

United States District Court,  
E.D. Michigan, Southern Division.

**UTICA ENTERPRISES, INC,**  
Plaintiff.

v.  
**FEDERAL BROACH AND MACHINE COMPANY,**  
Defendant.

**April 15, 2003.**

Owner of patent for method to retain broach-cutting tool in tool holder sued competitor for patent infringement. Construing claims, the District Court, Taylor, J., held that: (1) tool holder had to be single, one-piece structure; (2) phrase "predetermined accurate work position" meant fixed placement of tool in tool holder; and (3) locking step was limited to structures shown in specification for performing that function, and their equivalents.

Claims construed.

6,256,857. Construed.

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## **MEMORANDUM OPINION AND ORDER**

**TAYLOR, District Judge.**

### **I.**

Plaintiff, Utica Enterprises, Inc. ("Utica"), has alleged that Defendant, Federal Broach and Machine Company ("Federal Broach"), infringed claims 1, 3, 6 and 7 of Plaintiff's Patent No. 6,256,857 B1 (" '857 Patent"). The '857 Patent covers a method to retain a broach-cutting tool in a tool holder. "Broaching" involves a unique metal removing process to make precise and refined cuts to various machined parts.

[1] Before the Court is the parties' request for claim construction of the '857 Patent as is required pursuant to *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed.Cir.1995), *aff'd.*, 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996). Claim construction is a matter of law, exclusively within the Court's province, while infringement is an issue of fact. *Id.* Having held a hearing on January 15, 2003 wherein the

Court received the testimony of both parties' expert witnesses, and having received supplemental post-hearing briefs, the Court's determination of the '857 Patent's disputed claim terms follows.

## II.

### *Standard of Review*

[2] [3] For the purposes of claim construction, the Court should rely primarily on evidence intrinsic to the patent, that being the patent claims, specifications and prosecution history. *Teleflex, Inc. v. Ficosa North Am. Corp.*, 299 F.3d 1313, 1324-25 (Fed.Cir.2002)(citing *Vitronics Corp. v. Conceptoronic, Inc.*, 90 F.3d 1576, 1582 (Fed.Cir.1996))(stating that such evidence is "the most significant source of the legally operative meaning of the disputed claim language"). To determine the meaning of the claim terms, the Court must begin with the words of the claims themselves. *Id.* Unless the specifications or prosecution history indicate otherwise, claim terms should be given the ordinary meaning that a person of ordinary skill in the art would ascribe to them. *Id.*; *Texas Digital Sys., Inc. v. Telegenix, Inc.*, 308 F.3d 1193, 1204-05 (Fed.Cir.2002); *CCS Fitness, Inc. v. Brunswick, Corp.*, 288 F.3d 1359, 1366 (Fed.Cir.2001); *see also*, *Amerikam, Inc. v. Home Depot, Inc.*, 99 F.Supp.2d 810, 812 (W.D.Mich.2000).

[4] [5] [6] [7] The claims also must be construed within the context of the specifications to determine whether it appears that the inventor intended to impart novel meanings to the claim terms by deviating from the ordinary definitions. *Teleflex*, 299 F.3d at 1324. If the claim language is unclear on its face, then the Court may consider the specifications and the prosecution history to resolve the lack of clarity. *Id.*; *Interactive Gift Express, Inc. v. Compuserve, Inc.*, 256 F.3d 1323, 1331 (Fed.Cir.2001). With one exception, the specifications may not further limit the claims beyond the limitations contained in the claims themselves. *Teleflex*, 299 F.3d at 1326 (citing *Markman*, 52 F.3d at 979, and cautioning that "claims must be read in light of the specifications, but limitations from the specifications are not to be read into the claims"). When the claims describe a method in terms of the function that the method must serve, then, by statute, the claim construction will be limited to cover the structures, materials, or actions contained in the specifications and their equivalents. 35 U.S.C. s. 112, para. 6 ( *hereinafter* s. 112, para. 6). In addition, the Court must not determine the claims to be broader than what the inventor represented to the Patent and Trademark Office ("PTO") during the patent application process. *Teleflex*, 299 F.3d at 1326 (citation omitted) ("[P]rosecution history limits the interpretation of claims so as to exclude any interpretation that may have been disclaimed or disavowed during prosecution in order to obtain claim allowance"); *see also*, *Ecolab, Inc. v. Envirochem, Inc.*, 264 F.3d 1358, 1368 (Fed.Cir.2001) (citations omitted).

