

**UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF OHIO
WESTERN DIVISION**

ETHICON ENDO-SURGERY, INC, <i>et al.</i> ,	:	Case No. 1:11-cv-871
	:	
Plaintiffs,	:	Judge Timothy S. Black
	:	
vs.	:	
	:	
COVIDIEN, INC., <i>et al.</i> ,	:	
	:	
Defendants.	:	

ORDER ON CLAIM CONSTRUCTION

The parties have submitted briefs in support of their proposed claim constructions. (Docs. 66, 67, 74, and 75). Additionally, the Court held a *Markman* hearing on April 12, 2013.

I. THE PATENTS AT ISSUE

A. The ‘055 Patent

The ‘055 patent, filed in 1993, relates to an ultrasonic surgical device that includes a clamp for pushing body tissues towards an ultrasonic blade, thus allowing the tissue to be cut and/or coagulated during surgical procedures. The clamping mechanisms claimed in the ‘055 patent give the surgeon direct control over how much to open and close the clamp in order to produce the desired surgical results. The ‘055 patent overcame shortcomings associated with prior art systems without clamps. The prior art systems required the surgeon to press the blade directly against the tissue with sufficient pressure

to achieve the desired surgical result, and made it difficult for surgeons to grasp tissue. (Doc. 65-3 at 11). Today, the use of surgeon controlled clamps built into in ultrasonic surgical cutting devices is widespread.

B. The ‘275 Patent

The ‘275 patent, filed in 1997, relates to components for damping (*i.e.*, reducing) undesired vibrations that occur during the operation of ultrasonic cutting devices. When operated, the devices generate ultrasonic vibrations traveling in many directions. Only some of the vibrations are desirable, specifically axial or longitudinal vibrations (*e.g.*, vibrations that move directly forward and backward towards the surgical blade). (Doc. 64-5 at 10). The undesirable vibrations lead to non-optimal performance and potential damage to the device. (*Id.*)

Prior to the ‘275 patent, various methods had been used to reduce undesirable vibrations, including O-rings mounted within the device and damping fluids. (*Id.*) The prior art methods have limitations and drawbacks, including generating too much heat and being inconvenient or impractical. (*Id.*) The ‘275 patent improves on the prior art by using a damping member that surrounds a portion of the transmission rod within the device, allowing the desirable vibrations to move to the blade while reducing the undesired vibrations. (*Id.*) The damping member of the ‘275 patent works without the use of fluid and without other drawbacks associated with the prior art. (*Id.*)

C. The '569 Patent

The '569 patent, filed in 1997, relates to power generation within ultrasonic surgical devices. More specifically, the patent relates to an electrical system for ensuring that the generator is maintained in an optimal state during system operation. As noted above, the generator supplies power to a transducer which, in turn, produces the ultrasonic vibrations. The generator needs to operate in an optimal state for the overall device to work in its intended, optimal manner. During device operation, there are a number of factors (including temperature and environmental conditions) that might cause the generator to operate in a suboptimal manner. (Doc. 65-18 at 10). The '275 patent discloses a generator that includes circuitry to detect a suboptimal state and take corrective action to return the system to an optimal state. (*Id.*)

D. The '501 Patent

The '501 patent, with a priority date of February 2004, relates to devices and methods for sealing blood vessels using ultrasonic surgical cutting devices. More specifically, the patent relates to the optimal amount of clamping pressure that should be used during surgical procedures to seal blood vessels. Prior art methods and devices typically used low clamping forces (approx. 1.5 pounds), corresponding to low clamping pressures (approx. 45 psi (pounds per square inch)), to cut and seal blood vessels. (Doc. 64-5 at 7). The conventional thought was that using higher clamping forces would lead to a degradation in coagulation performance (*i.e.*, the seal on the end of the coagulated

blood vessel would be weaker and more susceptible to bursting open). (*Id.*) Defying conventional wisdom, Plaintiffs discovered that the use of higher clamping forces (2 to 7 pounds), corresponding to clamping higher pressures (60 to 210 psi), actually resulted in superior performance. (*Id.*) The '501 patent claims Plaintiffs' novel method of using the higher clamping forces/pressures and devices capable of operating at such forces/pressures.

