

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

APPLE INC.,

Plaintiff,

v.

MASIMO CORPORATION and
SOUND UNITED, LLC,

Defendants.

C.A. No. 22-1378-MN-JLH

JURY TRIAL DEMANDED

MASIMO CORPORATION and
CERCACOR LABORATORIES, INC.,

Counter-Claimants,

v.

APPLE INC.

Counter-Defendant.

**MASIMO CORPORATION AND CERCACOR LABS., INC.'S
RESPONSES TO APPLE INC.'S FINAL INVALIDITY CONTENTIONS**

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Pursuant to the Scheduling Order (D.I. 92) entered in the above-captioned action, Defendant/Counter-Claimant Masimo Corporation and Counter-Claimant Cercacor Laboratories, Inc. (collectively, “Masimo”) hereby provide the following Responses to Plaintiff/Counter-Defendant Apple Inc.’s August 24, 2023 Final Invalidity Contentions (“Apple’s Final Invalidity Contentions” or “AFIC”) with respect to the asserted claims of U.S. Patent Nos. 10,687,743 (“the ’743 Patent”), 10,722,159 (“the ’159 Patent”), 8,190,223 (“the ’223 Patent”), 10,736,507 (“the ’507 Patent”), and 10,984,911 (“the ’911 Patent”) (collectively, the “Masimo Asserted Patents”). Masimo’s Infringement Contentions set forth the Asserted Claims of the Masimo Asserted Patents and include the following claims:

Masimo Asserted Patents	Asserted Claims
’743 Patent	1, 4-8, 11, 12, 14, 16, 18, 19, 21
’159 Patent	1-5, 7-9, 13, 19-23, 25
’223 Patent	15, 21, 22, 27, 28, 34, 36, 37, 42, 43
’507 Patent	13, 14, 16, 17, 19, 20
’911 Patent	1-5, 8, 10-14, 17, 19-25, 28

I. RESERVATION OF RIGHTS

Masimo reserves all rights to further supplement or modify these responses to Apple’s Invalidity Contentions, including to address any prior art identified by Apple, any description of the prior art provided by Apple, and any grounds or contentions of invalidity asserted by Apple. In addition, Masimo reserves the right to demonstrate the validity of any asserted claim, including but not limited to the Asserted Claims, on bases other than those disclosed in these disclosures and contentions and/or amend these contentions at a later date, including to identify additional reasons why the prior art fails to disclose or render obvious claim elements or otherwise provide additional reasons why Apple’s contentions under 35 U.S.C. §§ 101, 102, 103, and/or 112 fail. Masimo otherwise reserves the right to supplement and/or amend these

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contentions as necessary and appropriate and as provided under any applicable Rules or order of the Court.

Masimo's responses to Apple's Final Invalidity Contentions are made to the best of Masimo's knowledge based upon the information reasonably available to Masimo as of the date of this response and Masimo's understanding of Apple's Final Invalidity Contentions. Masimo's investigation remains ongoing, fact discovery is not yet complete, expert discovery has not begun, and the Court has not yet construed any terms. Accordingly, Masimo reserves the right to amend, modify, supplement, or otherwise revise any portion of its responses to Apple's Final Invalidity Contentions based on Masimo's continuing investigation, Apple's supplementation of its Final Invalidity Contentions, the Court's claim construction order, Apple's responses to Masimo's discovery requests including requests for documents and/or things, interrogatories, requests for admission, other disclosures from Apple, third-party discovery, fact witness deposition testimony, expert witness deposition testimony, expert witness reports and/or declarations, disclosures from Apple, disclosures and/or deposition testimony from third-parties, future rulings from the Court, any additional items of evidence, and for any additional reason permitted by statute, rule, and/or applicable case law. Masimo also reserves the right to amend, modify, supplement, or otherwise revise any portion of its responses to Apple's Final Invalidity Contentions as Masimo's review and investigation of such contentions—which encompass *over 15,700 pages* in addition to many dozens of alleged prior art references—continues.

Apple bears the burden to prove invalidity by clear and convincing evidence. *Microsoft Corp. v. i4i Ltd. Partnership*, 131 S. Ct. 2238, 2242 (2011). Apple has failed to carry that burden to show invalidity of any claim under any basis by clear and convincing evidence.

[REDACTED]

Any description of the references identified by Apple is not intended to limit any argument by Masimo that the references fail to disclose any fact asserted by Apple, including but not limited to arguments that Apple has taken disparate portions of references and combined them even though a person of ordinary skill in the relevant art (“POSITA”) would not have done so and/or would not have reasonably expected success in such combinations. Further, these responses are made based on Apple’s identification of specific passages or quotations from cited references and thus may not constitute Masimo’s responses to any portions of the reference not expressly identified by Apple. Masimo may supplement its below responses and/or offer additional evidence to support any of Masimo’s responsive contentions made with respect to the references identified by Apple, including additional citations to portions of the reference not identified in Apple’s Final Invalidity Contentions. Moreover, Masimo does not admit that any of the references cited by Apple actually constitute prior art or that such references are enabling. Additionally, Masimo expressly contends that Apple has not met its burden to show that the disclosures it relies on its Final Invalidity Contentions are enabling.

Where a responsive contention is made below with respect to a particular Asserted Claim, Masimo incorporates said contention for each Asserted Claim to which the contention may apply. Masimo also incorporates any argument presented in the prosecution histories of the Masimo Asserted Patents to support allowance of the claims.

Additionally, fact discovery is underway, expert discovery has not begun, the claim construction process has not been completed, and the Court has not construed the claims. Accordingly, Masimo reserves the right to rely on contentions not yet developed in response to the Court’s claim constructions or anything disclosed by Apple or third parties in discovery.

[REDACTED]

Moreover, nothing in Masimo's responses to Apple's Final Invalidity Contentions should be construed as an admission. For example, if a fact is not specifically contested or denied, it should not be construed as being admitted. Further, nothing in Apple's Final Invalidity Contentions or Masimo's responses to Apple's Final Invalidity Contentions should be limiting on Masimo for the purposes of claim construction, which has not yet concluded in this litigation. Apple's Final Invalidity Contentions do not establish whether the preamble of any claim is limiting, as the issue of whether a preamble is limiting is one of claim construction, which has not yet been completed. Additionally, regardless of the format of Masimo's responses to Apple's Final Invalidity Contentions, Masimo does not acquiesce to any contention, characterization, allegation, or statement of fact made by Apple in its Final Invalidity Contentions, and the formatting of Masimo's responses should never be construed as an admission.

In addition, Masimo's responses to Apple's Final Invalidity Contentions are not a waiver of Masimo's below-identified objections to Apple's Final Invalidity Contentions and do not prevent Masimo from moving to strike or preclude based on the many deficiencies in Apple's Final Invalidity Contentions, including the many deficiencies of Apple's more than 13,000-page Final Invalidity Contentions.

Further, as explained below, none of the alleged prior art identified by Apple anticipates or renders obvious any Asserted Claim of the Masimo Asserted Patents, and Apple has failed to provide reasons or motivations for modifying a reference or combining the alleged prior art references to arrive at any of the Asserted Claims, or bases for alleging an expectation of success in modifying a reference or combining the alleged prior art references. Apple has also failed to demonstrate that any of the references it identifies, alone or in combination with other references,

[REDACTED]

present a prima facie case of obviousness because the proposed modifications—to the extent any modifications are even identified in Apple’s Final Invalidity Contentions (almost universally, they are not)—would change the principle(s) of operation of at least the primary references on which Apple relies. The combinations in Apple’s Final Invalidity Contentions for which Apple has provided detail or discussion have been addressed below, to the extent possible. To the extent Apple is permitted to supplement its Final Invalidity Contentions to identify its combinations, provide discussion of currently unaddressed or unexplained combinations, or to provide additional explanation regarding any of its obviousness combinations, Masimo reserves the right to respond to such contentions and/or explanations.

