UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF VIRGINIA
Norfolk Division

W.L. GORE & ASSOCIATES, INC., and GORE ENTERPRISE HOLDINGS, INC.,

Plaintiffs,

v. **Civil Action No. 2:10cv441**

MEDTRONIC, INC., MEDTRONIC USA, INC., and MEDTRONIC VASCULAR, INC.,

Defendants.

OPINION AND ORDER

On October 25, 2011, the Court conducted a Markman hearing for the purpose of construing the eight disputed claims in the patent at issue in this case. After careful consideration of the briefs submitted by the parties, the arguments advanced at the Markman hearing, and the record before the Court, the Court issues this Opinion and Order detailing the claim constructions adopted by the Court.

I. FACTUAL AND PROCEDURAL BACKGROUND

At issue in this case is Plaintiff's patent titled "Intraluminal Stent Graft," patent number 5,810,870 ("'870"). Plaintiffs, W.L. Gore & Associates, Inc. and Gore Enterprise Holdings, Inc. (collectively "Gore") are manufacturing companies specializing in fluoropolymer products and are best known for

their GORE-TEX fabrics. Defendants, Medtronic, Inc., Medtronic USA, Inc., and Medtronic Vascular, Inc. (collectively "Medtronic") are manufacturing companies specializing in the medical products and technologies industry.

On September 3, 2010, Gore filed a complaint against Medtronic alleging patent infringement. Gore alleges that Medtronic's Talent Thoracic Stent Graft and its Talent Abdominal Stent Graft infringe claims 12, 16, and 19 of the '870 patent, which are directed to methods of making a tubular intraluminal stent graft. Pursuant to a scheduling order, the parties have timely filed the claim construction briefs at issue here. After carefully reviewing such filings, the court conducted a Markman hearing at which the court heard argument regarding the eight disputed claim terms.

II. CLAIM CONSTRUCTION PROCEDURE

In Markman, the United States Supreme Court succinctly explained the basis for, and importance of, claim construction:

> The Constitution empowers Congress "[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries." Art. I, § 8, cl. 8. Congress first exercised this authority in 1790, when it provided for the issuance of "letters patent," Act of Apr. 10, 1790, ch. 7, § 1, 1 Stat. 109, which, like their modern counterparts, granted inventors "the right to exclude others from making, using, offering for sale, selling, or importing the patented invention," in exchange for

full disclosure of an invention, H. Schwartz, Patent Law and Practice 1, 33 (2d ed. 1995). It has long been understood that a patent must describe the exact scope of an invention and its manufacture to "secure to [the patentee] all to which he is entitled, [and] to apprise the public of what is still open to them." McClain v. Ortmayer, 141 U.S. 419, 424 (1891). Under the modern American system, these objectives are served by two distinct elements of a patent document. First, it contains a specification describing the invention "in such full, clear, concise, and exact terms as to enable any person skilled in the art . . . to make and use the same." 35 U.S.C. § 112; see also 3 E. Lipscomb, Walker on Patents §10:1, pp. 183-184 (3d ed. 1985) (Lipscomb) (listing the requirements for a specification). Second, a patent includes one or more "claims," which "particularly poin[t] out and distinctly clai[m] the subject matter which the applicant regards as his invention." 35 U.S.C. § 112. "A claim covers and secures a process, a machine, a manufacture, a composition of matter, or a design, but never the function or result of either, nor the scientific explanation of their operation." 6 Lipscomb § 21.17, at 315-316. The claim "define[s] the scope of a patent grant," 3 *id.* § 11:1, at 280, and functions to forbid not only exact copies of an invention, but products that go to "the heart of an invention but avoids the literal language of the claim by making a noncritical change," Schwartz, *supra*, at 82. . . .

Characteristically, patent lawsuits charge what is known as infringement, Schwartz, *supra*, at 75, and rest on allegations that the defendant "without authority ma[de], use[d] or [sold the] patented invention, within the United States during the term of the patent therefor . . . ." 35 U.S.C. § 271(a). Victory in an infringement suit requires a finding that the patent claim "covers the alleged infringer's product or process," which in turn necessitates a determination of "what the words in the claim mean." Schwartz, *supra*, at 80; see also 3 Lipscomb § 11:2, at 288-290.

Markman v. Westview Instruments, 517 U.S. 370, 373-74 (1996).

It is well-settled that a determination of infringement requires a two-step analysis: "First, the court determines the scope and meaning of the patent claims asserted" and second, "the properly construed claims are compared to the allegedly infringing device." Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1448, 1454 (Fed. Cir. 1998) (en banc) (citing Markman v. Westview Instruments, Inc., 52 F.3d 967, 976 (Fed. Cir.1995) (en banc), aff'd, 517 U.S. 370 (1996)). In conducting this analysis, it must be remembered that "[i]t 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) (en banc) (quoting Innova/Pure Water, Inc. v. Safari Water Filtration Systems, Inc., 381 F.3d 1111, 1115 (Fed. Cir. 2004)); see also Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996) ("[W]e look to the words of the claims themselves . . . to define the scope of the patented invention.").

A. Claim Construction Principles

The Federal Circuit has repeatedly stated that "the words of a claim 'are generally given their ordinary and customary meaning,'" and that "the ordinary and customary meaning of a

claim term 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." Phillips, 415 F.3d at 1312-13 (quoting Vitronics, 90 F.3d at 1582). This provides "an objective baseline from which to begin claim interpretation" and is based upon "the well-settled understanding that inventors are typically persons skilled in the field of the invention and that patents are addressed to and intended to be read by others of skill in the pertinent art." Id. at 1313. As noted by the Federal Circuit:

> It is the person of ordinary skill in the field of the invention through whose eyes the claims are construed. Such person is deemed to read the words used in the patent documents with an understanding of their meaning in the field, and to have knowledge of any special meaning and usage in the field. The inventor's words that are used to describe the invention—the inventor's lexicography—must be understood and interpreted by the court as they would be understood and interpreted by a person in that field of technology. Thus the court starts the decisionmaking process by reviewing the same resources as would that person, *viz.*, the patent specification and the prosecution history.

