UNITED STATES DISTRICT COURT
DISTRICT OF CONNECTICUT

Tyco Healthcare Group LP d/b/a United States Surgical, a division of Tyco Healthcare Group LP	:	
Plaintiff-Counterclaim Defendant	:	
v.	:	**No. 3: 04 CV 1702 (JBA)**
Ethicon Endo-Surgery, Inc.	:	
Defendant-Counterclaimant	:	

Claim Construction of Disputed Terms in U.S. Patents 6,063,050, 6,280,407, 6,468,286, 6,682,544

The Complaint filed by plaintiff Tyco Healthcare Group L.P., also known as United States Surgical ("Tyco") alleges defendant's infringement of four patents it acquired between May 2000 and January 2004. See Complaint [Doc. # 1]. The parties have filed a Joint Claim Construction which identifies their agreements and disagreements as to certain claim terms in U.S. Patent No. 6,063,050 (the "'050 Patent") (entitled "Ultrasonic Dissection and Coagulation System") (Complaint [Doc. # 1] Ex. A), U.S. Patent No. 6,280,407 (the "'407 Patent") (also entitled "Ultrasonic Dissection and Coagulation System") (Complaint Ex. B), U.S. Patent No. 6,468,286 (the "'286 Patent") (entitled "Ultrasonic Curved Blade") (Complaint Ex. C), and U.S. Patent No. 6,682,544 (the "'544 Patent") (also entitled "Ultrasonic Curved

Blade) (Complaint Ex. D). See Joint Claims Constructions & Prehearing Stmt. [Doc. # 32].

These four patents relate to a medical tool that uses ultrasonic energy to effect cutting and blood coagulation during surgery and is commonly used in laparoscopic or endoscopic surgeries (typically minimally invasive surgeries). Plaintiff does not claim to have been the first to invent this type of technology, but claims that its patents made "substantial improvements that, in combination, provide a more effective and functional system." Pl. Claim Construction Br. [Doc. # 35] at 3. Plaintiff claims that defendant has infringed its patents by incorporating these improvements into its own products, specifically defendant's "UltraCision Harmonic Scalpel Curved Blade" surgical instrument.

II. AGREEMENT ON VARIOUS CLAIM TERMS

The parties' submissions reflect the following agreed term constructions:

- For the '050 Patent, Claim 1 and all dependent claims, and the '407 Patent Claim 1 and all dependent claims: "**Housing**" is construed as "a case or enclosure for parts of the ultrasonic surgical instrument."[1]
- For the '050 Patent, Claim 1 and all dependent claims: "**Elongated outer tube extending from the housing**" is

[1] Colloquy with counsel at the Markman hearing indicates that characteristics of the "housing" differ between the '050 Patent and the '407 Patent, see Markman Tr. [Doc. # 57] at 124-26, but there is no need to reflect these characteristics in the construction of the claim term "housing" itself.

construed as "a long, hollow generally cylindrical outer body extending from the housing."

- For the '050 Patent, Claim 9: "**Transducer removably connected to the housing**" is construed as "a transducer configured, as part of its normal use, to be joined with and be unjoined with the housing so that when connected the transducer may transmit its ultrasonic vibrations to the parts of the instrument designed for reception and transmission of ultrasonic vibrations."

- For the '407 Patent, Claim 1 and dependent Claim 7: "**Transducer adapted to be removably supported on the handle portion of the housing**" is construed as "a transducer configured, as part of its normal use, to be held up or in position by and to be removed from the handle portion of the housing so that when connected the transducer may transmit its ultrasonic vibrations to the parts of the instrument designed for the reception and transmission of the ultrasonic vibrations."

- For the '407 Patent, Claim 1 and dependent Claim 7: "**Tool member supported on**" is construed as "the working end of the instrument held up or in position by the distal end of the vibration coupler."

- For the '286 Patent, Claims 6, 7 and all dependent claims: "**Tissue engaging stops**" is construed as "the portions of the clamp that engage tissue and prevent tissue from moving past the proximal portion end of the blade surface."

- For the '286 Patent, Claim 7 and all dependent claims: "**Vibration coupler supported by and extending distally from the handle assembly**" is construed as "the vibration coupler is held up or held in position by the handle assembly and extends distally from the handle assembly; the vibration coupler conducts high frequency vibration from the ultrasonic transducer to the distal end of the instrument."

- For the '286 Patent, Claims 7, 9, 12 and all dependent claims: "**Handle assembly**" is construed as "the proximal end of the instrument that is grasped by the hand of the user."

- For the '286 Patent, Claims 10, 11, 12 and all dependent claims: "**Coupling member**" is construed as a "component that connects two other parts."

- For the '286 Patent, Claim 19: "**Concavity**" is construed as "a shape that is curved inward."

- For the '544 Patent, Claims 9, 12 and all dependent claims: "**Handle assembly**" is construed as "the proximal end of the instrument that is grasped by the hand of the user."

- For the '544 Patent, Claim 13 and dependent Claim 16: "**Transducer removably supported on the handle assembly**" is construed as "a transducer configured, as part of its normal use, to be held up or in position by and to be removed from the handle assembly so that when connected the transducer may transmit its ultrasonic vibrations to the parts of the instrument designed for the reception and transmission of the ultrasonic vibrations."

- For the '544 Patent, Claim 18: "**Dimensioned to be received within a 5 mm trocar assembly**" is construed as "designed so as to fit into the hollow receptacle of a 5 mm trocar cannula."

- For the '544 Patent, Claims 23 and 24: "**Tissue receiving stop**" is construed as "the portion of the clamp that engages tissue and prevents tissue from moving past the proximal portion end of the blade surface."

- For the '544 Patent, Claim 24: "**Blade surface**" is construed as "the face that engages tissue to achieve cutting."