Additionally, Apple’s Final Invalidity Contentions rely on translations of foreign language references, but it is unclear if the translations produced by Apple in this litigation are certified, accurate, and/or complete. Indeed, such translations appear to be machine translations and are of unknown origin, accuracy, and completeness. Where multiple translations of the same foreign language reference have been provided, it is unclear which translation Apple is relying upon for its contentions. Accordingly, Masimo reserves the right to amend its responses, including its description and analyses pertaining to such foreign language references, to the extent that: (1) Apple identifies the translation(s) it is relying upon for each foreign language reference; and/or (2) the translations produced by Apple for its foreign language references contain inaccuracies, are not certified, and/or are otherwise discovered to be incomplete or inaccurate in any respect.



II. MASIMO’S OBJECTIONS TO APPLE’S FINAL INVALIDITY CONTENTIONS

Masimo objects to, and reserves all rights to move to strike, preclude, or otherwise seek appropriate relief from the many deficiencies in Apple’s Final Invalidity Contentions, including at least the following deficiencies:

- (1) Apple’s repeated attempts to reserve the right to “identify additional prior art references . . . to the extent any such prior art becomes known during discovery in this case” for its contentions (*see, e.g., AFIC at 5, 8*);
- (2) Apple’s contention that there are “thousands of invalidating combinations” despite only providing “illustrative examples” of such alleged combinations (*see, e.g., id. at 4-5*);
- (3) Apple’s broad and vague attempts to reserve the right to “rely on any other combination of any prior art references” (*see, e.g., id. at 42-43*) and to “identify[] other invalidating combinations as appropriate” (*see, e.g., id. at 4-5*);
- (4) Apple’s repeated attempts to reserve the right to rely on “uncited portions” of the identified references (*see, e.g., id. at 3, 5, 9*);
- (5) Apple’s repeated attempts to “rely on both cited and uncited portions of . . . other prior art” that is not even identified upon in Apple’s Final Invalidity Contentions (*see, e.g., id. at 3, 5, 9*);
- (6) Apple’s attempts to broadly and vaguely “rel[y] on and incorporate[] all prior art references cited in and/or on the cover of the Asserted Patents and their respective prosecution histories” for unidentified-to-date “anticipation and/or obviousness” contentions (*see, e.g., id. at 5*);

- [REDACTED]
- (7) Apple’s attempt to reserve rights to assert bases of invalidity (*e.g.*, pre-AIA 35 U.S.C. §§ 102(f), (g)) not relied upon Apple’s Final Invalidity Contentions (*see, e.g., id.* at 2);
- (8) Apple’s attempts to reserve the right to rely on the text or content “associated with” what Apple has identified in its Final Invalidity Contentions (*see, e.g., id.* at 8-9);
- (9) Apple’s attempts to obscure its actual contentions by vaguely setting forth its invalidity contentions in any of Apple’s cover document or 81 claim charts (collectively comprising over 15,700 pages) (*see generally id.*);
- (10) Apple’s purported reliance on inherent disclosure without identifying whether and where Apple relies on inherent disclosure in its contentions or providing the bases underlying Apple’s contentions based on inherent disclosure (*see, e.g., id.* at 3, 9-10);
- (11) Apple’s failure to identify whether and where it is relying on a given reference “to show[] the state of the art in the relevant time period” rather than relying on the reference to allege anticipation and/or obviousness of one or more claims (*see, e.g., id.* at 4, 8-10, 41-42, 45);
- (12) Apple’s attempts to assert anticipation and/or obviousness contentions against claim language that Apple simultaneously contends cannot be understood with reasonable certainty (*see, e.g., id.* at Section VIII(A)); and
- (13) Apple’s attempt to assert contentions based on the understanding of a person of ordinary skill in the art without ever defining the level of ordinary skill in the art for any of the Masimo Asserted Patents (*see generally id.*).

Masimo expressly reserves the right to identify and seek relief from additional deficiencies in Apple’s Final Invalidity Contentions as Masimo’s investigation continues and discovery progresses, including as Masimo continues its review of Apple’s Final Invalidity

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Contentions, which encompass over 15,700 pages in addition to many dozens of alleged prior art references.

III. LEVEL OF ORDINARY SKILL IN THE ART

Apple fails to propose any definition of a person of ordinary skill in the art (“POSITA”) for any of the Masimo Asserted Patents. Masimo expressly reserves the right to consider and respond to any definition of a POSITA proposed by Apple, and to propose its own definitions of a POSITA for each of the Masimo Asserted Patents.

The level of ordinary skill in the art for the ’743 Patent is measured as of July 2, 2015. The level of ordinary skill in the art for the ’159 Patent is measured as of July 2, 2015. The level of ordinary skill in the art for the ’223 Patent is measured as of March 1, 2005. The level of ordinary skill in the art for the ’507 Patent is measured as of September 20, 2012. The level of ordinary skill in the art for the ’911 Patent is measured as of March 1, 2005.

IV. PRIORITY DATES OF THE ASSERTED CLAIMS

The priority date and earliest effective filing date of the Asserted Claims of the ’743 and ’159 Patents is July 2, 2015, the filing date of U.S. Provisional Patent App. No. 62/188,430. These patents properly claim priority back to the filing date of the above-identified provisional application and are entitled to the filing date of said provisional application as their priority date and earliest effective filing date. 35 U.S.C. § 119(e)(1). While Apple states that it disputes that the Asserted Patents are entitled to the asserted priority dates (AFIC at 7), Apple fails to raise a specific contention to the contrary. Indeed, Apple does not substantively respond to or dispute the information Masimo provided in Masimo’s Initial Response to Apple’s Initial Invalidity Contentions at Appendices 1-2 (also attached hereto) regarding the earliest effective filing date of the ’743 and ’159 Patents. Appendix 1 (’743 Patent) and Appendix 2 (’159 Patent) describe

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the relevant information supporting the priority date for the '743 and '159 Patents, including by describing where each claim element of the Asserted Claims of the '743 and '159 Patents is supported by the application(s) relied upon for the above-identified priority date. Masimo reserves the right to further demonstrate, if and when necessary or appropriate, that the '743 and '159 Patents are entitled to the identified priority date.

The priority date and earliest effective filing date of the Asserted Claims of the '223 Patent is March 1, 2005, the filing date of U.S. Provisional Patent App. Nos. 60/657,596, 60/657,281, 60/657,268, and 60/657,759. This patent properly claims priority back to the filing date of the above-identified provisional applications and is entitled to the filing date of said provisional applications as its priority date and earliest effective filing date. 35 U.S.C. § 119(e)(1) (pre-AIA). While Apple states that it disputes that the Asserted Patents are entitled to the asserted priority dates (AFIC at 7), Apple fails to raise a specific contention to the contrary. Indeed, Apple does not substantively respond to or dispute the information Masimo provided in Masimo's Initial Response to Apple's Initial Invalidity Contentions at Appendix 3 (also attached hereto) regarding the earliest effective filing date of the '223 Patent. Appendix 3 describes the relevant information supporting the priority date for the '223 Patent, including by describing where each claim element of the Asserted Claims of the '223 Patent is supported by the application(s) relied upon for the above-identified priority date. Masimo reserves the right to further demonstrate, if and when necessary or appropriate, that the '223 Patent is entitled to the identified priority date.

