IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF DELAWARE

MEDTRONIC VASCULAR, INC. and MEDTRONIC USA, INC,	)	
Plaintiffs,	)	
v.	)	Civ. No. 98-80-SLR
ADVANCED CARDIOVASCULAR SYSTEMS, INC. and GUIDANT SALES CORP.,	)	
Defendants.	)	

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MEMORANDUM OPINION

Dated: January 5, 2005
Wilmington, Delaware

ROBINSON, Chief Judge

I. INTRODUCTION

Medtronic AVE ("Medtronic") filed suit against Advanced Cardiovascular Systems, Inc. ("ACS") on February 18, 1998,[1] alleging patent infringement of the Boneau patents, breach of contract, trade secret misappropriation, unfair competition, restoration of property wrongfully acquired, conversion, declaratory relief, and equitable claims. (D.I. 1) Specifically, Medtronic alleges that ACS infringes the Boneau patents by manufacturing, using, selling, offering for sale, and importing its Multi-Link stents in the United States. (Id. at ¶2) Medtronic also contends that ACS wrongfully acquired and is misusing its stent technology to develop and to patent balloon expandable stents.[2] In this regard, Medtronic seeks a declaratory judgment that its Micro Stent II and GFX Stent Delivery Systems do not infringe ACS's patents relating to balloon expandable stents.

On March 30, 1998, ACS answered the complaint denying Medtronic's allegations and asserting a variety of affirmative defenses including the "first-to-file" rule, noninfringement, estoppel, invalidity, statute of limitations, laches, and federal

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[1]On November 15, 2000, this case was stayed pending resolution of two different appeals to the Federal Circuit. The case was not reopened until March 20, 2003.

[2]AVE holds the Lau patents relating to balloon expandable stents. (Id. at ¶3)

preemption. (D.I. 8) ACS amended its answer on June 15, 1998, to add an additional affirmative defense of inequitable conduct and to assert invalidity counterclaims as to the Boneau patents. (D.I. 24 at ¶¶ 5, 6, 113, 114)

Due to its similarity to other actions involving the Boneau patents, this case will be tried with Civil Action Nos. 98-80-SLR and 98-478-SLR. The patents in suit are the Boneau Patents, United States Patent Nos. 5,292,331 ("the '331 patent"), 5,674,278 ("the '278 patent"), 5,879,382 ("the '382 patent"), 6,344,053 ("the '053 patent") and the Lau Patents, United States Patent Nos. 5,514,154 ("the '154 patent"), 5,603,721 ("the '721 patent"), 5,735,893 ("the '893 patent"), 6,056,776 ("the '776 patent"), 6,066,167 ("the '167 patent"), 6,066,168 ("the '168 patent"), and 6,432,133 ("the '133 patent").

The court has jurisdiction over these matters pursuant to 28 U.S.C. §§ 1331, 1338(a) and 2201(a). Pending before the court is ACS's and Guidant's motions for summary judgment that Medtronic's state law claims are barred under Delaware law and that Mr. Boneau is not a joint inventor of the Lau patents. (D.I. 404, 406) For the reasons stated, these motions are granted.

II. BACKGROUND

A. Assignment of Boneau's Rights

In 1988 Michael Boneau conceived of the idea that gave rise to the Boneau patents. (D.I. 431, Ex. 2 at 133) Initially

Boneau and his partner, Dr. Stertzer, and Dr. Stertzer's lab technician, Mr. Hidalgo, formed Accuterix. (D.I. 471 at 8) Boneau assigned the rights to the application that would later become the '331 patent, to Accuterix. Id. The three men would then form Endovascular Support Systems, Inc. ("ESS") to further develop the Boneau technology, and Boneau's rights were subsequently assigned to ESS. Id. In 1992, ESS sold the rights to the Boneau technology to Proprietary Extrusion Technologies ("PET"), which was a subsidiary of AVE. Id. In 1996, Dr. Stertzer, at the time a shareholder, became a director of AVE. (D.I. 471 at 15) Eventually AVE would become Medtronic, the plaintiff in this case. (D.I. 17)