III. CLAIM CONSTRUCTION

A. Standard

The construction of patent claims is a matter of law within the exclusive province of the Court. See Markman v. Westview Instruments, Inc., 517. U.S. 370 (1996). In construing patent

claims, the words of a claim are typically "given their ordinary and customary meaning," see e.g., Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996), which meaning has been interpreted as "the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention." Phillips v. AWH Corp., 415 F.3d 1303, 1313 (Fed. Cir. 2005). Claim construction, therefore, "begins with the claims themselves, the written description, and, if in evidence, the prosecution history." Microsoft Corp. v. Multi-Tech Sys., Inc., 357 F.3d 1340, 1346 (Fed. Cir. 2004).

As Phillips clarified, in determining the meaning given to a claim term by a person of ordinary skill in the art, that person "is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification." Phillips, 415 F.3d at 1313 (also stating "[t]he best source for understanding a technical term is the specification from which it arose, informed, as needed, by the prosecution history," id. at 1315 (citing cases)). Philips warns, however, that courts should "avoid importing limitations from the specification into the claims." Phillips, 415 F.3d at 1323.

When the proper claim construction is not "readily apparent" from the claim term and other intrinsic evidence, a court may look to "sources available to the public that show what a person

of skill in the art would have understood disputed claim language to mean." Phillips, 415 F.3d at 1314. There is no "magic formula" to claim construction, and a court is "[not] barred from considering any particular sources or required to analyze sources in any specific sequence, so long as those sources are not used to contradict claim meaning that is unambiguous in light of the intrinsic evidence." Phillips at 1324.

B. The '050 Patent

1. Claim 1 ("handle")

Claim 1 (and all dependent claims) of the '050 Patent uses the term "handle" as follows: "a housing including a first **handle** and a second **handle** movable with respect to the first **handle**," and "a clamp member extending distally of the distal portion of the outer tube and pivotable between an open position and a clamped position by movement of the second **handle** between first and second positions . . . " See '050 Patent, Claim 1 (emphasis added). Plaintiff proposes the following construction: "The part of the instrument designed to be grasped by the hand," while defendant proposes: "A part of the housing that can be grasped by the hand by inserting one or more fingers through an opening therein."

The plaintiff's proposed instruction that "handle" be construed as "the part of the instrument designed to be grasped by the hand," comports with the agreed ordinary and customary

meaning of "handle" as "a part that is designed esp. to be grasped by the hand or that may be grasped by the hand," see Def. Claim Construction Br. [Doc. # 40] at 10, and there is a heavy presumption in claim construction that claim terms carry their "ordinary and customary meaning[s]." Phillips, 415 F.3d at 1312-13 (internal quotation and citation omitted).

While defendant's argument that this ordinary meaning cannot be adopted given various distinctions drawn by the patentees between "handle" and various other terms[2] may correctly reflect that the patentees did not intend that these other terms be given the identical construction as "handle," in the Court's view, adopting defendant's proposed construction to avoid this result is neither necessary nor appropriate. Claim terms will "take on their ordinary and accustomed meanings unless the patentee demonstrated an intent to deviate from the ordinary and accustomed meaning of a claim term by redefining the term or by characterizing the invention in the intrinsic record using words or expressions of manifest exclusion or restriction, representing a clear disavowal of claim scope." Teleflex, 299 F.3d at 1327. No such indication of intent to deviate from the ordinary meaning of "handle" appears either in the Claim 1 itself or in the specifications. See '050 Patent, Claim 1, 10:47-50, 11:63-66,

[2] See Def. Claim Construction Br. at 10-12 (comparing "handle" with, inter alia, "stationary gripping member" described at '050 Patent, 4:35-41, 6:20-26).

14:9-12.

Moreover, it is improper for a court to "import" limitations into a claim from the specifications. See e.g., N. Am. Container, Inc. v. Plastipak Packaging, Inc., 415 F.3d 1335, 1348 (Fed. Cir. 2005) ("[U]nless required by the specification, limitations that do not otherwise appear in the claims should not be imported into the claims."); Seachange Int'l, Inc. v. C-COR Inc., 413 F.3d 1361, 1376 (Fed. Cir. 2005) ("[I]t is improper to import a limitation into a claim where the limitation has no basis in the intrinsic record."); Playtex Prods., Inc. v. Proctor & Gamble Co., 400 F.3d 901, 906 (Fed Cir. 2005) ("The court must take care in its analysis, when locating in the written description the context for a disputed term, not to import a limitation from that written description."). Defendant's proposed limitation that the construction require that the "handle" contain an opening into which fingers can be inserted appears in neither the claim itself, nor the specifications, and thus there is no basis for "importing" that limitation into the claim construction.

2. Claims 11 and 12 ("camming members")

Claims 11 and 12 of the '050 Patent use the term "camming members" as follows: "The surgical instrument of claim 1, wherein the clamp member includes a pair of pivot pins and pair of **camming members** spaced from the pivot pins," see '050 Patent,

Claim 11 (emphasis added), and "The surgical instrument of claim 1, wherein the actuator tube includes a pair of slots engageable with a pair of **camming members** of the clamp member," see '050 Patent Claim, 12 (emphasis added). Plaintiff proposes construing the term as: "The parts on the clamp (followers) that are imparted motion by the cam slots" and defendant proposes: "Protrusions (followers) the motion of which is controlled by movement of the "slots" with which they are engaged."

The main issues in dispute appear to be: (1) defendant's use of the word "protrusions" to describe the "camming members" and (2) the parties' disagreement concerning the type of movement and/or control imparted by the cam slots to the camming members.

As to the first issue, the use of the word "protrusions" is inappropriate because that word is not invoked in the claim or the specifications. In fact, the patentees did use the word "protrusions" elsewhere in the patent, thus suggesting that if they had wished to use that term here, they knew how to do so. See e.g., '050 Patent 10:47-50, 12:24-26. Thus the Court will not import such a limitation into the claim absent any basis for such a limitation in the intrinsic evidence.