II. THE CLAIM TERMS AT ISSUE

The claim terms at issue in the '055 Patent are (1) "means for selectively displacing said clamp toward and away from said blade," (2) "means extending along said tube and operable from said housing for displacing said clamp toward and away from said blade," (3) "means for pivoting said clamp toward and away from said blade," (4) "means for pivoting said clamp toward and away from said blade," and (5) "means for isolating the ultrasonic vibration transmitted from said ultrasonic element along said extender to said blade from said tube including means engageable between said tube and said extender."

The claim term at issue in the '725 Patent is "configured to loosely contact."

The claim terms at issue in the '569 Patent are (1) "detector circuitry to detect a non-resonant condition of the phase lock loop" and (2) "an input signal to the phase lock loop of a desired condition."

The claim terms at issue in the ‘501 Patent are (1) “means for limiting a user applied clamping force,” (2) “limiting the clamping art to exert between 60 psi and 210 psi on the blood vessel,” (3) “clamp(ing) [pressure/force] [of/between and including] . . . a value,” and (4) “average coaptation pressure . . . between and including . . . a value.”

III. STANDARD OF REVIEW

Claim construction is a matter of law to be decided exclusively by the court. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 970-71 (Fed. Cir. 1995) (*en banc*), *aff’d*, 517 U.S. 370.

“The appropriate starting point [...] is always with the language of the asserted claim itself.” *Comark Comm. Inv. v. Harris Corp.*, 156 F.3d 1186 (Fed. Cir. 1998). “[T]he claims of a patent define the invention to which the patentee is entitled the right to exclude.” *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004).

Claim terms are “generally given their ordinary and customary meaning.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005). “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, i.e., as of the effective date of the patent application.” *Id.* at 1313.

In the event of ambiguity regarding claim terms, courts must first look to the intrinsic evidence (*i.e.*, the claim itself, the specifications, the prosecution history, and

prior art cited in the patent) to resolve any ambiguities. *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996).

“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.” *Id.* Indeed, “[w]hen the specification explains and defines a term used in the claims, without ambiguity or incompleteness, there is no need to search further for the meaning of the term.” *Multiform Desiccants, Inc. v. Medzam Ltd.*, 133 F.3d 1473, 1478 (Fed. Cir. 1998).

The court may also consider “the prosecution history of the patent, if in evidence.” *Vitronics*, 90 F.3d at 1582. The prosecution history limits the interpretation of claim terms so as to exclude any interpretation that was disclaimed during prosecution. *Southwall Techs., Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1576 (Fed. Cir. 1995).

In most circumstances, analysis of the intrinsic evidence alone will resolve claim construction disputes. *See Vitronics*, 90 F.3d at 1583. However, if the intrinsic evidence does not resolve ambiguities, extrinsic evidence may be considered. Extrinsic evidence “can shed light on the relevant art,’ but is less significant than the intrinsic record in determining the ‘legally operative meaning of disputed claim language.’” *C.R. Bard, Inc. v. United States 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)).

IV. THE COURT’S CONSTRUCTION OF THE CLAIMS

A. Joint Claim Constructions

The Court adopts the joint claim constructions proposed by the parties in the Agreed Upon Claim Constructions charts found in Doc. 64-1 at 1-5.

B. The Disputed Terms

1. The ‘055 Patent

- i. “means for selectively displacing said claim toward and away from said blade”*

Ethicon’s proposed construction	Covidien’s proposed construction
112 ¶6 Structure Scissors-like gripping handles or grips, with thumb and finger grips, that, when squeezed, engage an actuator to move the clamp jaw toward the clamp-closed position and into engagement with the blade. When the grips are separated, the clamp jaw is moved away from the blade. Equivalents are also included.	112 ¶6 Structure Actuator rod and single distal pin in hole of clamp jaw - displaced forwardly to move clamp toward blade by pivoting thumb grip toward finger grip about pin to cause link to pivot ring in a clockwise direction about pivot pins to advance rod and thereby pivoting clamp towards blade about pivot pin – displaced rearwardly to move clamp away from the blade by pivoting thumb grip in the opposite direction to rotate ring about pivot pins in a counterclockwise direction to retract rod, thereby pivoting clamp away from blade about pivot pin.

