IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

GUIDANT CORPORATION, GUIDANT SALES CORPORATION, ELI LILLY & COMPANY, MIROWSKI)))		
FAMILY VENTURES L.L.C., Plaintiffs,)		
v.))	Civ. No.	04-0067-SLR
ST. JUDE MEDICAL, INC., and PACESETTER, INC.,)))		
Defendants.)		

Frederick L. Cottrell, III, Esquire and Anne Shea Gaza, Esquire of Richards, Layton & Finger, Wilmington, Delaware. Counsel for Plaintiffs. Of counsel: J. Michael Jakes, Esquire and Kathleen A. Daley, Esquire of Finnegan Henderson Farabow Garret & Dunner, Washington, D.C., Arthur I. Neustadt, Esquire of Oblon, Spivak, McClelland, Maier & Neustadt, Alexandria, Virginia.

Josy W. Ingersoll, Esquire, John W. Shaw, Esquire and Christian Douglas Wright, Esquire of Young Conaway Stargatt & Taylor, Wilmington, Delaware. Counsel for Defendants. Of counsel: Denis R. Salmon, Esquire, H. Mark Lyon, Esquire, Michael A. Sitzman, Esquire and Frederick S. Chung, Esquire of Gibson, Dunn & Crutcher, Palo Alto, California, Morgan Chu, Esquire, Jonathan Steinberg, Esquire and Gary N. Frischling, Esquire of Irell & Manella, Los Angeles, California.

MEMORANDUM OPINION

Dated: January 6 , 2006 Wilmington, Delaware

ROBINSON, Chief Judge

I. INTRODUCTION

On February 2, 2004, Guidant Corporation and its subsidiaries Cardiac Pacemakers, Inc. and Guidant Sales Corporation, along with co-plaintiff Mirowski Family Ventures, L.L.C. (collectively called "plaintiffs"), filed the present action against St. Jude Medical, Inc. and Pacesetter, Inc. (collectively called "defendants"), alleging infringement of U.S. Patent No. Re 38,119E (the "'119 reissue patent"). (D.I. 1)

On April 19, 2005, the court granted St. Jude's motion for leave to file an early summary judgment motion on recapture.

Before the court is defendants' motion for summary judgment that the '119 reissue patent is invalid under the recapture rule.

(D.I. 90)

II. BACKGROUND

A. Technology

The technology of the accused products involves cardiac resynchronization therapy (CRT) for the treatment of congestive heart failure. (D.I. 91 at 3) CRT works to ensure that the lower chambers of the heart - the right ventricle and the left ventricle - contract synchronously with each other in order to maximize the flow of blood through the heart and body. Id. The CRT devices and methods accused in this action focus on synchronizing the ventricles by applying low-voltage electrical stimulation to both ventricles. This is often referred to as

"bi-ventricular pacing." Id.

Bi-ventricular pacing can be accomplished by connecting leads to an implantable pulse generator and then lacing the other ends of the leads - which contain one or more electrodes - in or on the chambers of the heart, including the ventricles. The electrodes are used to stimulate the ventricles, but they may also be used to sense naturally occurring cardiac depolarization signals in the heart. Sensing such depolarization signals can be used by the CRT device in connection with the delivery of resynchronizing stimulating pulses. Id. at 3-4.

The '119 reissue patent is a reissue of U.S. Patent No. 4,928,688 (the "'688 patent"). The '688 patent claims are directed to an invention where the sensed depolarization signals are "analyzed" and the electrodes, depending on the sensed depolarization signals, stimulate the ventricles ("conditional embodiment"). The '119 reissue patent claims are directed to an invention where the sensed signals are not "analyzed," but rather the electrodes are stimulated unconditionally ("unconditional embodiment"). Plaintiffs allege that defendants infringe the '119 patent by making and selling congestive therapy products that provide cardiac resynchronization therapy ("CRT") to treat CHF.¹ (D.I. 28)

¹The accused devices are St. Jude's Epic™ HF implantable cardioverter defibrillator, Atlas™ HF implantable cardioverter defibrillator, and Frontier™ pacemaker device. (D.I. 28)

On January 23, 1989, the original '688 patent application was filed with the Patent and Trademark Office (PTO) and assigned patent application number 07/299895 ("the '895 application").