The priority date and earliest effective filing date of the Asserted Claims of the '507 Patent is September 20, 2012, the filing date of U.S. Provisional Patent App. No. 61/703,729. This patent properly claims priority back to the filing date of the above-

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identified provisional application and is entitled to the filing date of said provisional application as its priority date and earliest effective filing date. 35 U.S.C. § 119(e)(1) (pre-AIA). While Apple states that it disputes that the Asserted Patents are entitled to the asserted priority dates (AFIC at 7), Apple fails to raise a specific contention to the contrary. Indeed, Apple does not substantively respond to or dispute the information Masimo provided in Masimo's Initial Response to Apple's Initial Invalidity Contentions at Appendix 4 (also attached hereto) regarding the earliest effective filing date of the '507 Patent. Appendix 4 describes the relevant information supporting the priority date for the '507 Patent, including by describing where each claim element of the Asserted Claims of the '507 Patent is supported by the application(s) relied upon for the above-identified priority date. Masimo reserves the right to further demonstrate, if and when necessary or appropriate, that the '507 Patent is entitled to the identified priority date.

The priority date and earliest effective filing date of the Asserted Claims of the '911 Patent is March 1, 2005, the filing date of U.S. Provisional Patent App. Nos. 60/657,281, 60/657,268, 60/657,759, and 60/657,596. This patent properly claims priority back to the filing date of the above-identified provisional applications and is entitled to the filing date of said provisional applications as its priority date and earliest effective filing date. 35 U.S.C. § 119(e)(1) (pre-AIA). While Apple states that it disputes that the Asserted Patents are entitled to the asserted priority dates (AFIC at 7), Apple fails to raise a specific contention to the contrary. Indeed, Apple does not substantively respond to or dispute the information Masimo provided in Masimo's Initial Response to Apple's Initial Invalidity Contentions at Appendix 5 (also attached hereto) regarding the earliest effective filing date of the '911 Patent. Appendix 5 describes the relevant information supporting the priority date for the '911 Patent, including by describing where each claim element of the Asserted Claims of the '911 Patent is supported by

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the application(s) relied upon for the above-identified priority date. Masimo reserves the right to further demonstrate, if and when necessary or appropriate, that the '911 Patent is entitled to the identified priority date.

V. MASIMO'S RESPONSES TO APPLE'S FINAL INVALIDITY CONTENTIONS

A. The Masimo Asserted Patents Are Presumed Valid

The USPTO properly issued each Asserted Claim of the Masimo Asserted Patents in accordance with the patent laws of the United States. The Asserted Claims of the Masimo Asserted Patents are therefore presumed valid pursuant to 35 U.S.C. § 282. Apple bears the burden of proving otherwise by clear and convincing evidence. *Microsoft Corp. v. i4i Ltd. P'ship*, 131 S. Ct. 2238, 2243 (2011) (“[T]he burden of proving invalidity [is] on the attacker. That burden is constant and never changes[.]”); *see, e.g., BASF Corp. v. SNF Holding Co.*, 955 F.3d 958, 963 (Fed. Cir. 2020) (“The statutory presumption of patent validity imposes the burden of persuasion on the [party challenging the patent], [35 U.S.C.] § 282(a), and factual propositions and inferences underlying an invalidity defense must be proven by clear and convincing evidence.”). Apple has not met its burden in many respects. To the extent any of Apple’s Final Invalidity Contentions are not specifically addressed herein, they are disputed, at least because Apple has not met its burden of demonstrating invalidity of any Asserted Claim by clear and convincing evidence.

B. Apple’s “Identification of Prior Art” Is Deficient

For each of the Masimo Asserted Patents, Apple’s Final Invalidity Contentions purport to identify “prior art” that Apple may rely on for its anticipation and/or obviousness theories. AFIC at Section III. Apple’s contentions, however, do not identify basic information, such as whether the alleged prior art is allegedly anticipatory, relied upon for obviousness, relied upon as relevant

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to motivation to combine or expectation of success, or relied upon as evidence of the understanding of a POSITA. Further, various alleged prior art references identified in Apple’s Final Invalidity Contentions include publication dates that are after the earliest effective filing date of the Masimo Asserted Patents without any explanation or showing as to how such references would qualify as prior art. For many references, Apple fails to identify the specific bases of 35 U.S.C. § 102 under which it contends its references qualify as prior art. Additionally, for multiple references, Apple’s Final Invalidity Contentions provide only the unexplained and unsupported contention that various references are allegedly “entitled to claim the benefit of the filing date of [their] provisional application.” *See, e.g.,* AFIC at 12 n.1 & n.2, 13 n.3. However, it is Apple’s burden to establish that each item of alleged “prior art” is, in fact, prior art to the Masimo Asserted Patents against which it is asserted. *See, e.g., Microsoft*, 131 S. Ct. at 2243; *see also Medtronic, Inc. v. Barry*, 891 F.3d 1368, 1380 (Fed. Cir. 2018) (“[T]he patent challenger[] bears the burden of establishing that a particular document is a printed publication.”). Apple’s Final Invalidity Contentions have not satisfied this threshold burden and are thus fatally flawed.

Apple also identifies and relies on numerous references that were already considered by the Patent Office during prosecution of the Masimo Asserted Patents. *See* AFIC at Section III. However, such references should be given less weight, and Apple’s reliance on invalidity positions already considered by the Patent Office makes it even “harder to meet the clear and convincing burden.” *Sciele Pharma v. Lupin Ltd.*, 684 F.3d 1253, 1260-61 (Fed. Cir. 2012).

Apple’s Invalidity Contentions also state that Apple’s charts are not exhaustive because such charts are “exemplary claim charts.” AFIC at 42-43. Apple’s Invalidity Contentions also confirm the inadequacy of its claim charts by stating that “the citations presented in [Apple’s]

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final claim charts for a claim limitation are for exemplary purposes only and likewise should not be deemed exhaustive” and repeatedly attempting to reserve the right to rely on charted and uncharted (i.e., unidentified) references and charted and uncharted disclosures. *See, e.g., id.* at 2-3. To the extent Apple relies on any such uncharted references or uncharted citations to assert anticipation and/or obviousness, Apple has not met its burden of proving by clear and convincing evidence that the uncharted reference or citation discloses each and every (or any) element of any Asserted Claim of the Masimo Asserted Patents, alone or in combination with any other references identified by Apple, or that such uncharted references or citations provide a motivation to combine and/or reasonable expectation of success in combining other references identified by Apple.

Moreover, Apple’s allegations are rife with inaccurate statements, such as but not limited to Apple’s characterizations of the Asserted Claims, the alleged state of the art, the alleged prior art, and the alleged knowledge or understanding of a POSITA. Masimo, in its below responses to Apple’s Invalidity Contentions, has not identified each and every failure of proof in Apple’s 15,000+ pages of Invalidity Contentions and Masimo reserves its right to amend these responses as discovery progresses and Masimo’s investigation continues.

As explained below, none of the references identified in Apple’s Invalidity Contentions disclose each and every element of any Asserted Claim of the Masimo Asserted Patents, alone or in combination with any other references identified by Apple. Further, Apple has not shown by clear and convincing evidence a motivation to modify a reference or combine any of the references it has identified to arrive at the inventions claimed in the Asserted Claims of the Masimo Asserted Patents with a reasonable expectation of success, or that the claimed inventions otherwise would have been obvious to a POSITA. Apple’s Invalidity Contentions fall far short

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of Apple’s burden to demonstrate anticipation or obviousness of any Asserted Claims of the Masimo Asserted Patents by clear and convincing evidence.