The parties agree that this is a means-plus-function element governed by 35 U.S.C. § 112 ¶6 and agree that the function is “to selectively displace the clamp toward and away from the blade.” (Doc. 66 at 9; Doc. 67 at 17).

Plaintiffs argue that their proposed structure is identified in the specification and clearly linked with the function of selectively displacing the clamp toward and away from the blade, as the specification uses language similar to what Plaintiffs propose in describing the type of structure used to displace the clamp. (*Id.* at 14). Plaintiffs argue that Defendants' proposed construction is a "subset" of Plaintiffs' proposed construction and is incorrect because it ignores the broader configuration represented in the specification. (*Id.*)

Defendants urge that Plaintiffs' argument that the corresponding structure is limited to the thumb grip and actuator rod because the patent on occasion refers to these structures without mentioning the distal pin, pivot pins, link and pivot ring is flawed because the only embodiment showing the use of the thumb grip and actuator rod for "selectively displacing the clamp" discloses a direct connection to the distal pin along with the pivot pins, link and pivot ring and shows why they are necessary for the claimed function. (Doc. 74 at 8). Defendants point out that the thumb grips and an actuator rod alone cannot perform the clamp displacing function as, without the distal pin, the clamp would not even be connected to either the scissor grips or the actuator rod. (*Id.* at 6-7). According to Defendants, the pivot pins, link, and pivot ring are all integral to performing the selectively displacing function and thus must be included in the corresponding structure. (*Id.* at 7).

The Court agrees with Defendants that the actuator rod and distal pin along with the pivot pins, link and pivot ring are required corresponding structure. “If a patentee chooses to disclose a single embodiment, then any means-plus-function claim limitation will be limited to the single disclosed structure and equivalents thereof.” *Mettler-Toledo, Inc. v. B-Tek Scales, LLC*, 671 F.3d 1291, 1296 (Fed. Cir. 2012). The Federal Circuit has consistently required the inclusion of structures that are necessary to perform the claimed function. *Gemstar–TV Guide Int’l., Inc. v. Int’l Trade Comm’n*, 383 F.3d 1352, 1363 (Fed.Cir.2004); *see also IMS Tech., Inc. v. Haas Automation, Inc.*, 206 F.3d 1422, 1431 (Fed Cir. 2000) (because interface means required transferring data to a tape cassette and receiving data from the RAM through the PIA, the tape cassette and the PIA must be included within the means for interfacing corresponding structure); *Engineered Prods. Co. v. Donaldson Co., Inc.*, 147 Fed. Appx. 979, 985 (Fed. Cir. 2005) (unpublished) (“the district court construed ‘means for selectively disengaging’ too broadly by not identifying all of the structure necessary to perform the stated function”; the corresponding structure could not be as broad as just pushing the button that initiated the disengagement process but must also include the flange and bottom wall “that actually causes the interengagable notches to disengage”). In the ‘055 patent, to accomplish the function of selectively displacing the clamp toward and away from the blade, the specification discloses that the actuator rod and the single distal pin in conjunction with thumb grip, link, pivot ring and pivot pins, are all necessary to move the clamp toward and away from the blade.

