IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

MHL CUSTOM, INC., Plaintiff, v. WAYDOO USA, INC. and SHENZHEN WAYDOO INTELLIGENCE TECHNOLOGY CO., LTD., Defendants.	Civil Action No. 21-0091-RGA

MEMORANDUM OPINION

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BRP 1028

ANDREWS, UNITED STATES DISTRICT JUDGE:

Before me are Plaintiff MHL Custom's ("MHL") and Defendants Waydoo USA's and Shenzhen Waydoo Intelligence Technology's (collectively, "Waydoo") motions for partial summary judgment. The parties have fully briefed the motions. (D.I. 80, 83, 91, 93, 101, 106). I heard oral argument on January 4, 2023.

I. BACKGROUND

Plaintiff alleges that Defendants infringe two of Plaintiff's patents. Those patents are U.S. Patent Nos. 9,359,044 (the, "'044 Patent") and 9,586,659 (the, "'659 Patent") (collectively, the "Asserted Patents"). The Asserted Patents relate to a personal hydrofoil watercraft. The Asserted Patents share a common specification.

Plaintiff asserts that Defendants' products infringe all claims of the '044 Patent (claims 1-22) and '659 Patent (claims 1-20). Defendants counterclaimed. (D.I. 13). The parties agree claim 1 of the '044 Patent and claims 1 and 16 of the '659 Patent are representative of the other claims for purposes of the pending motions.[1]

Plaintiff has moved for summary judgment of (1) direct infringement of claim 1 of the '044 Patent, (2) the '044 Patent and '659 Patent are not anticipated, and (3) Plaintiff has standing. (D.I. 77, 78, 79). Defendants have moved for summary judgment of (1) claims 16-20 of the '659 Patent are invalid for lack of written description, (2) non-infringement of the '044 Patent, and (3) non-infringement of claims 1-15 of the '659 Patent. (D.I. 81).

[1] These three claims are the independent claims in the two patents. For purposes of the pending motions, Parties agree that the other elements of the dependent claims are met and only dispute as to whether all the claim elements as listed in the three independent claims are infringed by Defendants' products.

II. LEGAL STANDARD

"The court shall grant summary judgment if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." FED. R. CIV. P. 56(a). Material facts are those "that could affect the outcome" of the proceeding. *Lamont v. New Jersey*, 637 F.3d 177, 181 (3d Cir. 2011) (quoting *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986)). "[A] dispute about a material fact is 'genuine' if the evidence is sufficient to permit a reasonable jury to return a verdict for the nonmoving party." *Id.* The burden on the moving party may be discharged by pointing out to the district court that there is an absence of evidence supporting the non-moving party's case. *Celotex Corp. v. Catrett*, 477 U.S. 317, 323 (1986).

The burden then shifts to the non-movant to demonstrate the existence of a genuine issue for trial. *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 586–87 (1986); *Williams v. Borough of West Chester*, 891 F.2d 458, 460–61 (3d Cir. 1989). A non-moving party asserting that a fact is genuinely disputed must support such an assertion by: "(A) citing to particular parts of materials in the record, including depositions, documents, electronically stored information, affidavits or declarations, stipulations . . . , admissions, interrogatory answers, or other materials; or (B) showing that the materials cited [by the opposing party] do not establish the absence . . . of a genuine dispute . . . ." FED. R. CIV. P. 56(c)(1). The non-moving party's evidence "must amount to more than a scintilla, but may amount to less (in the evaluation of the court) than a preponderance." *Williams*, 891 F.2d at 460–61.

When determining whether a genuine issue of material fact exists, the court must view the evidence in the light most favorable to the non-moving party and draw all reasonable inferences in that party's favor. *Scott v. Harris*, 550 U.S. 372, 378 (2007); *Wishkin v. Potter*, 476 F.3d 180,

184 (3d Cir. 2007). If the non-moving party fails to make a sufficient showing on an essential element of its case with respect to which it has the burden of proof, the moving party is entitled to judgment as a matter of law. *See Celotex*, 477 U.S. at 322.

III. DISCUSSION

A. INFRINGEMENT OF CLAIMS 1-15 OF THE '659 PATENT

Defendants have moved for summary judgment on non-infringement of claims 1-15 of the '659 Patent (D.I. 80 at 20-26; D.I. 83 at 29-32). The dispute focuses on whether Defendants infringe claim 1 of the '659 Patent. Claims 2-15 depend on claim 1. The claim reads as follows:

> 1. A passively stable, weight-shift controlled personal hydrofoil watercraft, comprising:
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> a flotation device that has a fore-aft length greater than a lateral width, the flotation device having a top surface and a bottom surface, wherein a user can be disposed on the top surface of the flotation device in a prone, kneeling, or standing position, the flotation device having a forward section, a middle section, and a rear section;
>
> a strut having a upper end and a lower end, the upper end fixedly interconnected with the flotation device between the middle section and the rear section of the flotation device;
>
> a hydrofoil fixedly interconnected with the lower end of the strut, the hydrofoil having no movable surface;
>
> a propulsion system for propelling the watercraft in a body of water, wherein the propulsion system is connected to the hydrofoil; and
>
> the watercraft having no movable steering system.

