Apple Watch Ultra 2, among other products.

97. For example, Defendant has and continues to directly infringe at least claim 1 of the '018 Patent by making, using, offering to sell, selling, and/or importing into the United States products that include devices and associated software for analyzing the biomechanical parameters of a stride of a runner, which include a power source, accelerometer, GPS receiver, chronograph, and digital processor programmed to measure parameters associated with a runner's stride including, but not limited to, the Apple Watch Ultra 2, among other products.

98. The Apple Watch Ultra 2 comprises a device designed for analyzing the biomechanical parameters of the stride of a runner. For example, as shown above, the Apple Watch Ultra 2 tracks and calculates various running information, such as stride and running cadence:

Running metrics on Apple Watch Ultra

Workout views for Outdoor Run workouts

The Outdoor Run workout includes these metrics:

- *Metrics:* Current heart rate, rolling mile, average pace, distance
- *Metrics 2:* Running cadence, stride length, ground contact time, vertical oscillation
- *Heart Rate Zones:* Current heart rate, time in zone, heart rate average
- *Split:* Split number, split pace, split distance, current heart rate
- *Segment:* Segment number, segment pace, segment distance, current heart rate
- *Elevation:* Elevation profile over the last 30 minutes, elevation gained, current elevation
- *Power:* Power profile over the last 30 minutes, current power, running cadence
- *Activity rings:* Move, exercise, stand

About running form and running power

Apple Watch Ultra can help measure and display elements of your running form. They include the following:

- *Vertical oscillation:* The amount your torso moves vertically with each step while running, measured in centimeters (cm).
- *Ground contact time:* The length of time your foot is in contact with the ground when running, measured in milliseconds (ms).
- *Stride length:* The distance covered per running step, measured in meters (m).

Apple Watch Ultra can also help measure your running power during an Outdoor Run workout. Running power measures the output of the work you're doing when you run, measured in watts.

[40]

[40] https://support.apple.com/guide/watch-ultra/running-metrics-apd1f24d4d35/10.0/watchos/10.0

99. The Apple Watch Ultra 2 comprises a self-sufficient electric power source. For example, as shown above, the Apple Watch Ultra 2 has a built-in rechargeable lithium-ion battery.[41]

100. The Apple Watch Ultra 2 comprises a triaxial accelerometer capable of supplying at least one sequence of acceleration data in at least the vertical direction whilst the runner travels a distance on a running course. For example, as shown above, the Apple Watch Ultra 2 has an acceleration sensor that, upon information and believe, is a triaxial accelerometer:

Sensors:

- Electrical heart sensor and ECG app[1]
- Third-generation optical heart sensor
- High and low heart rate notifications[1]
- Irregular rhythm notifications[2]
- Sleep stages
- Temperature sensing[3]
- Depth gauge ±1m accuracy and app
- Water temperature sensor
- Compass with Waypoints and Backtrack
- Always-on altimeter
- High-g accelerometer
- High dynamic range gyroscope
- Ambient light sensor

[42]

101. The Apple Watch Ultra 2 comprises a GPS receiver. For example, the Apple Watch Ultra 2 has a precision dual frequency GPS antenna:

[41] https://support.apple.com/kb/SP906?locale=en_US

[42] https://support.apple.com/kb/SP906?locale=en_US

Connectivity and Communication:

- Precision dual-frequency GPS: GPS, GNSS, Galileo and BeiDou
- LTE and UMTS[7]
- Wi-Fi 4 (802.11n)
- Bluetooth 5.3
- Second-generation Ultra Wideband chip[11]
- Apple Pay
- GymKit

[43]

102. The Apple Watch Ultra 2 comprises a chronograph. The Apple Watch Ultra 2 and associated software comprises a digital processor programmed for calculating, during or at the end of the run, biomechanical parameters of the stride of the runner, on the basis of said acceleration data, of a distance measured by the GPS receiver and the accelerometer, and of a duration counted by the chronograph, wherein the biomechanical parameters of the stride comprises a vertical oscillation of a center of gravity of the runner, and includes a distance the center of gravity lowers and a distance the center of gravity elevates in a stride, and a sum of the lowering and of the elevation of the center of gravity, and wherein the biomechanical parameters are calculated at each stride. For example, as shown above, the Apple Watch Ultra 2 uses both GPS and acceleration sensors to track running information about a user, including stride and running cadence.

103. The Apple Watch Ultra 2 and associated software comprises a digital processor programmed for calculating biomechanical parameters of the stride of the runner, wherein said digital processor is programmed for determining an anteroposterior direction during the run of the runner. The Apple Watch Ultra 2 and associated software comprises a digital processor programmed for calculating biomechanical parameters of the stride of the runner, wherein, upon information and belief, a sequence of acceleration data in the anteroposterior direction is measured

[43] *Id.*

by the accelerometer during the run and processed separately from the sequence of acceleration data in the vertical direction. The Apple Watch Ultra 2 and associated software comprises a digital processor programmed for calculating biomechanical parameters of the stride of said runner, wherein, upon information and belief, the digital processor is programmed for calculating, during or at the end of the run, the biomechanical parameters of the stride of said runner also on the basis of said acceleration data in said anteroposterior direction. For example, as shown above, the Apple Watch Ultra 2 uses both GPS and acceleration sensors to track running information about a user, including stride and running cadence.[44]

104. The Apple Watch Ultra 2 and associated software comprises a wireless interface for exchange of data with another data processing device (*e.g.*, a mobile phone with the Apple Application downloaded.)

105. Defendant has and continues to indirectly infringe one or more claims of the ’018 Patent by knowingly and intentionally inducing others, including Apple customers and end-users, to directly infringe, either literally or under the doctrine of equivalents, by making, using, offering to sell, selling, and/or importing into the United States products that include infringing technology, such devices and associated software for analyzing the biomechanical parameters of a stride of a runner, which include a power source, accelerometer, GPS receiver, chronograph, and digital processor programmed to measure parameters associated with a runner’s stride.

