IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

APPLE INC., *Plaintiff*, v. MASIMO CORPORATION and SOUND UNITED, LLC, *Defendants*.	Civil Action No. **JURY TRIAL DEMANDED**

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Apple Inc. ("Apple"), for its complaint against Defendants Masimo Corporation ("Masimo") and Sound United, LLC ("Sound United") (together, "Defendants"), alleges as follows:

INTRODUCTION

1. Apple is world-renowned for creating innovative products that people love. Apple produces those innovative products through its significant investment in research and development in technology and product design. Apple's innovations have been recognized with thousands of patents globally.

2. In 2015, Apple released Apple Watch, a revolutionary consumer wearable device. Apple Watch pairs cutting-edge technology with a beautiful design and is made from the highest quality materials. As a result of Apple's investments and advances in consumer wearables, Apple Watch is the best-selling smart watch of all time. Apple protects these investments and advances through its intellectual property (IP) rights, including patents.

3. Masimo is a hospital equipment manufacturer that has never been in the consumer wearables business.[1] But recently, Masimo released its first watch, direct to consumers, called the Masimo W1. Rather than innovating and developing a product independently, Masimo copied Apple while filing lawsuits to try to prevent sales of Apple Watch.

Apple Watch	Masimo W1

4. Masimo's copying violates Apple's patent rights. Apple brings this action to stop Masimo's infringement.

[1] *See* Company Evolution: About Masimo, MASIMO CORP., https://www.masimo.com/company/masimo/evolution/ (last visited Oct. 13, 2022).

THE PARTIES

5. Plaintiff Apple is a California corporation with its principal place of business at One Apple Park Way, Cupertino, California 95014.

6. Defendant Masimo is a Delaware corporation with its principal place of business at 52 Discovery, Irvine, California 92618. Masimo has appointed the Corporation Service Company, 251 Little Falls Drive, Wilmington, Delaware 19808 as its registered agent for service of process.

7. Defendant Sound United is a Delaware limited liability company with its principal place of business at 5541 Fermi Court, Carlsbad, CA 92008. On information and belief, Sound United is a wholly owned subsidiary of Masimo. Sound United has appointed the Corporation Service Company, 251 Little Falls Drive, Wilmington, Delaware 19808 as its registered agent for service of process.

8. Joinder of Masimo and Sound United in this action and consolidation for trial is appropriate under 35 U.S.C. § 299. Apple asserts claims for relief jointly, severally, or in the alternative against Masimo and its wholly owned subsidiary Sound United arising from the making, using, importing into the United States, offering for sale, and/or selling of the same infringing product, the W1. Common questions of fact will arise in this action relating to Defendants' infringement and liability.

JURISDICTION AND VENUE

9. This Court has subject-matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a) because this action arises under the patent laws of the United States, 35 U.S.C. §§ 100 *et seq.*

10. This Court has personal jurisdiction over Defendants because Defendants are entities each organized and existing under the laws of the State of Delaware.

11. Venue is proper in this Court under 28 U.S.C. § 1400(b) because Defendants are entities each organized and existing under the laws of the State of Delaware, and therefore each resides in the District of Delaware.

BACKGROUND

12. Apple was founded in 1976. Since then, Apple has made countless significant contributions in a variety of fields, including computers, software, telecommunications, integrated circuits, user interfaces, and industrial design. Apple's successful products include not only wearables, but also smartphones, tablets, desktop and laptop computers, operating systems, music products, professional-grade audio and video production software, semiconductor chips, and more. The United States Patent and Trademark Office ("USPTO") has awarded thousands of patents to Apple for its contributions to science and the useful arts. Apple's patents include U.S. Patent Nos. 10,076,257; 10,627,783; 10,942,491; 10,987,054; 11,106,352; and 11,474,483 (the "Patents-in-Suit").

13. Defendants' accused products are one or more products that infringe the Patents-in-Suit, including the Masimo W1 device ("Device") and its charger ("Wireless Charger") (together, "W1").[2]

I. APPLE REVOLUTIONIZES WEARABLE TECHNOLOGY AND DESIGN

14. Apple released the first-generation Apple Watch in April 2015, and it quickly became the best-selling smart watch. Since then, new line ups of Apple Watch have been released with powerful new technology. In September 2022, Apple announced the newest generation of Apple Watch products, including Apple Watch Series 8, the latest Apple Watch SE, and the all-new Apple Watch Ultra.

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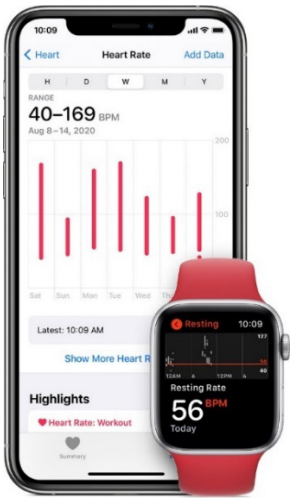
[2] Masimo W1 User's Guide at 7, *available at* https://www.masimopersonalhealth.com/pages/masimo-w1-support (last visited Oct. 13, 2022).

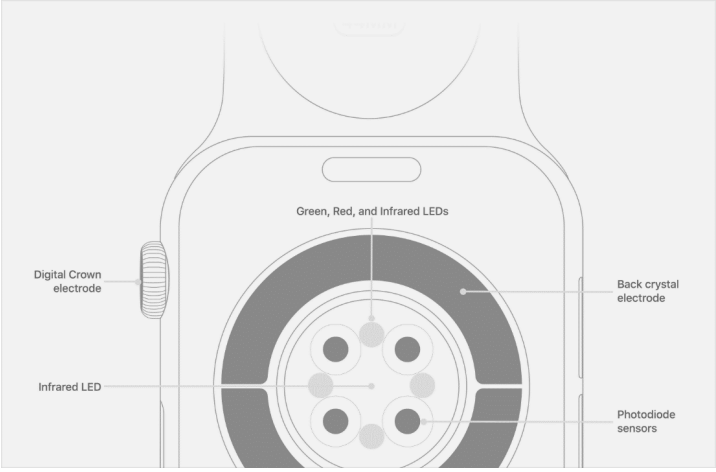
15. Apple Watch integrates seamlessly with popular Apple products such as the iPhone and expands their capabilities. It allows wearers to conveniently and intuitively access many of their favorite features. For example, users can receive and respond to notifications from their iPhone, place and answer phone calls, listen to music, download apps, and access features such as Apple Maps and Siri—all on a device conveniently located on the wearer's wrist. Apple Watch also uses this position on the wearer's wrist to introduce new capabilities, such as advanced fitness tracking and health metrics including heart health, sleep, women's health, and mobility. And features like Fall Detection, Crash Detection, and Emergency SOS can also help users call for help in the moment they need it. These features and others work in tandem with apps on the wearer's iPhone.



Health App and Apple Watch

16. Every Apple Watch includes a biosensor module on the back that rests on the wearer's wrist. The biosensor module contains LEDs, photodiodes, electrodes, and other components to enable measurement of health and wellness metrics such as heart rate, blood oxygen, and even electrocardiogram (ECG). The technology that enables these features is paired with a unique, eye-pleasing design and made of high-quality materials. Apple has updated the biosensor module and its design several times.

L to R: Apple Watch (first generation), Apple Watch Series 4, and Apple Watch Series 7



Apple Watch biosensor diagram

17. Apple Watch also contains a receive coil that inductively couples to a transmit coil in the charging "puck" to wirelessly charge Apple Watch's battery. The puck contains an internal permanent magnet that enables the user to connect and disconnect Apple Watch from its charger easily and effortlessly. Implementing wireless charging allowed Apple to greatly simplify not only the charging process, but also reduce its footprint.

Apple Watch Magnetic Charging Cable

Charging an Apple Watch

18. Apple has patented these and other features.

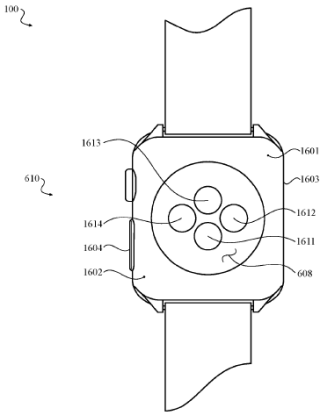


FIG. 16

U.S. Patent No. 10,627,783
Figure 16

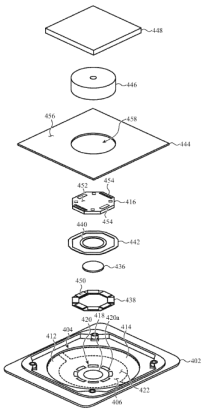


FIG. 4C

U.S. Patent No. 10,987,054
Figure 4C

19. The success of Apple's products is attributable not only to Apple's technological innovations, but also to Apple's careful attention to industrial design. Apple Watch is no exception. Apple's products, including Apple Watch, are meticulously designed to be eye-pleasing. Aesthetic themes and cues run through all of Apple's products, from the iPhone to Apple Watch.

20. Apple's products use the highest quality materials, such as high-grade aluminum, composites, ceramics, glass, and sapphire. Apple offers Apple Watch in several finishes and offers a variety of bands, straps, and loops to suit each wearer's preference. Apple also offers Apple Watch in collaboration with high-profile brands such as Hermès and Nike. Apple Watch's aesthetic appeal to a wide variety of consumer tastes is important to the product's success.

Apple Watch Nike

Apple Watch Hermès

Apple Watch Bands

II. MASIMO TAKES UNFAIR SHORTCUTS FOR ITS WATCH

21. Since its founding in 1989, Masimo has been a hospital equipment company.[3] Until recently, Masimo never disclosed an intent to offer consumer wearables to the general public.[4] In fact, as detailed below, Masimo had never even disclosed its intent to sell a consumer wearable until after it began its litigation campaign against Apple targeting Apple Watch—which came many years after Apple Watch revolutionized the consumer watch market.

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[3] *See* Company Evolution: About Masimo, MASIMO CORP., https://www.masimo.com/company/masimo/evolution/ (last visited Oct. 13, 2022).
[4] *Id.*

22. Teams across Apple worked for years to develop Apple Watch into a successful, innovative, and appealing product. In contrast, Masimo copied from Apple Watch and is free-riding on Apple's hard work. Rather than develop its own innovations to make its W1 attractive to consumers, Masimo copied Apple Watch and brought carefully timed lawsuits to try to kick Apple out of the market while Masimo and its recently acquired consumer division, Sound United, launched the W1.

23. Masimo is and has always been a hospital equipment company. Its product offerings are primarily directed at medical professionals for use in hospitals or other caregiving settings, such as the following products:

Masimo Radical
(2000)

Masimo Rad-9
(2006)

Masimo Rad-87
(2008)

Radical-7
(2011)

Root
(2014)

Rad-97
(2017)

24. In fact, the entire "Company Evolution" on Masimo's website is devoted to showcasing hospital products, and not consumer wearables.[5] Masimo portrays its 33-year history as devoted to hospital products and the patient sensors that go with those products.[6]

25. Masimo's business revolves around selling hospital products that use disposable biometric sensors, and the subsequent sale of additional disposable sensors.[7] For this reason, Masimo touts its "installed base" of hospital equipment in its annual reports.[8] Masimo derives the majority of its revenue from, and is "highly dependent" on, its Masimo SET platform, Masimo rainbow SET platform and related products, which Masimo describes as its "primary product offerings."[9]

26. For years, Masimo's focus was clinical-grade pulse oximetry. Following years of litigation, Masimo received a steady stream of patent licensing revenue from Nellcor (Medtronic),

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[5] Company Evolution: About Masimo, MASIMO CORP., https://www.masimo.com/company/masimo/evolution/ (last visited Oct. 13, 2022).

[6] *Id.*

[7] *See, e.g.*, Masimo (MASI) Q3 2021 Earnings Call Transcript, MOTLEY FOOL TRANSCRIBING (Oct. 27, 2021), https://www.fool.com/earnings/call-transcripts/2021/10/27/masimo-masi-q3-2021-earnings-call-transcript/ ("The year-over-year improvement was primarily driven by a more favorable revenue mix as we delivered strong revenue performance from our higher margin sensors in combination with the anticipated decline in sales for our lower margin technology boards and instruments."); Kenneth Squire, *How Activist Politan Capital May Find An Opportunity to Trim Costs, Build Value at Masimo*, CNBC (Aug 20, 2022), https://www.cnbc.com/2022/08/20/how-activist-politan-capital-may-find-an-opportunity-to-trim-costs-build-value-at-masimo.html. ("This is a razor/razor blade business model with the devices using single-use sensors pursuant to five-year contracts resulting in 80% recurring revenue for Masimo.").

[8] *E.g.*, Masimo Corporation, *2016 Annual Report* at 7, *available at* https://investor.masimo.com/financials/annual-reports/default.aspx (last visited Oct. 13, 2022).

[9] Masimo Corporation, *Fiscal Year 2021 Form 10-K Annual Report*, at 38, *available at* https://investor.masimo.com/financials/sec-filings/sec-filings-details/default.aspx?FilingId=15576856 (last visited Oct. 13, 2022) [hereinafter "Masimo F.Y. 2021 10-K"].

its only major competitor, and other companies.[10] But around 2019, Masimo's patents and license agreements began to expire, and the royalty revenue dried up.[11]

	Year Ended January 2, 2021	Year Ended December 28, 2019	Year Ended December 29, 2018	Year Ended December 30, 2017[(1)]	Year Ended December 31, 2016[(1)]
	(in thousands, except per share amounts)				
Statement of Operations:					
Revenue:					
Product	$ 1,143,744	$ 936,408	$ 829,874	$ 738,242	$ 673,962
Royalty and other revenue	—	1,429	28,415	52,006	38,936
Total revenue	1,143,744	937,837	858,289	790,248	712,898

27. As Masimo told investors in its most recent Form 10-K, "[c]ertain of our patents related to our technologies have begun to expire. Upon the expiration of our issued or licensed patents, we generally lose some of our rights to exclude competitors from making, using, selling

[10] *See, e.g.*, *Court Upholds $134.5 Million Verdict Against Nellcor for Infringement of Masimo's Patents*, MASIMO CORP. (July 16, 2004), https://www.masimo.com/company/news/news-media/2004/#news-2f5e00c6-d7af-4d79-92bb-a3345ea49465; *Masimo and Nellcor Announce Settlement of Patent Litigation*, MASIMO CORP. (Jan. 23, 2006), https://www.masimo.com/company/news/news-media/2006#news-76f2c84e-7857-4cff-a364-8a7af3b2221e ($330 million payments and ongoing royalty); *Masimo and Dolphin Announce Settlement of Patent Dispute*, MASIMO CORP. (April 27, 2006), https://www.masimo.com/company/news/news-media/2006#news-ce7f5903-c045-4afa-8c90-4e81ca557fb5; *Masimo and Respironics Announce an Expanded Relationship, the Adoption of Masimo Rainbow SET Pulse CO-Oximetry, and Settlement of Patent Dispute*, MASIMO CORP. (August 1, 2006), https://www.masimo.com/company/news/news-media/2006#news-0cac0538-250f-4c11-b412-217e20006e5e; *Court Upholds Award of $467 Million to Masimo for Philips' Patent Infringement*, MASIMO CORP. (May 19, 2015), https://www.masimo.com/company/news/news-media/2015/#news-3497b147-8519-44ce-8b05-c7c14db3d95d; *Masimo Announces Amendment to Nellcor Royalty Agreement*, MASIMO CORP. (Sept. 2, 2016), https://www.masimo.com/company/news/news-media/2016/#news-0f61fb9f-0af5-4245-b4e2-a329ad0562a6 ("Medtronic will continue to pay Masimo a royalty of 7.75% for its current pulse oximetry products sold in the United States through October 6, 2018. . ."); *Philips and Masimo Sign Multi-Year Business Partnership Agreement in Patient Monitoring and Select Therapy Solutions*, MASIMO CORP. (Nov. 7, 2016), https://www.masimo.com/company/news/news-media/2016/#news-3c555bf2-2e14-4eaa-abc0-5b723675c1e9 ("Agreement ends all pending lawsuits between the two companies and . . . includes a cash payment of USD 300 million by Philips to Masimo.").

[11] Masimo Corporation, *Fiscal Year 2020 Form 10-K Annual Report*, at 66, *available at* https://investor.masimo.com/financials/sec-filings/sec-filings-details/default.aspx?FilingId=14736544 (last visited Oct. 18, 2022) [hereinafter "Masimo F.Y. 2020 10-K"].

or importing products using the technology. . ."[12] For the first time in a long while, Masimo would have to compete without the benefit of patent exclusivity.

