

**UNITED STATES DISTRICT COURT**  
**WESTERN DISTRICT OF LOUISIANA**

**BARNETT OUTDOORS, LLC**

**\*CIVIL NO. 6:08-1916**

**VERSUS**

**\*MAGISTRATE JUDGE HILL**

**HUNTER'S MANUFACTURING  
COMPANY, INC.**

**\*BY CONSENT OF THE PARTIES**

**RULING ON CLAIM CONSTRUCTION**

This patent case is before the Court for construction of the two disputed claim terms in United States Patent No. 6,901,921 (“the 921 Patent”), that is, the terms “foot stirrup” and “interposed between”.<sup>1</sup> Plaintiff, Barnett Outdoors, LLC (“Barnett”) accuses the Defendant, Hunter’s Manufacturing Company, Inc. (“Hunter’s”) of infringing the claims of the 921 Patent. More specifically, the alleged infringing crossbows are the “Phantom CLS,” “Shadow CLS,” “Phantom Xtra CLS” and “Defender CLS” crossbows.

The Court conducted a hearing pursuant to *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 390, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996) (“the *Markman* hearing”) on May 18, 2010.<sup>2</sup> Upon review and consideration of the evidence before the Court, the claim construction and post-*Markman* hearing briefs filed by the parties<sup>3</sup>, the arguments presented by counsel at

---

<sup>1</sup>The parties originally submitted several claim terms for construction. [rec. doc. 33]. However, prior to the hearing, the parties agreed upon a construction of all disputed claim terms, except “foot stirrup” and “interposed between”. [rec. doc. 63]. Thus, these two terms are the sole remaining disputed claim terms for this Court’s construction. This understanding was verified by the Court at the *Markman* hearing.

<sup>2</sup>The transcript of the *Markman* hearing has been filed in the record. [rec. doc. 70].

<sup>3</sup>Barnett filed an Opening Claim Construction Brief [rec. doc. 37], a Rebuttal Brief on Claim Construction [rec. doc. 49], a Sealed Supplemental Rebuttal Claim Construction Brief [rec. doc. 60] and a Post-*Markman* Hearing Brief [rec. doc. 75]. Hunter’s filed an Opening Claim Construction Brief [rec. doc. 43], a Rebuttal Brief on Claim Construction [rec. doc. 51], a Sealed Supplemental Rebuttal Claim Construction Brief [rec. doc. 57] and a

the *Markman* hearing, and the controlling legal authority, the Court issues this Ruling on Claim Construction.

### **Background**

Barnett is the assignee and owner of the 921 Patent, issued June 7, 2005, and titled “Crossbow with Inset Foot Claw”. The named inventor of the 921 Patent is David A. Barnett.

Foot stirrups are used when cocking the crossbow.<sup>4</sup> The user places “his foot in the stirrup to hold the front end of the crossbow against the ground while the user pulls the bow string back to a cocked position . . . .” (Barnett Ex. 1, col. 1, lines 8-12).

As stated in the “Summary of Invention” section of the 921 Patent, the object of the invention was to reduce “the overall length, including the foot stirrup,” of conventional crossbows. (*Id.* at col. 1, lines 27-29). The “Background of the Invention” section explains that conventional crossbows included a foot stirrup that “extended out of the front end of the stock, thus being positioned forward of the bow prods.” (*Id.* at col. 1, lines 12-15).

The “Background of the Invention” section also explains that users of shorter stature have experienced difficulty “bending over the combined length of the crossbow stock and the forwardly projecting stirrup to grasp the string for cocking.” (*Id.* at col. 1, lines 18-21). To overcome this problem for persons of smaller stature, the inventor, David Barnett, found it “desirable to develop a crossbow structure in which the combined length of the crossbow stock and the foot stirrup is shorter than the conventional arrangements.” (*Id.* at col. 1, lines 22-24).

---

Post-*Markman* Hearing Brief [rec. doc. 74].

<sup>4</sup>The term “foot stirrup” is used interchangeably in the 921 Patent with the term “foot claw”.

To achieve this goal, as stated in the “Background of the Invention” section, David Barnett designed a crossbow “having a foot stirrup . . . , which foot stirrup is inset behind the bow prod.” (*Id.* at col. 1, lines 7-8). As explained in the “Description of Preferred Embodiments” section, “[b]y having the foot claw inset, rearwardly of the center portion of the bow formed by the prods 10 and 12, the effective length of the overall crossbow . . . is shorter than if the foot stirrup were placed forward of the bow. This arrangement facilitates cocking. . . by persons of shorter stature.” (*Id.* at col. 2, lines 27-33).

The “Summary of the Invention” section further explains that Barnett designed a crossbow with “a forward end to which is mounted a bow and a rearward end for engaging the shoulder of the user and a foot stirrup mounted to the stock forward end [of the crossbow] and being interposed between the stock forward end and the bow, such that a user’s foot is insertable into the stirrup to support the crossbow for cocking.” (*Id.* at col. 1, lines 32-38). That summary is consistent with the “Abstract” of the invention, which states that the crossbow “includes a foot stirrup mounted to the stock forward end interposed between the stock forward end and the bow, such that a user’s foot is insertable into such stirrup to support the crossbow for cocking.” (Barnett Ex. 1 at pg. 1).

The “Description of Preferred Embodiments” section of the 921 Patent describes a “particularly preferred embodiment of the invention” which is illustrated in figures 1-3 of the 921 Patent. (*Id.* at col. 1, lines 41-49).

