United States District Court
District of Massachusetts

KONINKLIJKE PHILIPS N.V. AND PHILIPS ELECTRONICS NORTH AMERICA CORPORATION,	)	
Plaintiff,	)	**Civil Action No. 10-11041-NMG**
v.	)	
ZOLL MEDICAL CORPORATION,	)	
Defendant.	)	

MEMORANDUM & ORDER

GORTON, J.

Philips Electronics North America Corporation and its parent company Koninklijke Philips, N.V. (collectively, "Philips") brought suit against defendant ZOLL Medical Corporation ("ZOLL") in June, 2010. Philips alleges that ZOLL infringed fifteen of its patents that relate to various components of automated external defibrillators. ZOLL filed a complaint against Philips one month later in which it alleged that Philips infringed five of ZOLL's patents. The cases were consolidated in September, 2011, and trial is scheduled to begin on December 2, 2013.

The parties' seven motions for summary judgment (Dockets No. 219, 223, 227, 231, 232, 236 and 237) were denied by a Court Order entered on November 6, 2013, "with memorandum and order to

follow." The parties' joint motion to dismiss certain claims with prejudice (Docket No. 369) was, however, allowed. The Court now publishes the subject memorandum and order.

I. Legal Standard for Resolving Summary Judgment Motions

The role of summary judgment is "to pierce the pleadings and to assess the proof in order to see whether there is a genuine need for trial." Mesnick v. Gen. Elec. Co., 950 F.2d 816, 822 (1st Cir. 1991) (quoting Garside v. Osco Drug, Inc., 895 F.2d 46, 50 (1st Cir. 1990)). The burden is on the moving party to show, through the pleadings, discovery and affidavits, "that there is no genuine issue as to any material fact and that the moving party is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(c).

A fact is material if it "might affect the outcome of the suit under the governing law." Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 248 (1986). "Factual disputes that are irrelevant or unnecessary will not be counted." Id. A genuine issue of material fact exists where the evidence with respect to the material fact in dispute "is such that a reasonable jury could return a verdict for the nonmoving party." Id.

Once the moving party has satisfied its burden, the burden shifts to the non-moving party to set forth specific facts showing that there is a genuine, triable issue. Celotex Corp. v. Catrett, 477 U.S. 317, 324 (1986). The Court must view the

entire record in the light most favorable to the non-moving party and make all reasonable inferences in that party's favor. O'Connor v. Steeves, 994 F.2d 905, 907 (1st Cir. 1993). Summary judgment is appropriate if, after viewing the record in the non-moving party's favor, the Court determines that no genuine issue of material fact exists and that the moving party is entitled to judgment as a matter of law.

II. Plaintiff's Motion for Summary Judgment that (1) the '187 Patent Claims are Invalid as Anticipated, or, in the Alternative, (2) Philips's Accused Products Do Not Infringe the '187 Patent

A. Background

ZOLL's '187 patent is directed to a "semi-automatic defibrillator with heart rate alarm driven by shock advisory algorithm." The "heart rate alarm circuit" described in the '187 patent is characterized by inputs that "comprise an averaged QRS rate and the shock advisory indication." This Court held in its Markman Order that it was clear from that claim language that both inputs are required.

Heart rate alarm circuits in prior art defibrillators were activated by either the heart rate ("averaged QRS rate") or a shock advisory to indicate to the operator whether the electrocardiogram shows an abnormal heart rhythm of the sort that can be corrected by defibrillation shock. For instance, the heart rate alarm circuit in the Marquette 1500 is capable of

receiving an averaged QRS rate in manual mode and a shock advisory indication in semi-automatic mode but not both at the same time.

ZOLL will contend at trial that two of Philips's products, the MRx and XL defibrillators, infringe the '187 patent because they have as inputs both an averaged QRS rate and a shock advisory indication when operated in semi-automatic mode. Philips disagrees and maintains that a user of those devices can receive a shock advisory indication or a heart rate alarm, but not both.

According to Philips, the issue boils down to whether the "heart rate alarm circuit" disclosed in ZOLL's '187 patent requires both inputs at the same time or not. It contends that it will prevail regardless of what interpretation the Court ultimately adopts.