28. Around the same time, Masimo noticed that the nature of health technology was changing—driven by innovative companies like Apple—to evince a new focus on consumer health and general well-being.[13] In 2018, Masimo noted to its investors that leading technology companies, including specifically Apple, had expanded into consumer health technology.[14] At the close of its fiscal year 2020—the year Masimo sued Apple in federal court—Masimo again referenced Apple's success in health-oriented wearables in its 10-K and remarked: "If we are unable to successfully compete against them, our financial performance could decline."[15] And in 2021—the year Masimo sued Apple at the ITC—it again referenced Apple, this time specifically highlighting Apple Watch Series 6 and Series 7.[16] It told its investors pointedly: "To effectively compete, we may need to expand our product offerings and distribution channels. . ."[17] Seeing Apple's continued success, Masimo tried to pivot to focus on the consumer to stay competitive. But Masimo, having focused only on clinical settings for decades, had already fallen behind.

29. Masimo had never designed a consumer wearable.[18] Delivering a high-quality product to market from scratch would take years of investment and innovation, but Masimo, already behind the curve, wanted to get there faster. As explained below, Masimo took shortcuts.

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[12] Masimo F.Y. 2021 10-K at 43.
[13] Masimo F.Y. 2021 10-K at 39.
[14] Masimo Corporation, *Fiscal Year 2018 Form 10-K Annual Report*, at 34, *available at* https://investor.masimo.com/financials/sec-filings/sec-filings-details/default.aspx?FilingId=13255271 (last visited Oct. 18, 2022).
[15] Masimo F.Y. 2020 10-K at 33.
[16] Masimo F.Y. 2021 10-K at 39.
[17] *Id.*
[18] Prior to the W1, Masimo's only consumer products were consumer versions of its fingertip pulse oximeters (iSpO2 and MightySat), which "account for a very, very tiny portion of [Masimo's]

30. In January 2020, Masimo brought a patent lawsuit against Apple targeting Apple Watch.[19] In that case, access to Apple's confidential information and source code for various models of Apple Watch, including details of its construction and functionality, was provided to a board member of Cercacor—a spin-off from Masimo that focuses on research and development.[20] That was two years before Masimo released the W1 to the general public.

31. In June 2021, Masimo filed a complaint before the U.S. International Trade Commission (ITC), an administrative agency, seeking an order that bans Apple Watch from being imported into the United States.[21] According to the public complaint, Masimo's ITC lawsuit claimed that Apple Watch allegedly infringed Masimo patents related to pulse oximetry.[22] But in the months that followed, a more nefarious potential strategy of this lawsuit came to light: to remove Apple Watch from the market and make way for Masimo's own watch.

32. In a Statement of Public Interest—a filing required to bring an ITC lawsuit—Masimo told the ITC that "no public interest concerns exist" with banning importation of Apple Watch. For example, Masimo claimed that the ban would not raise public health, safety, or welfare concerns because "Masimo offers ***pulse oximetry devices*** with reliable ***medical grade***

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overall business." *MASI – Masimo Corp. at Deutsche Bank Health Care Conference*, THOMSON REUTERS STREETEVENTS (May 8, 2018) (statement of Eli Kammerman, VP of Business Development & Investor Relations at Masimo), Exhibit E.

[19] *Masimo Corp. v. Apple Inc.*, Complaint, D.I. 1, No. 20-cv-48-JVS-JDE (C.D. Cal.).

[20] *See Masimo Corp. v. Apple Inc.*, D.I. 61-1 at 36–49, No. 20-cv-48-JVS-JDE (C.D. Cal.); *see also id.* D.I. 67 ¶ 9.3. Masimo and Cercacor retain a close relationship and have a significant technology cross-license agreement. Masimo's CEO and Chairman Joe Kiani is also the CEO and Chairman of Cercacor. *See* Masimo F.Y. 2021 10-K at 25; *see also* Who We Are, CERCACOR LABORATORIES, *available at* https://www.cercacor.com/pages/about-us-team (last visited Oct. 13, 2022) ("[Masimo CEO] Joe Kiani has ultimate oversight of [Cercacor's] marketing, product development, staffing and other key functions.").

[21] Complaint (Public Version) at ¶ 7, *In the Matter of Certain Light-Based Physiological Measurement Devices and Components Thereof*, Inv. No. 337-TA-1276 (Int'l Trade Comm. Jun. 29, 2021) [hereinafter *ITC Action*].

[22] *Id.* ¶¶ 39–76.

measurements, directly to consumers."[23] Masimo also stated that "[e]ven if smartwatches were necessary for some important public interest function, Apple ***and other third parties*** can provide an adequate supply of alternatives to consumers."[24]

33. In its ITC complaint, Masimo identified an alleged "Masimo Watch" as a "domestic industry" product for four of its patents.[25] On information and belief, no commercial "Masimo Watch" existed at the time Masimo filed its ITC lawsuit in June 2021—rather, it was hastily developed during litigation.[26]

34. Masimo, while trying to block importation or sale of Apple Watch, was also secretly copying it. Masimo hid its copying until the W1 was ready for the public.

35. Masimo unveiled the W1 to the public in January 2022—with the ITC lawsuit ongoing—at a conference in Dubai. At the conference, Masimo executives demonstrated the W1 to attendees and gave interviews to the media.

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[23] Complainants' Statement on the Public Interest (Public Version) at 2–3, *ITC Action* (Jun. 29, 2021).
[24] *Id*. at 4.
[25] Order No. 32: Granting-in-Part and Denying-in-Part Respondent's Motion to Strike and Preclude Reliance on Complainants' Domestic Industry Contentions (Public Version) at 1–2, *ITC Action* (May 5, 2022).
[26] *See* Order No. 31: Denying Respondent's Motion For Sanctions (Public Version) at 2, *ITC Action* (April 28, 2022) (explaining Masimo "represented that 'a ***confidential sample*** of a Masimo Watch" existed); *id.* at 5-6 ("Complainants oppose the motion for sanctions, arguing that Apple's contentions are premised on an erroneous assumption that the domestic industry requirement requires a ***finished commercial product***."); *id.* at 8 ("[T]he Amended Complaint is equivocal on the issue of whether a domestic industry exists or is in the process of being established.").

Masimo W1 display at Arab Health 2022[27]

36. When the Masimo W1 became public, it was clear that Masimo had copied Apple. As more details emerged, it was clear the scope of that copying was expansive. In addition to copying Apple Watch's overall look and feel, the Masimo W1 appropriates specific patented features and functionalities from Apple Watch. Apple worked hard to develop innovative designs and features for Apple Watch. Masimo took shortcuts.

[27] Arab Health, *Masimo Talks to Arab Health TV (Nazih Darwish)*, YOUTUBE (Jan 24, 2022), https://www.youtube.com/watch?v=5KvcsFkxBvE (last accessed Oct. 13, 2022).

Apple Watch	Masimo W1

37. With the ITC lawsuit against Apple ongoing, Masimo bought Defendant Sound United to bring the W1 to market as quickly as possible. In February 2022, Masimo announced that it would acquire Sound United, "a leading innovator of premium, high-performance audio products for consumers,"[28] for $1.025 billion.[29] Masimo's stated reason for the acquisition, which closed in April 2022, was to "leverage Sound United's expertise across consumer channels to

[28] *Sound United Enters into Agreement to Be Acquired by Masimo Corporation*, SOUND UNITED (Feb. 15, 2022), https://www.soundunited.com/news/sound-united-enters-into-agreement-to-be-acquired-by-masimo-corporation.
[29] William White, *MASI Stock: The Masimo-Sound United Deal That Has Investors Scratching Their Heads*, INVESTORPLACE (Feb. 16, 2022), https://investorplace.com/2022/02/masi-stock-the-masimo-sound-united-deal-that-has-investors-scratching-their-heads/.

accelerate distribution of the combined company's expanding portfolio of consumer-facing healthcare products."[30] The CEO of Masimo stated on an earnings call in February 2022: "We like Sound United the most for several reasons. One, it's [sic] management team. Two, the distribution channel, that is essential to what we are doing as an important product for us which is the Masimo Watch."[31]

38. Masimo's sudden pivot into consumer wearables with a product that copied Apple Watch required consumer distribution channels that Masimo lacked. Masimo's stock fell 35% the day after it announced the Sound United acquisition.[32] Months later, news outlet CNBC reported that an "activist" investor had increased its holdings of Masimo, and CNBC questioned the motivation of Masimo's sudden move into consumer wearables: "But, now Masimo has launched its own W1 watch to compete with Apple. This feels more personal than fiduciary."[33]

39. Masimo released the W1 to the general public on August 31, 2022.[34] As shown below, the Masimo W1 infringes the Patents-in-Suit.

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[30] *Masimo Closes Acquisition of Sound United*, MASIMO CORP. (April 12, 2022), https://www.masimo.com/company/news/news-media/#4rtyy700d-7c03-9876-bt7u-8y57ktr7ull8n.

[31] Masimo (MASI) Q4 2021 Earnings Call Transcript, MOTLEY FOOL TRANSCRIBING (Feb. 15, 2022), https://www.fool.com/earnings/call-transcripts/2022/02/15/masimo-masi-q4-2021-earnings-call-transcript/.

[32] Ciara Linnane, *Medical Technology Company Masimo Stock Slides 35% After Unveiling $1 Billion Acquisition of Sound United*, MARKETWATCH (Feb. 16, 2022), https://www.marketwatch.com/story/medical-technology-company-masimo-stock-slides-35-after-unveiling-1-billion-acquisition-of-sound-united-2022-02-16; William White, *MASI Stock: The Masimo-Sound United Deal That Has Investors Scratching Their Heads*, INVESTORPLACE (Feb. 16, 2022) https://investorplace.com/2022/02/masi-stock-the-masimo-sound-united-deal-that-has-investors-scratching-their-heads/.

[33] Kenneth Squire, *How Activist Politan Capital May Find An Opportunity to Trim Costs, Build Value at Masimo*, CNBC (Aug 20, 2022), https://www.cnbc.com/2022/08/20/how-activist-politan-capital-may-find-an-opportunity-to-trim-costs-build-value-at-masimo.html.

[34] *Medical Pioneer Masimo Announces the Full Market Consumer Release of the Masimo W1™, the First Watch to Offer Accurate, Continuous Health Data*, MASIMO CORP. (Aug. 31, 2022),

40. Masimo carefully studied Apple's IP for its litigation campaign. Masimo cited numerous Apple Watch patents in its complaints in federal court[35]—including, for example, a patent in the same family as Apple's '054 Patent—well before willfully copying Apple Watch. On information and belief, Masimo either knew about or willfully blinded itself to Apple's patent rights while infringing the Patents-in-Suit.

COUNT I: INFRINGEMENT OF U.S. PATENT NO. 10,076,257

41. The preceding paragraphs are incorporated by reference as if fully realleged herein.

42. U.S. Patent No. 10,076,257 (the "'257 Patent"), entitled "Seamlessly Embedded Heart Rate Monitor," was duly, legally, and validly issued to inventors Gloria Lin et al. on September 18, 2018. The '257 Patent is assigned to Apple. The '257 Patent is attached hereto as Exhibit A.

43. Apple is the exclusive and current owner of all rights, title, and interest in the '257 Patent, including the right to exclude and the right to seek damages and injunctive relief.

44. The '257 Patent discloses an electronic device with an integrated sensor for detecting a user's cardiac activity and electrical signals.

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https://www.masimo.com/company/news/news-media/#eccc62f2-a423-4e81-a064-57ddc48c8a13.

[35] *See, e.g.*, *Masimo Corp. v. Apple Inc.*, Complaint, D.I. 1, No. 20-cv-48-JVS-JDE (C.D. Cal.).

45. For illustration, claim 1 of the ’257 Patent claims:

’257 Patent, Claim 1
An electronic device for detecting a user's cardiac signal, comprising: an enclosure; a heart sensor configured to detect the user’s cardiac signal, the heart sensor comprising: a first lead comprising a first pad that is embedded in a first portion of the enclosure, wherein an exterior surface of the enclosure comprises an exterior surface of the first portion, wherein the first pad is positioned underneath the exterior surface of the first portion, and wherein the first pad is configured to detect a first electrical signal of the user’s cardiac signal via the user’s skin’s contact with the exterior surface of the first portion of the enclosure; and a second lead comprising a second pad that is embedded in a second portion of the enclosure, wherein the second pad is configured to detect a second electrical signal of the user’s cardiac signal via the user’s skin’s contact with at least one of the second pad and the second portion of the enclosure; and a processor coupled to the heart sensor and configured to receive and process the detected cardiac signal, wherein the first lead further comprises a first connector coupled to the first pad and configured to provide the first electrical signal detected by the first pad to the processor, and wherein the second lead further comprises a second connector coupled to the second pad and configured to provide the second electrical signal detected by the second pad to the processor.

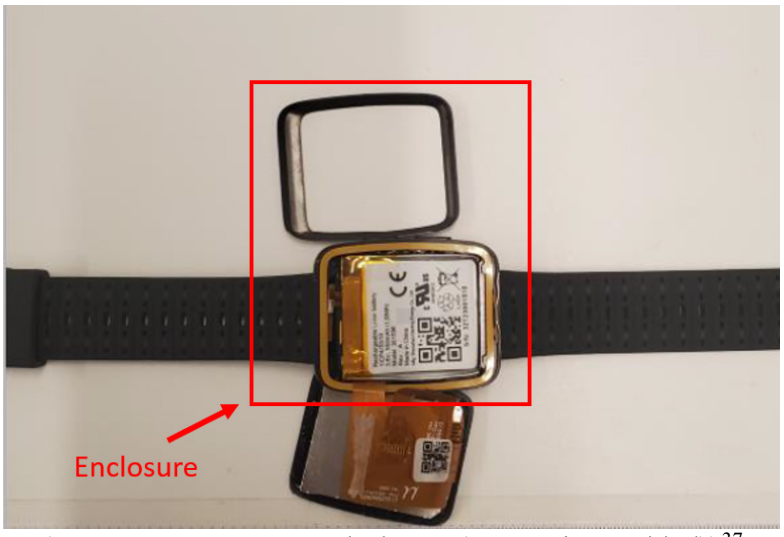
46. The W1 practices at least claim 1 of the ’257 Patent literally or in an equivalent manner.

47. The Masimo W1 is an electronic device for detecting a user's cardiac signal.[36] For example, the Masimo W1 is an electronic device with electrocardiogram (ECG) functionality.

48. The Masimo W1 includes "an enclosure" according to claim 1 of the '257 Patent.

(Masimo W1 User Manual at 1 (annotations added)).

[36] To the extent the preamble of claim 1 is deemed to be limiting, which Apple does not concede, the Masimo W1 practices the preamble of claim 1.

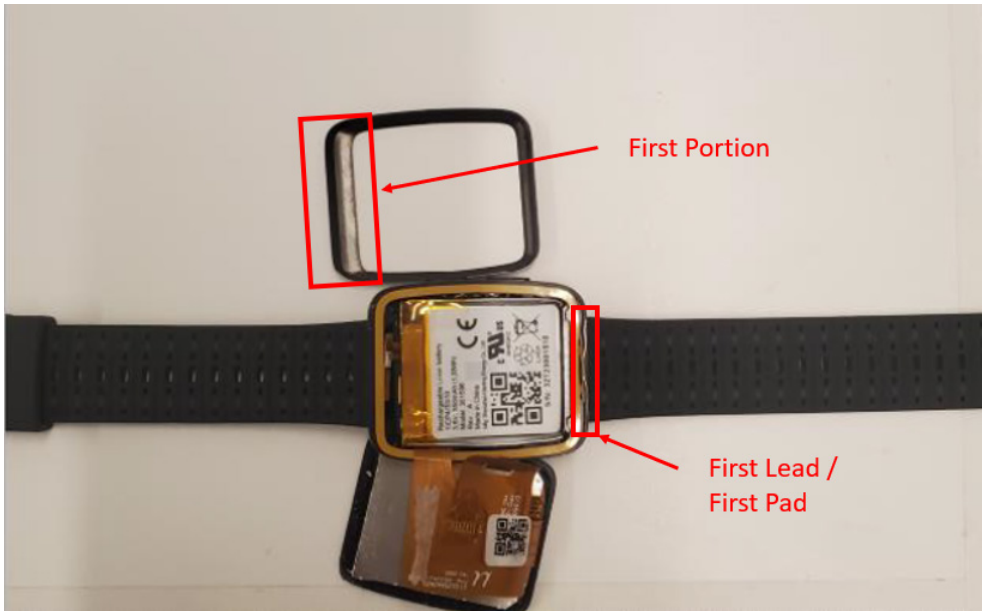


(FCC MASIW1 Internal Photos (annotations added))[37]

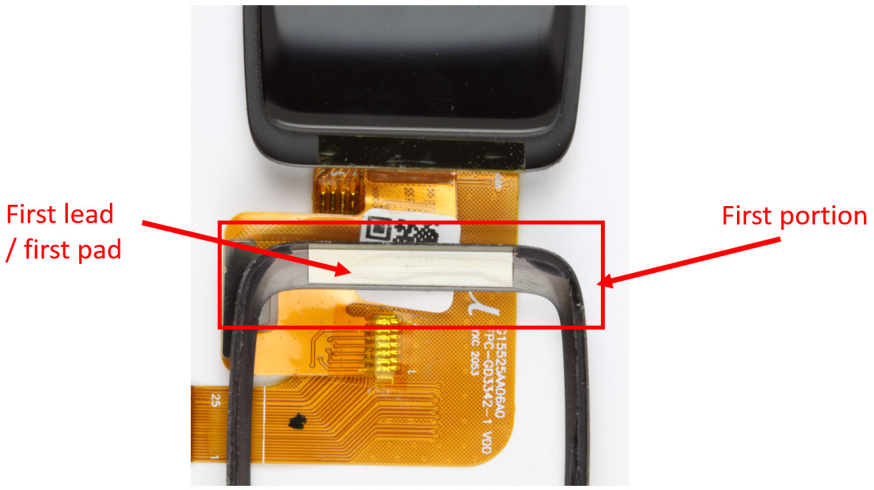
49. The Masimo W1 includes "a heart sensor configured to detect the user's cardiac signal" according to claim 1 of the '257 Patent. For example, the W1 Device includes hardware for measuring the user's ECG, a cardiac signal.