Id. (quoting Multiform Desiccants, Inc. v. Medzam, Ltd., 133 F.3d 1473, 1477 (Fed. Cir. 1998)). However, "[i]n some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly

understood words." Acumed LLC v. Stryker Corp., 483 F.3d 800, 805 (Fed. Cir. 2007) (quoting Phillips, 415 F.3d at 1314). Finally, when construing claim terms and phrases, the Court cannot add or subtract words from the claims or appeal to "abstract policy considerations" to broaden or narrow their scope. See SmithKline Beecham Corp. v. Apotex Corp., 403 F.3d 1331, 1339-40 (Fed. Cir. 2005); Quantum Corp. v. Rodime, PLC, 65 F.3d 1577, 1584 (Fed. Cir. 1995) ("[I]t is well settled that no matter how great the temptations of fairness or policy making, courts do not redraft claims.").

B. Types of Evidence to Be Considered

In determining the meaning of disputed terms or phrases, the Court should first examine the claim and the specification. The Federal Circuit has stated that "the claims themselves provide substantial guidance as to the meaning of particular claim terms," and "[b]ecause claim terms are normally used consistently throughout the patent, the usage of a term in one claim can often illuminate the meaning of the same term in other claims." Phillips, 415 F.3d at 1314.

The claims, however, "do not stand alone" and "'must be read in view of the specification, of which they are a part.'" Id. at 1315 (quoting Markman, 52 F.3d at 979); see also Vitronics, 90 F.3d at 1582 (stating that "the 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."); Multiform Dessicants, 133 F.3d at 1478 (stating that "[t]he best source for understanding a technical term is the specification from which it arose, informed, as needed, by the prosecution history."). The specification, as required by statute, describes the manner and process of making and using the patented invention, and "[t]hus claims must be construed so as to be consistent with the specification, of which they are a part." Merck & Co. v. Teva Pharms. USA, Inc., 347 F.3d 1367, 1371 (Fed. Cir. 2003); see also Markman, 517 U.S. at 389 (stating that a claim "term can be defined only in a way that comports with the instrument as a whole."); Phillips, 415 F.3d at 1316 (stating that "our cases recognize 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.").

In addition to the claims and specification, the Court should consider the prosecution history, which consists of the complete record of the proceedings before the Patent and Trademark Office ("PTO"), including the prior art cited during the examination of the patent. Phillips, 415 F.3d at 1317

(citing Autogiro Co. of America v. United States, 384 F.2d 391, 399 (Ct. Cl. 1967)). The prosecution history "provides evidence of how the PTO and the inventor understood the patent" and "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." Phillips, 415 F.3d at 1317 (citing Vitronics, 90 F.3d at 1582-83); see also Chimie v. PPG Indus., Inc., 402 F.3d 1371, 1384 (Fed. Cir. 2005) (stating that the purpose of consulting the prosecution history in claim construction is to exclude any interpretation that was disclaimed during prosecution).

The Court may also examine extrinsic evidence, which includes "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 example, technical dictionaries may provide the Court with a better understanding of the underlying technology and the way in which one of skill in the art might use the claim terms. Phillips, 415 F.3d at 1318; see also Vitronics, 90 F.3d at 1584 n.6. Expert testimony also can be useful:

> to provide background on the technology at issue, to explain how an invention works, 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.

Phillips, 415 F.3d at 1318; see also Pitney Bowes, Inc. v. Hewlett-Packard Co., 182 F.3d 1298, 1308-09 (Fed. Cir. 1999). "However, while extrinsic evidence 'can shed useful light on the relevant art,' [the Federal Circuit has] explained that it is 'less significant than the intrinsic record in determining "the legally operative meaning of claim language."'" Phillips, 415 F.3d at 1317 (citing C.R. Bard, Inc. v. U.S. Surgical Corp., 388 F.3d 858, 862 (Fed. Cir. 2004) (quoting Vanderlande Indus. Nederland BV v. Int'l Trade Comm'n, 366 F.3d 1311, 1318 (Fed. Cir. 2004)).

Finally, with respect to general usage dictionaries, the Federal Circuit has noted that "[d]ictionaries or comparable sources are often useful to assist in understanding the commonly understood meaning of words and have been used . . . in claim construction," and that "[a] dictionary definition has the value of being an unbiased source 'accessible to the public in advance of litigation.'" Phillips, 415 F.3d at 1322 (quoting Vitronics, 90 F.3d at 1585).[1] However, the Federal Circuit cautions that

[1] In Phillips, the Federal Circuit expressly discounted the approach taken in Texas Digital Systems, Inc. v. Telegenix, Inc., 308 F.3d 1193 (Fed. Cir. 2002), in which the court placed greater emphasis on dictionary definitions of claim terms.

"'a general-usage dictionary cannot overcome art-specific evidence of the meaning' of a claim term," that "the use of the dictionary may extend patent protection beyond what should properly be afforded by the inventor's patent," and "[t]here is no guarantee that a term is used in the same way in a treatise as it would be by the patentee." Phillips, 415 F.3d 1322 (quoting Vanderlande, 366 F.3d at 1321). Additionally, "different dictionaries may contain somewhat different sets of definitions for the same words. A claim should not rise or fall based upon the preferences of a particular dictionary editor, or the court's independent decision, uninformed by the specification, to rely on one dictionary rather than another." Id.

With the foregoing principles in mind, the Court will now examine the patent and the disputed claim terms.

Phillips, 415 F.3d at 1319-24 ("Although the concern expressed by the court in Texas Digital was valid, the methodology it adopted placed too much reliance on extrinsic sources such as dictionaries, treatises, and encyclopedias and too little on intrinsic sources, in particular the specification and prosecution history."). The Federal Circuit reaffirmed the approach in Vitronics, Markman, and Innova as the proper approach for district courts to follow in claim construction, but acknowledged that there was "no magic formula" for claim construction, and that a court is not "barred from considering any particular sources . . . as long as those sources are not used to contradict claim meaning that is unambiguous in light of the intrinsic evidence." Phillips, 415 F.3d at 1324.

III. ANALYSIS OF THE DISPUTED CLAIM TERMS

1. Stent

a. Proposed definitions

Gore: "one or more interconnected wires defining a substantially cylindrical plane"

Medtronic: "implantable device to maintain the patency of a vessel"

b. Discussion

The dispute over this term is two-fold. First, the parties differ on whether Medtronic's definition improperly imputes a functional limitation into the claim term. Second, the parties disagree as to whether Gore's use of the term "interconnected wires" is proper in light of the specification.