C. **The Alleged Prior Art Does Not Anticipate or Render Obvious the Asserted Claims of the Masimo Asserted Patents**

Apple’s Final Invalidity Contentions include both “Primary References” and “Secondary References” as alleged prior art for each of Masimo’s Asserted Patents. AFIC at 42-43. Apple identifies the Primary References as those cited in Exhibits A-1 – A-17; B-1 – B-17; C-1 – C-14; D-1 – D-16; and E-1 – E-12. *Id.* at 42. Apple identifies the Secondary References as those cited in Exhibits A-18, B-18, C-15, D-17 and E-13. *Id.* at 43. Apple has not demonstrated by clear and convincing evidence that any of the Primary or Secondary references disclose, or render obvious, alone or in combination, the Asserted Claims of the Masimo Asserted Patents.

Anticipation is an exacting standard which is only met if “a single prior art reference . . . discloses each and every element of the claimed invention.” *See, e.g., Structural Rubber Prods. Co. v. Park Rubber Co.*, 749 F.2d 707, 715 (Fed. Cir. 1984). An anticipatory reference must contain a “clear and unambiguous” disclosure of each limitation of the claims. *See, e.g., Cheese Sys., Inc. v. Tetra Pak Cheese & Powder Sys., Inc.*, 725 F.3d 1341, 1352 (Fed. Cir. 2013). “[I]n order to demonstrate anticipation, the proponent must show that the four corners of a single, prior art document describe every element of the claimed invention.” *See, e.g., Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1369 (Fed. Cir. 2008) (citation omitted). Moreover, “the prior art reference . . . must also disclose those elements arranged as in the claim.” *Id.* (citation omitted). “An anticipating reference must enable that which it is asserted to anticipate.” *See, e.g., Abbott Labs. V. Sandoz, Inc.*, 544 F.3d 1341, 1345 (Fed. Cir. 2008). Each of the Asserted Claims of the Masimo Asserted Patents is valid and not anticipated by Apple’s alleged prior art.

[REDACTED]

Further, the obviousness analysis requires that “the scope and content of the prior art are . . . determined; differences between the prior art and the claims at issue are . . . ascertained; and the level of ordinary skill in the pertinent art resolved.” *See, e.g., KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 399 (2007) (citing *Graham v. John Deere Co. of Kan. City*, 383 U.S. 1, 17-18 (1966)). For obviousness combinations based on a single reference, there still “must be a motivation to make the combination and a reasonable expectation that such a combination would be successful, otherwise a skilled artisan would not arrive at the claimed combination.” *In re Stepan Co.*, 868 F.3d 1342, 1346 (Fed. Cir. 2017). Moreover, a determination of obviousness “requires finding both ‘that a skilled artisan would have been motivated to combine the teachings of the prior art . . . and that the skilled artisan would have had a reasonable expectation of success in doing so.’” *Id.* at 1345-46 (quoting *Intelligent Bio-Sys., Inc. v. Illumina Cambridge Ltd.*, 821 F.3d 1359, 1367-68 (Fed. Cir. 2016)).

Each of the Asserted Claims of the Masimo Asserted Patents is valid and non-obvious in accordance with the non-obviousness standard set forth in *KSR*, 550 U.S. 398. Apple has not met its burden of proving anticipation or obviousness of any claim of the Masimo Asserted Patents by clear and convincing evidence. As explained below, none of the alleged prior art identified by Apple anticipates or renders obvious any Asserted Claim of the Masimo Asserted Patents. Moreover, Apple has failed to provide reasons or motivations for combine the alleged prior art references to arrive at any of the Asserted Claims, or bases for alleging an expectation of success in combining the alleged prior art references.

1. The Asserted Claims of the ’743 and ’159 Patents Are Not Anticipated Or Rendered Obvious by the Alleged Prior Art

Apple’s Final Invalidity Contentions identify the same Primary and Secondary References for each of the ’743 and ’159 Patents. AFIC at 42-43; *see also* Exhibits A-1 – A-18

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- “The computer-implemented method of claim 13, further comprising, via the application, enabling the user to set reminders to take future measurements.” [20]

Accordingly, this reference does not anticipate or (alone or in combination with other references) render obvious any of the Asserted Claims of the '507 Patent.

* * *

In addition to the above, Sections V.C.5-6 (*infra*) provides additional reasons why Apple has not demonstrated by clear and convincing evidence that any of the Asserted Claims of this patent would have been obvious to POSITA based on any of Apple's references, alone or in combination with each other.

4. The Asserted Claims of the '911 Patent Are Not Anticipated Or Rendered Obvious by the Alleged Prior Art

Apple's Final Invalidity Contentions identify the Primary and Secondary References for the '911 Patent. AFIC at 42-43; *see also* Exhibits E-1 – E-13. These references will be referred to herein as the '911 Primary References and '911 Secondary References, respectively. Apple has not demonstrated by clear and convincing evidence that any of the '911 Primary References or '911 Secondary References disclose, or render obvious, alone or in combination, the Asserted Claims of the '911 Patent.

Apple does not even allege that Abdul-Hafiz, Mason, Nellcor Oximax Sensor, Masimo SET Sensors, HP M-Series Sensor, Nellcor FS14, Nierlich or any of the '911 Secondary References anticipate the Asserted Claims of the '911 Patent. *See* AFIC at 36-41. Moreover, as noted below, Apple has failed to demonstrate, or even allege, that numerous additional limitations are disclosed by the '911 Primary References and '911 Secondary References.

Apple's obviousness contentions are deficient at least because they fail to provide a clear identification of the combinations of references Apple intends to rely upon in this case. As an example, Apple has cited 12 Primary References and 24 Secondary References for the '911

[REDACTED]

Patent. Apple states “[t]o the extent any claim element is found to be missing from one of the primary references, that primary reference can be combined with any other primary reference that discloses that claim element (as shown in the attached exemplary claim charts), and/or any secondary reference that discloses that claim element (as shown in the attached exemplary claim charts).” AFIC at 43; *see also id.* at 58-62. Apple then purports to provide a bullet point listing of exemplary combinations for the ’911 Patent, but these “combinations” do not provide any specificity. AFIC at 58-62.

As an example, with respect to the ’911 Patent, Apple states:

- to the extent Masimo contends or the Court finds that any of the primary references identified herein do not teach or render obvious any element of independent claims 1, 10, or 19, that teaching would have been obvious in view of the knowledge of a POSITA and ***at least each of the other primary references*** for the ’911 patent, as shown in the attached claim charts.
- to the extent Masimo contends or the Court finds that any of the primary references identified herein do not teach or render obvious the cavity of claims 1 and 10, that teaching would have been obvious in view of the knowledge of a POSITA and the other charted prior art references providing that disclosure including ***at least the following references*** for the ’911 patent, as shown in the attached claim charts: Grubisic, Mannheimer 756, Kiani 816, Takatani, Abdul-Hafiz, Nierlich, Nogawa, Fantini, Webster, Raley, OxiMax, Masimo SET, M-Series, and FS14.

AFIC at 58-62 (emphases added). This vague disclosure fails to identify the combinations Apple intends to rely upon and fails to explain how such combinations would be implemented with respect to the entirety of any Asserted Claims of the ’911 Patent. This disclosure also fails to identify how individual references would be modified. Apple’s claim charts do not cure these issues. The charts merely copy and paste large sections of the references without providing any information or explanation as to how a reference would be modified or combined with another reference. These deficiencies are not limited to specific claims of the ’911 Patent but apply across all of Apple’s invalidity contentions with respect to the Asserted Claims of this patent.

[REDACTED]

Indeed, Apple’s remaining obviousness contentions similarly rely upon a large number of primary and secondary references and suffer from the same deficiencies. *See*, AFIC at 58-62, Apple’s Primary and Secondary Reference Claim Charts (i.e., Exhibits E-1 – E-13).