B. Anticipation

Philips maintains that if the "heart rate alarm circuit" is construed as not necessarily receiving average QRS rate and shock advisory indication inputs at the same time, then the '187 patent was anticipated by the prior art Marquette 1500.

1. Legal Standard

Section 102(e) of the Patent Act provides that an invention is not patentable if it was described in a previously issued patent and is therefore "anticipated" by that earlier invention.

Parties that seek to establish invalidity by anticipation bear an "especially heavy burden." Koito Mfg. Co. v. Tum-Key-Tech, LLC, 381 F.3d 1142, 1151 (Fed. Cir. 2004). To prove invalidity by anticipation, the movant must show that

> every element and limitation of the claim was previously described in a single prior art reference, either expressly or inherently, so as to place a person of ordinary skill in possession of the invention.

Sanofi-Synthelabo v. Apotex, Inc., 550 F.3d 1075, 1082 (Fed. Cir. 2008). Furthermore,

> differences between the prior art reference and a claimed invention, however slight, invoke the question of obviousness, not anticipation.

Net MoneyIN, Inc. v. VeriSign, Inc., 545 F.3d 1359, 1371 (Fed. Cir. 2008). Anticipation is a question of fact and thus summary judgment of invalidity is proper only "if no reasonable jury could find that the patent is not anticipated." Telemac Cellular Corp. v. Topp Telecom, Inc., 247 F.3d 1316, 1327 (Fed. Cir. 2001).

2. Application

The Court finds that Philips has failed to carry its "especially heavy burden" of proving invalidity by anticipation at this stage in the litigation as a reasonable jury could find that the patent was not anticipated by the Marquette 1500 prior art reference. In particular, Philips has not accounted for the differences in circuitry between the prior art and '187 patent.

The evidence, viewed in the light most favorable to ZOLL, is that the Marquette 1500 is incapable of receiving "dual inputs" in semi-automatic mode, whereas the claimed term at issue involves a semi-automatic defibrillator with a circuit that is capable of receiving two different kinds of inputs.

C. Non-infringement

In the alternative, Philips argues that if the '187 patent requires that the circuit receive both inputs at the same time, then its accused products do not infringe because they are incapable of receiving both inputs at the same time.

1. Legal Standard

An infringement analysis requires 1) the Court to determine, as a matter of law, the meaning and scope of the patent claims asserted to be infringed and 2) the trier of fact to compare the properly construed claims to the device accused of infringing. Markman v. Westview Instruments, Inc., 52 F.3d 967, 976 (Fed. Cir. 1995) (en banc), aff'd, 517 U.S. 370 (1996). Summary judgment of non-infringement is appropriate where

> on the correct claim construction, no reasonable jury could have found infringement on the undisputed facts or when all reasonable factual inferences are drawn in favor of the patentee.

Netword, LLC v. Centraal Corp., 242 F.3d 1347, 1353 (Fed. Cir. 2001).

2. Application

The Court declines to enter summary judgment because its Markman Order does not construe the "heart rate alarm circuit" disclosed in the '187 patent to require simultaneous inputs. Moreover, the Court finds that there is a genuine issue of material fact as to whether Philips's products receive both QRS-based and shock advisory inputs while in semi-automatic mode. Philips asserts that the QRS-based algorithm is only operational in manual mode and never operates at the same time as the shock advisory algorithm. ZOLL responds that the QRS-based algorithm is never disabled in the MRx and XL defibrillators and therefore operates in the "background" when the accused products are used in semi-automatic mode. While the Court is skeptical of ZOLL's claim that the fact that the QRS-based algorithm is always running is sufficient to show that it is received as an input, that is a matter for the jury to determine at trial.

III. Plaintiff's Motion for Summary Judgment of Invalidity of the Asserted Claims of the '526 Patent

A. Background

ZOLL's '526 patent is directed to defibrillation electrodes, which are gel-covered plates that are placed on the patient's chest. Prior art electrodes were designed to have very low electrical resistance (what is known as "low impedance") in order to maximize the defibrillation energy

delivered to the patient. This design came at a cost: in particular, low-impedance electrodes were believed to lead to high electrical current levels at the edges of the plate and gel which increased the risk of patients experiencing such discomfort as stinging or burning.

