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

MASIMO CORPORATION,	)	
Plaintiff,	) )	
v.	)	C.A. No. 09-80-LPS C.A. No. 11-742-LPS
PHILIPS ELECTRONICS NORTH	)	
AMERICA CORPORATION and PHILIPS	)	
MEDIZIN SYSTEME BÖBLINGEN GMBH,	)	
	)	
Defendants.	)	

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# MEMORANDUM OPINION

December 1, 2015 Wilmington, Delaware

STARK, U.S. District Judge:

Pending before the Court is the issue of claim construction of several disputed claim terms in U.S. Patent Nos. 6,157,850 (the "850 patent"), 7,509,154 (the "154 patent"), 8,019,400 (the "400 patent"), and 5,337,745 (the "745 patent").

# I. BACKGROUND

Plaintiff Masimo Corporation ("Masimo" or "Plaintiff") filed a patent infringement suit against Defendants Philips Electronics North America Corporation and Philips Medizin Systeme Böblignen GMBH ("Defendants") on February 3, 2009, alleging infringement of the '850 patent. (C.A. No. 09-80-LPS D.I. 1)<sup>1</sup> Masimo later amended the complaint to add allegations of infringement of the '154 patent. (D.I. 12) On August 19, 2011, Masimo filed another patent infringement suit against Defendants, a suit in which Plaintiff eventually asserted allegations of infringement of the '400 patent. (C.A. No. 11-742 D.I. 7) On April 16, 2012, the Court consolidated the two cases. (C.A. No. 11-742 D.I. 38)

In the meantime, Defendants filed counterclaims for infringement of several of their patents, including their '745 patent. (*See* D.I. 75) Generally, both sides' patents disclose methods and devices for measuring the concentration of oxygen in blood.

Previously, Chief Magistrate Judge Thynge issued a Report and Recommendation ("R&R") recommending resolution of the claim construction disputes involving the '850, '154, '400, and '745 patents, as well as several other patents involved in this litigation.

Pending before the Court are the parties' objections to Judge Thynge's R&R. Given the Supreme Court's decision in *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120 (2014),

<sup>&</sup>lt;sup>1</sup>All citations to the docket are to C.A. No. 09-80-LPS unless otherwise noted.

the Court has also permitted Defendants to argue that certain claims are indefinite, so that issue is now before the Court as well. (*See* D.I. 1013)

The parties completed briefing on September 17, 2015. (D.I. 1022) The Court held a claim construction hearing on October 2, 2015. (D.I. 1059) ("Tr.")

## II. LEGAL STANDARDS

#### A. Claim Construction

Claim construction is a question of law. See Teva Pharm. USA, Inc. v. Sandoz, Inc., 135 S. Ct. 831, 837 (2015) (citing Markman v. Westview Instruments, Inc., 517 U.S. 370, 388-91 (1996)). "It is a bedrock principle of patent law that the claims of a patent define the invention to which the patentee is entitled the right to exclude." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (internal quotation marks omitted). "[T]here is no magic formula or catechism for conducting claim construction." *Id.* at 1324. Instead, the court is free to attach appropriate weight to sources "in light of the statutes and policies that inform patent law." *Id.* 

"[T]he words of a claim are generally given their ordinary and customary meaning .... [This is] the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." *Id.* at 1312-13 (internal citations and quotation marks omitted). "[T]he ordinary meaning of a claim term is its meaning to the ordinary artisan after reading the entire patent." *Id.* at 1321 (internal quotation marks omitted). The patent specification "is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term." *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996).

While "the claims themselves provide substantial guidance as to the meaning of particular

claim terms," the context of the surrounding words of the claim also must be considered. *Phillips*, 415 F.3d at 1314. "Other claims of the patent in question, both asserted and unasserted, can also be valuable sources of enlightenment . . . [b]ecause claim terms are normally used consistently throughout the patent . . . ." *Id*. (internal citation omitted).

"Differences among claims can also be a useful guide . . . . For example, the presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim." *Id.* at 1314-15 (internal citation omitted).