106. Defendant, with knowledge that these products, or the use thereof, infringe the ’018 Patent at least as of the date of this Complaint,[45] knowingly and intentionally induced, and

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[44] *See* https://support.apple.com/guide/watch-ultra/running-metrics-apd1f24d4d35/10.0/watchos/10.0

[45] Apple cited to the ’018 Patent family in relation to one of its own U.S. patent applications. Apple, therefore, had knowledge of the ’018 Patent as of the citation, which was in relation to U.S.

continues to knowingly and intentionally induce, direct infringement of the ’018 Patent by providing these products to end-users for use in an infringing manner. Alternatively, on information and belief, Defendant has adopted a policy of not reviewing the patents of others, including specifically those related to Defendant’s specific industry, thereby remaining willfully blind to the Patent-in-Suit at least as early as the issuance of the Patents-in-Suit.

107. Defendant has induced infringement by others, including end-users, with the intent to cause infringing acts by others or, in the alternative, with the belief that there was a high probability that others, including end-users, infringe the ’018 Patent, but while remaining willfully blind to the infringement. Defendant has and continues to induce infringement by its customers and end-users by supplying them with instructions on how to operate the infringing technology in an infringing manner, while also making publicly available information on the infringing technology via Defendant’s website, product literature and packaging, and other publications.

108. Slyde has suffered damages as a result of Defendant’s direct and indirect infringement of the ’018 Patent in an amount to be proven at trial.

109. Slyde has suffered, and will continue to suffer, irreparable harm as a result of Defendant’s infringement of the ’018 Patent, for which there is no adequate remedy at law, unless Defendant’s infringement is enjoined by this Court.

COUNT VII
(Infringement of the ’134 Patent)

110. Paragraphs 1 through 31 are incorporated by reference as if fully set forth herein.

111. Slyde has not licensed or otherwise authorized Defendant to make, use, offer for sale, sell, or import any products that embody the inventions of the ’134 Patent.

Patent Application No.17/356,355, published on December 23, 2021, and is still pending before the U.S. Patent and Trademark Office.

112. Defendant has and continues to directly infringe the ’134 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, and/or importing into the United States products that satisfy each and every limitation of one or more claims of the ’134 Patent. Such products include athletic performance monitoring devices with an accelerometer wirelessly connected to a user-worn device with a processing system to provide athletic performance information including, but not limited to, the Apple Watch Ultra 2, among other products.

113. For example, Defendant has and continues to directly infringe at least claim 1 of the ’134 Patent by making, using, offering to sell, selling, and/or importing into the United States products that include performance monitoring devices with an accelerometer wirelessly connected to a user-worn device with a processing system to provide athletic performance information including, but not limited to, the Apple Watch Ultra 2, among other products.

114. The Apple Watch Ultra 2 comprises an athletic performance monitoring device. The Apple Watch Ultra 2 comprises an accelerometer adapted to be worn by an athlete close to the center of gravity of the athlete. For example, the Apple Watch Ultra 2 includes, among other movement sensors, and acceleration sensor:

Sensors:

- Electrical heart sensor and ECG app[1]
- Third-generation optical heart sensor
- High and low heart rate notifications[1]
- Irregular rhythm notifications[2]
- Sleep stages
- Temperature sensing[3]
- Depth gauge ±1m accuracy and app
- Water temperature sensor
- Compass with Waypoints and Backtrack
- Always-on altimeter
- High-g accelerometer
- High dynamic range gyroscope
- Ambient light sensor

[46]

115. The Apple Watch Ultra 2 comprises a user-worn device with a processing system integral thereto, such that the processing system (*e.g.*, a mobile phone, such as an iPhone) can be worn by the athlete (*e.g.*, in an arm band, pouch, or pocket). The Apple Watch Ultra 2 comprises an accelerometer wherein the accelerometer is further configured such that it can wirelessly communicate acceleration data, relating to the acceleration of the athlete, to the processing system, and wherein the processing system is configured such that, during use, it requests acceleration data from the accelerometer only when a predefined event has occurred, and such that it can process the acceleration data it receives from the accelerometer to provide athletic performance information. For example, the Apple Watch Ultra 2 can track a user's running pace at certain intervals (*e.g.*, every mile or kilometer) to determine if they are on a pace set by the user:

[46] https://support.apple.com/kb/SP906?locale=en_US

Running metrics on Apple Watch Ultra

Workout views for Outdoor Run workouts

The Outdoor Run workout includes these metrics:

- *Metrics:* Current heart rate, rolling mile, average pace, distance
- *Metrics 2:* Running cadence, stride length, ground contact time, vertical oscillation
- *Heart Rate Zones:* Current heart rate, time in zone, heart rate average
- *Split:* Split number, split pace, split distance, current heart rate
- *Segment:* Segment number, segment pace, segment distance, current heart rate
- *Elevation:* Elevation profile over the last 30 minutes, elevation gained, current elevation
- *Power:* Power profile over the last 30 minutes, current power, running cadence
- *Activity rings:* Move, exercise, stand

About running form and running power

Apple Watch Ultra can help measure and display elements of your running form. They include the following:

- *Vertical oscillation:* The amount your torso moves vertically with each step while running, measured in centimeters (cm).
- *Ground contact time:* The length of time your foot is in contact with the ground when running, measured in milliseconds (ms).
- *Stride length:* The distance covered per running step, measured in meters (m).

Apple Watch Ultra can also help measure your running power during an Outdoor Run workout. Running power measures the output of the work you're doing when you run, measured in watts.

[47]

[47] https://support.apple.com/guide/watch-ultra/running-metrics-apd1f24d4d35/10.0/watchos/10.0

116. Defendant has and continues to indirectly infringe one or more claims of the ’134 Patent by knowingly and intentionally inducing others, including Apple customers and end-users, to directly infringe, either literally or under the doctrine of equivalents, by making, using, offering to sell, selling, and/or importing into the United States products that include infringing technology, such as performance monitoring devices with an accelerometer wirelessly connected to a user-worn device with a processing system to provide athletic performance information and associated software.

117. Defendant, with knowledge that these products, or the use thereof, infringe the ’134 Patent at least as of the date of this Complaint, knowingly and intentionally induced, and continues to knowingly and intentionally induce, direct infringement of the ’134 Patent by providing these products to end-users for use in an infringing manner. Alternatively, on information and belief, Defendant has adopted a policy of not reviewing the patents of others, including specifically those related to Defendant’s specific industry, thereby remaining willfully blind to the Patent-in-Suit at least as early as the issuance of the Patents-in-Suit.

