

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF OHIO
EASTERN DIVISION

THE LINCOLN ELECTRIC COMPANY, et al.,)	CASE NO.: 1:09 CV 1886
)	
Plaintiffs,)	JUDGE DONALD C. NUGENT
)	
v.)	
)	
NATIONAL STANDARD, LLC,)	<u>MEMORANDUM OPINION</u>
)	<u>AND ORDER</u>
Defendant.)	
)	

This matter comes before the Court subsequent to a Claim Construction hearing. The parties have filed opening briefs on claim construction, as well as response briefs. Accordingly, the claim construction issues in the instant matter are now ripe for determination.

I. BACKGROUND

Lincoln Electric Company and Lincoln Global, Inc. (collectively “Plaintiffs”) design, develop, manufacture, and sell welding products and accessories, including, but not limited to, weld wire sold in bulk packages. (ECF # 1 at ¶ 2.) On August 12, 2009, Plaintiffs filed a three-count Complaint against National Standard, LCC (“Defendant”), alleging that it violated three separate patents, namely the ‘864, ‘454, and ‘899 patents.

The ‘864 and the ‘454 patents relate to weld wire that is imparted “shape memory,” designed to result in consistent weld placement and higher quality welds. (ECF # 113 at 1-2.) More specifically, the ‘864 patent concerns the weld wire, while the ‘454 patent addresses methods of forming the wire. (*Id.* at 1.) The ‘899 patent relates to a ring structure, or payout, that feeds the weld wire continuously and uniformly from a bulk container for its use in the welding process. (*Id.* at 19.)

II. STANDARD OF REVIEW

An infringement analysis entails two steps. The first step is determining the meaning and scope of the patent claims asserted to be infringed. The second step is comparing the properly construed claims to the product accused of infringing. *See Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed. Cir. 1995) (*en banc*), *aff'd*, 517 U.S. 370 (1996). It is the first step, commonly known as claim construction or interpretation, that is at issue at this juncture.

Construction of patent claims is a question of law for the court. *See id.* at 970-71.

In construing claims, the court should consider first intrinsic evidence of the record: the patent itself, including the claims, the specification, and, if in evidence, the prosecution history. *See Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). This is the most significant source of the legally operative meaning of disputed claim language. *See id.* When analysis of the intrinsic evidence permits unambiguous definition of the meaning and scope of the claims, as it will in most cases, reference to extrinsic evidence is improper. *See id.* at 1583. The Federal Circuit has reaffirmed this principle in *Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005). Although courts can put general or specialized dictionaries and comparable extrinsic sources to appropriate use in helping to ascertain the commonly understood meaning of words, they must give this evidence only the relatively limited weight it is due and not divorce claim terms from the context of the intrinsic evidence. *See id.* at 1318-19, 1322-24.

A court's examination of the intrinsic evidence in a claim construction analysis begins with the words of the disputed claim itself. *See Vitronics Corp.*, 90 F.3d at 1582. The claims define the scope of the right to exclude. *See Teleflex, Inc. v. Ficoso N. Am. Corp.*, 299 F.3d 1313, 1324 (Fed. Cir. 2002) (*quoting Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d

1243, 1248 (Fed. Cir. 1998)). In the absence of a patentee's "express intent to impart a novel meaning to the claim terms," the words of the claims take on the "ordinary and customary meanings attributed to them by those of ordinary skill in the art." *Mars, Inc. v. H.J. Heinz Co.*, 377 F.3d 1369, 1373 (Fed. Cir. 2004) (quoting *Int'l Rectifier Corp. v. LXYS Corp.*, 361 F.3d 1363, 1369 (Fed. Cir. 2004); *Brookhill-Wilk 1, LLC v. Intuitive Surgical, Inc.*, 334 F.3d 1294, 1298 (Fed. Cir. 2003)).

In assessing the meaning of the claim terms, a court must always review the specification. See *Vitronics Corp.*, 90 F.3d at 1582. The specification is the part of the patent that "teaches" the invention so that one skilled in the art can make and use it. *Amgen, Inc. v. Hoechst Marion Roussel, Inc.*, 314 F.3d 1313, 1334 (Fed. Cir. 2003). The specification is highly relevant to claim construction because it may contain special or novel definitions of claim terms when the patentee has chosen to be his own lexicographer, see *Vitronics*, 90 F.3d at 1582, or it may help to resolve ambiguity when the ordinary and customary meaning of a term is not sufficiently clear, see *Teleflex*, 299 F.3d at 1325. In sum, the specification is the "single best guide to the meaning of a disputed term," *Phillips*, 415 F.3d at 1315 (quoting *Vitronics Corp.*, 90 F.3d at 1582), and is usually "dispositive," *Vitronics Corp.*, 90 F.3d 1582.