As to the second issue, defendant acknowledges both that a "cam" is a well-known structure in the art, see Def. Claim Construction Br. at 27; Houser Decl. [Doc. # 41, Ex. 8] at ¶ 7, and that definitions for "cam" "almost uniformly refer to the cam

as being a structure which communicates or imparts motion to a 'follower,'" see Def. Claim Construction Br. at 27. Plaintiff agrees that a "cam" imparts motion to a "follower." See Pl. Reply Br. at 7. There is no basis for defendant's proposed use of "controlled" in either the claims or the specifications.[3]

Lastly, there was much discussion at the Markman hearing regarding the type of motion imparted by the cam slots to the camming members. Counsel appeared to be in agreement that a cam is a mechanism that effects the translation of motion, for example, the translation of linear motion into rotary motion. With respect to the cam mechanism in the patents at issue here, counsel also appeared to be in agreement that the cam slots impart that translated motion to the camming members and guide the motion of the camming members as the camming members engage with the surface of the cam slots. See Markman Tr. at 52-53, 59, 107-08. Accordingly, this concept is incorporated into the Court's construction of "camming members" as: "The follower parts of the cam mechanism that are imparted motion by the cam slots and whose motion is guided by the cam slots."

[3] Although the plain language of the claims and specifications is determinative on this issue and therefore resort to extrinsic evidence is neither necessary nor appropriate, the Court notes that plaintiff's expert testified that many factors can influence the movement of the cam followers, indicating that the "cam slots" do not definitively "control" the movement of the cam members. See Markman Tr. 56, 59.

3. Claim 12 ("slots engageable with a pair of camming members")

Claim 12 of the '050 Patent uses the term "slots engageable with a pair of camming members" as follows: "The surgical instrument of claim 1, wherein the actuator tube includes a pair of **slots engageable with a pair of camming members of the clamp member**." '050 Patent, Claim 12 (emphasis added). Plaintiff proposes construing the term as: "Openings or grooves that impart motion to the camming members" and defendant proposes: "Narrow openings or grooves that engage and control the motion of the camming members."

The Court construes the disputed term as "openings or grooves that impart motion to and guide the motion of the camming members." It is clear from a review of the claim language, the other intrinsic evidence, and the parties' discussions in the briefing, that the ordinary meaning of "slots" is "openings or grooves." See Pl. Claim Construction Br. at 30; Def. Claim Construction Br. at 28-29. There is no basis for importing defendant's limitation of the "slots" as being "narrow." The issue of the use of the word "control" is the same as that discussed above with respect to the term "camming members" and, for the same reasons, the Court concludes that use of that word is improper. Defendant also proposes using the word "engage" to describe the relationship between the "camming members" and the "slots," but this qualification similarly appears to be without

basis in either the claim language or specifications, particularly where the use of the words "impart" and "guide" more accurately describes the interaction between camming members and slots.

C. The ‘407 Patent

1. Claim 1 ("extending between")

Claim 1 (and dependent Claim 7) of the ‘407 Patent uses the term "extending between" in the following context: "[A] vibration coupler having a proximal and a distal end, the vibration coupler being positioned within the housing and **extending between** the elongated body portion and the handle portion." ‘407 Patent, Claim 1 (emphasis added). Plaintiff’s proposed construction is "stretching from one object to another object" and defendant proposes "spanning the distance that separates."

Defendant argues that while the patent repeatedly describes the vibration coupler as "extending through" the elongated body, it does not describe "any embodiment" where the vibration coupler "extends between" the elongated body portion and the handle portion. See ‘407 Patent 4:49-51, 6:32-34, 8:65-9:3, 12:19-22. Defendant argues that accordingly, the claim term "extending between" must be construed as written, and thus as differentiated from the term "extending through," which is used in the specifications. See Def. Claim Construction Br. at 13.

Plaintiff responds that defendant’s definition "directly

contradicts" prior claim language, which, plaintiff contends, "make[s] clear that [the elongated body portion and the handle portion] are connected" and therefore the "distance that separates" to which defendant refers in its proposed construction does not in fact exist. See Pl. Claim Construction Br. at 3 (referring to '407 Patent, Claim 1 ("An ultrasonic surgical instrumental comprising: a housing **including** an elongated body portion and a handle portion")) (emphasis added). At the Markman hearing, plaintiff argued further that "there is nothing that precludes the handle portion and the elongated tube from being right up against one another, and still the vibration coupler would be going between the two or extending between the two." Markman Tr. at 20. Plaintiff compared the disclosure in Claim 1 to "the roadway on the Lincoln Tunnel or Holland Tunnel," reasoning, "it certainly extends between New Jersey and New York, but also New York and New Jersey touch one another. . . . [E]xtending between doesn't require that there be a gap." Id.

Because the Court agrees that nothing in the claim language or specification requires that there be any space ("the distance," as proposed by defendant) between the elongated body portion and the handle portion, the Court adopts plaintiff's construction, "stretching from one object to another object."

D. The '286 Patent

1. Claims 1, 6, 7, and 8 ("clamp member")

Claims 1, 6, 7, and 8 (and all dependent claims) of the ‘286 Patent use the term "clamp member" as follows:

- “[A] clamp member supported adjacent to the cutting jaw, the **clamp member** being moveable in relation to the cutting jaw between an open position in which at least a portion of the clamp member is spaced from the cutting jaw and a closed position in which the **clamp member** and the cutting jaw are in substantially juxtaposed alignment,” see ‘286 Patent, Claim 1(c) (emphasis added);

- “[A] rotatable member operatively associated with the vibration coupler, the **clamp member** and the cutting jaw, the rotatable member being rotatable to cause corresponding rotation of the **clamp member** and cutting jaw about a longitudinal axis of the instrument,” see id. Claim 1(d) (emphasis added);

- “An ultrasonic instrument according to claim 1, wherein the **clamp member** includes a pair of tissue engaging stops,” see id. Claim 6 (emphasis added);

- “[A] **clamp member** supported adjacent to the cutting jaw, the **clamp member** and the cutting jaw defining a tissue receiving area, the **clamp member** being moveable between open and closed positions in relation to the cutting jaw and having a tissue engaging stop positioned to engage tissue and prevent positioning of tissue beyond the proximal end of the cutting surface of the cutting jaw,” see id. Claim 7(d) (emphasis added);

- “An ultrasonic instrument according to claim 7, further including an actuator tube slidably positioned about the vibration coupler, a distal end of the actuator tube including a cam slot configured to receive cam members formed on the **clamp member**, the actuator tube being moveable between advanced and retracted positions about the vibration coupler in response to actuation of the handle assembly to effect movement of the **clamp member** between the open and closed positions,” see id.