The preferred embodiment includes a stock 2<sup>5</sup> with a forward end 4 and a rearward end 6. A riser 8 is affixed to the forward end 4 of the stock 2. Prods 10 and 12, which compromise the bow portion of the crossbow, are affixed to the riser 8. Compound-bow cam-shaped rollers 14 and 16 are positioned on the outermost extremities of the prods 10 and 12. Rollers 14 and 16 carry the bow string 18. (*Id.* at col. 1, line 54-col. 2, lines 4).

As further described in the “Description of Preferred Embodiments” section, the riser 8 “is preferably of the general configuration of an open-centered polygon . . . .” For example, the riser 8, “could be characterized as having a generally triangular shape, with the prods 10 and 12 mounted to the base of the triangle, and the riser [8] mounted to the stock at an apex generally opposite that base.” As an alternative example, the riser 8 “could be characterized as a generally tetragonal shape, in plane view, with the prods 10 and 12 affixed to two adjacent sides of the tetragonal figure, and the riser [8] attached to the stock at an apex of the [tetragonal] figure generally opposite the prod-mounting portions.” (*Id.* at col. 2, lines 5-16).

In the preferred embodiment described in the “Description of Preferred Embodiments” section, “the center of the riser or mount 8 is open and dimensioned to receive the foot of a user” of the crossbow. “The sole of the user’s foot . . . engages a foot engaging portion 20 of the riser or mount 8 . . .to steady the crossbow against the ground or other surface . . . while pulling the string 18 back during cocking.” “By having the foot claw inset, rearwardly of the center portion of the bow formed by the prods 10 and 12, the effective length of the overall

---

<sup>5</sup>The numbers cited in this Ruling refer to the numbers assigned to specific named parts of the invention shown in the illustration and figures of the 921 Patent.

crossbow . . . is shorter than if the foot stirrup were placed forward of the bow. This arrangement facilitates cocking . . . by persons of shorter stature.” (*Id.* at col. 2, lines 17-33).

The “Description of Preferred Embodiments” section ends with the qualification that while a preferred embodiment of the invention has been described, it is to be understood that the description is “illustrative only of the principles of this invention and is not to be considered limitative thereof.” To the contrary, “the scope of this invention is to be limited solely by the claims . . . .” (*Id.* at col. 2, lines 34-41).

The patent application (Serial No. 10/769,428) that matured into the 921 Patent was filed on January 30, 2004. The prosecution history of the 921 Patent has been entered into evidence. [Barnett Ex. 2]. The references cited during prosecution of the 921 Patent include the Duncan (114), Anderson (797) and Bower (641) Patents which describe conventional crossbows mentioned in the Background section of the 921 Patent in which the foot stirrup “extended out of the front end of the stock, thus being positioned forward of the bow prods.” [Barnett Exs. 3, 7 and 8]. The Duncan (114) describes a “foldable crossbow” that “has a stirrup . . . adapted to be engaged by the bowman’s foot to assist in anchoring the crossbow when it is cocked.” [Barnett Ex. 3, col. 2, lines 21-23]. The Anderson (797) has “a stirrup . . . mounted on the front end of the stock . . . to receive the archer’s foot when the crossbow . . . is being cocked.” [Barnett Ex. 7, col. 2, lines 11-13]. In the Bower (641) “a stirrup . . . mounted at the end of [the] barrel . . . may assist the user in cocking the crossbow. That is, by placing the stirrup . . . on the ground and putting one’s foot in it, bowstring . . . may be more easily

pulled.” [Barnett Ex. 8, col. 3, lines 19-23].

The 921 Patent contains five claims. The parties agree that claim one is the only independent claim and that the remaining four claims are dependent claims. The claims are as follows:

1. A crossbow comprising

a bow,

a stock having opposed longitudinal ends, including a forward end to which is mounted said bow, and a rearward end for engaging the shoulder of a user, and

a foot stirrup mounted to said stock forward end and being interposed between said stock forward end and said bow, such that a user's foot is insertable into said stirrup to support the crossbow for cocking.

2. The crossbow of claim 1 wherein said foot stirrup comprises a mount to attach said bow to said stock forward end.

3. The crossbow of claim 2 wherein said bow comprises two bow prods mounted to said bow mount.

4. The crossbow of claim 3 wherein said bow mount has the general configuration of an open-centered polygon, with said bow prods mounted to a portion of said polygon and the stock forward end mounted to an apex of said polygon generally opposite said prod-mounting portion.

5. The crossbow of claim 4 wherein said open center of said mount is dimensioned to receive the foot of a user, whereby the bow mount serves as the foot stirrup positioned rearwardly of the bow.

### **Legal Standard on Claim Construction**

A patent describes “the exact scope of an Invention and its manufacture to ‘secure to [the patentee] all to which he is entitled, [and] to apprise the public of what is still open to

them.” *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 373, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996) (citation omitted). Indeed, “it is only fair (and statutorily required) that competitors be able to ascertain to a reasonable degree the scope of the patentee’s right to exclude.” *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 978 (5<sup>th</sup> Cir. 1995) ( *en banc* ), *aff’d*, 517 U.S. 370, 116 S.Ct. 1384 (1996). The claims of a patent define the patented invention to which the patentee is entitled the right to exclude. *Markman*, 517 U.S. at 373-374; *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) ( *en banc* ) (citations omitted).