It is also possible that "the specification may reveal a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess. In such cases, the inventor's lexicography governs." *Phillips*, 415 F.3d at 1316. It bears emphasis that "[e]ven when the specification describes only a single embodiment, the claims of the patent will not be read restrictively unless the patentee has demonstrated a clear intent to limit the claim scope using words or expressions of manifest exclusion or restriction." *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004) (internal quotation marks omitted).

In addition to the specification, a court "should also consider the patent's prosecution history, if it is in evidence." *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 980 (Fed. Cir. 1995), *aff'd*, 517 U.S. 370 (1996). The prosecution history, which is "intrinsic evidence," "consists of the complete record of the proceedings before the PTO [Patent and Trademark Office] and includes the prior art cited during the examination of the patent." *Phillips*, 415 F.3d at 1317. "[T]he prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be." Id.

In some cases, "the district court will need to look beyond the patent's intrinsic evidence and to consult extrinsic evidence in order to understand, for example, the background science or the meaning of a term in the relevant art during the relevant time period." Teva, 135 S. Ct. at 841. Extrinsic evidence "consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises." Markman, 52 F.3d at 980. For instance, expert testimony can be useful "to ensure that the court's understanding of the technical aspects of the patent is consistent with that of a person of skill in the art, or to establish that a particular term in the patent or the prior art has a particular meaning in the pertinent field." Id. Nonetheless, courts must not lose sight of the fact that "expert reports and testimony [are] generated at the time of and for the purpose of litigation and thus can suffer from bias that is not present in intrinsic evidence." Id. Overall, while extrinsic evidence "may be useful" to the court, it is "less reliable" than intrinsic evidence, and its consideration "is unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence." Id. at 1318-19. Where the intrinsic record unambiguously describes the scope of the patented invention, reliance on any extrinsic evidence is improper. See Pitney Bowes, Inc. v. Hewlett-Packard Co., 182 F.3d 1298, 1308 (Fed. Cir. 1999) (citing Vitronics, 90 F.3d at 1583).

Finally, "[t]he construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction." *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998). It follows that "a claim interpretation that would exclude the inventor's device is rarely the correct

interpretation." Osram GmbH v. Int'l Trade Comm'n, 505 F.3d 1351, 1358 (Fed. Cir. 2007) (quoting Modine Mfg. Co. v. United States Int'l Trade Comm'n, 75 F.3d 1545, 1550 (Fed. Cir. 1996)).

## **B.** Summary Judgment<sup>2</sup>

"The court shall grant summary judgment if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). The moving party bears the burden of demonstrating the absence of a genuine issue of material fact. See Adickes v. S.H. Kress & Co., 398 U.S. 144, 157 (1970). An assertion that a fact cannot be – or, alternatively, is – genuinely disputed must be supported either by citing to "particular parts of materials in the record, including depositions, documents, electronically stored information, affidavits or declarations, stipulations (including those made for the purposes of the motion only), admissions, interrogatory answers, or other materials," or by "showing that the materials cited do not establish the absence or presence of a genuine dispute, or that an adverse party cannot produce admissible evidence to support the fact." Fed. R. Civ. P. 56(c)(1)(A) & (B). If the moving party has carried its burden, the nonmovant must then "come forward with specific facts showing that there is a genuine issue for trial." Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 587 (1986) (internal citation omitted). The Court will "draw all reasonable inferences in favor of the nonmoving party, and it may not make credibility determinations or weigh the evidence." Reeves v. Sanderson Plumbing Prods., Inc.,

<sup>&</sup>lt;sup>2</sup>At a status conference on July 22, 2015, the Court granted Defendants leave to move for summary judgment of indefiniteness in connection with the claim construction process. (*See* D.I. 1013 at 50-51) Although no formal motion has been filed and separately docketed, Defendants do seek summary judgment, and the Court addresses their request below.