The parties appear to agree that the function of a stent alone is to maintain the patency of a vessel or lumen.[1] However, a dispute exists between the parties as to whether there is a difference between a stent which functions alone and a stent which functions as a *component* of a "stent graft." The language of Claim 12 describes a two-step process; the first step is comprised of "selecting at least one tubular, diametrically adjustable stent" and the second step involves "affixing a

[1] During their Markman argument, Gore stated that they agreed the function of a stent alone was to "hold open a vessel." (Tr. 57:14, Docket No. 87). However, they argued that the "stent component" of a stent graft is different and not limited to the same function.

tubular covering to the . . . stent." (12; '870 col 9:31-43). Medtronic argues that the first step merely requires "selecting" an already commercially available stent, and thus that "stent" will inherently have the function of "maintaining the patency of a vessel." They argue that it is only after the second step is completed, after a covering is affixed, that the stent becomes an "intraluminal stent graft" which can have the additional function of repairing an aneurysmal vessel as described in the specification. (Id. at 1:37-41). Gore responds by arguing that there is nothing in the language of the claims or in the specification which limits the selected stent to a "commercially available one" or to one that must function to "maintain the patency of a vessel."

The Court agrees that there is a difference between a "stent" and a "stent graft" and that the specification describes only the potential functions of an "intraluminal stent graft." (Id.). For example, the Background of Invention section of the '870 patent focuses only on two potential functions for an intraluminal stent graft: (1) to "maintain patency after an occluded vessel has been re-opened"; and (2) "to repair aneurysmal vessels, particularly aortic arteries." (Id. at 1:33, 37). There is no corresponding discussion of a "stent" alone. The claim language simply describes the "stent" as being

"diametrically adjustable" and as "having an exterior surface, a luminal surface and a wall." (12; Id. at 9:31-43). Furthermore, it has been argued by Gore that defining a stent as a device or structure designed to "maintain the patency of a vessel" improperly imports a functional limitation when nothing in the claims suggest "stent" should be limited to any particular function. See Ecolab, Inc. v. Envirochem, Inc., 264 F.3d 1358, 1367 (Fed. Cir. 2001) ("Where a function is not recited in the claim itself by the patentee, we do not import such a limitation."); see also, Toro Co. v. White Consol. Indus., Inc., 266 F.3d 1367, 1371 (Fed. Cir. 2001) (noting that it is improper to "import into the claim a function from the specification, particularly when the claim recites only purely structural limitations"). Additionally, if the term "stent" was construed according to its function, it is argued that it would be improper to read in only one of the stated functions of an intraluminal stent graft, as described above in the Background of Invention section of the specification, while excluding the other.

In reviewing the intrinsic record, this Court must also "strive to capture the scope of the actual invention, rather than strictly limit[ing] the scope of the claims to disclosed embodiments or allow[ing] the claim language to become divorced

from what the specification conveys is the invention." Retractable Techs., Inc. v. Becton, 653 F.3d 1296, 1305 (Fed. Cir. 2011). However, there is a fine line between construing claims in light of their specification and improperly importing a limitation into a claim. See Phillips, 415 F.3d at 1323. Because the claim language, the specification, and the prosecution history make no mention of one particular function for the "stent" used in the intraluminal stent graft, this Court will not import a functional limitation into its construction of the term. See Ecolab, Inc. v. Envirochem, Inc., 264 F.3d 1358, 1367 (Fed. Cir. 2001) ("Where a function is not recited in the claim itself by the patentee, we do not import such a limitation.").[2]

The second dispute at issue for this term is whether Gore's proposed construction describing a stent as "interconnected wires forming a substantially cylindrical plane" is appropriate.

[2] Medtronic attempts to support its functional definition with a case that defined "stent" as a "device implanted to maintain the patency of a vessel." Advanced Cardiovascular Sys. v. Medtronic Vascular, Inc., 182 Fed. Appx. 994, 997 (Fed. Cir. 2006). However, in the case cited, the Federal Circuit specifically explained that the reason the definition did not improperly incorporate a functional limitation was because the invention was categorized as an "endovascular support device" and the specification of the patent clearly stated that stents were devices "for mechanically keeping the affected vessel open." Id. (emphasis added). Since no such language appears in the patent at issue, the Court does not find this argument persuasive.

Gore supports its proposed construction by pointing out that every example in the patent and all of the stents described in the specification are formed of metal wire. However, at the Markman hearing, Gore conceded that the words "interconnected wires" appear nowhere in the actual claim language, the specification, or the prosecution history and offered "elongated members" as a possible alternative. (Tr. 61:22, Docket No. 87).

The Court first finds that "elongated members" better comports with the specification and more properly encompasses all the possible "stent" examples referenced in the specification and in the preferred embodiments. ('870: col 3:49-51) ("While the stent shown is made from metal wire, a perforated sleeve having perforations of suitable shape, size and quantity may also be used."). Next, the Court agrees with Medtronic that construing stent as defining a "plane" is too abstract and instead stent is better described as a device or structure. (Def. Resp. 11, Docket No. 70). Last, the Court finds that the phrase "one or more interconnected" is unnecessary and potentially excludes certain stents referenced in the Summary of Invention section of the '870 patent. (Def. Resp. 11; Pl. Responsive 5, Docket No. 72). Based on the above, the Court finds that neither party's proposed construction best defines "stent." Accordingly, the Court adopts the following

construction of the claim term: "Elongated members forming a substantially cylindrical and rigid structure."

c. Definition

"Elongated members forming a substantially cylindrical and rigid structure"

2. Wall

a. Proposed Definitions

Gore's definition: "a substantially cylindrical plane defined by the wires of the stent"