Claim 8 (emphasis added).[4]

Plaintiff proposes construing the term as: "A part configured to hold, grasp, or apply pressure to tissue, that is movable and works with a component of the instrument (e.g. the cutting jaw), for holding, grasping, or applying pressure to the tissue." Defendant proposes: "A part configured to hold, grasp, or apply pressure to tissue, that is movable and which is separate and distinct from the tissue contacting member."

The parties thus agree on the first phrase in this construction: that a "clamp member" is "a part configured to hold, grasp, or apply pressure to tissue, that is movable." Additionally, it is clear from the claim language and the specifications that the ordinary and customary meaning of "clamp member" in the context of this patent includes the feature that the "clamp member" works with the cutting jaw, for holding, grasping, or applying pressure to tissue. See e.g., '286 Patent Claim 1(c), Claim 1(d), Claim 7(d), 2:5-13.

The parties dispute, however, whether the "clamp member" is necessarily "separate and distinct from" the tissue contact surface.[5] The basis of the parties' dispute is the meaning of

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[4] The term is further utilized in dependent Claims 12, 14, 17 and 19.

[5] While defendant proposes that the "clamp member" must be separate and distinct from the "tissue contacting member," the term actually used in Claim 17 of the '286 Patent is "tissue contact surface" and the patent's actual terminology will be

dependent Claim 17, which provides: "An ultrasonic instrument according to claim 7, wherein the clamp member includes a tissue contact surface removably fastened to the clamp member." Defendant argues that the "clamp member" must thus be separate and distinct from the "tissue contact surface" in order for it to be capable of being "removably fastened" to the tissue contact surface, as described in the claim and specifications. See Def. Claim Construction Br. at 16-17; Markman Tr. 124; see also '286 Patent 3:64-4:9. Plaintiff argues that it is improper to limit the claim language based on dependent Claim 17. See Pl. Claim Construction Br. at 22; Pl. Reply Br. at 5-6; Markman Tr. 25-26.

While plaintiff is correct that as a general matter claim language should not be limited by dependent claims,[6] the Federal Circuit has also held that a term used in multiple claims should be construed identically in each of those claims. See Nazomi Commc'ns, Inc. v. Arm Holdings, PLC, 403 F.3d 1364, 1370 (Fed. Cir. 2005); Dayco Prods. Inc. v. Total Containment, Inc., 329 F.3d 1358, 1371 (Fed. Cir. 2003) ("[I]f a claim term appears in more than one claim it should be construed the same in each.").

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used. See '286 Patent, Claim 17.

[6] See Nazomi Commc'ns, Inc. v. Arm Holdings, PLC, 403 F.3d 1364, 1370 (Fed. Cir. 2005) ("The concept of claim differentiation normally means that limitations stated in dependent claims are not to be read into the independent claim from which they depend.") (internal quotation and citation omitted).

Thus, because Claim 17 requires that the "clamp member" and the "tissue contact surface" be separate and distinct, such that they are capable of being "removably fastened," it is proper as a matter of claim construction for all those claims in the '286 Patent that invoke the term "clamp member" to be consistently construed to reflect that limitation. Accordingly, the Court construes the term as: "A part configured to hold, grasp, or apply pressure to tissue, that is movable, that works with a component of the instrument (e.g. the cutting jaw), and which is separate and distinct from the tissue contact surface."

2. Claim 8 ("cam slot")

Claim 8 (and all dependent claims) of the '286 Patent uses the term "cam slot" in the following context:

> An ultrasonic instrument according to claim 7, further including an actuator tube slidably positioned about the vibration coupler, a distal end of the actuator tube including a **cam slot** configured to receive cam members formed on the clamp member, the actuator tube being moveable between advanced and retracted positions about the vibration coupler in response to actuation of the handle assembly to effect movement of the clamp member between the open and closed positions.

'286 Patent, Claim 8 (emphasis added). Plaintiff seeks to construe this term as "[an] opening or groove that imparts motion to the camming member," while defendant proposes, "narrow opening or groove that engages and controls the motion of the camming members."

The Court adopts the following construction: "opening or

groove that imparts motion to and guides the camming member." The Court refers to its discussion above regarding a similar term in the '050 Patent, and concludes that the '286 Patent claim language itself and the specifications support the finding that this construction reflects the ordinary and customary meaning of this claim term. See '286 Claim 8, 4:21-23, 5:51-54, 6:9-18; see also Markman Tr. 52-53, 59, 107-08 (discussion with counsel regarding the translation of movement from the cam slots to the camming members). As noted above, it would be inappropriate to import defendant's proposed limiting terms "narrow" and "control." Additionally, as noted above, the terms "impart" and "guide" most accurately describe the interaction between the cam slot and the camming member.

3. Claim 8 ("cam members")

Claim 8 (and all dependent claims) of the '286 Patent invokes the term "cam members" as follows:

> An ultrasonic instrument according to claim 7, further including an actuator tube slidably positioned about the vibration coupler, a distal end of the actuator tube including a cam slot configured to receive **cam members** formed on the clamp member, the actuator tube being moveable between advanced and retracted positions about the vibration coupler in response to actuation of the handle assembly to effect movement of the clamp member between the open and closed positions.

'286 Patent, Claim 8 (emphasis added). Plaintiff's proposed construction of this term is: "The parts on the clamp (followers) that are imparted motion by the cam slots," while defendant

proposes: "Protrusions (followers) the motion of which is controlled by movement of the 'slots' with which they are engaged."

