

United States District Court,
D. Massachusetts.

CYNOSURE, INC. and El. En. S.P.A,
Plaintiffs.

v.

COOLTOUCH INC,
Defendant.

Civil Action No. 08-10026-NMG

Dec. 22, 2008.

Background: Owner of patent for method for removing subcutaneous layers of fat by using a laser to liquefy, or melt, fat cells and its licensee brought action against competitor, alleging patent infringement and asserting invalidity of competitor's patents. Competitor counterclaimed for invalidity. Parties sought claim construction.

Holdings: The District Court, Gorton, J., held that:

- (1) term "providing a hollow needle with a tip" meant providing a slender hollow instrument for introducing material or removing material from the body;
- (2) term "with one end of said optical fiber adjacent to said tip of said needle" meant with one end of said optical fiber next to said tip of said needle;
- (3) term "laser energy" meant energy produced by a laser;
- (4) term "thermal quenching of tissue" meant delivery of cooling to tissue;
- (5) term "with cooling times of about 30 milliseconds" meant with cooling for a period of about 30 milliseconds; and
- (6) term "causing thermally mediated injury in skin below the epidermis" meant causing, with heat, injury in skin below the epidermis.

Claims construed.

6,206,873, 6,451,007, 7,122,029, 7,217,265. Construed.

Lauren B. Fletcher, Wayne L. Stoner, Christopher G. Lim, Wilmer Hale LLP, Boston, MA, for Plaintiffs.

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MEMORANDUM & ORDER

GORTON, District Judge.

In this patent infringement action the Court held a Markman hearing on December 5, 2008, at which counsel offered arguments in support of their proposed claim constructions of disputed terms. The following is the Court's ruling with respect to those terms.

I. Background

The plaintiffs, Cynosure, Inc. and El. En. S.P.A. ("El. En.," together with Cynosure, "the Plaintiffs") allege infringement of U.S. Patent No. 6,206,873 ("the '873 patent") by the defendant New Star Lasers, doing business as Cooltouch Inc. ("Cooltouch"). The '873 patent describes a method for eliminating adipose layers (i.e. fat) by means of laser energy. El. En. is owner of the '873 patent and Cynosure is its exclusive licensee. Plaintiffs also assert claims for invalidity of three patents owned by the defendant: U.S. Patent Nos. 7,217,265 ("the '265 patent"), 6,451,007 ("the '007 patent") and 7,122,029 ("the '029 patent").

Defendant Cooltouch responds that it is not infringing the '873 patent and counterclaims for the alleged infringement of the '265, '007 and '029 patents. It also asserts a claim of invalidity of the '873 patent.

A brief synopsis of the patents in suit follows:

1) The Plaintiffs' '873 patent describes a method for removing subcutaneous layers of fat by using a laser to liquefy, or melt, fat cells. The procedure is accomplished by placing a laser fiber, encased in a needle, under a patient's skin. Energy emitted by the tip of the laser irradiates fat cells, causing them to melt. The liquefied fat is then suctioned away or absorbed by the patient. The inventors of the patent discovered that such a method of removing fat was less harmful to surrounding tissue than traditional liposuction. The '873 patent has a total of 19 claims.

2) The defendant's '265 patent describes a method for reducing the appearance of cellulite. The method involves using electromagnetic energy selectively to shrink collagen, which is the cause of the dimpled appearance of cellulite, while avoiding damage to the surrounding fatty cells. The '265 patent has a total of 25 claims.

3) The defendant's '007 patent describes a method for treating tissue by applying pulsed thermal energy while also using "thermal quenching" (or cooling) to prevent damage to surrounding tissue. The '007 patent has a total of 21 claims.

4) The defendant's '029 patent describes a method of treating acne scars, photo damaged skin and wrinkles by applying thermal energy to the skin. The invention is designed to heat skin tissue to a level at which tissue below the epidermis experiences erythema (a kind of skin damage) without blistering the epidermis itself. That apparently helps to initiate the healing process below the epidermis without damaging the surface layer of skin. The '029 patent has a total of three claims.