530 U.S. 133, 150 (2000).

To defeat a motion for summary judgment, the non-moving party must "do more than simply show that there is some metaphysical doubt as to the material facts." Matsushita, 475 U.S. at 586; see also Podobnik v. U.S. Postal Serv., 409 F.3d 584, 594 (3d Cir. 2005) (stating party opposing summary judgment "must present more than just bare assertions, conclusory allegations or suspicions to show the existence of a genuine issue") (internal citation omitted). However, the "mere existence of some alleged factual dispute between the parties will not defeat an otherwise properly supported motion for summary judgment; the requirement is that there be no genuine issue of material fact." Anderson v. Libertv Lobby, Inc., 477 U.S. 242, 247-48 (1986) (emphasis in original). A factual dispute is genuine only where "the evidence is such that a reasonable jury could return a verdict for the nonmoving party." Id. at 248. "If the evidence is merely colorable, or is not significantly probative, summary judgment may be granted." Id. at 249-50 (internal citations omitted); see also Celotex Corp. v. Catrett, 477 U.S. 317, 322 (1986) (stating entry of summary judgment is mandated "against a party who fails to make a showing sufficient to establish the existence of an element essential to that party's case, and on which that party will bear the burden of proof at trial").

# III. DISCUSSION

A. "based upon said physiological signal, determining at least two possible indications of said physiological parameter based on at least two alternative calculations for said physiological parameter" and related terms ('850 patent, claims 1, 25; '400 patent, claims 1, 11, 18)

Plaintiff's Proposal	No construction necessary. If the Court deems construction to be necessary, then: "determining at least two possible indications of said physiological parameter based on at least two alternative calculations on at least some of the same sensed physiological signal data."
Defendants' Proposal	"performing at least two calculations using different techniques on the same input data to determine at least two possible indications of said physiological parameter for the same time window of the sensed physiological signal"
Court's Construction	"determining at least two possible indications of said physiological parameter based on at least two alternative calculations on at least some of the same sensed physiological signal data."

The parties seem to have two disputes with respect to this claim term. First, whether the invention uses the same input data to perform the "two alternative calculations," and second, whether the "two possible indications" of the physiological parameter refer to the same time window.

By the conclusion of the hearing, it became evident that the parties actually agree on the first issue: each of the "two alternative calculations" use the same input data. For instance, Plaintiff stated at the hearing, "the inputs to the two techniques are the same" and "the two calculators have to receive the same input data." (Tr. at 9, 12) Defendants stated that they "agree that . . . each calculator receive[s] the same signal." (Tr. at 32)

The parties further agree that the two calculators do not use the same subset of data when computing their respective parameter estimates. One calculator, referred to as the "statistics module," considers only data from a single time window when computing its estimate for that time window. The other calculator, referred to as the "saturation transform module," considers historical data. (*See* D.I. 1022 at 17-18 (Masimo's explanation); *see also id.* at 12-15 (Phillips' explanation)) The parties also agree that the two modules seek to estimate the same parameter and that the estimates produced by the two calculators each refer to the same period of time.<sup>3</sup> (*See* Tr. at 9 (Phillips: "the calculations that are alternative should be talking about and representing the same thing .... [The calculations are] for a particular time."); *id.* at 54 (Masimo: "Now [Phillips] says [that] what [they] mean is just calculating for the bin. 'For the bin' is not at issue."))

The Court concludes that Plaintiff's proposed construction accurately reflects the parties' agreements and, more importantly, is correct in light of the intrinsic evidence.<sup>4</sup> Specifically, the

<sup>4</sup>The claim phrase "based upon said physiological signal" indicates that the two calculators receive the same "said" signal. This is further supported by Figures 17 and 18, showing that the two calculators receive the same set of 570 data samples. (*See* '850 patent)

<sup>&</sup>lt;sup>3</sup>At the hearing, the parties explained the process in great detail: the two calculators receive the same set of 570 samples and use an identical process to filter the 570 samples to 270 samples. (Tr. at 12-13) The 270 samples are then split into one group of 150 and five sequential "bins" of 24 samples each. (*Id.*) At this point, the calculators estimate a saturation value for each bin, but they do so using different methods. (*Id.*) One calculator produces an estimate for each bin using only the 24 samples corresponding to that bin. (*Id.*) The other calculator produces an estimate for each bin using the 24 samples corresponding to the bin, along with each of the samples (from the 270 sample sub-set) that sequentially preceded it. (*Id.*)