[8] The Court may rely on extrinsic evidence including dictionaries, treatises and expert testimony to assist with comprehending the underlying subject matter as it is understood by those of ordinary skill in the particular trade, and to assist with claim construction, when necessary, so long as the extrinsic evidence does not contradict the claim language. *Altiris, Inc. v. Symantec Corp.*, 318 F.3d 1363, 1369 (Fed.Cir.2003); *Markman*, 52 F.3d at 981. This memorandum constitutes the Court's findings of law on claim construction for the '857 Patent.

## III.

### A. Claim 1

Defendant asserts that all of the terms needing construction can be found in Claim 1. Plaintiff asserts that those terms have a different scope in Claim 3, and, therefore, that the Court should construe Claim 3 as

well. For the reasons explained more fully in Part III.B., *infra*, the Court only will construe the disputed terms contained in Claim 1. Claim 1 reads, in part:

A method of retaining a broach cutting tool member in a broach tool holder, said broach tool holder comprising:

a top surface, an oppositely disposed bottom surface, and an intermediate surface interposed said top and bottom surfaces, said broach tool holder further comprising a first planar abutment surface extending from said top surface and spaced a predetermined distance from said first planar abutment surface, said first planar abutment surface and said second planar abutment surface forming a dihedral right angle, said first and second planar abutment surfaces further forming a right angle with said top surface;

said broach cutting tool member comprising a bottom end surface, a top end surface opposite said bottom end surface, a peripheral outer surface interposed said top end surface and said bottom end surface, said peripheral outer surface having two planar abutment surfaces disposed along said peripheral outer surface and extending perpendicularly to said top end surface and said bottom end surface of said broach cutting tool member, said two planar abutment surfaces adapted to be complementary, respectively, to said first planar and second planar abutment surfaces, disposed on said broach tool holder, said peripheral outer surface of said broach cutting tool member further having a third planar abutment surface disposed along said peripheral outer surface, said third planar abutment surface having at least a portion extending obliquely with respect to one of said top end surface and said bottom end surface of said broach cutting tool member ... '857 Patent, Col. 7, ll. 26-56.

Both parties request that the Court 1) determine whether or not the tool holder assembly cited in Claim 1 must be a unitary structure, 2) determine and/or clarify the meaning of "predetermined accurate work position," and 3) determine whether Claim 1 contemplates that the locking step would require a single device, and if so, whether that device is limited to a wedge-like object. Defendant further requests that the Court construe the terms "top surface," "planar abutment surfaces," and "contiguous." FN1

FN1. At the Markman Hearing, the parties conceded that the term "contiguous" simply means to abut. Hearing Tr. p. 115, ll. 17-25. The Court, therefore, declines to construe this term and only will construe the terms "top surface" and "planar abutment surfaces" in the discussion of the tool holder structure.

## **1) Tool Holder Structure**

Utica maintains that neither the specification nor the prosecution history expresses its intent to limit Claim 1 to the preferred embodiments which describe the tool holder as a unitary structure machined from a single piece of metal. To support its contention that the tool holder is a one-piece, unitary structure, Federal Broach relies on Figures 1 and 2 of the '857 Patent as well as on the deposition testimony of Robert Roseliep ("Roseliep"), the inventor, that the planar surface on the tool holder must be an integral part of the tool holder itself. *See* Def.'s Markman Br., App. D, Roseliep Dep. p. 41, ll. 23-25; p. 42, ll. 1-14. The Court's construction must begin with the claim's language. *Teleflex*, 299 F.3d at 1324-25. To that end, the Court will begin by construing the terms "top surface" and "planar abutment surface" as these terms are included in Claim 1's description of the tool holder body.