A court in this District has stated that contentions that include “combinations that are incredibly broad” and “vague disclosures that made reference to 20+-reference combinations” are the kind of “disclosures [that] are hardly notice of anything.” *Pharmacyclics LLC et al v. Sandoz Inc. et al*, 18-192-CFC-CJB, D.I. 466, (September 1, 2020.) Contentions have also been found to be inadequate in other courts when they have not specifically pointed out particular combinations of references. *See, e.g., Slot Speaker Techs., Inc. v. Apple, Inc.*, No. 13-CV-01161-HSG(DMR), 2017 WL 235049, at *7 (N.D. Cal. Jan. 19, 2017) (concluding that contentions were inadequate since “Apple must explain which prior art references fall in a particular group, as well as the theory of obviousness for combinations from particular groups”); *0912139 B.C. Ltd. v. Rampion USA Inc.*, No. C18-1464JLR, 2019 WL 3082290, at *5 (W.D. Wash. July 15, 2019) (concluding that contentions were inadequate where defendant provided “‘buckets’ of references that would support virtually endless permutations of prior art combinations” and further, “although the claim charts purport to assert obviousness combinations on a claim element-by-claim element basis, the charts include so many potential combinations of alleged prior art that they fail to reasonably apprise Plaintiffs of the obviousness combinations on which Defendants intend to rely.”); *Altria Client Servs. LLC v. R.J. Reynolds Vapor Co.*, No. 1:20CV472, 2022 WL 2489054, at *6 (M.D.N.C. July 6, 2022) (concluding that contentions were inadequate when “Defendants have given Plaintiffs a litany of choices that may possibly combine to make a claim obvious.”).

[REDACTED]

Moreover, Apple has not demonstrated by clear and convincing evidence that any of its cited references teach or render obvious the incomplete handful of limitations Apple addresses for the '911 Patent in pages 58-62 of Apple's Final Invalidity Contentions.

Apple has not demonstrated by clear and convincing evidence that a POSITA would have been motivated to combine “any of the primary references” with “the other primary references” with a reasonable expectation of success, how such combinations would be implemented, or that such combinations would have disclosed or rendered obvious “any element of independent claims 1, 10, or 19 [of the '911 Patent].” AFIC at 58.

Apple has not demonstrated by clear and convincing evidence that a POSITA would have been motivated to combine “any of the primary references” with Grubisic, Mannheimer 756, Kiani 816, Takatani, Abdul-Hafiz, Nierlich, Nogawa, Fantini, Webster, Raley, OxiMax, Masimo SET, M-Series, or FS14 with a reasonable expectation of success, how such combinations would be implemented, or that such combinations would have disclosed or rendered obvious “the cavity of claims 1 and 10” of the '911 Patent. AFIC at 59.

Apple has not demonstrated by clear and convincing evidence that a POSITA would have been motivated to combine “any of the primary references” with Abdul-Hafiz, Benni, Nierlich, Kimura, Webster, Moyle, Hannula, or Ehrlich with a reasonable expectation of success, how such combinations would be implemented, or that such combinations would have disclosed or rendered obvious “the electromagnetic shield of claim 10” of the '911 Patent. AFIC at 59.

Apple has not demonstrated by clear and convincing evidence that a POSITA would have been motivated to combine “any of the primary references” with Grubisic, Mannheimer 756, Kiani 816, Abdul-Hafiz, Benni, Nierlich, Fantini, or Parker with a reasonable expectation of success, how such combinations would be implemented, or that such combinations would have

[REDACTED]

disclosed or rendered obvious “the side walls of claims 10 and 21” of the ’911 Patent. AFIC at 59.

Apple has not demonstrated by clear and convincing evidence that a POSITA would have been motivated to combine “any of the primary references” with Abdul-Hafiz, Nierlich, Webster, Hannula, or Feather with a reasonable expectation of success, how such combinations would be implemented, or that such combinations would have disclosed or rendered obvious “the black material of claims 1, 10, and 21” of the ’911 Patent. AFIC at 59-60.

Apple has not demonstrated by clear and convincing evidence that a POSITA would have been motivated to combine “any of the primary references” with Grubisic, Mannheimer 756, Takatani, Benni, Raley, Webster, Moyle, Nogawa, Aoyagi, Jarman, Barthelmy, Fantini, or Scharf with a reasonable expectation of success, how such combinations would be implemented, or that such combinations would have disclosed or rendered obvious “the three LEDs emitting light of different wavelengths of claims 1, 10, and 19” of the ’911 Patent. AFIC at 60.

Apple has not demonstrated by clear and convincing evidence that a POSITA would have been motivated to combine “any of the primary references” with Grubisic, Abdul-Hafiz, Benni, Nierlich, Kimura, Shaw, Diab, Fantini, Hamamatsu, or Mannheimer 842 with a reasonable expectation of success, how such combinations would be implemented, or that such combinations would have disclosed or rendered obvious “the smaller opening or smaller window of claims 1, 10, and 20” of the ’911 Patent. AFIC at 60.

Apple has not demonstrated by clear and convincing evidence that a POSITA would have been motivated to combine “any of the primary references” with Grubisic, Mannheimer 756, Kiani 816, Takatani, Abdul-Hafiz, Benni, Raley, or Scharf with a reasonable expectation of success, how such combinations would be implemented, or that such combinations would have

[REDACTED]

disclosed or rendered obvious “the processing of signals from the detector to determine a physiological parameter of claims 1, 10, and 19” of the ’911 Patent. AFIC at 60-61.

Apple has not demonstrated by clear and convincing evidence that a POSITA would have been motivated to combine “any of the primary references” with Grubisic, Mannheimer 756, Kiani 816, Takatani, Benni, Raley, Robinson-889, Allen, Moyle, Nogawa, Henderson, Takatani 1992, Jarman, Fantini, or Scharf with a reasonable expectation of success, how such combinations would be implemented, or that such combinations would have disclosed or rendered obvious “the eight or twelve LEDs of claims 2, 4, 11, 13, 23, and 25” of the ’911 Patent. AFIC at 61.

Apple has not demonstrated by clear and convincing evidence that a POSITA would have been motivated to combine “any of the primary references” with Grubisic, Takatani, Allen, Nogawa, Henderson, Takatani 1992, Fantini, or Scharf with a reasonable expectation of success, how such combinations would be implemented, or that such combinations would have disclosed or rendered obvious “the LEDs of the same wavelength of claims 3, 12, and 24 of the ’911 Patent. AFIC at 61.

Apple has not demonstrated by clear and convincing evidence that a POSITA would have been motivated to combine “any of the primary references” with Grubisic, Mannheimer 756, Takatani, Robinson-889, Allen, Mannheimer 842, Nogawa, or Henderson with a reasonable expectation of success, how such combinations would be implemented, or that such combinations would have disclosed or rendered obvious “the configuration for concurrent activation of LEDs of claims 5, 14, and 22” of the ’911 Patent. AFIC at 61-62.

Apple’s claim charts also fail to demonstrate by clear and convincing evidence that any of the Primary or Secondary references render obvious the Asserted Claims of the ’911 Patent.

[REDACTED]

The charts merely copy and paste large sections of the references without providing any information as to how a reference would be modified or combined with another reference with a reasonable expectation of success or why a POSITA would have made such a modification or combination.