[37] *Available at* https://apps.fcc.gov/tcb/GetTcb731Report.do?applicationId=DV5Hw4aOEec6FFXhLQxpxQ%3D%3D&fcc_id=VKF-MASIW1 (last visited Oct. 13, 2022).

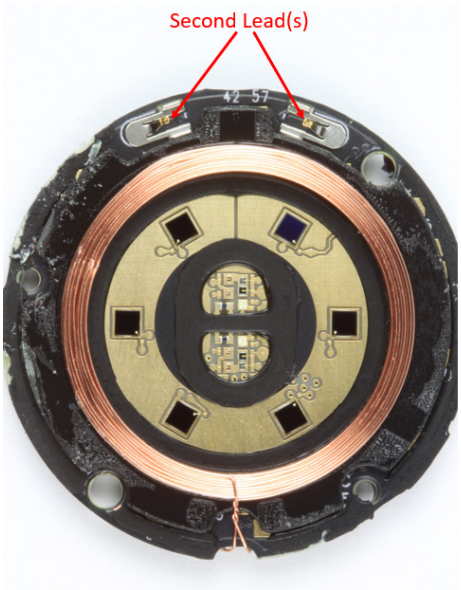
50. The Masimo W1's heart sensor includes "a first lead comprising a first pad that is embedded in a first portion of the enclosure, wherein an exterior surface of the enclosure comprises an exterior surface of the first portion, wherein the first pad is positioned underneath the exterior surface of the first portion, and wherein the first pad is configured to detect a first electrical signal of the user's cardiac signal via the user's skin's contact with the exterior surface of the first portion of the enclosure" according to claim 1 of the '257 Patent. For example, the W1 Device's heart sensor includes a first lead embedded in the enclosure, as shown below. The heart sensor is configured to receive an electrical signal of the user's cardiac signal from the user's finger when in contact with the with the exterior surface of a first portion of the enclosure. The first pad / first lead is positioned underneath the first portion of the enclosure.



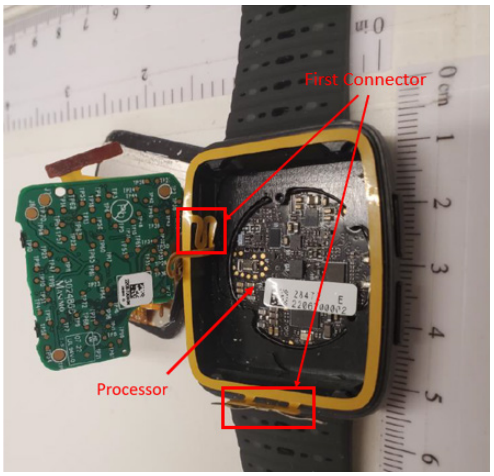
(FCC MASIW1 Internal Photos (annotations added))

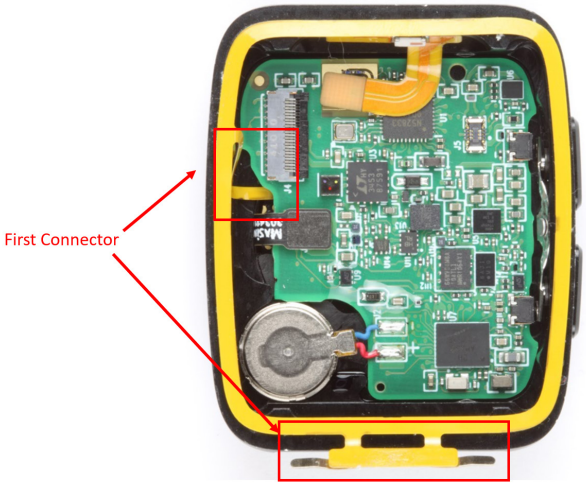


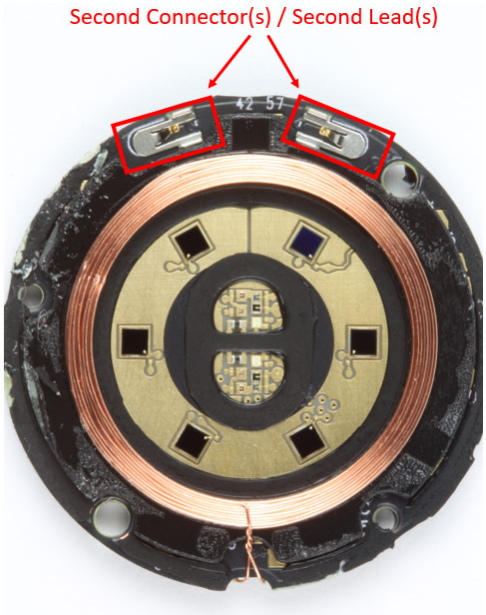
51. The Masimo W1's heart sensor includes "a second lead comprising a second pad that is embedded in a second portion of the enclosure, wherein the second pad is configured to detect a second electrical signal of the user's cardiac signal via the user's skin's contact with at least one of the second pad and the second portion of the enclosure," according to claim 1 of the '257 Patent. For example, the W1 Device's heart sensor includes a second lead embedded in the enclosure as shown below. The heart sensor is configured to receive an electrical signal of the user's cardiac signal from the user's wrist when in contact with the second pad and/or a second portion of enclosure.



52. The Masimo W1 includes "a processor coupled to the heart sensor and configured to receive and process the detected cardiac signal, wherein the first lead further comprises a first connector coupled to the first pad and configured to provide the first electrical signal detected by the first pad to the processor, and wherein the second lead further comprises a second connector coupled to the second pad and configured to provide the second electrical signal detected by the second pad to the processor," according to claim 1 of the '257 Patent. For example, the W1 Device includes a processor coupled to the heart sensor that receives and processes the detected signals to measure the user's ECG. As shown below, the first lead further comprises a connector coupled to the first pad to provide the detected electrical signal to the processor. The second lead further comprises a connector coupled to the second pad and to provide the second detected electrical signal to the processor.







53. Defendants directly infringe the ’257 Patent by making, using, selling, and/or offering for sale in the United States, and/or importing into the United States, products that practice at least claim 1 of the ’257 Patent, including the Masimo W1. Defendants’ infringement is a violation of 35 U.S.C. § 271.

54. Defendants also indirectly infringe the ’257 Patent by intentionally inducing others, including their customers, to infringe at least claim 1 of the ’257 Patent through the use of their products, including the Masimo W1. Defendants provide to others (including their customers)

instructions for using the W1 in a manner that infringes at least claim 1 of the '257 Patent. Defendants' infringement is a violation of 35 U.S.C. § 271.

55. Defendants also indirectly infringe the '257 Patent as contributory infringers by selling or offering to sell in the United States, or importing into the United States, products including the Masimo W1. These products are material parts of the invention claimed in at least claim 1 of the '257 Patent; are known to Defendants to be especially adapted for such infringing use; and are not staple articles or commodities of commerce suitable for substantial non-infringing use. Defendants' infringement is a violation of 35 U.S.C. § 271.

56. Apple has been damaged and continues to be damaged by Defendants' infringement of the '257 Patent. In addition, Apple has suffered and will continue to suffer irreparable harm unless Defendants' infringement of the '257 Patent is enjoined.

COUNT II: INFRINGEMENT OF U.S. PATENT NO. 10,627,783

57. The preceding paragraphs are incorporated by reference as if fully realleged herein.

58. U.S. Patent No. 10,627,783 (the "'783 Patent"), entitled "Wearable Electronic Device," was duly, legally, and validly issued to inventors Fletcher R. Rothkopf et al. on April 21, 2020. The '783 Patent is assigned to Apple. The '783 Patent is attached hereto as Exhibit B.

59. Apple is the exclusive and current owner of all rights, title, and interest in the '783 Patent, including the right to exclude and the right to seek damages and injunctive relief.

60. The '783 Patent discloses a wearable electronic device that can monitor a user's physiological signals and provide health-related information based on those signals.

61. For illustration, claim 9 of the ’783 Patent claims:

’783 Patent, Claim 9
A wearable electronic device, comprising: a housing comprising a bottom portion defining an opening; a biosensor module aligned with the opening; a wireless charging receive coil positioned within the housing and aligned with the opening; a battery operably coupled to the wireless charging receive coil; and a cover disposed over the biosensor module; wherein: the cover is configured to pass optical signals to and from the biosensor module; and the cover is configured to pass wireless power to the wireless charging receive coil.

62. The Masimo W1 practices at least claim 9 of the ’783 Patent literally or in an equivalent manner.

63. The Masimo W1 is a wearable electronic device.[38]

(http://www.masimopersonalhealth.com/products/masimo-w1/)

[38] To the extent the preamble of claim 9 is deemed to be limiting, which Apple does not concede, the Masimo W1 practices the preamble of claim 9.

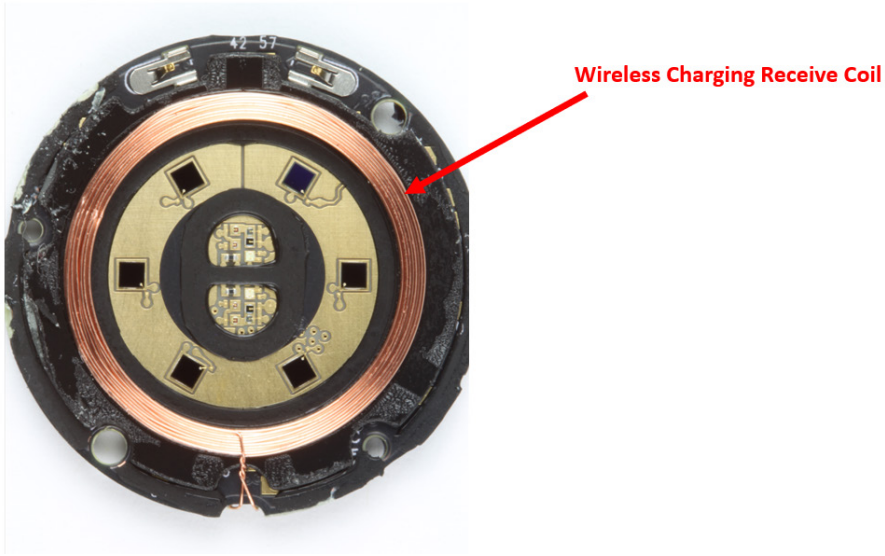
64. The Masimo W1 includes "a housing comprising a bottom portion defining an opening" according to claim 9 of the '783 Patent.

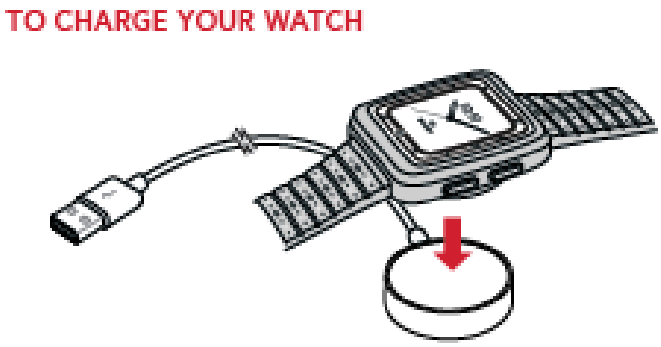
(FCC MASIW1 Masimo W1 Internal Photos (annotations added)).

65. The Masimo W1 includes "a biosensor module aligned with the opening;" according to claim 9 of the '783 Patent.

(FCC MASIW1 Masimo W1 Internal Photos (annotations added)).

66. The Masimo W1 includes "a wireless charging receive coil positioned within the housing and aligned with the opening" according to claim 9 of the '783 Patent. As shown below, the W1 includes a wireless receive coil within the housing and aligned with the opening.



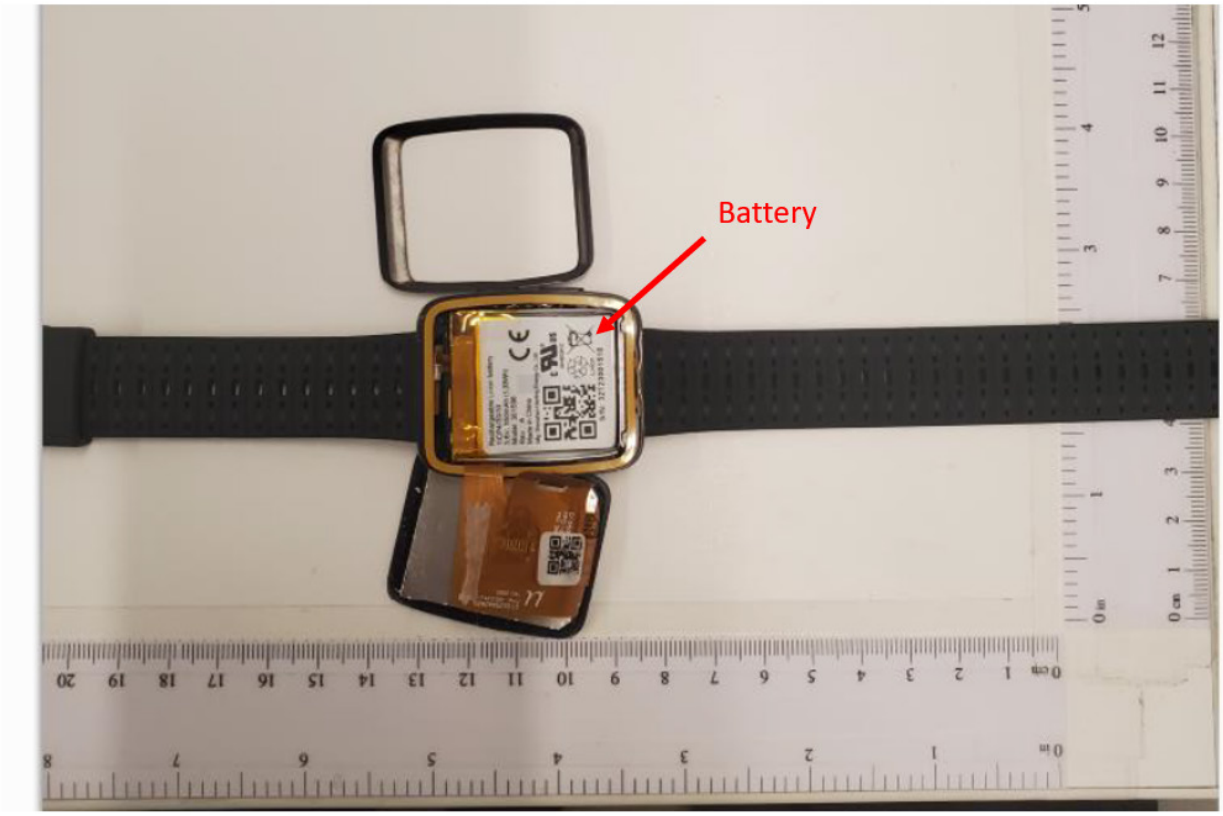


(Masimo W1 Quick Reference Guide)[39]

67. The Masimo W1 includes "a battery operably coupled to the wireless charging receive coil" according to claim 9 of the '783 Patent.