The Court will construe this term as: "The follower parts of the cam mechanism that are imparted motion by the cam slots and whose motion is guided by the cam slots." The issues are the same as those discussed above with respect to "camming members" in the '050 Patent Claims 11 and 12. For the reasons discussed above, defendant's proposed use of the words "protrusions" and "controlled" is inappropriate because there is no basis in the claim or specification for importing such terms into the claim construction.[7] Additionally, as earlier discussed, the words "impart" and "guide" best describe the interaction and engagement between the cam slots and cam members.

4. Claim 11 ("swivel member")

Claim 11 (and all dependent claims) in the '286 patent uses the term swivel member in the following context: "An ultrasonic instrument according to Claim 10, wherein the coupling member

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[7] Moreover, the use of the word "protrusions" would be improper given that the patentees used that term elsewhere in the specifications, and therefore knew how to use it to describe this claim term, if they had so desired. See '286 Patent, 5:16-18 ("**Protrusions** project outwardly from sidewalls of swivel member and extend through cam slots of movable handle) (emphasis added), 5:48-50 ("In the open position, moveable handle is spaced rearwardly from stationary handle portion and **protrusions** are positioned in the lower proximal portion of cam slots.") (emphasis added).

includes a **swivel member**, the **swivel member** being positioned to permit rotation of the coupling member in relation to the moveable handle." '286 Patent, Claim 11 (emphasis added). Plaintiff proposes construing the term as "component designed to permit swiveling or rotation of another part," whereas defendant proposes "a component that permits the coupling member to pivot freely."

The Court construes this term as: "A component designed to permit the coupling member to swivel or rotate."[8] First, this construction comports with the plain language of Claim 11, which expressly describes what the "swivel member" is designed to do. See '286 Patent, Claim 11 ("the coupling member includes a swivel member, the swivel member being positioned to **permit rotation of the coupling member**") (emphasis added); accord '286 Patent, 5:13-18 ("Swivel member 108 is preferably formed from molded half-sections 108a and 108b and permits rotation of the coupling member relative to movable handle 36."); 6:1-6 ("Referring to FIGS. 11-15, when movable handle 36 is pivoted clockwise about

[8] While plaintiff argues that the swivel member permits the swiveling or rotation of "another part" instead of, specifically, the "coupling member," see Markman Tr. at 37, the Court does not see a basis for this construction in the intrinsic evidence. The claim language specifically provides that the swivel member permits rotation of the **coupling member**. While the coupling member may in turn permit rotation of the rotation knob, see id. at 37-38, it is the coupling member that interfaces with the swivel member. Accord id. at 38 ("[T]he coupling member is sort of the interface between the swivel member and the rotation knob.").

pivot member 82 towards stationary handle portion 28, in the direction indicated by arrow "A" in FIG. 11, cam slot 88 engages protrusion 90 of the swivel member 108 to advance coupling member 98 distally within cavity 110 of rotation knob."). Second, defendant's proposal of "pivot freely," instead of "swivel" or "rotate," imports a term that has no basis in the intrinsic evidence; the words "pivot freely" describe motion different from simply "swivel" or "rotate."

5. Claim 12 ("adjacent the handle assembly")

Claim 12 (and dependent Claim 13) of the '286 Patent uses this disputed claim term in the following context:

> An ultrasonic instrument according to claim 11, wherein the coupling member is operably connected to a rotatable knob positioned **adjacent the handle assembly**, the rotatable knob being rotatably secured to the handle assembly such that rotation of the rotatable knob in relation to the handle assembly effects corresponding rotation of the coupling member and the clamp member.

'286 Patent, Claim 12 (emphasis added). Plaintiff proposes construing the term as "near the handle assembly," whereas defendant proposes, "directly next to the handle assembly."

As the parties' submissions indicate, standard dictionary definitions result in multiple possible constructions. See Pl. Claim Construction Br. at 20; Def. Claim Construction Br. at 14-15. The defendant acknowledges that where the claim language is not determinative, and the Court is confronted with multiple definitions, the Court should consult the other intrinsic

evidence. See Novartis Pharms. Corp. v. Eon Labs Mfg., Inc., 363 F.3d 1306, 1309-10 (Fed. Cir. 2004). In this case, the intrinsic evidence does not define the term, nor does it suggest that the term has some specialized meaning in the relevant art. Additionally, plaintiff argues that defendant's proposed construction would in fact exclude the patented instrument itself because such a construction wrongly implies that the knob and the handle assembly "touch" each other, when in fact, while they may touch each other, nothing in the patent requires that they touch each other. See Pl. Reply Br. at 4-5 & n.10; Markman Tr. at 23-25.

The Federal Circuit recently held that where the intrinsic evidence did not define the term "adjacent" or suggest that the term had a specialized meaning in the relevant art, the appropriate construction of the term "adjacent" was "not distant." See Free Motion Fitness, Inc. v. Cybex Int'l, Inc., 423 F.3d 1343, 1348-49 (Fed. Cir. 2005). The Circuit noted that there were multiple possible dictionary definitions and concluded that the intrinsic evidence served to "point away" from the more restrictive definitions where there was nothing in the intrinsic evidence to suggest that such a narrowing definition was appropriate. See id. As was the case in Free Motion, nothing in the intrinsic evidence of the '286 Patent requires the adoption defendant's more restrictive definition, "directly next to," and

thus the Court adopts plaintiff's construction, "near," as guided by the decision in Free Motion.[9]

6. Claim 15 ("curved along the longitudinal axis")

Claim 15 of the '286 patent uses the term "curved along the longitudinal axis" in the following context: "An ultrasonic instrument according to claim 7, wherein the cutting surface of the cutting jaw is **curved along the longitudinal axis** of the instrument." '286 Patent, Claim 15 (emphasis added). Plaintiff's proposed construction of the term is: "Deviating from a straight line along the lengthwise dimension," while defendant's proposed construction is: "Curved outwardly and downwardly in the distal direction."