Medtronic's definition: "structure spanning the length of the stent which is capable of having a multiplicity of openings"

b. Discussion

Both sides acknowledged during oral arguments that the constructions of "stent", "wall" and "multiplicity of openings" are interrelated. Thus, this Court must consider its adopted construction of "stent" when defining "wall." A key dispute between the parties in construing the term "wall" is whether it should be referred to as a "plane" as Gore proposes, or as a "structure" as Medtronic proposes. Gore argues that "structure"

is inappropriate because it implies a solid wall and a "plane" is more appropriate because the wall is defined by the structure of the stent. However, at oral argument, Medtronic stated that it was not their position that by defining a wall as a "structure" it had to therefore be solid; rather, Medtronic acknowledged that the wall will have a multiplicity of openings in it and will not be a solid tube. (Tr. 87:18-20, Docket No. 87). Medtronic went on to explain that, in its view, referring to the "wall" as a "structure" was more appropriate because the claim language requires there to be "a multiplicity of openings *through* the wall" as well as a surface on which to "affix a tubular covering." (12; '870 patent col. 9:33-36) (emphasis added). Additionally, Medtronic argues its definition is consistent with the patent examiner's description in the prosecution history that states, "an expandable stent having a *distinct* wall means having specified perforations or openings therein which accommodate the affixing together of both an internal and external film covering therethrough . . . ." (JA-167, Docket No. 66) (emphasis added).

First, the Court finds that "wall" is more appropriately defined as a "plane" and not as a separate "structure" since the wall does not appear to have an existence independent of the stent. Rather, the "wall" is defined by the structure of the

stent and includes more than the actual elongated members; it includes the entire surface area which spans the length of the stent. See Oxforddictionarys.com (defining "plane" as "an imaginary flat surface through or joining material objects"). The Court finds that a "plane" is still capable of having a "multiplicity of openings" and thus comports with the language of the claims. Second, the Court finds that Medtronic's phrase "structure spanning the length of the stent" is too broad because it could be read to encompass any separate structure that spans the length of the stent. Thus, the Court rejects Medtronic's proposed definition. The Court also rejects Gore's proposed definition and instead modifies it to be consistent with the definition the Court has adopted for "stent."

c. Definition

"A substantially cylindrical plane defined by the structure of the stent."

3. Multiplicity of Openings

a. Proposed definitions

Gore's definition: "more than one opening; an opening is an area of the wall bounded by the wires of the stent"

Medtronic's definition: plain and ordinary meaning

b. Discussion

The Markman hearing made clear that the dispute between the parties centers on the definition of "multiplicity." Medtronic argues this phrase does not need construction because its ordinary meaning is clear to a person of ordinary skill in the art. However, if the term is to be construed, Medtronic argues that "multiplicity" means "many" or a "large number of openings" and that all of the preferred embodiments described in the specification have "many" openings (not merely two). To support this definition, Medtronic cites to previous cases and dictionary definitions which, at some point in the definition, define "multiplicity" as a "large number." See Girafa.com, Inc. v. IAC Search & Media, Inc., 653 F. Supp. 2d 512, 526 (D. Del. 2009) (defining multiplicity as "A large number"); THE OXFORD DICTIONARY OF ENGLISH (2nd Ed. 2006) (defining multiplicity as "a large number or variety").

Gore argues that its definition is supported by the claim language and makes clear that the "openings" are through the cylindrical plane of the stent wall, and do not include the inlet or outlet of the stent. Gore further argues that the plain meaning of "multiplicity" is "more than one" and supports this with dictionary definitions. However, the dictionary

definition provided by Gore includes in its definition of multiplicity - "a great number." (Pl. Ex. 10, Docket No. 65). In its responsive brief and at oral argument, Gore acknowledged that "more than one" was synonymous with "two or more" and cited to cases that have construed "multiplicity" to mean "two or more." See e.g., Apple Computer v. Burst.com, Inc., 2007 WL 1342504, at *16-17 (N.D. Cal. May 8, 2007) (defining multiplicity to mean "two or more; usually a fairly large number"); Itron, Inc. v CellNet Data Sys., Inc., 34 F. Supp. 2d. 1135, 1140-41 (D. Minn. 1999) (construing "multiplicity of NSM-packet signals" to mean "two or more NSM-packet signals"). Gore argues that the "full ordinary and customary meaning" of multiplicity is "two or more" as well as larger numbers and that any attempt to restrict the meaning would be improper. Omega Eng'g, Inc. v. Raytek Corp., 334 F.3d 1314, 1323 (Fed. Cir. 2003) ("We indulge a 'heavy presumption' that claim terms carry their full ordinary and customary meaning."). Gore believes construction of this phrase appropriate to avoid further argument later on about what "multiplicity" means.

The Court should generally assign claim terms their ordinary meaning, "according to the customary understanding of a person of ordinary skill in the art who reads them in the context of the intrinsic record." Agilent Techs., Inc. v.

Affymetrix, Inc., 567 F.3d 1366, 1376 (Fed. Cir. 2009). The Court has reviewed the claim language, the specification and the prosecution history, and finds that the intrinsic evidence reveals no special meaning for the phrase "multiplicity of openings." Dictionaries and treatises are "among the many tools that can assist the court in determining the meaning of particular terminology to those of skill in the art of the invention." Phillips, 415 F.3d at 1318. For the term "multiplicity," Medtronic advocates the definition provided in Faber on Mechanics of Patent Claim Drafting, which appears to merge the requests of both parties: "two or more; usually a fairly large number." Robert C. Faber, FABER ON MECHANICS OF PATENT CLAIM DRAFTING (6th ed. 2011). However, to provide guidance and to avoid ambiguity, the Court will simply define multiplicity as "two or more."

Furthermore, an examination of relevant extrinsic evidence reveals that the meaning of the term "opening," as understood by one skilled in the art, is apparent even to lay persons. Because claim construction for this term would involve "little more than the application of the widely accepted meaning of [a] commonly understood word," and because the intrinsic and extrinsic evidence do not meaningfully add to the definition, it is appropriate in this case to allow the straightforward claim

language to speak for itself. Id. at 1314. The Court agrees with Medtronic and finds that the plain and ordinary meaning of "opening" is appropriate here; therefore, no construction is needed.[3] See U.S. Surgical Corp. v. Ethicon, Inc., 103 F.3d 1554, 1568 (Fed. Cir. 1997) ("Claim construction is a matter of resolution of disputed meanings and technical scope, to clarify and when necessary to explain what the patentee covered by the claims, for use in the determination of the infringement. It is not an obligatory exercise in redundancy.").

c. Definition

Multiplicity: "two or more"