118. Defendant has induced infringement by others, including end-users, with the intent to cause infringing acts by others or, in the alternative, with the belief that there was a high probability that others, including end-users, infringe the ’134 Patent, but while remaining willfully blind to the infringement. Defendant has and continues to induce infringement by its customers and end-users by supplying them with instructions on how to operate the infringing technology in an infringing manner, while also making publicly available information on the infringing technology via Defendant’s website, product literature and packaging, and other publications.

119. Slyde has suffered damages as a result of Defendant’s direct and indirect infringement of the ’134 Patent in an amount to be proven at trial.

120. Slyde has suffered, and will continue to suffer, irreparable harm as a result of Defendant's infringement of the '134 Patent, for which there is no adequate remedy at law, unless Defendant's infringement is enjoined by this Court.

COUNT VIII
(Infringement of the '809 Patent)

121. Paragraphs 1 through 31 are incorporated by reference as if fully set forth herein.

122. Slyde has not licensed or otherwise authorized Defendant to make, use, offer for sale, sell, or import any products that embody the inventions of the '809 Patent.

123. Defendant has and continues to directly infringe the '809 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, and/or importing into the United States products that satisfy each and every limitation of one or more claims of the '809 Patent. Such products include athletic performance monitoring devices with an accelerometer wirelessly connected to a user-worn device with a processing system to provide athletic performance information including, but not limited to, the Apple Watch Ultra 2, among other products.

124. For example, Defendant has and continues to directly infringe at least claim 20 of the '809 Patent by making, using, offering to sell, selling, and/or importing into the United States products that include performance monitoring devices with an accelerometer wirelessly connected to a user-worn device with a processing system to provide athletic performance information including, but not limited to, the Apple Watch Ultra 2, among other products.

125. The Apple Watch Ultra 2 comprises a wearable device arranged for providing to an athlete during a race, such as a running or a cycling race, at least one of: a race time prediction; a probability to achieve a target time at the end of the race; and/or an indication of whether the pace followed by the athlete is too fast, adequate, or too slow in order to achieve a target time. For

example, the Apple Watch Ultra 2, a user can set a pace for an outdoor run workout on a pre-set distance (*e.g.*, 5 miles). The Apple Watch Ultra 2, during the user's run, will show the user's average running pace, the user's current pace, and a graph demonstrating whether the user is ahead of or behind the pre-set pace.

> **Set a pace for an outdoor run workout**
>
> Choose a target pace for an outdoor run, and your Apple Watch Ultra shows if you're ahead or behind that pace.
>
> 1. Open the Workout app on your Apple Watch Ultra.
> 2. Turn the Digital Crown to scroll to Outdoor Run, then tap .
> 3. Tap Create Workout, then tap Pacer.
> 4. Adjust the distance—5 miles, for example—then tap Next.
> 5. Adjust the target time for running that distance, then tap Done.
>
> During your run, your Apple Watch Ultra shows your average pace and your current pace, and a graph shows whether you are ahead or behind your chosen pace.
>
> Your Apple Watch Ultra remembers your target pace across workouts. To change it, choose Outdoor Run, tap , tap in the Pacer tile, tap Distance • Time, then edit the distance and time.

[48]

126. The Apple Watch Ultra 2 comprises an inertial sensor and/or a positional sensor for measuring a plurality of intermediate times during said race. For example, the Apple Watch Ultra 2 comprises an accelerometer and GPS antennas.

[48] https://support.apple.com/guide/watch-ultra/complete-an-outdoor-run-workout-apdf2260a232/10.0/watchos/10.0

Sensors:

- Electrical heart sensor and ECG app[1]
- Third-generation optical heart sensor
- High and low heart rate notifications[1]
- Irregular rhythm notifications[2]
- Sleep stages
- Temperature sensing[3]
- Depth gauge ±1m accuracy and app
- Water temperature sensor
- Compass with Waypoints and Backtrack
- Always-on altimeter
- High-g accelerometer
- High dynamic range gyroscope
- Ambient light sensor

Connectivity and Communication:

- Precision dual-frequency GPS: GPS, GNSS, Galileo and BeiDou
- LTE and UMTS[7]
- Wi-Fi 4 (802.11n)
- Bluetooth 5.3
- Second-generation Ultra Wideband chip[11]
- Apple Pay
- GymKit

[49]

127. The Apple Watch Ultra 2 comprises a processing unit arranged for retrieving, based on said intermediate time and on previous races of other athletes, a race profile as non-linear function of time over distance (t=f(d)), and for determining said information based on said race profile (*e.g.*, the S9 SiP).[50] The Apple Watch Ultra 2 comprises a memory for storing a plurality of predefined race profiles. For example, the Apple Watch Ultra 2 can have an internal storage capacity of up to 64GB.

[49] https://support.apple.com/kb/SP906?locale=en_US

[50] https://www.apple.com/apple-watch-ultra-2/?afid=p238%7CsfkfRV8pK-dc_mtid_20925qtb42335_pcrid_686763229403_pgrid_155088240124_pexid__&cid=wwa-us-kwgo-watch-slid---Brand-AppleWatchUltra2-WatchNewYear-

Chip:

- S9 SiP with 64-bit dual-core processor
- 4-core Apple Neural Engine
- 64GB capacity [51]

128. The Apple Watch Ultra 2's processing unit is also configured to select among said plurality of predefined race profiles, the race profile that best corresponds to the race profile determined from said intermediate times. The Apple Watch Ultra 2's race profiles comprise a first starter race profile wherein said non-linear function represents a more rapid pace during an initial section than during a last section of the race. The Apple Watch Ultra 2's race profiles include a second starter race profile wherein said non-linear function represents a more rapid pace during a last section than during an initial section of the race.

129. For example, the Apple Watch Ultra 2 will save routes a user has run several times with minimal deviation in time. The user can then race against their previous times recorded on the route, and the Apple Watch Ultra 2 will indicate to the user whether they are ahead of or behind the time.

[51] https://support.apple.com/kb/SP906?locale=en_US

Use Race Route to race your last or best time

When running or cycling a route you do often, you can race against your last or best time. Routes are automatically generated and are available to you after you've repeated the same route with little to no deviation at least two or more times.