Therefore, the Court adopts Defendants’ construction, which properly includes all of the integral structures for this claim term.

ii. “means extending along said tube and operable from said housing for displacing said clamp toward and away from said blade”

Ethicon’s proposed construction	Covidien’s proposed construction
<p>112 ¶6 Structure</p> <p>An actuator operable from the housing that moves the clamp jaw toward and away from the blade, and equivalents.</p>	<p>112 ¶6 Structure</p> <p>Actuator rod with single distal pin as incorporated in the means for selectively displacing the clamp toward and away from the blade, where actuator rod extends along the length of tube and is operable from housing.</p>

The parties agree that this is a means-plus-function element governed by 35 U.S.C. § 112 ¶6 and agree that the function is “displacing the clamp toward and away from the blade.” (Doc. 66 at 11; Doc. 67 at 19).

Plaintiffs argue that their proposed construction is supported by the same section of the specification they cite in support of their construction of the prior term in Section IV.B.1.i, *supra*. Plaintiffs argue that the specification clearly identifies the actuator as the element to displace the clamp toward and away from the blade and that Defendants’ construction is an overly-narrow subset of Plaintiffs’ proposed construction. (Doc. 67 at 15-16).

Defendants argue that their construction of the structure properly reflects the structures disclosed in the ‘055 patent for performing the claimed function. (Doc. 66 at

7). They argue that Plaintiffs’ construction would improperly broaden the claim element and permit any structure connecting any actuator to a clamp to be encompassed, but that the specification only provides one structure – the single distal pin connecting the actuator rod.

As with the previous term, all of the structure necessary to perform a claimed function must be included with regard to a means-plus-function term. *See Cardiac Pacemakers, Inc. v. St. Jude Med., Inc.*, 296 F.3d 1106, 1119 (Fed. Cir. 2002). The Court agrees with Defendants that Plaintiffs’ proposed construction omits necessary structure. Plaintiffs’ construction improperly recites any “actuator” and omits the necessary distal pin.

Accordingly, the Court adopts Defendants’ construction because it comports with the corresponding structures disclosed by the ‘055 patent specification in keeping with the applicable means-plus-function law.

iii. “means for pivoting said clamp toward and away from said blade”

Ethicon’s proposed construction	Covidien’s proposed construction
<p>112 ¶6 Structure</p> <p>Scissors-like gripping handles or grips, with thumb and finger grips, that, when squeezed, engages an actuator to pivot the clamp jaw toward the clamp-closed position and into engagement with the blade. When the grips are separated, the clamp jaw is pivoted away from the blade. Equivalents are also included.</p>	<p>112 ¶6 Structure</p> <p>Actuator rod with single distal pin movable forwardly to engage clamp jaw at pin joint and pivot jaw about pivot pin in a clockwise direction to close the jaw and actuator rod and pin in pin joint engaging clamp jaw as moved rearwardly to pivot jaw about pivot pin in a counterclockwise direction to open the jaw.</p>

The parties agree that this is a means-plus-function element governed by 35 U.S.C. § 112 ¶6 and agree that the function is “to pivot the jaw (clamp) between the open and closed positions.” (Doc. 66 at 12; Doc. 67 at 20).

Plaintiffs advance the same evidence and arguments in favor of a broader construction that they cited in support of their constructions of the previous two claim terms, arguing that Defendants’ proposed construction is an overly-narrow subset of Plaintiffs’ proposed construction. (Doc. 67 at 20-21).

Defendants again argue that their proposed construction accurately reflects the structure and thus comports with the requirements of 35 U.S.C. § 112 ¶ 6. Defendants’ construction includes the actuator rod with the single distal pin to engage the clamp of the jaw and pivot it about a pivot pin to close the jaw. By contrast, Plaintiffs’ construction does not provide any corresponding structure for the pivoting function and includes only the gripping handles and an actuator. Defendants urge that this fails (1) because the gripping handles are not linked to the pivoting function described in the specification, (2) because the patent identifies only an actuator rod (not any actuator) as part of the pivoting mechanism, and (3) because the specification identifies additional structures essential for the pivoting function, namely the distal pin to engage the clamp of the jaw and pivot it around a pivot pin to close the jaw. (Doc. 66 at 13); *see Chicago Bd. Options Exchange, Inc. v. Int’l Sec. Exchange, LLC*, 677 F.3d 1293, 1367 (Fed. Cir. 2012); *Frank’s Casing Crew & Rental Tools, Inc. v. Weatherford Int’l, Inc.*, 398 F.3d 1370, 1377-78 (Fed. Cir.