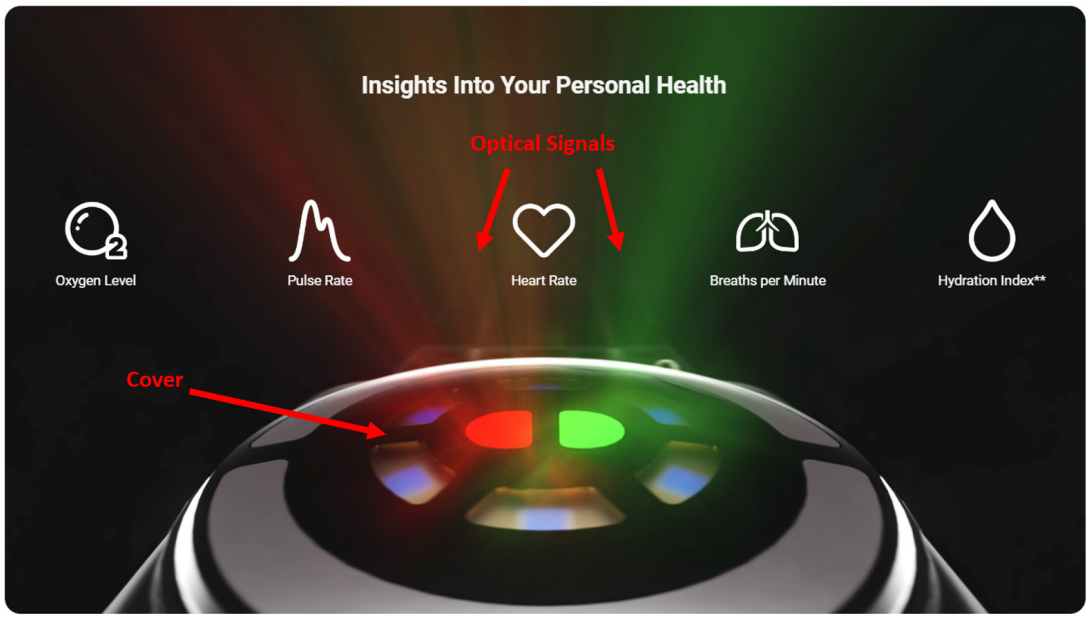
[39] *Available at* https://www.masimopersonalhealth.com/pages/masimo-w1-support#operators-manuals (last visited Oct. 13, 2022).

Photo 1: Internal top view of W1 displaying battery and LCD back side



(FCC MASIW1 Internal Photos (annotations added)).

68. The Masimo W1 includes "a cover disposed over the biosensor module; wherein: the cover is configured to pass optical signals to and from the biosensor module; and the cover is configured to pass wireless power to the wireless charging receive coil," according to claim 9 of the '783 Patent. For example, the W1 Device includes a cover disposed over the biosensor module. The cover of the W1 Device includes transparent portions that pass optical signals (i.e., light) from LEDs and/or to photodiodes in the biosensor module. The cover passes wireless power from a transmit coil in the W1 Wireless Charger to the receive coil.



(https://www.masimopersonalhealth.com/products/masimo-w1 (annotations added))

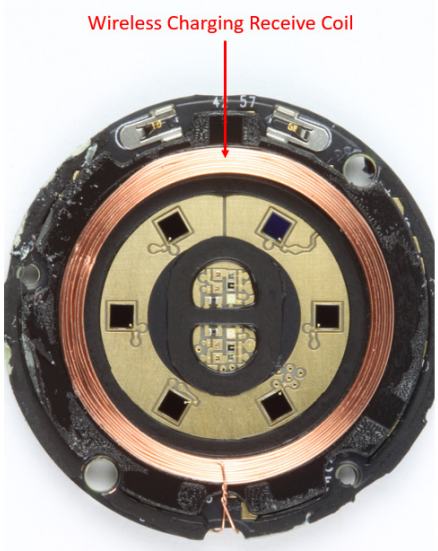
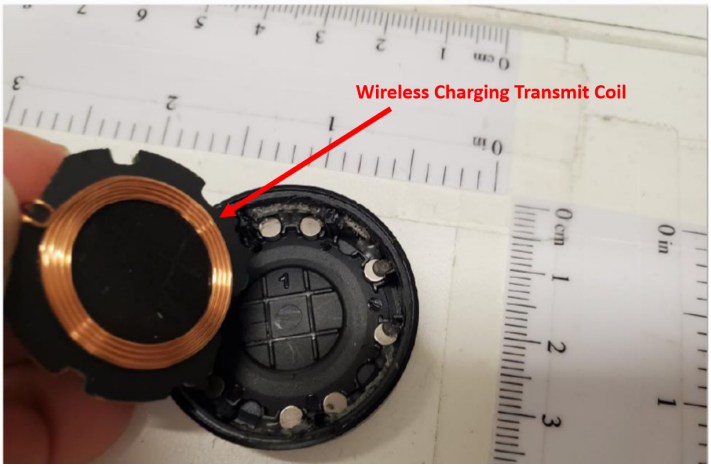


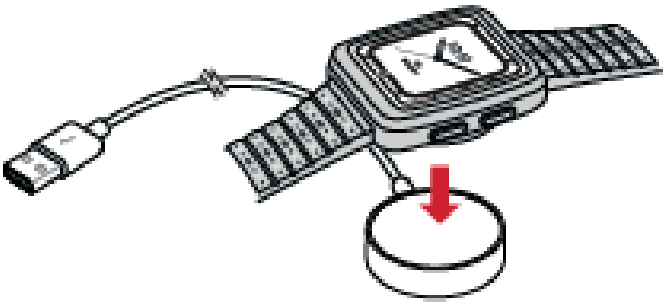
Photo 5: view of the coil present



(FCC MASIW1CG Masimo W1 Charger Internal Photos (annotation added)).[40]

[40] *Available at* https://apps.fcc.gov/tcb/GetTcb731Report.do?applicationId=2gMazzSZM8XaY6PQ%2FRpoOQ%3D%3D&fcc_id=VKF-MASIW1CG (last visited Oct. 13, 2022).

TO CHARGE YOUR WATCH



(Masimo W1 Quick Reference Guide).

Power

- Li-ion rechargeable battery
- Up to 24 hours of operation[4]
- 3 hours from zero to full charge
- Wireless charging

(https://www.masimopersonalhealth.com/products/masimo-w1 (annotations added))

69. Defendants directly infringe the '783 Patent by making, using, selling, and/or offering for sale in the United States, and/or importing into the United States, products that practice at least claim 9 of the '783 Patent, including the Masimo W1. Defendants' infringement is a violation of 35 U.S.C. § 271.

70. Defendants also indirectly infringe the '783 Patent by intentionally inducing others, including their customers, to infringe at least claim 9 of the '783 Patent through the use of their products, including the Masimo W1. Defendants provide to others (including their customers) instructions for using the W1 in a manner that infringes at least claim 9 of the '783 Patent. Masimo's infringement is a violation of 35 U.S.C. § 271.

71. Defendants also indirectly infringe the '783 Patent as contributory infringers by selling or offering to sell in the United States, or importing into the United States, products

including the Masimo W1. These products are material parts of the invention claimed in at least claim 9 of the '783 Patent; are known to Defendants to be especially adapted for such infringing use; and are not staple articles or commodities of commerce suitable for substantial non-infringing use. Defendants' infringement is a violation of 35 U.S.C. § 271.

72. Apple has been damaged and continues to be damaged by Defendants' infringement of the '783 Patent. In addition, Apple has suffered and will continue to suffer irreparable harm unless Defendants' infringement of the '783 Patent is enjoined.

COUNT III: INFRINGEMENT OF U.S. PATENT NO. 10,942,491

73. The preceding paragraphs are incorporated by reference as if fully realleged herein.

74. U.S. Patent No. 10,942,491 (the "'491 Patent"), entitled "Wearable Electronic Device," was duly, legally, and validly issued to inventors Fletcher R. Rothkopf et al. on March 9, 2021. The '491 Patent is assigned to Apple. The '491 Patent is attached hereto as Exhibit C.

75. Apple is the exclusive and current owner of all rights, title, and interest in the '491 Patent, including the right to exclude and the right to seek damages and injunctive relief.

76. The '491 Patent discloses a wearable electronic device that can monitor a user's physiological signals and provide health-related information based on those signals.

77. For illustration, claim 7 of the '491 Patent claims:

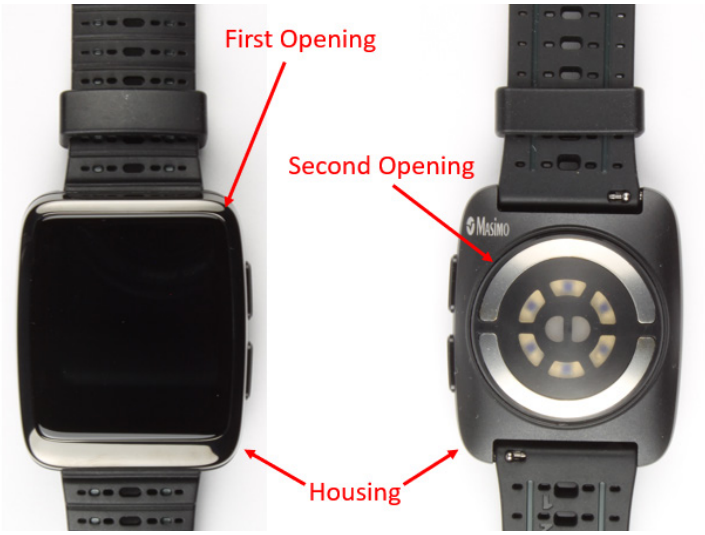
'491 Patent, Claim 7
A wearable electronic device comprising: a housing formed from a conductive material and defining a first opening opposite to a second opening; a band attached to the housing and configured to secure the wearable electronic device to a user; a display positioned in the first opening; a cover comprising a non-conductive material and positioned over the second opening, the cover forming a portion of an exterior surface of the wearable electronic device;

a biosensor module positioned below the cover configured to pass an optical signal through a window defined within the non-conductive material of the cover; and a wireless charging receive coil aligned with the second opening and below the cover, the wireless charging receive coil configured to inductively couple to an external wireless charging device through the non-conductive material of the cover.

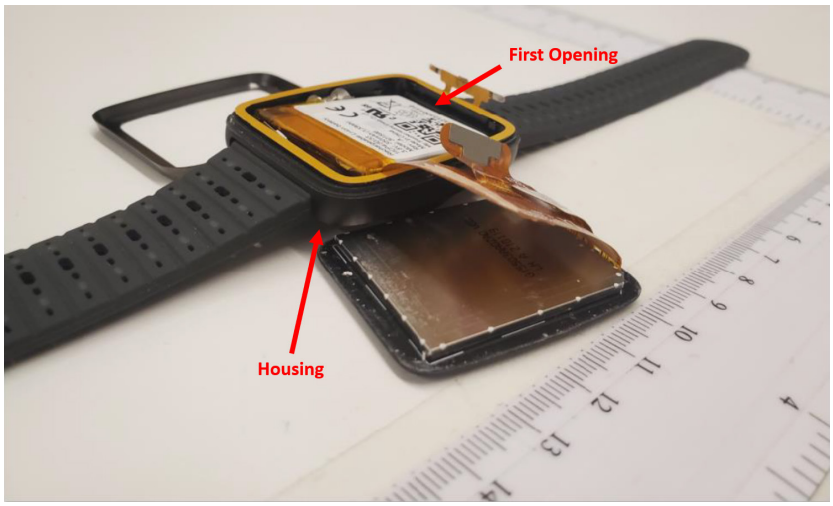
78. Masimo products, including the W1, practice at least claim 7 of the '491 Patent literally or in an equivalent manner.

79. The Masimo W1 is a wearable electronic device.[41]

80. The Masimo W1 includes "a housing formed from a conductive material and defining a first opening opposite to a second opening" according to claim 7 of the '491 Patent. For example, the housing is formed from a conductive material such as a metal or equivalent material. The housing defines a first opening that exposes the W1's display. The housing also defines a second opening opposite thereto that exposes a cover that is positioned above the W1's biosensor module.



[41] To the extent the preamble of claim 7 is deemed to be limiting, which Apple does not concede, the Masimo W1 practices the preamble of claim 7.



(FCC MASIW1 Masimo W1 Internal Photos (annotations added)).

81. The Masimo W1 includes "a band attached to the housing and configured to secure the wearable electronic device to a user" according to claim 7 of the '491 Patent.

Masimo W1™

Masimo

(Masimo W1 User Manual at 1 (annotation added)).

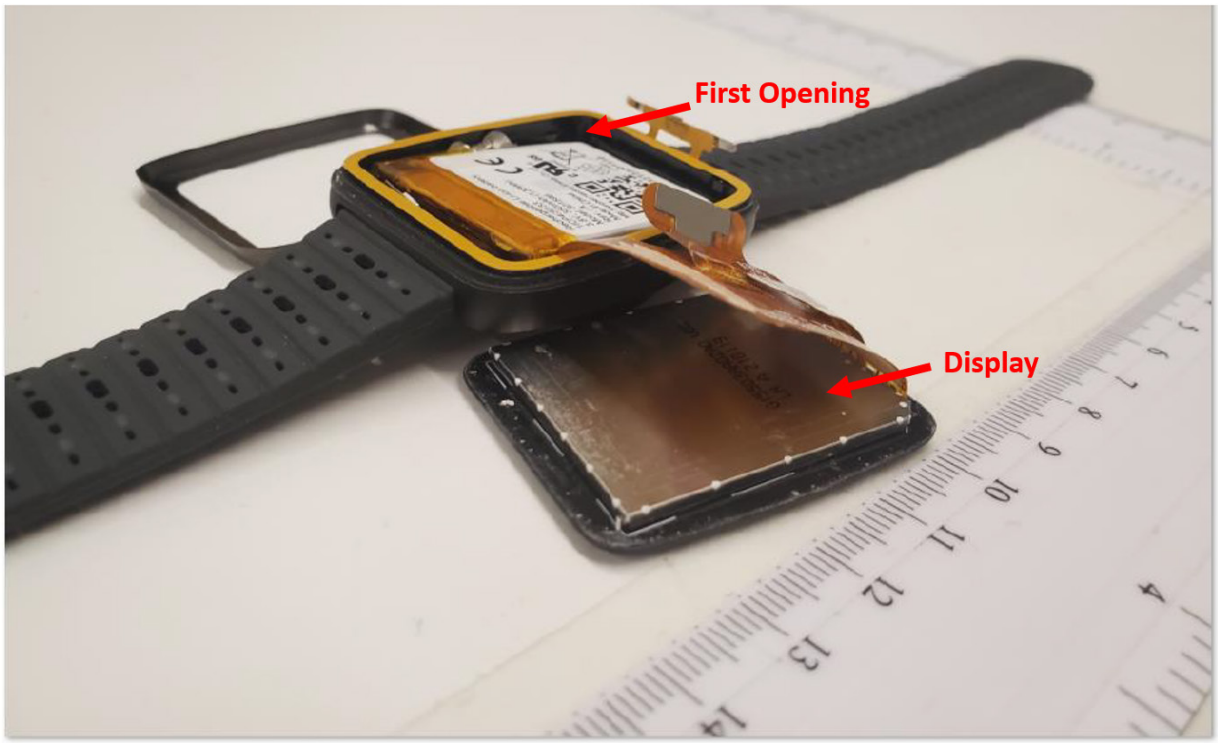
(https://www.masimopersonalhealth.com/products/masimo-w1 (annotations added))

(https://www.masimopersonalhealth.com/products/masimo-w1)

82. The Masimo W1 includes "a display positioned in the first opening" according to claim 7 of the '491 Patent.

(https://www.masimopersonalhealth.com/products/masimo-w1 (annotations added))

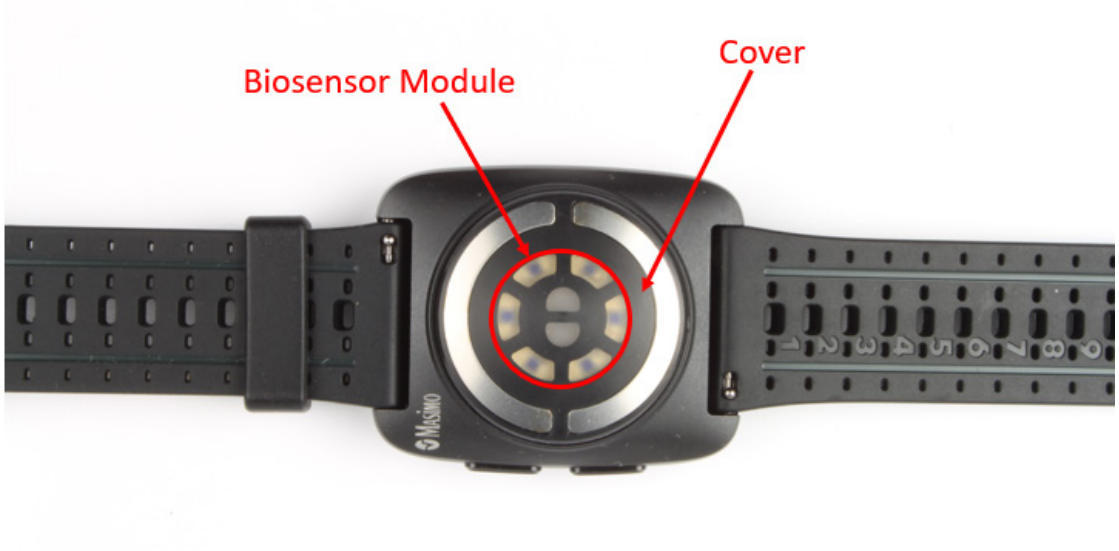
Photo 2: Internal right view of W1 displaying battery and LCD back side, another view