Similarly, the claim phrase "said physiological parameter" indicates that the two calculators estimate the same parameter, which is further supported by the specification's treatment of the two estimates as interchangeable. (*See id.* at 47:26-29) ("If the saturation value of the selected peak for a given bin is lower than the seed saturation *for the same bin*, the peak is replaced with the seed saturation value.") (emphasis added) The specification further supports a conclusion that the two calculators use a different subset of data when arriving at their respective estimates. (*Compare id.* at 42:66-43:9 with id. at 45:19-32)

Court concludes: (1) the two alternative calculators must receive the same input data, (2) the two estimates produced by the calculators must refer to the same parameter, and must relate to the same period of time, and (3) the calculators do not need to rely on the same subset of input data when making their calculations.<sup>5</sup> The Court also concludes that Defendants' proposed "said time window" is unnecessary and would potentially confuse the jury.

**B.** "said scan" ('850 patent, claim 25)

Plaintiff's Proposal	"said scan" refers to the result of the "analysis module."
	Consequently, "said scan" means "the analysis to qualify the plurality of indication values to be considered as possible resulting indications for the physiological parameter."
Defendants' Proposal	Indefinite.
Court's Construction	"the analysis to qualify the plurality of indication values to be considered as possible resulting indications for the physiological parameter."

The parties agree that the disputed claim term contains an error, as the claim contains no antecedent basis for "said scan." The parties disagree about the consequences of the error. Plaintiff argues that the error can be corrected and that, even absent correction, a person having ordinary skill in the art would understand "said scan" to refer to the result of the analysis module. Defendants contend that the Court does not have authority to correct the error and that the claim, as written, is indefinite. While the Court agrees with Defendants that it cannot correct the error, it nonetheless agrees that Plaintiff's proposed construction is correct and that the claim term is

<sup>&</sup>lt;sup>5</sup>Defendants argue that Plaintiff should be judicially estopped from espousing its current position based on a purported "clear inconsistency" with Plaintiff's position in prior litigation with Nellcor. (D.I. 1022 at 10-12) The Court disagrees. The Court is persuaded that the issues in dispute here were not at issue in the *Nellcor* litigation.

not indefinite.

"It is well-settled law that, in a patent infringement suit, a district court may correct an obvious error in a patent claim." *CBT Flint Partners, LLC v. Return Path, Inc.*, 654 F.3d 1353, 1358 (Fed. Cir. 2011). However, a district court may correct a patent only if "(1) the correction is not subject to reasonable debate based on consideration of the claim language and the specification and (2) the prosecution history does not suggest a different interpretation of the claims." *Novo Industries, L.P. v. Micro Molds Corp.*, 350 F.3d 1348, 1354 (Fed. Cir. 2003). While "[t]he error must be evident on the face of the patent, . . . the prosecution history should be consulted to ascertain whether there is only a single reasonable construction." *Fargo Electronics, Inc. v. Iris, Ltd., Inc.*, 287 Fed. Appx. 96, 101-02 (2008).

Plaintiff's proposed correction is subject to reasonable debate when considered in light of the claim language and the patent specification. As Defendants point out, the error could be the omission of a separate "scan" limitation, the improper use of a definite reference ("said scan" instead of "a scan"), or the mislabeling of one of the earlier limitations. (D.I. 1022 at 37) Hence, the Court cannot correct the error.

It does not follow, however, that the claim term is necessarily indefinite. *See California Inst. of Tech. v. Hughes Commc'ns Inc.*, 35 F. Supp. 3d 1176, 1193 (C.D. Cal. 2014) (explaining that claim terms can be definite even if mistake cannot be corrected, so long as term's meaning would be reasonably certain to person having ordinary skill in art). Indefiniteness, like claim construction, is a question of law. *See Atmel Corp. v. Info. Storage Devices, Inc.*, 198 F.3d 1374, 1378 (Fed. Cir. 1999). "[A] patent is invalid for indefiniteness if its claims, read in light of the specification . . . and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014). The facts underlying an indefiniteness determination must be proved by clear and convincing evidence. *See Young v. Lumenis, Inc.*, 492 F.3d 1336, 1347 (Fed. Cir. 2007); 35 U.S.C. § 282; *see also Nautilus*, 134 S. Ct. at 2130 n.10.