Defendant urges that its proposed construction is appropriate because the intrinsic evidence in the patent abstract and specifications describes a cutting jaw that "is curved outwardly and downwardly." See '286 Patent, Abstract ("The cutting jaw has a blade surface which is curved downwardly and outwardly in the distal direction with respect to the longitudinal axis . . . "), 1:65-67 ("The cutting jaw has a blade surface which is curved outwardly and downwardly along its

[9] Defendant also argues that use of the word "near" in the construction would allow the "adjacent" parts to be anywhere on the instrument (given that the instrument itself is relatively small). See Def. Claim Construction Br. at 14. This is clearly not the case, however, given that "near" is a relative term to be interpreted in the context of the instrument as a whole, which would take into account the relative size of the instrument.

surface and thus, curved with respect to the axis of vibration"), 4:26-28 ("Cutting jaw 58 includes a curved blade surface 59 that slopes downwardly and outwardly in the distal direction."), Figure 4. Plaintiff argues, however, that the references to "outward" and "downward" in the intrinsic evidence indicate that the patentees clearly knew how to include explicit language in the claims if they wanted to, and chose not to do so.

As noted in Phillips, the specifications are properly consulted in order to ascertain the ordinary meaning to be given to claim terms, particularly where the claim terms themselves are vague. See Phillips, 415 F.3d at 1315. However, as discussed above, courts must avoid importing limitations from the specifications into the construction of the claims. To avoiding importing limitations, "it is important to keep in mind that the purposes of the specification are to teach and enable those of skill in the art to make and use the invention and to provide the best mode for doing so." Phillips, 415 F.3d at 1323.

> One of the best ways to teach a person of ordinary skill in the art how to make and use the invention is to provide an example of how to practice the invention in a particular case. Much of the time, upon reading the specification in that context, it will become clear whether the patentee is setting out specific examples of the invention to accomplish those goals, or whether the patentee instead intends for the claims and the embodiments in the specification to be strictly coextensive. . . . The manner in which the patentee uses a term within the specification and claims usually will make the distinction apparent.

Id.

In this case, while the intrinsic evidence does describe a cutting surface that is curved outwardly and downwardly, nothing in the intrinsic evidence requires that the cutting surface be so curved. Indeed, as Ethicon's counsel acknowledged at the Markman hearing, the cutting surface could be curved along the lengthwise axis "up or down," as long as it did not curve "side to side" – which curvature, the Court notes, would no longer be along the longitudinal axis, but a curve along the latitudinal axis. See Markman Tr. at 115 (emphasis added). Additionally, as Tyco argues, the intrinsic evidence demonstrates that the patentees clearly knew the appropriate terminology to use in their claims had they sought to limit their claimed invention to one with a blade surface that curved outward and downward; the patentees chose not to do so.[10] Accordingly, the Court will not import any

[10] The parties also dispute whether the patent background and prosecution history are relevant and, if so, the import of these sources. Defendant argues that these sources (both of which describe blades that curve outwardly and downwardly) indicate a specific need that the patentees sought to address, by remedying past deficiencies in earlier technology. See Def. Claim Construction Br. at 19-20 & n.11, 22-23 (citing, inter alia, CVI/Beta Ventures, Inc. v. Tura LP, 112 F.3d 1146, 1160 (Fed. Cir. 1997) ("In construing claims, the problem the inventor was attempting to solve, as discerned from the specification and the prosecution history, is a relevant consideration."); Microsoft Corp. v. Multi-Tech Sys., Inc., 357 F.3d 1340, 1347-50 (Fed. Cir. 2004) (finding that prosecution history was relevant to the interpretation of claim terms, given that the prosecution history included statements made regarding an earlier and related patent)). Plaintiff argues that defendant's suggestion that the patent history is relevant and supports its construction is "legally and factually wrong," given that (1) the law provides that the prosecution history cannot be used to "enlarge, diminish

limitations from the specification into its claim construction and will adopt plaintiff's proposed construction: "Deviating from a straight line along the lengthwise dimension."[11]

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or vary the limitations of the claims," (2) the inventions in the earlier patents differed from the '286 Patent, and (3) the patent history demonstrates that if the inventors had wanted to use the term "outwardly and downwardly," they knew how to do so. See Pl. Claim Construction Br. at 25, Pl. Reply Br. at 7.

The Court declines to consider the patent background and prosecution history, however, because the claim language and intrinsic evidence provide adequate guidance to construe the claims. Moreover, the Court agrees with plaintiff's contention that the patent history in this instance is ambiguous – it could be read as demonstrating that the inventors sought to remedy a problem by using a blade surface that curves "outwardly and downwardly," or it could be read as indicating that the patentees knew how to specify the "outward and downward" direction of the blade if they wanted to, and chose not to do so. Cf. Phillips, 415 F.3d at 1317 (noting, "because the prosecution history represents an ongoing negotiation between the [Patent & Trademark Office] and the applicant, rather than the final product of that negotiation, it often lacks the clarity of the specification and thus is less useful for claim construction purposes").

[11] At the Markman hearing, counsel for Ethicon also argued that plaintiff's proposed use of the phrase "deviating from a straight line . . . " was contrary to the claim language, which provides that the blade surface is "curved along the longitudinal axis." See Markman Tr. at 117-18 (plaintiff's language "contradict[s] the claim language itself where you have language that says you must curve along the axis, and then you are saying, well, it can deviate from the axis, that's just contrary to the plain language of the claims"). The Court is constrained to disagree based on the claim language. Plaintiff's proposed language – "deviating from a straight line . . . " is simply plaintiff's description of the curvature of the blade; the balance of plaintiff's proposed construction describes the nature of the curvature – "along the lengthwise dimension." Contrary to Ethicon's contention, the claim language does not provide that the blade surface exactly follows the longitudinal axis – if it did, the blade surface would not be curved at all, but would be straight – instead, the claim language provides that it is curved "along the longitudinal axis" – i.e., curved in the up or down direction.