The final source of intrinsic evidence plays a role similar to the specification in the claim construction analysis. The prosecution history of the patent — the complete record of the proceedings before the Patent and Trademark Office — "provides evidence of how the PTO and the inventor understood the patent" and should be considered by the court. *Phillips*, 415 F.3d at 1317. "The patent applicant's consistent usage of a term in prosecuting the patent may enlighten the meaning of that term." *Metabolite Lab., Inc. v. Laboratory Corp. of Am. Holdings*, 370 F.3d

1354, 1360 (Fed. Cir. 2004). The prosecution history may contain “express representations made by the applicant regarding the scope of the claims.” *Vitronics Corp.*, 90 F.3d at 1582. But any limitation found in the history must be “clear and unmistakable.” *Anchor Wall Sys., Inc. v. Rockwood Retaining Walls, Inc.*, 340 F.3d 1298, 1307 (Fed. Cir. 2003).

If a claim is amenable to more than one construction, the claim should, when possible, be construed to preserve its validity. *See Karsten Mfg. Corp. v. Cleveland Golf Co.*, 242 F.3d 1376, 1384 (Fed. Cir. 2001); *ACS Hosp. Sys., Inc. v. Montefiore Hosp.*, 732 F.2d 1572, 1577 (Fed. Cir. 1984). However, the court is not permitted to redraft claims. *Quantum Corp. v. Rodime, PLC*, 65 F.3d 1577, 1584 (Fed. Cir. 1995).

III. DISCUSSION

The parties have submitted a Joint Claim Construction Chart, indicating that they disagree as to the meaning of certain patent terms. The main construction dispute arising from the ‘864 and ‘454 patents involves the shape of the weld wire. Although Plaintiffs state that the terms at issue require no construction, Defendant proposes a reading that would limit the wire shape by requiring “semi-circular sections” or “semi-circular half-cycles.” There is likewise a dispute over whether certain terms require the wire to be wound and unwound from a spool. As to the ‘454 patent only, the parties dispute whether certain terms require construction relating to wire formation or an extrusion process. As to the ‘899 patent, the dispute between the parties concerns whether the patent terms require the payout to be in certain types of welding wire containers or packages. The Court examines these categories in turn.

A. Shape Of The Weld Wire Required By The ‘864 And ‘454 Patents

In their Opening Claim Construction Submission, Plaintiffs propose that the term

“waveform” be given its plain and ordinary meaning. (ECF # 113 at 3.) As such, Plaintiffs claim that no construction is required. (*Id.*) To the extent a definition may be given, Plaintiffs urge the Court to define waveform as “a curve that represents the propagation of a wave.” (*Id.*)

Defendant, on the other hand, argues that “waveform” should be defined as “a recurring undulating curve.” (ECF # 112 at 10.) To the extent Defendant offers a definition of undulating curve,¹ Defendant asserts that it means “a succession of generally semi-circular sections having a fixed radius of curvature, the semi-circular sections curving in one direction and then reversing and curving in the opposite direction.” (*Id.* at 9.) Defendant asserts that this position is supported and described in Figure 8A, and claims that the requirement of semicircular half-cycles was confirmed by the Patent Office in the prosecution of the ‘864 patent. (*Id.* at 13.)

The Court has reviewed the respective positions of the parties, and finds that, based upon the claims themselves, the specification, and the prosecution history, Defendant’s construction of the term “waveform” should be adopted. The record also reveals that the construction for waveform in the ITC, a contemporaneously filed litigation involving the ‘864 patent,² was “a recurring undulating curve.” (ECF # 112 at 9; Defendant’s 5/31/11 Hearing Presentation at 13.)

¹ Defendant asserts that the term “undulating curve” is indefinite. (ECF # 132-1 at 4.) Because the Court finds that the claim provides sufficient particularity and clarity to inform a person with ordinary skill in the art the scope of the claim, Defendant’s assertion that this term is indefinite is without merit.

