United States District Court,
W.D. Tennessee, Western Division.

SMITH & NEPHEW, INC,
Plaintiff.
v.
ARTHROCARE CORPORATION,
Defendant.

No. 03-2214 MaA

Oct. 6, 2004.

Glen G. Reid, Jr., Mark Vorder-Bruegge, Jr., Wyatt Tarrant & Combs, Memphis, TN, James M. Dowd, Mark G. Matuschak, Matthew A. Stowe, William F. Lee, Wilmer Cutler Pickering Hale & Dorr LLP, Washington, DC, Shawn D. Sentilles, Wright Medical Technology, Inc., Arlington, TN, for Plaintiff.

Jared Ben Bobrow, Kwang-Chien Ger, Kymberleigh N. Korpus, Joelle C. Lumish, Weil Gotshal & Manges LLP, Redwood Shores, CA, Sandra A. Bresnick, Weil Gotshal & Manges, New York, NY, Saul C. Belz, Glankler Brown, Memphis, TN, for Defendant.

MEMORANDUM OPINION AND ORDER ON MARKMAN MOTION

SAMUEL H. MAYS, JR.**, District Judge.**

Before the court is the parties' request for patent claim construction under Markman v. Westview Instruments, Inc., 52 F.3d 967 (Fed.Cir.1995), *aff'd,* 517 U.S. 370 (1996). The court held a Markman hearing on September 10, 2004. For the reasons stated, the court construes the claims as follows.

I. Background

On November 9, 1999, the United States Patent and Trademark Office ("PTO") issued U.S. Patent No. 5,980,504 (the "'504 patent"), entitled Method for Manipulating Tissue of an Intervertebral Disc, to inventors Hugh J. Sharkey, John Ashley, Joel Saal, Jeffrey Saal, and Le Trong Le. On July 17, 2001, the PTO issued U.S. Patent No. 6,261,311 (the "'311 patent"), entitled Method and Apparatus for Treating Intervertebral Discs, to inventors Hugh J. Sharkey, Joel Saal, Jeffrey Saal, and John Ashley. The technology at issue is a method of operating on discs between the vertebrae "using percutaneous disc techniques without the need for major surgical intervention." U.S. Patent No. 5,980,504, Column 1:17-21. The patents were originally assigned to Oratec Interventions, Inc. ("Oratec"). Oratec later assigned both patents to Smith & Nephew, Inc. ("Smith & Nephew"). Smith & Nephew alleges that ArthroCare Corporation ("ArthroCare") has infringed the '504 and '311 patents.

II. Legal Standard for Claim Interpretation

A patent is a fully integrated written instrument, and claim construction is a matter of law for the court. *See* Markman, 52 F.3d at 978. In construing the language of a claim, the court should look primarily to intrinsic evidence. Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed.Cir.1996). Intrinsic evidence includes the claims themselves, the specification, and the prosecution history. *Id*. Claim terms should be given their ordinary and customary meaning unless the patentee acts as his own lexicographer and, either explicitly or by implication, uses the specification to give a particular definition to a term. *See* Bell Atlantic Network Services, Inc. v. Covad Communications Group, Inc., 262 F.3d 1258, 1268 (Fed.Cir.2001) (quoting Vitronics, 90 F.3d at 1582). The ordinary and customary meaning of a term may be determined by considering what a person of ordinary skill in the art would have considered the term to mean at the time of invention, not the subjective intent of the patentee. Markman, 52 F.3d at 986. The prosecution history should be consulted as well, because the patentee may not advocate an interpretation which he earlier disavowed in order to obtain allowance. *See* Standard Oil Co. v. American Cyanamid Co., 774 F .2d 448, 452 (Fed.Cir.1985).

Where intrinsic evidence is dispositive, extrinsic evidence, such as expert testimony, inventor testimony, and prior art, should not influence the court's claim interpretation. Vitronics, 90 F.3d at 1584. Judges, however, may "rely on dictionary definitions when construing claim terms, so long as the dictionary definition does not contradict any definition found in or ascertained by a reading of the patent documents." Id. at 1584 n. 6.