2004). The Court agrees with Defendants that the additional elements included in their proposed construction are necessary to perform the recited function and thus must be included in the Court’s construction.

Accordingly, the Court adopts Defendants’ construction of this claim term as well, because it properly includes the actuator rod, single distal pin, and pivot pin for the corresponding structure to the pivoting means.

iv. “means for isolating the ultrasonic vibration transmitted from said ultrasonic element along said extender to said blade from said tube including means engageable between said tube and said extender”

Ethicon’s proposed construction	Covidien’s proposed construction
<p>112 ¶6 Function</p> <p>To isolate the ultrasonic vibration transmitted from the ultrasonic element along the extender to the blade from the tube extending about and radially spaced from the extender.</p>	<p>112 ¶6 Function</p> <p>To minimize or eliminate dissipation of the ultrasonic longitudinal vibration of the extender by contact with the tube.</p>

The parties agree that this is a means-plus-function element governed by 35 U.S.C. § 112 ¶6 and agree that the structure is “a plurality of longitudinally spaced rings located at the node points of the extender.” (Doc. 66 at 14; Doc. 67 at 21).

Plaintiffs argue that they have proposed the only construction that gives force to the entirety of the claim because it is taken from the claim language itself, and identify the claim language as the most important source in construing a claim. (Doc. 67 at 22-23); *see Becton, Dickinson & Co. v. Tyco Healthcare Grp.*, 616 F.3d 1249, 1254 (Fed.

Cir. 2010). Plaintiffs argue that Defendants propose a construction based on cobbling together language in the claim with additional terms that do not appear in it. (*Id.* at 22).

Defendants argue that Plaintiffs’ proposed construction impermissibly broadens the scope in violation of 35 U.S.C. § 112 by omitting the contact with the tube when the specification states that the rings minimize or dissipate ultrasonic vibration “by contact with the tube.” (Doc. 66 at 14). The Court agrees that the construction cannot include a corresponding function that would not contemplate contact with the tube.

Accordingly, because Plaintiffs’ proposed construction neglects to include both contact with the tube and minimizing or eliminating dissipation of the ultrasonic longitudinal vibration of the extender as disclosed in the claim and specification, the Court adopts Defendants’ more complete (and hence accurate) proposed construction.

2. The ‘275 Patent

i. “configured to loosely contact”

Ethicon’s proposed construction	Covidien’s proposed construction
Contacting or capable of contacting portions of the transmission rod, but not tightly fitted.	Structured to have contact other than at fixed support points, but not tightly fitted.

The parties’ disagreement regarding the term “configured to loosely contact” focuses on where the damping sheath contacts the transmission rod and whether it is structured to contact or is simply “capable of contacting” the transmission rod. (Doc. 66 at 15). The primary difference between the proposed constructions is the concept of “fixed support points” in Defendants’ construction. (Doc. 75 at 4).

Plaintiffs argue that their proposal tracks the claim language, which makes it clear that the damping member only needs to be configured to loosely contact a portion of the transmission rod. (Doc. 67 at 24). Plaintiffs claim that Defendants propose to add a limitation, requiring that to “loosely contact” be “contact other than at fixed support points,” that does not appear in the claim. (*Id.*)

Defendants argue that their construction is guided by the '275 patent specification which differentiates between two types of contact, only one of which corresponds to “configured to loosely contact.” (Doc. 66 at 15). Defendants urge that Plaintiffs’ construction is inconsistent with the patent’s description because it neglects to distinguish loose contact from the contact at fixed points. (*Id.*) Defendants further argue that Plaintiffs’ construction would include embodiments where the damping sheath need not be specifically structured for contact with the transmission rod, but that the specification in fact indicates actual contact. (*Id.*)

The Court agrees with Defendants that their proposed construction is appropriately consistent with the patent specification by distinguishing loose contact from attachment at fixed support members, and tracks the claim language by making clear that the damping member makes actual contact with the transmission rod.