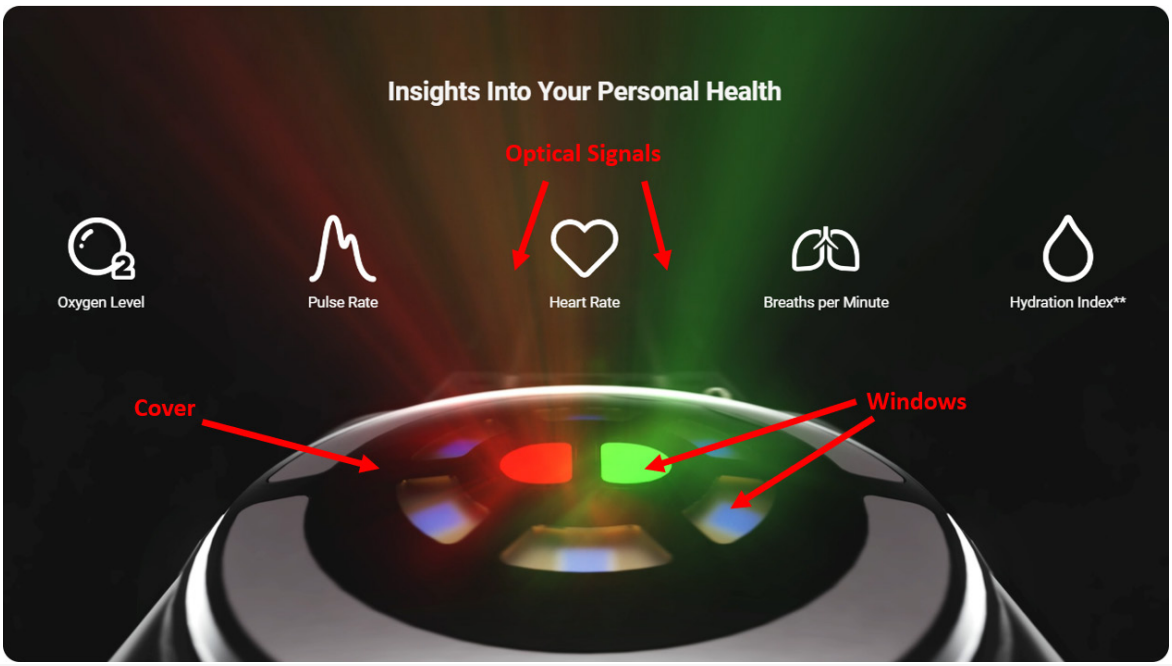
(FCC MASIW1 Masimo W1 Internal Photos (annotations added))

83. The Masimo W1 includes "a cover comprising a non-conductive material and positioned over the second opening, the cover forming a portion of an exterior surface of the wearable electronic device" according to claim 7 of the '491 Patent. For example, the cover comprises a non-conductive material such as a plastic. The cover forms a portion of an exterior surface, worn against the wearer's wrist.

84. The Masimo W1 includes "a biosensor module positioned below the cover configured to pass an optical signal through a window defined within the non-conductive material of the cover" according to claim 7 of the '491 Patent. For example, W1 Device includes a biosensor module below the cover. The cover of the W1 Device includes transparent portions (i.e., windows) that pass optical signals (i.e., light) from LEDs and/or to photodiodes in the biosensor module.



(FCC MASIW1 Masimo W1 Internal Photos (annotation added)).



Oxygen level (SpO_2)*
Oxygen levels in your blood, which can change with heart and lung function, activity, and altitude

Hydration Index (Hi)™**
An index calculated to reflect your relative level of hydration; studies have shown that optimal hydration can improve sleep quality, cognition, mood, and more

Pulse rate (PR)
How often the hearts pushes blood through your body, which can change with general health, physical activity, and with your mental or emotional state (e.g., stress, anxiety)

Heart rate (HR)
The number of times the heart beats in a minute, based on electrical signals

Pulse Rate Variability (PRV)
The changes in your pulse rate that can show how consistently your blood is being pushed through your body, even with exercise or under stress

Heart Rate Variability (HRV)
Variations in the amount of time between heart beats, which may provide insight into how consistently you are reacting to changes that affect your heart rate, like exercise or stress

Pleth Variability Index (PVi[$])
A calculation based on the changes in your perfusion index, which may be affected by your fluid volume during your respiration cycle and can increase with lower fluid levels

Breaths per minute (RRp[$†])
The number of breaths you take in a minute, based on the pleth; respiration rate can change with your general health condition, physical activity, or mental or emotional state

Perfusion Index (Pi)
A calculation of the relative strength of your pulse, which changes based on your circulation

(https://www.masimopersonalhealth.com/products/masimo-w1)

85. The Masimo W1 includes "a wireless charging receive coil aligned with the second opening and below the cover, the wireless charging receive coil configured to inductively couple

to an external wireless charging device through the non-conductive material of the cover," according to claim 7 of the '491 patent. For example, the cover passes wireless power from the W1 Wireless Charger, an external wireless charging device. The W1 Device includes a wireless charging receive coil aligned with the second opening and positioned below the cover that inductively couples with a transmit coil in the W1 Wireless Charger.

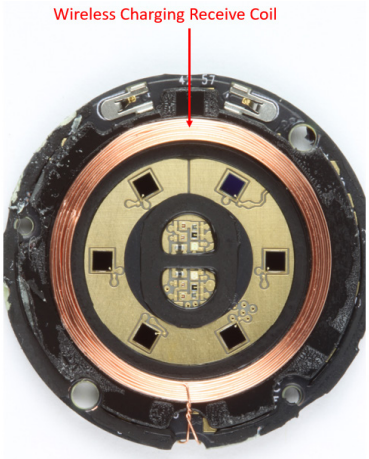
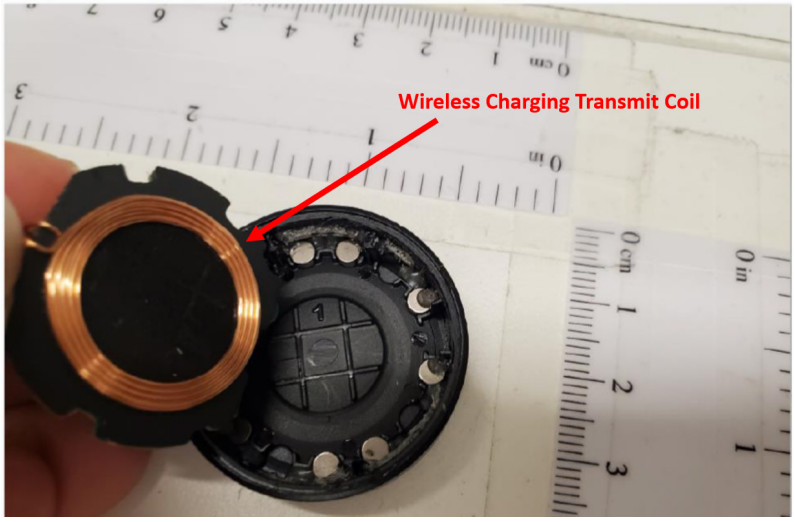


Photo 5: view of the coil present



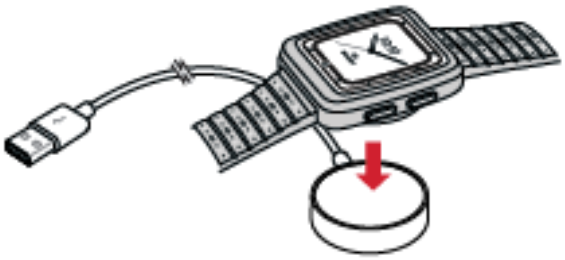
(FCC MASIW1CG Masimo W1 Charger Internal Photos (annotation added)).

Power

- Li-ion rechargeable battery
- Up to 24 hours of operation[4]
- 3 hours from zero to full charge
- Wireless charging

(https://www.masimopersonalhealth.com/products/masimo-w1 (annotations added))

TO CHARGE YOUR WATCH



(Masimo W1 Quick Reference Guide)

86. Defendants directly infringe the ’491 Patent by making, using, selling, and/or offering for sale in the United States, and/or importing into the United States, products that practice at least claim 7 of the ’491 Patent, including the Masimo W1. Defendants’ infringement is a violation of 35 U.S.C. § 271.

87. Defendants also indirectly infringe the ’491 Patent by intentionally inducing others, including their customers, to infringe at least claim 7 of the ’491 Patent through the use of their products, including the Masimo W1. Defendants provide to others (including their customers) instructions for using the W1 in a manner that infringes at least claim 7 of the ’491 Patent. Defendants’ infringement is a violation of 35 U.S.C. § 271.

88. Defendants also indirectly infringe the ’491 Patent as contributory infringers by selling or offering to sell in the United States, or importing into the United States, products including the Masimo W1. These products are material parts of the invention claimed in at least claim 7 of the ’491 Patent; are known to Defendants to be especially adapted for such infringing use; and are not staple articles or commodities of commerce suitable for substantial non-infringing use. Defendants’ infringement is a violation of 35 U.S.C. § 271.

89. Apple has been damaged and continues to be damaged by Defendants’ infringement of the ’491 Patent. In addition, Apple has suffered and will continue to suffer irreparable harm unless Defendants’ infringement of the ’491 Patent is enjoined.

COUNT IV: INFRINGEMENT OF U.S. PATENT NO. 10,987,054

90. The preceding paragraphs are incorporated by reference as if fully realleged herein.

91. U.S. Patent No. 10,987,054 (the “’054 Patent”), entitled “Wearable Electronic Device with Electrodes for Sensing Biological Parameters,” was duly, legally, and validly issued to inventors Sameer Pandya et al. on April 27, 2021. The ’054 Patent is assigned to Apple. The ’054 Patent is attached hereto as Exhibit D.

92. Apple is the exclusive and current owner of all rights, title, and interest in the ’054 Patent, including the right to exclude and the right to seek damages and injunctive relief.

93. The ’054 Patent discloses a wearable electronic device (such as a watch) with a set of electrodes for measuring biological parameters.

94. For illustration, claim 9 of the ’054 Patent claims:

’054 Patent, Claim 9
A wearable electronic device comprising: a rectangular housing member defining a rectangular front opening and a circular rear opening; a cover having a rectangular cover profile and positioned over the rectangular front opening; a display positioned below the cover; a carrier assembly coupled to the rectangular housing member and comprising: a carrier member having a circular carrier profile and positioned over the circular rear opening; a rear electrode positioned on the carrier member and configured to receive a first voltage signal from a wrist of a user; an optical sensor system comprising: an optical emitter positioned below a first region of the carrier member; and an optical receiver positioned below a second region of the carrier member; a side electrode positioned along an exterior of the rectangular housing member and configured to receive a second voltage signal from a finger of the user; and a processor positioned within the wearable electronic device and configured to determine a biological parameter using the first and second voltage signals.

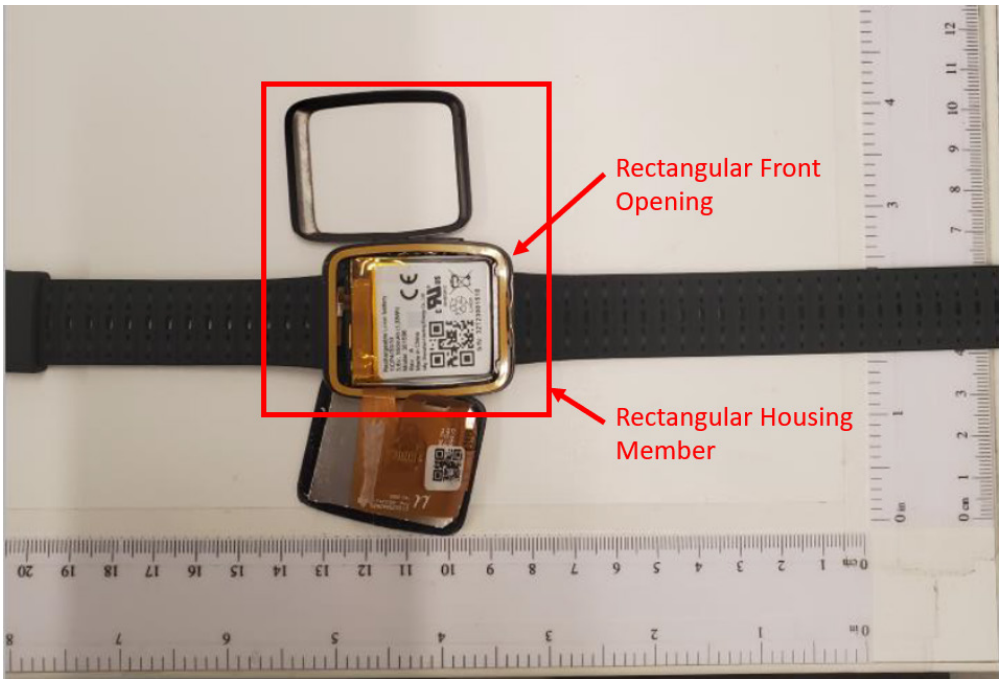
95. The Masimo W1 practices at least claim 9 of the ’054 Patent literally or in an equivalent manner.

96. The Masimo W1 is a wearable electronic device.[42]

97. The Masimo W1 includes “a rectangular housing member defining a rectangular front opening and a circular rear opening” according to claim 9 of the ’054 Patent. As shown below, the W1 has a housing member that is rectangular or an equivalent shape. The W1’s housing

[42] To the extent the preamble of claim 9 is deemed to be limiting, which Apple does not concede, the Masimo W1 practices the preamble of claim 9.

member has a front opening that is rectangular or an equivalent shape and a rear opening that is circular or an equivalent shape.



(FCC MASIW1 Masimo W1 Internal Photos (annotation added))

(FCC MASIW1 Masimo W1 Internal Photos (annotation added))

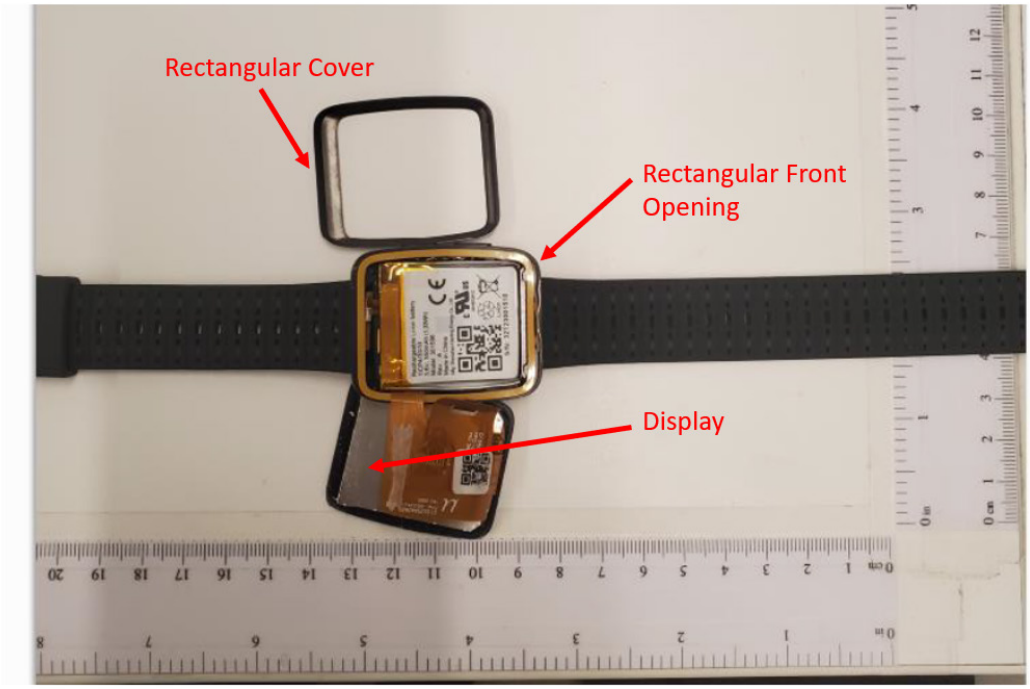
98. The Masimo W1 includes "a cover having a rectangular cover profile and positioned over the rectangular front opening" according to claim 9 of the '054 Patent. As shown below, the W1 has a cover with a profile that is rectangular or an equivalent shape. The cover is positioned over the front opening.