“Victory in any infringement suit requires a finding that the patent claim[s] ‘cover[] the alleged infringer’s product . . .’ which in turn necessitates a determination of ‘what the word[s] in the claim[s] mean.’” *Markman*, 517 U.S. at 374 (citation omitted). The meaning and scope of any disputed terms and limiting expressions in the claims are determined by the court as a matter of law. *Vivid Technologies, Inc. v. American Science & Engineering, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) *citing Markman*, 52 F.3d at 976 and *EMI Group North America, Inc. v. Intel Corp.*, 157 F.3d 887, 891 (Fed. Cir. 1998); *Markman*, 517 U.S. at 389-390. “[O]nly those terms need be construed that are in controversy, and only to the extent necessary to resolve the controversy.” *Vivid Technologies, Inc.*, 200 F.3d at 803 *citing U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997) (claim construction is for “resolution of disputed meanings”).

“The words of a claim ‘are generally given their ordinary and customary meaning.’” *Phillips*, 415 F.3d at 1312 *quoting Vitronics*, 90 F.3d at 1582. “The ordinary and customary

meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application.” *Phillips*, 415 F.3d. at 1313. This “person of ordinary skill in the art 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. . . .” *Id.*

For certain claim terms, “the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words.” *Phillips*, 415 F.3d at 1314 *citing Brown v. 3M*, 265 F.3d 1349, 1352 (Fed. Cir. 2001).

For other claim terms, however, the meaning of the claim language may be less apparent. To construe those terms, the court considers “those sources available to the public that show what a person of skill in the art would have understood disputed claim language to mean . . . [including] the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art.” *Id. quoting Innova/Pure Water, Inc. v. Safari Water Filtration Systems, Inc.*, 381 F.3d 1111, 1116 (Fed. Cir. 2004).

“[T]here is no magic formula or catechism for conducting claim construction”; the court is not barred from considering any particular source, nor is the court required to analyze



sources in any specific sequence. *Phillips*, 415 F.3d at 1324 (citations omitted). However, the court must assign the appropriate weight to each source consulted. *Id.*

Intrinsic evidence of record consists of “the patent itself, including the claims, the specification and, if in evidence, the prosecution history.” *Vitronics Corp.*, 90 F.3d at 1582 citing *Markman*, 52 F.3d at 979. The Federal Circuit has repeatedly emphasized the primary importance of intrinsic evidence in claim construction, deeming intrinsic evidence “the most significant source of the legally operative meaning of disputed claim language.” *Vitronics Corp.*, 90 F.3d at 1582; *Phillips*, 415 F.3d at 1317.

Extrinsic evidence “consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises.” *Phillips*, 415 F.3d at 1317 citing *Markman*, 52 F.3d at 980. Although extrinsic evidence may assist the court in claim construction, it is “less significant than the intrinsic record in determining the legally operative meaning of claim language.” *Id.* (internal quotations and citation omitted). This is so because, in general, extrinsic evidence is less reliable than intrinsic evidence in determining how to read claim terms.<sup>6</sup> *Id.* at 1318-1319. Moreover, intrinsic evidence

---

<sup>6</sup>The Federal Circuit has explained that, in general, extrinsic evidence is less reliable than intrinsic evidence in determining how to read claim terms because: (1) “extrinsic evidence is not part of the patent and does not have the specification's virtue of being created at the time of patent prosecution for the purpose of explaining the patent's scope and meaning”, (2) “extrinsic publications may not be written by or for skilled artisans and therefore may not reflect the understanding of a skilled artisan in the field of the patent”, (3) “extrinsic evidence consisting of expert reports and testimony is generated at the time of and for the purpose of litigation and thus can suffer from bias that is not present in intrinsic evidence”, (4) “there is a virtually unbounded universe of potential extrinsic evidence of some marginal relevance that could be brought to bear on any claim construction question [and] each party will naturally choose the pieces of extrinsic evidence most favorable to its cause” and (5) “undue reliance on extrinsic evidence poses the risk that it will be used to change the meaning of claims in derogation of the ‘indisputable public records consisting of the claims, the specification and the prosecution history,’ thereby undermining the public notice function of patents. *Id.* at 1318-1319.

constitutes “the public record of the patentee’s claim, a record on which the public is entitled to rely” in ascertaining the scope of the patentee's claimed invention to design around it. *Vitronics Corp.*, 90 F.3d at 1583. Allowing the public record to be altered or changed by extrinsic evidence would make this right meaningless. *Id.*

Within the class of intrinsic evidence, the claims themselves provide substantial guidance as to the meaning of particular claim terms. *Phillips*, 415 F.3d at 1314 *citing Vitronics*, 90 F.3d at 1582 and *ACTV, Inc. v. Walt Disney Co.*, 346 F.3d 1082, 1088 (Fed. Cir. 2003) (“the context of the surrounding words of the claim also must be considered in determining the ordinary and customary meaning of those terms”). In the absence of modifiers, general descriptive terms are typically construed as having their full meaning. *Innova/Pure Water, Inc.*, 381 F.3d at 1118. The context in which a term is used in the asserted claim can be highly instructive. *Phillips*, 415 F.3d at 1314. Other claims of the patent in question, both asserted and unasserted, can also be valuable sources of enlightenment as to the meaning of a claim term. *Id. citing Vitronics*, 90 F.3d at 1582. Because claim terms are normally used consistently throughout the patent, the usage of a term in one claim can often illuminate the meaning of the same term in other claims. *Id. citing Rexnord Corp. v. Laitram Corp.*, 274 F.3d 1336, 1342 (Fed. Cir. 2001) and *CVI/Beta Ventures, Inc. v. Tura LP*, 112 F.3d 1146, 1159 (Fed. Cir. 1997).