### **a. "Top Surface"**

[9] Claim 1 indicates that the tool holder is comprised of a top surface that is directly opposite a bottom surface with an intermediate surface between the two. '857 Patent, Col. 7, ll. 28-30. Claim 1 further advises that two planar abutment surfaces extend from the top surface, forming a dihedral right angle to each other, and also forming a right angle with the top surface. '857 Patent, Col. 7, ll. 31-38. Since the parties did not offer any definitions for the term "top surface" or "planar abutment surface," that are particular to the broaching trade, the Court assumes that persons of ordinary skill in the art would ascribe to these terms the same meanings that a lay person would ascribe. The Court thus relies on dictionary definitions that are consistent with the intrinsic evidence of the '857 Patent to construe these terms. *See Altiris*, 318 F.3d at 1369.

"Top" means the "highest point, level, or part of something." *Webster's Third International Dictionary* (1976) ( *hereinafter Webster's* ). Accordingly, the Court construes the term "top surface" to mean the highest part of the tool holder, above which nothing else extends.

#### **b. "Planar Abutment Surface"**

[10] The term "plane" connotes a "surface such that the straight line that joins any two of its points lies wholly in that surface; a surface any intersection of which by a like surface is a straight line," or a "flat, level surface." *Id.* To "abut" is simply "to touch." *Id.* The "planar abutment surfaces," then are flat, straight surfaces which are designed to come into contact with the mirror-image, corresponding surfaces of the cutting tool. Given the Court's above-mentioned construction of the term "top surface," and Claim 1's requirement that the planar abutment surfaces extend from the top surface, it follows that the planar abutment surfaces must extend downward from the top surface of the tool holder to the tool holder's intermediate surface.

#### **c. Single or Multi-Piece Assembly**

[11] Utica asserts that the claims do not limit the invention to a unitary structure, but rather, that the claim terms also cover a multi-piece assembly for the tool holder. Federal Broach argues that the only way in which Claim 1 defines over the prior art is if the tool holder body is of a one-piece construction.

Except for the statement in the second paragraph that the cutting tool's planar abutment surfaces must be "complementary ...to said first planar and second planar abutment surfaces, disposed on said broach tool holder," the claim otherwise is silent as to whether the tool holder must be a unitary structure or whether it also may be a multi-piece assembly. '857 Patent, Col. 7, 47-49. To be "disposed on" connotes "to put in place or order." *Webster's*. Again, because the parties have not provided a definition for the term "disposed on" from the perspective of one with ordinary skill in the broaching trade, the Court relies on the dictionary definition to determine the term's ordinary meaning. The ordinary meaning of the term "disposed on" conveys that the planar abutment surfaces are placed upon something, the tool holder body in this instance.

[12] [13] The Court next considers the specifications and the prosecution history for further guidance and to resolve the lack of clarity surrounding the inventor's intentions regarding the tool holder structure. *Interactive Gift*, 256 F.3d at 1331 (Fed.Cir.2001). Claim terms should be construed to sustain their validity, when possible, and should be read in light of the specifications. *Process Control, Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1356 (Fed.Cir.1999), *cert. denied*, 529 U.S. 1037, 120 S.Ct. 1531, 146 L.Ed.2d 346 (2000)(citing *Vitronics*, 90 F.3d at 1582). Furthermore, the Court may restrict a claim term's ordinary meaning when the intrinsic evidence shows that "the patentee distinguished the term from prior art on the basis of a particular embodiment." *CCS Fitness*, 288 F.3d at 1366.

The specifications state that the flat faces of the cutting tool directly contact the flat faces of the tool holder. '857 Patent, Col. 4, ll. 19-23. The precision with which the flat faces of the cutting tool and tool holder are ground facilitate the elimination of clearances and a more accurate positioning of the cutting tool. '857 Patent, Col. 4, ll. 27-32. Reading Claim 1 in light of this specification, as well as in light of Figures 1 and 2 of the '857 Patent, indicates that the planar abutment surfaces of the cutting tool and the tool holder must "directly contact" each other, in order to achieve the purpose of this invention-to eliminate clearances, as discussed more fully in Part III.A.2, *infra*. A multi-piece assembly whereby parts would be added to constitute the planar abutment surfaces, as Utica proposed at the Hearing, would frustrate Claim 1's instruction that the cutting tool's planar abutment surfaces "be complementary ... to the first planar and second planar abutment surfaces disposed on said broach tool holder." '857 Patent, Col. 7, ll. 47-49.