1. Open the Workout app on your Apple Watch.
2. Tap next to an Outdoor Run or Outdoor Cycle workout.
3. Tap the Race Route tile, then select Last or Personal Best.

   During the workout, your Apple Watch shows how far ahead or behind you are compared to the route you're racing as well as the remaining distance. If you deviate from the route, "Proceed To Route" appears on the screen until you return to the original route.

Available Race Routes appear as a suggested workout when you're close to the starting point of a route you've previously run. You can view all available routes by tapping Suggested, then selecting Route.[52]

130. Defendant has and continues to indirectly infringe one or more claims of the '809 Patent by knowingly and intentionally inducing others, including Apple customers and end-users, to directly infringe, either literally or under the doctrine of equivalents, by making, using, offering to sell, selling, and/or importing into the United States products that include infringing technology, such as performance monitoring devices with an accelerometer wirelessly connected to a user-worn device with a processing system to provide athletic performance information and associated software.

131. Defendant, with knowledge that these products, or the use thereof, infringe the '809 Patent at least as of the date of this Complaint, knowingly and intentionally induced, and continues to knowingly and intentionally induce, direct infringement of the '809 Patent by providing these products to end-users for use in an infringing manner. Alternatively, on information and belief, Defendant has adopted a policy of not reviewing the patents of others, including specifically those

[52] https://support.apple.com/guide/watch-ultra/complete-an-outdoor-run-workout-apdf2260a232/10.0/watchos/10.0

related to Defendant's specific industry, thereby remaining willfully blind to the Patent-in-Suit at least as early as the issuance of the Patents-in-Suit.

132. Defendant has induced infringement by others, including end-users, with the intent to cause infringing acts by others or, in the alternative, with the belief that there was a high probability that others, including end-users, infringe the '809 Patent, but while remaining willfully blind to the infringement. Defendant has and continues to induce infringement by its customers and end-users by supplying them with instructions on how to operate the infringing technology in an infringing manner, while also making publicly available information on the infringing technology via Defendant's website, product literature and packaging, and other publications.

133. Slyde has suffered damages as a result of Defendant's direct and indirect infringement of the '809 Patent in an amount to be proven at trial.

134. Slyde has suffered, and will continue to suffer, irreparable harm as a result of Defendant's infringement of the '809 Patent, for which there is no adequate remedy at law, unless Defendant's infringement is enjoined by this Court.

COUNT IX
(Infringement of the '696 Patent)

135. Paragraphs 1 through 31 are incorporated by reference as if fully set forth herein.

136. Slyde has not licensed or otherwise authorized Defendant to make, use, offer for sale, sell, or import any products that embody the inventions of the '696 Patent.

137. Defendant has and continues to directly infringe the '696 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, and/or importing into the United States products that satisfy each and every limitation of one or more claims of the '696 Patent. Such products include athletic performance monitoring devices with an accelerometer wirelessly connected to a user-worn device

with a processing system to provide athletic performance information including, but not limited to, the Apple Watch Ultra 2, among other products.

138. For example, Defendant has and continues to directly infringe at least claim 17 of the ’696 Patent by making, using, offering to sell, selling, and/or importing into the United States products that include performance monitoring devices with an accelerometer wirelessly connected to a user-worn device with a processing system to provide athletic performance information including, but not limited to, the Apple Watch Ultra 2, among other products.

139. The Apple Watch Ultra 2 comprises an accelerometer device for determining biomechanical parameters of the stride of a runner with a high accuracy, comprising: means for fastening the device to one wrist, to one upper arm, to the head or to one shoe; an accelerometer for measuring an initial sequence of acceleration data in at least the vertical direction, said initial sequence of acceleration data depending on the motion of the runner’s center of mass, and on extra-motions of the accelerometer device relative to the runner’s center of mass; a processing system containing a processor and a memory containing a program code arranged for: identifying in said initial sequence of acceleration data at least one frequency component caused by relative motion of the accelerometer device relative to the runner center of mass; attenuating said frequency component, so as to attenuate the component of acceleration due to said extra motions, so as to determine a modified sequence of acceleration data corresponding to the one that would be measured at the runner’s center of mass; determining said biomechanical parameters of the stride from said modified sequence of acceleration data.

140. Defendant has and continues to indirectly infringe one or more claims of the ’696 Patent by knowingly and intentionally inducing others, including Apple customers and end-users, to directly infringe, either literally or under the doctrine of equivalents, by making, using, offering

to sell, selling, and/or importing into the United States products that include infringing technology, such as performance monitoring devices with an accelerometer wirelessly connected to a user-worn device with a processing system to provide athletic performance information and associated software.

141. Defendant, with knowledge that these products, or the use thereof, infringe the '696 Patent at least as of the date of this Complaint, knowingly and intentionally induced, and continues to knowingly and intentionally induce, direct infringement of the '696 Patent by providing these products to end-users for use in an infringing manner. Alternatively, on information and belief, Defendant has adopted a policy of not reviewing the patents of others, including specifically those related to Defendant's specific industry, thereby remaining willfully blind to the Patent-in-Suit at least as early as the issuance of the Patents-in-Suit.

142. Defendant has induced infringement by others, including end-users, with the intent to cause infringing acts by others or, in the alternative, with the belief that there was a high probability that others, including end-users, infringe the '696 Patent, but while remaining willfully blind to the infringement. Defendant has and continues to induce infringement by its customers and end-users by supplying them with instructions on how to operate the infringing technology in an infringing manner, while also making publicly available information on the infringing technology via Defendant's website, product literature and packaging, and other publications.

143. Slyde has suffered damages as a result of Defendant's direct and indirect infringement of the '696 Patent in an amount to be proven at trial.

144. Slyde has suffered, and will continue to suffer, irreparable harm as a result of Defendant's infringement of the '696 Patent, for which there is no adequate remedy at law, unless Defendant's infringement is enjoined by this Court.

COUNT X
(Infringement of the ’391 Patent)

145. Paragraphs 1 through 31 are incorporated by reference as if fully set forth herein.

146. Slyde has not licensed or otherwise authorized Defendant to make, use, offer for sale, sell, or import any products that embody the inventions of the ’391 Patent.