Opening: no construction needed; "opening" has a plain and ordinary meaning

4. Covering

a. Proposed definitions

Gore's definition: plain and ordinary meaning

Medtronic's definition: "film of ePTFE material"

[3] Both claim 12 and claim 15 require the stent have "a wall" and "a multiplicity of openings *through the wall*." (12, 15: '870)(emphasis added). The Court believes the claim language makes clear that the "openings" are through the wall and do not include the inlet or outlet of the stent.

b. Discussion

The dispute between the parties centers on whether "covering" is limited to any particular material, specifically whether it is limited to ePTFE material. Gore argues that covering should be defined according to its plain and ordinary meaning and should not be limited to any particular material. First, Gore asserts that the doctrine of claim differentiation supports their construction and creates a presumption that covering should be construed broadly. Claims 1-11 specifically state that the stent uses a covering made of ePTFE. (1-11; '870 patent col 8-9). However, Claims 12-21 relate to a "method" of making intraluminal grafts and broadly use "covering" without limiting the material to ePTFE. (12-21; Id. at 9-10). Additionally, Gore points out that construing "covering" to mean ePTFE material would render dependent Claim 17 superfluous. (17; Id. at 10) (reciting "a method according to claim 16 wherein said tubular covering is of porous expanded PTFE").

Second, Gore argues that the patent examiner construed "covering" to be broader than just ePTFE material. Gore states that according to the Manual of Patent Examining Procedure (MPEP), if the patent examiner believed the inventors were limiting their invention to a covering of ePTFE, then the examiner should have rejected claim 17 as being a duplicate of

claim 16. See MPEP 706.03(k) (8th Edition, revised July 2010) (dealing with duplicate claims).

Third, Gore argues that the specification supports the presumption of claim differentiation and a broad construction of the term "covering." Gore points to the Background of the Invention which describes various types of covering material: "These devices are typically flexible tubes of woven or knitted polyethylene terephthalate or of porous polytetrafluoroethylene (hereinafter PTFE). Grafts of biological origin are also used, these being typically fixed human umbilical or bovine arteries." ('870 patent col 1:15-26).

Last, Gore argues that the prosecution history also supports a broad construction of "covering." In the Inventor's patent application they describe both method and apparatus claims: 1) a stent graft apparatus having a covering of ePTFE, and 2) methods of making a stent graft having a "thin covering" without any restriction on material. (JA-64). The patent examiner initially rejected claim 12, a method claim, in light of Khosravi, a prior art patent which allowed a covering to be made of "any suitable material." (JA-74); Khosravi, US Patent No. 5,441,515 at Abstract. Gore emphasizes that the patent examiner did not reject the claims that specifically required ePTFE as being anticipated by Khosravi and this is because the

examiner understood that claim 12 was broader than the narrower claims which recited ePTFE. Further, in arguing against this rejection, the applicants did not differentiate their invention from the prior art by asserting it used ePTFE, instead they argued it was different because it required an exterior covering. (JA-83).

During oral argument it was made clear that Medtronic is not making a claim differentiation disclaimer argument. Instead, Medtronic argues that Gore is only entitled to the scope of the invention disclosed, namely a stent with a covering of ePTFE. Medtronic points out that the Abstract of the Invention, the Summary of Invention, the Detailed Description of the Invention, and every embodiment disclosed refers to a covering made with ePTFE material. Specifically, Medtronic highlights Gore's use of the language "this invention" and the "present invention" when describing an intraluminal graft with a covering of ePTFE. ('870 patent col 2:28). Last, Medtronic argues that Gore's characterization of the method and apparatus claims as "two distinct inventions" is incorrect as a matter of law.[4] See 37 C.F.R. § 1.142 ("If two or more independent and

[4] At oral argument Gore characterized the method claims and apparatus claims as two distinct inventions. (Transcript 116:20; 120:9). Medtronic responded by arguing "there is no such thing as a patent with two inventions. Each patent has one patentably distinct invention." (Tr. 131: 7-9, Docket No. 87).

distinct inventions are claimed in a single application, the examiner in an Office action will require the applicant in the reply to that action to elect an invention to which the claims will be restricted . . . "). Medtronic points out that a method claim can only have a broader scope than a product claim if the specification supports that broader interpretation. Medtronic believes a broad interpretation of "covering" cannot be supported by the intrinsic record in this case.

The doctrine of claim differentiation provides that each claim is different in scope and is based on "the common sense notion that different words or phrases used in separate claims are presumed to indicate that the claims have different meanings and scope." Andersen Corp. v. Fiber Composites, LLC, 474 F.3d 1361, 1369 (Fed. Cir. 2007). Claim differentiation creates a presumption that the difference between claim language is significant and that the Court should not construe terms in such a way as to render the language of a claim superfluous. See Phillips, 415 F.3d at 1315 (noting that "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"). However, the doctrine of claim differentiation cannot broaden claims beyond their correct scope and "any presumption will be overcome by a contrary construction

dictated by the written description or prosecution history." Retractable Techs., Inc. v. Becton, 653 F.3d 1296, 1305 (Fed. Cir. 2011).

This Court must determine whether the consistent references to an ePTFE covering in the specification and in the disclosed examples overcome any presumption created by claim differentiation.[5] Both parties agree that every example disclosed in the patent describes a covering of ePTFE. It is also true that although the method claims (claims 12-21) appear to broadly require a "covering" less than 0.10mm thick, the specification never discloses any other covering material which is less than 0.10mm thick.

However, an examination of the prosecution history appears to support Gore's statement that the patent examiner was aware that the method claims 12-21 contained a broader scope than the narrower apparatus claims 1-11. "The Patent and Trademark Office (PTO) determines the scope of claims in patent applications not solely on the basis of claim language, but upon giving claims their broadest reasonable construction 'in light of the specification as it would be interpreted by one of ordinary skill in the art.'" See Phillips, 415 F.3d at 1316

[5] Although the Background of Invention section mentions other possible materials, it appears those materials are mentioned only to describe the older "conventional grafts" that require more invasive surgical methods. ('870 patent col 1:14-26).