The specifications also state that with the prior art, it was impossible to have zero tolerance between the outside diameter of the cutting tool and the inside diameter of the tool holder. '857 Patent, Col. 3, ll. 45-48. The prior art thus had "built-in error" due to the movement of a radial wedge or key into the "V" notch or key slot, "until surface-to-surface contact is obtained" by the complementary outer diameter of the cutting tool and inside diameter of the tool holder. '857 Patent, Col. 3, ll. 50-53. "The present invention eliminates the above described built-in error." '857 Patent, Col. 3, ll. 54-55. Any multi-piece assembly would invalidate the current invention's ability to eliminate built-in error, because a multi-piece assembly makes it "impossible to have zero tolerance" between the cutting tool and the tool holder. '857 Patent, Co. 3, ll. 46-47. Inasmuch as the Court finds that Utica defined over the prior art by representing to the PTO that this invention would eliminate the errors caused by radial wedges or keys, "V" notches or key slots, in other words, multiple pieces that generate clearances between the cutting tool and the tool holder, the Court holds that the tool holder must be a single, one-piece structure upon which the planar abutment surfaces are formed as a unitary part.

## 2) "Predetermined Accurate Work Position"

[14] The relevant portion of Claim 1 reads:

said method comprising the steps of positioning said two planar abutment surfaces of said broach cutting tool member contiguous said first planar and said second planar abutment surfaces, respectively, of said broach tool holder and simultaneously locating said bottom end surface of said broach cutting tool member on said intermediate surface of said broach tool holder whereby when said broach cutting tool member is positioned in said broach tool holder a predetermined accurate work position is established for said broach cutting tool member ... '857 Patent, Col. 7, ll. 57-67.

Utica contends that the term, "predetermined accurate work position," should be given the ordinary meaning that a person of ordinary skill in the art would attribute to it. Utica asserts that "predetermined" means to determine beforehand or to settle in advance, and that "accurate" means free from error or mistake, precisely fixed, executed with care. *Webster's*. Utica proposes that predetermined accurate work position means "a work position that was determined in advance and in which care was taken to make it as free from error or mistake as reasonably possible." Pl.'s Post-Markman Br., p. 6. Utica also relies on Roseliep's testimony that the predetermined accurate work position is determined by the designer in advance by measuring from the center axis of the tool to the planar surfaces, and then machining the planar surfaces to accurately reflect that measurement. Hearing Tr., p. 27. Utica posits that Federal Broach's President, William Martin ("Martin"), also testified that the cutting tool's work position is measured from the center axis of the cutting tool to the

appropriate surface. Hearing Tr., p. 91.

Federal Broach contends, however, that predetermined accurate work position means "a position in which the tool is supported on the tool holder with the complementary planar abutment surfaces of the tool and the tool holder in engagement with one another with no clearance between the surfaces." Def.'s Post-Markman Br., p. 6. To support its contention, Federal Broach relies on Claim 1's plain language, as well as the specification that "it is an object of the present invention to provide a cutting tool retention device that provides for accurate positioning of a cutting tool by eliminating any clearance between the cutting tool and the tool holder." '857 Patent, Col. 2, ln. 61. Federal Broach further relies on the specification that "the accuracy in positioning the cutting tool 12 is improved because the clearance between the mounting block hole and the cutting tool, as shown in the prior art, is eliminated." '857 Patent, Col. 6, ln. 45 (referencing FIGS. 1-5). Federal Broach also references Utica's statements to the PTO on two occasions that

when the broach cutting tool is mounted in a broach tool holder, the two precision planar faces of each of the broach cutting tool and broach tool holder are forced against each other by the use of the locking force applied against the oblique portion of the third planar surface locking so as to generate an accurate work position. *See* Def.'s Markman Br., App. C, Preliminary Amendment, Aug. 22, 2000, p. 10; PTO Prosecution History, Dec. 21, 2000, Reply, p. 8.