(https://www.masimopersonalhealth.com/products/masimo-w1 (annotations added))

99. The Masimo W1 includes "a display positioned below the cover" according to claim 9 of the '054 Patent.

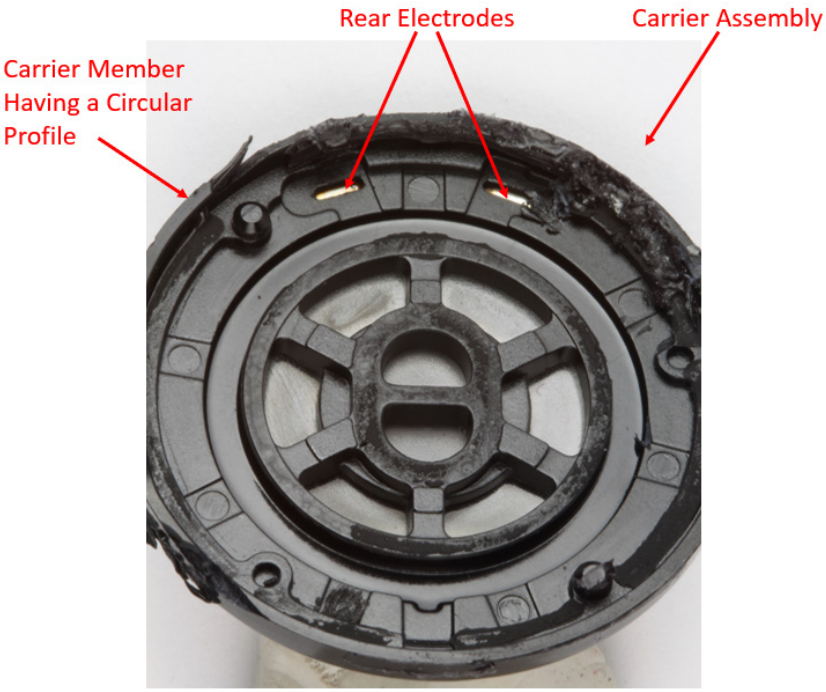
(https://www.masimopersonalhealth.com/products/masimo-w1 (annotations added))

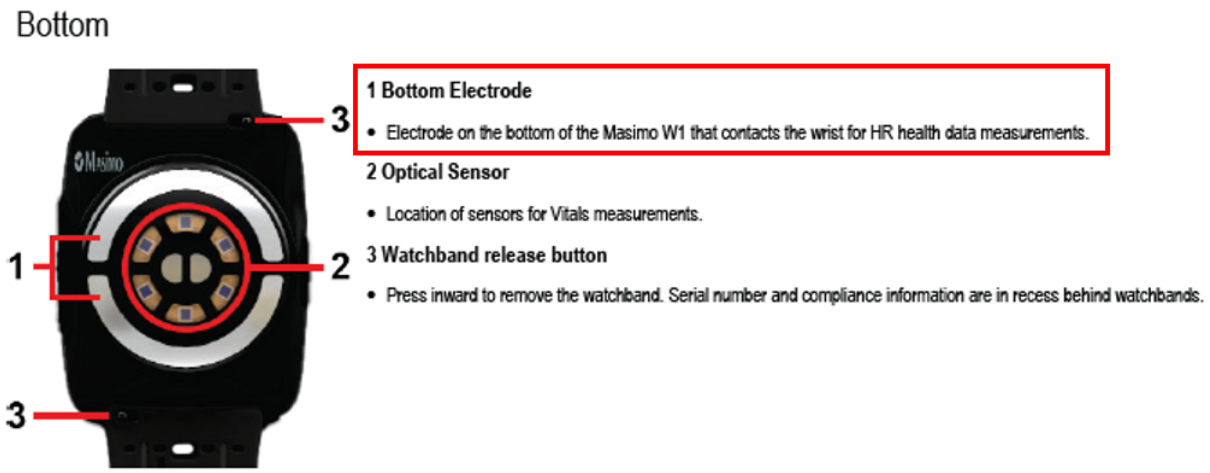
Photo 1: Internal top view of W1 displaying battery and LCD back side



(FCC MASIW1 Masimo W1 Internal Photos (annotation added))

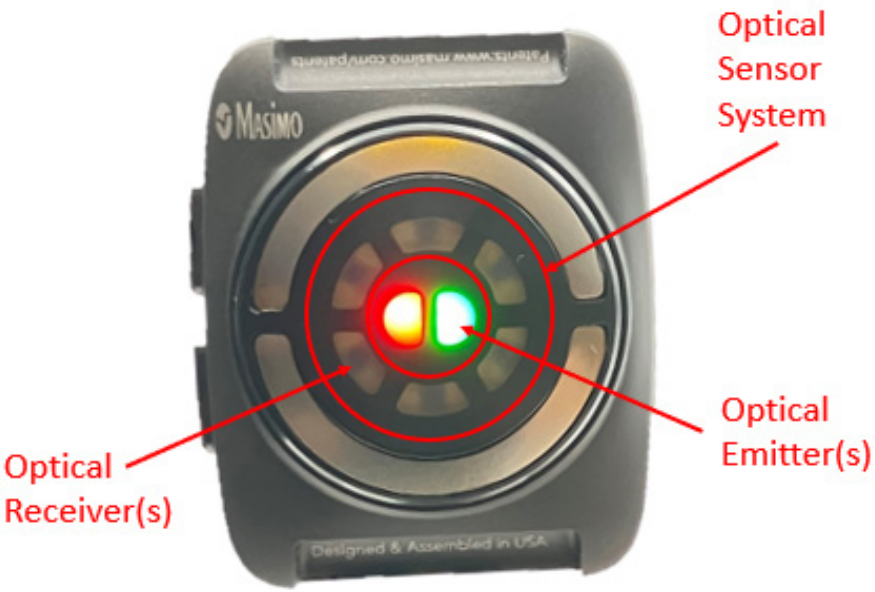
100. The Masimo W1 includes "a carrier assembly coupled to the rectangular housing member and comprising: a carrier member having a circular carrier profile and positioned over the circular rear opening; [and] a rear electrode positioned on the carrier member and configured to receive a first voltage signal from a wrist of a user" according to claim 9 of the '054 Patent. The W1's electrodes are used to receive voltage signals from the user's wrist for an electrocardiogram (ECG).

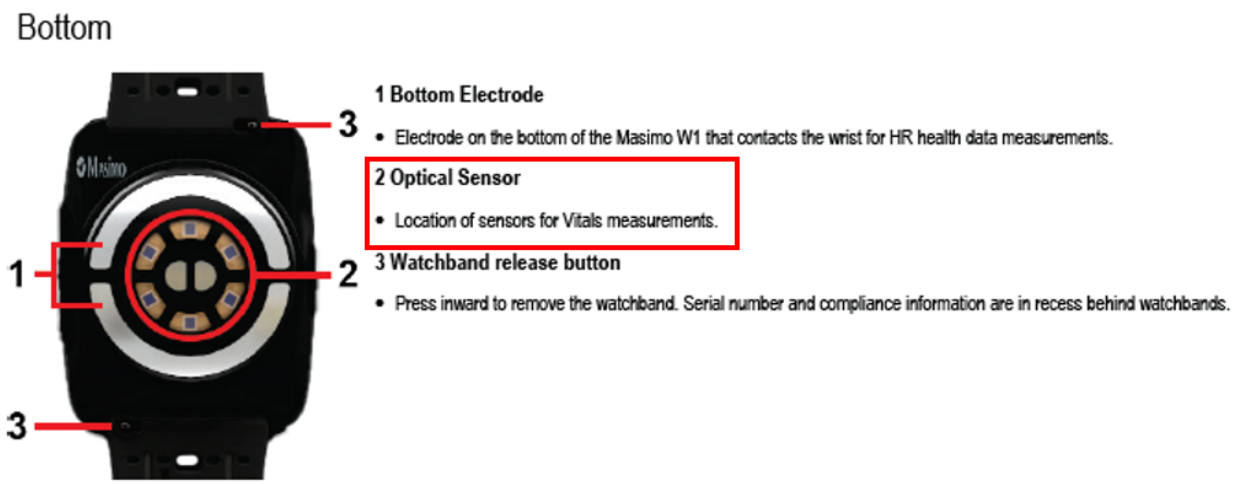




(Masimo W1 User Manual at 7 (annotations added)).

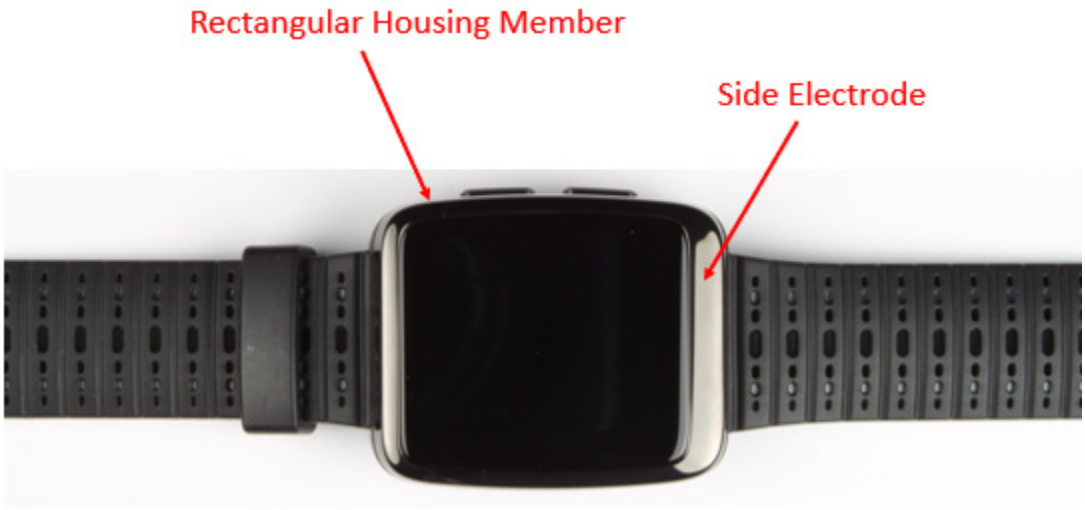
101. The Masimo W1 includes "an optical sensor system comprising: an optical emitter positioned below a first region of the carrier member; and an optical receiver positioned below a second region of the carrier member" according to claim 9 of the '054 Patent. For example, the Masimo W1 includes LEDs (i.e., optical emitters) positioned below a first region of the carrier member and photodiodes (i.e., optical receivers) positioned below a second region of the carrier member, which together form an optical sensor system.





(Masimo W1 User Manual at 8 (annotations added)).

102. The Masimo W1 includes "a side electrode positioned along an exterior of the rectangular housing member and configured to receive a second voltage signal from a finger of the user" according to claim 9 of the '054 Patent. The side electrode is configured to receive a second voltage from the user's finger for ECG measurement.



Features

Top

1 Main Menu/Back Button

- Press and hold to turn the watch On or Off.
- Press to cycle through menus from Home Screen OR use as a back button when in submenus.

2 Live Screen Button

- Press once to view health data (live screen). Screen returns to watch face after a few moments of inactivity.
- From the Watch Face, press once to turn off screen.

3 Touch Screen

- Used to interact with the watch. See ***Using the Touch Screen*** on page 9.

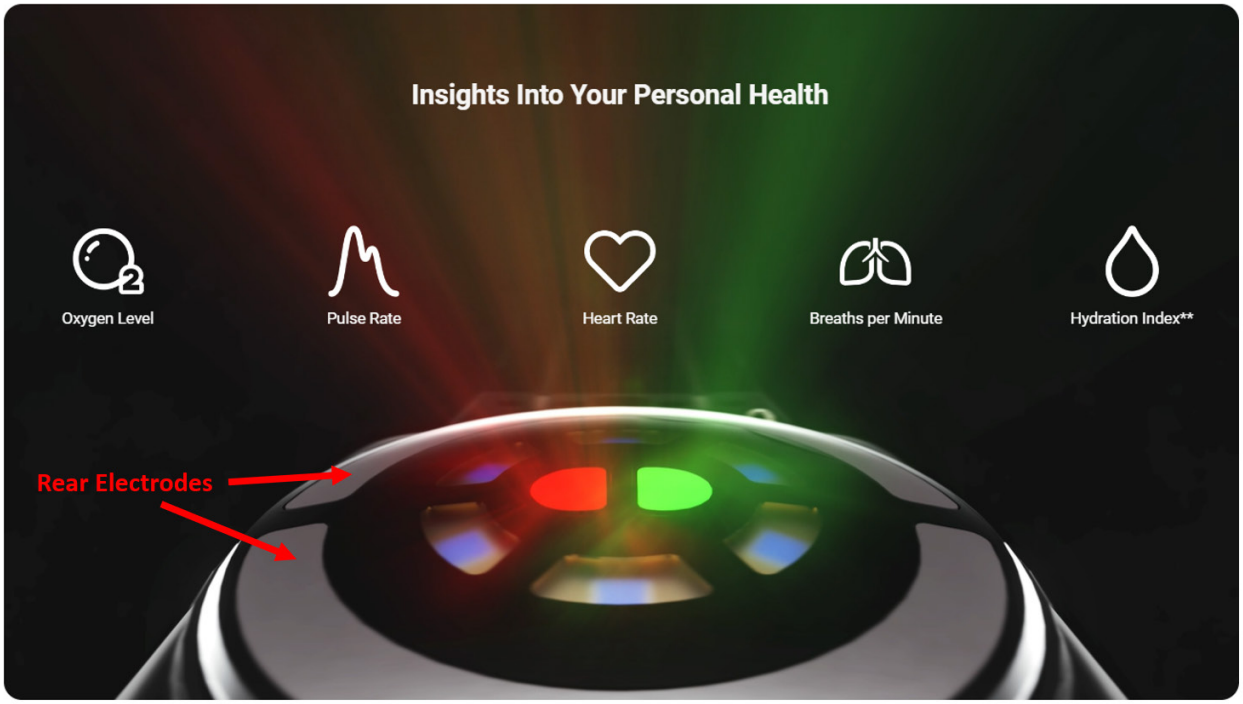
4 Top Electrode

- Electrode provided on the bottom bezel to be contacted with the finger during HR health data measurements.

(Masimo W1 User Manual at 9 (annotations added)).

103. The Masimo W1 includes "a processor positioned within the wearable electronic device and configured to determine a biological parameter using the first and second voltage signals" according to claim 9 of the '054 Patent. For example, the Masimo W1 includes a processor configured to measure biological parameters, such as ECG, using the first and second voltage signals.

(FCC MASIW1 Masimo W1 Internal Photos (annotation added))



(https://www.masimopersonalhealth.com/products/masimo-w1 (annotations added))

104. Defendants directly infringe the '054 Patent by making, using, selling, and/or offering for sale in the United States, and/or importing into the United States, products that practice at least claim 9 of the '054 Patent, including the Masimo W1. Defendants' infringement is a violation of 35 U.S.C. § 271.

105. Defendants also indirectly infringe the '054 Patent by intentionally inducing others, including their customers, to infringe at least claim 9 of the '054 Patent through the use of their products, including the Masimo W1. Defendants provide to others (including their customers) instructions for using the W1 in a manner that infringes at least claim 9 of the '054 Patent. Defendants' infringement is a violation of 35 U.S.C. § 271.

106. Defendants also indirectly infringe the '054 Patent as contributory infringers by selling or offering to sell in the United States, or importing into the United States, products including the Masimo W1. These products are material parts of the invention claimed in at least claim 9 of the '054 Patent; are known to Defendants to be especially adapted for such infringing

use; and are not staple articles or commodities of commerce suitable for substantial non-infringing use. Defendants' infringement is a violation of 35 U.S.C. § 271.

107. Apple has been damaged and continues to be damaged by Defendants' infringement of the '054 Patent. In addition, Apple has suffered and will continue to suffer irreparable harm unless Defendants' infringement of the '054 Patent is enjoined.

COUNT V: INFRINGEMENT OF U.S. PATENT NO. 11,106,352

108. The preceding paragraphs are incorporated by reference as if fully realleged herein.

109. U.S. Patent No. 11,106,352 (the "'352 Patent"), entitled "Devices, Methods, and Graphical User Interfaces for Accessing Notifications," was duly, legally, and validly issued to inventor William M. Tyler on August 31, 2021. The '352 Patent is assigned to Apple. The '352 Patent is attached hereto as Exhibit E.