147. Defendant has and continues to directly infringe the ’391 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, and/or importing into the United States products that satisfy each and every limitation of one or more claims of the ’391 Patent. Such products include devices and associated software for analyzing the biomechanical parameters of a stride of a runner, which include a power source, accelerometer, GPS receiver, chronograph, and digital processor programmed to measure parameters associated with a runner’s stride including, but not limited to, the Apple Watch Ultra 2, among other products.

148. For example, Defendant has and continues to directly infringe at least claim 1 of the ’391 Patent by making, using, offering to sell, selling, and/or importing into the United States products that include devices and associated software for analyzing the biomechanical parameters of a stride of a runner, which include a power source, accelerometer, GPS receiver, chronograph, and digital processor programmed to measure parameters associated with a runner’s stride including, but not limited to, the Apple Watch Ultra 2, among other products.

149. The Apple Watch Ultra 2 performs a method for analyzing biomechanical parameters of a runner’s stride using an electrically autonomous device. The Apple Watch Ultra 2 comprises a self-sufficient electric power source. For example, as shown above, the Apple

Watch Ultra 2 has a built-in rechargeable lithium-ion battery.[53]

150. The Apple Watch Ultra 2 comprises a triaxial accelerometer capable of supplying at least one sequence of acceleration data in at least the vertical direction whilst the runner travels a distance on a running course. For example, as shown above, the Apple Watch Ultra 2 has an acceleration sensor that, upon information and believe, is a triaxial accelerometer:

Sensors:

- Electrical heart sensor and ECG app[1]
- Third-generation optical heart sensor
- High and low heart rate notifications[1]
- Irregular rhythm notifications[2]
- Sleep stages
- Temperature sensing[3]
- Depth gauge ±1m accuracy and app
- Water temperature sensor
- Compass with Waypoints and Backtrack
- Always-on altimeter
- High-g accelerometer
- High dynamic range gyroscope
- Ambient light sensor

[54]

151. The Apple Watch Ultra 2 comprises a GPS receiver. For example, the Apple Watch Ultra 2 has a precision dual frequency GPS antenna:

[53] https://support.apple.com/kb/SP906?locale=en_US

[54] https://support.apple.com/kb/SP906?locale=en_US

Connectivity and Communication:

- Precision dual-frequency GPS: GPS, GNSS, Galileo and BeiDou
- LTE and UMTS[7]
- Wi-Fi 4 (802.11n)
- Bluetooth 5.3
- Second-generation Ultra Wideband chip[11]
- Apple Pay
- GymKit

[55]

152. The Apple Watch Ultra 2 comprises a chronograph. The Apple Watch Ultra 2 and associated software perform the step of measuring a sequence of acceleration data according to at least the vertical direction by said triaxial accelerometer while the runner travels said distance on said running course, said distance being measured by said triaxial accelerometer or by said GPS receiver. For example, as shown above, the Apple Watch Ultra 2 tracks and calculates various running information, such as stride and running cadence:

[55] *Id.*

Running metrics on Apple Watch Ultra

Workout views for Outdoor Run workouts

The Outdoor Run workout includes these metrics:

- *Metrics:* Current heart rate, rolling mile, average pace, distance
- *Metrics 2:* Running cadence, stride length, ground contact time, vertical oscillation
- *Heart Rate Zones:* Current heart rate, time in zone, heart rate average
- *Split:* Split number, split pace, split distance, current heart rate
- *Segment:* Segment number, segment pace, segment distance, current heart rate
- *Elevation:* Elevation profile over the last 30 minutes, elevation gained, current elevation
- *Power:* Power profile over the last 30 minutes, current power, running cadence
- *Activity rings:* Move, exercise, stand

About running form and running power

Apple Watch Ultra can help measure and display elements of your running form. They include the following:

- *Vertical oscillation:* The amount your torso moves vertically with each step while running, measured in centimeters (cm).
- *Ground contact time:* The length of time your foot is in contact with the ground when running, measured in milliseconds (ms).
- *Stride length:* The distance covered per running step, measured in meters (m).

Apple Watch Ultra can also help measure your running power during an Outdoor Run workout. Running power measures the output of the work you're doing when you run, measured in watts.

[56]

[56] https://support.apple.com/guide/watch-ultra/running-metrics-apd1f24d4d35/10.0/watchos/10.0

153. The Apple Watch Ultra 2 performs the step of, during or at the end of the run, computing by said digital processor biomechanical parameters of the stride on the basis of said acceleration data, wherein said biomechanical parameters include a stiffness, computed based on a maximum bearing force, wherein a regularity index is computed based on a dispersion of a reactivity, said reactivity being computed as the ratio between the flight time and the contact time, the flight time corresponding to the time interval between the moments when one foot of the runner takes off and where the same foot is in contact with the ground, the contact time corresponding to the time interval between the moments when the foot is in contact with the ground and where the same foot re-takes off.

154. The Apple Watch Ultra 2 and associated software comprises a digital processor programmed for calculating, during or at the end of the run, biomechanical parameters of the stride of the runner, on the basis of said acceleration data, of a distance measured by the GPS receiver and the accelerometer, and of a duration counted by the chronograph, wherein the biomechanical parameters of the stride comprises a vertical oscillation of a center of gravity of the runner, and includes a distance the center of gravity lowers and a distance the center of gravity elevates in a stride, and a sum of the lowering and of the elevation of the center of gravity, and wherein the biomechanical parameters are calculated at each stride. For example, as shown above, the Apple Watch Ultra 2 uses both GPS and acceleration sensors to track running information about a user, including stride and running cadence.[57]

155. Defendant has and continues to indirectly infringe one or more claims of the ’391 Patent by knowingly and intentionally inducing others, including Apple customers and end-users,

[57] *See* https://support.apple.com/guide/watch-ultra/running-metrics-apd1f24d4d35/10.0/watchos/10.0

to directly infringe, either literally or under the doctrine of equivalents, by making, using, offering to sell, selling, and/or importing into the United States products that include infringing technology, such devices and associated software for analyzing the biomechanical parameters of a stride of a runner, which include a power source, accelerometer, GPS receiver, chronograph, and digital processor programmed to measure parameters associated with a runner's stride.