Utica's contention that predetermined accurate work position should be limited to its ordinary meaning is expressly contradicted by the specification's clear, unambiguous, and express language that an object of the invention is to eliminate any clearance between the cutting tool and the tool holder. In its initial brief, Utica represented to this Court that:

In other words, the flat mounting surfaces of the tool holder against which the corresponding abutment surfaces of the cutting tool will be radially positioned are fixed and *not subject to accumulated clearances or tolerances that would compromise the accuracy of that location*, as the wedge like device locates and locks the cutting tool into the tool holder. Because the flat mounting surfaces of the tool holder are in a fixed position, rather than fitted into a slot or bore, there is a net surface that remains in the same position as the cutting tool is located and locked into place. *This creates a predetermined accurate work position not only when the tool is initially installed, but also when resharpened, refurbished, or replacement tools are positioned and locked into the tool holder.* Pl.'s Br. Regarding Claim Construction, p. 9 [Emphasis added].

The Court is not persuaded that the term "predetermined accurate work position" should be given its ordinary meaning, and doubts that upon reading the '857 Patent in its entirety, particularly upon reviewing Roseliep's representations to the PTO, a person of ordinary skill in the art would ascribe the meaning for which Utica advocates. In fact, the specifications state that "[i]t should be appreciated by those skilled in the art that the closer the tolerance obtained in manufacturing the flat faces ... the higher the accuracy of the radial positioning of the cutting tool." '857 Patent, Col. 4, ln. 27-32. Though the language of Claim 1 itself does not limit the term "predetermined accurate work position" to the elimination of clearances, this Court cannot ignore the construction Roseliep gave when he presented his invention to the PTO in order to obtain the patent. *Teleflex*. 299 F.3d at 1326.

The Court agrees that the term "predetermined" means determined beforehand or settled in advance. *Webster's*. The Court finds that Roseliep's and Martin's testimony that the cutting tool's position is measured from its center axis to the appropriate surface of the tool holder is consistent with this definition. As previously indicated, however, the specifications and the prosecution history, here in evidence, indicate that

the inventor intended to deviate from the ordinary meaning of the term "accurate," 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; *see also* *Beckson Marine, Inc. v. NFM, Inc.*, 292 F.3d 718 (Fed.Cir.2002)(explaining that "the inventor may act as his own lexicographer and use the specification to supply implicitly or explicitly new meanings for terms"). The inventor amended Claim 1 with the PTO to indicate that the predetermined accurate work position specifically meant that the "planar faces of the tool and tool holder are forced against each other." *Def.'s Markman Br., App. C, Preliminary Amendment*, Aug. 22, 2000, p. 10; PTO Prosecution History, Dec. 21, 2000, Reply, p. 8.

While adhering to the admonishment that claim terms should be given their ordinary meaning and that the limitations of the specifications should not be imported into the claim language, the Court may look to the specifications for guidance and context for claim construction, as well as to the prosecution history when it appears that the inventor offered a particular embodiment in order to obtain the patent. *Ecolab*, 264 F.3d at 1366 (Fed.Cir.2001). The Court, thus, is constrained to grant a construction of the term predetermined accurate work position that includes a reference to the elimination of clearances because it appears that the inventor ascribed that meaning to the claim term in the patent's specifications, as well as in the inventor's representations to the PTO and to this Court. The Court finds that the term "predetermined accurate work position" means the fixed placement of the tool in the tool holder. This placement is achieved by precisely measuring the distance from the surface of the center axis of the tool to the appropriate surfaces of the tool holder in advance, such that the flat mounting surfaces of the tool directly contact the corresponding surfaces of the tool holder, without any spaces in between, thereby maintaining the cutting tool's original placement until the tool is removed.