110. Apple is the exclusive and current owner of all rights, title, and interest in the '352 Patent, including the right to exclude and the right to seek damages and injunctive relief.

111. The '352 Patent discloses user interfaces including a wake screen, a home screen, and a widget screen displayed in response to user inputs.

112. For illustration, claim 9 of the '352 Patent claims:

'352 Patent, Claim 9
A computer system, comprising: one or more processors that are in communication with a display generation component and one or more input devices; and memory storing instructions, the instructions, when executed by the one or more processors, cause the processors to perform operations comprising: while the computer system is in a power saving state, detecting an input that meets display-waking criteria; in response to detecting the input that meets the display-waking criteria, displaying, via the

display generation component, a wake screen user interface;

while displaying the wake screen user interface, detecting a first input that is directed to a portion of the wake screen user interface and includes first movement; and

in response to detecting the first input that is directed to the portion of the wake screen user interface:

in accordance with a determination that the first input meets first criteria, wherein the first criteria require the first movement to be in a first direction in order for the first criteria to be met:

displaying of a home screen user interface that is different from the wake screen user interface, wherein the home screen user interface includes a plurality of application icons corresponding to different applications, and wherein a respective application icon of the plurality of application icons, when selected, causes display of an application corresponding to the respective application icon; and

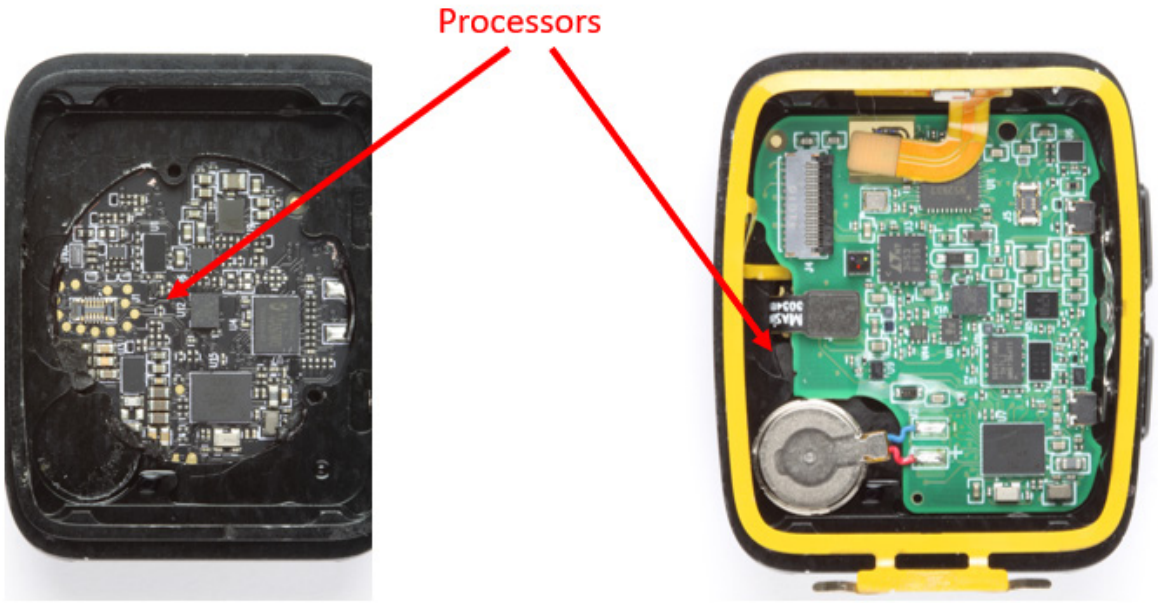
in accordance with a determination that the first input meets second criteria different from the first criteria, wherein the second criteria require the first movement to be in a second direction that is different from the first direction in order for the second criteria to be met:

displaying a widget screen user interface that is different from the wake screen user interface and the home screen user interface, wherein the widget screen user interface includes a plurality of user interface objects corresponding to different applications, wherein a respective user interface object of the plurality of user interface objects contains application content from an application corresponding to the respective user interface object, and when selected, causes display of an application corresponding to the respective user interface object.

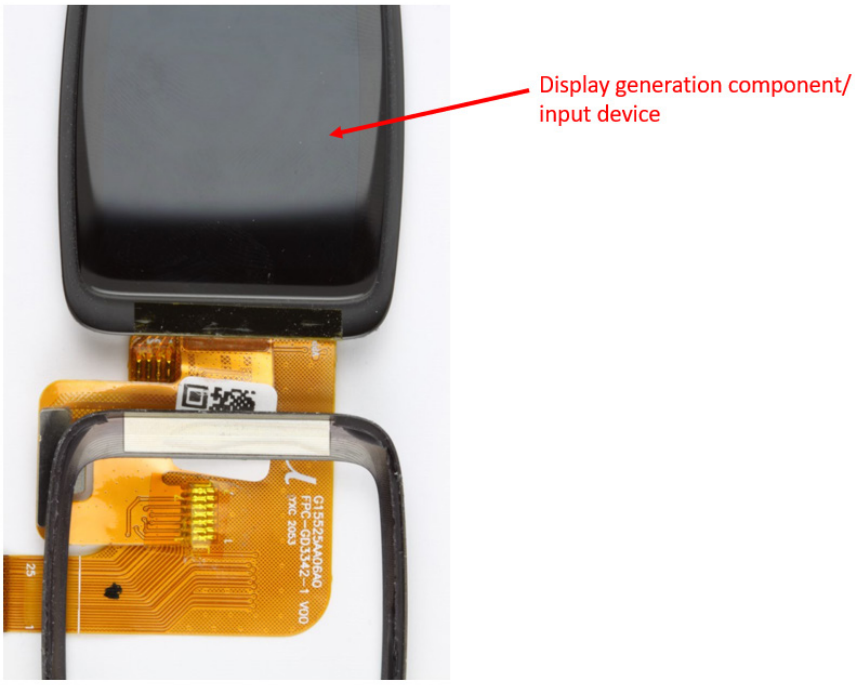
113. The Masimo W1 practices at least claim 9 of the ’352 Patent literally or in an equivalent manner.

114. The Masimo W1 is a computer system.[43]

115. The Masimo W1 includes “one or more processors that are in communication with a display generation component and one or more input devices” according to claim 9 of the ’352 Patent. The W1 includes a touch screen, comprising a display generation component and one or more input devices.



[43] To the extent the preamble of claim 9 is deemed to be limiting, which Apple does not concede, the Masimo W1 practices the preamble of claim 9.



Features

Top

1 Main Menu/Back Button

- Press and hold to turn the watch On or Off.
- Press to cycle through menus from Home Screen OR use as a back button when in submenus.

2 Live Screen Button

- Press once to view health data (live screen). Screen returns to watch face after a few moments of inactivity.
- From the Watch Face, press once to turn off screen.

3 Touch Screen

- Used to interact with the watch. See ***Using the Touch Screen*** on page 9.

4 Top Electrode

- Electrode provided on the bottom bezel to be contacted with the finger during HR health data measurements.

(Masimo W1 User Manual at 7 (annotations added))

Using the Touch Screen

When interacting with the watch, use the following gestures to navigate the touch screen.

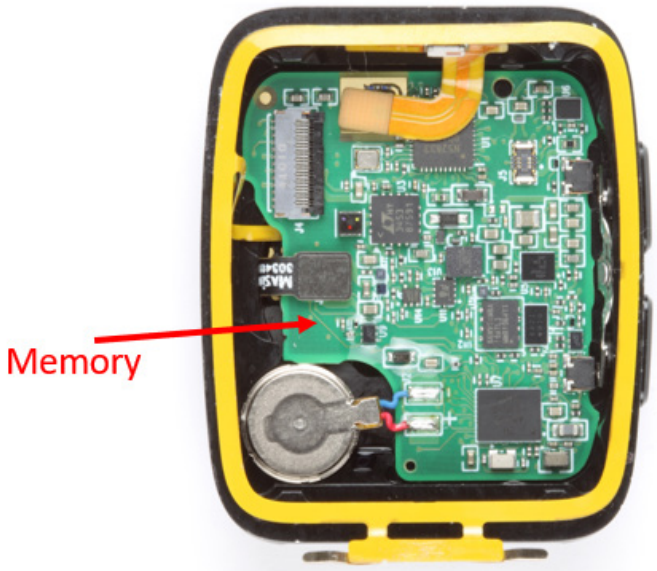
Touch/Tap - Momentarily touch and release one finger on the screen.

Touch and Hold- Touch and hold an item on the screen.

Swipe - Touch and move one finger on the screen left, right, up or down.

(Masimo W1 User Manual at 9)

116. The Masimo W1 includes "memory storing instructions, the instructions, when executed by the one or more processors, cause the processors to perform operations comprising" the remaining limitations according to claim 9 of the '352 Patent.



Features

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- Press and hold to turn the watch On or Off.
- Press to cycle through menus from Home Screen OR use as a back button when in submenus.

2 Live Screen Button

- Press once to view health data (live screen). Screen returns to watch face after a few moments of inactivity.
- From the Watch Face, press once to turn off screen.

3 Touch Screen

- Used to interact with the watch. See ***Using the Touch Screen*** on page 9.

4 Top Electrode

- Electrode provided on the bottom bezel to be contacted with the finger during HR health data measurements.

(Masimo W1 User Manual at 7).

117. The Masimo W1, "while the computer system is in a power saving state, detect[s] an input that meets display-waking criteria," and "in response to detecting the input that meets the display-waking criteria, display[s], via the display generation component, a wake screen user interface" according to claim 9 of the '352 Patent. As shown below, the W1 Device (i.e., a

computer system) detects a touch/tap input when the display is off (i.e., a power saving state), and in response to the input displays a watch face (i.e., a wake screen user interface).

Changing Settings Options

The following setting are available through the *Main Menu*.

Brightness	Screen brightness can be adjusted from the *Brightness* screen. Default brightness is 7. Touch to select a brightness level from 1 (dim) to 10 (most bright). **Note:** A high brightness setting may reduce battery life.
Always On	*Always On* displays the screen even when your wrist is down. When your wrist is raised, all functions of the Masimo W1 are available. This feature is turned on or off from the *Always On* screen. **Note:** When this feature is enabled, battery life my be reduced.
Raise to Wake	The *Raise to Wake* feature is turned on or off from the *Raise to Wake* screen. • When on, the screen turns on when your wrist is raised. When your wrist is lowered, the screen turns off. If the Masimo W1 does not wake when raised, check that the correct wrist orientation is selected. See ***Orientation***. • When off, to view you must touch the screen or press one of the buttons on the Masimo W1. If the Masimo W1 does not wake when the screen is touched or buttons are pressed, the battery may need to be charged. **Note:** Turning this feature off may extend battery life.
Bluetooth	Bluetooth is turned "On" or "Off" from the *Bluetooth* screen. Bluetooth is On by default. When Bluetooth is off, Masimo W1 will not communicate with the Masimo Health App to share Health Data.
Vibration	Vibration is turned on or off from the *Vibration* screen. When on, a vibration is felt when notifications are displayed on the Masimo W1.
Bedtime	The *Bedtime* screen is used to Turn Bedtime "On" or "Off" and set the Bedtime START and Bedtime END. This silences notifications from the Masimo W1 during the set time.
Set Time and Date	When connected to the Masimo Health app, the time and date for Masimo W1 are automatically set. The time or date can also be set manually. Touch the **Edit Time** or **Edit Date** tile to manually set the time or date.
Orientation	By default, the Masimo W1 is set to be worn on the left wrist. To set the watch to be worn on the right wrist, selection **Right** from the options available on the *Orientation* screen. **Note:** Orientation setting can affect the *Raise to Wake* feature operation.

(Masimo W1 User Manual at 12 (annotation added)).

118. The Masimo W1, "while displaying the wake screen user interface, detect[s] a first input that is directed to a portion of the wake screen user interface and includes first movement" according to claim 9 of the '352 Patent. For example, the W1 Device, while displaying the watch

face (i.e., wake screen), detects user input including a "swipe" (i.e., movement) directed to a portion of the wake screen.

(Masimo W1 User Manual at 10)

119. The Masimo W1, "in response to detecting the first input that is directed to the portion of the wake screen user interface: in accordance with a determination that the first input meets first criteria, wherein the first criteria require the first movement to be in a first direction in order for the first criteria to be met: display[s] . . . a home screen user interface that is different from the wake screen user interface, wherein the home screen user interface includes a plurality of application icons corresponding to different applications, and wherein a respective application icon of the plurality of application icons, when selected, causes display of an application corresponding to the respective application icon" according to claim 9 of the '352 Patent. For example, the Masimo W1, in response to detecting a user input, is configured to determine whether the input is a "swipe" to the left (i.e., the first criteria requiring the first movement to be in a first direction). In accordance with that determination, the W1 Device displays a "main menu" (i.e., home screen user interface). The home screen is different from the wake screen and includes a plurality of application icons, each of which when selected cause display of a corresponding application. For

example, the home screen user interface includes application icons for displaying Vitals Measurement, Heart Rate Measurement, Watch Face Settings, and Settings Menu applications.

User Interface (Display)

Main Menu

The *Main Menu* displays a list of available apps.

- To open the *Main Menu*, swipe left across the watch face using one finger or press the upper button on the side of the Masimo W1.
- Swipe left and right using one finger to navigate the *Main Menu* and view all available Apps.
- Open an app by tapping on its icon.

Vitals Measurement * - Feature to start or stop health data measurements. See ***Activate Continuous Health Data*** on page 9.

Heart Rate Measurement - Feature to perform a heart rate spot check. See ***How to Take a Heart Rate Measurement*** on page 10.

Watch Face Settings - Feature to change watch face. See ***Change Watch Face*** on page 11.

Settings Menu - Access additional watch settings. See ***Changing Settings Options*** on page 12.

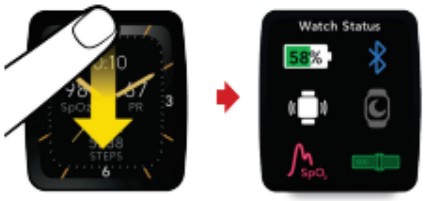
Watch Information - Displays software and regulatory information about watch. Serial number and compliance information are also located behind recess for watchbands.

(Masimo W1 User Manual at 10)

120. The Masimo W1, "in accordance with a determination that the first input meets second criteria different from the first criteria, wherein the second criteria require the first movement to be in a second direction that is different from the first direction in order for the second criteria to be met: display[s] a widget screen user interface that is different from the wake screen user interface and the home screen user interface, wherein the widget screen user interface includes a plurality of user interface objects corresponding to different applications, wherein a respective user interface object of the plurality of user interface objects contains application content from an

application corresponding to the respective user interface object, and when selected, causes display of an application corresponding to the respective user interface object" according to claim 9 of the '352 Patent. For example, the Masimo W1, in response to detecting a user input, is configured to determine whether the input is a "swipe" downward (i.e., the second criteria requiring the first movement to be in a second, different direction). In accordance with that determination, the W1 Device displays a "watch status screen" (i.e., widget screen user interface). The widget screen is different from the wake screen and home screen and includes a plurality of application icons, including "Battery Level," "Bluetooth Status," and "Watchband Tightness." The application icons display status information for the respective applications (i.e., application content) and, when selected, cause display of the corresponding applications.

Watch Status Screen



To view the *Watch Status* screen, swipe downward on the watch face with one finger, or press the bottom button on the watch.

Touch an icon to view status or access settings.

58%	**Battery Level**	Battery level in percentage displays on the *Watch Status* screen. When battery charge is low, a notification displays.		
	Bluetooth Status	Off	On	Connected
	Vibration Mode	Touch the icon to display the *Vibration* screen. This feature can be turned on or off from the *Vibration* screen.		
	Bedtime Setting	Touch the icon to display the *Bedtime* screen and change the settings. See ***Changing Settings Options*** on page 12 for complete information.		
SpO_2	**Health Data**	Touch the icon to display the *Vitals* screen. Vitals can be started and stopped from this screen. See ***Activate Continuous Health Data*** on page 9.		
	Watchband Tightness	Undetermined	OK Correct	Too Loose / Too Tight

(Masimo W1 User Manual at 11)

121. Defendants directly infringe the ’352 Patent by making, using, selling, and/or offering for sale in the United States, and/or importing into the United States, products that practice at least claim 9 of the ’352 Patent, including the Masimo W1. Defendants’ infringement is a violation of 35 U.S.C. § 271.