B. Boneau's Contact with ACS

In 1989, he approached ACS because he was looking for a partner to help develop his technology. (D.I. 407 at 4; 471 at 4) Before meeting, the parties executed nondisclosure agreements regarding an "Endo-vascular Support Device/System (stent)." (D.I. 431 at Ex. 5; D.I. 475 at Ex. 2) Beginning in May 1989, Mr. Boneau met with high ranking ACS executives to discuss the "Boneau stent concepts." Later that year, Mr. Boneau gave ACS a copy of the drafted patent application that gave rise to the '331 patent, before he actually filed the application with the United States Patent and Trademark Office. (D.I. 407 at 4; D.I. 475 at Ex. 4; D.I. 469 at 3, 4) At these meetings Mr. Boneau explained

the structure and functional capabilities of his stents. (D.I. 469 at 4)

By July of 1989, ACS had begun research on developing its own stent technology. (D.I. 475, Ex. 5 at 1-2) The initial concept, titled "'Hoops and Stocking' Stent," consisted of "a series of thin, stiff circular rings, placed longitudinally along the length of the stent . . . held together by a porous, stocking-like mesh material." (Id. at 2) A year later, ACS engineers authored a feasibility report on eleven stent technologies, including the Boneau stent. (D.I. 475 at Ex. 7) ACS intended the report to "lead into selection of a first generation ACS stent that offers value and may be introduced for clinical studies in a relatively short period of time." Id. After considering the eleven stents, the engineers recommended that ACS pursue its own designs, the "Zigzag ring" and "Sigwart_flex" stents, as opposed to any of the others considered. (Id. at 3)

Sometime in 1990, Dr. Lau, an ACS engineer, met with Mr. Boneau and Dr. Stertzer to evaluate the Boneau stent technology. (D.I. 475 Ex. 6 at 471) At these meetings Dr. Lau inquired into the prototypes, material composition, dimensions and operation (i.e., expansion) of the Boneau stents. (D.I. 475, Ex. 6 at 461-62) Eventually ACS informed Mr. Boneau that it was not interested in pursuing his stent design, citing concerns that the

peaks of the stent, and the pits forming in the material, would promote blood clotting. (D.I. 431, Ex. 7 at 408)

Around March 5, 1990, Dr. Lau, on behalf of ACS, began exploring a stent made up of multiple sinusoidally patterned rings that were connected together at various points. (D.I. 475, Ex. 6 at ACS 125915) The design resembles the Multi-Link design.

C. Disclosure of ACS's Multi-Link Stent

In 1992, ACS filed a European Patent Application ("Lau European Application"). (D.I. 431 at Ex. 27) This application was published worldwide in 1993. Id. According to Medtronic, there was technical trade secret information in this patent application[3] that was obtained by ACS during its meetings with Mr. Boneau. (D.I. 488, Ex. 42 at 3, 9)[4]

At a 1993 American Heart Association ("AHA") Scientific Sessions meeting, ACS's Multi-Link stent was presented, as it appeared in a 1993 issue of Circulation, AHA's official journal. (D.I. 431, Ex. 8 at ACS00696894) It is possible that Bradley Jendersee, Medtronic's Director and CEO, was at this AHA meeting. Mr. Jendersee attended several AHA meetings, but could not

[3]Medtronic indicated that the application contained information regarding the stent's design, expansion, and use of a plurality of rings on a single balloon. (D.I. 488, Ex. 42 at 3-4)

[4]A copy of the application was in Medtronic's files at the time of discovery for this case. (D.I. 431 at Ex. 27)

specifically recall whether or not he attended the 1993 meeting.[5] (D.I. 431, Ex. 12 at 138-44)

Also in 1993, the ACS Multi-Link stent was the subject of a chapter in the Textbook of Interventional Cardiology (Eric J. Topol, M.D. ed., 1993) and three professional journal articles.[6] (D.I. 431 at Ex. 22)

ACS displayed its Multi-Link stent at the 1994 Scientific Sessions meeting and made a presentation regarding its comparison with "slotted tube" designs. Mr. Jendersee was present at the meeting, but it is unknown whether an ACS representative attended this specific presentation. (D.I. 431, Ex. 12 at 139) Generally, Medtronic employees would review abstracts that were presented at professional meetings and would have been particularly interested in information regarding its competitors, including ACS. (D.I. 431, Ex. 13 at 118-19; Ex. 14 at 170-72)