### **3) Locking Step**

Utica asserts that the claim language does not limit the locking force to any particular device or to a single device, as long as the lateral and downward locking force components impose a locking force on at least a portion of the third planar surface of the cutting tool. Utica argues that this construction is consistent with the statement in the specification that the invention may be practiced other than as specifically described. '857 Patent, Col 7, ll. 21-24. Contrarily, Federal Broach asserts that the locking force is generated by a single locking member that must act alone to secure the tool in the tool holder. The relevant language of Claim 1 reads:

said method comprising the steps of positioning said two planar abutment surfaces ... whereby a predetermined accurate work position is established; and

locking said broach cutting tool member in said predetermined accurate work position, by imposing a locking force on said at least a portion of said third planar abutment surface of said broach cutting tool member, said locking force having a force component directed towards said two planar abutment surfaces of said broach cutting tool member and a force component directed downward from said top surface towards said intermediate surface of said broach tool holder to securely hold said broach cutting tool member in said broach tool holder. '857 Patent, Col. 7, ll. 57-58, 65-67; Col. 8, ll. 1-11.

[15] The parties do not dispute that Claim 1 is an independent method claim. Although the parties neither briefed nor argued its applicability, s. 112, para. 6 is instructive.FN2 By associating the word "steps" with two functions-establishing a predetermined accurate work position and locking the tool in the tool holder-Claim 1 contains express step-plus-function language to describe the locking element. This language creates

the presumption that s. 112, para. 6 governs the Court's construction of the locking force element. *Relume Corp. v. Dialight Corp.*, 63 F.Supp.2d 788, 798 (E.D.Mich.1999) (citing *Al- Site Corp. v. VSI Int'l, Inc.*, 174 F.3d 1308, 1318 (Fed.Cir.1999))(holding that the use of "means for" or "step for" terminology typically invokes s. 112, para. 6). The presumption that s. 112, para. 6 applies is rebutted if the claim itself recites sufficient structures or materials to perform the stated function. *Al- Site*, 174 F.3d at 1318 (citing *Sage Prods., Inc. v. Devon Indus., Inc.*, 126 F.3d 1420, 1427-28 (Fed.Cir.1997)). A claim recites sufficient structure when it elaborates the structure, material, or acts necessary to perform entirely the recited function. *See Sage*, 126 F.3d at 1427-28.

FN2. 35 U.S.C. s. 112, para. 6 reads:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

[16] When construing a step-plus-function limitation pursuant to s. 112, para. 6, the Court first must identify the function explicitly recited in the claim. *Asyst Tech., Inc. v. Empak, Inc.*, 268 F.3d 1364, 1369 (Fed.Cir.2001) (citations omitted). Next, the Court must identify the "corresponding structure set forth in the written description that performs the particular function set forth in the claim." *Id.* The proper application of s. 112, para. 6, mandates reading the claim element to embrace distinct and alternative structures described in the specifications that perform the claimed element. *Ishida Co. v. Taylor*, 221 F.3d 1310, 1316 (Fed.Cir.2000)(citing *Serrano v. Telular Corp.*, 111 F.3d 1578, 1583 (Fed.Cir.1997)). s. 112, para. 6, does not, however, "permit incorporation of structure from the written description beyond that necessary to perform the claimed function." *Asyst Tech.*, 268 F.3d at 1370 (quoting *Micro Chem., Inc. v. Great Plains Chem. Co.*, 194 F.3d 1250, 1257-58 (Fed.Cir.1999)). Structural features that do not actually perform the recited function do not constitute corresponding structure and thus do not serve as claim limitations. *Id.* (citing *B. Braun Med., Inc. v. Abbott Labs.*, 124 F.3d 1419, 1424 (Fed.Cir.1997)). Additionally, once the corresponding structure(s) is identified, its scope cannot be extended solely by the inventor's statement that unspecified structures may perform the same function. *See Fonar Corp. v. General Electric Co.*, 107 F.3d 1543, 1551-52 (Fed.Cir.1997).