122. Defendants also indirectly infringe the ’352 Patent by intentionally inducing others, including their customers, to infringe at least claim 9 of the ’352 Patent through the use of their products, including the Masimo W1. Defendants provide to others (including their customers) instructions for using the W1 in a manner that infringes at least claim 9 of the ’352 Patent. Defendants’ infringement is a violation of 35 U.S.C. § 271.

123. Defendants also indirectly infringe the ’352 Patent as contributory infringers by selling or offering to sell in the United States, or importing into the United States, products including the Masimo W1. These products are material parts of the invention claimed in at least claim 9 of the ’352 Patent; are known to Defendants to be especially adapted for such infringing use; and are not staple articles or commodities of commerce suitable for substantial non-infringing use. Defendants’ infringement is a violation of 35 U.S.C. § 271.

124. Apple has been damaged and continues to be damaged by Defendants' infringement of the '352 Patent. In addition, Apple has suffered and will continue to suffer irreparable harm unless Defendants' infringement of the '352 Patent is enjoined.

COUNT VI: INFRINGEMENT OF U.S. PATENT NO. 11,474,483

125. The preceding paragraphs are incorporated by reference as if fully realleged herein.

126. U.S. Patent No. 11,474,483 (the "'483 Patent"), entitled "Wearable Electronic Device," was duly, legally, and validly issued to inventors Fletcher R. Rothkopf et al. on October 18, 2022. The '483 Patent is assigned to Apple. The '483 Patent is attached hereto as Exhibit E.

127. Apple is the exclusive and current owner of all rights, title, and interest in the '483 Patent, including the right to exclude and the right to seek damages and injunctive relief.

128. The '483 Patent discloses a wearable electronic device that can monitor a user's physiological signals and provide health-related information based on those signals.

129. For illustration, claim 1 of the '483 Patent claims:

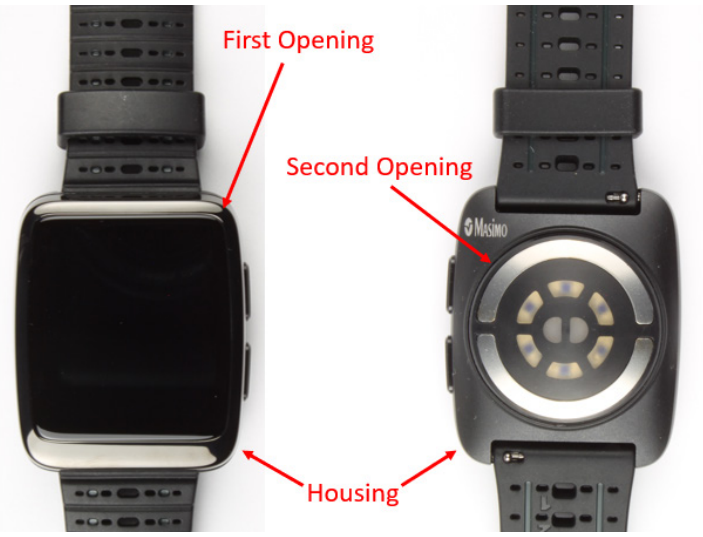
'483 Patent, Claim 1
A wearable electronic device comprising: a housing defining a first opening and a second opening; a display positioned at least partially within the first opening; a front cover positioned over the display and defining at least a portion of a front exterior surface of the wearable electronic device; a biosensor module comprising: a rear cover positioned at least partially within the second opening and defining an optically transparent window and a protruding convex surface; an optical sensor aligned with the optically transparent window; a first electrode positioned along a rear surface of the wearable electronic device; and a second electrode positioned along the rear surface of the wearable electronic device; and a third electrode positioned along a side of the wearable electronic device, wherein:

the wearable electronic device is configured to measure a first physiological parameter of a wearer using the optical sensor; and the wearable electronic device is configured to measure a second physiological parameter using the first electrode, the second electrode, and the third electrode.

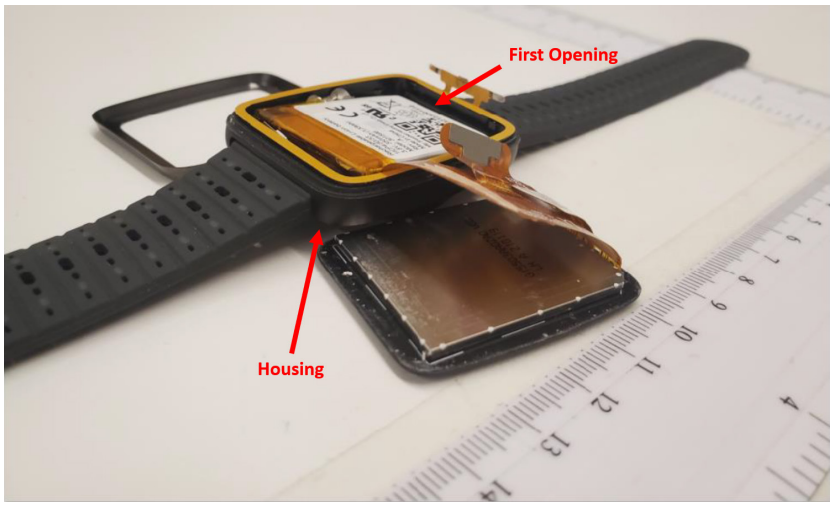
130. Masimo products, including the W1, practice at least claim 1 of the '483 Patent literally or in an equivalent manner.

131. The Masimo W1 is a wearable electronic device.[44]

132. The Masimo W1 includes "a housing defining a first opening and a second opening" according to claim 1 of the '483 Patent.



[44] To the extent the preamble of claim 1 is deemed to be limiting, which Apple does not concede, the Masimo W1 practices the preamble of claim 1.

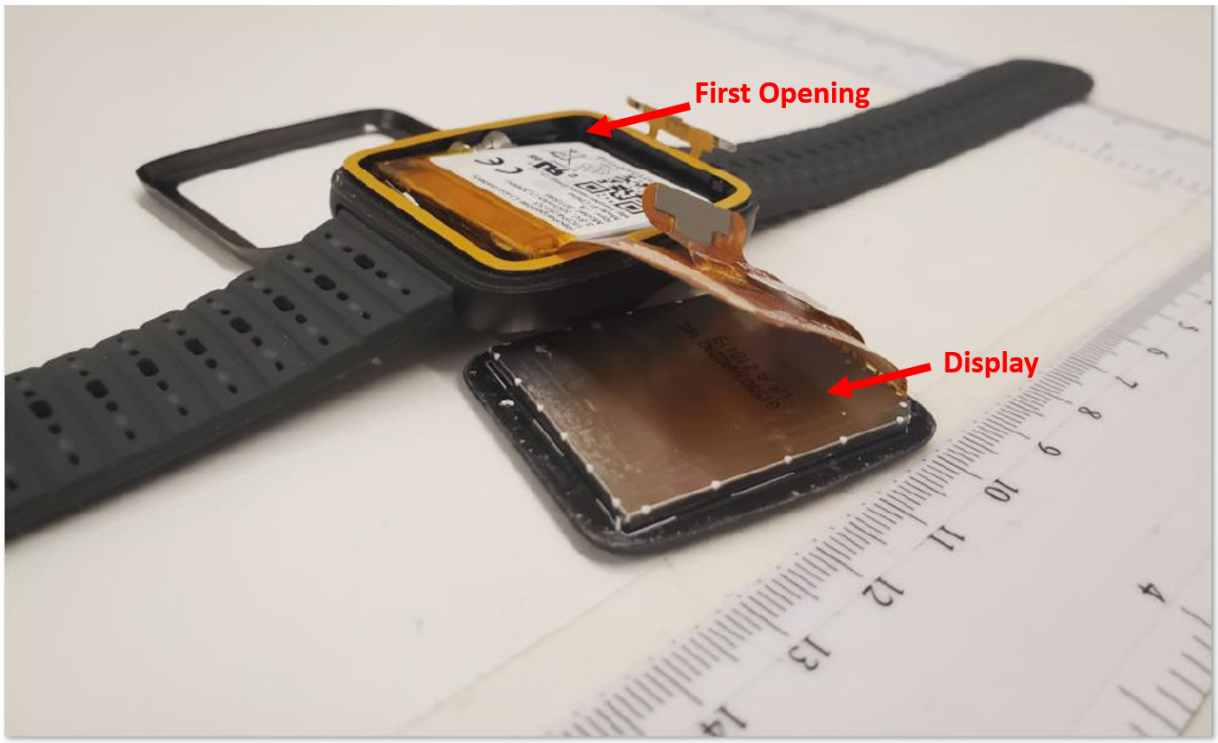


(FCC MASIW1 Masimo W1 Internal Photos (annotations added)).

133. The Masimo W1 includes "a display positioned at least partially within the first opening;" according to claim 1 of the '483 Patent.

(https://www.masimopersonalhealth.com/products/masimo-w1 (annotations added))

Photo 2: Internal right view of W1 displaying battery and LCD back side, another view



(FCC MASIW1 Masimo W1 Internal Photos (annotations added))

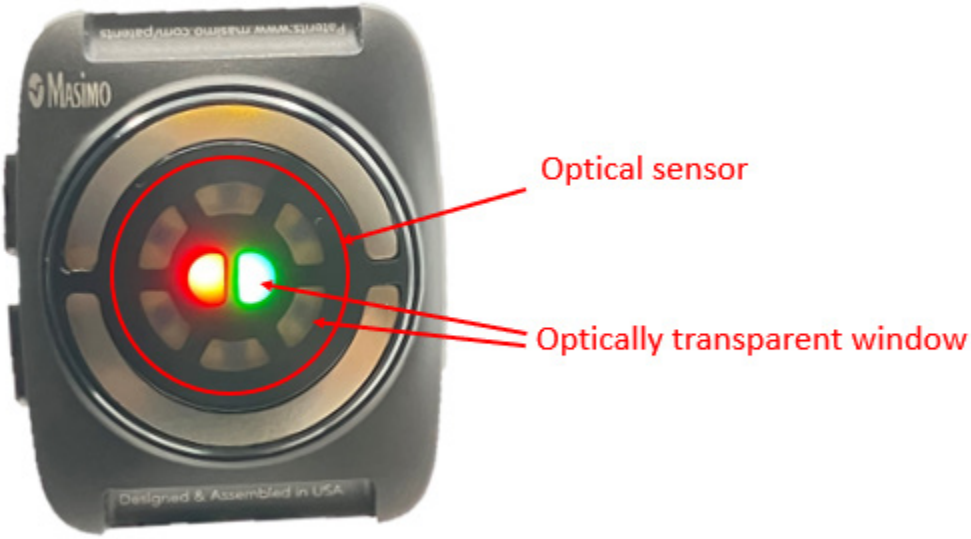
134. The Masimo W1 includes "a front cover positioned over the display and defining at least a portion of a front exterior surface of the wearable electronic device" according to claim 1 of the '483 Patent.

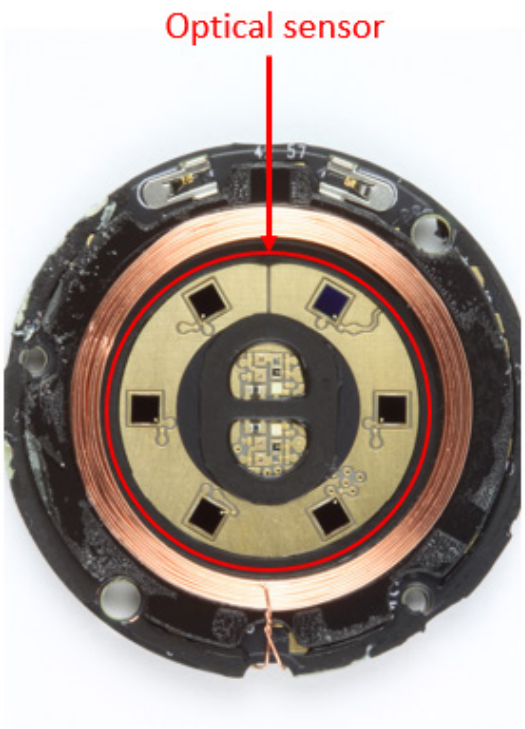
135. The Masimo W1 includes "a biosensor module" according to claim 1 of the '483 Patent.

(FCC MASIW1 Masimo W1 Internal Photos (annotation added)).

136. The Masimo W1's biosensor module includes "a rear cover positioned at least partially within the second opening and defining an optically transparent window and a protruding convex surface," according to claim 1 of the '483 patent. For example, W1 Device's biosensor includes a rear cover defining a protruding convex surface. The rear cover defines an optically transparent window. The rear cover is positioned at least partially within the second opening.

137. The Masimo W1's biosensor module includes "an optical sensor aligned with the optically transparent window," according to claim 1 of the '483 patent. For example, the Masimo W1 includes an optical sensor including LEDs and photodiodes aligned with the optically transparent window of the rear cover.





138. The Masimo W1's biosensor module includes "a first electrode positioned along a rear surface of the wearable electronic device; and a second electrode positioned along the rear surface of the wearable electronic device," according to claim 1 of the '483 patent.

139. The Masimo W1 includes "a third electrode positioned along a side of the wearable electronic device," according to claim 1 of the '483 patent.

(FCC MASIW1 Internal Photos (annotations added)).

140. The Masimo W1 "is configured to measure a first physiological parameter of a wearer using the optical sensor," according to claim 1 of the '483 patent. For example, the Masimo W1 uses the optical sensor for "Vitals measurements," including physiological parameters of the wearer.

(Masimo W1 User Manual at 8 (annotations added))

141. The Masimo W1 "is configured to measure a second physiological parameter using the first electrode, the second electrode, and the third electrode," according to claim 1 of the '483 patent. For example, the Masimo W1 uses the first, second, and third electrodes to measure the user's ECG.

How to Take a Heart Rate Measurement

The Heart Rate Measurement can be accessed by touching the Heart Rate icon from the *Main Menu* and following the steps below. See ***Main Menu*** on page 10. Ensure the Masimo W1 is on the wrist identified in the *Orientation* settings to ensure a proper heart rate measurement. See ***Changing Settings Options*** on page 12.

1. Access the *Heart Rate measurement* screen by touching the Heart Rate icon from the *Main Menu*.
2. Check that the electrode pad on the bottom of the watch makes good contact to the wrist.
3. Touch and hold your finger on the electrode pad on the bezel (below the lower portion of the watch screen) until the results screen is displayed.

Note: Do not move during the measurement. The measurement will take approximately 30s.

(Masimo W1 User Manual at 8)

142. Defendants directly infringe the '483 Patent by making, using, selling, and/or offering for sale in the United States, and/or importing into the United States, products that practice at least claim 1 of the '483 Patent, including the Masimo W1. Defendants' infringement is a violation of 35 U.S.C. § 271.

143. Defendants also indirectly infringe the '483 Patent by intentionally inducing others, including their customers, to infringe at least claim 1 of the '483 Patent through the use of their products, including the Masimo W1. Defendants provide to others (including their customers) instructions for using the W1 in a manner that infringes at least claim 1 of the '483 Patent. Defendants' infringement is a violation of 35 U.S.C. § 271.

144. Defendants also indirectly infringe the '483 Patent as contributory infringers by selling or offering to sell in the United States, or importing into the United States, products including the Masimo W1. These products are material parts of the invention claimed in at least claim 1 of the '483 Patent; are known to Defendants to be especially adapted for such infringing use; and are not staple articles or commodities of commerce suitable for substantial non-infringing use. Defendants' infringement is a violation of 35 U.S.C. § 271.

145. Apple has been damaged and continues to be damaged by Defendants' infringement of the '483 Patent. In addition, Apple has suffered and will continue to suffer irreparable harm unless Defendants' infringement of the '483 Patent is enjoined.

PRAYER FOR RELIEF

For the foregoing reasons, Apple prays for relief and entry of judgment as follows:

A. That Defendants infringe one or more claims of the Patents-in-Suit;

B. That Defendants' infringement is willful;

C. That Defendants' be permanently enjoined from further infringement of the Patents-in-Suit;

D. That Apple be awarded damages for Defendants' infringement of the Patents-in-Suit;

E. That Apple be awarded enhanced damages pursuant to 35 U.S.C. § 284, and pre- and post-judgment interest at the maximum rate permitted by law;

F. That this case be declared an exceptional case within the meaning of 35 U.S.C. § 285 and that Apple be awarded attorneys' fees, costs, and expenses incurred in connection with this action; and

G. That Apple be awarded such other relief as this Court deems just and appropriate.

DEMAND FOR JURY TRIAL

Pursuant to Federal Rule of Civil Procedure 38 and the Local Rules of this Court, Apple respectfully demands a jury trial on all issues so triable.

Dated: October 20, 2022

Respectfully submitted,

By: */s/ David E. Moore*

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