STATES COURT FOR WESTERN DISTRICT OF

HARRISONBURG DIVISION PARKER COMPOUND BOWS,

5:14cv00004 HUNTER'S COMPANY, States

TENPOINT CROSSBOW TECHNOLOGIES,

MEMORANDUM OPINION Plaintiff Parker declaratory

TenPoint ("TenPoint"), 1

Parker's infringe ofTenPoint's TenPoint's TenPoint

claim U.S. 370

TenPoint U.S. Patent "'541 Patent"); U.S. Patent

"'025 Patent"); U.S. Patent "'012 Patent"); U.S. Patent '"719 Patent"); U.S. Patent "'595 Patent"), "Narrow Power Stroke."

'.'Hunter's" "TenPoint" IN THE UNITED DISTRICT

THE VIRGINIA

INC.,)

Plaintiff,) Civil Action No.

By: Michael F. Urbanski MANUFACTURING INC.,) United District Judge d/b/a)

Defendant.)

Compound Bows, Inc. brings this judgment action against defendant Hunter's Manufacturing Company, Inc. d/b/a Crossbow Technologies

seeking a declaration that crossbows do not certain patents and that patents are invalid. counterclaims, alleging infringement of five patents in the same patent family describing certain aspects of a narrow crossbow with a large power stroke. This matter is currently before the court for construction pursuant to Markman v. Westview Instruments. Inc., 517 (1996). The issues have been thoroughly briefed and argued and are ripe for adjudication.

I. is the owner of No. 8,191,541 (the No. 8,439,025 (the No. 8,469,012 (the No. 8,479,719 (the and No. 8,763,595 (the all of which are titled Crossbow with Large These patents describe largely the same subject matter and share similar illustrations, abstracts, backgrounds and written descriptions, but 1 Parker refers to defendant as on brief. Defendant refers to itself, however, as and so will the court.

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2012. '025 2013, '012 2013, 2013.

'025 U.S. 2014. flied

2014. vary in claim scope. 2

Crossbows, used for hunting and fishing and target shooting, generally have certain features, according to the patents-in-suit. such feature is a bow assembly mounted to the main beam, comprised of a bow and bowstring used to shoot arrows. A trigger mechanism, also mounted to the main beam, holds the bowstring in a cocked position. Certain crossbows called compound bows have wheels at the opposite ends of the bow that receive the bowstring. The distance between these wheels when the crossbow is in an uncocked position is called the wheel distance. The power stroke of a crossbow is the linear distance along the main beam that the bowstring moves between the uncocked and cocked condition. Large power strokes-in the range of 16, 17, or 18 inches-are desired, as they provide the potential for more speed and energy. But previous crossbows touting large power strokes came with several disadvantages, such as difficulty cocking and a width that reduces maneuverability. The patents-in-suit claim improvement over the prior art by creating a narrow crossbow with a large powerstroke that more compact and maneuverable and easy to manually cock. The illustration appearing on the first page of each of the patents-in-suit is representative:

2 TenPoint a Provisional Application on December 1, describing a narrow crossbow. November

TenPoint filed Application No. 11/948,319, which issued as Patent No. 7,832,386 on November 16, This patent is not challenged in this suit. TenPoint filed a continuation-in-part application, which

issued as the '541 Patent on June 5, It filed three divisional applications of the '541 Patent, which issued as the Patent on May 24, the Patent on June 25,

and the '719 Patent on July 9, TenPoint filed a continuation application of the Patent, which issued as Patent No. 8,794,225 on August 5,

This patent is not challenged in this suit. TenPoint a continuation application of this patent, which issued as the '595 Patent on July 1,

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Patent, '025 Patent, '012 Patent, Patent claim

claims claims

many Parker, Parker

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claims

U.S. 370

02 1360 2008) ("When claims, dispute."

The '541 and '595 crossbows having certain dimensional claims (e.g., bow limb lengths, distances between wheels, power distances and ratios of wheel distances to power distances) and certain power (e.g., draw weights and stored energy amounts). The of the '719 Claim are directed to a foot stirrup, an element that aids a user in cocking the crossbow.

TenPoint asserts this new crossbow has revolutionized the industry leading manufacturers, including to copy TenPoint's patented invention. insists TenPoint seeks to monopolize the practice of every crossbow fitting within the dimensions of the patents-in-suit.

A number of terms are in dispute.

II. The first step in a patent infringement case is to construe the meaning and stope of the patent at issue. Markman v. Westview Instruments. Inc., 52 F.3d 967, 976 (Fed. Cir. 1995), aff'd, 517 (1996). Claim construction is a matter of law exclusively for the court. Id. at 977-79; see also Micro Int'l Ltd.

v. Beyond Innovatioh Tech. Co .. Ltd., 521 F.3d 1351, (Fed. Cir. the parties raise an actual dispute regarding the proper scope of these

the court, not the jury, must resolve that (citing Markman, 52 F.3d at 979)).

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90 "[I]he ascertain the meaning of claims, we consider three sources: The claims, the specification, and the prosecution Markman, 52 F.3d at 979 (quoting Unique Concepts, Inc. v. Brown, 939 F.2d 1558, 1561 (Fed. Cir. 1991)). intrinsic evidence is the most significant source of the legally operative meaning of disputed claim language." Vitronics Corp. v. Conceptronic, Inc., F.3d 1576, 1582 (Fed. Cir. 1996).

First, the court must look to the words of the claims themselves. The claim terms generally given their ordinary and customary meaning,'" that is, meaning that the term would have to a' person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective date of the patent application." Phillips v. AWH Corp., 415 F.3d 1303, 1312-13 (Fed. Cir. (citations omitted). inquiry into how a person of ordinary skill in the art understands a claim term provides an objective baseline from which to begin claim interpretation." Id. at 1313 (citing Innova/PureWater, Inc. v.

Safari Water Filtration Sys .. Inc., 381 F.3d 1111, (Fed. Cir. 2004)). some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even lay judges, and claim in such cases involves little more than the application of the widely accepted meaning of commonly understood words." Id. at 1314 (citing Brown v. 3M, 365 F . 1349, 1352 (Fed. Cir. 2001)).

The claims, however, do not stand alone and must be read view of the specification, of which they are a Id. at 1315 (quoting Markman, 52 F.3d at 979). A person of ordinary skill in the art tb 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." Id. at 1313. is always necessary to review the specification to determine whether the inventor has used any terms in a manner inconsistent with their ordinary meaning. The specification acts as a dictionary when it expressly defines terms used in the claims or when it defines terms by implication." Vitronics Corp., F.3d at 1582 (citing Markman, 52 F.3d at 979).

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'"including treatises,"' 980), '"to

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history." 980. "Extrinsic 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 Phillips, 415 F.3d at 1316 (citing CCS Fitness. Inc. v. Brunswick Corp., 288 F.3d 1359,

1366 (Fed. Cit. Thus, the specification is highly to the analysis. Vitron.ics Corp., F.3d at 1582. it is dispositive; it is the single best guide to the meaning of a disputed

Id. Additionally, the court must consider the prosecution history, which contains complete record of all the proceedings before the and Trademark including any express representations made by the applicant regarding the scope of the id., as well as prior art cited during the examination of the Phillips, 415 F.3d at 1317 (citing Co. of Am. v. United States, 181 Ct. Cl. 55, 384 F.2d 391, 399 (1967)). the specification, the prosecution history provides evidence of how the and the inventor understood the Phillips, 415 F.3d at 1317 (citing Lemelson v. Gen Mills. Inc., 968 F.2d (Fed. Cit. 1992)).

The claims, specification and prosecution history the public record of the patentee's and, generally, analysis of th[is] intrinsic evidence alone resolve any ambiguity in a disputed claim Vitronics Corp., F.3d at 1583. However, the court may, in its discretion, look to extrinsic evidence, expert and inventor testimony, dictionaries, and learned Phillips, 415 F.3d at 1317 (quoting Markman, 52 F.3d at in order aid the court in coming to a correct conclusion' as to the 'true meaning of the language employed' in the

Markman, 52 F.3d at (quoting Seymour v. 78U.S. 516, 546 (1871)). Although it is significant than the intrinsic record in determining the legally operative meaning of claim Phillips, 415 F.3d at 1317 (citations omitted), extrinsic evidence be helpful to explain scientific principles, the meaning of technical terms, and terms of art that appear in the patent and prosecution Markman, 52 F.3d at evidence is to be used for the

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Id. at 981. It not for the purpose of clarifying ambiguity in Id. at 986.

III. The principal construction question to be resolved in this case is a narrow one: whether the also referred to in the plural as referenced throughout the patents-in-suit has a thickness that varies continuously from the end to the hinge point. Both parties agree the term has a specific meaning that must be interpreted in light of the written specification common to this family of patents. They further agree that its definition must be framed in terms of lirnb thickness-specifically, that a bow lirnb has a varying thickness from the first end to the hinge point. The parties' dispute over the proper construction of this term is.

to whether that thickness must vary along the length from the first end to the hinge point.

Both parties direct the to the following passage from the specification:

With reference now to FIGS. 1-6, a lirnb design according to one

of this invention will now be described. Each lirnb 36 has a first end that is received within the corresponding pocket 42 and a second end 62 that is operatively connected to the bowstring 34. Each lirnb 36 also has, as seen the best in FIG. 6, a length L1, a height 111 3

(measured from bottom to top when the crossbow is held in the normal operating position), and a thickness Tl. Each lirnb 36 also has a hinge point which is the point along the length L1 at which the thickness Tl is at a It should be noted that the thickness T1 of the limb 36 according to one embodiment varies continuously along its length Ll from the first end to the hinge point This is believed to be a first in the industry as known limbs maintain a constant thickness for at least a portion (2 to 4 inches, for a non-limiting example) of the pocket engaging end. Applicants have discovered, however, that the use of a varied thickness at the first end provides unexpected advantages. Specifically, the varied thickness provides limbs that can withstand greater bending forces prior 3 Subsequent patents correct this to read height See. e.g., Patent, col. 4, 11. 47.

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TenPoint

to failing under load and reduced yibrations. The position of the hinge point to respect to the end of the limb 36 can be any position chosen with sound judgment by a person ordinary skill in the art. In one embodiment, shown in FIG. 6, the hinge point

is at least 6 inches from the end of the limb 36. It should also be noted that the pockets 42 were not Thus, it is clear that the varied thickness limbs provide the advantage. As a result, the limb length Lt can be shorter than previously thought possible. This also may contribute to the reduced ratio WD /PD described above. In one embodiment, the limb length L1 may be less than 15 inches. In a more embodiment, the limb length L1 may be less than 13 inches. In yet a more specific embodiment, shown in FIG. 6, the limb length L1 maybe about 12 inches. In yet a more embodiment, the limb length L1 maybe about 11 inches, the distance between the two pivot axis WD may be about 17.5 inches uncocked and about 13 inches when cocked. For this embodiment, the power stroke distance may be about 12 inches or greater. See. e.g., '541 col. 4, ll. 16-54 (emphasis added). Relying on this

passage, argues that it is the continuously varying thickness of the bow limbs that allows for entire patent to function-that the continuously varying thickness of the bow limbs gives rise to the invention itself:

is the only novel element which purportedly allows for shorter limb lengths and corresponding dimensional claims which comprise all of the dimensional claims which constitute a 'Narrow Crossbow with a Relatively Long Br., ECF No. 47, at 23. This is confirmed by the fact that the points out the disadvantages of the known limb design, which has constant thickness for at least a portion (2 to 4 inches, for a non-limiting example) of the pocket engaging '541 col. 4, ll. 29-31. argues: distinguishing the claimed bow limbs over the prior art, has expressly described what the claims do not cover, and by implication, surrendered protection for the disclaimed subject

Br., ECF No. 47, at 27.

disagrees, arguing the patents-in-suit disclose multiple inventions and multiple embodiments of constituent components, including bow limbs, related to its narrow crossbow technology. As plainly stated in the common specification, bow limbs with continuously varying

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"preferred embodiments," "necessary," "critical," "essential"

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specifically flrst thicknesses along their length from the end to the point are but one such embodiment. See '541 Patent, col. 4, 11. 26-28; see also '025 Patent, col. 2, 11. to yet another embodiment of invention, a bow assembly includes: ... a limb ... wherein ... the thickness of the limb varies continuously along its length from its end to its hinge TenPoint insists that it did not clearly and unmistakably disclaim limb thickness that does not vary continuously along the length of the bow limb. Bow limbs with continuously varying thicknesses are not referred to in the patents as or as or

to the invention claimed. Nor do the patents disparage bow limbs known in the prior art, according

to TenPoint. It argues, mere disclosure of known embodiments of a component and of novel embodiments of that component does not automatically disclaim known embodiment and limit the claims to just the novel embodiment of that TenPoint Resp. Br., ECF No. 53, at 18.

TenPoint directs the court's attention to the Provisional Application. See ECF No. 47-12. It points to Figure 27, arguing it portrays an area of constant thickness at the end.

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magnified flrst confirming flrst 0.5 TenPoint contends:

Figure 27 of the Provisional Application, which is drawn to scale and is the source of Figure 6 of the Patents-in-Suit, shows that the inches of the limb at the end is constant thickness, after which the limb thickness varies to the hinge point. The below drawings show portions of the end of the limb shown in Figure 27, that at least the inches at the fust end maintains a constant thickness.