Differences among claims can also be a useful guide in understanding the meaning of particular claim terms. *Id. citing Laitram Corp. v. Rexnord, Inc.*, 939 F.2d 1533, 1538 (Fed.

Cir. 1991). For example, the doctrine of claim differentiation creates a presumption that each claim in a patent has a different scope. *SunRace Roots v. Enterprise Co., Ltd. v. SRAM Corp.*, 336 F.3d 1298, 1302 (Fed. Cir. 2003); *Wenger Mfg. v. Coating Machinery Systems, Inc.*, 239 F.3d 1225, 1234 (Fed. Cir. 2001). Thus, the presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim. *Phillips*, 415 F.3d at 1315 citing *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 910 (Fed. Cir. 2004). This presumption is strongest when the limitation in dispute is the only meaningful difference between an independent and a dependent claim. *Liebel-Flarsheim Co.*, 358 F.3d at 910.

The claims, of course, do not stand alone. Rather, they are part of “a fully integrated written instrument,” consisting principally of a specification that concludes with the claims. For that reason, claims “must be read in view of the specification, of which they are a part.” *Id. citing Markman*, 52 F.3d at 978-979. The specification “is always highly relevant to the claim construction analysis” and “is the single best guide to the meaning of a disputed term.” *Id. citing Vitronics Corp.*, 90 F.3d at 1582. This is so because “the words of the claims must be based on the description [in the specification] . . .” and, hence, the specification is “the best source for understanding a technical term . . . from which it arose.” *Id. citing Standard Oil Co. v. Am. Cyanamid Co.*, 774 F.2d 448, 452 (Fed. Cir. 1985), *Multiform Desiccants*, 133 F.3d at 1478 and *Metabolite Labs., Inc. v. Lab. Corp. of Am. Holdings*, 370 F.3d 1354, 1360 (Fed. Cir. 2004).

The importance of the specification in claim construction derives from its statutory role. The close kinship between the written description and the claims is enforced by the statutory requirement that the specification describe the claimed invention in “full, clear, concise, and exact terms.” *Phillips*, 415 F.3d at 1316 *citing* 35 U.S.C. § 112, ¶ 1. Consistent with that general principle, cases recognize that the specification may reveal a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess. In such cases, the inventor's lexicography governs. *Id.* In other cases, the specification may reveal an intentional disclaimer, or disavowal, of claim scope by the inventor. In that instance as well, the inventor has dictated the correct claim scope, and the inventor's intention, as expressed in the specification, is regarded as dispositive. *Id.* For example, where the patent criticizes a feature of prior products, such criticism operates as a clear disavowal of that feature. *Astrazeneca AB, et al. v. Mutual Pharmaceutical Company, Inc.*, 384 F.3d 1333, 1340 (Fed. Cir. 2004).

The patentee's choice of preferred embodiments can shed light on the intended scope of the claims.<sup>7</sup> *Astrazeneca AB*, 384 F.3d at 1340. However, “particular embodiments appearing in the specification will not generally be read into the claims . . . . What is patented is not restricted to the examples, but is defined by the words in the claims if those claims are

---

<sup>7</sup>In *Phillips*, the Federal Circuit explained that “[o]ne 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 [keeping 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 a best mode for doing so], 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.” *Phillips*, 415 F.3d at 1323 (citations omitted).

supported by the specification in the manner required by [the Patent Act].” *Specialty Composites v. Cabot Corp.*, 845 F.2d 981, 987 (Fed. Cir. 1988) (citations omitted); *Phillips*, 415 F.3d at 1323. Thus, the Federal Circuit has “expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment.” *Phillips*, 415 F.3d at 1323 *citing Gemstar-TV Guide*, 383 F.3d at 1366. Thus, “even where a patent describes only a single embodiment, claims will not be ‘read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using words or expressions of manifest exclusion or restriction.’” *Innova/Pure Water, Inc.*, 381 F.3d at 1117 *citing Liebel-Flarsheim*, 358 F.3d at 906 *quoting Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1327 (Fed. Cir. 2002).

The prosecution history, which is likewise designated as part of the intrinsic evidence, should be considered by the court, if it is in evidence. *Phillips*, 415 F.3d at 1317 *citing Markman*, 52 F.3d at 980, *Graham v. John Deere Co.*, 383 U.S. 1, 33, 86 S.Ct. 684, 15 L.Ed.2d 545 (1966) (“[A]n invention is construed not only in the light of the claims, but also with reference to the file wrapper or prosecution history in the Patent Office.”). The prosecution history consists of the complete record of the proceedings before the PTO and includes the prior art cited during the examination of the patent. *Id. citing Autogiro*, 384 F.2d at 399.

This “‘undisputed public record’ of proceedings in the PTO is of primary significance in understanding the claims.” *Markman*, 52 F.3d at 980 *citing Autogiro*, 384 F.2d at 397. Thus, the “court has broad power to look to the prosecution history of the patent in order to ascertain

the true meaning of the language used in the patent claims.” *Id.* However, because the prosecution history represents an ongoing negotiation between the PTO 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. *Id.* at 1317 (citations omitted).