('659 Patent, cl. 1). The parties agree that the preamble of the '659 Patent—A passively stable, weight-shift controlled personal hydrofoil watercraft–is limiting. (D.I. 83 at 30; D.I. 91 at 41). The parties dispute whether the "stable" aspect of the limitation is met. (D.I. 83 at 29-32; D.I. 91 at 43-45).

There are two issues to this dispute.

The first issue is whether "stable" includes both static stability – having an initial tendency to return to an original condition when disturbed – and dynamic stability – eventually returning to an original condition when disturbed. (D.I. 60-2, Ex. B at 602). Defendants argue both are included; Plaintiff, only static stability. I previously construed this term to have its plain and ordinary meaning but permitted the parties to readdress the issue at this stage of the case. (D.I. 66 at 9). Because there is a dispute over the scope of the claim term, I must construe the term before addressing the question of infringement. *O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1361 (Fed. Cir. 2008) ("A determination that a claim term 'needs no construction' or has the 'plain and ordinary meaning' may be inadequate . . . when reliance on a term's 'ordinary' meaning does not resolve the parties' dispute.").

The second issue is whether Defendants infringe the stability limitation as construed.

1. Claim Construction

"It is a bedrock principle of patent law that the claims of a patent define the invention to which the patentee is entitled the right to exclude." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (internal quotation marks omitted). "'[T]here is no magic formula or catechism for conducting claim construction.' Instead, the court is free to attach the appropriate weight to appropriate sources 'in light of the statutes and policies that inform patent law.'" *SoftView LLC v. Apple Inc.*, 2013 WL 4758195, at *1 (D. Del. Sept. 4, 2013) (quoting *Phillips*, 415 F.3d at 1324) (alteration in original). When construing patent claims, a court considers the literal language of the claim, the patent specification, and the prosecution history. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 977–80 (Fed. Cir. 1995) (en banc), *aff'd*, 517 U.S. 370 (1996). Of these sources, "the specification is always highly relevant to the claim construction

analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term." *Phillips*, 415 F.3d at 1315 (internal quotation marks omitted).

"[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." *Id.* at 1312–13 (citations and internal quotation marks omitted). "[T]he ordinary meaning of a claim term is its meaning to [an] ordinary artisan after reading the entire patent." *Id.* at 1321 (internal quotation marks omitted). "In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words." *Id.* at 1314.

When a court relies solely upon the intrinsic evidence—the patent claims, the specification, and the prosecution history—the court's construction is a determination of law. *See Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 574 U.S. 318, 331 (2015). The court may also make factual findings based upon consideration of extrinsic evidence, which "consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises." *Phillips*, 415 F.3d at 1317–19 (internal quotation marks omitted). Extrinsic evidence may assist the court in understanding the underlying technology, the meaning of terms to one skilled in the art, and how the invention works. *Id.* Extrinsic evidence, however, is less reliable and less useful in claim construction than the patent and its prosecution history. *Id.*

Defendants argue that "stable" should mean being statically stable and dynamically stable. Defendants cite to the patent specification and textbooks for support that a person of ordinary skill in the art ("POSA") would read "stable" to require static and dynamic stability. (D.I. 83 at 4-7).

Plaintiff argues that "stable" should be interchangeable with statically stable or having static stability, and therefore, does not require that the watercraft have dynamic stability. (D.I. 91 at 22). Plaintiff cites to their expert, Mr. Barry, for support that "'stable' and 'static stability' are 'commonly used interchangeably with respect to aircraft and hydrofoil stability.'" (D.I. 91 at 18 (citing D.I. 80-31, ¶ 12)). Mr. Barry also expressed an opinion that the patent uses the terms interchangeably. (*Id.* at 19).

I agree with Defendants that "stable" should mean having both static stability and dynamic stability. I previously rejected Plaintiff's argument that "stable" and "static stability" could be used interchangeably. (D.I. 66 at 9). Plaintiff has not provided compelling intrinsic or extrinsic evidence to convince me to deviate from my initial view. Furthermore, the patent specification recites, "This trim condition is stable if a disturbance results in a restoring moment that returns the hydrofoil to its original condition." ('659 Patent, col. 6:14-16). The hydrofoil returning to its original condition is a description of dynamic stability, not static stability. Therefore, the patent specification indicates that stable and statically stable (or static stability) are not interchangeable.

Therefore, I will construe "A passively stable, weight-shift controlled personal hydrofoil watercraft" to mean "a weight-shift controlled personal watercraft having a hydrofoil that does not have any moveable components and which, when disturbed, (1) has an initial tendency to return to its original condition and (2) eventually returns to its original condition."[2]

2. Non-Infringement by the Accused Products

The remaining issue is whether the accused products have static stability and dynamic stability. Defendants argue that their products are dynamically unstable (or lack dynamic stability) and Plaintiff has provided no evidence to show the accused products are dynamically stable. Thus,

[2] I proposed this construction prior to oral argument. (D.I. 142).