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Because Figure 27 does not indicate a limb thickness to the left of the measurement within the leftmost inch, a person of ordinary skill in the art would understand that the thickness to the left of the indicated thickness remains the same as the indicted thickness. TenPoint Resp. Br., ECF No. 53, at Parker takes a different view:

Figure 27 [ ] shows a partial vertical line corresponding to a length of

inches from the end. There no corresponding limb thickness shown either at the end or at the distance of inches from it. There are, moreover, no intermediate thickness measurements shown anywhere along this inch length, except

.486 WITH which appears at an undisclosed distance between the end and the inch mark. There is no information found on Figure 27 from which it can be determined that there is any length of constant limb thickness between the end and inches from the end.

To the contrary, examination of the totality of the drawing suggests by comparison that there is not a constant thickness at the

end, pictured at the left side of the drawing. [TenPoint] clearly demarcated a portion of constant thickness to the right of the hinge point (the nonworking area of the limb) by showing two identical measurements of .491 inches of thickness at approximately inches

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TenPoint claims Provisional

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from each other (i.e. from around 9 inches to 9.5 inches from the

end). There is no similar depiction of constant thickness at the end of the bow limbs. That knew how to depict as much belies its contention that a 0.5 inch portion of constant thickness at the end is shown. Instead, Figure 27 demonstrates that intentionally left the bow limb thickness at the end vague in its drawing.

Resp. Br., ECF No. 54, at 17. The court agrees with The measurements to the right of the hinge point in Figure 27, the hinge point end of the limb, clearly depict an area of constant thickness. The thickness values increase from .412 to .440 to .486 before steadying out at .491 and .491, followed by no further thickness measurements along the next several inches oflength, plainly demonstrating a constant thickness of .491. This constant thickness is even more apparent in Figure 6 of the patents-in-suit, which is derived from Figure 27 of the Application:

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FIG.-b HP

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See, e.g., '541 Fig. 6. The right side of the drawing in Figure 6 shows three measurements of .491 followed by no further measurements, clearly indicating an area of constant thickness.

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TENPOINT: The left side, or end side, of the drawings in both Figure 27 and Figure 6 is far less clear. The inch of the bow depicted in Figure 6 contains no thickness measurements whatsoever. The measurements start at .478 at the one-inch mark and vary continuously to the hinge point. Figure 6 does not clearly portray an area of constant thickness at the end.

Nor does Figure 27. Unlike in Figure 6, the end side of the bow limb depicted in Figure 27 shows a thickness measurement of .486 WITH prior to the measurement of .478 at the one-inch mark. TenPoint insists this shows one-half inch of constant thickness at the first end: Figure 27 does not indicate a limb thickness to the left of the measurement within the leftmost inch, a person of ordinary skill in the art would understand that the thickness to the left of the indicated thickness remains the same as the indicated TenPoint Resp. Br., ECF No. 53, at 11. Whether this indeed shows an area of constant thickness is far from clear, however. There is no width measurement at the half-inch mark denoting an area of constant thickness. Neither of these supports TenPoint's position.

The parties also both cite to a portion of the Provisional Application containing a transcript of an interview between TenPoint and patent counsel in which TenPoint discloses its limb design. While somewhat to understand, this discussion appears to support Parker's contention that the inventive feature of the patents-in-suit is a continuously varying limb thickness:

Right. And I tried it in a couple different locations with a constant thickness limb and what we found is after we came back to this design with varying thickness, the original hinge location is near as I can tell the direct location and the fact that it is tapered all the way back to the butt allows this section back in here to also flex. TDB: Now is that a typical design.

Certainly you wouldn't start off designing a limb this way. TDB: Why?

Because of what I said when I tried to design the limb

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Okay TENPOINT: as a traditional limb which had a solid butt end, a grind, the hinge and then back up to the tip. TDB: see there may be even something there?

In other words, a traditional limb design I imagine a rectangle as your butt and .then backside is flat so that's the back side of the limb. And then you taper from here to the hinge and then back up to the axle. from here to here it is tapered. That's the traditional design. a limb or a compound limb, they will make the core shaped like this and then they will laminate layers on it. this section is still square here.

But in design, the back of the limb is flat and has a square part here, tapers up to the hinge and then all the way back it is tapered. There is no rectangle back here. With a square butt end which is my second and third design with this hinge location in varying locations, all the while maintaining the squared butt end.

And each time it failed. we put our original one back on, which is a 14 1/2 inch cut down to 12 inch and tried it again just to make sure that we weren't missing something within the cam. if you were to draw, this would have a square butt end.

This hinge is 9.5 or 9.27, I forget the actual number, from this butt end before you cut it, and then when you cut it off it is 6 inches. what I tried to do is make the hinge at 6 inches, but it didn't work. TDB: Do you know why?

Because this section through here, right outside of the pocket is too thick and the slope here doesn't cut the compression and the glass. These are all open You have that are open if they are cut off. It is a big glass and there are thousands of glass spiders in there. TDB:

And what would happen is these layers would lift off, in fact here is the butt right outside of the bucket. Right here. And by

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this "bow limb(s)"

"While claims," 2000), "[c]laims part."

Corp. 90 ("Usually, term."); U.S.C.

Corp., ("there fine between specification, specification"). making section through here thinner, you are thinner at the pocket now. So you are allowing the area behind the pocket. TDB: Whereas when it is all square back there ....

It doesn't bend. It is like trying to bend a 2x4 what basically will happen.

*** If you look at every limb in industry you have a square butt end tapered off. TDB: Listen to what you just told me. Everyone else does it way. Which you don't. It just reinforces all the more why feature is inventive - because it is counter intuitive. ECF No. 47-12, at 11-13, 14 (emphasis added). The Provisional Application lends support to Parker's position.

However, issue turns on the court's interpretation of the claim term in light of the specification. limitations contained in the specification are not ordinarily read into the Watts v. XL Systems. Inc., 232 F.3d 877, 882 (Fed. Cir. case law teaches that

must be read in view of the specification, of which they are a Markman v. Westview Instruments. Inc., 52 F.3d 967, 979 (Fed. Cir. 1995); see Vitronics v. Concepttonic, F.3d 1576, 1582 (Fed. Cir. 1996) [the specification] is dispositive; it is the single best guide to the meaning of a disputed see also 35 § 112(a), (b) (stating one must look to the specification and claims to determine what the inventor regards as his invention). Indeed,

the distinction between using the specification to interpret the meaning of a claim and importing limitations from the specification into the claim can be a difficult one to apply in practice. See Comark Communications. Inc. v. Harris 156 F.3d 1182, 1186-87 (Fed. Cir. 1998) is sometimes a line reading a claim in light of the and reading a limitation into the claim from the However, the line between construing terms and importing limitations can be discerned with reasonable certainty and predictability if the court's focus remains on understanding how a person of ordinary skill in the art

would understand the claim terms.

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2005).

Power

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"[a]ccording embodiment" 4

2.0; /PD "[a]ccording embodiment,"

"varies point." '025

"a stroke" "may cock."

'012 '025 Phillips v. AWH Corp., 415 F.3d 1303,1323 (Fed. Cir.

The patents-in-suit are all tided Narrow Crossbow With Large Stroke and disclose various features and embodiments thereof. The background section of the patents' specification explains that large power strokes are desired in the industry but come at a cost. such problem is the added difficulty in manually cocking the crossbow. More specifically, the operator must have relatively long arms in order to properly reach the bowstring for cocking '541 Patent, col. 1, ll. 38-41. Known crossbows with large power strokes are also difficult to cock given the increased angle of the bowstring when placing it into the cocked position. I d. at col. 1, ll. 42-45. Another problem is that known crossbows must be to achieve a large power stroke. I d. at col. 1, ll. 46-48.

Such wide crossbows may be difficult for a hunter to operate while following prey, side to side, because the crossbow is less maneuverable and the hunter is more likely to bump into surrounding objects.

What is needed is a relatively narrow crossbow having a relatively large power stroke. In this way, the disadvantages known in the art can be overcome in a way that is better, more efficient and that provides better overall results. Id. at col. 1, ll. 47-55. The specification summarizes the invention to one

as a crossbow with 'certain component parts and a wheel distance (WD)/power stroke distance (PD) ratio of less than according to other embodiments a WD ratio of less than 1.8 and 1.6, respectively; and to yet another a bow assembly including a first limb, the thickness of which continuously along its length from its first end to its hinge See. e.g., Patent, col. 1, ll. 60-67; col. 2, ll. 1-20. The summary section lists the advantages of the invention according to these embodiments as providing relatively narrow crossbow having a relatively large power that be easy to manually Id. at col. 2, 4 This summary of the embodiments of the invention appears in the Patent, Patent, '595 Patent and '719 Patent but not the '541 Patent, which leaves the description of the embodiments blank. See '541 Patent, col. 1, ll. 59-62.

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art." "A 11. 21-25.

The written description portion of the specification goes on to tout the advantages of limbs with continuously varying thicknesses, which the patentee notes are to be a first in 'the industry." '541 Patent, col. 4, 11. 28-29. Contrasting which maintain a constant thickness for a portion to 4 inches, for a non-limiting of the pocket engaging end, the specification indicates that the way to achieve a narrow crossbow with a large power stroke is through the continuously varying limb thickness:

Applicants have discovered [] that the use of a varied thickness at the first end limb provides unexpected advantages. Specifically, the varied thickness provides limbs that can withstand greater bending forces prior to failing under load and reduced vibrations. Id. at col. 4, ll. 31-35. The specification goes on to describe Figure 6 of the patents-in-suit:

In one embodiment, shown in FIG. 6, the hinge point is at least 6 inches from the first end of the limb 36. It should also be noted that the pockets 42 were not modified. Thus, it is clear that the varied thickness limbs provide the advantage. Id. at col. 4, 11. 38-42. 5

Notably, the specification explains this limb design is responsible for not only the reduced width of the crossbow, but also for the ratios listed in the summary of the invention:

As a result, the limb length L1 can be shorter than previously thought possible. This also may contribute to the reduced ratio WD described above. Id. at col. 4, ll. 42-45. Thus, the in its various embodiments summarized in the specification is attributable to the continuously varying thickness the bow limbs. See also '541 Patent, col. 5, ll. 13-16 should be noted that these inventive limb designs are not only applicable to a crossbow but would also apply to a compound bow or other bows when applied with sound judgment by a person of ordinary skill in the (emphasis added)). specification's

5 This appears to dispel any notion that Figure 6 portrays an area of constant thickness at the first end.

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defining claims." CV 13-830, 2015 2015).

"one embodiment"

embodiment" specification specific

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specification.

770, USPQ2d 1801, 1803, 1805-06

specification "not described").

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to· "a 30. emphasis on a particular feature of an invention in solving the problems of the prior art is an important factor in the Transcend Med .. Inc. v. Glaukos Corp., No.

WL 263612, at *6 (D. Del. Jan. 16,

TenPoint insists that the specification makes clear that this limb design is but

of the invention. See '541 Patent, col. 4, 11.16-17. Whether an invention is fairly claimed more broadly than the "preferred in the is a question to the content of the the context in which the embodiment is described, the prosecution history, and if appropriate the prior art, for claims should be construed, when feasible, to sustain their validity. The usage does not of itself broaden the claims beyond their support in the See [Modine Mfg. Co. v. United States Int'l Trade Comm'n, 75 F.3d 1545, 1551 (Fed. Cit. 1996)]; General American Transportation Corp. v. Cryo-Trans. Inc., 93 F.3d 766, 772, 39 (Fed. Cit. 1996) (the teaching in the was just the preferred embodiment of the invention; it is the only one

Wang Labs .. Inc. v. Am. Online. Inc., 197 F.3d 1377, 1383 (Fed. Cit. 1999). To be sure, the patents-in-suit claim various limb embodiments relating to, for example, the length of the limbs, material of the limbs, and whether there are wheels attached to the limbs. But, as Parker points out, no other limb thickness embodiment or design is ever taught, illustrated or suggested. 6

claims need

6 TenPoint insists that some disclosed embodiments do include a constant-thickness portion at the first end of the limb. See TenPoint Resp. Br., No. 53, at It points to Figure 27 of the Provisional Application, which the court has already determined does not support TenPoint's position, as well as to the transcript of the interview between TenPoint and patent counsel in the Provisional Application. TenPoint argues that one embodiment described in that interview discloses a limb length of 12 inches obtained by cutting off 2.5 inches from a prior 14.5 inch limb embodiment. It concludes, if a 14.5-inch limb were to be cut down by 2.5 inches, the resulting 12-inch limb would have either no constant-thickness portion or up to a 1.5-inch constant-thickness portion, depending on the size (2-4 inches) of the constant-thickness portion on the 14.5-inch limb." at 11. This, according to TenPoint, is a disclosed embodiment of a limb with an area of constant thickness. This argument is far too speculative. As TenPoint recognizes, the limb described could have no constant-thickness portion remaining after the cut, depending on the length of constant thickness on the original 14.5-inch limb. TenPoint surmises that to a 1.5-inch constant-thickness portion" could have remained after the cut, but this is based on its assumption that the original limb had a 2 to 4 inch portion of constant thickness, which the specification notes be non-limiting example" of areas of constant thickness on known limbs. See '541 Patent, col. 4, 1. The court simply has no idea what portion of the 14.5-inch limb described in this interview had a constant thickness prior to the cut and cannot therefore say this serves as an example of an embodiment with a disclosed constant thickness portion.