Within the class of extrinsic evidence, the Federal Circuit has observed that dictionaries can be useful in claim construction. *Phillips*, 415 F.3d at 1318 *citing Renishaw*, 158 F.3d at 1250 and *Rexnord*, 274 F.3d at 1344. Dictionaries or comparable sources are often useful to assist in understanding the commonly understood meaning of words in claim interpretation. *Id.* at 1322 *citing Exhibit Supply Co. v. Ace Patents Corp.*, 315 U.S. 126, 134, 62 S.Ct. 513, 86 L.Ed. 736 (1942), *Weber Elec. Co. v. E.H. Freeman Elec. Co.*, 256 U.S. 668, 678, 41 S.Ct. 600, 65 L.Ed. 1162 (1921), *Renishaw*, 158 F.3d at 1247-53 (approving the use of dictionaries with proper respect for the role of intrinsic evidence).

Likewise, technical dictionaries may help a court “to better understand the underlying technology and the way in which one of skill in the art might use the claim terms.” *Id.* at 1318 *citing Vitronics*, 90 F.3d at 1584 n. 6. Because “dictionaries, and especially technical dictionaries, endeavor to collect the accepted meanings of terms used in various fields of science and technology, those resources have been properly recognized as among the many tools that can assist the court in determining the meaning of particular terminology to those of skill in the art of the invention.” *Id. citing Teleflex, Inc.*, 299 F.3d at 1325.

Such evidence, “may be considered if the court deems it helpful in determining ‘the true meaning of language used in the patent claims.’” *Id. citing Markman*, 52 F.3d at 980. In sum, “judges are free to consult dictionaries and technical treatises at any time in order to better understand the underlying technology and may also rely on dictionary definitions when construing claim terms. . . .” *Id.* at 1322.

However, given the primary importance of intrinsic evidence, the court’s consultation and reliance on dictionaries and technical treatises is limited to the extent that “the dictionary definition does not contradict any definition found in or ascertained by a reading of the patent documents.” *Id.* at 1322-1323 *citing Vitronics*, 90 F.3d at 1584 n. 6.

Likewise, testimony of the inventor may not be used to vary or contradict the claim language, nor contradict the import of other parts of the specification. *Vitronics*, 90 F.3d at 1584. Where patent documents are unambiguous, testimony regarding the inventor’s subjective intent as to the claim scope has no effect; such testimony cannot guide the court to a proper interpretation when the patent documents themselves do so clearly. *Id.*

In addition, a court in its discretion may rely on prior art proffered by one of the parties. *Id.* This prior art can often help to demonstrate how a disputed term is used by those skilled in the art and what those skilled in the art generally believe a certain term means. *Id.* Prior art evidence is useful “to show what was then old, to distinguish what was new, and to aid the court in the construction of the patent.” *Markman*, 52 F.3d at 980 *citing Brown v. Piper*, 91 U.S. 37, 41, 23 L.Ed. 200 (1875). Prior art cited in the prosecution history falls within the

category of intrinsic evidence, while prior art not considered by the examiner is extrinsic evidence. *Tate Access Floors, Inc. v. Interface Architectural Resources, Inc.*, 279 F.3d 1357, 1372 fn. 4 (Fed. Cir. 2002).

### **Construction of Claim Terms**

#### **Foot Stirrup**

The term “foot stirrup” appears in Claims 1, 2 and 5.<sup>8</sup>

Barnett proposes the following construction: “That piece of a crossbow defined by an opening into which a foot is placed to support the crossbow for cocking.” Barnett’s construction encompasses the entire three sided open-centered polygon, including the foot engaging bottom portion and the two sides.

Hunter’s proposes the following construction: “The piece of a crossbow where you put your foot onto to support the crossbow for cocking.” Hunter’s construction includes only the foot engaging bottom piece, upon which the user places his foot while cocking the crossbow.

For the following reasons, the Court adopts Barnett’s construction in its entirety as that construction is consistent with the intrinsic evidence and the ordinary and customary understanding of the term as used in the crossbow industry, with the addition of clarifying language as follows: That piece of a crossbow defined by an opening in to, *and onto*, which a foot is placed to support the crossbow for cocking.

---

<sup>8</sup>See fn. 4, *supra*.



The 921 Patent does not define or label “foot stirrup”. However, the 921 Patent makes clear that the “foot stirrup” encompasses both the mount or rise, 8, and the foot engaging portion, 20. Indeed, if no side structure was included, as Hunter’s suggests, there could be no opening into which “a user’s foot is insertable into” as stated in the “Abstract” and taught in both the specification (“Summary of the Invention”) and Claim 1, itself.

Claim 1 clearly states that the “user’s foot is insertable *into*” the foot stirrup, not “*onto*” the foot stirrup. Indeed, if the “foot stirrup” was limited solely to the bottom foot engaging portion as Hunter’s suggests, Claim 1 would necessarily have to have stated that the user’s foot be placed “onto” the foot stirrup, as it is impossible to place a foot “*into*” a solid singularly sided object.