Also in 1994, ACS presented the Multi-Link stent (including displaying prototypes) and distributed literature about the

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[5]On another Scientific Sessions registration sheet, however, he indicated he had attended it. (D.I. 431, Ex. 12 at 138-44)

[6]Sigwart U., Haber R., Kowalchuk G., Simonton C., Butler N., Virmani R., The New ACS Metallic Stent: Experimental and Clinical Experience, 88 Circulation 1 (1993). (D.I. 431 at Ex. 11) Sigwart U., Haber R., Virmani R., Buller N., Haber R., Simonton C., Kowalchuk G., Bronco: Balloon Expandable Coronary Stent, 14 Eur. Heart J. 39 (1993). (Id. at Ex. 25) Sigwart U., Khosravi F., Virmani R., Buller N., Haber R., Simonton C., Kowalchuk G., Bronco: Ein neuer, Balloon-expandierbarer, flexibler stent, 82 Z. Kardiol 71 (1993). (Id. at Ex. 26)

technology at a international stent conference in the Netherlands. (D.I. 431, Ex. 16 at ¶¶ 4-7) Medtronic's predecessor, AVE, was also in attendance. (Id. at ¶ 8) At a session titled, "Why I Like My Stent," Medtronic and ACS gave successive five-minute presentations on their respective technologies. (Id., Ex. 17 at 3) This presentation included a "personal but factual opinion of the stent" and information about design, characteristics, delivery systems, size and "expected technical improvements." (D.I. 431, Ex. 17) Later that same year, ACS also presented the Multi-Link at a conference in Milan, which representatives of AVE attended. (D.I. 431, Ex. 21 at 567)

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 could conclude that the position of the person with the burden of proof on the disputed issue is correct." Horowitz v. Fed. Kemper

Life Assurance Co., 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). If the nonmoving party fails to make a sufficient showing on an essential element of its case with respect to which it has the burden of proof, the moving party is entitled to judgment as a matter of law. See Celotex Corp. v. Catrett, 477 U.S. 317, 322 (1986).

IV. ACS'S AND GUIDANT'S MOTION FOR SUMMARY JUDGMENT THAT MEDTRONIC'S STATE LAW CLAIMS ARE BARRED

A. Trade Secrets

ACS and Guidant argue that Medtronic should be estopped from bringing state law trade secret claims because the three year statute of limitations has expired. (D.I. 407) ACS and Guidant ask the court to find that Medtronic had at least constructive

notice of the alleged theft of trade secrets in 1993 or 1994. (Id.)

Medtronic claims that it did not become aware of ACS's alleged use of the Boneau technology until 1996[7] when it was preparing to release its Boneau stent in the United States market. (D.I. 471 at 9) At that time, Medtronic became aware of Boneau's meetings with ACS in 1989, and the subsequent exchange of information between Boneau and ACS. Id. Therefore, Medtronic asserts, it was not aware that ACS had access to its trade secrets until two years before it filed this action. Id.

Under Delaware law, the statute of limitations for a theft of trade secrets claim is three years from the date the misappropriation was discovered or, by the exercise of reasonable diligence, should have been discovered. See 6 Del. Code Ann. tit. 6, § 2006 (2004).

In this case, Medtronic has admitted that many of the trade secrets that were allegedly stolen were included in the Lau European application. AVE should have known or could have discovered the unauthorized use of its trade secrets in 1993. Thus, 1996 was the last year that Medtronic could have filed its trade secret claims.

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[7]Medtronic cites two different years with respect to this argument. First, it claims it found out in 1997, then it cites 1996, when Dr. Stertzer became a director of AVE. (D.I. 471 at 15) For the purposes of this memorandum opinion, the court uses the earlier of these two dates.

B. Other State Law Claims

ACS and Guidant argue that Medtronic's breach of contract, actual fraud, unjust enrichment and unfair competition claims are also barred by the statute of limitations. (D.I. 407) Medtronic argues that the limitations period was tolled until AVE found out, or should have known, about ACS's alleged wrongful acts because it had no way of knowing ACS had access to its trade secrets and had actively misled Mr. Boneau and Dr. Stertzer about its intent to pursue stent technologies.