III. Claim Construction

A. Claim Language

The parties disagree about the proper construction of language found in ten claims in the '504 patent and three claims in the '311 patent. The claims containing disputed language within the '504 patent provide as follows, with the contested language underlined:

1. A method of manipulating a disc tissue of an intervertebral disc, the disc having a nucleus pulposus, and annulus fibrosus, and an *inner wall of the annulus fibrosus,* the method comprising:

providing a *catheter* having a *functional element*. adjacent a dist *al end of the catheter* and a proximal end for externally guiding the distal end of the catheter within an intervertebral discpositioning the functional element *inner wall of the* annulus fibrosus by applying a sufficient force to advance the functional element through the nucleus pulposus to the *inner wall of the annulus,* which force is insufficient to puncture the annulus fibrosus;

and performing a function on the disc tissue using the functional element.

3. The method of claim 1, wherein the step of providing a *catheter* is followed by the steps of:

providing an introducer with a proximal end and a distal end and having an introducer lumen with a distal opening at a terminus of the introducer;

inserting the introducer into the disc so that the proximal end of the introducer is external to the body and the distal opening of the introducer lumen is internal to the body, and

slidably inserting the *catheter* into the introducer.

6. A method of manipulating a disc tissue at a selected location of the intervertebral disc, the disc having a nucleus pulposus, an annulus fibrosus, and an *inner wall of the annulus fibrosus,* the method comprising:

providing a *catheter* having a *functional element adjacent a distal end of the catheter* and a proximal end for externally guiding the distal end of the *catheter* within an intervertebral disc;

positioning the functional element at the selected location of the disc by applying a sufficient force to advance the distal end of the *catheter* through the nucleus pulposus and *adjacent the inner wall of the annulus,* which force is insufficient to puncture the annulus fibrosus; and

performing a function selected from the group consisting of adding material and removing material on the disc tissue at the selected location of the disc using the functional element.

7. A method of manipulating a disc tissue of an intervertebral disc, the disc having a nucleus pulposus, an annulus fibrosus, and an *inner wall of the annulus fibrosus,* the method comprising:

providing a *catheter* having a *functional element adjacent a distal end of the catheter* and a proximal end for externally guiding the distal end of the *catheter* within an intervertebral disc;

positioning the functional element *along* the *inner wall of the annulus fibrosus* by applying a sufficient force to advance the distal end of the *catheter* through the nucleus pulposus and *adjacent the inner wall of the annulus,* which force is insufficient to puncture the annulus fibrosus; and

performing a function on the disc tissue *along* the *inner wall of the annulus fibrosus* using the functional element.

8. A method of manipulating a disc tissue of an intervertebral disc, the disc having a nucleus pulposus, an annulus fibrosus, and an *inner wall of the annulus fibrosus,* the method comprising:

providing a *catheter* having a *functional element adjacent a distal end of the catheter* and a proximal end for externally guiding the distal end of the *catheter* within an intervertebral disc;

positioning the functional element at a location selected from the group consisting of posterior medial inner, posterior lateral, anterior lateral and anterior medial wall of the annulus fibrosus or combinations thereof by applying a sufficient force to advance the distal end of the *catheter* through the nucleus pulposus and *adjacent the inner wall of the annulus,* which force is insufficient to puncture the annulus fibrosus; and

performing a function on the disc tissue using the functional element at the selected location.

9. A method of manipulating a disc tissue of an intervertebral disc, the disc having a nucleus pulposus, an annular fibrosus, and an *inner wall of the annulus fibrosus,* the method comprising:

providing a *catheter* having a *functional element adjacent a distal end of the catheter* and a proximal end for externally guiding the distal end of the *catheter* within an intervertebral disc;

positioning the functional element at a first selected location of the disc by applying a sufficient force to

advance the distal end of the *catheter* through the nucleus pulposus and *adjacent the inner wall of the annulus,* which force is insufficient to puncture the annulus fibrosus;

performing a function on the disc tissue at the first selected location of the disc using the functional element;

positioning the functional element at a second selected location; and

performing a function on the disc tissue at the second selected location of the disc using the functional element.