17

invention."' USA. 450 1350, 2006)

2001)).

2001),

"all invention"

configuratiop.).

"exacting." 2012). "present invention" "all embodiments"

"successful manufacture," "require[d]." not be limited to the preferred embodiment when the invention is more broadly described, 'neither do the claims enlarge what is patented beyond what the inventor has described as the Inpro II Licensing.S.A.R.L. v. T-Mobile Inc., F.3d 1355 (Fed. Cir. (quoting Netword. LLC v. Central Corp., 242 F.3d 1347, 1352 (Fed. Cir.

Parker relies on SciMed Life Sys .. Inc. v. Advanced Cardiovascular Sys .. Inc., 242 F.3d 1337 (Fed. Cir. and a number of cases cited therein, in support of its position that the patents-in- suit disclaim known bow limbs with an area of constant thickness at the first end. The court in SciMed interpreted the asserted claims in light of the specification and upheld the district court's construction of the patents as disclaiming the dual lumen configuration of the prior art in favor of the coaxial lumens claimed in the patented invention. TenPoint argues SciMed is distinguishable, because disclaimer in that case was clear and unequivocal. Indeed, the SciMed court held:

The words embodiments of the present are broad and unequivocal. It is difficult to imagine how the patents could have been clearer in making the point that the coaxial lumen configuration was a necessary element of every variant of the claimed invention. Moreover, there 'is no suggestion that the patentee made that statement unaware of the alternative dual lumen configuration, because earlier in the patent the patentee had distinguished the dual lumen configuration used in prior art devices as having disadvantages that the coaxial lumens used in the patented invention had overcome. See '594 patent, col. 3, ll. 1-22; '482 patent, col. 3, ll. 3-24; '334 patent, col. 3, ll. 8-29. (describing the dual lumen This is therefore a clear case of disclaimer of subject matter that, absent the disclaimer, could have been considered to fall within the scope of the claim language.

Id. at 1343-44. To be sure, the standard for disavowal is Thorner v. Sony Computer Entertainment Am .. LLC, 669 F.3d 1362, 1366 (Fed. Cir. However, the absence of words like and in the patents-in-suit is not dispositive of the instant dispute.

We have found disclaimer when the specification indicated that, for

a particular step was

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2007).

"pushing forces," "pushing forces" "an

invention." 1269-70 2007). also "antiquated," "inherent "deficiencies difficult" Options Sec.

used

"very invention,"

USA 450 1350, 1354---55 2006). "describes

whole," "this invention." Pacing 1021,

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O.I.

"passage"

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"passage" "[a]ll

OI the· statements." 450 "correctly

Andersen Corp. v. Fiber Composites. LLC, 474 F.3d 1361, 1367 (Fed. Cit. We have found disclaimer when the specification indicated that the invention operated by (as opposed to pulling) and then characterized the as important feature of the present SafeTCare Mfg., Inc. v. Tele-Made, Inc., 497 F.3d 1262, (Fed. Cit. We have found disclaimer when the patent repeatedly disparaged an embodiment as having inadequacies," and then detailed the [that] make it to use. Chi. Bd.

Exch .. Inc. v. Int'l Exch., LLC, 677 F.3d 1361, 1372 (Fed. Cit. 2012). Likewise, we have disclaimer to limit a claim element to a feature of the preferred embodiment when the specification described that feature as a important feature ... in an aspect of the present and disparaged alternatives to that

feature. Inpro II Licensing, S.A.R.L. v. T-Mobile Inc., F.3d (Fed. Cit. When a patentee the features of the 'present invention' as a he alerts the reader that description limits the scope of the AGA Med.

717 F.3d at 936. Technologies, LLC v. Garmin International, Inc., 778 F.3d 1024-25 (Fed. Cit. 2015). The case of Corporation v. Tekmar Company, Inc., 115 F.3d 1576 (Fed. Cit. 1997), is instructive. The patents at issue in Corporation were directed to an apparatus and method for removing water vapor from a sample to be analyzed in gas chromatograph. The Federal Circuit was charged with reviewing the district court's construction of the word not to include smooth-walled tubing. The specification in that case stated the structure for the passage included non-smooth geometries and a conical shape. The specification also distinguished prior art as

specif[ying] that the pneumatic tubing and passageways between the trap and GC are smooth-walled." Id. at 1581. The court concluded that the term did not encompass a smooth-walled, completely cylindrical structure, finding of the 'passage' structures contemplated by the written description are [] either non-smooth or conical. In addition, the description expressly distinguishes over prior art passages by stating that those passages are generally smooth-walled. has not identified anything in prosecution history contrary to those

Id.; see also Inpro II Licensing, F.3d at 1354-57 (holding district court

19

connection," "host interface" "a interface").

"one embodiment,"

"first industry,"

of

in

"bow limb(s)"

"bow limb(s)"

IV. require

Any

Parker

20 observed that the only host interface described in the specification is a direct parallel bus interface, and that the specification emphasizes the importance of a parallel connection in solving the problems of the previously used serial thus affirming interpretation of to require direct parallel bus

The dispute in this case centers on one word: continuously. Although the patentee qualifies its description of bow limbs with continuously varying thickness as but no other thickness embodiment is taught or disclosed. The specification describes the limb design as in . the and expressly touts the advantages of limbs with continuously varied thickness over the known limbs of prior art, which have a portion constant thickness at the first end. In fact, the specification attributes this limb design to the shorter limb length and reduced ratio ofWD/PD that are hallmarks of the invention.

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 question.

SciMed, 242 F.3d at 1341. Moreover, TenPoint has not identified anything in the prosecution history that suggests to the court that the term should be construed broadly.

As such, the court concludes that one skilled in the art reading the claims in light of the specification, illustrations, and prosecution history would find that the term in the context of the patents-in-suit means bow limb(s) having a continuously varying thickness from the first end to the hinge point. The court will construe these claim terms accordingly.

Four remaining claim terms construction. 7

As regards one of those claim terms, the

7 dispute over the six additional claim terms included in TenPoint's opening brief, see ECF No. 48, at 13-17, was rendered moot by Parker's withdrawal of non-infringement arguments as to these terms, which confirmed on the

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dispute." 02 2008), 2008.

640 (W.D.N.C. 2008).

"determin[e]

infringed." U.S.

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betWeen

hearing. claim construction parties agree it contains a typographical error that should be corrected by the court. As to the other three, it is primarily the scope, rather than the meaning, of these terms that is in dispute. Both parties agree that the court should give these three terms their plain and ordinary meaning. Parker proposes no construction; TenPoint also argues no construction is required and proposes a construction in the alternative, only to the extent the court finds construction necessary.

The fact that a term may have a commonly understood meaning

does not relieve the Court of its duty to construe the claims. determination that a claim term 'needs no construction' or has [a] 'plain and ordinary meaning' may be inadequate when a term has more than one 'ordinary' meaning or when reliance on a term's 'ordinary' meaning does not resolve the parties' Micro Int'l Ltd. v. Beyond Innovation Tech. Co., 521 F.3d 1351, 1361 (Fed. Cir. reh'g en bane denied June 11, Attic Tent. Inc. v. Copeland, 627 F. Supp. 2d 635, Thus, the court cannot simply adopt the plain and ordinary meaning of these terms without first resolving the parties' dispute as to the scope of the claims at issue.

The purpose of claim construction is to the meaning and scope of the patent claims asserted to be Markman v. Westview Instruments. Inc., 52 F.3d 967, 976 (Fed. Cir1995) (en bane), affd 517 370, 116 S. Ct. 1384, 134 L. Ed. 2d 577 (1996). When the parties raise an actual dispute regarding the proper scope of these claims, the court, not the jury, must resolve that dispute. See id. at 979 (holding that claim construction is a matter of law). Micro, 521 F.3d at 1360.

The court addresses each of these claim terms below. A. "the length of the first bow limb is 11 and 12 inches; and, the length of the

second bow limb is between 12 and 13 inches" This limitation appears in the '595 Patent and contains a typographical error that both parties agree should be corrected by the court. Claim 4 of the '595 Patent reads:

4. The crossbow of claim 1 wherein: record at the Markman As such, these terms require no by the court.

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first

"the inches." TenPoint Patent

TenPoint Opening

"less inches." Patent, "between inches"

"between inches,"

of"less inches." Patent,

with

"only

specification claims." L.P. One

Patent ·typographical

"This

"between" the length of the bow limb is between 11 and 12 inches;

and, the length of the second bow limb is between 12 and 13 inches. The parties assert the court should correct the obvious typographical error in the description of the length of the second bow limb so that it reads: length of the second bow limb is between 11 and 12 As points out on brief, the other claims of the '595 describe a crossbow with two bow limbs of identical length. Br., ECF No. 48, at 37. For instance, Claim 1 describes a crossbow with two bow limbs, each having a length of than 14

'595 col. 9, 11. 12, 18. Claim 2 describes a crossbow with two bow limbs each 13 and 14 in length, Claim 3 describes a crossbow wherein each of the two limbs has a length 12 and 13 and Claim 5 describes a crossbow with two limbs each having a length than 11 '595 col. 9, 11. 59-62, 64-67; col. 10, 11.7-8. Claim 4 is the only claim of the patent describing a crossbow bow limbs of differing length.

Courts can correct obvious errors inpatent claims but if (1) the correction is not subject to reasonable debate based on consideration of the claim language and the and (2) the prosecution history does not suggest a different interpretation of the Novo Indus.,

v. Micro Molds Corp., 350 F.3d 1348, 1357 (Fed. Cit. 2003); see also Group Ltd. v. Hallmark Cards, Inc., 407 F.3d 1297, 1303 (Fed. Cit. 2005) (district court can correct an error if evident from face of

patent). Here, the only reasonable interpretation of Claim 4 of the '595 is the one agreed to by the parties. As such, the court will correct this error as requested and construe this claim to read: 8

4. The crossbow of claim 1 wherein: the length of the fust bow limb is between 11 and 12 inches; and, the length of the second bow limb is between 11 and 12 inches. is not in any real sense, a re-making of the claim; but is merely giving to it the meaning which 8 The court's construction of the term with respect the scope of the word is discussed infra.

22 .

examiner." U.S. "inadvertent unnoticed" "between"

"between" "the flrst inches," Patent, 59-60; "the PD 10 inches," '012 Patent, 39-40. Parker

"between" Online "The Wednesday." Online Dictionary, 2015)]. sufflce

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[TenPoint] Parker Opening TenPoint,

"between" Ugine, 2003),

"up 10%." cowt "about 10% endpoint,"

"up to"

On

limit, limit limit-" about 0%"-the was intended by the applicant and understood by the I.T.S. Rubber Co. v. Essex Rubber Co., 272 429 (1926) (correcting and clerical error in claim).

B. two numerical values

The patents-in-suit contain a number of claim limitations that quantify either the limb length or the power stroke (PD) as being two numerical values-e.g., length of the bow limb is between 13 and 14 '595 col. 9, ll. crossbow of claim 1 wherein is between inches and 11 col. 8, ll. argues the plain and ordinary meaning of the term excludes the beginning and end points:

The Merriam-Webster Dictionary provides an example which is telling: two days between Monday and Thursday are Tuesday and [Merriam-Webster http:/ /www.merriam-webster.com/dictionary (accessed Mar. 11,

Common examples as well: the even numbers between and are 2, 4, 6, and 8; if someone requests that you paint the area between the door frame and window frame, you would not paint the frames. Simply put, between two points means between those two points, not between two points and including those points as suggests. Br., ECF No. 47, at 31-32. on the other hand, contends that when used with numeric beginning and end points, the term is inclusive. It cites AK Steel Corp. v. Sollac & 344 F.3d 1234, 1241 (Fed. Cit. in support of this position. The court in AK Steel was charged with construing the term to about The held that the phrase included the explaining:

As pointed out by AK Steel, when an object of the preposition

is nonnumeric, the most natural meaning is to exclude the object (e.g., painting the wall up to the door). the other hand, as pointed out by Sollac, when the object is a numerical the normal meaning is to include that upper numerical (e.g., counting up to ten, seating capacity for up to seven passengers). Because we have here a numerical 1 ordinary meaning is that that endpoint is included.

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Parker "up to," "between." TenPoint

Patent 910 708 2012), 2013),

"between 511 1511." Products

I 4.711 "between" 511 1511.