In contrast, the '526 patent teaches that a gel-covered electrode with relatively high impedance (i.e. greater than 1Ω) reduces the risk of patient discomfort without decreasing the therapeutic benefits of a defibrillation shock. In particular, the patent calls for

> a layer of electrolytic gel comprising a concentration of an electrolyte that produces a combination series resistance of two of said electrodes, when measured with the electrodes configured in a series circuit with a 50Ω resistance, and with the electrolytic gel layer of each electrode in contact with that of the other electrode, that is greater than 1Ω when a 200 Joule defibrillation pulse is discharged into the series circuit.

In other words, the patent teaches that two electrodes are placed facing each other so that their gel layers are touching. A defibrillation pulse is then delivered through the electrodes, and the resistance of the electrode is measured. If the measured resistance is greater than 1Ω, it is high enough to meet the claims and a product that satisfied that criteria would therefore infringe.

The central issue raised by Philips's motion is how that 1Ω resistance is to be measured. Philips claims that the '526

patent specification is fatally "indefinite" because it fails to provide any "meaningful guidance" to a person of ordinary skill in the art with respect to testing parameters, specifically 1) the temperature of the testing environment, 2) the number of shocks used and 3) the age of the tested electrode. Philips contends that those parameters are important because, without further guidance, it is possible that an electrode could infringe when tested in one environment but not infringe if tested in a different environment.

ZOLL responds that the issues Philips raises are red herrings because only temperature is a true test condition and a person skilled in the art would know to run the tests under indoor room temperature. It contends that the other parameters are irrelevant because infringement is measured at the point of sale and Philips neither sells old electrodes nor electrodes that have already delivered a half-dozen or more shocks.

B. Legal Standard

A patent's specification must be sufficiently "definite" in that it must "conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention." 35 U.S.C. § 112. That requirement ensures that patent claims will be "sufficiently precise to permit a potential competitor to determine whether or not he is infringing." Amgen Inc. v. Hoechst Marion Roussel,

Inc., 314 F.3d 1313, 1342 (Fed. Cir. 2003) (internal quotation marks omitted).

Thus, a claim is considered indefinite if a person of ordinary skill in the art could not determine if a particular composition infringes based on the specification. Geneva Pharm., Inc. v. GlaxoSmithKline PLC, 349 F.3d 1373, 1384 (Fed. Cir. 2003). Absolute clarity is not necessary. Rather, only claims that are "not amenable to construction" or "insolubly ambiguous" are indefinite. Datamize, LLC v. Plumtree Software, Inc., 417 F.3d 1342, 1347 (Fed. Cir. 2005). Moreover, the fact that a person of ordinary skill in the art would have to engage in some experimentation to determine the scope of the claim does not render the claim indefinite, so long as the experimentation is not "undue". Exxon Research & Eng'g Co. v. United States, 265 F.3d 1371, 1379 (Fed. Cir. 2001).

The Federal Circuit has explained that indefiniteness is a question of law. Microprocessor Enhancement Corp. v. Tex. Instruments Inc., 520 F.3d 1367, 1374 (Fed. Cir. 2008). To the extent that this legal conclusion entails questions of fact, the party claiming invalidity by way of indefiniteness must prove those facts by clear and convincing evidence. Tech. Licensing Corp. v. Videotek, Inc., 545 F.3d 1316, 1339 (Fed. Cir. 2008).

C. Application

The Court finds that Philips has failed to make the requisite clear and convincing showing of indefiniteness. Quite simply, there is no suggestion that a person of ordinary skill in the art would not know to test at room temperature. Instead, Philips's argument boils down to whether or not testing at various temperatures within that range will result in a measurement of over 1Ω. For instance, Philips's expert measured a resistance of 0.92Ω in a 28 degrees Celsius environment and 1.36Ω at 18 degrees Celsius. ZOLL maintains that Philips's expert used inferior equipment and therefore the results should be disregarded. Ultimately, the issue of whether proper testing methods were used is a question of fact that is more appropriately resolved by the jury at trial than by the Court at the summary judgment stage. See ADC Telecomm., Inc. v. Switchcraft, Inc., 281 F. App'x 989, 992 (Fed. Cir. 2008).