Apple's contentions also fail to adequately address evidence Masimo has previously raised (1) contradicting Apple's contentions that pulse oximetry at the wrist was well-known years after the priority date of the '911 Patent, and (2) demonstrating that given the difficulties Apple's engineers encountered in developing the blood oxygen feature of the Apple Watch and the skepticism Apple's own engineers expressed regarding the ability to successfully measure oxygen saturation at the wrist, both of which occurred years after the priority date of the '911 Patent, a POSITA would not have had a reasonable expectation of success in measuring oxygen saturation at the wrist at the priority date of the '911 Patent. Masimo's evidence rebutting Apple's invalidity contentions, which Apple fails to adequately address, is fully discussed above in Section V.C.1. Moreover, the objective indicia demonstrating the nonobviousness of the Asserted Claims of the '911 Patent is discussed in Masimo's Responses and Objections to Apple's Interrogatory No. 33, which is hereby incorporated by reference in its entirety.

a. Grubisic (U.S. Patent No. 6,816,241)

Apple has not demonstrated by clear and convincing evidence that Grubisic alone and/or in combination with the '911 Primary or Secondary references discloses, or renders obvious, at least the following limitations of the Asserted Claims of the '911 Patent:

- “at least three LEDs recessed into a cavity, the at least three LEDs configured to emit light of at least three different wavelengths;” [1A]
- “at least one detector configured to detect at least a portion of the light emitted from the at least three LEDs after at least a portion of the light has been attenuated by

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- “The method of claim 19, wherein the light block is formed of black materials and further comprises a base, side walls, and a top forming an enclosure, and wherein the at least one detector is positioned in the enclosure.” [21]
 - “The method of claim 19, wherein said activating the at least three LEDs comprises concurrently activating at least two LEDs of the at least three LEDs.” [22]
 - “The method of claim 19, wherein the at least three LEDs comprises at least eight LEDs.” [23]
 - “The method of claim 23, wherein the at least eight LEDs comprises at least two LEDs of the same wavelength.” [24]
 - “The method of claim 19, wherein the at least three LEDs comprises at least twelve LEDs.” [25]
 - “The method of claim 19, wherein the at least a portion of the light passes through the opening after it interacts with the body tissue.” [28]

Accordingly, this reference does not anticipate or (alone or in combination with other references) render obvious any of the Asserted Claims of the '911 Patent.

e. Abdul-Hafiz (U.S. Patent App. Pub. No. 2004/0039272)

Apple has not demonstrated by clear and convincing evidence that Abdul-Hafiz alone and/or in combination with the '911 Primary or Secondary references discloses, or renders obvious, at least the following limitations of the Asserted Claims of the '911 Patent:

- “at least three LEDs recessed into a cavity, the at least three LEDs configured to emit light of at least three different wavelengths;” [1A]
- “at least one detector configured to detect at least a portion of the light emitted from the at least three LEDs after at least a portion of the light has been attenuated by tissue, the at least one detector configured to output at least one signal responsive to the detected light;” [1B]
- “a light block surrounding the at least one detector, the light block comprising a shoebox structure configured to recess the at least one detector into the shoebox structure, wherein the shoebox structure is at least partially formed of a black material, wherein a top of the shoebox structure includes only one opening through which light is configured to pass, the opening comprising an area smaller than a detection surface area of the at least one detector; and” [1C]

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- “a processor configured to receive and process one or more signals responsive to the outputted at least one signal and determine a physiological parameter of a user responsive to the one or more signals.” [1D]
 - “The device of claim 1, wherein the at least three LEDs comprises at least eight LEDs.” [2]
 - “The device of claim 2, wherein the at least eight LEDs comprises at least two LEDs of the same wavelength.” [3]
 - “The device of claim 1, wherein the at least three LEDs comprises at least twelve LEDs.” [4]
 - “The device of claim 1, wherein at least two LEDs of the at least three LEDs are configured for concurrent activation.” [5]
 - “The device of claim 1, wherein the opening provides an optical path from the tissue to the at least one detector.” [8]
 - “at least three LEDs recessed into a cavity, the at least three LEDs configured to emit light of at least three different wavelengths;” [10A]
 - “at least one detector configured to detect at least a portion of the light emitted from the at least three LEDs after at least a portion of the light has been attenuated by tissue, the at least one detector configured to output at least one signal responsive to the detected light;” [10B]
 - “a light block surrounding the at least one detector, the light block at least partially formed of black materials, the light block comprising a base, four side walls and a top forming an enclosure, wherein the light block comprises a window, the window having an area smaller than a detection surface area of the at least one detector; and” [10D]
 - “a processor configured to receive and process one or more signals responsive to the outputted at least one signal and determine a physiological parameter of a user responsive to the one or more signals.” [10E]
 - “The device of claim 10, wherein the at least three LEDs comprises at least eight LEDs.” [11]
 - “The device of claim 11, wherein the at least eight LEDs comprises at least two LEDs of the same wavelength.” [12]
 - “The device of claim 10, wherein the at least three LEDs comprises at least twelve LEDs.” [13]
 - “The device of claim 10, wherein at least two LEDs of the at least three LEDs are configured for concurrent activation.” [14]

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- “The device of claim 10, wherein the window provides an optical path from the tissue to the at least one detector.” [17]
 - “positioning a sensor with respect to body tissue of a living patient, the sensor comprising at least three LEDs, at least one detector, and a light block at least partially surrounding the at least one detector, wherein a top of the light block comprises only one opening through which light is configured to pass;” [19A]
 - “activating the at least three LEDs such that at least three wavelengths of light are emitted from the at least three LEDs;” [19B]
 - “detecting, at the at least one detector, at least a portion of the light emitted from the at least three LEDs after at least a portion of the light has been attenuated by the body tissue and passed through the opening of the top of the light block, wherein the at least one detector outputs at least one signal responsive to the detected light; and” [19C]
 - “determining a physiological parameter of the living patient responsive to the outputted at least one signal.” [19D]
 - “The method of claim 19, wherein an area of the opening is smaller than a detection surface area of the at least one detector.” [20]
 - “The method of claim 19, wherein the light block is formed of black materials and further comprises a base, side walls, and a top forming an enclosure, and wherein the at least one detector is positioned in the enclosure.” [21]
 - “The method of claim 19, wherein said activating the at least three LEDs comprises concurrently activating at least two LEDs of the at least three LEDs.” [22]
 - “The method of claim 19, wherein the at least three LEDs comprises at least eight LEDs.” [23]
 - “The method of claim 23, wherein the at least eight LEDs comprises at least two LEDs of the same wavelength.” [24]
 - “The method of claim 19, wherein the at least three LEDs comprises at least twelve LEDs.” [25]
 - “The method of claim 19, wherein the at least a portion of the light passes through the opening after it interacts with the body tissue.” [28]

Accordingly, this reference does not anticipate or (alone or in combination with other references) render obvious any of the Asserted Claims of the '911 Patent.

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- “The method of claim 19, wherein the at least three LEDs comprises at least eight LEDs.” [23]
 - “The method of claim 23, wherein the at least eight LEDs comprises at least two LEDs of the same wavelength.” [24]
 - “The method of claim 19, wherein the at least three LEDs comprises at least twelve LEDs.” [25]
 - “The method of claim 19, wherein the at least a portion of the light passes through the opening after it interacts with the body tissue.” [28]

Apple has not demonstrated by clear and convincing evidence that the Nellcor OxiMax Sensor or the documentation Apple cites regarding the Nellcor OxiMax Sensor are prior art to the '911 Patent. Accordingly, this reference does not anticipate or (alone or in combination with other references) render obvious any of the Asserted Claims of the '911 Patent.

h. Masimo SET Sensors (APL DEL00037755, APL DEL0037757, APL DEL00037764)

Apple has not demonstrated by clear and convincing evidence that “Masimo SET Sensors” alone and/or in combination with the '911 Primary or Secondary references disclose, or renders obvious, at least the following limitations of the Asserted Claims of the '911 Patent:

- “at least three LEDs recessed into a cavity, the at least three LEDs configured to emit light of at least three different wavelengths;” [1A]
- “at least one detector configured to detect at least a portion of the light emitted from the at least three LEDs after at least a portion of the light has been attenuated by tissue, the at least one detector configured to output at least one signal responsive to the detected light;” [1B]
- “a light block surrounding the at least one detector, the light block comprising a shoebox structure configured to recess the at least one detector into the shoebox structure, wherein the shoebox structure is at least partially formed of a black material, wherein a top of the shoebox structure includes only one opening through which light is configured to pass, the opening comprising an area smaller than a detection surface area of the at least one detector; and” [1C]
- “a processor configured to receive and process one or more signals responsive to the outputted at least one signal and determine a physiological parameter of a user responsive to the one or more signals.” [1D]

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- “The device of claim 1, wherein the at least three LEDs comprises at least eight LEDs.” [2]
 - “The device of claim 2, wherein the at least eight LEDs comprises at least two LEDs of the same wavelength.” [3]
 - “The device of claim 1, wherein the at least three LEDs comprises at least twelve LEDs.” [4]
 - “The device of claim 1, wherein at least two LEDs of the at least three LEDs are configured for concurrent activation.” [5]
 - “The device of claim 1, wherein the opening provides an optical path from the tissue to the at least one detector.” [8]
 - “at least three LEDs recessed into a cavity, the at least three LEDs configured to emit light of at least three different wavelengths;” [10A]
 - “at least one detector configured to detect at least a portion of the light emitted from the at least three LEDs after at least a portion of the light has been attenuated by tissue, the at least one detector configured to output at least one signal responsive to the detected light;” [10B]
 - “an electromagnetic interference shield positioned between the at least three LEDs and the at least one detector;” [10C]
 - “a light block surrounding the at least one detector, the light block at least partially formed of black materials, the light block comprising a base, four side walls and a top forming an enclosure, wherein the light block comprises a window, the window having an area smaller than a detection surface area of the at least one detector; and” [10D]
 - “a processor configured to receive and process one or more signals responsive to the outputted at least one signal and determine a physiological parameter of a user responsive to the one or more signals.” [10E]
 - “The device of claim 10, wherein the at least three LEDs comprises at least eight LEDs.” [11]
 - “The device of claim 11, wherein the at least eight LEDs comprises at least two LEDs of the same wavelength.” [12]
 - “The device of claim 10, wherein the at least three LEDs comprises at least twelve LEDs.” [13]
 - “The device of claim 10, wherein at least two LEDs of the at least three LEDs are configured for concurrent activation.” [14]
 - “The device of claim 10, wherein the window provides an optical path from the tissue to the at least one detector.” [17]

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- “positioning a sensor with respect to body tissue of a living patient, the sensor comprising at least three LEDs, at least one detector, and a light block at least partially surrounding the at least one detector, wherein a top of the light block comprises only one opening through which light is configured to pass;” [19A]
 - “activating the at least three LEDs such that at least three wavelengths of light are emitted from the at least three LEDs;” [19B]
 - “detecting, at the at least one detector, at least a portion of the light emitted from the at least three LEDs after at least a portion of the light has been attenuated by the body tissue and passed through the opening of the top of the light block, wherein the at least one detector outputs at least one signal responsive to the detected light; and” [19C]
 - “determining a physiological parameter of the living patient responsive to the outputted at least one signal.” [19D]
 - “The method of claim 19, wherein an area of the opening is smaller than a detection surface area of the at least one detector.” [20]
 - “The method of claim 19, wherein the light block is formed of black materials and further comprises a base, side walls, and a top forming an enclosure, and wherein the at least one detector is positioned in the enclosure.” [21]
 - “The method of claim 19, wherein said activating the at least three LEDs comprises concurrently activating at least two LEDs of the at least three LEDs.” [22]
 - “The method of claim 19, wherein the at least three LEDs comprises at least eight LEDs.” [23]
 - “The method of claim 23, wherein the at least eight LEDs comprises at least two LEDs of the same wavelength.” [24]
 - “The method of claim 19, wherein the at least three LEDs comprises at least twelve LEDs.” [25]
 - “The method of claim 19, wherein the at least a portion of the light passes through the opening after it interacts with the body tissue.” [28]

Apple has not demonstrated by clear and convincing evidence that the Masimo SET Sensors or the documentation Apple cites regarding the Masimo SET Sensors are prior art to the '911 Patent. Accordingly, this reference does not anticipate or (alone or in combination with other references) render obvious any of the Asserted Claims of the '911 Patent.

v. Raley (U.S. Patent No. 6,014,576)

Apple has not demonstrated by clear and convincing evidence that Raley alone and/or in combination with the '911 Primary or Secondary references discloses, or renders obvious, at least the following limitations of the Asserted Claims of the '911 Patent:

- “A physiological monitoring device comprising:” [1 Preamble]
- “at least three LEDs recessed into a cavity, the at least three LEDs configured to emit light of at least three different wavelengths;” [1A]
- “at least one detector configured to detect at least a portion of the light emitted from the at least three LEDs after at least a portion of the light has been attenuated by tissue, the at least one detector configured to output at least one signal responsive to the detected light;” [1B]
- “a light block surrounding the at least one detector, the light block comprising a shoebox structure configured to recess the at least one detector into the shoebox structure, wherein the shoebox structure is at least partially formed of a black material, wherein a top of the shoebox structure includes only one opening through which light is configured to pass, the opening comprising an area smaller than a detection surface area of the at least one detector; and” [1C]
- “a processor configured to receive and process one or more signals responsive to the outputted at least one signal and determine a physiological parameter of a user responsive to the one or more signals.” [1D]
- “The device of claim 1, wherein the at least three LEDs comprises at least eight LEDs.” [2]
- “The device of claim 2, wherein the at least eight LEDs comprises at least two LEDs of the same wavelength.” [3]
- “The device of claim 1, wherein the at least three LEDs comprises at least twelve LEDs.” [4]
- “The device of claim 1, wherein at least two LEDs of the at least three LEDs are configured for concurrent activation.” [5]
- “The device of claim 1, wherein the opening provides an optical path from the tissue to the at least one detector.” [8]
- “A physiological monitoring device comprising:” [10 Preamble]
- “at least three LEDs recessed into a cavity, the at least three LEDs configured to emit light of at least three different wavelengths;” [10A]

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- “at least one detector configured to detect at least a portion of the light emitted from the at least three LEDs after at least a portion of the light has been attenuated by tissue, the at least one detector configured to output at least one signal responsive to the detected light;” [10B]
 - “an electromagnetic interference shield positioned between the at least three LEDs and the at least one detector;” [10C]
 - “a light block surrounding the at least one detector, the light block at least partially formed of black materials, the light block comprising a base, four side walls and a top forming an enclosure, wherein the light block comprises a window, the window having an area smaller than a detection surface area of the at least one detector; and” [10D]
 - “The device of claim 10, wherein the at least three LEDs comprises at least eight LEDs.” [11]
 - “The device of claim 11, wherein the at least eight LEDs comprises at least two LEDs of the same wavelength.” [12]
 - “The device of claim 10, wherein the at least three LEDs comprises at least twelve LEDs.” [13]
 - “The device of claim 10, wherein at least two LEDs of the at least three LEDs are configured for concurrent activation.” [14]
 - “The device of claim 10, wherein the window provides an optical path from the tissue to the at least one detector.” [17]
 - “A method for determining a physiological parameter of a living patient, the method comprising:” [19 Preamble]
 - “positioning a sensor with respect to body tissue of a living patient, the sensor comprising at least three LEDs, at least one detector, and a light block at least partially surrounding the at least one detector, wherein a top of the light block comprises only one opening through which light is configured to pass;” [19A]
 - “detecting, at the at least one detector, at least a portion of the light emitted from the at least three LEDs after at least a portion of the light has been attenuated by the body tissue and passed through the opening of the top of the light block, wherein the at least one detector outputs at least one signal responsive to the detected light; and” [19C]
 - “The method of claim 19, wherein an area of the opening is smaller than a detection surface area of the at least one detector.” [20]