10. A method of manipulating a disc tissue at a selected location of an intervertebral disc, the disc having a nucleus pulposus, an annulus fibrosis, and an *inner wall of the annulus fibrosus,* the method comprising:

providing a *catheter* having a *functional element adjacent a distal end of the catheter* and a proximal end for externally guiding the distal end of the *catheter* within an intervertebral disc;

positioning the functional element at the selected location of the disc by applying a sufficient force to advance the distal end of the *catheter* through the nucleus pulposus and *adjacent the inner wall of the annulus* such that the *catheter* conforms sufficiently to the *inner wall of the annulus fibrosus* to contact multiple locations on the inner wall; and

performing a function on the disc tissue at the selected location of the disc using the functional element.

11. A method of manipulating a disc tissue of an intervertebral disc, the disc having a nucleus pulposus, an annulus fibrosus, and an *inner wall of the annulus fibrosus,* the method comprising:

providing a *catheter* having a *functional element adjacent a distal end of the catheter* and a proximal end for externally guiding the distal end of the *catheter* within an intervertebral disc;

positioning the functional element at an outer annulus/dural interface of the disc by applying a sufficient force to advance the distal end of the *catheter* through the nucleus pulposus and *adjacent the inner wall of the annulus,* which force is insufficient to puncture the annulus fibrosus; and

performing a function on the disc tissue using the functional element.

12. A method of manipulating a disc tissue of an intervertebral disc, the disc having a nucleus pulposus, an annulus fibrosus, and an *inner wall of the annulus fibrosus,* the method comprising:

providing a *catheter* having a *functional element adjacent a distal end of the catheter* and a proximal end for externally guiding the distal end of the *catheter* within an intervertebral disc;

positioning the functional element at a posterior longitudinal ligament/annulus fibrosus interface of the disc by applying a sufficient force to advance the distal end of the *catheter* through the nucleus pulposus and *adjacent the inner wall of the annulus,* which force is insufficient to puncture the annulus fibrosus; and

performing a function on the disc tissue using the functional element.

13. A method of manipulating a disc tissue at a selected location of an intervertebral disc, the disc having a nucleus pulposus, an annulus fibrosus, and an *inner wall of the annulus fibrosus,* the method comprising:

providing a *catheter* having a *functional element adjacent a distal end of the catheter* and a proximal end for externally guiding the distal end of the *catheter* within an intervertebral disc;

positioning the functional element at the selected location of the disc by twisting the proximal end of the *catheter* and applying a sufficient force to advance the distal end of the *catheter* through the nucleus pulposus and *adjacent the inner wall of the annulus,* which force is insufficient to puncture the annulus fibrosus; and

performing a function on the disc tissue at the selected location of the disc using the functional element.

U.S. Patent No. 5,980,504, Column 17:53-20:47.

The claims containing disputed language within the '311 patent provide as follows, with the contested language underlined:

1. A method for delivering a controlled amount of energy *adjacent an inner wall of an intervertebral disc* comprising:

introducing an intervertebral disc apparatus within an intervertebral disc such that a *functional element incorporated into the apparatus adjacent a distal end of apparatus* is positioned *adjacent a wall of the intervertebral disc;* and

delivering energy from the functional element to the *wall of the invertebral disc* such that *no vaporization* of intervertebral disc tissue occurs when energy is delivered.

2. A method for delivering a controlled amount of energy *adjacent an inner wall of an intervertebral disc* comprising:

introducing an intervertebral disc apparatus within an intervertebral disc such that a *functional element incorporated into the apparatus adjacent a distal end of apparatus* is positioned *adjacent a wall of the intervertebral disc;* and

delivering energy from the functional element to the *wall of the invertebral disc* such that no material other than water is removed at or near the *wall of the intervertebral* when energy is delivered.