(D.I. 91, ex. A at 1)

On June 9, 1989, the PTO examiner issued his first action, rejecting claims 1-14 and 17-22 of the '895 application. (D.I. 91, ex A at 42) The examiner allowed claims 15 and 16. (Id.) Claims 2, 3, 8 and 9 were rejected as being obviousness in view of Nappholz² and Cohen.³ (Id. at 43) According to the examiner, Cohen showed "a means to sense a cardiac signal from the left or right ventricles [and it would be] obvious to use Cohen with the pacemaker in Nappholz . . . to more efficiently and effectively pace and sense the heart." (Id. at 44) The examiner explicitly noted that "the prior art does not show means to sense and stimulate both ventricles in a selective or alternate manner." (Id. at 44)

In response to the examiner's rejections of claims 1, 4-7 and 12-14, Dr. Morton M. Mower, the listed inventor, argued:

[I]t is clear that the method being claimed involves detecting the respective cardiac signals originating in the left and the right ventricles of the heart. After analyzing those cardiac signals (or the absence thereof) in an electronic control circuit, electrical pulses are provided from a stimulating circuit to one, the other or both ventricles for effecting

²U.S. Patent No. 4,378,020. (D.I. 91, ex. A at 45)

³U.S. Patent No. 4,774,950. (D.I. 91, ex. A at 45)

substantially simultaneous contraction of both ventricles. Clearly, Nappholz does not teach this method. The Nappholz patent describes a . . . pacemaker having a single atrial electrode and a single ventricular electrode Thus, the device of that patent is incapable of picking up ventricular depolarization signals from both ventricles and ultimately for providing stimulation to both ventricles.

(D.I. 91, ex. A at 49-50) (emphasis in original) With respect to claims 7, 12-14, Dr. Mower arqued that they were distinguishable over Nappholz because they called for "sensing cardiac signals originating in the atrium, in both ventricles and then stimulating both ventricles in a fashion such that simultaneous contraction of the ventricles occurs after a predetermined A-V delay period." (Id. at 50) According to this argument, Nappholz cannot simultaneously sense or pace in both ventricles. (Id.) With respect to claims 2, 3, 8 and 9, Dr. Mower asserted that they were not obvious in light of Nappholz and Cohen. (Id. at Nappholz disclosed a pacemaker that sensed and selectively paced an atria and sensed and selectively paced a ventricle. (Id.) The Cohen prior art reference, Dr. Mower argued, had electrodes in the ventricles that paced but did not sense. (\underline{Id}_{\cdot}) Thus, the two references did not suggest

the idea of placing sensing electrodes in both the left and right ventricles and providing a control circuit capable of detecting the depolarization signals from both the left and right ventricles and to then provide control signals to a stimulating circuit that is used to stimulate one, the other or both ventricles whereby substantially simultaneous contraction of both ventricles . . . results.

(Id.)

In response to these arguments, the examiner allowed claims 4 and 15-22, but rejected claims 7-9, 13 and 14 as being anticipated by Rockland* which, it was asserted, disclosed the structure of these claims. (D.I. 91, ex. A at 54) Claims 1, 2, 3 and 5 were rejected over Rockland because it would be "within the scope of the skilled artisan when utilizing the Rockland . . . invention." (Id. at 56) Claims 10, 23 and 25-27 were rejected as being obvious in light of Rockland and Funke, sas it would be "an obvious engineering design choice . . . to connect the ventricular electrodes in series, as shown by Funke." (Id.) Claims 11 and 24 were rejected because "[i]t would have been obvious to one of ordinary skill in the art to use McCorkle* with Rockland . . . and Funke in order to more efficiently and accurately pace/sense ventricular depolarizations." (Id.)

