IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

TRIMED, INC.,	)	
	)	
Plaintiff,	)	
	)	
v.	)	C.A. No. 18-666 (MN)
	)	
ARTHREX, INC.,	)	
	)	
Defendant.	)	

MEMORANDUM ORDER

At Wilmington this 31st day of July 2019:

IT IS HEREBY ORDERED that the claim term of U.S. Patent No. 8,177,822 ("the '822 Patent") with an agreed-upon construction is construed as follows (*see* D.I. 45 at 12-13):

1. "fractures of a bone" means "a fracture or break of any bone"

Further, as announced at the hearing on July 30, 2019, IT IS HEREBY ORDERED that the disputed claim terms of the '822 Patent are construed as follows:

1. "wrap around a terminal endpoint of the bone" means "curving or extending onto the end surface of the bone"

2. "offset" means "the difference in length between the apex of the first hook and the end of the plate opposite the hook compared to the apex of another hook and that end" and the difference in length may be zero

Plaintiff TriMed, Inc. ("Plaintiff" or "TriMed") and Defendant Arthrex, Inc. ("Defendant" or "Arthrex") briefed the issues (*see* D.I. 45) and submitted an appendix containing both intrinsic and extrinsic evidence (*see* D.I. 46; *see also* D.I. 41). The Court carefully reviewed all submissions in connection with the parties' contentions regarding the disputed claim terms, heard oral argument and applied the following legal standards in reaching its decision:

I. LEGAL STANDARDS

"[T]he ultimate question of the proper construction of the patent [is] a question of law," although subsidiary fact-finding is sometimes necessary. *Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 837-38 (2015). "[T]he words of a claim are generally given their ordinary and customary meaning [which is] the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005) (en banc) (internal citations and quotation marks omitted). Although "the claims themselves provide substantial guidance as to the meaning of particular claim terms," the context of the surrounding words of the claim also must be considered. *Id.* at 1314. "[T]he ordinary meaning of a claim term is its meaning to the ordinary artisan after reading the entire patent." *Id.* at 1321 (internal quotation marks omitted).

The patent specification "is always highly relevant to the claim construction analysis . . . [as] it is the single best guide to the meaning of a disputed term." *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). It is also possible that "the specification may reveal a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess. In such cases, the inventor's lexicography governs." *Phillips*, 415 F.3d at 1316. "Even when the specification describes only a single embodiment, [however,] the claims of the patent will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using words or expressions of manifest exclusion or restriction." *Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1372 (Fed. Cir. 2014) (internal quotation marks omitted) (quoting *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004)).

In addition to the specification, a court "should also consider the patent's prosecution history, if it is in evidence." *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 980 (Fed. Cir. 1995) (en banc), *aff'd*, 517 U.S. 370 (1996). The prosecution history, which is "intrinsic evidence, . . . consists of the complete record of the proceedings before the PTO [Patent and Trademark Office] and includes the prior art cited during the examination of the patent." *Phillips*, 415 F.3d at 1317. "[T]he prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be." *Id.*

In some cases, courts "will need to look beyond the patent's intrinsic evidence and to consult extrinsic evidence in order to understand, for example, the background science or the meaning of a term in the relevant art during the relevant time period." *Teva*, 135 S. Ct. at 841. Extrinsic evidence "consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises." *Markman*, 52 F.3d at 980. Expert testimony can be useful "to ensure that the court's understanding of the technical aspects of the patent is consistent with that of a person of skill in the art, or to establish that a particular term in the patent or the prior art has a particular meaning in the pertinent field." *Phillips*, 415 F.3d at 1318. Nonetheless, courts must not lose sight of the fact that "expert reports and testimony [are] generated at the time of and for the purpose of litigation and thus can suffer from bias that is not present in intrinsic evidence." *Id.* Overall, although extrinsic evidence "may be useful to the court," it is "less reliable" than intrinsic evidence, and its consideration "is unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence." *Id.* at 1318-19. Where the intrinsic record unambiguously describes the scope

of the patented invention, reliance on any extrinsic evidence is improper. *See Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1308 (Fed. Cir. 1999) (citing *Vitronics*, 90 F.3d at 1583).