II. Analysis

A. Legal Standard

[1] [2] In analyzing a patent infringement case, a Court must 1) determine the meaning and scope of the

patent claims asserted to be infringed and 2) compare the properly construed claims to the infringing device. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed.Cir.1995) (*en banc*), *aff'd*, 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996). The first step, known as claim construction, is an issue of law for the court to decide, while the second step is determined by the finder of fact. *Id.* at 979.

[3] [4] [5] [6] Courts are to afford claim terms "their ordinary and customary meaning." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed.Cir.2005) (*en banc*) (quoting *Vitronics Corp. v. Conceptor, Inc.*, 90 F.3d 1576, 1582 (Fed.Cir.1996)). The Court's responsibility is to determine the meaning of claim terms as they would be understood by persons of ordinary skill in the relevant art. *Bell Atl. Network Servs., Inc. v. Covad Comm. Group, Inc.*, 262 F.3d 1258, 1267 (Fed.Cir.2001). Where the ordinary meaning of a claim is not apparent, there is a hierarchy of sources to aid in the court's claim construction: 1) intrinsic evidence (e.g., the words themselves, specification and prosecution history) and 2) extrinsic evidence (e.g., dictionaries and treatises). *Phillips*, 415 F.3d at 1313-14. Although extrinsic evidence may be useful in construing claims, the intrinsic evidence should be afforded the greatest weight in determining what a person of ordinary skill would have understood a claim to mean. The Federal Circuit urges caution in the use of extrinsic evidence. *Id.* at 1319-24.

[7] [8] Among the sources of intrinsic evidence, the claims and specifications themselves are most important. The particular context in which a term is used in the asserted claim and the use of the term in other claims can be "highly instructive". *Id.* at 1314. It is clear that the claims "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 978), and not surprisingly the specification is therefore "the single best guide to the meaning of a disputed term." *Id.* at 1303.

B. The '873 Patent

With respect to the '873 patent, the parties contest terms appearing in Claims 1 and 13. Claim 1 reads as follows (with disputed terms underlined):

1. A method for the removal of subcutaneous adipose layers, the method comprising the steps of:

providing a hollow needle with a tip;

providing a laser source with emitting characteristics for generating a laser beam having an intensity and a wavelength for causing lipolysis of adipose cells;

generating a laser beam with said laser source;

arranging an optical fiber inside said needle with one end of said optical fiber adjacent to said tip of said needle and with another end of said fiber connected to an output of said laser source;

piercing the skin of a patient and bringing said needle tip into a subcutaneous adipose layer of the patient;

irradiating said adipose layer with said laser beam to cause lipolysis of said adipose layer and rupturing membranes of cells forming the adipose layer, thus transforming adeps forming said adipose layer into a liquid substance.

The contested terms in Claim 13 are substantially identical to those identified above and the parties' proposed construction of those terms is, likewise, the same in substance.

1. "Providing a hollow needle with a tip"

[9] The defendant asserts that "providing a hollow needle with a tip" should be construed to mean "providing a sharp, hollow needle with a tip for puncturing or piercing the skin." Plaintiffs respond that "needle" means only "a slender hollow instrument for introducing material or removing material from the body" and that the term includes no requirement that the object be sharp or used to puncture skin.

The term "needle," although common in everyday parlance, is susceptible to multiple definitions. Its ambiguity persists even within the medical field, as evidenced by the conflicting citations to medical dictionaries offered by the opposing parties. *Compare* Dorland's Pocket Medical Dictionary 459 (23d ed. 1982) (defining needle as "a sharp instrument for suturing or puncturing"), *with* Stedman's Medical Dictionary 1179-80 (26th ed. 1995) (defining needle as "a hollow [needle] used ... to guide introduction of a catheter into a vessel or other space"). To determine the meaning of the term "needle" to a person of ordinary skill in the art, it is therefore necessary to read that term in the context of the entire patent, including the specification. *See* Phillips, 415 F.3d at 1313.

Cooltouch asserts that its proposed construction is more consistent with other claim language and the specification. It cites language within Claim 1 which describes "piercing the skin of a patient and bringing said needle tip into a subcutaneous adipose layer of the patient." According to Cooltouch, the reference to "piercing" implies that the needle is used for the act and, thus, is necessarily sharp. It also cites to the language in the "Description of the Preferred Embodiment" that suggests that the needle is sharp and used to pierce the skin.