Accordingly, the Court adopts Defendants’ proposed construction as Plaintiff’s proposed construction is, again, inappropriately broad.

3. The '569 Patent

i. “detector circuitry to detect a non-resonant condition of the phase lock loop”

Ethicon’s proposed construction	Covidien’s proposed construction
Supervisory circuitry to detect if there is a nonresonant condition of the phase lock loop.	Supervisory circuitry outside the phase lock loop and separate from the processing unit that monitors and determines if the phase lock loop fails to maintain a resonant condition.

As with previous terms, Plaintiffs argue that their construction is appropriate because it directly follows the claim language. (Doc. 67 at 25). Plaintiffs argue that Defendants, on the other hand, add two restrictions that are not supported by the claim language or by the intrinsic record: that the supervisory circuitry must be outside of the phase lock loop (“PLL”) and that it must be separate from the processing unit. (*Id.*)

Defendants argue that Plaintiffs’ construction omits key distinctions made by the patent and the prosecution history in distinguishing the patent’s circuitry from the prior art PLL. Defendants argue that Plaintiffs’ construction improperly suggests that the detector circuitry could be the internal circuitry inherent in any PLL that detects if the PLL is in a nonresonant condition, when the ‘569 patent specification makes it clear that the detector circuitry is, in fact, separate and distinct from the prior art PLL. (Doc. 74 at 24). As the claim language indicates that the detector circuitry is separate from the processing unit (“a processing unit *coupled to* detector circuitry”) and the patent specification places the claimed detector circuitry outside of the PLL, the Court agrees

that Plaintiffs’ proposed construction inappropriately conflates the prior art with the new technology disclosed by the ‘569 patent. (Doc. 66 at 13).

Accordingly, the Court adopts Defendants’ proposed construction as it properly incorporates the distinction the patentee made between the claimed invention and the prior art.

ii. “an input signal to the phase lock loop of a desired condition”

Ethicon’s proposed construction	Covidien’s proposed construction
An input signal to the phase lock loop to cause the phase lock loop to reach a resonant condition.	An override voltage control signal to the voltage controlled oscillator of the phase lock loop corresponding to a last known or most recently stored resonant frequency.

Defendants argue that Plaintiffs’ construction improperly broadens this claim term beyond what is disclosed as the patent does not identify any other possibilities for the input signal other than an override voltage control signal, and only as a signal going to the voltage controlled oscillator. (Doc. 66 at 18). Defendants further urge that Plaintiffs’ construction impermissibly encompasses all types of signals going to any part of a PLL and improperly encompasses what was disclaimed during prosecution because Plaintiffs previously distinguished the invention from the prior art by pointing to the use of the last known or most recently stored resonant frequency. (*Id.* at 18-19).

Plaintiffs argue that their proposal directly follows the claim language and that requiring the input signal to be an “override voltage control signal” that “correspond[s] to a last known or most recently stored resonant frequency” contemplates limitations that do

not appear in the claim and are not required by the intrinsic record. (Doc. 67 at 26). Plaintiffs urge that the inclusion of examples involving voltage controlled oscillators and override voltage control systems in the specification does not impose limitations on the claim itself. *See Liebel-Flarsheim v. Medrad, Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004) (“Even when the specification describes only a single embodiment, the claims of the patent will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using ‘words or expressions of manifest exclusion or restriction’”). Plaintiffs further urge that Defendants also do not cite any statement in the prosecution history that approaches the “clear and unmistakable disavowal of [claim] scope” necessary for disclaimer. *Computer Docking Station Corp. v. Dell, Inc.*, 519 F.3d 1366, 1374 (Fed. Cir. 2008) (quoting *Purdue Pharma L.P. v. Endo Pharms, Inc.*, 438 F.3d 1123, 1136 (Fed. Cir. 2006)).