3. A method for delivering a controlled amount of energy *adjacent an inner wall of an intervertebral disc* comprising:

introducing an intervertebral disc apparatus within an intervertebral disc such that a *functional element incorporated into the apparatus adjacent a distal end of apparatus* is positioned *adjacent a wall of the intervertebral disc;* and

delivering energy from the functional element to the *wall of the invertebral disc* such that *no destructive lesion is formed on a disc* at or near the *wall of the intervertebral disc* when energy is delivered.

U.S. Patent No. 6,261,311, Column 24:18-52.

Within these thirteen claims, the parties disagree as to the meaning of eleven phrases. The court will construe the eleven terms in the following order: "catheter," "inner wall of the annulus fibrosus FN1," "wall of the intervertebral disc," "adjacent the inner wall of the annulus," "adjacent a wall of the intervertebral disc," "adjacent an inner wall of an intervertebral disc," "functional element adjacent a distal end of catheter," "functional element incorporated into the apparatus adjacent a distal end of apparatus," "along," "no vaporization," and "no destructive lesion is formed on a disc." The court will construe only those parts of the claims actually in dispute. *See* U.S. Surgical Corp. v. Ethicon, Inc., 103 F.3d 1554, 1568 (Fed.Cir.1997).

FN1. The terms "annulus" and "annulus fibrosus" are used interchangeably throughout the patents and this order.

B. Catheter

Smith & Nephew proposes that "catheter" should be construed to mean "a long flexible tube." ArthroCare would interpret "catheter" to mean "a long flexible tube that can bend around the inner wall of the annulus fibrosus." The parties agree that the specification controls the definition of "catheter" because the patentees acted as their own lexicographer. The specification explicitly defines "catheter:"

"[t]he catheter is not necessarily a traditional medical catheter ... but is a defined term for the purposes of this specification. 'Catheter' has been selected as the operant word to describe this part of the apparatus, as the apparatus is a long flexible tube...."

U.S. Patent No. 5,980,504, Column 5:51-57. The parties' dispute centers on whether the word "catheter" should be construed to have an additional flexibility requirement such that it could be bent around the inner wall of the annulus.

The claims recite no catheter flexibility requirements, and the claims must be read to contemplate methods of practicing the invention that do not involve bending the catheter around the inner wall of the annulus. Every word in a claim is presumed to add meaning, and the claim should not be read so as to render any of the claim language superfluous. Exxon Chem. Patents, Inc. v. Lubrizol Corp., 64 F.3d 1553, 1557 (Fed.Cir.1995). Claim 1 describes advancing the functional element of the catheter "through the nucleus pulposus to the inner wall of the annulus." Claim 10 describes advancing the "distal end of the catheter through the nucleus pulposus and adjacent the inner wall of the annulus such that the catheter conforms sufficiently to the inner wall." For every word in Claim 10 to have meaning, Claim 1 must envision methods of practicing the invention that do not involve "conforming" the catheter to the inner wall of the annulus. If the invention can be practiced without bending the catheter around the inner wall of the annulus, there is no reason to require that the catheter be capable of bending to such a degree.

ArthroCare argues that the patentees implicitly defined "catheter" as something that can be bent around the inner wall of the annulus because the specification consistently describes the catheter as bending to that degree. The summary of the invention, detailed description, abstract, and several of the drawings all involve a catheter bending around the inner wall of the annulus. This repeated use is not enough to imply a

flexibility requirement in the definition of "catheter." The Federal Circuit has stated that "when a patentee uses a claim term throughout the entire patent specification, in a manner consistent with only a single meaning, he has defined that term 'by implication.' " Bell Atlantic, 262 F.3d at 1271 (citing Vitronics, 90 F.3d at 1582). "Catheter," however, is not used in all portions of the specification in a manner consistent with a definition requiring sufficient flexibility to bend around the inner wall of the annulus.

The specification describes catheters that are "actively steerable." A physician can bend these catheters by applying force at various points along the device's length using mandrels located inside the catheter. U.S. Patent No. 5,980,504, Column 11:33-12:67. When these catheters are used to practice the invention, the inner wall of the annulus plays no role in bending them.