Dr. Mower cancelled claims 4, 17-14 and 25-27 and included the limitations of claim 4 into an amended claim 1, so that it stated:

[S] aid step of analyzing including providing a control signal from said control circuit to said stimulating circuit for producing an electrical stimulating pulse

⁴U.S. Patent No. 4,088,140. (D.I. 91, ex. A at 41)

⁵U.S. Patent No. 3,937,226. (D.I. 91, ex. A at 41)

⁶It is unclear which McCorkle reference the examiner is citing to, U.S. Patent No. 4,332,259 or 4,458,677.

to one or both ventricles in response to the absence of a detected cardiac signal from one or both ventricles within a time interval which is a small fraction of the pulse width of a detected cardiac signal.

(D.I. 91, ex. A at 57) This left claims 23 and 24 at issue. Dr. Mower amended claim 23 to include the following limitation:

[F]or producing an electrical stimulating pulse to the left ventricle in the absence of a detected cardiac signal from the left ventricle, or to the right ventricle in the absence of a detected cardiac signal from the right ventricle, or to both ventricles in the absence of detected cardiac signals from both ventricles to effect substantially simultaneous contraction of both ventricles after a predetermined A-V delay period.

(Id. at 58) Dr. Mower remarked that the newly added limitation rendered claim 23 no longer obvious in light of Rockland and Funke, as Rockland failed to disclose a device to analyze signals from the right and left ventricles or to selectively pace the ventricle that is missing a normal cardiac signal. (Id. at 59-60) Furthermore, "[i]n applicant's arrangement, the stimulating pulses are applied to the plural sites only when none of these plural sites is producing a normal depolarization signal." (Id. at 60) Because claim 24 depended from claim 23, Dr. Mower argued that it too should be considered nonobvious. (Id.)

The examiner and Dr. Mower's attorney conducted a telephone interview on December 5, 1989. (Id. at 62) The interview resulted in a formal examiner's amendment⁷ making "minor wording"

⁷Formal examiner's amendments can be used to correct "all errors and omissions in the claims" United States Patent

changes to claims 15, 16, 19, 21 and 23." (<u>Id.</u>) Such wording changes were considered by the examiner to be a condition of allowance. (<u>Id.</u>) After the amendment, claim 15 (which is representative of the changes to claim 16) read:⁸

A method for effecting simultaneous contraction of both left and right ventricles of a heart for improving hemodynamic efficiency comprising the steps of: separately sensing for the presence of cardiac depolarization signals from both left and right ventricles;

determining whether said cardiac depolarization signals are simultaneously present in both the left and right ventricles; and

stimulating at least one ventricle substantially simultaneously with the contraction of at least one other ventricle in the event that said cardiac depolarization signals are determined not to be simultaneously present in both ventricles.

The Notice of Allowance issued on December 11, 1989. (D.I. 91, ex. A at 66)

On May 29, 1992, Dr. Mower filed an application for reissue of the '688 patent. (D.I. 91 at 8) Dr. Mower's first reissue declaration stated that he had "claimed less than [he] had a right to claim in the patent," as the claims inadvertently did not include the unconditional embodiment. (D.I. 91, ex. B at 45) Although Dr. Mower acknowledged that such an embodiment may be implicitly covered by the claims, he noted that they were not explicitly included despite being disclosed in the specification.

and Trademark Office, Manual fo Patent Examining Procedure § 1302.04 (8th ed. 2003)

The language in bold was added by the examiner.