² Plaintiffs filed the instant lawsuit in addition to filing a complaint at the International Trade Commission (“ITC”) involving other parties. (ECF # 112 at 1, 8.) The ITC litigation, like this case, involves the ‘864 patent. (*Id.* at 8.) Defendant describes the ITC litigation following the initial complaint as follows:

The subsequent investigation, Inv. No. 337-TA-686, went to a hearing on issues involving claim construction, infringement and invalidity of certain claims of the ‘864 patent. The presiding Administrative Law Judge (“ALJ”) issued an Initial Determination (“ID”) on July 29, 2010, construing disputed claim terms and finding non-infringement. (*Id.* at 8-9 (citations omitted).)

Thus, the ITC's construction mirrors that of Defendant. Although this Court is not bound by the ITC decision, the Court finds it persuasive and, thus, it adopts that construction of the term waveform here.

Having said that, however, the Court also finds that, contrary to Defendant's position, undulating curve should not be limited to a succession of generally semi-circular sections having a fixed radius of curvature.³ Rather, the Court finds that, based upon the record before it, the term undulating curve should be given its plain and ordinary meaning as understood by one of ordinary skill in the art. Thus, the Court finds that this term requires no construction.⁴

Consistent with this ruling, and unless specified herein, all terms relating to the shape of the weld wire should be given their plain and ordinary meaning, without imposing any limitations or restrictions not specifically included in the claim language itself. Because further explanation is not necessary to aid the Court or the jury in understanding these terms as they are used in the claimed invention, any proposed construction shall not be adopted.⁵

³ This finding has support in the prosecution history, given the Examiner's reference to a sinusoidal wave, which is distinct from a wave that is semi-circular. (Plaintiffs' 5/31/11 Hearing Presentation at 74-75; ECF # 113 at 5 ("[T]he Examiner found that 'undulations mean that the linear cast of the wire would curve in one direction and then reverse and curve in the opposite direction like a sinusoidal wave.'").)

⁴ The ALJ in the ITC litigation likewise declined to limit the term "waveform" to a series of semi-circular (or half circle) sections. (ECF # 112 at 13, n.3.)

⁵ This ruling applies to, but is not limited to, "in a single plane" and "in one plane." Although Plaintiffs contend that no construction of these terms is required, Defendant urges the Court to adopt a construction that reflects, *inter alia*, a portion of the wire rising above the flat surface less than about six inches. The construction offered by Defendant is similar to, but differs slightly from, that adopted by the ALJ in the litigation at the ITC. There, the ALJ's construction of "substantially lying in a single plane" and "substantially in one plane" was "the weld wire, when laid upon a flat surface, rises above the flat surface less than about 6 inches." (ECF # 112 at 9; Defendant's 5/31/11 Hearing Presentation at 13.) Indeed, the specification states that, in one aspect of an embodiment, "the cut weld wire, when laid upon a flat ground surface rises above the flat ground surface less than about 6 inches ..." The ITC reviewed the construction of the ALJ, but it took no position on it. (ECF # 46 at 138-39.) Having reviewed the record thoroughly with respect to these terms, the Court finds that construction of the terms is not necessary, and they

B. Storage On A Spool In The '864 And '454 Patents

Another issue arising under the '864 and '454 patents is whether the terms require the weld wire to be wound and unwound from a spool. Plaintiffs argue that the claims relating to storage on a spool require no construction because they are a statement of intended use, rather than an affirmative claim limitation. Defendant argues to the contrary, asserting that "on a spool" is an affirmative claim limitation that has a plain and ordinary meaning, namely "on a cylindrical piece of material." (Defendant's 5/31/11 Hearing Presentation at 105.) Defendant's definition was the construction given to the term by the ITC.

Based upon the record before it, including, but not limited to, the plain language of the claims and the prosecution history, this Court finds merit in Defendant's position. That is, the Court finds that the term "on a spool" is an affirmative claim limitation that means "on a cylindrical piece of material." Consistent with this determination, the Court adopts the ITC's construction of "prior to said weld wire being wound on said spool," and construes that term as "a point in time before the weld wire is physically wound on said spool."

The related term "shape memory" likewise is defined by both Plaintiffs and Defendant. Defendant offers a construction that requires the weld wire to be wound and unwound from a spool. Plaintiffs argue that the proper construction of the term does not require the wire to be bound and unbound from a spool. This Court finds support for Plaintiffs' position in the ITC's construction, which defines "imparted shape memory" as "a specified shape or cast that is applied to the wire by plastic formation so that the wire has a residual stress such that the wire reverts to substantially consistent memory shape when the wire is untensioned." (ECF # 112 at

should be given their plain and ordinary meaning.