I I "between 511 1511." Of

this "key 'between,'" O.U.R. 1302, 1307 2000),

"between 511 1511"

"between 511 1511"

"between" "in separates." 1308

of"between 511 1511"

2011 2011) "from

'z"' Parker this

"between" - -

argues AK. Steel is distinguishable because the claim term at issue in that case was whereas here it is But the district court cases cited by on brief suggest that distinction is of no moment. For example, In re Fenofibrate Litigation, F. Supp. 2d

(S.D.N.Y. aff'd, 499 F. App'x 974 (Fed. Cir. involved allegations of infringement related to the development of a generic version of the prescription drug ANTARA. The asserted claims required the ratio of fenofibrate to binding cellulose derivative in the final composition to be

and Id. at 711. Defendant's generic ANDA contained a mass ratio of fenofibrate to binding cellulose derivative of no more than 4. 7 1. Defendant thus argued that

was not and The patentee, Lupin Atlantis Holdings S.A., disagreed, asserting 4. 7 1 to 5 and thus falls within the claimed range. The court held that 4. 7 1 does not fall and particular relevance to the instant case, the In re Fenofibrate court explained:

In case, the word is see Elekta Instrument S.A. v. Scientific Int'l. Inc., 214 F.3d (Fed. Cir. and, Lupin's proposed definition of and does not comport with the ordinary meaning of that phrase. During claim construction, Lupin did not argue that the phrase and

should be construed to embody anything other than its ordinary meaning. As the Federal Circuit concluded in Elekta, the ordinary meaning of is the time, space or interval that

Id. at (quoting Webster's New World Dictionary 947 (3d ed. 1988)). The space or interval that separates 5 and 15 includes numbers greater than or equal to 5, and lesser than or equal to 15. Id. at 712. The In re Fenofibrate court held the ordinary meaning and includes the end values, 5 and 15. See also CoorsTek, Inc. v. Reiber, No. 08-cv-01133-KMT-CBS,

WL 1638855, at *19 (D. Colo. May 2, (ordinary meaning of the phrase number 'x' to number would include the endpoint). cites no case law to the contrary. Finding reasoning persuasive, the court in the instant case will do the same.

Additionally, the specification supports a construction of that is inclusive of the

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'025 Patent

'025 Patent, "about inches," inches" inches," '025 Patent,

Patent, 10,

inches," inches"). '012 Patent,

"about greater,"

inches" inches." '012 Patent,

"between," "between"

Phillips 1303, 2005) (construction

words").

1206-07 2010) 02 ga.ve·term endpoints. The describes one embodiment in which:

'[T]he limb length Ll may be less than 15 inches. In a more specific embodiment, the limb length Ll may be less than 13 inches. In yet a more specific embodiment, shown in FIG. 6, the limb length Ll may be about 12 inches. In yet a more specific embodiment, the limb length Ll maybe about 11 inches .... col. 5, 11. 4-9. Given that the specification describes a crossbow with a limb length of 12 it is inconceivable that the claims that disclose limb lengths "between 12 and 13 and "between 11 and 12 see. e.g., col. 8, 11. 23-28, would exclude a 12 inch limb length. 9

See also '595 col. 5, 11. 9-12; col. 9, 11. 64-66; col. 11. 2-4 (using same description as above in specification and claiming crossbows with two limbs with lengths "between 12 and 13 and "between 11 and 12 The same holds true for the in which the specification describes a power stroke of 12 inches or and the claims disclose a crossbow with a power stroke of "between 11 and 12 and "between 12 and 13

col. 5, 11. 11-13; see. e.g., col. 8, 11. 41-44. It cannot be said that a crossbow with a power stroke of 12 inches is excluded from the scope of the claims.

The court holds that the scope of the term when used to disclose a limb length or power stroke two numerical values, includes the endpoints. Having resolved the parties' dispute, the court declines to engage in any further construction of the claim term. See

v. AWH Corp., 415 F.3d 1314 (Fed. Cir. of this claim term requires "little more than the application of the widely accepted meaning of commonly understood

The parties agree no construction is necessary, and the court will give the term its plain and ordinary meaning. See Finjan. Inc. v. Secure Computing Corp., 626 F.3d 1197, (Fed. Cir. (fmding no Micro error where court its plain and ordinary meaning but

9 Indeed, Figure 6 of the patents-in-suit appears to depict a limb length of 12 inches.

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2090550,

"a first "

"mounted"

"mounted" attachment-specifically, "a first assembly."

10 Parker Figilre explicitly rejected defendant's restrictive construction and prevented defendant's expert from advancing that construction at trial); see also Certusview Tech .. LLC v. S & N Locating Servs .. LLC, No. 2:13cv346, 2014 WL at *11 (E.D. Va. May 16, 2014) (rejecting defendants' construction, adopting plain and ordinary meaning of term, and noting the court had resolved the parties' dispute).

C. "a foot stirrup mounted to said first end of said main beam"

Claim 1 of the '719 Patent discloses a crossbow comprising, inter alia, foot stirrup mounted to said end of said main beam .... '719 Patent, col. 8, 11. 29. Both parties agree this claim term should be given its plain and ordinary meaning but dispute whether it requires the foot stirrup to be directly mounted to the main beam.

Parker argues that in the context of this patent, the term requires a direct attachment. Parker points to Figure 3, 10

which it claims depicts a foot stirrup directly the main beam, as well as to the fact that the word is used elsewhere in Claim 1 of the '719 Patent to describe a direct main beam having opposed longitudinal ends, including a end to which is mounted said bow '719 Patent, col. 8, 11. 27-28. Parker contends the word cannot mean both a direct attachment and an indirect attachment within the same claim.

Parker is incorrect. Figure 3 does not show the foot stirrup directly abutting the main beam; it shows the foot stirrup mounted to the main beam through the riser: 11

erroneously refers to this as 4 on brief. 11 This cropped and magnified version of the relevant portion of Figure 3 is found on page 34 of Parker's Opening Claim Construction Brief, ECF No. 47.

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FIG.-12

Patent

'"is correct."' This is especially clear in light of Figure 12, which shows a detached foot stirrup and riser.

No illustration in the '719 shows the foot stirrup directly abutting the main beam. A claim construction that excludes a preferred embodiment rarely, if ever, SanDisk Corp. v.

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2005) 90

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id:

specification

40 define "mounted"

find

figures Memorex Prods., Inc., 415 F.3d 1278, 1285 (Fed. Cir. (quoting Vitronics Corp. v. Conceptronic, Inc., F.3d 1576, 1583 (Fed. Cir. 1996)); see also Douglas Dynamics, LLC v. Buyers Prods. Co., 717 F.3d 1336, 1342-43 (Fed. Cir. 2013) (holding district court's construction requiring a direct connection would exclude a preferred embodiment of the invention, where Figure 6 depicted lift frame

connected to mounting frame via an intermediate removable hitch arm).

Moreover, Claim 1 does not require a direct attachment of the bow assembly to the main beam, as Parker asserts. Claim 1 reads in full:

1. A crossbow comprising:

a bow assembly including a riser and a pair of bow limbs that are spaced- apart to allow a user's foot to be inserted therebetween; a main beam having opposed longitudinal ends, including a first end to which is mounted said bow assembly; and a foot stirrup mounted to said end of said main beam; said foot stirrup beginning behind said pair of bow limbs and extending beyond said bow limbs, such that a user's foot is insertable into said foot stirrup to support the crossbow for cocking. '719 Patent, col. 8, ll. 29-33. Claim 1 explicitly provides that the bow assembly includes a riser, at col. 8, 1. 24, and the illustrations of the '719 Patent show the bow assembly, like the foot stirrup, mounted to the main beam by virtue of that riser. See, e.g., '719 Patent, Fig. 1, Fig. 3, Fig. 4, Fig. 7, Fig. 8, Fig. 12. Nothing in Claim 1 requires direct attachment of either the foot stirrup or the bow assembly to the main beam. 12

In fact, the supports the notion that the foot stirrup can be attached to the main beam indirectly through the riser. It describes in relevant part:

With continued reference now to FIGS. 1-4 and 7-12, an opening 72 may be formed in the riser and may a foot stirrup 74 which 12

Indeed, to credit Parker's argument that the word used in Claim 1 requires direct attachment of both the foot stirrup and the bow assembly to the main beam, one would have to a separate, direct attachment of both component parts to the main beam. This is plainly not what is illustrated in the patent and, as discussed infra, such a dual attachment makes no sense given this crossbow design.

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2014 20, 2014) "mounted on" "attached to," "directly to,"

2014 4071809 2014); ("The '700

connection."). "The

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prosecution." 2013) 2007));

2004) ("[C]laims

"words restriction."'" is used, as is well known, in cocking crossbow . . . In one

the foot stirrup 74 comprises a genetally U-shaped member extendingfrom the riser . ... '719 Patent, col. 6, ll. 7-24 (emphasis added). Additionally, as TenPoint points out, the word

is used elsewhere in the specification to denote an indirect attachment of the wheels to the bow See '719 Patent, col. 4, ll. 15-16 pair of wheels or pulleys 38, 38 mounted to the limbs 36, 36 receive the bowstring); col. 6, ll. 48-52 wheel38 may have first and second sides 82, 84 and an opening 86 ... used to receive a shaft 88 that is operatively connected to the limbs 36 of the crossbow

There is no support in the patent language for Parker's contention that the foot stirrup must be directly mounted to the main beam. See Wonderland Nurserygoods Co .. Ltd. v. Kids II. Inc., No. 1:13-CV-1114-TWT, WL 2094295, at *3 (N.D. Ga. May (construing

to mean rather than attached fmding latter construction to be too restrictive where bassinet described in patent was mounted to frame body of play yard via a hook), denying reconsideration, WL (N.D. Ga. Aug. 18, see also Douglas Dynamics, 717 F.3d at 1342 Patent does not at any point limit the connection between the A-frame and mounting frame to a 'direct' Therefore, the court declines to limit the claim scope to direct mounting. presumption is that claim terms should be given their 'ordinary and customary meaning,' Vitronics, F.3d at 1582, and not a restrictive construction unless there is clear evidence to support it in the intrinsic evidence, or a broader meaning is specifically disclaimed during Aventis Pharm. Inc. v. Amino Chemicals Ltd., 715 F.3d 1363, 1375 (Fed. Cir.

(citing Saunders Grp .. Inc. v. Comfortrac. Inc., 492 F.3d 1326, 1331 (Fed. Cir. see also Innova/Pure Water. Inc. v. Safari Water Filtration Sys .. Inc., 381 F.3d 1111, 1117 (Fed. Cir.

will not be 'read restrictively unless the patentee has demonstrated a clear intention to limit the

claim scope using or expressions of manifest exclusion or (citations

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"a

art." Purdue Pharma L.P. 2006). "mounted" Parker's

1206-07; 2014 2090550,

"a main beam," 30

10, Parker

"that

beam." Parker's

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scol_2!:.-of 02 :Micro, 1360.

30 omitted)). To disclaim a broader meaning during prosecution, a patentee must make clear and unmistakable disavowal of scope during prosecution," for example by "characteriz[ing] an aspect of his invention in a specific manner to overcome prior v. Endo Pharmaceuticals Inc., 438 F.3d 1123, 1136 (Fed. Cir. There has been no such disavowal here, and the plain and ordinary meaning of is not limited to a direct attachment.

Having rejected restrictive reading of the limitation, the court finds this term needs no further construction. The court will give it its plain and ordinary meaning. See Finjan. 626 F.3d at see also Certusview Tech., WL at *11.

D. "a riser that comprises: a connection portion that connects the riser to an end of the

main beam" At issue here is the term riser that comprises: a connection portion that connects the riser to an end of the found in dependent Claims 15 and of the '595 Patent: 13

The crossbow of [independent Claims 1 and 16, respectively] further comprising a riser that comprises:

a connection portion that connects the riser to an end of the main beam. a first end having a pocket

that receives the first bow limb; and, a second end having a pocket that receives the second bow limb. '595 Patent, col. 11. 49-46; col. 12, 11. 46-53. argues that reading these dependent claims in conjunction with independent Claims 1 and 16 plainly reveals there is a dual connection of the (i) bow assembly mounted directly to the main beam, and (ii) a riser element connected directly to the main Opening Br., ECF No. 47, at 35.

Independent 1 and 16 disclose:

A crossbow comprising:

a main beam that has a proximal end, a distal end and an axis 13 Although both parties, once again, agree this term should be given its plain and ordinary meaning, the the term is plainly disputed. See 521 F.3d at

Patent, 10, 1-50.

Parker

exduded. "[a]

comprising" "Comprising"

"According \o ftrst ftrst " Patent,

specification

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·bowstring

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Patent, Patent

of elongation; a bow assembly mounted to the distal end of the main beam and comprising:

[certain enumerated component parts, including a bowstring, two bow limbs, and two wheels, as well as the positioning of those component parts and certain dimensions and capabilities] a trigger mechanism mounted to the main beam for use in holding the bowstring in the cocked position; and, wherein the bow assembly has a draw weight in excess of 87 pounds. '595 col. 8, ll. 63-67; col. 9, ll. 1-57; col. ll. 57-67; col. 11, ll. The fact that Claims 1 and 16 do not list the riser as part of the bow

assembly leads to argue that both the bow assembly and the riser must be separately, directly attached to the main beam. The court rejects this argument.