The specification also describes catheters that contain segments with differing levels of flexibility. "Such a catheter will have two or more different radii of curvature in different segments of the catheter under the same bending force." U.S. Patent No. 5,980,504, Column 13:28-30. A catheter that is bent around the inner wall of the annulus will have a single radius of curvature. A catheter with multiple radii of curvature will not necessarily be flexible enough to bend around the inner wall of the annulus at all places along its length.

ArthroCare also argues that the specification distinguishes prior art that involved flexible catheters. The specification discusses prior art that was "rigid" or "somewhat more flexible [than rigid]." U.S. Patent No. 5,980,504, Column 3:9-39. That prior art could be practiced with catheters described as "somewhat more flexible" does not imply that the current invention only avoids the prior art if it is practiced with a catheter so flexible that it can bend around the inner wall of the annulus.

The court has found no specific requirement of flexibility indicated in the patent claims, specification, or prosecution history. The patentees clearly intended to define the term catheter, and they did so in plain, simple language. The court sees no reason to use a definition other than the one chosen by the patentees and construes catheter to be "a long flexible tube."

C. Inner Wall of the Annulus Fibrosus

Smith & Nephew proposes that "inner wall of the annulus fibrosus" should be construed to mean "the portion of the annulus fibrosus which is comprised primarily of fibrous material and includes the transition zone between the nucleus and the annulus, where the catheter encounters more resistance to penetration than in the nucleus." ArthroCare would interpret "inner wall of the annulus fibrosus" to mean "the location in the disc where the catheter encounters more resistance to penetration and bends into a radius less than that of the external wall of the annulus fibrosus." The parties agree that the patentees acted as their own lexicographer and defined "inner wall of the annulus fibrosus" in the specification. They dispute, however, which words in the specification are actually the definition.

The disputed portion of the specification contains two sentences. The first sentence states:

"For purposes of this specification, the inner wall of the annulus fibrosus can include the young wall comprised primarily of fibrosus material as well as the transition zone which includes both fibrous material and amorphous colloidal gels...."

U.S. Patent No. 5,980,504, Column 7:10-15. The second sentence states:

"Functionally, that location where the catheter of the present invention encounters more resistance to penetration and bends into a radius less than that of the external wall of the annulus fibrosus is considered to be the 'inner wall of the annulus fibrosus.' "

U.S. Patent No. 5,980,504, Column 7:15-20. Smith & Nephew argues that the definition of "inner wall of the annulus fibrosus" is the first sentence of the quoted material plus the first clause of the second sentence. ArthroCare argues that the second sentence is the correct definition.

The first sentence begins with the words "[f]or purposes of this specification." Clearly the patentees intended this sentence to be the definition of the "inner wall of the annulus" and the court will use it as the term's definition.

The court interprets the second sentence as a functional definition, describing how the "inner wall of the annulus" can be found using one disclosed embodiment. As discussed in part III B., the claims must be read to envision the invention's being practiced in a manner that does not necessarily involve bending the catheter around the inner wall of the annulus. If there are ways of practicing the invention without bending the catheter around the inner wall of the annulus, the radius of the catheter cannot be central to a general definition of the inner wall of the annulus.

If the second sentence is merely a functional definition that applies to a particular disclosed embodiment, Smith & Nephew's proposed definition is flawed because it incorporates part of the functional definition. The court adopts the definition in sentence one to define the "inner wall of the annulus" as "the young wall comprised primarily of fibrosus material as well as the transition zone which includes both fibrous material and amorphous colloidal gels."

D. Wall of the Intervertebral Disc

The parties agree that "wall of the intervertebral disc" used in the '311 patent, and "inner wall of the annulus fibrosus" used in the '504 patent have the same meaning. Thus, the court defines "wall of the intervertebral disc" to be "the young wall comprised primarily of fibrosus material as well as the transition zone which includes both fibrous material and amorphous colloidal gels."