Under Delaware law, Medtronic's claims are subject to a three year limitations period. See 10 Del. C. § 8106. Ordinarily this period begins to "run at the time of the alleged wrongful act 'even if the plaintiff is ignorant of the cause of action,'" but there are two relevant exceptions. Merck & Co., Inc. v. SmithKline Beecham Pharm. Co., No. C.A. 15443-NC, 1999 WL 669354, at *42 (Del. Ch. Aug. 5, 1999) (quoting In re Dean Witter Partnership Litig., C.A. No. 14816, 1998 Del. Ch. LEXIS 133, at *15 (Del. Ch. July 17, 1998)). First, the limitations period can be tolled until an injury manifests itself if the circumstances or facts surrounding the cause of the injury are "inherently unknowable." See Studiengesellschaft Kohle v. Hercules, Inc., 748 F. Supp. 247, 252 (D. Del. 1990). Second, the limitations period can be tolled if the circumstances or facts that would

have put a plaintiff on notice with respect to the harm are fraudulently concealed by a defendant. Id. at 252.

To show that the "inherently unknowable" exception applies, a plaintiff must prove that it was "blamelessly ignorant of the act or omission or injury." Id. (citing Wilson v. Simon, 1990 WL 63922 (Del. Super. Ct. March 22, 1990). Knowledge imputable to a corporation, such as AVE, comes from its agents. In other words, the knowledge of a corporate agent is directly attributable to the corporation. See, e.g., E.I. du Pont Nemours & Co. v. Admiral Ins. Co., C.A. No. 89C-AU-99, 1996 WL 111133, at *2-3 (Del Super. Ct. Feb. 22, 1996), Cedar Lane Farms, Inc. v. Taylor, Civ. A. No. 993-K, 1992 WL 111210, at *3 (Del. Ch. May 18, 1992); see also Fletcher Cyclopedia of the Law of Private Corporations § 789 (2002). This is true regardless of when the agent obtained the information as long as the information has "some significance which the [agent] could be reasonably expected to perceive." E.I. du Pont Nemours & Co., 1996 WL 111133, at *3; Fletcher Cyclopedia of the Law of Private Corporations § 799.

Even assuming that Medtronic or AVE did not know about the agreements and meetings between Mr. Boneau and ACS prior to 1993, the knowledge of Dr. Stertzer with respect to these meetings is attributable to AVE in 1993. Dr. Stertzer's knowledge of these meetings would have been directly relevant to his position as CEO of AVE, especially in as competitive a market as stent design.

Therefore, if the "inherently unknowable" exception ever applied, it stopped tolling the limitations period in 1993 when Dr. Stertzer became the CEO of AVE.

The fraudulently concealed exception requires that a plaintiff show that a defendant actively concealed information with the intent to "prevent inquiry or knowledge of the injury." Id. (citing Bradely v. Maryland Cas. Co., 563 F. Supp. 602, 606 (D. Del. 1983). In this case, there is no evidence of record that ACS actively concealed any of its activities. It presented its Multi-Link stent at professional conferences and meetings. It offered prototypes and literature regarding the stent to anyone in attendance at most of these meetings. It filed a patent application that, according to Medtronic, contained AVE and Medtronic trade secrets. Therefore, the court declines to find that ACS fraudulently concealed its activities.

Because neither exception would toll Medtronic's state law claims past 1993, Delaware law required that Medtronic file its state law claims by 1996.

V. ACS'S AND GUIDANT'S MOTION FOR SUMMARY JUDGMENT THAT MR. BONEAU IS NOT A JOINT INVENTOR OF THE LAU PATENTS

A. Joint Invention of the Lau Patents

Joint invention occurs when more than one individual significantly contributes to the conception of a solution to a problem and it is this solution that becomes the subject matter of a patent. See 35 U.S.C. § 116 (2004); Fina Oil and Chem. Co.

v. Ewen, 123 F.3d 1466, 1476 (Fed. Cir. 1997); Chisum on Patents § 2.02[2]. Conception occurs with "the 'formation in the mind of the inventor, of a definite and permanent idea of the complete and operative invention' [so that] 'only ordinary skill would be necessary to reduce the invention to practice.'" Ethicon, Inc. v. United States Surgical Corp., 135 F.3d 1456, 1460 (Fed. Cir. 1998) (quoting Borroughs Wellcome Co. v. Barr Lab, Inc., 40 F.3d 1223, 1227-28 (Fed. Cir. 1994); Hybritech, Inc. v. Monoclonal Antibodies, Inc., 802 F.2d 1367, 1376 (Fed. Cir. 1986)). Thus, joint inventorship requires that a co-inventor do more than simply explain "concepts that are well known and the current state of the art." Fina Oil, 123 F.3d at 1476.