II. THE COURT'S RULING

The Court's rulings regarding the disputed claim terms of the '822 Patent were announced from the bench at the conclusion of the hearing as follows:

> At issue is U.S. Patent 8,177,822, titled "Contoured Bone Plate for Fracture Fixation Having Hook Members and Drill Guide for Same." There are two terms in dispute, and as I said, I'm prepared to rule on each of those disputes. I will not be issuing a written opinion, but I will issue an order stating my rulings. I want to emphasize before I announce my decisions that, while I am not issuing a written opinion, we have followed a full and thorough process before making the decisions I am about to state. I have reviewed the '822 Patent and the portions of the prosecution history submitted. There was full briefing on each of the disputed terms, and that briefing included an appendix that explained how certain commercial devices work and included other extrinsic evidence. There was a declaration from the sole inventor on the '822 Patent. And there has been argument here today. All of that has been carefully considered.
>
> Now as to my rulings. As an initial matter, I am not going to read into the record my understanding of claim construction law generally. I have a legal standard section that I have included in earlier opinions, including in my recent order in *OmegaFlex v. Ward Manufacturing*, C.A. No. 18-1004. I incorporate that law and adopt it into my ruling today and will also set it out in the order that I issue.
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> Additionally, with respect to the person of ordinary skill in the art in this case, Plaintiff asserts that that person is someone "that has a technical background and three to five years of experience in bone and soft tissue anatomy and the biomechanical principles of fracture fixation." In the joint brief, Defendant does not offer a definition of a person of ordinary skill in the art[] and does not contest Plaintiff's definition for purposes of claim construction. So I will use Plaintiff's definition.
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> The first disputed term is "wrap around a terminal endpoint of the bone" in claim 1. Plaintiff's proposed construction is "extending around a point on the terminal end of the bone." Defendant, on the other hand, proposed the construction: "curving

or extending onto the end surface of the bone." I agree with Defendant and construe this term to mean "curving or extending onto the end surface of the bone." I note that in the briefing, Defendant referred to "curving around the very tip" of the bone. Here, today, the Defendant stated that by tip – it's referring to the surface. I accept that but want to make clear that I am not construing the term to require that it curve or extend around the "very tip" of the bone.

As an initial matter, the specification refers to the terminal end of a bone as the portion where the bone flares out. I think all of the parties here agree on that. That can be found in the patent at column 2, lines 2 through 6, column 3, lines 14 through 16, column 5, lines 50 to 52 and column 6, lines 1 through 3. The specification does not, however, use the words wrap around or endpoint.

The words of the claim "wrap around" have a plain meaning that encompasses the notion of curving around from one surface to the other, and this is supported by the dictionaries cited by Defendant. For example, Webster's College Dictionary, Second Edition, defines "wrap around" as "extending in a curve from the front around to the sides." The Oxford Dictionary, Eleventh Edition, defines "wrap around" as "curving or extending around at the edges or side." And the American Heritage Dictionary, Fourth Edition, defines "wrap around" as "shaped to curve around the sides."

Here, according to the claim language, the second region of the bone plate must wrap around the terminal endpoint. This suggests that the bone plate must do more than extend to the terminal end of the bone, as Plaintiff proposes. Rather, the bone plate must wrap – or curve – around to the end surface of the bone. This is depicted consistently in the patent – for example, in Figures 10 through 12 of the '822 Patent, and there is no similar depiction or description anywhere in the patent where the bone plate does not curve around or extend onto the end surface of the bone.

The construction I adopt is also supported by the prosecution history. In its November 14, 2011 Amendment and Response to an Office Action, the Patent Applicant amended the claim language to clarify the claims and to address a rejection over the Foley prior art. In the rejection, the Patent Examiner noted that Foley had a second portion configured to wrap around a terminal end of the bone and pointed to the two projections - the bone engaging fasteners. In its remarks, Applicant emphasized that Foley did not disclose a bone plate having a second portion configured to wrap around the terminal end of a bone. And I will note that the phrase "wrap

around" was emphasized by underlining in the Applicant's response. In discussing the differences between Foley and the invention at issue here, Applicant noted that the bone plate of Foley could not "wrap around" anything because it was "entirely planar." In conjunction with these arguments, Applicant cited Figures 4 and 10, which support the conclusion that the claimed bone plate extends around and onto the end surface of the bone. In particular, Figure 4 shows the drill guide set up to drill holes in the end surface of the bone to receive the bone plate projections, and Figure 10 shows the plate wrapping around the end and the projections going into the holes made in the end surface of the bone. I believe this discussion in the prosecution history further suggests that the bone plate at issue here is one that curves or extends onto the end surface of a bone. To be clear, I am not finding prosecution disclaimer as applied to this disputed term. I am simply using the prosecution as a guide to the patentee's understanding of the claimed invention, as *Phillips* instructs that I may do.