The Court is not persuaded that reading the term "needle" in the context of the specification supports Cooltouch's construction of that term. As Plaintiffs note, the defendant's proposal imports a limitation from one preferred embodiment into the claims of the patent. *See* Callicrate v. Wadsworth Mfg., Inc., 427 F.3d 1361, 1368 (Fed.Cir.2005) (importing limitation from single embodiment was error); Phillips, 415 F.3d at 1323 (noting that claims are not to be limited to description of a single embodiment). Although the specification describes performing the procedure with a sharp needle that is used to puncture the skin, nowhere does it teach that such a needle must be used.

Even more problematic is that the defendant's proposed construction would render dependent claims in the patent superfluous. Dependent Claims 4 and 19 refer to a needle with a "sharp edge" and "skin cutting tip" that is used to pierce or cut the skin. If "needle" were construed to mean a sharp object used for piercing the skin, reference to a "sharp needle" would be redundant. *See* Phillips, 415 F.3d at 1314 (noting that reference to "steel baffles" implies that baffles are not inherently steel).

[10] The proposed construction of Cooltouch also ignores the presumption that different claims should be construed to have different scopes. *See id.* ("the presence of a dependant claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim"). Although claim differentiation is not a "hard and fast rule of construction," *Kraft Foods, Inc. v. Int'l Trading Co.*, 203 F.3d 1362, 1368 (Fed.Cir.2000), nothing in the specification overcomes the presumption that the doctrine applies here.

Finally, the Court disagrees with the defendant's assertion that the Plaintiff's construction renders the patent invalid pursuant to 35 U.S.C. s. 112. The first paragraph of that statute requires that a patent specification enable a person of ordinary skill in the art to make and use the invention described. Contrary to Cooltouch's suggestion, this Court finds that a person of ordinary skill in the art of medicine would be capable of discerning how to pierce the skin of a patient regardless of the patent claim language.

Accordingly, the term "providing a hollow needle with a tip," as used in Claims 1 and 13, will be construed to mean "providing a slender hollow instrument for introducing material or removing material from the body."

2. "With one end of said optical fiber adjacent to said tip of said needle"

[11] The parties also dispute the meaning of the term "adjacent to" in Claims 1 and 13, which both include the highlighted phrase. Plaintiffs' assert that "adjacent to" means "in the vicinity of" and, thus, includes an optical fiber that protrudes slightly from the tip of a needle. The defendant asserts that "adjacent to" means "such that the tip of said optical fiber ends at the tip or point of said needle." Such a construction would presumably not include a fiber that protrudes beyond the tip of the needle.

This Court finds nothing in the plain meaning of the word "adjacent" or in the patent specification that would require that term to be construed as narrowly as Cooltouch suggests. Cooltouch points to language in the "Description of the Preferred Embodiment" and a Figure displaying one embodiment to support its construction. Again, however, importing such a limitation into the claims of the patent would be improper. *See Callicrate*, 427 F.3d at 1368; *Phillips*, 415 F.3d at 1323.

Although this Court declines to adopt the defendant's proposed construction as unduly restrictive, it also concludes that the suggestion of Cynosure and *El. En.* is overly broad. Even though the specification describes the fiber as ending "in the vicinity" of the tip of the needle, it is the claim language itself that defines what is patented and establishes the limit of the patentee's right of exclusivity. *See Phillips*, 415 F.3d at 1312. Construing the term "adjacent" to mean "in the vicinity of" would unduly broaden the scope of the claim. *See id.*

The Court will, therefore, construe the word "adjacent" to mean "next to." The specification does not suggest that "adjacent" was used in any way other than the ordinary sense and Plaintiffs themselves acknowledge that the term "next to" is consistent with the ordinary meaning of "adjacent." Accordingly, the term "adjacent" as used in "with one end of said optical fiber adjacent to said tip of said needle" in Claims 1 and 13 means "next to."