On the issue of indefiniteness, the Court agrees with Judge Thynge's analysis.<sup>6</sup> (D.I. 750) As Judge Thynge explained, the improper antecedent reference was added to the patent during a prosecution amendment. (*See id.* at 10-11) The patent originally disclosed "a scan module responsive to said plurality of indication values," but was amended to disclose "an analysis module." (D.I. 1022 Ex. 14 (File History) at MASP0466096-97 (9/22/1999 Amendment at 3-4)) The patentee failed to update the "said scan" language to correspond to the newly added "analysis module" limitation.

The prosecution history makes clear that Plaintiff's amendment did not seek to substantially change the scope of the claim. Indeed, the "scan module" in the original claim has the same functionality as the "analysis module" in the amended claim. Given the identical claim structure and the context of the amendment, the Court concludes that a person having ordinary skill in the art would understand that "said scan" means "the analysis to qualify the plurality of indication values to be considered as possible resulting indications for the physiological parameter."<sup>7</sup>

<sup>&</sup>lt;sup>6</sup>Having reviewed the issue de novo, the Court OVERRULES Philips' objections to Judge Thynge's R&R and ADOPTS Judge Thynge's R&R with respect to the "said scan" term. Further, the Court DENIES Defendants' motion for summary judgment (D.I. 1022) of invalidity due to indefiniteness.

<sup>&</sup>lt;sup>7</sup>The parties' declarations provide further support for the Court's conclusion not to grant summary judgment of indefiniteness. (*See* D.I. 1024 Ex. 16 at 27-28 (Plaintiff's expert Madisetti

# C. "determine a resulting indication that likely most closely correlates to the physiological parameter" ('850 patent, claim 1)

Plaintiff's Proposal	No construction necessary.
	If the Court deems claim construction to be necessary, then "determine a resulting indication from the possible indications that likely most closely correlates to the physiological parameter."
Defendants' Proposal	Indefinite.
Court's Construction	"determine a resulting indication from the possible indications that likely most closely correlates to the physiological parameter."

Defendants argue that the disputed claim term is indefinite because the patent does not disclose a method for selecting a value that "likely most closely correlates" to the physiological parameter. (D.I. 1022 at 44) The Court disagrees. The specification explains how to calculate two estimates of the physiological parameter (saturation values) and teaches how the invention uses the two estimates to arrive at a resulting indication. (*See* '850 patent at 47:22-57) Plaintiff has also submitted an expert declaration, which further supports its position, and which (at minimum) shows a genuine dispute of material fact preventing the Court from granting summary judgment of invalidity due to indefiniteness. (*See* D.I. 1024 Ex. 16 at 29-30)

While the "resulting indication" need not be either of the two estimates referenced earlier in the claim,<sup>8</sup> the patent provides a sufficiently definite explanation for how one skilled in the art

explaining that one of skill in art would understand that "said scan" refers to "analysis module," as that module is only "scan-like" operation); *id.* Ex. 20 at 8 (Defendants' expert Bergeron explaining that analysis module qualifies plurality of indication values and then selection module identifies at least one resulting indication))

<sup>&</sup>lt;sup>8</sup> The parties agree that the resulting indication need not be either of the two estimates referenced earlier in the claim. (D.I. 1022 at 47 (Plaintiff: "Under certain situations, the resulting indication is not one of the already calculated indications."); *id.* at 45 (Defendants: "[T]he resulting value . . . is not limited to the previously determined possible indications."))

can use the two estimates to arrive at a resulting indication. (*See* '850 patent at 47:22-57) Defendants have failed to show by clear and convincing evidence that the claim term is indefinite. To the contrary, evidence in the record indicates that a person having ordinary skill in the art would know, with reasonable certainty, which estimates would be covered by the claim term and which would not. *See Nautilus*, 134 S. Ct. at 2124.