Finally, I will note that there is nothing in the specification or the prosecution history to support Plaintiff's proposed construction that wrapping around "a terminal endpoint" simply means wrapping around any point that falls on the terminal end of the bone. Plaintiff refers me to the purpose of the patent and says the specification never identifies the terminal endpoint as the surface. Although that's true – it doesn't carry any weight. The specification never identifies the terminal endpoint at all. It never uses that term. Instead, the intrinsic evidence consistently depicts or describes the bone plate wrapping – or curving – around onto the end surface of the bone.

The second disputed term is "offset" in claim 1. Plaintiff proposes that "offset" be construed as "spaced." Defendant proposes "offset" be construed as "asymmetrically spaced." Not only do the parties disagree as to the words of the construction – they disagree as to what the term is referring to – the lateral spacing between the hooks, parallel holes and sleeves as Plaintiff argues, or the longitudinal distance from the apex of the hook to the first or second end of the plate, as Defendant asserts.

Plaintiff says that its construction is supported by "the entire purpose of the invention," which is "to have the plate sit flush against the bone when the projections are inserted into the drill holes in the terminal end." I disagree. The citations provided by Plaintiff including column 2, lines 29 through 36 and lines 62 to 64, column 3 lines 26 through 29, column 7, lines 14 through 22, column 8, lines 8 through 13, and column 10, lines 52 to 62, make clear that what

allows the plate to "sit flush against the bone" is the depth and trajectory or angle of the holes and hooks and the shape of the plate.

For example, column 2, lines 29 through 35 state, "It is a further object of the present invention to provide a means to create pilot holes in the terminal fragment for engagement by the hooks in the plate such that the hook or hooks in the plate engage the bone at the correct depth and trajectory so as to direct the plate to advance both longitudinally as well as drop down against the surface of the bone as it is seated."

Similarly, column 8, lines 5 to 13 state that "the present invention also comprises a double barreled drill guide, configured to direct a drill or K-wire in the proper depth and angle, relative to the lateral malleolus, such that, after pilot holes are drilled for the hook members and upon subsequently impacting the hook members...the bottom surface of the hook plate tracks, and, when fully seated, is substantially adjacent, the surface contour of the [lateral] malleolus and [the] adjacent lateral surface of the fibula." Also see column 10, lines 57 through 62.

Again, this language describes the depth and angle or trajectory of the holes and hooks as what is allowing the plate to sit flush with the bone – not the lateral distance between the projections or the holes or sleeves. Indeed[,] that distance is never mentioned in the patent.

I disagree with Defendant, however, that the apexes of the hooks must extend to different lengths along the longitudinal axis.

The specification makes clear that the length from the apex of the first hook to the end may be the same or different than the length of the apex of the second hook to the end. Column 2, lines 64 to column 3, line 5 says that "the first hook member has a first curved region including a first apex, the second curved member has a second curved region including a second apex, and the distance between the second end and the first apex is greater than the distance between the second end and the second apex. In another preferred embodiment, the distance between the second end to the first apex is equal to the distance between the second end to the second apex."

And in discussing how to achieve the correct offset, the specification in column 10, lines 41 through 44 states, "If the gauge assembly fully seats, it is indicative of the proper offset plate to use. If the gauge assembly does not seat when inserted with either attitude, it is indicative that a zero offset, bilaterally symmetrical

plate is required." Similarly, the patent references a "zero offset" in column 11, line 26. Defendant conceded that a predetermined length of zero would be covered by the claims. That an offset as described in the specification may be zero is inconsistent with Defendant's proposed construction, which would require that the offset be other than zero.

I will thus construe "offset" to mean "the difference in length between the apex of the first hook and the end of the plate opposite the hook compared to the apex of another hook and that end." This difference in length may be zero.

Maryellen Noreika

The Honorable Maryellen Noreika
United States District Judge