3. "Piercing the skin of the patient"

Plaintiffs assert that no construction is necessary for "piercing the skin" but the defendant responds that it should be construed to mean "puncturing or piercing the skin of a patient with said needle."

The Court perceives no reason to adopt Cooltouch's more restrictive construction. Its proposal adds language not in the claim rather than clarifying the existing terms. Moreover, adopting Cooltouch's proposed construction would be inconsistent with this Court's actual construction of the term "needle."

Accordingly, the Court finds that no construction beyond the phrase itself is necessary for the term "piercing the skin of the patient."

4. "Irradiating said adipose layer with said laser beam" FN1

FN1. Claim 13 contains slightly different language, i.e. "irradiating adipose cells in the adipose layer with said laser beam from said optical fiber" but this Court's analysis and conclusion apply to it as well.

Plaintiffs contend that no further construction is required for the subject term as well. The defendant responds that the term should be construed to mean "irradiating said adipose layer with said laser beam while said optical fiber is arranged within said needle such that the tip of said optical fiber ends at the tip or point of said needle."

Again, the Court sees no reason to add the language Cooltouch suggests. Cooltouch seeks to impose a limitation rather than to clarify the term. Importing such a limitation here is unjustified and would be inconsistent with this Court's construction of the term "adjacent to." Accordingly, the Court finds that no additional construction is necessary for the term "irradiating said adipose layer with said laser beam," nor for similar language found in Claim 13.

C. The '265 Patent

1. Contested Terms

With respect to the '265 patent, the parties contest one term (which is underlined) appearing in independent Claim 1, which reads as follows:

1. A method for treating cellulite with laser energy comprising the steps of selectively targeting and treating collagen fibers in the connective structure of the tissue located essentially in the valley areas of the dimples of the cellulite with heat and simultaneously selectively avoiding heating the collagen fibers in the connective structure of the tissue located essentially on the hill areas of the dimples of the cellulite as well as avoiding heating the fatty tissue of the cellulite itself.

The parties initially disagreed over whether the references to tissue located in "valley" and "hill" areas required construction. Cooltouch has since withdrawn its proposed construction of those terms and agrees with the Plaintiffs that they require no construction. At the Markman hearing, Cooltouch further indicated that it no longer objects to Plaintiffs' proposed construction of the term "simultaneously," as it appears in Claims 1 and 24, as meaning "at the same instant in time." Consequently, the only term still in dispute with respect to the '265 patent is the term "laser energy."

2. "Laser energy"

[12] Plaintiffs assert that the term "laser energy" should be construed to mean "energy produced by a laser" while the defendant contends that "laser energy having a wavelength of 1300-1600 nm or 1900-2200 nm" is the correct construction.

Nothing in the ordinary meaning of the term "laser energy" supports limiting it to particular wavelengths. Nevertheless, Cooltouch maintains that language elsewhere in the specification requires that the term be so limited. For example, in the "Description of the Embodiment" the specification states that there are

therapeutic windows ... indicat[ing] the range of wavelengths where collagen containing connective tissue ... may be effectively targeted with minimal damage to fatty tissue.

Figure 2 of the specification shows that the "therapeutic windows" correspond with the limitation Cooltouch proposes (wavelengths of 1300-1600 nm and 1900-2200 nm). According to Cooltouch, that language demonstrates a clear disclaimer of the scope of the claim with respect to any wavelengths outside the proposed ranges.

[13] Although a "specification may reveal an intentional disclaimer, or disavowal of claim scope by the inventor," Phillips, 415 F.3d at 1316, such a disclaimer must be "a clear disavowal of claim scope." *Voda v. Cordis Corp.*, 536 F.3d 1311, 1320 (Fed.Cir.2008) (citing *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1325 (Fed.Cir.2002)). Despite the defendant's assertion that the description within the specification of particular wavelengths as "therapeutic windows" constitutes a "clear disclaimer," this Court rejects that conclusion for a number of reasons.