(citing In re Am. Acad. Of Sci. Tech. Ctr., 367 F.3d 1359, 1364 (Fed. Cir. 2004)). Thus, it is appropriate for this Court to consider that the PTO was "required to consult the specification during examination in order to determine the permissible scope of the claim." In re Morris, 127 F.3d 1048, 1055 (Fed. Cir. 1997). During prosecution, the applicants repeatedly described their invention in the following way:

> The **present invention** relates to a tubular intraluminal graft comprising a tubular, diametrically adjustable stent having exterior and luminal surfaces and a wall containing a multiplicity of openings therethrough, and a **tubular covering of porous expanded PTFE** affixed to the exterior surface of the stent. **A method of making an intraluminal graft is also claimed**, the method claims requiring a stent as described for the article claim, and affixing to the exterior surface of the stent a **thin covering** (less than about 0.010 thick) which has a seam extending through between its own exterior and luminal surfaces.

(JA-64, 83) (emphasis added).

In the Court's view, the prosecution history supports the assertion that the inventors patented "covering" broadly and did not limit it to ePTFE material. The only difference between Claim 1 and Claim 12 is the recitation of ePTFE and the patent examiner chose to reject Claim 12 based on prior art and not Claim 1. (JA-74). This makes clear that the patent examiner understood the scope of the claims to be different. See Rambus Inc. v. Infineon Techs. Ag, 318 F.3d 1081, 1095 (Fed. Cir. 2003)

(refusing to construe a claim's broad use of "bus" narrowly and noting that the prosecution history demonstrated the PTO understood "bus" was not limited to a "multiplexing bus"). The Federal Circuit recently reiterated this principle, noting that: "Each claim of a patent has a purpose that is separate and distinct from the remaining claims. Claims of narrower scope can be useful to clarify the meaning of broader, independent claims under the doctrine of claim differentiation." In re Tanaka, 640 F.3d 1246, 1250-51 (Fed. Cir. 2011). Accordingly, in the patent at issue, it is clear that the prosecution history supports a broader interpretation of the term "covering."[6]

At the Markman hearing Medtronic argued that the Federal Circuit recently rejected a similar claim differentiation argument in Retractable Techs., Inc. v. Becton, 653 F.3d 1296 (Fed. Cir. 2011). In that case it was argued that the term "body" should be read broadly and should not be limited to a one-piece structure. Id. at 1304-1305. The argument was supported by the doctrine of claim differentiation because some claims recited "body" while others specifically recited "one-piece body". Id. The Court held that because the specification

[6] Furthermore, the use of the phrase "the present invention" does not automatically limit the meaning of the claim terms and "such language must be read in the context of the entire specification and prosecution history." Netcraft Corp. v. eBay, Inc., 549 F.3d 1394, 1398 (Fed. Cir. 2008).

expressly stated that the "invention" had a body constructed of a single structure, all of the embodiments had a single-structure body, and the specification "expressly distinguished the invention from prior art based on that feature," the claim differentiation argument was overcome by the intrinsic record. Id. at 1305.

Although the situation in Retractable is in many ways similar to the present case, the patent at issue is distinguishable based on the prosecution history and because the applicants never used ePTFE to distinguish their invention from prior art.[7] The fact that each example described in the patent uses an ePTFE covering should not be used to limit a claim that clearly uses "covering" more broadly. Phillips, 415 F.3d at 1323 ("[A]lthough the specification often describes very specific embodiments of the invention, we have repeatedly warned against confining the claims to those embodiments."); Trading Techs. Int'l, Inc. v. eSpeed, Inc., 595 F.3d 1340, 1352 (Fed. Cir. 2010) (noting that even when a patent uses only one example to enable the claims "courts should not limit the broader language to that embodiment 'unless the patentee has

[7] For example, in arguing against an initial claim rejection by the patent examiner, the applicants did not differentiate their invention from the prior art by asserting it used ePTFE, instead they argued it was different because it required an exterior covering. (JA-83).

demonstrated a clear intention to limit the claim scope using words or expressions of manifest execution or restriction.'").

Additionally, Gore correctly points out that construing "covering" to mean ePTFE material would render dependent Claim 17 superfluous. See Phillips, 415 F.3d at 1315 (noting that "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"). Independent Claim 16 reads: "A method according to claim 15 wherein said tubular covering is less than about 0.10 mm thick." (16; '870 patent col 10:23-24). Dependent Claim 17 reads: "A method according to claim 16 **wherein said tubular covering is of porous expanded PTFE**." (17; Id. at 10:25-26) (emphasis added). Thus, the Court finds the claim differentiation presumption has not been overcome and it will construe "covering" absent any limitation and in accordance with its plain and ordinary meaning.

c. Definition

No construction needed; "covering" has a plain and ordinary meaning

*5. **Affixing***

a. Proposed Definitions
Gore's definition: plain and ordinary meaning

Medtronic's definition: "attaching through the use of heat or with an adhesive"

b. Discussion

The dispute here is whether or not the term "affixing" includes "suturing" as a possible method for affixing a covering to the stent. Gore proposes the plain and ordinary meaning of the term "affixing" should apply and that the language of the claims do not limit affixing to any particular method. Gore also notes that the specification, particularly Example 3, describes multiple methods by which the stent coverings can be affixed. The covering may be: 1) "thermally adhered"; 2) "adhered to the stent surfaces by an adhesive"; or 3) "affixed to the stent by suturing the open ends of the tube together." ('870 patent col 7:58, 60-61, 62-63). Thus, Gore argues it would be improper for this Court to exclude embodiments explicitly disclosed in the specification from the scope of the claim.

Medtronic argues that the patent contemplates the "affixing" of a covering can be achieved only through heat or

through the use of a separate adhesive. Medtronic points to language in the Summary of Invention section that states:

> The porous expanded PTFE film may be affixed to the stent with an adhesive. The adhesive may be a **thermoplastic adhesive** and more preferably a **thermoplastic fluoropolymer adhesive** such as fluorinated ethylene propylene (hereinafter FEP) or perfluoroalkoxy (hereinafter PFA). Where the first and second tubular coverings of expanded PTFE film are affixed to each other through the multiplicity of openings in the stent wall, the two coverings **may be affixed by heating** them above the crystalline melt point of the PTFE film adequately to cause them to thermally adhere, or alternatively they may be **affixed by an adhesive such as FEP**.