9; Defendant's 5/31/11 Hearing Presentation at 13.) Because the Court finds the ITC's construction instructive based upon the intrinsic evidence in this case, the Court adopts the ITC's construction, and it does not add "after being wound and unwound from a spool," as requested by Defendant.

C. Forming A Weld Wire Or Extrusion In The '454 Patent

The parties likewise disagree over whether claim terms in the '454 patent that relate to forming a weld wire or extrusion require construction. Having reviewed the record as to this issue, the Court finds that the terms relating to the formation of the weld wire and the extrusion process should be given their plain and ordinary meaning. Because construction is unnecessary to aid the jury in understanding these terms, the terms shall not be construed. Having resolved the broad categories in dispute relating to the '864 and '454 patents, the Court now turns to the '899 patent and the disputed terms therein.

D. Disputed Terms In The '899 Patent

The dispute between the parties concerning the '899 patent involves whether the patent terms require the ring structure, or payout, to be in certain types of welding wire containers or packages. More specifically, Plaintiffs contend that certain terms in the '899 patent, such as "inner core coaxial with the drum body," "drum axis," and "coil of wire," are not part of the invention, namely a payout consisting of a ring structure. (ECF # 133 at 20.) According to Plaintiffs, "[t]he specification of the '899 patent shows that these other terms describe an environment in which the invention is intended to work and so are statements of intended use, not claim limitations." (*Id.*)

Defendant, on the other hand, argues that "inner core coaxial with the drum body" is an

affirmative claim limitation that has a plain and ordinary meaning. (ECF # 112 at 21.)

According to Defendant, a person of ordinary skill in the art would understand the term to require “a cylindrical piece of material in the central region of the drum, the axis of which is coaxial to the axis of the drum.” (*Id.*) Defendant claims that its definition is supported by claim 28 and the patent specification and file history. (*Id.*) Defendant further claims that the term “inner core” provides an antecedent basis for defining the claim terms, including “annular passage,” “first substantially planar ring,” “continuous circular gap,” and “second substantially planar ring.” (*Id.* at 21-22.) Defendant’s position is that, without the term “inner core,” these terms become nonsensical. (*Id.* at 22.)

Based upon the Abstract, Summary of the Invention, and prosecution history, the Court finds merit in Defendant’s position that the ‘899 patent covers packaging with an inner core. This Court finds the term “inner core” to be an affirmative claim limitation and construes it in accordance with the definition offered by Defendant. Accordingly, “inner core” means “a cylindrical piece of material in the central region of the drum, the axis of which is coaxial to the axis of the drum.” Consistent with this determination, the terms “annular passage” and “continuous circular gap” are likewise affirmative claim limitations that should be given the meaning proposed by Defendant. The Court finds that the remaining disputed terms in the ‘899 patent do not require construction. As stated above, because further explanation is not necessary to aid the Court or the jury in understanding these terms as they are used in the claimed invention, any proposed construction shall not be adopted.


IV. CONCLUSION

For the reasons set forth above, the Court makes the following findings:

- As to the '864 and '454 patents, Defendant's construction of the term "waveform" is adopted. This construction mirrors the construction for that term in the ITC, namely "a recurring undulating wave." Further, the term "on a spool" is an affirmative claim limitation that means "on a cylindrical piece of material." As such, Defendant's construction of that term is adopted. In addition, the term "prior to said weld wire being wound on said spool," is construed as "a point in time before the weld wire is physically wound on said spool." The term "imparted shape memory" is construed in this litigation as it was in the ITC litigation, namely as "a specified shape or cast that is applied to the wire by plastic formation so that the wire has a residual stress such that the wire reverts to substantially consistent memory shape when the wire is untensioned."
- As to the '899 patent, the term "inner core" is an affirmative claim limitation construed in accordance with the definition offered by Defendant. Accordingly, "inner core" means "a cylindrical piece of material in the central region of the drum, the axis of which is coaxial to the axis of the drum." Consistent with this determination, the terms "annular passage" and "continuous circular gap" are likewise affirmative claim limitations that are construed in the manner set forth by Defendant.

The Court finds that the remaining terms should be construed according to their ordinary and customary meaning without imposing any limitations or restrictions not specifically included in the claim language itself. Further explanation is not necessary to aid the Court or the jury in understanding these terms as they are used in the claimed inventions.

IT IS SO ORDERED.


DONALD C. NUGENT
United States District Judge

DATED: June 3, 2011