First, the language allegedly constituting a disclaimer appears only in the portion of the specification entitled "Detailed Description of the Embodiment." The Federal Circuit has "repeatedly warned against confining the claims to [specific embodiments of the invention]." Phillips, 415 F.3d at 1323 (collecting cases). Importing such a limitation would be particularly inappropriate here, where elsewhere the description of the embodiment states:

the invention is not intended to be limited to the embodiments disclosed, but the invention is to be given the largest possible scope which is consistent with the principals and features described herein.

Such language belies any assertion that the patentee intentionally disclaimed a scope of the claim beyond what is described in the embodiment.

Second, language elsewhere in the claims contradicts the notion that the term "laser energy" was restricted to the particular wavelengths Cooltouch suggests. *See Voda*, 536 F.3d at 1320 (finding no disclaimer based on other portions of specification). For example, dependent Claim 5 provides for the use of laser energy with wavelengths between 1250-1600 nm. Such wavelengths are outside the range Cooltouch proposes and, thus, construing the term "laser energy" as Cooltouch urges would result in independent Claim 1 having a narrower scope than dependent Claim 5. *Cf. AK Steel Corp. v. Sollac*, 344 F.3d 1234, 1242 (Fed.Cir.2003) (noting that "dependent claims are presumed to be of narrower scope than the independent claims from which they depend"). Such a perverse result militates against finding a clear disavowal of claim scope.

Accordingly, the term "laser energy" will be construed to mean "energy produced by a laser."

D. The '007 Patent

1. Contested Terms

With respect to the '007 patent, the only contested terms (which are underlined) appear in Claim 1, which states:

1. A method for treatment of target tissue or structures with a source of pulsed electromagnetic energy with thermal quenching of adjacent or surface tissue, the method comprising the following steps:

- (A) Generating pulsed energy from an energy source;
- (B) Delivering the pulsed energy to the target tissue or structures with a delivery device;
- (C) Irradiating the target tissue or structures with the pulsed energy to cause selective thermally mediated treatment of the target tissue or structures such that there is minimal absorption of energy in surface tissue and adjacent tissue and selective absorption of energy in target tissue, and such that surface tissue remains at a temperature below the threshold for damage temperature during irradiation; and
- (D) Thermal quenching of tissue adjacent or overlying the treated target tissue with cooling times of about 30 milliseconds subsequent to step B with delay times between about 0 to about 15 milliseconds to prevent undesired temperature rise in adjacent or overlying tissue due to conduction of heat from the treated target tissue into the adjacent or overlying tissue.

The parties initially contested additional terms but the defendant has since withdrawn its proposed construction of "an energy source" and "delivery device" and accepts Plaintiffs' construction of those terms. Thus, the Court will construe "an energy source" to mean "a source of energy" and "delivery device" to mean "a device for delivering energy." The three terms underlined above remain in dispute.

2. "Thermal quenching of tissue"

[14] Cynosure and El. En. propose that "thermal quenching of tissue" be construed to mean "quenching of heat that has already been delivered to tissue." Cooltouch responds that the term should be construed to mean "delivery of cooling to tissue."

Plaintiffs contend that their proposed construction is consistent with the claim and the prosecution history, both of which indicate that thermal quenching is applied "subsequent to" the application of heat. Although the Court does not disagree with the Plaintiffs characterization of what the claims and prosecution history require, it declines to adopt their proposed construction.

The claim clearly indicates that "thermal quenching" is done "subsequent" to the heating of tissue so, to the extent Plaintiff's proposed construction seeks to impose that limitation, it is unnecessary. To the extent it seeks to impose a further limitation, it is unjustified. The claim language and prosecution history relied on by the Plaintiffs require only that quenching be subsequent to the delivery of heat.

Cooltouch's proposed construction is consistent with the use of the term "thermal quenching" throughout the patent and in the prosecution history (i.e., to mean the delivery of cooling). Accordingly, this Court will construe the term "thermal quenching of tissue" to mean "delivery of cooling to tissue."

3. "With cooling times of about 30 milliseconds"

[15] Plaintiffs propose that within this term the word "times" simply be construed to mean "for a period" while the defendant responds that the entire term means "with cooling performed for a period including 30 milliseconds."