E. Adjacent the Inner Wall of the Annulus

Smith & Nephew proposes that "adjacent the inner wall of the annulus" should be construed to mean "being in close proximity to the inner wall of the annulus." ArthroCare would interpret the term to mean "next to the inner wall of the annulus." The parties' dispute centers on the meaning of the word "adjacent."

The American Heritage Dictionary defines "adjacent" as: "1) close to; lying near; 2) next to; adjoining." THE AMERICAN HERITAGE DICTIONARY OF THE ENGLISH LANGUAGE (4th ed.2000). The claims, specification, and prosecution history give no reason to depart from using the ordinary meaning of the word adjacent as the term's definition. Thus, the court construes "adjacent the inner wall of the annulus" to mean "close to, lying near, next to, or adjoining the inner wall of the annulus."

F. Adjacent a Wall of the Intervertebral Disc

The parties agree that "wall of the intervertebral disc" used in the '311 patent, and "inner wall of the annulus fibrosus" used in the '504 patent have the same meaning. Thus, the court defines "adjacent a wall of the

intervertebral disc" to mean "close to, lying near, next to, or adjoining the inner wall of the annulus."

G. Adjacent an Inner Wall of an Intervertebral Disc

The parties agree that "inner wall of an intervertebral disc" used in the ' 311 patent, and "inner wall of the annulus fibrosus" used in the '504 patent have the same meaning. Thus, the court defines "adjacent an inner wall of the intervertebral disc" to mean "close to, lying near, next to, or adjoining an inner wall of an annulus."

H. Functional Element Adjacent a Distal End of the Catheter

Smith & Nephew proposes that "functional element adjacent a distal end of the catheter" should be construed to mean "functional element in close proximity to a distal end of the catheter." ArthroCare would interpret the term to mean "the functional element is next to the tip of the catheter, but is not the tip itself." The dispute centers on the definition of the word "adjacent," and the level of clarification needed to demonstrate that the functional element and the tip of the catheter are separate entities.

The court has already construed the word "adjacent" to mean "close to, lying near, next to, or adjoining." Proper claim construction requires that, where possible, the same word be given the same meaning throughout the claims. Nothing in the claims, specification, or prosecution history suggests that the word adjacent in the term "functional element adjacent a distal end of the catheter" should be construed any differently from the word "adjacent" in any of the uses already discussed, such as "adjacent the inner wall of the annulus."

ArthroCare argues at some length that two objects adjacent to each other cannot be the same object. The Court agrees, but sees no need to add the words "but is not the tip itself" to the term's definition. The claim language, specification and prosecution history all indicate that the distal end and the functional element are different entities. A definition that describes the functional element as "close to, lying near, next to, or adjoining" the distal end clearly indicates that the functional element and the distal end are separate. Thus, the court defines "functional element adjacent a distal end of the catheter" as "functional element close to, lying near, next to, or adjoining the distal end of the catheter."

I. Functional Element Incorporated into the Apparatus Adjacent a Distal End of Apparatus

The parties agree that "functional element incorporated into the apparatus adjacent a distal end of apparatus" should be construed consistently with "functional element adjacent a distal end of the catheter." Thus, the definition of the term is "functional element incorporated into the apparatus close to, lying near, next to, or adjoining a distal end of apparatus."

J. Along

Smith & Nephew proposes that "along" requires no further definition and should be construed to mean "along." ArthroCare would interpret "along" to mean "on a line or course parallel and close to." Smith & Nephew objects to ArthroCare's proposed definition for fear that a jury would understand ArthroCare's construction to require continuous contact between an object and the thing that object is "along."

The applicable American Heritage Dictionary definition of "along" is: "on a line or course parallel and close to; continuously beside: rowed along the shore; the trees along the avenue." THE AMERICAN HERITAGE

DICTIONARY OF THE ENGLISH LANGUAGE (4th ed.2000). The claims, specification and prosecution history do not counsel against using the term's ordinary meaning. When the entire dictionary definition is used, including the example "the trees along the avenue," it is clear that the word "along" does not require continuous contact, which should alleviate Smith & Nephew's concerns. Thus, the court will use the entire dictionary definition and define "along" as "on a line or course parallel and close to; continuously beside; for example: rowed along the shore; the trees along the avenue."