The fact that the riser is not listed as part of the bow assembly in Claims 1 and 16 does not mean it was mean to be Claims 1 and 16 describe crossbow comprising: ... a bow assembly mounted to the distal end of the main beam and certain component parts.

is an inclusive, rather than exclusive, term, and the specification suggests that a bow assembly can include a riser. The summary of the invention section of the specification states:

yet another embodiment of this invention, a bow assembly includes: a riser having a end with a pocket and a second end with a second pocket .... '595 col. 2, ll. 13- 15. The later details this described embodiment:

The crossbow also includes a bow assembly adapted to propel an arrow and having a bow 32 and a 34. The bow 32 includes a pair of limbs 36, 36 that receive the bowstring 34 in any conventional manner chosen with sound judgment by a person of ordinary skill in the art. For the embodiment shown, a pair of wheels or pulleys 38, 38 mounted to the limbs 36, 36 receive the bowstring 34 in a known manner. The bow may also include a riser or block having a pair of limb pockets 42, 42 that receive the limbs 36, 36, as shown. '595 col. 4, ll. 12-21. Indeed, Claim 1 of the '719 specifically lists the riser as part of

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Patent, "a riser").

6f Parker's

Parker "directly"

Patent, 10.

find Patent

clarified finds

1206-07; 2014 2090550,

indefiniteness. 14

Indefiniteness

On TenPoint Parker's Parker

TenPoint's See TenPoint's Opening ECF TenPoint

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Parker TenPoint Preliminary "[a]ny U .S.C.

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Patents, Patents " ECF Parker ECF

TenPoint's filing infringement the bow assembly. '719 col. 8, 11. 24 (claiming bow assembly including a

Whether or not the riser is considered part the bow assembly, argument still fails. As with the disputed foot stirrup term discussed supra, reads the word into the claims language when there is no basis for doing so. Claims 1 and 16 do not require a direct attachment of the bow assembly to the main beam. As previously discussed, the patent illustrations all show the bow assembly mounted to the main beam indirectly through the riser. See '595 Fig. 1, 3, 4, 5, 7, 8, None of these illustrations show separate, direct attachments of the bow assembly and the riser to the main beam. Likewise, nothing about crossbow design suggests such a dual attachment would even be possible. As such, the court declines to that the claims of the '595 require independent, direct attachments of the riser and bow assembly to the main beam.

Having the scope of the claim, the court no need to construe this claim further. Thus, the court will give the disputed term its plain and ordinary meaning. See Finjan. 626 F.3d at see also Certusview Tech., WL at *11.

v. The dispute over the next series of claim terms centers on is

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brief, moves to strike indefiniteness allegations, arguing failed to adequately explain its arguments in its invalidity contentions and answers to interrogatories. Br., No. 48, at 44. contends it was hamstrung by this lack of explanation, which rendered it impossible to adequately prepare a defense. insists that it has complied with its disclosure obligations. The amended scheduling order required to serve on its Invalidity and Unenforceability Contentions, which were to include grounds of invalidity based on 35 § 112, including invalidity contentions based on written description, enablement, and/ or and/ or best No. 26, at 6 18(d). In its contentions, listed each claim limitation it alleges to be indeftnite, as well as the speciftc claims of the speciftc patents in which these

limitations can be found, along with the applicable legal standard.

interrogatory number asked to with speciftcity the factual and legal basis, including an element-by-element analysis for each claim of each of Defendant's upon which you allege that Defendant's

are invalid .... No. 48-15, at 8. provided a detailed response to this interrogatory, No. 48- 16, at 7-12, but objected to request for a claim-by-claim analysis in advance of the deadline for invalidity and contentions.

32

"legal claims."

2003). Patent "conclude

invention." U.S.C.

Chimie PPG 402 2005), def:!.tl.iteness

2003) ..

Plumtree 2005),

2120 (2014). United

U.S. 2120 (2014). "[A]

invention." balance."' U.S.

(2002)). "On def:!.tl.iteness

language" "[s]ome uncertainty"

indefiniteness indeflniteness

filing

Stat. 2011. 2011, a determination arising out of the court's performance of its duty construing the B.J. Servs. Co. v. Halliburton Energy Servs., Inc., 338 F.3d 1368, 1372 (Fed. Cir. The Act requires that a patent's specification with one or more claims particularly pointing out and distinctly claiming the

subject matter which the inventor or a joint inventor regards as the

35 § 112(b). 15

Because the claims perform the fundamental function of delineating the scope of the invention, v. Indus .. Inc., F.3d 1371, 1379 (Fed. Cir. the purpose of the requirement is to ensure that the claims delineate the scope of the invention using language that adequately notifies the public of the patentee's right to exclude, Honeywell Int'l, Inc. v. Int'l Trade Comm'n, 341 F.3d 1332, 1338 (Fed. Cir.

Datamize. LLC v. Software, Inc., 417 F.3d 1342, 1347 (Fed. Cir. abrogated on other grounds by Nautilus, Inc. v. Biosig Instruments, Inc., 134 S. Ct.

The States Supreme Court recently articulated the standard for indefiniteness under § 112 in Nautilus, Inc. v. Biosig Instruments, Inc., __ __ , 134 S. Ct. The Court held: patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the Id. at 2124. The Court explained that§ 112 "entails a 'delicate

Id. at 2128 (quoting Festa Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 722, 731, 122 S. Ct. 1831 the one hand, the requirement must take into account the inherent limitations of and must allow for modicum of To the court's knowledge, TenPoint never moved to compel or otherwise sought court intervention in an effort to gain a more detailed understanding of Parker's allegations prior to the filing of its claim construction brief. In any event, the issue has been thoroughly briefed by both parties, and it does not appear to the court that any failure on Parker's part to provide a detailed explanation of its argument before its opening brief has prejudiced TenPoint with respect to its defense of this case. As such,.TenPoint's motion to strike is DENIED. 15 This statute was amended by the Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 284, which went into effect on September 6, Paragraph 2 of§ 112 was replaced with§ 112(b). Because the patents-in-suit issued after the court will reference § 112(b) but notes the language in the prior version of the statute is substantially similar.

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"At

them."' U.S. "Although

required," AOL. 1370-.

"a definiteness

claims."' "that specification

certainty."

"Indefiniteness

indefinite construction." 2008)

U.S.C.

P'ship, U.S.

the

Parker indefmite. propelled" Patent Parker

Patent, indefinite: first first

fust to incentivize innovation. Id. the same time, a patent must be precise enough to afford clear notice of what is claimed, thereby 'appris[ing] the public of what is still open to I d. at 2129 (quoting Markman, 517 at 373 (internal citations omitted)). absolute or mathematical precision is not Interval Licensing LLC v. Inc., 766 F.3d 1364, 71 (Fed. Cir. 2014), cert. denied, 136 S. Ct. 59 (2015), patent does not satisfy the requirement of§ 112 merely because 'a court can ascribe some meaning to a patent's Id. (quoting Nautilus, 134 S. Ct. at 2130). The statute requires a patent's claims, viewed in light of the and prosecution history, inform those skilled in the art about the scope of the invention with reasonable Nautilius, 134 S. Ct. 2129; accord Interval Licensing, 766 F.3d at 1371.

is a matter of claim construction, and the same principles that generally govern claim construction are applicable to determining whether allegedly claim language is subject to Praxair. Inc. v. ATMI. Inc., 543 F.3d 1306, 1319 (Fed. Cir. (citing Datamize. LLC, 417 F.3d at 1348). Issued patents are presumed valid, 35 § 282, and the party challenging the validity has the burden of proving invalidity by clear and convincing evidence. Microsoft Corp. v. i4i Ltd. 564 91, 131 S. Ct. 2238; 2242 (2011).

Neither party has offered proposed constructions for disputed claim terms. Thus, the sole issue to be decided with respect to each of the following limitations is whether has met its burden of proving the claims are invalid as

A. "Properly limitations of the '595

asserts that the following limitations, highlighted in bold and appearing in independent Claims 1 and 16 of the '595 are

(a) a wheel that is supported to the bow limb and that is

pivotal with respect to the bow limb about a first pivot axis that is substantially perpendicular to a ground surface when the arrow is properly propelled, wherein a first line that is

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perpendicular" parallel,"

indefinite.

specification definition.

indefinite. 766 1370

indefinite.").

precision." Georgia-Pacific Corp.

U.S.

benefit invention."

1120 2002). "[w]hen

specification degree."

2014

35. substantially parallel to the first pivot axis simultaneously intersects a portion of the first wheel and a portion of the first bow limb; (b) a second wheel that is supported to the second bow limb and that

is pivotal with respect to the second bow limb about a second pivot axis that is substantially perpendicular to the ground surface when the arrow is properly propelled, wherein a second line that is substantially parallel to the second pivot axis simultaneously intersects a portion of the second wheel and a portion of the second bow limb; '595 Patent, col. 9, ll. 19-34; col. 11, ll. 13-28. Parker insists that the lack of precision in the terms "substantially and "substantially as well as the inherent subjectiveness of these terms of degree, render these claims, and all those dependent on them, Parker argues the meaning of these terms would not be reasonably certain to one skilled in the art, and there is no context in the from which one could discern the proper The court disagrees.

Parker Compound Bows, Inc. v. Hunter's Manufacturing Company, Inc.

2016 | Cited 0 times | W.D. Virginia | February 12, 2016

Terms of degree are not inherently See Interval Licensing, F.3d at (''We do not understand the Supreme Court to have implied in Nautilus, and we do not hold today, that terms of degree are inherently

[I]t is well accepted that "patentable inventions cannot always be described in terms of exact measurements, symbols and formulae, and the applicant necessarily must use the meager tools provided by language, tools which admittedly lack exactitude and

v. United States Plywood Corp., 258 F.2d 124, 136 (2d Cir. 1958), cert denied, 358 884 (1958). Therefore, "[e]xpressions such as 'substantially' are used in patent documents when warranted by the nature of the invention, in order to accommodate the minor variations that may be appropriate to secure the invention ... and indeed may be necessary in order to provide the inventor with the of his Verve. LLC v. Crane Cams .. Inc., 311 F.3d 1116, (Fed. Cir. That said, the Court understands that a word of degree is used the district court must determine whether the patent's provides some standard for measuring that Seattle Box Co .. Inc. v. Indus. Crating & Packing. Inc., 731 F.2d 818, 826 (Fed. Cir. 1984). Thomas Swan & Co .. Ltd. v. Finisar Corp., No. 2:13-cv-00178, WL 2885296, at *25 (E.D. Tex.

"the definiteness does

''substantially"

2001) ("[T]he

specified parameter."'). "envisions

340 2003). "substantially"

90

1350-52 2005). "aesthetically pleasing" indefinite

meaningful definition pleasing" definition

determining pleasing."

·subjective opinion." 1350.

parallel" "completely opinion." June 25, 2014); see also id. (noting that the Supreme Court's decision in Nautilus does not overturn the above-cited cases but rather emphasizes that inquiry not require 'absolute

. . ''') prec1s10n.... .

Here, the patentee plainly used the word to describe the relationship between two lines-i.e., their perpendicularity or parallelity, as the case may be-in a way that does not require exactness. See Ecolab, Inc. v. Envirochem, Inc., 264 F.3d 1358, 1367 (Fed. Cir.

term 'substantially' is a descriptive term commonly used in patent claims to 'avoid a strict numerical boundary to the The phrase "substantially perpendicular"

some amount of deviation from [perpendicular]." Anchor Wall Sys., Inc. v. Rockwood Retaining Walls. Inc., F.3d 1298, 1311 (Fed. Cir. Had the adverb not been included in the claims language, one could argue that the limitation demands a precise degree angle between the pivot axis and ground surface when the crossbow is used to propel an arrow. Such exactitude is impractical; even the slightest variation in a crossbow's orientation to the ground when used to propel an arrow would alter the angle and make the limitation a near impossibility.

Parker likens this case to Datamize, LLC v. Plumtree Software, Inc., 417 F.3d 1342, (Fed. Cir. In Datamize, the court held use of the term rendered the claim in the context of a patent that disclosed software allowing a person to author user interfaces for electronic kiosks. The court reasoned that the claim language did not provide any

of "aesthetically and that batamize offered no objective or standard for whether an interface screen is "aesthetically The court stated,

the absence of a workable objective standard, 'aesthetically pleasing' does not just include a subjective element, itis completely dependent on a person's Id. at The same cannot be said in the instant case. The terms "substantially perpendicular" and "substantially

are not dependent on a person's subjective Id. The Datamize court,

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2003), 1380--:-81." Unlike

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PD 10

/PD 2.0. /PD /PD 30-44. in fact, recognized this distinction, noting '"aesthetically pleasing' does not exacdy compare to words of degree such as 'substantially equal to,' see Seatde Box Co., 731 F.2d at 826, 'about,' see BJ Servs. Co. v. Halliburton Energy Servs .. Inc., 338 F.3d 1368, 1372-73 (Fed. Cir. or 'substantial absence,' see Exxon Research & Eng'g, 265 F.3d at 417 F.3d at 1351.

in Datamize, the relevant claim language of the '595 Patent, when read in light of Figures 1, 2 and 4 and their descriptions in the specification, provide objective boundaries for those skilled in the art. The specification explains:

FIG. 1 shows the crossbow in an uncocked condition while FIGS. 2-4 show the crossbow in a cocked condition. The power stroke is thus shown, in FIG. 1, with reference For this invention the power stroke is at least inches. In a more specific embodiment the power stroke is at least 12 inches. In yet a more specific embodiment the power stroke is about 13 inches. With reference to FIGS. 2 and 4, each wheel 38, 38 pivots about a pivot axis A-A. When the crossbow is in the uncocked condition, the distance between the two pivot axes is shown with reference WD, see FIG 1. To illustrate the relative narrow design of the crossbow according to this invention, in one embodiment the ratio WD is less than In a more specific embodiment the ratio WD is less than· 1.8. In getting more specific embodiments the ration WD is less than 1.6. '595 Patent, col. 4, ll. Figure 2 shows a line depicting the pivot axis, marked A-A, running perpendicular to the ground:

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s= r.n = ... 10

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... i<, t= FIG.-2

<:: "' .... :;'> ;:! "' = ...