[17] Since Claim 1 does not recite definite structures that will generate the locking force, the presumption that s. 112, para. 6, applies is unrebutted. *Al- Site*, 174 F.3d at 1318. Therefore, the Court will construe the claim to cover the corresponding structures described in the specifications and their equivalents. *Id.* As an initial matter, the Court finds that the function of the locking step in Claim 1, is to provide adequate force to securely or firmly retain the cutting tool in the tool holder in the predetermined accurate work position, as that term was defined earlier in this Opinion. '857 Patent, Col. 8, 11. 1-2, 10-12; *Asyst Tech.*, 268 F.3d at 1369.

The Court next must identify the corresponding structures that retain the cutting tool in the tool holder in the predetermined accurate work position. *Id.* The specifications indicate that a "wedge lock arrangement" generates the locking force. *See, e.g.*, '857 Patent, Col. 4, ll. 8-9; Col. 5, ll. 54-61. The wedge lock arrangement "includes a wedge member having a first tapered edge, a second tapered edge, a threaded collar having a cross pin, and a retaining screw." '857 Patent, Col. 5, 11. 54-58. The specifications also reference "an optional configuration of the wedge lock arrangement" which would have only one tapered edge instead of two, however this configuration, the inventor notes, while functional, would not be optimal. '857 Patent, Col. 6, 11. 25-29. "Only one retaining device is required to hold the cutting tool in place.... By



reducing the number of parts necessary to secure the cutting tool to a single wedge lock arrangement, the time and effort required to change the tools is greatly reduced." '857 Patent, Col. 6, ll. 59-60, 63-66. The specifications go on to state that "one skilled in the art may appreciate the use of other wedge locking configurations to mount the cutting tool to the tool holder." '857 Patent, Col. 6, ll. 32-34. Finally, the specifications state that "[m]any modifications and variations of the present invention are possible .... Therefore, within the scope of the appended claims, the present invention may be practiced other than as specifically described. " '857 Patent, Col. 7, ll. 21-24.

Although the specifications state that other wedge-like configurations may be used, no such configurations are specified. Per s. 112, para. 6, the method described in Claim 1 is, thus, limited to a wedge-like device and its equivalents. Accordingly, the Court finds that the locking step described in Claim 1 is limited to a single wedge-like device, with two tapered edges, or with one tapered edge as is described in the specification's optional configuration, and its equivalents. '857 Patent, Col 6, ll.25-27. Moreover, the Court finds that the scope of the corresponding structure to perform Claim 1's stated functions cannot be extended solely by the inventor's statement that "[m]any modifications and variations are possible," or that unspecified structures may perform the same function. '857 Patent, Col. 7, ll. 21-24; *see* Fonar, 107 F.3d at 1551-52.

### **B. Claim 3**

Utica contends that, at least with regard to the locking step, Claim 3 is broader than Claim 1, because Claim 3 does not require that the locking force be imposed "to securely hold said broach cutting tool member in said tool holder." '857 Patent, 8, ll. 10-11. Claim 3, Utica argues, only requires that the locking force result in a downward force component from the top surface towards a lower surface. Federal Broach asserts that Claim 3 is incomplete and indefinite because it does not require the bottom of the tool to be supported on anything and the tool must be supported in some way, nor does it require the locking force to be in the direction of the intermediate surface, which surface is not recited in Claim 3. Federal Broach maintains that, other than the differences mentioned, the same claim language appears in Claims 1 and 3, and that those claim terms should be given the same construction.

[18] [19] [20] The doctrine of claim differentiation generally instructs that each claim of a patent is presumptively different in scope. *Comark Communications, Inc. v. Harris Corp.*, 156 F.3d 1182, 1187 (Fed.Cir.1998). This presumption, nevertheless, "can not broaden claims beyond their correct scope." *Fantasy Sports Prop., Inc. v. Sportsline.com, Inc.*, 287 F.3d 1108, 1115-16 (Fed.Cir.2002)(quoting *Kraft Foods, Inc. v. Int'l Trading Co.*, 203 F.3d 1362, 1368 (Fed.Cir.2000)). The presumption that each claim in a patent has a different scope, thus, is rebuttable. *Amgen Inc. v. Hoechst Marion Roussel, Inc.*, 314 F.3d 1313, 1326 (Fed.Cir.2003). When it is clear that the same claim terms are used, those terms should be given the same meaning throughout the claims. *Process Control*, 190 F.3d at 1357; *Phonometrics, Inc. v. Northern Telecom Inc.*, 133 F.3d 1459, 1465 (Fed.Cir.1998)("A word or phrase used consistently throughout a claim should be interpreted consistently"). Additionally, step-plus-function claims are governed by s. 112, para. 6, therefore, the doctrine of claim differentiation generally is inapplicable to such claims. *C.R. Bard, Inc. v. M3 Sys., Inc.*, 157 F.3d 1340, 1363-64 (Fed.Cir.1998), *cert. denied* 526 U.S. 1130, 119 S.Ct. 1804, 143 L.Ed.2d 1008 (explaining that claims governed by s. 112, para. 6 are limited by statute to the structures described in the specifications and their equivalents).