This Court sees no justification for construing the term "about" to mean "including" as Cooltouch suggests. In fact, counsel for Cooltouch acknowledged at the Markman hearing that such a construction would allow for *any* period of cooling greater than 30 milliseconds. Such a construction is inconsistent with the ordinary

meaning of the term "about."

Accordingly, the Court will construe "with cooling times of about 30 milliseconds" to mean "with cooling for a period of about 30 milliseconds."

4. "Delay times between about 0 to about 15 milliseconds"

[16] [17] Plaintiffs propose that, within this contested term, "delay times" means "postponed until a later time" and "about 0 to about 15 milliseconds" means "a period of time greater than 0 milliseconds and less than 15 milliseconds." The defendant replies that the subject term means "cooling is simultaneous with the delivery of pulsed energy or begins within about 15 milliseconds after the pulsed energy." Thus, the parties disagree about the meaning of this term in two respects, specifically, whether it 1) allows for simultaneous cooling and 2) allows for delay times beyond 15 milliseconds.

With respect to whether the term permits simultaneous cooling, this Court concludes that both the claim language and the prosecution history preclude such a construction. First, use of the word "delay" implies that cooling cannot be simultaneous with the delivery of heat. Second, the patentee distinguished its invention from prior art that used "concurrent cooling" in the patent application. *See Rheox, Inc. v. Entact, Inc.*, 276 F.3d 1319, 1325 (Fed.Cir.2002) (arguments made to distinguish prior art can lead to narrow claim interpretation) (citation omitted).

The Court concludes that Plaintiffs' construction is more accurate with respect to the range of delay times that are included in the claim. The defendant asserts that the use of the word "about" suggests that delay times of slightly more than 15 milliseconds are included. Although such a construction is plausible, use of the word "between" supports a more limited reading of the term. To construe the term as allowing delay times of more than 15 milliseconds would be to ignore the patentee's use of the word "between."

Accordingly, within the term "delay times between about 0 to about 15 milliseconds," "delay times" will be construed to mean "postponed until a later time" and "between about 0 to about 15 milliseconds" to mean "a period of time greater than 0 milliseconds and less than 15 milliseconds."

E. The '029 Patent

1. Contested Terms

With respect to the '029 patent, Claims 1-3 all contain contested terms. Claim 1 (the contested terms of which are underlined) reads as follows:

A method for treatment of acne scars in skin comprising:

heating the target skin portion with a source of energy which is uniformly attenuated with depth in skin for a predetermined time period and predetermined fluence such that the exposure time period of the epidermis and the peak temperature reached by the epidermis are such that the epidermis does not blister;

causing thermally mediated injury in skin below the epidermis; and

causing resulting transient erythema to initiate a healing response which improves the appearance of the acne scars.

The disputed terms in Claims 2 and 3 (and the proposed construction of those terms) are identical to the disputed terms in Claim 1.

2. "Source of energy which is uniformly attenuated with depth in skin"

[18] Plaintiffs' propose that this term be construed to mean "source of energy which is linearly decreasing with depth in skin." The defendant proposes that it be construed to mean "an energy source including a gas discharge flashlamp, incandescent-type filament lamp, ultrasound, microwave, radiofrequency, or laser having a wavelength of 1100 nm or longer."

The construction proposed by the defendant focuses exclusively on the words "source of energy" and does not address how to construe the words "uniformly attenuated with depth in skin." It seeks to limit "source of energy" to specific examples and to require a wavelength greater than "1100 nm." Once again the defendant's interpretation unjustifiably imports a limitation from a description of one embodiment of the invention to the claims of the patent. *See Phillips*, 415 F.3d at 1323. Nothing in the claims or specification requires an energy source with a wavelength of greater than 1100 nm. Furthermore, the description of the preferred embodiment states that

the invention is not intended to be limited to the embodiments disclosed, but the invention is to be given the largest possible scope which is consistent with the principals and features herein.

Accordingly, the Court will not limit the term "source of energy" as proposed by Cooltouch.

Plaintiffs' construction addresses the words "uniformly attenuated with depth in skin" rather than "source of energy." The Court agrees that those words are more properly the focus of attention. Although Cooltouch contends that Plaintiffs' proposed construction of the subject term is confusing, it adequately captures the plain meaning of what is otherwise an even less comprehensible term.