**D.** "a selection module responsive to the result of said scan to identify at least one resulting indication as representative of said physiological parameter" ('850 patent, claim 25)

Plaintiff's Proposal	This claim element is not a phrase that should be construed under 35 U.S.C. § 112 ¶ 6. If the Court construes this limitation under 35 U.S.C. § 112 ¶ 6, the corresponding function and structure are as follows: <u>Function:</u> identifying at least one resulting indication as representative of said physiological parameter <u>Structure:</u> a processor that receives as an input the result of the analysis to qualify the plurality of indication values to be considered as possible resulting indications for the physiological parameter and is programmed to identify at least one resulting indication as representative of the physiological parameter, and equivalents thereof
Defendants' Proposal	This element should be construed under 35 U.S.C. § 112(f) as follows: <u>Function:</u> receive the result of said scan and respond by identifying at least one resulting indication as representative of said physiological parameter <u>Structure:</u> a digital signal processor programmed to receive the result of said scan and select three indication values as representative of the physiological parameter based on which three indication values are the highest

Court's Construction	This element is construed under 35 U.S.C. § 112(f) as follows:
	<u>Function</u> : identifying at least one resulting indication as representative of said physiological parameter
	<u>Structure:</u> a processor that receives as an input the result of the analysis to qualify the plurality of indication values to be considered as possible resulting indications for the physiological parameter and is programmed to identify at least one resulting indication as representative of the physiological parameter, and equivalents thereof

The parties dispute whether this claim term should be construed as a means-plus-function term pursuant to 35 U.S.C. § 112(f), which allows patentees "to express a claim limitation by reciting a function to be performed rather than by reciting structure for performing that function." *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1347 (Fed. Cir. 2015). Construction of a means-plus-function claim term is limited to the corresponding structure described in the patent specification. *See id.* 

In *Williamson*, the Court of Appeals for the Federal Circuit explained that, when deciding whether a term should be construed as means-plus-function, the "essential inquiry" is "whether the words of the claim are understood by persons of ordinary skill in the art to have a sufficiently definite meaning as the name for structure. . . . [W]hen a claim term lacks the word 'means,' . . . § 112, para. 6 will apply if the challenger demonstrates that the claim term fails to 'recite sufficiently definite structure' or else recites 'function without reciting sufficient structure for performing that function.'" *Id.* at 1349.

The disputed claim term lacks the word "means," so there is a presumption that meansplus-function claiming is not applicable. However, Defendants have demonstrated that the term fails to recite sufficiently definite structure to avoid means-plus-function treatment. The term module is vague. *See generally Williamson*, 792 F.3d at 1350-51 (finding that "distributed learning control module" was properly construed as means-plus-function claim term); *Transperfect Global, Inc. v. MotionPoint Corp.*, 2013 WL 2299621, at \*8 (N.D. Cal. May 24, 2013) (finding that "module" failed to provide sufficient structure to avoid means-plus-function construction).<sup>9</sup>

Despite its position that the term should not be construed as means-plus-function, Plaintiff provides an alternative construction, and the Court agrees that the function here is accurately stated in Plaintiff's alternative: "identifying at least one resulting indication as representative of said physiological parameter" based on the output from the analysis module. With respect to structure, the Court agrees with Plaintiff that the specification explains that this function is performed with a "smoothing filter." (*See* D.I. 1022 at 62; D.I. 1024 Ex. 16 at 31-32) Accordingly, the Court adopts Plaintiff's proposed structure: "a processor that receives as an input the result of the analysis to qualify the plurality of indication values to be considered as possible resulting indications for the physiological parameter and is programmed to identify at least one resulting indication as representative of the physiological parameter, and equivalents thereof."

<sup>&</sup>lt;sup>9</sup>Defendants' expert explained that a "selection module" could be "any element in a signal processor that performs the recited function." (D.I. 1023 Ex. 8 at 21-22) This opinion, in tandem with the Court's analysis of the claim language and intrinsic evidence, is sufficient to overcome the presumption that means-plus-function claiming is not applicable. Plaintiff's expert declaration espousing the contrary view is conclusory and unpersuasive. (*See* D.I. 1024 Ex. 16 at 30)

E. "a processor configured to perform a method comprising . . . selecting one of the plurality of possible oxygen saturation values as an oxygen saturation measurement based upon an analysis to determine which of the plurality of possible oxygen saturation values corresponds to the oxygen saturation of the pulsing blood" ('154 patent, claim 9)