IV. Plaintiff's Motion for Summary Judgment of No Inequitable Conduct

Philips also moves for summary judgment of no inequitable conduct against ZOLL. ZOLL alleges that Philips engaged in inequitable conduct by making a false declaration with respect to the self-test patents and by failing to disclose material information to the patent examiner with respect to the waveform patents.

A. Legal Standard

Inequitable conduct is a defense to patent infringement that, if established, bars enforcement of a patent. Therasense, Inc. v. Becton, Dickinson & Co., 649 F.3d 1276, 1286 (Fed. Cir. 2011). ZOLL must prove, by clear and convincing evidence, that Philips misrepresented or made a deliberate decision to withhold known material information with the specific intent to deceive the United States Patent and Trademark Office ("the PTO"). Id. at 1287, 1290. To meet the clear and convincing evidence standard, Philips's specific intent to deceive the PTO must be "the single most reasonable inference able to be drawn from the evidence." Id. at 1290.

B. Application

The Court finds that, given the disputed issues of fact, a reasonable jury could find, but would not be required to find, that the single most reasonable inference is that Philips acted with the specific intent to deceive the PTO. Philips's motion centers on two factual disputes: first, whether Carl Morgan's declaration about the publication date of the VivaLink brochure demonstrated a specific intent to deceive the PTO on a material issue and, second, whether the disclosures of Philips's predecessor-in-interest to the PTO were made with an intent to deceive. Both factual disputes involve dueling witness statements which a jury could choose to believe or not. As a

result, the issue is not susceptible to summary judgment and Philips's motion will be denied.

V. Defendant's Motion for Summary Judgment of Laches

A. Background

Philips's relevant waveform patents were issued between 1997 and 2000 while its patents related to self-testing and CPR instruction were issued between 1998 and 2002. Philips initiated litigation related to all of those patents in 2002 and the final case was resolved in 2007. In 2008, Philips began to negotiate with ZOLL to resolve licensing issues and, after the negotiations failed to produce an agreement, it filed the instant lawsuit in 2010.

ZOLL has moved for summary judgment of laches on the grounds that Philips waited 11 years after ZOLL first marketed and sold the biphasic waveform technology and nine years after ZOLL first marketed and sold a defibrillator with the allegedly infringing features to bring an infringement suit.

B. Legal Standard

Laches is an equitable defense that may bar a party from relief if its delay in bringing the claim was 1) unreasonable and inexcusable from the time when the plaintiff had actual or constructive notice of its potential claim and 2) resulted in injury or prejudice to the opposing party. A.C. Aukerman Co. v.

R.L. Chaides Const. Co., 960 F.2d 1020, 1034–35 (Fed. Cir. 1992). Prejudice can be evidentiary or economic.

In the patent context, a statutory presumption of laches arises if a preponderance of the evidence reveals that the patentee delayed filing suit without excuse for more than six years after actual or constructive knowledge of the defendant's alleged infringing activity. Id. at 1034–36. Even if the presumption is rebutted, unreasonable delay and prejudice may still bar a plaintiff's claim. Id. at 1038. As an equitable defense, however, laches is not applied mechanically. Rather,

> laches is not established by undue delay and prejudice. Those factors merely lay the foundation for the trial court's exercise of discretion. When there is evidence of other factors which would make it inequitable to recognize the defense despite undue delay and prejudice, the defense may be denied.

Id. at 1036. Because the laches defense is "fact-intensive," summary judgment will often be inappropriate. See, e.g., Rockwell Int'l Corp. v. SDL, Inc., 103 F. Supp. 2d 1192, 1196 (N.D. Cal. 2000).

C. Application

ZOLL argues that Philips had constructive notice of potential infringement in 1999 when ZOLL first marketed and sold a defibrillator using biphasic waveform technology and that Philips's subsequent litigation against different parties does not excuse its delay in filing suit against ZOLL.

Philips disputes ZOLL's timeline and asserts that any delay was reasonable and should be excused. It contends that it first became aware of potential infringement in 2008 and, to the extent that it was aware of ZOLL's infringement earlier than 2008, the delay in filing suit was reasonable because of ongoing litigation and its 2008 negotiations with ZOLL.