Furthermore, Claim 2, which depends from independent Claim 1, states that the “foot stirrup comprises a mount to attach said bow to said stock forward end.” If the “foot stirrup” was limited to the bottom foot engaging portion, Claim 2 would be rendered meaningless; the figures contained in the 921 Patent make clear that the foot engaging portion, 20, does not attach the bow (or the bow prods) to the forward end of the stock, that is the function of the mount or riser, 8, which the “foot stirrup” comprises. Moreover, that “mount” is further defined in Claims 4 and 5, respectively, as “an open-centered polygon” “dimensioned to receive the foot of a user whereby the bow mount serves as the foot stirrup . . . .”

Thus, the Court cannot adopt the construction urged by Hunter’s, as a singularly sided, vertical piece *onto* which the user’s foot is placed, as that construction is contrary to the plain

language of the claims themselves. Hunter's construction cannot satisfy the criteria for the "foot stirrup" set forth in the claims, as the foot engaging portion does not attach the bow to the forward end of the stock and is neither open-centered nor dimensioned to receive the user's foot. To the contrary, the claims envision the entirety of the structure between the bow (or bow prods) and the forward end of the stock, defined by an opening, through which, and onto which, the user places his foot to cock the crossbow.

The 921 Patent's specification is consistent with this interpretation of the term "foot stirrup". The "Abstract", which briefly describes the invention, states that the invention is a crossbow that includes a foot stirrup "such that a user's foot is insertable *into* such stirrup to support the crossbow for cocking." (emphasis added). The "Summary of the Invention" section of the specification likewise describes the "foot stirrup" as encompassing a polygon with sides and a bottom by stating that the "user's foot is insertable *into* the stirrup to support the crossbow for cocking." (emphasis added). Moreover, the "Background of the Invention" section of the specification likewise describes conventional prior art foot stirrups used to cock crossbows as the entire structure into which a user places his foot to hold the crossbow for cocking by stating that "the user can place his foot *in* the stirrup . . ." (emphasis added).

Finally, the "Description of the Preferred Embodiments" of the invention makes clear that the riser or mount is not only an integral part of the foot stirrup, but actually functions as the foot stirrup teaching that "the riser, or mount, 8 is preferably of the general configuration of an open-centered polygon, suitably triangular or tetragonal figure, having a central opening . . .

the center of the riser or mount 8 is open and dimensioned to receive the foot of a user.” Thus, any construction of the term “foot stirrup” which excludes any side structure, which in this case has the dual function as serving as the riser or mount, is clearly not supported by the express language in the specification.

The Court’s construction of the term “foot stirrup” is further supported by the prior art cited in the prosecution history of the 921 Patent. Review of the drawings of the Duncan (114), Anderson (797) and Bower (641) Patents plainly reveals that conventional prior art foot stirrups were not construed as limited to the bottom piece onto which the user’s foot rested during cocking of the crossbow. To the contrary, as illustrated and labeled as 17 in Figure 1 of the Duncan (114), as 12 in Figure 1 of the Anderson (797) and as 25 in Figures 1-3 of the Bowers (641) Patents, such foot stirrups included the sides and bottom of an open-centered polygon. Moreover, the Bower (641) Patent specifically describes a preferred embodiment as employing a stirrup that assists the user to cock the crossbow “by placing [the] stirrup on the ground and putting one’s foot *in it*” so that the “bowstring may be more easily pulled.” [Barnett Ex. 8, col. 3, lines 19-22 (emphasis added)].

If the foot stirrup was limited to the bottom portion only, the user’s foot would necessarily have to have be placed *on* the foot stirrup, as opposed to *in* it. Likewise the Anderson (797) Patent describes a conventional prior art foot stirrup as “mounted on the front end of the stock to receive the archer’s foot when the crossbow is being cocked.” [Barnett Ex. 7, col. 2, lines 11-13]. The use of the word “receive” clearly contemplates putting the foot *into*

a multi-sided structure, as opposed to *onto* a single sided object. Had that been the case, the word “received” would not have been necessary for a full understanding of the term.

However, given the above construction, a clarifying modification of the construction proposed by Barnett is necessary. While Hunter’s suggests that the term cannot be construed as both permitting the foot to be placed into, as well as onto the structure, this Court’s construction allows exactly that. Because the term “foot stirrup” has been construed as a physical structure including the bottom foot engaging portion, labeled as 20 in the 921 Patent, as well as the riser or mount, labeled as 8 in the 921 Patent, the foot stirrup is not only the structure *into* which a foot is placed, but also *onto* which the foot is placed for cocking. Additional clarifying language is thus necessary to ensure that the term includes and fully conveys the function of the foot stirrup – to support the crossbow against the ground while cocking.

In light of the above cited intrinsic evidence, the Court need not look to extrinsic evidence to determine how a person of ordinary skill in the art would understand the term “foot stirrup” as suggested by Hunter’s. To the contrary, given the primary importance this intrinsic evidence, it would be error for this Court to look to less significant and less reliable extrinsic evidence, which invariably would alter or change the public record, on which the public is entitled to rely in ascertaining the meaning of the claim terms. *See Phillips, supra.*

In accordance with the above analysis, “foot stirrup” is construed as follows: That piece of a crossbow defined by an opening into and onto which a foot is placed to support the crossbow for cocking.

### **Interposed Between**

The term “interposed between” appears in Claim 1.<sup>9</sup>

Hunter’s proposes the following construction: “Located in the space forward of the stock forward end and rearward of the bow.”

Barnett proposes the following construction: “Inserted into or across a space separating two points.”

For the following reasons, the Court adopts Hunter’s construction in its entirety as that construction is consistent with both the intrinsic evidence and is consistent with the notice function of a Patent.