"substantially" n,ot ,599 1335· 201 0)

"not substantially"

"a

them"' "absolute unattainable").

arrow See also '595 Patent, Fig. 18.

The patentee's use of the word is fatal to these claims. Cf. Enzo Biochem. Inc. v. Applera Corp., F. 3d 1325, (Fed. Cir. (holding claims not indefinite even though the construction of the term interfering defmed term without reference to precise numerical measurement). Nautilus does not require an exacting standard, so long as the claims inform one skilled in the art about the scope of the invention with reasonable certainty. 134 S. Ct. at 2129 (holding patent must be precise enough to afford clear notice of what is claimed, thereby 'appris[ing] the public of what is still open to but recognizing that

precision is Subjective terminology aside, Parker contends it would be impossible to evaluate any crossbow against a claim that refers to the propulsion of an at a specific angle to the ground,

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"in flre ground." Parker's Opening Parker

propelled" Parker

Patent. 17 Patent

"A A," defined

Patent, propelled"

2003) ("The

terms."). Patent

Parker propelled" Patent

" limbs" elongation" Parker "elongated,"

"As provided."

below," Opening ECF

Ct. · is opinion." 1350. because ordinary usage a crossbow may at many different angles with respect to the

Br., ECF No. 47, at 39. further argues the patent provides no clarification for what a "properly arrow is. is feigning confusion. A skilled artisan would know how to hold and use a crossbow to propel an arrow 16

and, thus, would understand the orientation of the wheels on a bow assembly, described in Claims land 16 of the '595 The illustrations in Figures 2, 4 and 18 of the '595 leave no doubt as to what is meant by these disputed claims. These figures show a crossbow oriented parallel to the ground with a dashed line marked - which is in the specification as the pivot axis, running through the wheel shaft perpendicular to the ground. See '595 col. 4, ll. 36-37. The term "properly cannot be divorced from the remainder of the claims language and must be read in the context of the entire patent, including the illustrations. See Abbott Labs. v. Syntron Bioresearch. Inc., 334 F.3d 1343, 1351 (Fed. Cir. usage of the disputed claim terms in the context of the claims as a whole also informs the proper construction of the It plainly appears in the '595 as a way to describe the orientation of the wheel axes, not to suggest there is only one way to propel an arrow. 18

A skilled artisan reading these claims in full context would understand, with reasonable certainty, what is claimed here. Thus, the court finds that has not met its burden of establishing the "properly limitations of the '595 are indefmite.

B. Dimensionallimitations

1. main beam, bow and ''axis of

argues that the term used to describe the main beam in Claims 1 and 27

16 Indeed, the specification lists the components of a crossbow and then states: the operation of these components is well known to those of skill in the art, no further details will be '595 Patent, col. 4, 11. 27-29. 17 Parker argues that when used from a tree stand, a crossbow can be aimed "straight down towards a buck which would orient the wheels' pivot axes perfectly parallel to the ground rather than perpendicular. Parker's Br., No. 47, at 46. The fact that a crossbow might be used from a tree stand and might be aimed downward does not render this claim indefinite. Claims 1 and 16 of the '595 Patent inform one skilled in the art about the scope of the invention with reasonable certainty. Nautilus, 134 S. at 2129. 18 Thus, unlike in Datamize, the term not "completely dependent on a person's subjective 417 F.3d at

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Patent Patent, Patent, Parker

"elongated" "elongated beam" "elongated liml?s" Parker

"axis elongation," Patent, Patent TenPoint Patent.

"elongated"

Protective

("[T]he

wide.").

"elongated beam" "elongated limbs." '

"elongated"

Parker's "In

claims." Corp. v. Velan. 2006)

in,

!9 deflne similar "longitudinal." '012

("'Main

well.").

40 of the '012 and Claim 3 of the '719 and to describe bow limbs in Claim 3 of the '719

is indefinite. contends the patents-in-suit refer elsewhere to the main beam and bow limbs without the modifier; thus, there must be a distinction between an main or bow and un-elongated ones. raises a similar argument concerning the term of used in Claims 1 and 16 of the '595 Claim 1 and 27 of the '012 and, (as points out) Claim 1 of the '541

These terms are not indefinite. The word is commonly understood to mean long and thin and is used to describe something longer than its width. 19

See Indus .. Inc. v. Ratermann Mfg .. Inc., No. 3:10-cv-01033, 2012 WL 1598042, at *6 (M.D. Tenn. May7, 2012)

Court finds that the term 'elongated' is clear and that, if any definition is needed, the term is to be defined as 'longer than it is Simply looking at the illustration on the cover page of the patents-in-suit would make clear to one skilled in the art what is meant by the terms main

and bow Moreover, the fact that the word is used descriptively in certain claims but not others does not mean the terms in which it appears must be interpreted differently. claim differentiation

argument is unconvincing. the most specific sense, 'claim differentiation' refers to the presumption that an independent claim should not be construed as requiring a limitation added by a dependent claim. Thus, the claim differentiation tool works best in the relationship between independent and dependent Curtiss Wright Flow Control Inc., 438 F.3d 1374, 1380 (Fed. Cir. (internal citations omitted).·

We are not faced with a situation here in which the main beam is described without the modifier in an independent claim but with the modifier in a dependent claim of the same patent,

The court notes that the patents the main beam using a adjective, See e.g., Patent, col. 3, ll. 35-37 Beam' means the longitudinal structural member of a weapon used to support the trigger mechanism and often other components as

"elongated" '012

"presumption scope." Versa F.3d 1330 2004)

On other

U.S. 1017. 1023

904 1990) ("It

"[c]laim rule."

"elongated beam" "main beam" "elongated limbs"

"bow limbs." 2000) ("[D]espite

1.").

"[T]hat which case Parker's argument might have fared better. Rather, the word is used in independent Claims 1 and 27 of the Patent and independent Claim 3 of the '719 Patent, but not in the independent claims of other patents-in-suit-e.g., Claim 1 of the '541 Patent.

Id. at 1380-81.

Beyond the independent/ dependent claim scenario, this court has characterized claim differentiation more generally, i.e., as the

that each claim in a patent has a different Corp. v. Ag-Bag Int'l Ltd., 392 1325, (Fed. Cir. (quoting

Comark Commc'ns. Inc. v. Harris Corp., 156 F.3d 1182, 1187 (Fed. Cir. 1998)). Different claims with different words can, of course, define different subject matter within the ambit of the invention. the hand, claim drafters can also use different terms to defme the exact same subject matter. Indeed this court has acknowledged that two claims with different terminology can define the exact same subject matter. Tandon Corp. v. Int'l Trade Comm'n. 831 F.2d (Fed. Cir. 1987); Hormone Research Found. v. Genentech. Inc., F.2d 1558, 1567 n. 15 (Fed. Cir.

is not unusual that separate claims may defme the invention using different terminology, especially where (as here) independent claims are involved."). In this context, this court has cautioned that differentiation is a guide, not a rigid Laitram Corp. v. Rexnord. Inc., 939 F.2d 1533, 1538 (Fed. Cir. 1991).

In the context of the instant patents-in-suit, the court finds that the term main means the same thing as and that bow means the same thing as See Tate Access Floors. Inc. v. MaxcessTech .. Inc., 222 F.3d 958, 968 (Fed. Cir.

the absence of the modifier 'integral,' the term 'border' in claim 8 should be construed in the same manner as the term 'integral contrasting border' in claim There is no suggestion in any of the patents that an un-elongated main beam or un-elongated bow limbs are claimed; indeed, the illustrations consistently depict a long, thin main beam and long, thin bow limbs. Moreover, other claim terms and limitations differentiate the claims at issue from claims in the remaining patents-in-suit. the claims are presumed to differ in scope does not mean that every limitation must be distinguished from its counterpart in another claim, but only that at least

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differ." 08 09

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"axis elongation" "elongated."

defining

PD 10

"PD" one limitation must Id. at 968; Fujitsu Ltd. v. Tellabs Operations. Inc., No. C3379, C 4530, 2012 WL 987272, at *6 (N.D. Ill. Mar. 21, 2012) each claim in a patent has a different scope regardless of whether two similar claim terms are construed to be identical, there is much less reason to apply the

doctrine of differentiation.").

Additionally, the meaning of of is abundantly clear in light of the patentee's descriptive use of the word Both terms appear in Claims 1 and 27 of the '012 Patent, which disclose:

A crossbow comprising: an elongated main beam a bow assembly mounted to the main beam and comprising: (a) a pair of bow limbs, opposite ends of said bow assembly, each bow limb having a length; (b) a bowstring movable between a cocked position and an uncocked position, the linear distance between the cocked position and the uncocked position along the axis of elongation of the main beam being the power-stroke distance (PD), said being at least inches ....

'012 Patent, col. 8, 11. 12-22. Figure 1 illustrates what is described in these claims using a double arrowed line labeled that runs along the length of the main beam, the axis of elongation:

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Ill ..., "' .. 10

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.. p "' ·"' ... ... :::;]q

"' ... !t a. ...

Patent "a

elongation." Patent, 10,

"axis elongation" "elongated"

"approximatefy inches"

"approximately inches,"

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.... = ... 52

Moreover, Claims 1 and 16 of the '595 describe the main beam as having three parts: proximal end, a distal end and an axis of '595 col. 8, 11. 64-65; col. 11. 58- 59.

. The meaning of of and in the context of these patents is clear, and the scope of these claims would be reasonably certain to those skilled in the art. As such, the court rejects Parker's contention that these disputed claims are indefinite.

2. 13 Parker argues that the term 13 which appears in multiple claims of

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'012 Patene 0

indefinite undefined Other '012 Patent '012 Patent, 39-40 ("The PD 10 inches.").

"approximately inches." Parker specification "approximately inches,"

TenPoint C0 2014 2014),

X-:_Body 2013 2013). "approximately" indefinite.

"ubiquitous claims" "when

field the courts." "approach other," "close to," "substantially equal," "closely approximate" indefinite). "Approximately" "about." '012 Patent,

specification specific "power PD inches").

"about," "substantially," "is

specified 20

'012 "approximately" "The PD

10 inches," '012 does

Power defined '012 "the

condition." '012

:•·.·· c ' the to describe power stroke (PD), 21

is because it an term of degree. claims of the list a set range for power stroke. See. e.g., col. 8, ll. crossbow of claim 1 wherein is between inches and 11 The claims at issue, however, quantify power

stroke as 13 contends the

provides no guidance as to how to evaluate a power stroke of 13 and, thus, a manufacturer would not be able to tell if a product were infringing. For its part, relies primarily on two cases, Thomas Swan & .. Ltd. v. Finisar

2:13-cv-00178, WL 2885296 (E.D. Tex. June 25, and Advanced Steel Recovery. LLC v. Equipment. Inc., No. 2:12-cv-01004-GEB-DAD, WL 4828152 (E.D. Cal. Sept. 9, In both cases, the court found the term not to be

Words of approximation are in patent and, serving reasonably to describe the claimed subject matter to those of skill in the of the invention, and to distinguish the claimed subject matter from prior art, have been accepted in patent examination and upheld by the Andrew Corp. v. Gabriel Elecs .. Inc., 847 F.2d 819,821 (Fed. Cir. 1988) (holding terms each and not to be

is synonymous with See. e.g .. col. 4, ll. 32-33 (describing in a embodiment in which stroke is about 13 The Federal Circuit has held that the term like the term a descriptive term commonly used in patent claims to 'avoid a strict numerical boundary to the Dependent claims 6, 12, 18, 25, 32, 38, 44, 51. The court notes that other claims of the Patent also use the word

with respect to the power stroke measurement--e.g., crossbow of claim 1 wherein is approximately Patent, col. 8, 11. 37-38-but Parker not challenge the definiteness of these claims. Parker points out that the disputed claim is of particular relevance in this case because TenPoint's infringement contentions include a Parker crossbow with a power stroke of 13.25 inches. Whether this crossbow infringes the patents-in-suit, however, is a question to be answered at a later stage of the proceedings. 21

stroke is in the Patent as linear distance that the bowstring is moved between the uncocked condition and the cocked Patent, col. 3, 11. 42-44.

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parameter."' 2001) Pall

340 2003).

"To definiteness

innovation."' 2014

"approximately channel" "approximately channel" indefinite

specification

"approximately"

'012

PD 10

'012 specification "the

condition." '012 ("The

condition."). Ecolab. Inc. v. Envirochem. Inc., 264 F.3d 1358, 1367 (Fed. Cir. (quoting Corp. v. Micron Seps., 66 F.3d 1211, 1217 (Fed. Cir. 1995)); see also Anchor Wall Sys .. Inc. v. Rockwood Retaining Walls. Inc., F.3d 1298, 1310-11 (Fed. Cir.