7. Claim 17 ("removably fastened")

Claim 17 of the '286 Patent provides for "[a]n ultrasonic instrument according to claim 7, wherein the clamp member includes a tissue contact surface **removably fastened** to the clamp member." '286 Patent, Claim 17 (emphasis added). Plaintiff would construct "removably fastened" as "designed so as to be capable of being held secure to something else and designed so as also to be capable of being unsecured and taken away from." Defendant proposes, "designed so as to be capable of being held secure to something else and also adapted to be unsecured and taken away from."

Thus, the dispute between the parties as to this claim term is whether to use the phrase "and designed so as also to be capable . . . " (plaintiff's construction), or "and also adapted to be . . ." (defendant's construction). At the Markman hearing, plaintiff argued that use of the word "adapted" suggests that "a user might have reason to, or could, if he or she so wished, remove that tissue contact surface, but that doesn't happen. It's designed such that if you wish to pull it out you could, but it wouldn't actually ever be pulled out in actual use." Markman Tr. at 36. In contrast, defendant argued that "it's designed so [it] can [be] take[n] on and off, and what they disclose in the patent for these tissue contact surfaces is a simple tongue-and-groove mechanism so that the tissue contact surface can be

applied to the clamp member and then removed again." Id. at 130.[12]

While the Court is dubious about the distinction drawn between "designed" and "adapted" as having a meaningful difference, the Court nonetheless sees no basis in the claim language or specification for the differentiation defendant proposes. The patent simply provides no indication that the term "removably" should be construed using the word "adapted" while the term "fastened" is construed using the word "designed." Additionally, the words "capable of being" more closely track the dictionary definition, than does defendant's "adapted" language. See Webster's Third New Int'l Dictionary (plaintiff's Ex. G) at 1921 ("[C]apable of being removed, displaced, transferred, dismissed, or eradicated."). Accordingly, the Court will construe the term "removably fastened," as "designed so as to be capable of being held secure to something else and designed so as also to be capable of being unsecured and taken away from."

E. The '544 Patent

1. Claim 1 ("the clamp including a camming member which operatively engages the actuation member such that movement of the actuation member pivots the clamp between the open and clamped positions")

Claim 1 (and all dependent claims) of the '544 Patent uses

[12] In fact, the specifications provide that the "tongue and groove fastening assembly" is the preferred method, "although other fastening assemblies are envisioned." '544 Patent, 4:2-6.

the above claim term in the following context:

> [A] clamp pivotally mounted adjacent the distal end of the outer tube, the clamp being movable in relation to the jaw member between open and clamped positions, the **clamp including a camming member which operatively engages the actuation member such that movement of the actuation member pivots the clamp between the open and clamped positions**."

'544 Patent, Claim 1 (emphasis added). Plaintiff proposes the following construction: "The camming member of the clamp (follower) and the actuation member constitute a camming mechanism to pivot the clamp." Defendant proposes: "A protrusion (follower) the motion of which is controlled by movement of the 'slot' with which it is engaged."[13]

The Court adopts plaintiff's construction and construes the claim as follows: "The camming member of the clamp (follower) and the actuation member constitute a camming mechanism to pivot the clamp." First, the parties agree that the "camming member" is the follower part of the camming mechanism. Moreover, this construction is consistent with the claim language itself and the specifications. See '544 Claim 1, 4:26-30, 6:15-24, Figure 13. Lastly, as addressed above, there is no basis for importing the words "protrusions" or "controlled" into the claim construction.

2. Claims 2 and 3 ("slot for receiving the camming member of the clamp / pair of slots")

[13] Defendant originally argued that the means-plus-function limitation in 35 U.S.C. § 112 applied to this claim term, but has since withdrawn that argument. See Markman Tr. at 6.

Claims 2 and 3 of the '544 Patent use the claim term "slot for receiving the camming member of the clamp / pair of slots" as "[a]n ultrasonic instrument according to claim 1, wherein the actuation member includes a **slot for receiving the camming member of the clamp**," '544 Patent, Claim 2 (emphasis added), and "[a]n ultrasonic instrument according to claim 2, wherein the clamp includes a pair of camming members and the actuation member includes a **pair of slots**, each one of the **pair of slots** being positioned to receive one of the pair of camming members," '54 Patent, Claim 3 (emphasis added). Plaintiff's proposed construction of the term is: "Opening or groove that imparts motion to the camming member," while defendant's proposal is: "Narrow opening or groove that receives and controls the motion of the camming member."

The Court incorporates its discussion infra of similar claim terms in the '050 and '286 Patents construes the term as: "Opening or groove (or a pair of openings or grooves) that imparts motion to and guides the motion of the camming member." See Omega Eng'g, Inc. v. Raytek Corp., 334 F.3d 1314, 1334 (Fed. Cir. 2003) (the Court will "presume, unless otherwise compelled, that the same claim term in the same patent or related patents carries the same construed meaning). Additionally, with respect to this claim term, the claim language itself contradicts defendant's proposed use of the word "control," because the

claims explicitly use the word "receive," where "control" could have been included if the patentees had so desired. Similarly, and as discussed above, it would be inappropriate to import defendant's notion of "control" where there is no basis for it in either the claim language or specification and the words "impart" and "guide" more accurately reflect the interaction between the slots and the camming member.

3. Claim 6 ("curved blade surface")

Claim 6 and dependent Claim 8 of the '544 Patent include the claim term "curved blade surface" in the following context: "An ultrasonic instrument according to claim 1, wherein the jaw member includes a **curved blade surface**," '544 Patent, Claim 6 (emphasis added), and "An ultrasonic instrument according to claim 6, wherein the **curved blade surface** includes a longitudinally extending cutting edge," '544 Patent, Claim 8 (emphasis added). Plaintiff's proposed construction of the Claim 6 term is: "Blade surface that has a deviation from a straight line," while defendant proposes: "Surface adapted to be used for cutting that is curved outwardly and downwardly in the distal direction."