Barnett argues that the term has no “unique definition” in the crossbow industry and therefore should be construed in accordance with dictionary definitions of each word appearing in the term which represents the “widely accepted meaning of [these] commonly understood words.” While the Court agrees that dictionary definitions may be helpful, the Court cannot rely on these definitions in a vacuum as it is not “readily apparent” to the Court how the term would be understood by a person of skill in the art. *See Phillips*, 415 F.3d at 1313. To make that determination, it is necessary “to read the claim term not only in the context of the

---

<sup>9</sup>Although consisting of two words, the Court will refer to the phrase collectively as a single “term.”

particular claim in which the disputed term appears, but in the context of the entire patent. . . .”

*Id.*

While the term appears in the Abstract and Summary of the Invention, it is used in those sections identically as set forth in Claim 1. However, no specific definition is given to the term in the 921 Patent. More specifically, Claim 1, in which the term appears, does not explain whether part of the foot stirrup may extend forward of the bow prods. The meaning conveyed by the term may nevertheless be construed by examination of the Background of the Invention, the Description of the Preferred Embodiments and the language of, and differences among, the five claims set forth in the 921 Patent. *See Markman*, 52 F.3d at 979 (“Claims must be read in view of the specification, of which they are a part.”).

The 921 Patent specification reveals that the inventor, David Barnett, limited the scope of the term “interposed between” in Claim 1. The “Background of the Invention” section clearly explains that the sole purpose of the invention was to facilitate crossbow use by persons of shorter stature by shortening “the combined length of the crossbow stock and the forwardly projecting stirrup” of prior art crossbows. The 921 Patent admits that prior art crossbows included a foot stirrup which “extended out the front end of the stock of the crossbow, thus being positioned forward of the bow prods.” Indeed, the prior art cited during the prosecution of the 921 Patent included crossbow with foot stirrups entirely in front of the bow prods (Anderson 797, Bower 641). In order to set the Barnett crossbow apart from these prior art

crossbows, David Barnett, developed a crossbow “having a foot stirrup . . . , which foot stirrup is *inset behind the bow prod.*” (emphasis added).

Furthermore, as explained in the “Description of Preferred Embodiments” section “[b]y having the foot claw *inset, rearwardly of the center portion of the bow formed by the prods 10 and 12, the effective length of the overall crossbow . . . is shorter than if the foot stirrup were placed forward of the bow.* (emphasis added). This arrangement facilitates cocking . . . by persons of shorter stature.”

Thus, the only foot stirrup contemplated by, and included in, the invention is one that is inset behind the bow prods, not one that is merely partially behind the prods; such a feature is outside the scope of Claim 1. Where the specification makes clear that the invention does not include a particular feature, that feature is deemed to be outside the reach of the claims of the patent, even though the language of the claims, read without reference to the specification, might be considered broad enough to encompass the feature in question. *SciMed Life Systems, Inc. v. Advanced Cardiovascular Systems, Inc.*, 242 F.3d 1337, 1341 (Fed. Cir. 2001).

Despite the clear and express teachings of the 921 Patent that the foot stirrup must be located completely rearward of the bow prods, Barnett claims herein that its crossbow encompasses a design wherein the foot stirrup may extend forward of the bow prods, arguing that the phrase “interposed between” must be construed as simply meaning that the foot stirrup be partially between the bow prods and the stock forward end. That construction is not

consistent with the above cited intrinsic evidence and is further not supported for the following reasons.

The 921 Patent admits that foot stirrups of prior art crossbows extended in front of the bow or bow prods. Thus, to adopt Barnett's construction of "interposed between" would be, in essence, construing the 921 Patent as practicing prior art. Indeed, the Patent would not have been issued if this were, in fact, the case since the invention would be encompassed by the admitted prior art.

To remedy that obvious result, the 921 Patent disclaims these prior art crossbows in which the foot stirrup extended in front of the bow or bow prods, by criticizing that design as not suitable for shorter persons. Such criticism of this feature of the prior art crossbows operates as a clear disavowal of the feature. *See Astrazeneca AB*, 384 F.3d at 1340. This disavowal in the specification dictates the correct construction of the claim scope and the inventor's intention expressed therein is regarded as dispositive. *See Phillips*, 415 F.3d at 1316. In light of this clear disavowal of prior art crossbow foot stirrups, the Court concludes that the terms "interposed between" should be construed narrowly, and that one skilled in the art reading Claim 1 would conclude that the terms do not encompass a crossbow with some portion of the foot stirrup forward of the bow prods.

Moreover, since the sole object of the invention is to shorten the length of the crossbow, to construe "interposed between" as permitting extension of the foot stirrup beyond the bow prods, would be contrary to the invention's stated sole objective – to decrease the overall



length of the crossbow. Any construction in which the foot stirrup extends beyond the bow prods would necessarily increase, rather than decrease the overall length of the crossbow, and, thereby, negate the inventor's solution to the problem encountered by users of shorter stature, who admittedly have difficulty bending over the combined length of both the crossbow stock and foot stirrup.

Hunter's proposed construction, construing the term "interposed between" to mean that the foot stirrup be located entirely in the space forward of the stock forward end and rearward end of the bow, is consistent with the accomplishment of the 921 Patent's stated objective.