The most important dispute concerns whether Philips's undisputed awareness of ZOLL's use of biphasic waveform technology also constituted constructive notice that ZOLL was violating Philips's waveform patents. ZOLL argues that Philips' awareness put it on notice of potential violations. Philips responds that many technologies use biphasic waveforms such that their use by ZOLL would not put Philips on notice of a potential infringement. This highly technical dispute is not susceptible to summary judgment because it involves disputed facts and questions of witness credibility. Accordingly, the Court will deny ZOLL's motion for summary judgment of laches.[1]

[1] Because the Court will deny defendant ZOLL's motion for summary judgment of laches (Docket No. 231), it is unnecessary for the Court to address plaintiff Philips's motion to preclude ZOLL from relying on certain documents in its laches motion (Docket No. 272). That motion will therefore be denied as moot.

VI. Defendant's Motion for Summary Judgment that (1) No Asserted Claim is Entitled to a Priority Date Before May 10, 1994; (2) Asserted Claims 25, 41, 42, 43, 67-72 of the '374 Patent and Claims 1-7 of the '460 Patent are Invalid for Anticipation; and (3) Asserted Claims 66 and 73 are not Infringed

As an initial matter, the parties' joint motion to dismiss certain claims (Docket No. 369) narrows the scope of the instant motion. The Court will limit its analysis to arguments pertaining to claims 41, 42, 43, 66, 67, 68 and 73 of the '374 patent and claim 7 of the '460 patent.

A. Priority Dates for the '374 and '460 Patents

The main issue underlying this motion is whether Philips is entitled to claim an earlier priority date for its '374 and '460 patents. The four relevant dates for the purposes of the instant motion are:

(1) **May 18, 1993**: the date on which the '631 application ("the first application") was filed. Carl Morgan was named as the sole inventor. It disclosed a defibrillator that performs periodic, automatic self-tests through a microprocessor and without user intervention and then indicates the results on a visual status indicator.

(2) **March 11, 1994**: the date on which the prior art "Wiley patent" application was filed. It disclosed an external defibrillator capable of performing self-tests in order to monitor the operational status of the defibrillator and to indicate when some or all of the defibrillator is inoperable. The defibrillator disclosed by the Wiley patent detects when it is in a "quiescent" state and conducts automatic self-tests without user intervention.

(3) **May 10, 1994**: the date on which the '374 application ("the second application") was filed as a

"continuation-in-part" to the first application. It named five additional inventors and included some new material. The Wiley patent was not cited during prosecution of this patent.

(4) **April 16, 1997**: the date on which the '460 application was filed. The parties agree that the '460 patent includes a specification that is substantially similar to the '374 application.

In this case, the parties dispute whether Philips is entitled to claim the filing date of the '631 application as the priority date for the '374 and '460 patents such that the Wiley patent is not prior art as to those patents. ZOLL seeks summary judgment that the earliest priority date that Philips can claim for its '374 and '460 patents is May 10, 1994 and therefore several of its claims under those patents are invalid as anticipated by prior art.

1. Legal Standard

Section 102(e) of the Patent Act provides that a patent is invalid as anticipated if the underlying invention was described in a published United States patent application filed before the invention's effective reference date. However, an inventor can "swear behind" the prior art patent application and claim the "priority date" of an earlier-filed application if

> (1) the written description of the earlier filed application discloses the invention claimed in the later filed application to satisfy the requirements of § 112; (2) the applications have at least one common inventor; (3) the later application is filed before the issuance or abandonment of the earlier filed

> application; and (4) the later application contains a reference to the earlier filed application.

In re NTP, Inc., 654 F.3d 1268, 1277 (Fed. Cir. 2011).

The issue here is whether the written description in the earlier-filed '631 application discloses the inventions claimed in the later-filed '374 and '460 patents. The "written description" requirement in the context of a CIP application holds that the earlier-filed application must describe the invention in "sufficient detail" such that one skilled in the art could "clearly conclude" that the inventor "possessed" the invention as of the earlier filing date. Lockwood v. Am. Airlines, Inc., 107 F.3d 1565, 1572 (Fed. Cir. 1997).

Whether the inventor "possessed" the invention as of the earlier filing date is a question of fact. Ariad Pharms., Inc. v. Eli Lilly & Co., 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc). The Federal Circuit has noted that the amount of detail required to demonstrate possession as of an earlier date depends on the context. Id. Factors relevant to the inquiry include "the nature and scope of the claims and . . . the complexity and predictability of the relevant technology." Id.