As in the case of the '286 Patent claim term, discussed above, defendant supports its proposed construction by pointing to the specifications in the '544 Patent that describe a blade surface that is "curved outwardly and downwardly." See '544

Patent 1:67-2:2, 4:31-55, Figure 4. Nevertheless, nothing in the '544 Patent requires that the blade surface be curved outwardly and downwardly and, as discussed above, counsel for Ethicon acknowledged that the blade surface could curve upward, as well as downward. Markman Tr. at 115. Additionally, the presumption that similar claims in related patents should be construed consistently applies here, counseling for construing the '544 Patent claim term consistently with the '286 Patent claim term described above. See Omega Eng'g, 334 F.3d at 1334. Accordingly, the Court adopts plaintiff's proposed construction of the claim term.

4. Claim 8 ("longitudinally extending cutting edge")

As noted above, Claim 8 of the '544 Patent uses the term "longitudinally extending cutting edge" in the following context: "An ultrasonic instrument according to claim 6, wherein the curved blade surface includes a **longitudinally extending cutting edge**." '544 Patent, Claim 8 (emphasis added). Plaintiff proposes construing the term as "the edge of the blade surface that engages tissue to achieve cutting and extends along the lengthwise dimension." Defendant proposes: "Edge adapted for cutting that extends outwardly and downwardly in the distal direction."

First, the Court notes that Claim 8 is a claim dependent on Claim 6, which is discussed above. The "curved blade surface"

claim term from Claim 6 and dependent Claim 8, however, is distinct from the "longitudinally extending cutting edge" that is at issue here. Specifically, as defendant's counsel explained at the Markman hearing, "[what] claim 8 is adding to the independent claim [6] is [that] you can have a cutting edge which is longitudinally extending" on the curved blade surface. Markman Tr. at 118-19. This is because, the "blades" are designed for cutting with harmonic energy and therefore, "the blade can be . . . quite blunt or flat," id. at 118, and thus claim 8 adds a longitudinally extending cutting edge to the curved blade surface claimed in Claim 6.

It is clear from the claim language and other intrinsic evidence that the customary and ordinary meaning of "cutting edge" is a "blade surface designed for cutting," and thus, the Court will incorporate that description in its construction. Additionally, while the specifications of the '544 Patent describe the cutting edge as one that curves "downwardly and outwardly in the distal direction," '544 Patent 4:31-55, Figures 4 & 11, the Court will not import that limitation from the specifications into the claim language where there is no indication in the intrinsic evidence that the cutting edge must be curved in the downward and outward direction, particularly where counsel for Ethicon acknowledged that the cutting edge could extend upwards. Thus, the Court construes the term as:

"The edge of the blade surface designed for cutting that extends along the lengthwise dimension."

5. Claims 9 and 12 ("adjacent the handle assembly")

Claims 9 and 12 (and all dependent claims) in the '544 Patent use the term adjacent the handle assembly as follows:

- "An ultrasonic instrument according to claim 1, further including a handle assembly, the proximal end of the outer tube being supported **adjacent the handle assembly**." '544 Patent, Claim 9 (emphasis added).

- "An ultrasonic instrument according to claim 10, wherein the rotatable collar is positioned **adjacent the handle assembly**." '544 Patent, Claim 12 (emphasis added).

Plaintiff would construe the term as "near the handle assembly," whereas defendant proposes, "directly next to the handle assembly."

The Court incorporates its discussion above concerning construction of a claim term including the word "adjacent" in Claim 12 of the '286 Patent and concludes that, in accordance with the decision in Free Motion Fitness, Inc. v. Cybex Int'l, Inc., 423 F.3d at 1348-49, supra, the appropriate construction of "adjacent the handle assembly" is, as plaintiff proposes, "near the handle assembly."

6. Claim 23 ("positioned adjacent the jaw member")

Claim 23 (and dependent Claim 24) of the '544 Patent uses the claim term as follows: "An ultrasonic instrument according to claim 1, wherein the clamp includes at least one tissue receiving

stop which is **positioned adjacent the jaw member.**" '544 Patent, Claim 23 (emphasis added). Plaintiff's proposed construction is: "Placed so as to be near the jaw member," while defendant proposes, "placed so as to be directly next to the jaw member."

The parties' dispute concerning this claim term tracks that discussed above with respect to Claims 9 and 12 of this patent and Claim 12 of the '286 Patent. As with those other claim terms, nothing in the actual claim language or specifications expressly states that these elements are "directly" adjacent to one another. And, as plaintiff argues, a construction using the phrase "directly next to" would exclude the very instrument the inventors were disclosing in the patent because there must be some space between the two elements in order for the instrument to work properly, and a claim interpretation that excludes the device disclosed is rarely the correct interpretation. See Pl. Reply Br. at 4-5 & n.9, citing '544 Patent, 4:5-6, 11-13 (describing the dysfunctionality that would arise if the two elements were "directly next to" each other); see also Playtex Prods., 400 F.3d at 904 ("[C]laim constructions that exclude the preferred embodiment are rarely, if ever, correct.") (internal citation omitted).[14] Accordingly, because nothing in the

[14] Defendant further argues that the "tissue receiving stops" must be "directly next to" the "blade surface," because the pair of stops define the proximal end of the exposed blade surface so as to prevent tissue from moving past the proximal end of that surface. See Def. Claim Construction Br. at 15-16; '544

intrinsic evidence supports adoption of defendant's more restrictive definition and, in fact, such a definition might exclude the patentees' preferred embodiment, the Court will construe the claim term in accordance with the term "adjacent" in Free Motion Fitness, 423 F.3d at 1348-49, supra, as "placed so as to be near the jaw member."

IV. CONCLUSION

The disputed claim terms are hereby construed as described above.

IT IS SO ORDERED.

/s/
Janet Bond Arterton
United States District Judge

Dated at New Haven, Connecticut this 23rd day of January, 2006.

Patent, 4:5-6, 6:43-44. This argument, however, ignores the use of the word "proximal" in the specification language, and that a construction of "adjacent" as simply "near" would also fulfill the requirement that the pair of stops define the "proximal" end of the blade surface and would prevent tissue from moving past that "proximal" end.