The Supreme Court's decision in Nautilus does not demand a strict numerical boundary, as the district court in Thomas Swan recognized. the contrary, the .Supreme Court emphasized that the inquiry does not require 'absolute precision' because, for example, the statute 'must take into account the inherent limitations of language' and '[s]ome modicum of uncertainty ... is the price of ensuing appropriate incentives for WL 2885296, at *25. The Thomas Swan court considered whether the limitations a desired center wavelength of a respective and a desired passband of a respective are

and concluded they are not. The court found that in the context of the respective patent, the informed, with reasonably certainty, those skilled in the art about the scope of the claim terms.

In this case, the word refers to a numerical value for power stroke distance. Independent Claims 1 and 27 of the Patent, on which the disputed claims rely, describe how power stroke is measured:

(b) a bowstring movable between a cocked position and an uncocked position, the linear distance between the cocked position and the uncocked position along the axis of elongation of the main beam being the power-stroke distance (PD), said being at least inches .... Patent, col. 8, 11. 18-24. The defmes power stroke as linear distance that the bowstring is moved between the uncocked condition and the cocked Patent, col. 3, ll. 42-44; see also col. 1, ll. 32-34 power stroke is the distance along the main beam that the bowstring moves between the uncocked and the cocked It goes on to explain:

FIG. 1 shows the crossbow 10 in an uncocked condition while FIGS. 2-4 show the crossbow 10 in a cocked condition. The power stroke

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PD. PD 0

PD

PD '012

"approximately inches,"

Patent 910 708, 2013) "between 15/1," "do

broadly"). "approximately" 1370, Parker

'012

beam"

main 1

beam" "a

beam" Patent

-the is thus shown, in FIG. 1, with reference For this invention the power stroke is at least 1 inches. In a more specific embodiment the power stroke is at least 12 inches. In yet a more specific embodiment the power stroke is about 13 inches. Patent, col. 4, ll. 27-33.

The court finds that in the context of this patent, the disputed claims, disclosing a measurement of 13 provide sufficient objective boundaries. See Interval Licensing, 766 F.3d at 1371; cf. In re Fenofibrate Litig., F. Supp. 2d 713 (S.D.N.Y. 2012), affd, 499 F. App'x 974 (Fed. Cir. (rejecting argument that ratio 4.7/1 falls within the range 5/1 and and noting the claim limitations not include any approximation language such as 'about' or 'approximately' that would indicate that the ratios should be read

The term is not inherently indefmite, id. at and has not established by clear and convincing evidence that as used in the Patent, it fails to inform, with reasonable certainty, those skilled in the art about the scope of the invention.

3. "a second end that extends from a first side of the main beam toward the proximal end of the main

and "a second end that extends from a second side of the main beam toward the proximal end of the The terms second end that extends from a first side [or second side, respectively] of the main beam

toward the proximal end of the main appear in Claims 1 and 16 of the '595

in the following context:

A crossbow comprising: a main beam that has a proximal end, a distal end and an axis of elongation; a bow assembly mounted to the distal end of the main beam and compr1smg:

(b) a first bow limb that has: a first end supported to the main beam; a second end that extends from a first side of the main beam toward the proximal end of main beam; a concave surface that faces the main beam when the bowstring is in the uncocked position; and, a length that is less than 14 inches; (c) a second bow limb that has: a first end supported to the main

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of

10,

"a

beam." "a elongation."

10, "mounted beam." 10,

"bow "

and beam; a second end that extends from a second side. of the main beam toward the proximal end the main beam; a concave surface that faces the main beam when the bowstring is in the uncocked position; and, a length that is less than 14 inches;

'595 Patent, col. 8, 11. 63-67; col. 9, 11. 7-18; col. 11. 58-61; col. 11, 11. 1-12. Parker argues that the specification provides no explanation for how the second end of a bow limb extends from the main beam toward the proximal end of the main beam. According to Parker, the figures show the bow limbs extending away from-not toward-the main beam and, therefore, the term is indefinite.

A skilled artisan would have no trouble understanding in the context of this patent what is meant by second end that extends from a [first or second] side of the main beam toward the proximal end of the main Claims 1 and 16 of the '595 Patent disclose a crossbow comprising main beam that has a proximal end, a distal end and an axis of '595 Patent, col. 8, 11. 63-65; col. 11. 57-59. These claims provide that the bow assembly is to the distal end of the main Id. at col. 8, 11. 66-67; col. 11. 60-61. The specification explains that the bow assembly includes a bow and bowstring, and that the 32

includes a pair of limbs 36, 36 that receive the bowstring .... '595 Patent, col. 4, 11. 12-15. Thus, it is clear which end of the main beam is the distal end (the end to which the bow assembly is mounted) which is the proximal end (the other end). See; e.g., '595 Patent, Figure 3:

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b2

FIG.-3

Patent, "Each

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34." Patent,

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According to Claims 1 and 16, the first end of the bow limb is supported to the main beam. See '595 col. 9, 11. 7-8, 13-14; col. 11, 11. 1-2, 7-8. The specification further explains: limb 36 has a first end that is received within the corresponding pocket 42 and a second end 62 that is operatively connected to the bowstring '595 col. 4, 11. 47-49. Therefore, it is also clear which end of the bow limb is the first end (the end supported to the main beam, marked in Figure 3) and which is the second end (the other end, marked 62).

The patent illustrations leave no question as to what is meant by the disputed claim terms-

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Parker

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[TenPoint] non-infringing." Parker's

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"' .,. So .. - the second end of each bow limb extends in the direction of the proximal end of the main beam.

insists that Figure 1 of the patent, showing an uncocked crossbow (in contrast to Figure 3, which shows a cocked crossbow), that the second end of the bow limbs does not extend toward the proximal end of the main beam; in fact, is clear that the second ends of the bow limbs extend outward, away from the main beam entirely, and do not extend towards either end of the main beam, something that called out as Response Br., ECF No. 54, at 38. The court cannot agree. Like in Figure 3, the second ends of the bow limbs of the crossbow depicted in Figure 1 extend in the general direction of the proximal end of the main beam.

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"too indefinite muster." Specifically,

"one

claimed." "neither specification, figures certainty," 40, indefinite.

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50 Additionally, the limitations immediately following the ones in dispute, describing bow limbs having concave surface that faces the main beam when the bowstring is in the uncocked

shed further light on the limitations in dispute and the positioning of the bow limbs. Thus, the court finds Parker has not met its burden of proving these claims are

C. Foot stirrup limitations of the '719 Patent

1. ''spaced-apart to allow a user's foot to This limitation appears in Claims 1, 2 and 5 of the '719 Patent and describes placement of a foot stirrup:

A crossbow comprising: a bow assembly including a riser and a pair of bow limbs that are spaced-apart to allow a user's foot to be inserted therebetween;

719 Patent, col. 8, ll. 23-26, ll. 46-48. Parker argues this limitation fails to define the size of the opening between the bow limbs using any dimensions whatsoever and is subjective and

to pass Parker's Opening Br., ECF No. 47, at 52. Parker contends that this description leaves of ordinary skill uncertain as to what sizes and separations between the bow limbs or within the riser are Id. Parker insists that the nor the claims, nor the disclose what dimensions or special arrangements are covered with any reasonable Parker's Resp. Br., ECF No. 54, at and, therefore, these claims are invalid as

The of the '719 Patent describes the foot stirrup component of the crossbow, in its various embodiments, in great detail.

With continued reference now to FIGS. 1-4 and 7-12, an opening 72 may be formed in the riser and may a foot stirrup 74 which is used, as is well known, in cocking the crossbow In one embodiment, the opening 72 is positioned at least partially directly between the pockets 42, 42. This arrangement provides an opening 72 to receive most boot sizes yet simultaneously provides a reduced overall length for the crossbow makes it easier to

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10. embodiment, 40

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10. embodiment

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Parker

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the 10." Patent, 6-10. "[i]n

42." 10-11; "a 42"). manually cock the bowstring 34. In another the pockets 42, 42. extend at least partially longitudinally beyond the first end of 11 off the main beam 12. This arrangement also provides for an overall reduced length for the crossbow In yet another

the foot stirrup 74 is made with the riser as a single piece. This permits, for one non-limiting example, the riser and the foot stirrup 74 to be machined from a single piece of material. In one embodiment, the foot stirrup 74 comprises a generally U-shaped member extending from the riser body. The U-shaped member has a pair of leg portions and a mid-portion 112. The mid-portion 112 has an outer surface 114 that is substantially planar and is used in contacting a ground surface (as shown in FIG. 8) when cocking the crossbow The mid-portion 112 in one is on the same plane as the leg portions In another embodiment, shown, the mid-portion 112 has an offset 116. This offset 116 permits the crossbow to be easily balanced on a ground surface when a user is cocking the crossbow As shown in FIGS. 11-12, the offset 116 may extend downwardly. In one embodiment, the portions

extend substantially from an inner surface of the mid-portion 112. In another embodiment, shown in FIG. 12, each leg portion has an offset 118 that may extend outwardly. This offset 118 permits the opening 72 to be larger to thereby receive a user's foot that is larger and also provides for a longer mid-portion 112 that assists in balancing the crossbow to a ground surface. It should be noted that this inventive riser design is not only applicable to a crossbow having a compound bow but also to a crossbow having other bows when applied with sound judgment by a person of ordinary skill in the art. argues this detailed passage provides no support for the disputed claim term. It points out that the specification refers to an opening in the riser, not the bow limbs that are referenced in the disputed claims. However, the claims disclose riser and a pair of bow limbs that are spaced-apart,"

and the specification discusses both.

To be sure, the specification states that opening 72 may be formed in the riser and may define a foot stirrup 74 which is used, as is well known, in cocking crossbow '719

col. 6, ll. It goes on to explain, however, that one embodiment, the opening 72 is positioned at least partially directly between the pockets 42, Id. at col. 6, ll. see also id. at col. 5, ll. 46-4 7 (describing one riser design as having first end 64 with one pocket 42 and a second end 66 with another pocket These pockets 42, 42 are described earlier in the

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"a apart." See

"allow "[b]oots

stirrup." Opening · "absolute required" requirement AOL. 1370

"patent's

certainty." S.

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10 bowstring34." Patent,

"to larger"). mform

scope "extremely

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"The

terms." Syntron 2003). specification as limb pockets that receive the bow limbs 36, 36. Id. at col. 4, ll. 17-19. The specification therefore explains what is meant by riser and a pair of bow limbs that are spaced

also '719 Patent, Fig. 1. Parker also contends that the description of the size of the opening as being sufficient to a user's foot to be inserted,'? is too subjective, arguing and feet would be ofdifferent sizes, and users would engage with stirrup or opening in different fashions, extending an uncertain

portion of their foot into the Parker's Br., ECF No. 47, at 53. As previously discussed, or mathematical precision is not to satisfy the definiteness

of§ 112. Interval Licensing. LLC v. Inc., 766 F.3d 1364, (Fed. Cit. 2014). All§ 112 demands is that a claims, viewed in light of the specification and prosecution history, inform those skilled in the art about the scope of the invention with reasonable Nautilus. Inc. v. Biosig Instruments. Inc., 134 Ct. 2120, 2129 (2014). Here, the patent consistently describes the size of the foot stirrup as being sufficient to allow a user's foot to be inserted therein. The specification goes a step further, describing opening 72 sufficient to receive most boot sizes yet simultaneously provid[ing] a reduced overall length for the crossbow makes it easier to manually cock the '719 col. 6, ll. 12-15; see also id. at col. 6, ll. 38-39 (describing another embodiment in which the opening is larger thereby receive a user's foot that is These objective parameters sufficiently with reasonable certainty those skilled in the art of the of the invention. Indeed, Parker acknowledges that f0ot stirrups are well-known in the Parker's Resp. Br., ECF No. 54, at 39.

Parker argues that in the context of this claim alone, it is unclear how the spacing of the bow limbs is to be judged. This argument is equally unconvincing. usage of the disputed claim terms in the context of the claims as a whole [] informs the proper construction of the Abbott Labs. v. Bioresearch. Inc., 334 F.3d 1343, 1351 (Fed. Cit. All five claims of

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Patent, ("said

cocking");

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Parker

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Patent

"arc" the '719 Patent disclose locations of the foot stirrup. See. e.g., '719 col. 8, ll. 29-33 foot stirrup beginning behind said pair of bow limbs and extending beyond said bow limbs, such that a user's foot is insertable into said foot stirrup to support the crossbow for id. at col. 8, ll. 34-35 ("wherein a portion of said foot stirrup is located between said pair of bow id. at col. 8, ll. 51-54 foot stirrup having a portion adapted for engagement with a uset's foot, wherein said portion adapted for engagement with a user's foot extends in a direction away from said bow

Reading the claims language in the context of the specification and illustrations, one ordinarily skilled in the art would understand, with reasonable certainty, the scope of the invention claimed. has not met its burden by clear and convincing evidence of proving this claim limitation is indefmite.