The Court agrees that both the claim and the prosecution history are devoid of evidence of any clear intent to limit the claim term as Defendants’ proposed construction does and that the limitations that Defendants include are, in fact, only examples of possible embodiments of the claim.

Accordingly, the Court adopts Plaintiffs’ proposed construction as it appropriately omits limitations that are not required by the claim.

4. The ‘501 Patent

- i. “means for limiting a user applied clamping force” and “limiting the clamping arm to exert between and including 60 psi and 210 psi on the blood vessel”*

Ethicon’s proposed construction	Covidien’s proposed construction
<p>112 ¶6 Function</p> <p>To limit a user applied clamping force to exert between and including 60 psi and 210 psi on the blood vessel.</p> <p>112 ¶6 Structure</p> <p>Each of the following alone or in combination: (1) a motor which rotates either the clamp arm or the blade relative to the other and is preselected to cause a known-size clamping surface area to exert the desired pressure on tissue large enough to cover the clamping surface area, (2) a variable torque motor with user settings to set the value or range of the force; (3) a substantially constant force spring, while applied a predetermined force to the clamp arm; and (4) a physical stop limiting the range of motion of the actuator rod. Equivalents to (1), (2), (3), and (4) are also included.</p>	<p>112 ¶6 Function</p> <p>To limit a user applied clamp force.</p> <p>Covidien contends that the part of the claim element stating “between and including 60 psi and 210 psi on the blood vessel” is indefinite.</p> <p>112 ¶6 Structure</p> <p>A conventional torque wrench; element 40 as positioned between the scissor-like grips in Figure 3.</p>

The parties agree that both of these claim elements are governed by 35 U.S.C. § 112 ¶6 and agree that the function includes “to limit a user applied clamp force.” (Doc. 66 at 20; Doc. 67 at 27). The parties also agree that “means for limiting a user applied clamping force” is a means-plus-function term and “limiting the clamping arm to exert

between and including 60 psi and 210 psi on the blood vessel” is a step-plus-function term and that they share common functions and corresponding structures under § 112 ¶6 and therefore they should be construed together. (Doc. 66 at 25 n.2).

Plaintiffs argue that their proposed construction for the structure includes all structures within the specification that “limit a user applied clamp force.” (Doc. 67 at 27). Plaintiffs urge that the specification illustrates that the structures that limit force go beyond the single structure that Defendants include in their proposed construction (torque wrench/element 40). (*Id.*) Plaintiffs argue that the specification discloses the three other structures found in their proposed construction and describes them as force creating means, but that they clearly “limit a user applied clamping force” as well, and thus are properly included as force limiting means. (*Id.*)

Defendants argue that their proposed construction for the structure properly limits these force-limiting means to the corresponding structures in the patent specification and that Plaintiffs’ construction improperly imports structures that are not linked in the patent specification to the force limiting function. (Doc. 66 at 20); *see Med. Instrumentation & Diagnostics Corp. v. Elektra AB*, 344 F.3d 1205, 1213 (Fed. Cir. 2003). Defendants urge that Plaintiffs’ construction also includes a fourth structure (a physical stop limiting the range of motion of the actuator rod), but that no such structure is even described, let alone linked to the description of the force-limiting means in the patent. *See Med. Instrumentation*, 344 F.3d at 1218 (finding software was not part of the corresponding

structure because “the two structures clearly linked by the specification to the converting function are depicted in the figures of the patent, while software for digital-to-digital conversion is not”). The Court agrees that Plaintiffs’ proposed construction identifies structures not clearly linked to the claimed function.

With regard to function, the only difference between the parties is whether “to exert between and including 60 psi and 210 psi on the blood vessel” should be included in the description of the function. As Defendant argues that the disputed language is indefinite, this question will be addressed as part of the analysis in the following section.