(<u>Id.</u>) Furthermore, Dr. Mower asserted that he was not aware of the error until early in 1992. (<u>Id.</u> at 46)

On April 8, 1993, the examiner rejected the reissue claims 15-24, pursuant to 35 U.S.C. § 112, because the specification did not support the new claims. (D.I. 91, ex. B at 54-55)

Specifically, the examiner noted that column 7, lines 45-50, cited by Dr. Mower in his declaration, discussed pacing both ventricles immediately, but claims 15-24 included pacing one or both ventricles immediately. (Id. at 55) Claims 1-24 were rejected as being based upon a defective reissue declaration. (Id. at 54) Claims 20-24 were rejected as being directed towards an apparatus when the subject matter of reissue was a method. (Id.) Claims 15-19 were rejected for not particularly pointing out the subject matter that is the invention. (Id. at 55)

In response to this rejection, claims 15, 16, 19 and 20° were amended to more explicitly claim the unconditional embodiment. (D.I. 91 ex. B at 60) Along with the amendments, it was argued that the specification did describe the invention, i.e., col. 4, 11. 13-17; col. 4, 1. 51-col. 5, 1. 15; col. 5, 11.

[°]Claim 20 was amended along the same lines as claims 15 and 16. As originally drafted, one of its limitations read, "sensing a depolarization signal from one of the ventricles . . . immediately applying the stimulating pulse to the other or both ventricles." As amended it read, "sensing a depolarization signal from one of the ventricles . . . and immediately and unconditionally applying the stimulating pulse to both ventricles." (D.I. 91, ex. B at 60)

50-63; and col. 7, ll. 45-50. (<u>Id.</u> at 61) Claim 15 of the '115 reissue patent reads:

A method for improving the hemodynamic efficiency of a heart comprising the steps of: detecting a cardiac deplorization signal originating from a first ventricle; immediately and unconditionally stimulating both ventricles for effecting a coordinated contraction of both ventricles when a cardiac depolarization signal originating from the first ventricle is detected.

On June 22, 1993, Dr. Mower filed a supplemental reissue application declaration. (D.I. 91, ex. B at 63) Dr. Mower again asserted that he had claimed less than he was entitled to because the claims did not include the unconditional pacing. (<u>Id.</u> at 65-6)¹⁰

Upon request by the PTO, Dr. Mower filed a third reissue application declaration, in which he reasserted his statements made in previous declarations. (D.I. 91, ex. B at 80) On

¹⁰At this point, the examiner allowed reissue claims 1-18 and 20-24, but rejected claim 19. (Id. at 68) The examiner asserted that claim 19 was obvious in light of Baker and Rockland and, for the same reasons, obvious in light of Baker and Funke. Baker is U.S. Patent No. 4,624,260 and, according to the examiner, teaches all of the method steps of claim 19, except for stimulating both ventricles to cause a coordinated contraction. According to Dr. Mower, Baker only teaches atrial sensing and pacing in one ventricle. (D.I. 91, ex. B at 89) In response to the rejection of claim 19, Mr. Mower sought to add two claims, which he believed distinguished Baker, Rockland and Funke. Mr. Mower argued that, because neither Baker nor Rockland (which was an improvement over Funke) taught pacing in both ventricles followed by an A-V delay period, claim 19 was not obvious in light of the prior art. (D.I. 91, ex. B at 75) These rejections are not material to the issue at bar.

December 11, 2002, a final Notice of Allowance was mailed. 11

Defendants assert that the central issue of this motion is whether, in the prosecution of the original '895 application, Dr. Mower and his patent attorneys represented to the PTO that the alleged invention was unique and patentably distinguishable from the prior art because it claimed a device and method for sensing in both ventricles and, thereby, surrendered all subject matter with sensing in only one ventricle under the recapture rule. The court finds that the recapture rule does not apply because the challenged subject matter was not surrendered.

III. STANDARD OF REVIEW

A court shall grant summary judgment only if "the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show 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). The moving party bears the burden of proving that no genuine issue of material fact exists. See Matsushita Elec.

Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 586 n.10 (1986).
"Facts that could alter the outcome are 'material,' and disputes are 'genuine' if evidence exists from which a rational person

¹¹Prior to this final Notice of Allowance, several issues arose with respect to Dr. Mower not particularly specifying the errors he relied upon and rendering the reissue declaration defective. However, those facts are not at issue in this motion for summary judgment.

could conclude that the position of the person with the burden of proof on the disputed issue is correct." Horowitz v. Fed. Kemper <u>Life Assurance Co.</u>, 57 F.3d 300, 302 n.1 (3d Cir. 1995) (internal citations omitted). If the moving party has demonstrated an absence of material fact, the nonmoving party then "must come forward with 'specific facts showing that there is a genuine issue for trial.'" Matsushita, 475 U.S. at 587 (quoting Fed. R. Civ. P. 56(e)). The court will "view the underlying facts and all reasonable inferences therefrom in the light most favorable to the party opposing the motion." Pa. Coal Ass'n v. Babbitt, 63 F.3d 231, 236 (3d Cir. 1995). The mere existence of some evidence in support of the nonmoving party, however, will not be sufficient for denial of a motion for summary judgment; there must be enough evidence to enable a jury reasonably to find for the nonmoving party on that issue. See Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 249 (1986).

The underlying facts in this case are taken directly from the prosecution file histories and the claims of the '688 patent and the '119 reissued patent. Claim construction is a purely legal question and therefore, comparison of the claims of the '688 patent and the '115 reissue patent "is a purely legal question appropriate for summary judgment." Pannu v. Storz Instrucments, Inc., 258 F.3d 1366, 1370 (Fed. Cir. 2001)

IV. DISCUSSION

Federal patent law provides that

[w]henever any patent is, through error without any deceptive intention, deemed wholly or partly inoperative or invalid, by reason of a defective specification or drawing, or by reason of the patentee claiming more or less than he had a right to claim in the patent, the Director shall, on the surrender of such patent and the payment of the fee required by law, reissue the patent for the invention disclosed in the original patent, and in accordance with a new and amended application, for the unexpired part of the term of the original patent. No new matter shall be introduced into the application for reissue.

35 U.S.C. § 251 (emphasis added). Section 251 has two distinct requirements: (1) the patent is defective, partly inoperative or invalid because of defects or because the patentee claimed more or less than he was entitled to; (2) the defect was caused by error without deceptive intent. See In re Amos, 953 F.2d 613, 616 (Fed. Cir. 1991); In re Wilder, 736 F.2d 1516, 1518 (Fed. Cir. 1984). Although the statute is liberally construed to allow patentees to correct defects in their patents, it is restricted in that a reissue patent cannot claim subject matter that could not have been claimed in the original patent. See In re Amos, 953 F.2d at 617; In re Wilder, 736 F.2d at 1519.

Like any other patent, a reissue patent is entitled to a

¹²This includes a requirement that, when a patentee is asserting broader claims in the reissue application than are in the original patent, the broader claims are supported by an adequate disclosure within the original specification. See In re Weiler, 790 F.2d 1576, 1580 (Fed. Cir. 1986). In this case, it is not alleged that the broader claims of the '119 reissue patent are not supported by the specification or written description. Therefore, this requirement is not addressed here.

presumption of validity. <u>See Westvaco Corp. v. Int'l Paper Co.</u>, 991 F.2d 735, 745 (Fed. Cir. 1993). Defendants must prove by clear and convincing evidence that the '119 reissue patent is invalid. <u>Interconnect Planning Corp. v. Feil</u>, 774 F.2d 1132, 1139 (Fed. Cir. 1985).

Defendants argue that the '119 reissue patent is invalid because it improperly recaptures subject matter that was surrendered during prosecution of the '688 patent. Specifically, defendants assert that Dr. Mower surrendered all embodiments that do not sense depolarization signals in both ventricles.