Accordingly, this Court will construe the term "source of energy which is uniformly attenuated with depth in skin" to mean "source of energy which linearly decreases with depth in skin."

3. "Causing thermally mediated injury in skin below the epidermis"

[19] Plaintiffs propose that this term be construed to mean "causing, with heat, injury in skin below the epidermis." The defendant initially proposed that the term be construed to mean "causing heat-caused physiological reaction in skin layers below the epidermis."

At the Markman hearing counsel for Cooltouch agreed to the use of the word "injury" (rather than her proposed "physiological reaction") and, thus, the term is no longer in dispute. Accordingly the Court will construe the term "causing thermally mediated injury in skin below the epidermis" to mean "causing, with heat, injury in skin below the epidermis."

4. "Causing resulting transient erythema to initiate a healing response"

[20] Plaintiffs propose that this term be construed to mean "intentionally causing (and not minimizing) transient erythema as an active step in the treatment to be used as an indicator for the endpoint of treatment." The defendant counters that the term means "causing a short-term redness which triggers the

body's healing response."

Although Plaintiffs' construction adds language not in the term, they justify their proposal by explaining that Cooltouch (the patentee) used almost identical terminology to overcome a prior art rejection during prosecution of the '029 patent. A review of the prosecution file of that patent indicates that the patentee distinguished prior art by stating:

[prior art] is silent to teaching of utilization of the appearance of transient erythema as an indicator for the endpoint for thermal treatment

There is no suggestion [in prior art] ... that tissue can be treated by causing transient erythema as an active step in method of treatment

[Prior art] suggests a treatment which minimizes erythema, as opposed to causing it intentionally.

(emphasis added). Because the limitations Plaintiffs seek were used to distinguish prior art during prosecution, construing the claim to contain such limitations is altogether appropriate. *See Rheox*, 276 F.3d at 1325 (noting that the prosecution history can exclude an interpretation that was disclaimed during prosecution) (citation omitted).

Although this Court agrees that the limitations Plaintiffs seek are appropriate, their proposed construction does not clarify the meaning of the words "transient erythema." On the other hand, the construction proposed by Cooltouch construes those words in accordance with their plain meaning (albeit without the limitation sought by the Plaintiffs). Therefore, the Court will adopt Cooltouch's proposed construction but add the limitation warranted by the prosecution history.

Accordingly, the term "causing resulting transient erythema to initiate a healing response" will be construed to mean "intentionally causing (and not minimizing) short-term redness which triggers the body's healing response, as an active step in the treatment, to be used as an indicator for the endpoint of treatment."

ORDER

For the reasons set forth in the preceding Memorandum, the Court hereby construes the disputed claims as follows:

The '873 Patent

1. providing a hollow needle with a tip means providing a slender hollow instrument for introducing material or removing material from the body;
2. with one end of said optical fiber adjacent to said tip of said needle means with one end of said optical fiber next to said tip of said needle;
3. piercing the skin of the patient requires no construction; and
4. irradiating said adipose layer with said laser beam requires no construction.

The '265 Patent

5. laser energy means energy produced by a laser.

The '007 Patent

6. thermal quenching of tissue means delivery of cooling to tissue;

7. with cooling times of about 30 milliseconds means with cooling for a period of about 30 milliseconds;
and

8. Within the term delay times between about 0 to about 15 milliseconds, delay times means postponed until a later time and between about 0 to about 15 milliseconds means a period of time greater than 0 milliseconds and less than 15 milliseconds.

The '029 Patent

9. source of energy which is uniformly attenuated with depth in skin means source of energy which linearly decreases with depth in skin;

10. causing thermally mediated injury in skin below the epidermis means causing, with heat, injury in skin below the epidermis; and

11. causing resulting transient erythema to initiate a healing response means intentionally causing (and not minimizing) short-term redness which triggers the body's healing response, as an active step in the treatment, to be used as an indicator for the endpoint of treatment.

So ordered.

D.Mass.,2008.

Cynosure, Inc. v. Cooltouch Inc.

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