K. No Vaporization

Smith & Nephew proposes that "no vaporization" should be construed to mean "no visible conversion to a gaseous state." ArthroCare would interpret "no vaporization" to mean "no conversion to a gaseous state." The parties agree that "vaporization" is conversion of a non-vapor to a vapor. The parties' only dispute involves whether the vapor that is created by "vaporization" must be visible. The American Heritage Dictionary gives two relevant definitions of "vapor:" "1) "barely visible or cloudy diffused matter, such as mist, fumes, or smoke, suspended in the air; 2) a) the state of a substance that exists below its critical temperature and that may be liquefied by application of sufficient pressure; b) the gaseous state of a substance that is liquid or solid under ordinary conditions." THE AMERICAN HERITAGE DICTIONARY OF THE ENGLISH LANGUAGE (4th ed.2000). Smith & Nephew contends that part 1 of the definition applies to the '311 patent. ArthroCare argues that part 2b of the definition applies to the term in this patent.

When words have multiple dictionary definitions, the intrinsic record must be consulted to determine which possible definition is most consistent with the use of the word by the inventor. Texas Digital Systems, Inc. v. Telegenix, Inc., 308 F.3d 1193, 1203 (Fed.Cir.2002). The claims themselves give no guidance in this case. The specification is more illuminating. The specification states that the invention relates to "percutaneous techniques" for treating intervertebral discs. U.S. Patent No. 6,261,311, Column. 1:39-42. The technique involves operating on the interior of the disc, without actually opening the disc. Although some methods of practicing the invention involve a catheter that can transmit material from the disc and away from the patient's body, other methods of practicing the invention involve catheters that do not transfer matter to or from the disc. When these methods are practiced and vapor is created, it is impossible to tell whether the vapor created is visible, like steam, or invisible, like air.

The parties present extensive testimony from depositions of the named inventors and various expert witnesses. The court sees no reason to consult such extrinsic evidence. That the procedure is percutaneous is sufficient for the court to adopt ArthroCare's definition and define "no vaporization" as "no conversion to a gaseous state."

L. No Destructive Lesion is Formed on a Disc

Smith & Nephew proposes that "no destructive lesion is formed on a disc" should be construed to mean "no ruinous change in the structure of tissue on a disc." ArthroCare would interpret the term to mean "a pathological change in tissue resulting in structural degradation, death and/or removal of tissue." The American Heritage Dictionary defines "destructive" as: "causing or wreaking havoc; ruinous." THE AMERICAN HERITAGE DICTIONARY OF THE ENGLISH LANGUAGE (4th ed.2000). The American Heritage Dictionary defines "lesion" as: "a localized pathological change in a bodily organ or tissue." THE AMERICAN HERITAGE DICTIONARY OF THE ENGLISH LANGUAGE (4th ed.2000).

The claims, specification and prosecution history do not counsel against giving the term its plain meaning. Thus the court sees no reason not to combine the dictionary definitions of "destructive" and "lesion" to

define "no destructive lesion" as "no ruinous change in the structure of tissue on a disc."

ArthroCare argues that this definition does not clarify the original term, but proposes no better construction. The patent states "[d]iscs with fissures can be treated non-destructively with or without the removal of nucleus tissue ..." U.S. Patent No. 6,261,311, Column. 22:13-14. This patent language contemplates non destructive procedures on the disc that involve the removal of tissue. This language contradicts ArthroCare's definition, which implies that removal of tissue necessarily has a negative impact on the intervertebral disc. Additionally, the phrase "structural degradation" and the word "pathological" are ambiguous and do not clarify the term "destructive lesion."

For these reasons "no destructive lesion" is defined as "no ruinous change to the structure of tissue on a disc."

IV. Conclusion

The foregoing constitutes the court's Markman construction of claim terms.

So ORDERED.

W.D.Tenn.,2004.
Smith & Nephew, Inc. v. ArthroCare Corp.