Reissue proceedings cannot be used to obtain subject matter that could not have been included in the original patent. See, e.g., In re Watkinson, 900 F.2d 230, 232 (Fed. Cir. 1990) (citations omitted). The recapture rule prevents such an occurrence by prohibiting a "patentee from acquiring, through reissue, claims that are of the same or broader scope than those claims" that were amended during the original prosecution. See Ball Corp. v. United States, 729 F.2d 1429, 1436 (Fed. Cir. 1984). The recapture rule, however, does not apply in the absence of evidence that an amendment or cancellation was "'an admission that the scope of that claim was not in fact patentable.'" In re Clement, 131 F.3d 1464, 1469 (Fed. Cir. 1997). Often a patentee's intent in amending claims, or in acquiescing in the amendment of the claims, is not evident. The

Federal Circuit has stated, however, that "[d]eliberately . . . amending a claim in an effort to overcome a reference strongly suggests that the applicant admits that the scope of the claim before the . . . amendment is unpatentable, but it is not dispositive because other evidence in the prosecution history may indicate to the contrary." In re Clement, 131 F.3d at 1469.

When the recapture rule applies, it requires a three step process. First, the court must "'determine whether and in what 'aspect' the reissue claims are broader than the patent claims.'" Pannu, 258 F.3d at 1371 (quoting <u>Clement</u>, 131 F.3d at 1468). Second, the court must "'determine whether the broader aspects of the reissued claim related to surrendered subject matter.'" Id. "[I]f the reissue claim is as broad as or broader than the . . . amended claim in all aspects, the recapture rule bars the claim . . . " In re Clement, 131 F.3d at 1470. If the claims are narrower in all aspects than the amended claims, then "the recapture rule does not apply." Id. Third, "the court must determine whether the reissued claims were materially narrowed in other respects to avoid the recapture." Pannu, 258 F.3d at 1371. Claims that are broader and not narrowed in a way that is germane to the prior art rejection at issue are barred by the recapture rule. Id.

An amendment to a claim is not the only way a patentee can surrender subject matter during prosecution. Hester Indus., Inc.

v. Stein, Inc., 142 F.3d 1472, 1482 (Fed. Cir. 1998). Arguments made during prosecution can serve to surrender subject matter and, when such surrendered subject matter appears in the reissue claims, the recapture rule applies. Id. Defendants argue that Dr. Mower surrendered the unconditional embodiment with the arguments he made to distinguish the prior art during prosecution.

The claims of the '895 application did not include an embodiment with only one sensing electrode. All of the claims of the '895 application refer to some means of sensing in both the right and left ventricles. Likewise, the claims of the '688 patent disclose a device with two sensing electrodes because each claim refers to some form of "detecting respective cardiac signals originating in the left and right ventricles of the heart . . . " '688 patent, col. 8, 11. 3-4 (emphasis added); see also '688 patent, col. 8, 11. 42-44, 55-58, col. 9, 11. 1-7, 21-23, col. 10, 11. 22-25.

Claim 15 of the '119 reissue patent, however, claims a device with only one ventricular sensing electrode (as it requires only "detecting a cardiac depolarization signal originating from a first ventricle") and two pacing electrodes (as it paces both ventricles unconditionally). '119 reissue patent, col. 10, ll. 3-4. Because the '119 reissue patent is broad enough to include a device with one sensing electrode, and

the claims of the '688 patent require two sensing electrodes, the '119 reissue patent is necessarily broader in scope than the '688 patent. See Hester, 142 F.3d at 1480 ("A reissue claim that does not include a limitation present in the original patent claims is broader in that respect.").

The question becomes whether the broadened subject matter relates to any amendments or subject matter surrendered during prosecution. Because the claims of the '895 application and the '688 patent always included two sensing electrodes, the patentee did not surrender subject matter via an amendment during prosecution. Without surrender of subject matter, there cannot be recapture of subject matter.