156. Defendant, with knowledge that these products, or the use thereof, infringe the '391 Patent at least as of the date of this Complaint,[58] knowingly and intentionally induced, and continues to knowingly and intentionally induce, direct infringement of the '391 Patent by providing these products to end-users for use in an infringing manner. Alternatively, on information and belief, Defendant has adopted a policy of not reviewing the patents of others, including specifically those related to Defendant's specific industry, thereby remaining willfully blind to the Patent-in-Suit at least as early as the issuance of the Patents-in-Suit.

157. Defendant has induced infringement by others, including end-users, with the intent to cause infringing acts by others or, in the alternative, with the belief that there was a high probability that others, including end-users, infringe the '391 Patent, but while remaining willfully blind to the infringement. Defendant has and continues to induce infringement by its customers and end-users by supplying them with instructions on how to operate the infringing technology in an infringing manner, while also making publicly available information on the infringing technology via Defendant's website, product literature and packaging, and other publications.

[58] Apple cited to the '018 Patent family in relation to one of its own U.S. patent applications. Apple, therefore, had knowledge of the '018 Patent as of the citation, which was in relation to U.S. Patent Application No.17/356,355, published on December 23, 2021, and is still pending before the U.S. Patent and Trademark Office.

158. Slyde has suffered damages as a result of Defendant's direct and indirect infringement of the '391 Patent in an amount to be proven at trial.

159. Slyde has suffered, and will continue to suffer, irreparable harm as a result of Defendant's infringement of the '391 Patent, for which there is no adequate remedy at law, unless Defendant's infringement is enjoined by this Court.

COUNT XI
(Infringement of the '905 Patent)

160. Paragraphs 1 through 31 are incorporated by reference as if fully set forth herein.

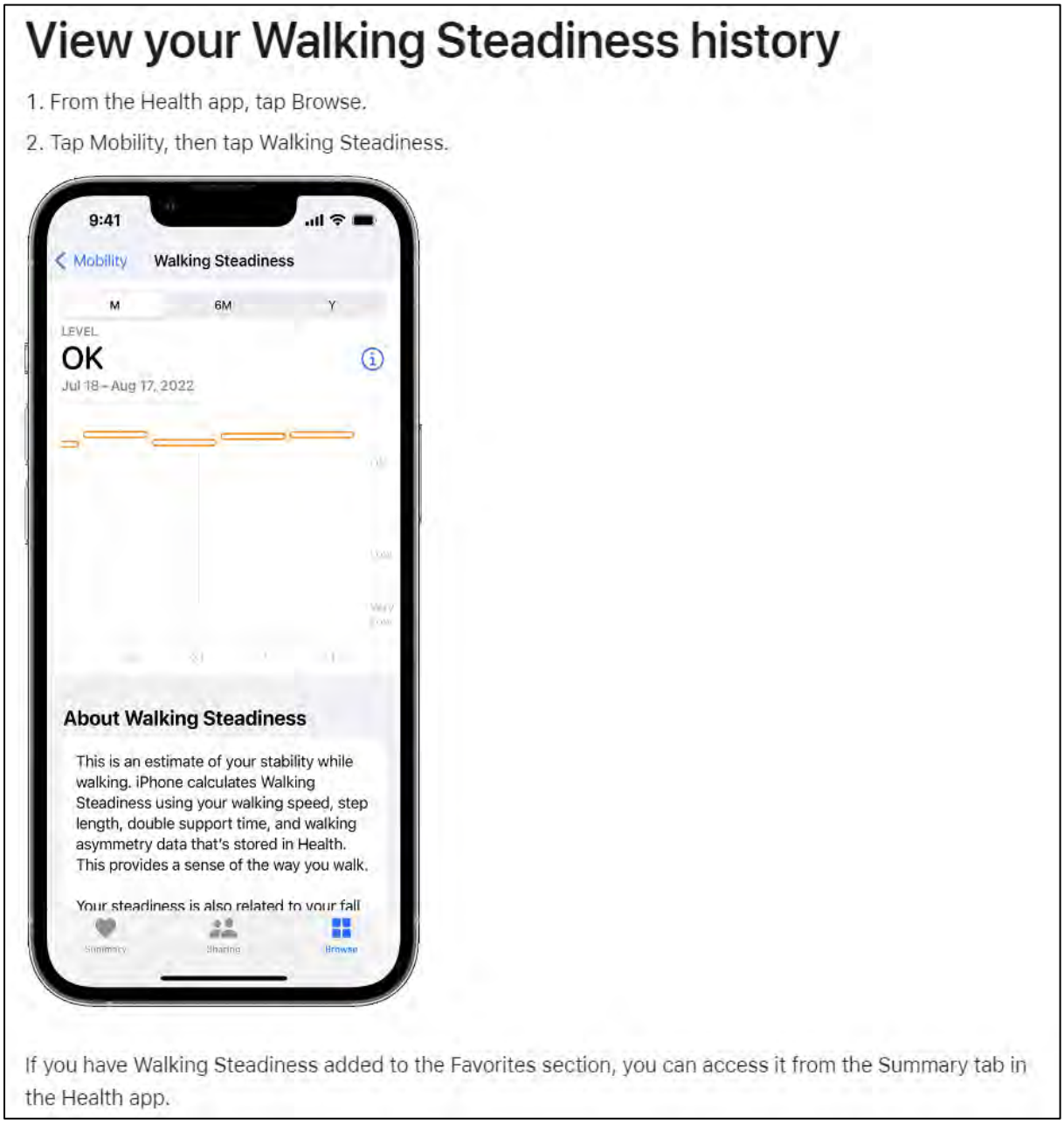
161. Slyde has not licensed or otherwise authorized Defendant to make, use, offer for sale, sell, or import any products that embody the inventions of the '905 Patent.

162. Defendant has and continues to directly infringe the '905 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, and/or importing into the United States products that satisfy each and every limitation of one or more claims of the '905 Patent. Such products include athletic performance monitoring devices with an accelerometer with a processing system to provide athletic performance information including, but not limited to, the Apple iPhone 15 Pro Max, operating on iOS, among other products.