Accordingly, the Court adopts Defendants’ proposed construction as Plaintiffs have not established the required linkage between the additional structures they include in their proposed construction and the function in question.

ii. “clamp(ing) [pressure/force] [of/between and including] . . . a value”

Ethicon’s proposed construction	Covidien’s proposed construction
Clamping arm exerts a clamp(ing) [pressure/force] [of/between and including] a value when the clamping arm is fully engaged by the user.	Indefinite.

iii. “average coaptation pressure . . . between and including . . . a value”

Ethicon’s proposed construction	Covidien’s proposed construction
Clamping arm exerts an average coaptation pressure . . . between and including . . . a value when the clamping arm is fully engaged by the user.	Indefinite.

The '501 patent has a variety of claim elements relating to (1) clamping force measurements (e.g., how much force or pressure is exerted by the clamp arm of the ultrasonic cutting instrument) and (2) coaptation force measurements (e.g., how much force or pressure is exerted by the clamp arm of the ultrasonic cutting instrument on a blood vessel). (Doc. 67 at 30). The parties have divided the allegedly indefinite terms into two groups commonly represented by one term each. (*Id.*) This Court need only decide if the common term is capable of construction or is indefinite. (*Id.*)

To prevail on their indefiniteness claim, Defendants must demonstrate by clear and convincing evidence that the claim terms at issue are “not amenable to construction” or “insolubly ambiguous.” *Halliburton Energy Servs., Inc. v. M-I LLC*, 514 F.3d 1244, 1250 (Fed. Cir. 2008).

Defendants argue that there is a distinct lack of guidance as to how such force and pressure are measured to ascertain whether a device falls within the claimed numeric values. (Doc. 66 at 22). Defendants further argue that neither the specification, nor the claims, nor the file history provide any guidance for measuring force or pressure or any objective standard known in the art for measuring clamping pressure and force. (*Id.* at 23). Finally, Defendants argue that Plaintiffs’ proposed constructions fail to address how, where, and when clamping force/pressure is measured. (*Id.*)

Plaintiffs argue that their constructions make use of the claim term language and that the added specificity of “when the clamping arm is fully engaged” comes from the

specification itself, which explains that the pressure/force measurements correspond to a “fully engaged clamping surface area.” (Doc. 67 at 31). Plaintiffs point out that the patent went through eight rounds of examination by the Patent Examiner, who used the terms in question himself when discussing prior art. (*Id.*) Plaintiffs urge that as the ultimate issue is whether someone in the relevant technical field could understand the bounds of a claim, the Patent Examiner’s use of the terms demonstrates that one with ordinary skill in the art understands the meaning of these terms. *See PowerOasis, Inc. v. T-Mobile USA, Inc.*, 522 F.3d 1299, 1304 (Fed. Cir. 2008) (quoting *Am. Hoist & Derrick Co. v. Sowa & Sons*, 725 F.2d 1350, 1359 (Fed. Cir. 1984)) (“[USPTO is] a qualified government agency presumed to have properly done its job, which includes one or more examiners who are assumed to have some expertise in interpreting the references and to be familiar from their work with the level of skill in the art and whose duty it is to issue only valid patents”).

The Court agrees with Plaintiffs that there is evidence in the intrinsic record to allow for construction, that one of skill in the art knows what clamping force/pressure means, that the specifications define when to measure the pressure (“when the clamping arm is fully engaged”), and that Defendants have failed to meet their high burden of “showing by clear and convincing evidence that a skilled artisan could not discern the boundaries of the claim based on the claim language, the specification, and the prosecution history, as well as her knowledge of the relevant art area.” *Halliburton*, 514

F.3d at 1249-50.

Accordingly, the Court finds that the terms in question are not indefinite and adopts Plaintiffs' proposed constructions.

V. CONCLUSION

“The construction that stays true to the claim language and most naturally aligns with the patent’s description of the invention will be, in the end, the correct construction.” *Phillips*, 415 F.3d at 1316 (quoting *Renishaw PLC v. Marposs Societa per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998)). Therefore, the parties shall construe the contested terminology of the patents in suit as set forth in this Order.

IT IS SO ORDERED.

Date: April 25, 2013

s/ Timothy S. Black
Timothy S. Black
United States District Judge