As previously stated, arguments made during prosecution can serve to surrender subject matter and, when such surrendered subject matter appears in the reissue claims, the recapture rule applies. See Hester, 142 F.3d at 1482. The Federal Circuit in Hester analogized argument-based reissue recapture to argument-based prosecution history estoppel and concluded that argument-based reissue recapture may only "arise by way of unmistakable assertions." Id. at 1481-82. In discussing argument-based prosecution history estoppel involving multiple grounds for distinguishing prior art, the Federal Circuit stated that "[e] very statement made by a patentee during prosecution to distinguish a prior art reference does not create a separate

estoppel. . . ." Read Corp. v. Portec, Inc., 970 F.2d 816, 824

(Fed. Cir. 1992) (emphasis in original), abrogated on other

grounds by Markman v. Westview Instruments, Inc., 52 F.3d 967

(Fed. Cir. 1995) (en banc); see Southwall Technologies, Inc. v.

Cardinal IG Co., 54 F.3d 1570, 1582 (Fed. Cir. 1992) (concluding Read held that multiple arguments do not always create multiple estoppels).

During prosecution of the '688 patent, the Nappholz reference was distinguished because it did not have two sensing electrodes and it also did not have two pacing electrodes. examiner stated clearly, "The prior art does not show means to sense and stimulate both ventricles in a selective or alternate manner." Defendants point to the fact that Dr. Mower distinguished Nappholz on the basis that the claimed method "involves detecting the respective cardiac signals originating in the left and the right ventricles of the heart." (D.I. 91, ex. A at 50) (emphasis in original) However, defendants fail to note that Dr. Mower further described his invention as follows: "After analyzing those cardiac signals (or the absence thereof) in an electronic control circuit, electrical pulses are provided from a stimulating circuit to one, the other or both ventricles for effecting substantially simultaneous contraction of both ventricles." It is about this entire series of events that Dr. Mower states, "Clearly, Nappholz does not teach this method."

Similar statements discussing both the ability to sense in the right and left ventricles and the ability to pace in the right and left ventricles after analyzing the signals are found in the prosecution history.

The reissue claims still require bi-ventricular pacing, but do not require bi-ventricular sensing and do not analyze the signals from the sensing electrodes. In the entire prosecution history, the invention is never distinguished from the prior art based only on the ability to sense in both ventricles. Bi-ventricular sensing, analyzing the signals and bi-ventricular pacing, when used together to distinguish over prior art, do not create separate surrenders of subject matter. The court, therefore, finds no clear surrender of all subject matter with only one sensing electrode to support entry of summary judgment.

Likewise, the Cohen prior art was distinguished because it only had electrodes that paced and did not sense depolarizations. Such an embodiment is not included in the reissue claims, which require at least one electrode that can both sense and pace.

During prosecution of the '895 application, the Rockland prior art was distinguished because it did not have analyzing circuitry and it paced the heart over a predetermined time period at a plurality of points upon sensing depolarizations. The reissue claims require immediate and unconditional pacing of only the ventricles upon depolarization. These claims do not include

both ventricles of the heart. It was not distinguished on the sole basis that it sensed in both ventricles. Dr. Mower did not surrender all subject matter that did not have sensing electrodes in both ventricles. The court concludes that, while the claims of the '119 reissue patent are broader than those in the '688 patent, they are materially narrowed so as to not recapture the subject matter given up during prosecution. The recapture rule does not apply.

V. CONCLUSION

For the reasons stated herein, the court denies defendants' motion for summary judgment. An order consistent with this memorandum opinion shall issue.

IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

ORDER

At Wilmington this 6th day of January, 2006, consistent with the memorandum opinion issued this same date;

IT IS ORDERED that defendants' motion for summary judgment (D.I. 90) is denied.

IT IS FURTHER ORDERED that a telephone conference is scheduled for Tuesday, January 24, 2006 at 9:30 a.m. to be coordinated by plaintiffs' counsel.

United States District Judge