Plaintiff's Proposal	This claim element is not a phrase that should be construed under 35 U.S.C. § 112 $\P$ 6.
	If the Court construes this limitation under 35 U.S.C. § $112 \ \mbox{\P} 6$ , the corresponding function and structure is as follows:
	<u>Function</u> : selecting one of the plurality of possible oxygen saturation values as an oxygen saturation measurement based upon an analysis to determine which of the plurality of possible oxygen saturation values corresponds to the oxygen saturation of the pulsing blood
	Structure: a processor programmed to (1) select either the point corresponding to the largest saturation value, or (2) select the saturation values occurring most frequently, or (3) apply a smoothing filter to possible saturation values, and equivalents thereof.
Defendants' Proposal	This element should be construed under 35 U.S.C. § 112(f) as follows:
	<u>Function</u> : select one of the plurality of possible oxygen saturation values as an oxygen saturation measurement based upon an analysis to determine which of the plurality of possible oxygen saturation values corresponds to the oxygen saturation of the pulsing blood
	<u>Structure</u> : a digital signal processor programmed to select a saturation value from a plurality of possible oxygen saturation values by selecting either (1) the point corresponding to the largest saturation value; or (2) the saturation values occurring most frequently
<b>Court's Construction</b>	This element does not need construction under 35 U.S.C. § 112(f)

The parties dispute whether this claim term should be construed as a means-plus-function term. This time the Court agrees with Plaintiff that such a construction is not appropriate and, indeed, no construction is necessary.

The lack of the word "means" creates a presumption that this term is not a means-plusfunction term. Here, Defendants have not overcome that presumption. Further, unlike in *Williamson*, where "processor" was merely a "generic description for software or hardware that performs a specified function," 792 F.3d at 1350, the current claim provides an input-output structure for the processor and explains how the processor interacts with the other components of the claim. In this context, "processor" establishes sufficient structure to avoid the need for construction under § 112(f). *See Smartflash LLC v. Apple*, 2015 WL 4208754, at \*3 (E.D. Tex. July 7, 2015) (concluding that "processor" connotes sufficient structure to avoid means-plusfunction treatment).

**F.** "determination of confidence in the accuracy of physiological signals" ('955 patent, claim 5; '572 patent, claim 20; '400 patent, claims 7, 11, 15, 22)

<b>R&amp;R Recommended</b> Construction	"determination of the level of certainty that the signal accurately represents a physiological parameter"
Plaintiff's Proposal	"determination of the level of certainty that the signal accurately represents a physiological parameter"
Defendants' Proposal	"determination of whether noise due to patient motion exists in the intensity signals"
Court's Construction	"determination of the level of certainty that the signal accurately represents a physiological parameter"

Judge Thynge's R&R addresses this dispute and recommends adoption of what is now Plaintiff's proposal, based on an application of the doctrine of claim differentiation. (D.I. 750 at 24) Having reviewed the objections de novo, Defendants' objections to this recommendation are OVERRULED and the Court ADOPTS the R&R with respect to this claim term.

Differences between claims can be instructive in resolving claim construction disputes.

See, e.g., Phillips, 415 F.3d at 1314-15. If the Court were to adopt Defendants' proposed

construction, then dependent claims 8, 15, and 23 of the '400 patent would be rendered superfluous. Additionally, Judge Thynge's recommended construction is consistent with the ordinary meaning of "confidence." *See generally id.* ("[T]he words of a claim are generally given their ordinary and customary meaning."). Defendants rely heavily on the following statement from the specification: "[d]uring high confidence (no motion), the smoothing filter is a simple one-pole . . . filter." ('955 patent at 47:57-59) While the parenthetical portion of this statement *associates* high confidence with no motion it does not *equate* confidence and motion. Accordingly, the Court rejects Defendants' proposal to restrict "confidence" to a determination of patient movement.