The inquiry requires courts to proceed on a claim-by-claim basis because each claim in the later-filed application must be supported by the earlier application. Subject matter that arises for the first time in a CIP application does not receive

the earlier filing date of the "parent" application. Augustine Med., Inc. v. Gaymar Indus., Inc., 181 F.3d 1291, 1302 (Fed. Cir. 1999). As a result, it is possible for some claims in a CIP application to receive the benefit of an earlier filing date while others do not. Id.

As always, the challenged patent is entitled to a presumption of validity and "the burden of persuasion to the contrary is and remains on the party asserting invalidity." Ralston Purina Co. v. Far-Mar-Co, Inc., 772 F.2d 1570, 1573 (Fed. Cir. 1985). Where, as here, the U.S. Patent and Trademark Office did not make an explicit finding as to the correct filing date for the CIP application, the challenger bears the initial burden of establishing a prima facie case of invalidity by clear and convincing evidence. Specifically, it must show that prior art that anticipated the invention disclosed in the CIP application predated the filing of the CIP application. See PowerOasis, Inc. v. T-Mobile USA, Inc., 522 F.3d 1299, 1303-06 (Fed. Cir. 2008). If that requirement is met, the burden shifts to the patent-holder to come forward with evidence to prove that it is entitled to an earlier filing date. Id. It should produce "sufficient evidence and argument to show that an ancestor [to the CIP patent] contains a written description that supports all of the limitations of . . . the claim[s] being asserted." Tech. Licensing Corp., 545 F.3d at 1327. If the patent-holder

produces sufficient evidence, the burden again shifts to the challenger to overcome the presumption of validity with convincing evidence that the patentee is not entitled to the earlier date. Id. at 1328.

2. Application

The Court will not enter summary judgment on this matter. The parties' experts disagree about whether a person of ordinary skill in the art would have understood Philips to "possess" the disputed claims at the time the '631 application was filed. ZOLL has not carried its burden of presenting clear and convincing evidence that Philips is not entitled to the earlier filing date and therefore is not entitled to summary judgment in its favor. As the priority date remains in dispute, summary judgment of anticipation is unwarranted.

B. Non-Infringement of Claims 66 and 73 of '374 Patent

ZOLL also argues that its accused products do not infringe because claims 66 and 73 of the '374 patent require "recalibrating" as part of the self-testing process and ZOLL's products do not recalibrate during self-tests. Philips has, however, presented evidence that suggests that ZOLL's products undergo a process where "bad" data is replaced with "good" data. After construing the facts in favor of Philips as the non-moving party, the Court finds that a reasonable jury could determine

that such a process entailed recalibration and therefore declines to enter summary judgment in ZOLL's favor.

VII. Defendant's Motion for Summary Judgment of Non-Infringement of Waveform Patents ('879, '905, '978, and '454 Patents)

ZOLL also seeks summary judgment of non-infringement on the grounds that its accused products involve a fundamentally different method for generating defibrillation shock waveforms for a particular patient than the methods claimed by Philips's waveform patents.

As described above, summary judgment of non-infringement is appropriate where, "on the correct claim construction, no reasonable jury could have found infringement" on the undisputed facts or when all reasonable factual inferences are drawn in favor of the patentee." Netword, LLC, 242 F.3d at 1353.

There are several factual disputes that preclude the entry of summary judgment in ZOLL's favor. ZOLL, for example, contests vigorously Philips's claim that ZOLL's technologies infringe on the '879 patent's method of "measuring a patient's impedance during the discharge step." ZOLL argues that although its defibrillators "calculate" patient impedance "during" the discharge step, they measure the current at a different moment such that any measurement of patient impedance does not occur "during" the discharge step. Defibrillator technology is undoubtedly complex but the Court finds it squarely within the

realm of possibility that a reasonable jury could find that, in fact, ZOLL's "calculating" infringes on Philips' patent covering the act of "measuring." As a result, it will not grant summary judgment on this motion.