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- “The method of claim 19, wherein the light block is formed of black materials and further comprises a base, side walls, and a top forming an enclosure, and wherein the at least one detector is positioned in the enclosure.” [21]
 - “The method of claim 19, wherein said activating the at least three LEDs comprises concurrently activating at least two LEDs of the at least three LEDs.” [22]
 - “The method of claim 19, wherein the at least three LEDs comprises at least eight LEDs.” [23]
 - “The method of claim 23, wherein the at least eight LEDs comprises at least two LEDs of the same wavelength.” [24]
 - “The method of claim 19, wherein the at least three LEDs comprises at least twelve LEDs.” [25]
 - “The method of claim 19, wherein the at least a portion of the light passes through the opening after it interacts with the body tissue.” [28]

Accordingly, this reference does not anticipate or (alone or in combination with other references) render obvious any of the Asserted Claims of the '911 Patent.

vi. Robinson (U.S. Patent No. 6,278,889)

Apple has not demonstrated by clear and convincing evidence that Robinson alone and/or in combination with the '911 Primary or Secondary references discloses, or renders obvious, at least the following limitations of the Asserted Claims of the '911 Patent:

- “A physiological monitoring device comprising:” [1 Preamble]
- “at least three LEDs recessed into a cavity, the at least three LEDs configured to emit light of at least three different wavelengths;” [1A]
- “at least one detector configured to detect at least a portion of the light emitted from the at least three LEDs after at least a portion of the light has been attenuated by tissue, the at least one detector configured to output at least one signal responsive to the detected light;” [1B]
- “a light block surrounding the at least one detector, the light block comprising a shoebox structure configured to recess the at least one detector into the shoebox structure, wherein the shoebox structure is at least partially formed of a black material, wherein a top of the shoebox structure includes only one opening through which light is configured to pass, the opening comprising an area smaller than a detection surface area of the at least one detector; and” [1C]

5. The Asserted Claims of the Masimo Asserted Patents Would Not Have Been Obvious Over the Alleged Prior Art

Apple has not demonstrated by clear and convincing evidence that any of the Asserted Claims of the Masimo Asserted Patents would have been obvious to a POSITA over Apple's alleged prior art references, alone or in combination.

Rather than provide specific obviousness contentions for each of the Masimo Asserted Patents, Apple addresses all of the Masimo Asserted Patents simultaneously with entirely generic, conclusory, and fatally deficient obviousness contentions that amount to nothing more than boilerplate. Apple merely contends that “the prior art references identified in above, and charted in Exhibits A-1 – A-18; B-1 – B-18; C-1 – C-15; D-1 – D-17; and E-1 – E-13, each render obvious the Asserted Claims.” AFIC at 41. Apple also states that:

The primary references are cited in Apple's exemplary claim charts: Exhibits A-1 – A-17; B-1 – B-18; C-1 – C-15; D-1 – D-17; and E-1 – E-13. Each of the primary references teaches or renders obvious all or, at a minimum, the vast majority of the limitations of the Asserted Claims. To the extent any claim elements are found to be missing from the primary references, secondary references are designated for combination with the primary references. The secondary references are cited in Apple's exemplary claim charts: Exhibits A-18, B-18, C-15, D-17, and E-13.

Id. at 43. Regarding motivation to combine or modify, Apple, in the cover document of its Final Invalidity Contentions, merely identifies seven wholly generic, conclusory, and boilerplate motivations to combine or modify any references and then states, without evidence or explanation, that “[t]he various motivations described above provide a basis for combining or modifying references to render each of the Asserted Claims obvious.” AFIC at 44. Similarly, Apple's charts merely provide one paragraph of wholly generic, conclusory, and boilerplate motivations to combine or modify. *See generally* Apple's Exhibits A-1 through E-13 at 1-2. Regarding “reasonable expectation of success,” Apple's charts merely provide one conclusory

[REDACTED]

sentence: “A POSITA would have had a reasonable expectation of success in combining [any of the alleged prior art identified by Apple] for the reasons set forth in Apple’s Final Invalidity Contentions.” *See generally* Apple’s Exhibits A-1 through E-13 at 1-2. However, Apple’s Final Invalidity Contentions fail to address “reasonable expectation of success” at all. AFIC at 41-63. Additionally, to the extent Apple maintains that any contentions in the cover document of its Final Invalidity Contentions address reasonable expectation of success, such contentions are generic, conclusory, and boilerplate as are Apple’s contentions regarding motivation to combine or modify. *See id.*

Apple obviousness contentions fail to demonstrate by clear and convincing evidence that any Asserted Claim of the Masimo Asserted Patents would have been obvious to a POSITA. For each of the Masimo Asserted Patents, Apple’s primary and secondary references do not disclose at least the limitations identified above (in Section V.C.1-4). Apple has not shown by clear and convincing evidence that any proposed combinations and/or modifications of Apple’s references teach each or any of the limitations not disclosed by its references. In addition to the many limitations of the Asserted Claims not disclosed by Apple’s references, Apple fails to demonstrate obviousness of any Asserted Claim because Apple’s obviousness contentions consist of completely generic, conclusory, and boilerplate allegations that: (1) fail to address the level of ordinary skill in the art (e.g., a POSITA is never defined for any of the Masimo Asserted Patents); (2) fail to identify the specific combinations and/or modifications of the references that Apple is actually relying upon for obviousness (e.g., what particular disclosures of references would be combined and how); (3) fail to demonstrate, or even allege, that a POSITA would have had any motivation to make the specific combinations or modifications of references that Apple relies upon; and (4) fail to demonstrate, or even allege, that a POSITA would have reasonably

[REDACTED]

expected the specific combinations or modifications of references that Apple relies upon to succeed. Accordingly, Apple has not demonstrated by clear and convincing evidence that any of the Asserted Claims of the Masimo Asserted Patents would have been obvious based on any of Apple's references, alone or in combination with each other.

6. Objective Evidence Confirms the Nonobviousness of the Asserted Claims of the Masimo Asserted Patents

Apple has not demonstrated obviousness of any Asserted Claim of any Masimo Asserted Patents, as explained above and in the attached appendices. Additionally, “[o]bjective indicia of nonobviousness must be considered in every case where present.” *Apple Inc. v. Samsung Elecs. Co.*, 839 F.3d 1034, 1048 (Fed. Cir. 2016) (the obviousness inquiry “requires consideration of all four *Graham* factors”). Such evidence includes failure and skepticism by others, industry recognition, unexpected results, copying, commercial success, and teaching away. *See, e.g., Graham v. John Deere Co. of Kan. City*, 383 U.S. 1, 17-18 (1966); *Transocean Offshore Deepwater Drilling, Inc. v. Maersk Drilling USA, Inc.*, 699 F.3d 1340, 1349 (Fed. Cir. 2012); *Allergan, Inc. v. Sandoz Inc.*, 796 F.3d 1293, 1305 (Fed. Cir. 2015). Objective evidence of nonobviousness plays an important role as a guard against the statutorily proscribed hindsight reasoning in the obviousness analysis. *WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1331–32 (Fed. Cir. 2016). The Federal Circuit has held such evidence “may often be the most probative and cogent evidence in the record.” *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1538 (Fed. Cir. 1983); *Graham*, 383 U.S. at 36 (“[Objective indicia] may also serve to guard against slipping into use of hindsight, and to resist the temptation to read into the prior art the teachings of the invention in issue.” (cleaned up)). Objective indicia of nonobviousness is presumed to have a nexus to the claimed invention when the patentee shows the asserted objective evidence is tied to a specific product and the product “is the invention disclosed and claimed in the patent.”