(Id. at 2:58-67) (emphasis added). Medtronic also argues that the prosecution history supports its construction and that Gore specifically defined "affixing" in its patent application. (JA-56) ("Khosravi et al. discloses the invention as claimed with the exception of the adhesive"). Medtronic notes that when the examiner rejected one of the pending '870 claims, Gore responded as follows:

> Khosravi et al., do not teach or suggest affixing thin, seamed coverings to the exterior surfaces of stents in any fashion. Because of the described differences, they cannot be said to teach or suggest the claimed invention wherein the tubular covering is affixed to the exterior surface of a stent with an adhesive.

(JA-65, 66).

The Court does not find Medtronic's argument persuasive. The prosecution history passage just referenced above relates

only to pending claim 40 (now claim 13) which stated: "A method according to claim 39 wherein the tubular covering is affixed with an adhesive." (JA-33; '870 patent col 10:1-2). The fact that Gore overcame this rejection by stating that the use of an adhesive was an important element missing in the prior art appears to be largely irrelevant since the claims at issue here do not use the word "adhesive" and were not at issue in the passage cited. Further, the passage Medtronic cites defines affixing only through using an adhesive. This is inconsistent with Medtronic's proposed construction which limits "affixing" to use of an adhesive **or** through use of thermal heat.

The Court finds "affixing" should be construed in accordance with its plain and ordinary meaning. First, the claim language itself does not limit "affixing" to any particular method and thus generally it should be construed broadly. See Trading Techs. Int'l, 595 F.3d at 1352 (noting that "courts should not limit the broader language [of the claim] to the embodiments 'unless the patentee has demonstrated a clear intention to limit the claim scope using words or expressions of manifest execution or restriction.'"). Second, Example 3 of the specification lists three possible methods that can be used for "affixing": 1) thermally adhering the covering; 2) adhering the covering to the stent surfaces by an adhesive;

or 3) affixing the covering to the stent by suturing the open ends of the tube together. ('870 patent col 7:58, 60-61, 62-63). Medtronic's definition eliminates the third option and limits the definition only to the two methods mentioned in the Summary of Invention section of the patent.[8] Limiting a definition to only some of the methods disclosed in the embodiments as Medtronic suggests is usually improper unless there is a "clear disclaimer" in the specification. See Oatey Co. v. IPS Corp., 514 F.3d 1271, 1276-1277 (Fed. Cir. 2008) ("We normally do not interpret claim terms in a way that excludes embodiments disclosed in the specification."); Verizon Servs. Corp. v. Vonage Holdings Corp., 503 F.3d 1295, 1305 (Fed. Cir. 2007) (rejecting proposed claim interpretation that would exclude disclosed examples in the specification); Invitrogen Corp. v. Biocrest Mfg., L.P., 327 F.3d 1364, 1369 (Fed. Cir.

[8] Gore points out that "suturing" is the method Medtronic uses to make its accused devices. Medtronic responds by arguing that the "suturing" reference found in Example 3 does not apply to the claims at issue. Medtronic explains that because the claims of the '870 patent relate only to an intraluminal graft with an *exterior* covering, the reference to "suturing the open ends" of an exterior and interior covering together in Example 3 is not applicable to the instant claims. ('870 patent col 7:61-62). However, the paragraph in Example 3 which discusses potential affixing methods begins by stating that: "Stent coverings may be affixed to a stent surface by variations on this method. For example. . . ." (Id. at 7:54-55). The Court finds this language to be broad enough to encompass many potential methods of affixing a covering to the exterior surface of a stent, even ones which are not specifically discussed in the preferred embodiment.

2003) (finding the district court's claim construction erroneously excluded an embodiment described in an example in the specification, where the prosecution history showed no such disavowal of claim scope); Vitronics, 90 F.3d at 1583 (noting that a claim interpretation which excludes a preferred embodiment is "rarely, if ever, correct"). Here, there is no language in the specification that indicates Gore "clearly disclaimed" affixing by any method other than thermal heat or adhesives and thus the Court will not so limit the definition.

The Court has reviewed the claim language, the specification and the prosecution history, and finds that the intrinsic evidence reveals no special meaning for the term "affixing." As discussed above, dictionaries and treatises are "among the many tools that can assist the court in determining the meaning of particular terminology to those of skill in the art of the invention." Phillips, 415 F.3d at 1318. The definitions of affix include: "to fix, fasten or make firm a thing (to, on, upon) another" (Oxforddictionary.com); "to attach physically" or "to attach in anyway" (Merriam-Webster, Pl. Ex. 11). Thus, an examination of relevant extrinsic evidence reveals that the meaning of the term "affixing," as understood by one skilled in the art, is apparent even to lay persons. Because claim construction for this term would involve "little

more than the application of the widely accepted meaning of [a] commonly understood word," and because the intrinsic and extrinsic evidence do not meaningfully add to the definition, it is appropriate in this case to allow the straightforward claim language to speak for itself. Id. at 1314. Thus, the Court declines to construe any limitation into the term "affixing" and instead accords the term its plain and ordinary meaning.

c. Definition

No construction needed; "affixing" has a plain and ordinary meaning

6. "Seam extending from the exterior surface through to the luminal surface of the tubular covering"

a. Proposed Definitions

Gore's definition: Plain and ordinary meaning

Medtronic's definition: "seam created by an overlap of the exterior and interior surfaces of the tubular covering"

b. Discussion

For this phrase, the parties disagree as to whether the edges of the covering must "overlap" in order to create a "seam extending from the exterior surface through to the luminal

surface." Both sides agree that all of the figures shown in the '870 patent depict an overlap.

Gore argues that the plain and ordinary meaning of this phrase should apply. Gore believes Medtronic's definition again attempts to insert a particular method of making a seam found in the illustrated examples into broad claim language. Gore also points to the language in the specification which states "the following examples of intraluminal stent grafts are intended to be illustrative only and are not intended to limit the scope of the invention to only the constructions described by these examples." ('870 patent col 4:44-47).

Medtronic asserts that the phrase is ambiguous and its proposed construction provides clarity. Medtronic argues the only way this "seam" can be created is by "an overlap of the exterior and interior surfaces." Medtronic points to the embodiments in the specification and notes that every embodiment specifically refers to "overlapped edges" in connection with the seam. (Id. at 5:38,54; 6:48 ;7:20). Additionally, Medtronic notes that every illustration in the patent clearly depicts an overlap.