Upon the issuance of a patent, it is presumed that there are no inventors other than those listed on the patent. Bd. of Educ. v. American Bioscience, Inc., 333 F.3d 1330, 1337 (Fed. Cir. 2003). A party challenging this presumption must prove, by clear and convincing evidence, that they significantly contributed to the conception of the invention. Id. An inventor's testimony stating that he contributed to the conception at issue is not, by itself, enough to support a finding of inventorship. Such testimony must be corroborated by either contemporaneous documents, testimony of someone else or circumstantial evidence. Ethicon, 135 F.3d at 1461.

There is no evidence, other than Mr. Boneau's statements, that the information Dr. Lau received at those meetings substantially contributed to his conception of the Lau stent technology. The mere fact that Mr. Boneau met with ACS is not enough to overcome the presumption that the inventors listed on the Lau patents are the true and correct inventors.

Medtronic argues that the Multi-Link stent is merely a series of Boneau stents linked together, and that this is evidence that Mr. Boneau contributed to its conception. Based on the court's claim construction of the Boneau and Lau patents, however, Medtronic's assertion is incorrect. The Lau patents claim a stent consisting of a series of connected circular elements that have a circumferential pattern of U-shaped, W-shaped or Y-shaped members. The Boneau patents claim stents that can be used in multiples, which are made up of substantially straight segments that extend the length of the stent. In light of these constructions, the court declines to infer joint inventorship from the functional similarities between the Boneau and Lau stents.

B. Invalidity of Lau Patents Under § 102(f)

In order to prove the Lau patents are invalid under § 102(f), Medtronic must prove, by clear and convincing evidence, that Mr. Boneau both conceived of Dr. Lau's invention and communicated this conception to Dr. Lau. See Gambro Lundia AB v.

Baxter Healthcare Corp., 110 F.3d 1573, 1576 (Fed. Cir. 1997). To show communication, Medtronic must show that Mr. Boneau "'enabled an ordinary [artisan], without the exercise of any ingenuity and special skill on his part, to construct and put the improvement in successful operation.'" Id. (quoting Agawam Woolen v. Jordan, 74 U.S. (7 Wall.) 583 (1868)). As with joint inventorship, an inventor's testimony regarding his conception must be corroborated. See id.

As stated above, there is not enough evidence to support a finding that Mr. Boneau conceived of the Lau stent technology. Thus, the Lau patents are not invalid under § 102(f)

VI. CONCLUSION

For the reasons state, ACS's and Guidant's motion for summary judgment that Medtronic's state law claims are barred under Delaware law is granted. ACS's and Guidant's motion for summary judgment that Mr. Boneau is not a joint inventor of the Lau stent technologies and that the Lau patents are not invalid under § 102(f) is also granted. An order consistent with this memorandum opinion shall issue.

IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF DELAWARE

MEDTRONIC VASCULAR, INC. and MEDTRONIC USA, INC,	)	
Plaintiffs,	)	
v.	)	Civ. No. 98-80-SLR
ADVANCED CARDIOVASCULAR SYSTEMS, INC. and GUIDANT SALES CORP.,	)	
Defendants.	)	

O R D E R

At Wilmington this 5th day of January, 2005, consistent with the memorandum opinion issued this same day;

IT IS ORDERED that:

1. ACS's and Guidant's motion for summary judgment that Medtronic's state law claims are time barred (D.I. 406) is granted.

2. ACS's and Guidant's motion for summary judgment that Mr. Boneau is not a joint inventor of the Lau patents and the Lau patents are not invalid under § 102(f) (D.I. 404) is granted.

Sue L. Robinson
United States District Judge