<b>R&amp;R Recommended Construction</b>	"variably average the plurality of values"
Plaintiff's Proposal	"average the plurality of resulting values by adjusting the filter weights"
Defendants' Proposal	"average the newest measurement and previous values, where the weight given to the newest measurement varies based on a predetermined property of the detected intensity signals"
Court's Construction	"average the plurality of resulting values by adjusting the filter weights"

G. "adjustably smooth the plurality of values" ('400 patent, claims 1, 11, 18)

With respect to this term, the discussion at the hearing prompted the Court to direct the parties to meet and confer and consider whether their disputes had been narrowed since the time they were argued before Judge Thynge. After the discussion at the hearing and the further meet-and-confer, no party advocated the R&R's recommended construction. The table above reflects the parties' most recent, post-hearing proposals. (*See* D.I. 1041) Having considered these

proposals, and having reviewed Defendants' objections de novo, the Court SUSTAINS the objections, REJECTS the R&R with respect to this claim construction dispute, and adopts Plaintiff's revised proposed construction.

The patent claims provide considerable guidance as to the meaning of "adjustably smooth." Claim 11 of the '400 patent indicates that the invention adjustably smooths "based on a confidence measurement . . . wherein if the confidence measure is high, the . . . device is configured to speed up the adjustable smoothing by giving a higher weight to the newest measurement and wherein if . . . the confidence determination is low, the . . . device is configured to . . . slow down the adjustable smoothing by giving a higher weight to older measurements." ('400 patent at 65:45-56) There is further support for this understanding of "adjustably smooth" in the specification. (*See id.* at 46:50-64)

Accordingly, the Court construes "adjustably smooth" as "average the plurality of resulting values by adjusting the filter weights." The Court declines to adopt Defendants' proposed construction because the proposed construction imports limitations that are unsupported.

H. "speed up the adjustable smoothing," "slow down the adjustable smoothing" ('400 patent, claims 11, 16)

<b>R&amp;R Recommended</b> Construction	"use less averaging" (speed up)
	"use more averaging" (slow down)
Plaintiff's Proposal	"use less averaging" (speed up)
	"use more averaging" (slow down)
Defendants' Proposal	"give higher weight to the newest measurement" (speed up)
	"give lower weight to the newest measurement" (slow down)
Court's Construction	"give higher weight to the newest measurement" (speed up)
	"give lower weight to the newest measurement" (slow down)

As explained above, the parties revised their proposed constructions following a meetand-confer after the claim construction hearing. While both sides' proposals are consistent with the evidence, Defendants' proposal will be more helpful to the jury. Accordingly, the Court SUSTAINS Defendants' objections and REJECTS the R&R with respect to these claim terms and adopts Defendants' revised proposal.

R&R Recommended Construction	"the quantity of an absorptive substance in the blood relative to the quantity or volume of solvent in the blood"
Plaintiff's Proposal	"the determined quantity of a dissolved material relative to the determined quantity of the substance in which the material is dissolved"
Defendants' Proposal	"the quantity of an absorptive substance in the blood relative to the quantity or volume of solvent in the blood"
Court's Construction	"the quantity of an absorptive substance in the blood relative to the quantity or volume of solvent in the blood"

I. "concentration" ('745 patent, claim 10)

Defendants' proposed construction for this term is the same as that recommended by Judge Thynge. Having reviewed Plaintiff's objections de novo, the Court OVERRULES Plaintiff's objections and ADOPTS the R&R with respect to this claim term.

Masimo contends that, during prosecution of Defendants' '745 patent, the patentee distinguished its invention from a prior art reference (U.S. Patent No. 5,078,136 ("Stone")) by "disclaim[ing] calculations that did not determine the quantity of the substance and the quantity of the dissolved material." (C.A. No. 11-742, D.I. 83 at 20) The Court disagrees. The patentee distinguished the subject matter of the '745 patent from Stone by pointing out that the '745 patent measures concentration in quantitative terms, such as grams per liter, while Stone expresses concentration in unitless percentages of standard pulse oximetry. (D.I. 689 Ex. 14, at PHIL03210613-14) ("[T]he Stone method is not directed towards the determination of concentration of substances in the blood, but rather is connected with evaluating . . . the oxygen carrying capacity of hemoglobin . . . and hence the method of Stone yields a saturation percentage rather than a concentration.")

#### IV. CONCLUSION

For the reasons stated above, the Court will adopt the constructions described above with respect to the disputed claim terms and will deny Defendants' requests for summary judgment of indefiniteness. An order follows.