Furthermore, while it is improper to limit the claims to the particular preferred embodiments described in the specification, the patentee's choice of preferred embodiments can shed light on the intended scope of the claims. *See Astrazeneca AB*, 384 F.3d at 1340-1341. Tellingly, in this case, the preferred embodiment describes the foot stirrup or "foot claw" as "inset, rearwardly of the center portion of the bow formed by the prods . . ." and all three drawings illustrating the preferred embodiment of the Barnett invention show exactly that – the entire foot stirrup located rearward of the bow prods with no portion of the stirrup extending in front of the bow prods. This fact adds further support to the conclusion that the term "interposed between" in Claim 1 should be construed as Hunter's suggests.

Additionally, although David Barnett testified that he made four prototypes of his invention, only the fourth prototype, with the foot stirrup completely behind the bow prods, is described in the 921 Patent. That testimony is supported by the intrinsic evidence and the

above analysis. Under black letter patent law, a patent must apprise to the public of the limits of the patentee's property right, that which is not open to them; thus, competitors must be able to ascertain, to a reasonable degree, the scope of the patentee's right to exclude. *See Markman*, 517 U.S. at 373-374; *Markman*, 52 F.3d at 978. Likewise, an important consideration in claim construction is whether the patent has given adequate notice to the public of the proposed claim construction. *Dayco Products, Inc. v. Total Containment, Inc.*, 258 F.3d 1317, 1324 (Fed. Cir. 2001).

In light of the above analysis, the novel and distinguishing feature of the Barnett crossbow is that the foot stirrup is located behind the bow prods to shorten the overall length of the crossbow. Nowhere does the 921 Patent disclose that having any portion of the foot stirrup forward of the bow prods is a part of the invention. To the contrary, David Barnett's criticism and distinction of prior art foot stirrups that are forward of the bow prods excludes such a construction from the claimed invention. Moreover, while Barnett argues that the stated objective is achieved if the foot stirrup is only partially located behind the bow limbs, the Court does not find this argument persuasive, as such a construction places no limits on how far the foot stirrup could extend forward of the bow before infringing the claimed invention. For all of these reasons, the patent gives no notice to those of ordinary skill in the art that the 921 Patent encompasses crossbows with any portion of the foot stirrup forward of the bow prods.

Finally, the language of, and differences among, the five claims set forth in the 921 Patent further supports the conclusion that the term "interposed between" in Claim 1 should be

construed as locating the entirety of the foot stirrup forward of the stock forward end and completely rearward of the bow prods. Nothing in the language of Claim 1 indicates that only a portion of the foot stirrup is interposed between the stock forward end and the bow. To the contrary, if that were, in fact, the correct construction, the term a “portion” could have been included in the claim to place the public on notice of all that is claimed. Indeed, the term “portion” is used in Claim 4 in connection with another feature of the invention, describing the claimed invention as having the “bow prods mounted to a portion of said polygon.” The use of this term in Claim 4 places everyone on notice that the bow prods need only be mounted to a portion of the polygon; the term is noticeably absent from Claim 1.

Barnett argues that Hunter’s proposed construction of “interposed between” disregards the doctrine of claim differentiation, which, it argues is controlling. More specifically, Barnett argues that dependent Claim 5 limits the term “interposed between” to a foot stirrup which is “positioned rearwardly of the bow.” Barnett argues that the sole independent claim, Claim 1, being broader in scope than Claim 5 that depends from it, should not be limited to foot stirrups that are completely behind the bow. The undersigned disagrees.

As noted by the Federal Circuit in *O.I. Corporation v. Tekmar Company, Inc.*, 115 F.3d 1576, 1581 (Fed. Cir. 1997), “[a]lthough the doctrine of claim differentiation may at times be controlling, construction of claims is not based solely upon the language of other claims; the doctrine cannot alter a definition that is otherwise clear from the claim language, description, and prosecution history.” *Id.* at 1582 citing *Hormone Research Found., Inc. v. Genentech, Inc.*, 904 F.2d 1558, 1567 n. 15 (Fed. Cir. 1990) (stating that the doctrine of claim

differentiation “cannot overshadow the express and contrary intentions of the patent draftsman”). Given the above, the Court concludes that the specification provides a clear meaning for the language of the disputed claim term, “interposed between”, in this case and that this trumps the doctrine of claim differentiation.

Furthermore, review of the entirety of Claim 5 reveals that the claim limits the “open centered” bow mount described in Claim 4, not the foot stirrup described in Claim 1. In Claim 5, the open center of the mount described in Claim 4 is “dimensioned to receive the foot of a user” and it is the bow mount that is “positioned rearwardly of the bow.” Thus, the fact that the bow mount is open to receive a foot and is positioned rearwardly of the bow differentiates Claim 5 from Claim 4, as well as Claim 1. As a result, the doctrine of claim differentiation is satisfied. Moreover, because these limitations in Claim 5 are directed to the bow mount, the doctrine of claim differentiation does not require that the foot stirrup of Claim 1 be interpreted broadly as permitting location of the foot stirrup forward of the bow prods.

In accordance with the above analysis, “interposed between is construed as follows: “Located in the space forward of the stock forward end and rearward of the bow.”

### **Conclusion**

Based on the foregoing, the Court construes the disputed terms, “foot stirrup” and “interposed between” as set forth above.

Signed this 5<sup>th</sup> day of November, 2010, at Lafayette, Louisiana.

  
C. MICHAEL HILL  
UNITED STATES MAGISTRATE JUDGE