While the Court acknowledges Utica's argument that it intended for Claim 3 to have a different scope than Claim 1, the doctrine of claim differentiation cannot broaden the proper scope of the claim language. *Fantasy Sports*, 287 F.3d at 1115-16. The Court has already determined that the locking step, Utica's sole

basis for arguing that Claim 3 is broader than Claim 1, is governed by s. 112, para. 6, and, therefore, is not subject to the doctrine of claim differentiation. C.R. Bard, 157 F.3d at 1363-64.

Thus, the Court finds that the same claim terms appear in Claim 3 as appear in Claim 1, and that those terms must be given the same construction as noted in Part III.A. of this Opinion, *supra*.

### **C. Claims 6 and 7**

At the Markman Hearing, neither party requested construction of Claim 6 nor of Claim 7. Assuming that they are not in dispute, the Court declines to construe these claims. Since Claim 6 and Claim 7 both depend from Claim 3, and because the Court has found that the claim terms in Claim 3 should be given the same construction as the terms in Claim 1, accordingly, the Court will grant the terms in Claims 6 and 7 the same construction as those terms are given in Claim 1.

## **IV.**

### **ORDER CONCERNING CLAIM CONSTRUCTION**

This matter having come before the Court upon the parties' request for a Markman Hearing, which hearing was held on January 15, 2003; the Court having heard the arguments of counsel, and having heard the testimony of both parties' expert witnesses; the Court being in receipt of the parties' post-Markman Hearing briefs, and being otherwise fully advised in the premises;

Now, therefore,

IT IS ORDERED that the disputed claim terms of Claim 1 of the '857 Patent are construed as follows:

1. **TOP SURFACE.** The "top surface" means the highest part of the tool holder, beyond which nothing else extends.
2. **PLANAR ABUTMENT SURFACES.** The "planar abutment surfaces" are the flat, straight surfaces that extend downward from the top of the tool holder to the intermediate surface of the tool holder, which planar abutment surfaces are designed to come into contact with the mirror-image, corresponding surfaces of the cutting tool.
3. **TOOL HOLDER STRUCTURE.** The tool holder recited in the claims must be a single, one-piece structure upon which the planar abutment surfaces are formed as a unitary part.
4. **PREDETERMINED ACCURATE WORK POSITION.** The term "predetermined accurate work position" means the fixed placement of the tool in the tool holder. This placement is achieved by precisely measuring the distance from the surface of the cutting tool's center axis to the appropriate surfaces of the tool holder in advance, such that the flat mounting surfaces of the cutting tool directly contact the corresponding surfaces of the tool holder, without any spaces in between, thereby maintaining the cutting tool's original placement until the tool is removed.
5. **LOCKING STEP.** The locking step described in Claim 1 is limited, pursuant to 35 U.S.C. s. 112, para. 6, to a single wedge-like device, with two tapered edges, or with one tapered edge as is described in the specification's optional configuration, and its equivalents.

IT IS FURTHER ORDERED that the above construction of Claim 1 of the '857 patent will govern the disputed claim terminology contained in Claims 3, 6 and 7. This construction of the '857 patent shall govern all further proceedings in this action before this Court.

**IT IS SO ORDERED.**

E.D.Mich.,2003.

Utica Enterprises, Inc. v. Federal Broach and Machine Co.

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