2. bow limbs, together defining a single bow arc defining a bow plane having a

convex side and a concave side and separated a first region; a foot siirrup extendingfrom said convex side said concave side; and, where a user's foot is insertable within said first contends that Claim 3 of the '719 Patent is indefmite. Claim 3 reads in full: A crossbow comprising: an elongated main beam; a pair of elongated bow limbs, together a single bow arc

a bow plane having a convex side and a concave side and separated by a first region; a foot stirrup extending from said convex side beyond said concave side; and, where a user's foot is insertable within said first region. '719 col. 8, ll. 36-42.

ordinarily skilled in the art reading Claim 3 in the context of the specification and illustrations of the '719 would understand the scope of the invention with reasonable certainty. Specifically, a skilled artisan would understand the basic geometric terms and

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"plane" defining

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FIG.-3

"numerous limbs· arc"' Opening

"bow plane" Patent

finds sufficiently definite Claim

indefiniteness definiteness used in this context-the bow limbs forming an arc 22

and the arc a plane. 23

A skilled artisan would understand which side of the arc is the convex side and which is concave, and thus be able to determine what is meant by foot stirrup extending from said convex side beyond said concave Figure 3 depicts what is described in Claim 3:

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22 Parker's assertion that there are imaginary lines one could draw between the separated bow to create the complete 'bow is simply incorrect. Parker's Br., ECF No. 47, at 55-56. An arc is an arc. 23 While the court finds infra that the meaning of the term in the context of Claim 4 of the '719 is unclear, use of that term is not necessarily fatal to Claim 3. For the reasons set forth herein, the court Claim 3 to be to survive construction, as one skilled in the art would be reasonably certain as to the scope of the invention claimed. The court will revisit Parker's argument concerning Claim 3 at the summary judgment stage when it considers the of Claim 4.

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"the 'first

limbs)." "insertable"-not

AOL. 1370 2014), "viewed specification

2120, (2014).

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Parker creates confusion where there is none. The claim means what it says, and one skilled in the art would understand its scope in the context of this patent.

brief, Parker states that carries the similar fault of accusing products where a user's foot may never been [sic] inserted into the particular region between the bow limbs as still allegedly infringing." Parker's Opening Br., ECF No. 47, at 55. It argues further: claim does not speak properly to a crossbow where a user may never insert his foot into the region' separating the bow limbs, nor insert his foot into any space beyond the concave side of the bow arc (ie., behind the bow Id. at 57. This argument misses the mark. The claim requires a user's foot be that it actually be inserted-within the region separating the bow arc.

And for the same reasons discussed previously, the court rejects Parker's argument that Claim 3 fails to quantify the size of the region separating the bow limbs. Mathematical precision is not required, Interval Licensing. LLC v. Inc., 766 F.3d 1364, (Fed. Cir. so long as the claims in light of the and prosecution history, inform those skilled in the art about the scope of the invention with reasonable certainty," Nautilus. Inc. v. Biosig Instruments. Inc., 134 S. Ct. 2129 Here, those skilled in the art would understand the parameters of what is claimed. Parker has not met its burden of proving this claim is

3. ''wherein a portion of said foot stirrup is located between said pair of bow Dependent Claim 2 of the '719 Patent claims crossbow as set forth in claim 1, wherein a portion of said foot stirrup is located between said pair of bow '719 Patent, col. 8, ll. 34- 35. Parker argues this claim fails to inform with any reasonable or dimensions how the stirrup is placed on the bow. But dimensions are not required for a claim to be see Interval Licensing. LLC, 766 F.3d at and this claim also means what it says- that a portion of the foot stirrup is located between the pair of bow limbs. Parker has not met its burden of proving

as to Claim 2.

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portion s'aid stirrup iJ lot-ated within said plane" Parker's Patent,

"[t]he

plane." "Bow plane" "a

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Scientific Parker's

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surface." Various defined TenPoint '7-19 Patent "a

plane." TenPoint figure

TenPoint Opening

"one plane." TenPoint's figure

"Portion plane."

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4. "wherein a of foot bow

argument as to dependent Claim 4 of the '719 however, is not so easily dismissed. Claim 4 discloses crossbow as set forth in claim 3, wherein a portion of said foot stirrup is located within said bow While the meaning of this claim may be clear on its face, its scope is not. is described in independent Claim 3 as follows: pair of elongated bow limbs, together a single bow arc defining a bow plane having a convex side and a concave side and separated by a '719 col. 8, ll. 38-40.

A plane in basic geometry is a two-dimensional concept. The McGraw-Hill Dictionary of and Technical Terms, attached as Exhibit 7 to Responsive Claim Construction Brief, ECF No. 54-7, a plane as surface such that a straight line that joins any two of its points lies entirely in that planes can be from points on the bow arc described in Claim 3. insists that Figure 2 of the shows view looking in the direction of, or along, the bow includes an annotated version of this in its opening

claim construction brief. See Br., ECF No. 48, at 67. It uses a dashed, red line running horizontally through a point just below the center of drawing to indicate what it designates as bow Id. at 66, 67. annotated also shows an arrow pointing to what is marked as 74, which intersects that dashed, red, horizontal line, and labels it:

of foot stirrup within bow

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FIG.-2

[TenPoint]

limb

"plane" in "[t]here it: patentee."

"redefining meaning,"

USA. Bow plane

Portion of foot stirrup within bow plane

As Parker points out, however, TenPoint

provides no support or reasoning for why it picks that particular bow plane from among the many possible bow plane lines it could have drawn or, more importantly, why a person of ordinary skill would know which of multiple potential bow planes was implicated by [TenPoint's] claim. Indeed, did not pick a bow plane line that would run through the center of the bow limbs, but instead appears to pick a ·line towards the bottom of the lower bow so that it could be ensured to capture the foot stirrup within the figure. Parker's Response Br., ECF No. 54, at 43.

It may well be that the patentee intended to use the term in a particular way the context ()f this patent. To be sure, is no guarantee that a term is used in the same way in a [technical dictionary] as would be by the Phillips v. AWH Corp., 415 F.3d 1303, 1322 (Fed. Cir. 2005). A patentee may act as his

own lexicographer, the meaning of particular claim terms away from their ordinary but any intent to do so must be expressed in the written description and must be sufficiently clear. Merck & Co. v. Teva Pharm. Inc., 395 F.3d

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1370 2005). "bow plane" Patent

"plane"

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110, 110. 116."

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"plane" "bow plane" 1364, (Fed. Cir. Any special meaning given to the term in the '719 is not clearly defined.

The term appears once in the passage of the specification in which various foot stirrup embodiments are described: mid-portion [of the U-shaped foot stirrup] 112 in one embodiment is on the same plane as the leg portions In another embodiment, shown, the mid-portion 112 has an offset Figure 11 shows this described offset:

From its use in this context, it appears the patentee intended to give the two-dimensional concept of a meaning with respect to this three-dimensional crossbow. It is conceivable that the

of Claim 4 refers to the within the bow arc, which is defined by the bow limbs, extending infinitely far in any direction. However, TenPoint has not provided expert testimony that clarifies the proper meaning of the term, and the court has scant other evidence on which to base an

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finds specification opinion as to its

course, there is a presumption of validity, 35 § 282, and close questions of

must be resolved in favor ofTenPoint. See Exxon Research & Eng'g Co. v. United States, 265 F.3d 1371, 1380 (Fed. Cir. 2001), abrogated on other grounds by Nautilus, 134 S. Ct. 2120 (2014). Parker has not yet moved for summary judgment on invalidity grounds. Given the high burden borne by Parker and the dispositive effect of an ruling, the court fmds Parker's invalidity argument to be more appropriately addressed at summary judgment.

It may be true that determining the indefmiteness of claim language is a question of law is drawn from the court's performance of its duty as the construer of patent which is the same duty that gives rise to the Markman hearing. Exxon, 265 F.3d at 1373. However, this does not outweigh the previous practical considerations that against determining indefmiteness prior to the end of fact or expert discovery. Waddington N. Am .. Inc. v. Sabert Corp., No. 09-4883 GEB, WL 4363137, at *3 (D.N.J. 27, 2010). As such, the court defers any ruling as to the indefmiteness of Claim 4 until summary judgment.

5. said portion adapted for engagement with a user's foot extends in a direction from

said bow Finally, Parker takes issue the limitation in Claim of the '719 Patent, which reads:

a foot stirrup having a portion adapted for engagement.with a user's foot, wherein said portion adapted for engagement with a user's foot extends in a direction away from said bow assembly. '719 Patent, col. 8, 11. 51-54. Parker's argument centers on the fact that the patent does not explain in which the foot stirrup must extend: are an number of 'directions' that a portion 'adapted for engagement with a user's foot' could 'extend' away from the bow Parker's Br., ECF No. 47, at 59.

The court rejects this argument and the scope of this claim would be clear to one ordinarily skilled in

the art. The describes the portion of the foot stirrup adapted for

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60 engagement with a user's foot:

In one embodiment, the foot stirrup 74 comprises a generally shaped member extending from the riser body. The U-shaped member has a pair of leg portions and a mid-portion 112. The mid-portion 112 has an outer surface 114 that is substantially planar and is used in contacting a ground surface (as shown in FIG. 8) when cocking the crossbow '719 Patent, col. 6, ll. 22-28. This is illustrated in Figure 11:

The specification goes on to explain various embodiments of this foot stirrup:

The mid-portion 112 in one embodiment is on the same as the leg portions In another embodiment, shown, the mid portion 112 has an offset 116. This offset 116 permits the crossbow

to be easily balanced on a ground surface when a user is cocking the crossbow As shown FIGS. 11-12, the offset 116 may extend downwardly. In one embodiment, the leg portions extend substantially perpendicular from an inner surface of the mid portion 112. In another embodiment, shown in FIG. 12, each leg portion has an offset 118 that may extend outwardly. This offset

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"portion foot"

"in from"

0-20; skilled· "away from"

118 permits the opening 72 to be larger to thereby receive a user's foot that is larger and also provides for a longer mid-portion 112 that assists in balancing the crossbow to .a ground surface. '719 Patent, col. 6, ll. 28-41. Figure 12 is illustrative:

From this description and the illustrations, one skilled in the art would understand what is meant by the [of the foot stirrup] adapted for engagement with user's in the context of this patent.

Additionally, a skilled artisan would understand with reasonable certainty which direction the claimed portion of the foot stirrup extends. Claim 5 states that the relevant portion of the foot stirrup extends a direction away the bow assembly. The patent clearly identifies the bow assembly, see. e.g., '719 Patent, col. 4, ll. 1 thus, a artisan would understand which direction is the bow assembly. The scope of this claim limitation is especially clear in light of the patent illustrations. See, e.g., '719 Patent, Fig. 1, Fig. 3.

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2014

"defined position," "defined relationship," "defined relationship," "in proximity," "Devices

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fixation movement." indefiniteness

"nothing specification

site." "the identified

indefmite" "new, rigorous" 9-10.

"extends assembly," specification (specifically sufficient

indefinite. This case is unlike the one cited by Parker, Abdou v. Alphatec Spine, Inc., No. 12-CV-1804 BEN (RBB), WL 6611422, at *8-9 (S.D. Cal. Nov. 19, 2014). 24

In Abdou, which was before the court on summary judgment, the court found indefmite certain terms including anatomical anatomical spatial and

which appeared in claims of two patents entitled and Methods for Inter Vertebral Orthopedic Device directed toward the treatment of diseases of the spine. The previously held that these relationships limited by the necessity that the surgical site be accurately targeted and that the mount, anchor device, or member be positioned to limit

Id. at *9. In considering at the summary judgment stage, the court found that in the claims or tells a person of ordinary skill in the art what the anatomical position, anatomical relationship, spacial relationship, or should be to accurately target the surgical Id. at *9. Thus, absence of boundaries in terms of proximity, distance, or location render[ed] the claims under the more Nautilus standard. Id. at *8,

The facts of Abdou are distinguishable from those before the court with respect to Claim 5 of the '719 Patent. The limitation describing a portion of the foot stirrup that in a direction away from said bow read in the context of the and patent illustrations Figures 1 and 3), provides objective boundaries to allow one ordinarily skilled in the art to understand the scope of the invention with reasonable certainty. Parker has not met its burden of proving Claim 5 is

2 4 Abdou is currently on appeal to the Federal Circuit.

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terms cou.rt Parker indefiniteness, United Cou.rt For the foregoing reasons, the court rules as follows:

1. The terms and are construed to mean bow limb or bow limbs that have a thickness that varies continuously from the end to the hinge point.

2. Claim 4 of the '595 is corrected to read length of the bow limb is between 11 and 12 inches; and, the length of the second bow limb is between 11 and 12

3. The term two numerical values does not construction and will be given its plain and ordinary meaning. However, the the scope of this limitation includes the endpoints.

4. The term foot stirrup mounted to said end of said main does not construction and will be given its plain and ordinary meaning. However, the court the scope of this limitation does not mounting.

5. The term riser that comprises: a connection portion that connects the riser to an end of the main does not construction and will be given its plain and ordinary meaning. However, the court the scope of this limitation does not the separate, attachment of the riser and the bow assembly to the main beam.

6. The court defers a ruling as to the and validity of Claim 4 of the '719 until summary judgment.

7. As to the remaining claim in dispute, the fmds has not met its burden of proving given the standard set forth by the States Supreme in Nautilus, Inc. v. Biosig Instruments, Inc., 134 S. Ct. 2120 (2014).

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Entered: (--

Michael F. Urbanski United States District Judge

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