163. For example, Defendant has and continues to directly infringe at least claim 1 of the '905 Patent by making, using, offering to sell, selling, and/or importing into the United States products that include performance monitoring devices with an accelerometer with a processing system to track the steadiness of a user's stride including, but not limited to, the iPhone 15 Pro Max, among other products.

164. The iPhone 15 Pro Max performs a method for detecting asymmetries in a movement of a user. For example, the iPhone 15 Pro Max, among other processes, monitors a

user's stride steadiness:



[59]

165. The iPhone 15 Pro Max performs the step of fastening a device on the torso of said user, close to his/her center of gravity (*e.g.*, around the waist or on the arm, among other locations), said device being electrically self-sufficient (*e.g.*, a battery) and comprising a triaxial

[59] https://support.apple.com/en-us/102504

accelerometer for providing distinct acceleration sequence data along three distinct axis, and a digital processor (*e.g.*, the A17 Pro chip or other SoC and/or processor), wherein the digital processor is configured to calculate, on the basis of acceleration data, a plurality of biomechanical parameters, said plurality of biomechanical parameters: a stride regularity index of an exercise determined on the basis of said acceleration data, wherein said stride regularity index is determined based on dispersion of a reactivity, and wherein the reactivity is determined based on flight time and contact time, and wherein flight time and contact time are determined on the basis of said acceleration data; a fatigue level indicator determined on the basis of said regularity index. For example, the iPhone 15 Pro Max has a rechargeable battery, a digital processor (among other digital processors and SoCs), and an accelerometer:

Power and Battery[17]

Video playback Up to 23 hours	**Video playback** Up to 29 hours
Video playback (streamed) Up to 20 hours	**Video playback (streamed)** Up to 25 hours
Audio playback Up to 75 hours	**Audio playback** Up to 95 hours

Both models

Built-in rechargeable lithium-ion battery

MagSafe wireless charging up to 15W[18]

Qi2 wireless charging up to 15W[18]

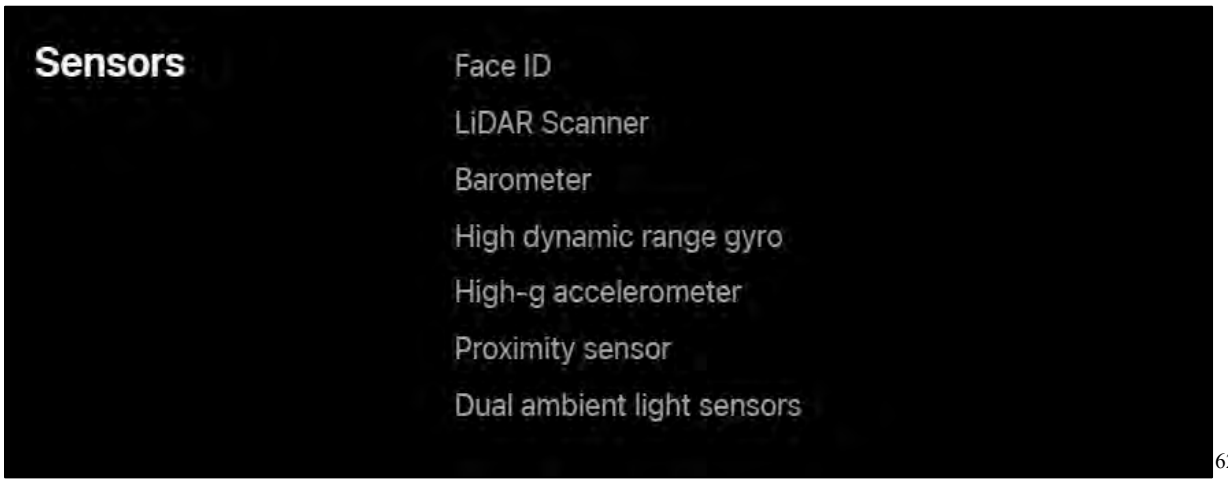
Qi wireless charging up to 7.5W[18]

Fast-charge capable:
Up to 50% charge in around 30 minutes[19] with 20W adapter or higher (available separately)

[60]

[60] https://www.apple.com/iphone-15-pro/specs/

[61]



[62]

166. For example, the iPhone 15 Pro Max, through the Health App and other fitness applications, as demonstrated above, show a graph of a user's stride. The graph tells the user whether they are within certain ranges of risk for falling based on the measured asymmetry of their stride.[63]

167. The iPhone 15 Pro Max performs the step of measuring a sequence of acceleration data along at least a vertical direction using said accelerometer, while the user performs at least one exercise (*e.g.*, walking). For example, the iPhone 15 Pro Max, using at least the accelerometer, measures various data regarding a user's stride, such as the double support time, walking speed, and walking step length, which includes at least vertical direction data:

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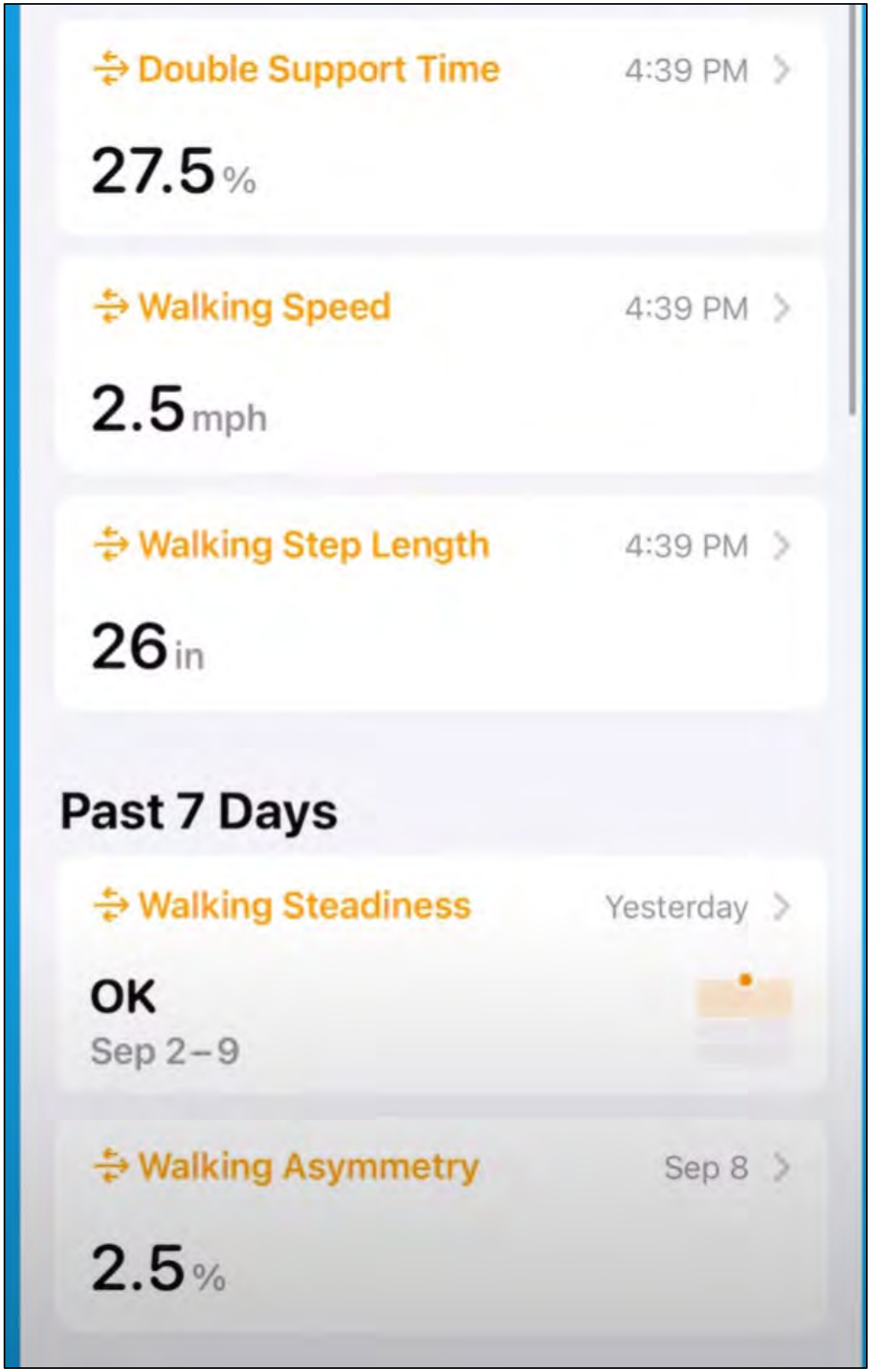
[61] *Id.*

[62] *Id.*

[63] https://support.apple.com/en-us/102504


Double Support Time
4:39 PM
27.5 %
Walking Speed
4:39 PM
2.5 mph
Walking Step Length
4:39 PM
26 in
Past 7 Days
Walking Steadiness
Yesterday
OK
Sep 2–9
Walking Asymmetry
Sep 8
2.5 %

64

168. The iPhone 15 Pro Max performs the step of, during or at the end of this exercise, having said processor calculate, on the basis of said acceleration data, said plurality of biomechanical parameters which allow at least one asymmetry in the movements of the user to be determined. For example, as demonstrated above, based on measuring at least double support time, walking speed, and walking step length, the iPhone 15 Pro Max can determine asymmetries in a user's stride.

169. Defendant has and continues to indirectly infringe one or more claims of the '905 Patent by knowingly and intentionally inducing others, including Apple customers and end-users, to directly infringe, either literally or under the doctrine of equivalents, by making, using, offering to sell, selling, and/or importing into the United States products that include infringing technology, such as performance monitoring devices with an accelerometer wirelessly connected to a user-worn device with a processing system to provide athletic performance information and associated software.

170. Defendant, with knowledge that these products, or the use thereof, infringe the '905 Patent at least as of the date of this Complaint,[65] knowingly and intentionally induced, and continues to knowingly and intentionally induce, direct infringement of the '905 Patent by providing these products to end-users for use in an infringing manner. Alternatively, on information and belief, Defendant has adopted a policy of not reviewing the patents of others, including specifically those related to Defendant's specific industry, thereby remaining willfully blind to the Patent-in-Suit at least as early as the issuance of the Patents-in-Suit.

[65] Apple cited to the '905 Patent family in relation to one of its own U.S. patent applications. Apple, therefore, had knowledge of the '905 Patent as of the citation, which was in relation to U.S. Patent Application No.17/356,355, published on December 23, 2021, and is still pending before the U.S. Patent and Trademark Office.

171. Defendant has induced infringement by others, including end-users, with the intent to cause infringing acts by others or, in the alternative, with the belief that there was a high probability that others, including end-users, infringe the '905 Patent, but while remaining willfully blind to the infringement. Defendant has and continues to induce infringement by its customers and end-users by supplying them with instructions on how to operate the infringing technology in an infringing manner, while also making publicly available information on the infringing technology via Defendant's website, product literature and packaging, and other publications.

172. Slyde has suffered damages as a result of Defendant's direct and indirect infringement of the '905 Patent in an amount to be proven at trial.

173. Slyde has suffered, and will continue to suffer, irreparable harm as a result of Defendant's infringement of the '905 Patent, for which there is no adequate remedy at law, unless Defendant's infringement is enjoined by this Court.

DEMAND FOR JURY TRIAL

Plaintiff hereby demands a jury for all issues so triable.

PRAYER FOR RELIEF

WHEREFORE, Slyde prays for relief against Defendant as follows:

a. Entry of judgment declaring that Defendant has directly and/or indirectly infringed one or more claims of each of the Patents-in-Suit;

b. An order pursuant to 35 U.S.C. § 283 permanently enjoining Defendant, their officers, agents, servants, employees, attorneys, and those persons in active concert or participation with them, from further acts of infringement of one or more of the Patents-in-Suit;

c. An order awarding damages sufficient to compensate Slyde for Defendant's infringement of the Patents-in-Suit, but in no event less than a reasonable royalty, together with

interest and costs;

d. Entry of judgment declaring that this case is exceptional and awarding Slyde its costs and reasonable attorney fees under 35 U.S.C. § 285; and

e. Such other and further relief as the Court deems just and proper.

Dated: May 6, 2024

Respectfully submitted,

/s/ Vincent J. Rubino, III

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