VIII. Defendant's Motion for Summary Judgment of Invalidity for Lack of Written Description of Certain Claims of the '212 and '454 Patents

First, the Court notes that, for the most part, this motion involves claims that were dismissed as a result of the parties' joint motion. Philips will not assert claims 8-10 and 12 with respect to the '212 patent at trial and therefore the Court will not address ZOLL's arguments with respect to those claims here. With respect the '454 patent, the joint motion to dismiss stipulates that claims 51, 53 and 54 will be at issue at trial. Claim 52 is not mentioned in the motion. The Court therefore assumes that only claim 51 of the '454 patent is at issue.

A. Legal Standard

At issue in this motion is whether claim 51 of the '454 patent satisfies the "written description" requirement described in the first paragraph of § 112 of the Patent Act. That provision states that

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set

> forth the best mode contemplated by the inventor of carrying out his invention.

35 U.S.C. § 112. To satisfy the written description requirement, "the description must 'clearly allow persons of ordinary skill in the art to recognize that [the inventor] invented what is claimed.' " Ariad Pharms., 598 F.3d at 1351 (quoting Vas-Cath, Inc. v. Mahurkar, 935 F.2d 1555, 1562-63 (Fed. Cir. 1991)).

The written description inquiry is a question of fact. Id. (citing Ralston Purina, 772 F.2d at 1575). At the summary judgment stage, Philips is entitled to a presumption that the '454 patent is valid. 35 U.S.C. § 282. ZOLL may of course rebut that presumption but must do so with clear and convincing evidence. Microsoft Corp. v. i4i Ltd. P'ship, 131 S. Ct. 2238, 2242 (2011).

B. Application

The parties disagree about whether claim 51 of the '454 patent satisfies the written description requirement. It is undisputed that the '454 patent resulted from an application that amended claims in an earlier application. Furthermore, it is undisputed that the following language was added to the '454 application as part of claim 51 and did not appear in the earlier version:

> removing the additional impedance from the electrical circuit if the electrical parameter is within a

> defined range prior to the end of the discharging step.

ZOLL argues that this part of the claim is not supported by the specification of '454. Yet Philips points to language in the '454 specification that states that

> If the peak current is below a circuit safety threshold, then switch 66 is closed to take safety resistor 64 out of the circuit.

A reasonable jury could find that the written description is satisfactory based on that language. While ZOLL may be able to proffer evidence showing that such provisions do not support claim 51 at trial, it has not made a sufficiently clear and convincing showing to warrant summary judgment in its favor.

ORDER

Accordingly, as previously ruled in the Order of this Court entered on November 6, 2013 (Docket No. 447):

1) Plaintiff's Motion for Summary Judgment that (1) the '187 Patent Claims are Invalid as Anticipated, or, in the Alternative, (2) Philips's Accused Products Do Not Infringe the '187 Patent (Docket No. 219) is **DENIED;**

2) Plaintiff's Motion for Summary Judgment of Invalidity of the Asserted Claims of the '526 Patent (Docket No. 223) is **DENIED;**

3) Plaintiff's Motion for Summary Judgment of No Inequitable Conduct (Docket No. 227) is **DENIED;**

4) Defendant's Motion for Summary Judgment of Laches (Docket No. 231) is **DENIED;**

5) Defendant's Motion for Summary Judgment that (1) No Asserted Claim is Entitled to a Priority Date Before May 10, 1994; (2) Asserted Claims 25, 41, 42, 43, 67-72 of the '374 Patent and Claims 1-7 of the '460

Patent are Invalid for Anticipation; and (3) Asserted Claims 66 and 73 are not Infringed (Docket No. 232) is **DENIED;**

6) Defendant's Motion for Summary Judgment of Non-Infringement of Waveform Patents ('879, '905, '978, and '454 Patents) (Docket No. 236) is **DENIED;**

7) Defendant's Motion for Summary Judgment of Invalidity for Lack of Written Description of Certain Claims of the '212 and '454 Patents (Docket No. 237) is **DENIED;**

8) Plaintiff's Motion for Order to Preclude ZOLL's Reliance on Documents Not Produced as Required by Fed. R. Civ. P. 26(a) (Docket No. 272) is **DENIED AS MOOT;**

9) The Joint Motion to Dismiss Remaining Claims with Prejudice (Docket No. 369) is **ALLOWED.**

So ordered.

/s/ Nathaniel M. Gorton
Nathaniel M. Gorton
United States District Judge

Dated November 19, 2013