The Court agrees with Gore and finds that the term does not require construction. "It is important not to import into a claim limitations that are not part of the claim. For example,

a particular embodiment appearing in the written description may not be read into a claim when the claim language is broader than the embodiment." Superguide Corp. v. DirecTV Enters., 358 F.3d 870, 875 (Fed. Cir. 2004). There is nothing in the language of the claims, the specification, or the prosecution history that mandates a "seam extending from the exterior surface through to the luminal surface" be created by an overlap. Thus, the Court declines to adopt such a limitation.

c. Definition

No construction needed; "seam extending from the exterior surface through to the luminal surface" has a plain and ordinary meaning

7. "Has been diametrically adjusted to the enlarged diameter"

a. Proposed Definitions

Gore's definition: plain and ordinary meaning

Medtronic's definition: "has been diametrically adjusted from the collapsed diameter to the enlarged diameter"

b. Discussion

Gore argues that this phrase is clear and its plain and ordinary meaning should apply. Gore states that Medtronic uses

the exact words of the claim in its proposed construction and then improperly adds in the phrase "from the collapsed diameter." At the Markman hearing the parties explained that the importance of having a stent which has a collapsed diameter and an enlarged diameter is so the stent can be inserted less-invasively through a blood vessel. Gore argues that the plain language of Claim 15 simply indicates that the stent is in its expanded form when the covering is applied but does not require that it have first been in a collapsed form.

Medtronic argues that its proposed construction eliminates any ambiguity and makes clear that Claim 15 requires the selection of a stent which has been adjusted from a collapsed diameter "**to** the enlarged diameter." ('870 patent col 10:10-15) (emphasis added). Medtronic also points out that the claims of the '870 patent relate to Species III, which is embodied in example 3, and describe a "balloon-expandable stent." They note that example 3 states that: "A Palmez stent of the balloon-expandable type. . . was adjusted **from its collapsed diameter** of 3.4mm **to an enlarged outside diameter** of 8.0mm." (Id. at 7:6-10) (emphasis added). A balloon-adjustable stent typically requires a balloon catheter to adjust it from its collapsed diameter to its expanded diameter. However, Medtronic's construction potentially leaves out other methods mentioned in

the Examples and in the Summary of Invention such as a "self-expanding" stent.[9] (Id. at 2:46-51). Self-expanding stents "expand to a larger diameter after being released from a constraining force which restricts them to a smaller diameter." (Id. at 2:51-54). Thus, self-expanding stents are typically in their expanded form prior to being constrained.

It is generally improper for this Court to construe claims in such a way as to exclude examples disclosed in the specification. See, e.g., Oatey, 514 F.3d at 1276-1277 ("We normally do not interpret claim terms in a way that excludes embodiments disclosed in the specification."); Verizon, 503 F.3d at 1305 (rejecting proposed claim interpretation that would exclude disclosed examples in the specification). During the Markman hearing it became clear that regardless of whether Medtronic's proposed language excludes all methods of making self-expanding stents, the language will exclude all stents that are adjusted from any diameter other than a completely collapsed diameter. (Tr. at 169, Docket No. 87). The plain language of the claim speaks of a stent being "diametrically adjusted to the enlarged diameter" but it says nothing about how that adjustment

[9] When asked at the Markman hearing whether their proposed construction would exclude self-expanding stents, Medtronic responded that it was not their purpose to exclude self-expanding stents and conjectured that it "might be possible for someone to make a self-expanding stent in this way." (JA-170, 173).

took place or what specific diameter it was adjusted from. ('870 patent col 10:10-15). Thus, because Medtronic's construction appears to improperly import a limitation and potentially exclude specific embodiments disclosed in the specification, the Court rejects the construction and finds that this phrase should be construed in accordance with its plain and ordinary meaning. See Superguide, 358 F.3d at 875 ("It is important not to import into a claim limitations that are not a part of the claim. For example, a particular embodiment appearing in the written description may not be read into a claim when the claim language is broader than the embodiment."); Renishaw PLC v. Marposs Societa' per Azioni, 158 F.3d 1243, 1249 (Fed. Cir. 1998) ("If we need not rely on a limitation to interpret what the patentee meant by a particular term or phrase in a claim, that limitation is 'extraneous' and cannot constrain the claim.").

c. Definition

No construction needed; "diametrically adjusted to the enlarged diameter" has a plain and ordinary meaning

8. "Luminal surface"

a. Proposed Definitions
Gore's definition: plain and ordinary meaning

Medtronic's definition: "interior surface"

b. Discussion

At the Markman hearing it was made clear that both parties agree the term "luminal surface" means "interior surface" and the only dispute is whether it is necessary for the Court to formally construe the term. The Court agrees with Medtronic that the various references to terms of art such as "intraluminal," "lumen" and "luminal surface" may be potentially confusing and that construction by this Court would aid the finder of fact. After an examination of the specification and the claim language, the Court finds that "luminal surface" should be construed to mean "interior surface." The Court notes that every time "luminal surface" is referenced in the claims and the specification, it is in direct contrast to "exterior surface." See e.g., (12; '870 patent col 9:33-36) ("selecting at least one tubular, diametrically adjustable stent, **having an exterior surface, a luminal surface** and a wall, and having a multiplicity of openings through the wall of the stent . . . ") (emphasis added). Additionally, Gore agreed in briefing and during oral argument that the ordinary meaning of "luminal

surface" to one of skill in the art is "interior surface." (Pl. Brief. 26, Docket No. 67; Tr. 175, Docket No. 87). Thus, this Court will construe "luminal surface" to mean "interior surface." (Pl. Brief. 26, Docket No. 67; Tr. 175, Docket No. 87).

c. Definition

"Interior surface"

IV. CONCLUSION

For the reasons set forth above, the Court issues this Opinion and Order as the construction of the disputed claim terms in the '870 patent.

The Clerk is **REQUESTED** to send a copy of this Opinion and Order to counsel of record for the parties.

It is so **ORDERED**.

/s/

Mark S. Davis
UNITED STATES DISTRICT JUDGE

Norfolk, Virginia
December 13 2011