Defendants argue there is no genuine issue of material fact that precludes summary judgment that the accused products do not infringe claims 1-15 of the '659 Patent.

Defendants contend that the only evidence Plaintiff has that shows Defendants' products are dynamically stable are "eigenvalue" analyses of some of the accused products. (D.I. 83 at 31). The parties agree that this type of analysis can be used to assess whether a watercraft is dynamically stable. (D.I. 83 at 31; D.I. 91 at 43). "If an eigenvalue analysis reports a positive 'sigma value,' it indicates that [a watercraft] is unstable." (D.I. 83 at 3). Defendants assert, because "[a]ll of Mr. Barry's eigenvalue analyses for [Defendants'] products report positive sigma values," Plaintiff's own expert shows conclusively that Defendants' products do not have dynamic stability. (D.I. 83 at 32).

Plaintiff argues that Defendants are not entitled to summary judgment because there still exists a genuine issue of material fact as to whether Defendants' products are dynamically stable. Plaintiff cites to Mr. Barry's deposition where he testified that he did not believe his analyses showed the products were dynamically unstable. (D.I. 91 at 44). Plaintiff contends that: (1) while Mr. Barry's eigenvalue analysis showed the watercrafts to be dynamically unstable, the results were "close" to showing dynamic stability, and (2) when Mr. Barry viewed the accused products operating in the real world, he concluded that they were dynamically stable, notwithstanding the eigenvalue analysis. (*Id.*; *see* D.I. 85-1, Ex. 6, 402:8-403:23 (stating positive eigenvalues did not indicate dynamic instability in part because the software was "an approximation" and did not account for all effects)). Plaintiff, therefore, argues that the eigenvalue analysis is not conclusive when considering Mr. Barry's testimony and other analyses.

Plaintiff also relies on Mr. Barry's statements that the Athena Vortex Lattice (AVL) software he used to analyze the stability of the watercrafts understated the stability of the accused

products.[3] Mr. Barry stated that the AVL software does not account for additional stabilizing factors that "exist once the effect of the water in which the hydrofoil is operating in is considered," such as "damping, free surface, added mass, and viscosity". (D.I. 91 at 44; *see, e.g.*, D.I. 80-33, Ex. 31, ¶¶ 23 (free surface), 55 (damping, added mass and viscosity effects)). Therefore, Plaintiff contends that Mr. Barry's testimony about his different analyses and his conclusions raises a genuine dispute as to whether the accused products are dynamically stable.

I agree with Plaintiff that there is a genuine dispute whether the accused products are dynamically stable. Defendants are correct that the eigenvalue analyses of the watercrafts show at least one positive sigma value for each product analyzed, which Plaintiff does not dispute, indicating dynamic instability. Those analyses, however, are not the only evidence in the record. The record also includes testimony by Mr. Barry, in which he concludes that the watercraft are dynamically stable based on analyzing the stability derivatives using the AVL software and observation of the watercraft in the real world. (D.I. 91 at 44; *see, e.g.*, D.I. 80-33, ¶¶ 26-28, 53-55). Taking the evidence in the light most favorable to Plaintiff, as I am required to do, I determine that a reasonable jury could conclude that the accused products have dynamic stability and therefore do infringe.

Therefore, I will deny summary judgment of infringement of claims 1-15 of the '659 Patent.

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[3] Mr. Barry used the AVL software to analyze the pitch stability derivative, directional stability derivative, and roll stability derivative to assess watercraft stability. Mr. Barry also used the AVL software to analyze the eigenvalues for his eigenvalue analysis. (*See, e.g.*, D.I. 85-1, Ex. 3, ¶¶ 95-96, 155-156)

B. INFRINGEMENT OF THE '044 PATENT

The parties have cross-moved for summary judgment on infringement of claims 1-22 of the '044 Patent (D.I. 80 at 20-26; D.I. 83 at 29-32). The parties agree that whether either side is entitled to summary judgment comes down to whether there is a genuine issue of material fact that Defendants infringe claim 1 of the '044 Patent. The claim reads as follows:

> 1. A passively stable, weight-shift controlled personal hydrofoil watercraft, comprising:
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> a flotation device that has a fore-aft length greater than a lateral width, the flotation device having a top surface and a bottom surface, wherein a user can be disposed on the top surface of the flotation device in a prone, kneeling, or standing position, the flotation device having a forward section, a middle section, and a rear section, and the flotation device being controlled via weight shift of the user;
>
> a strut having an upper end and a lower end, the upper end fixedly interconnected with the flotation device between the middle section and the rear section of the flotation device;
>
> a hydrofoil fixedly interconnected with the lower end of the strut, the hydrofoil having no movable surface and designed to provide passive static stability controlled solely by weight shift of the user;
>
> a propulsion system for propelling the watercraft in a body of water, wherein the propulsion system is connected to the hydrofoil; and
>
> the watercraft having no movable steering system.

('044 Patent, cl. 1). There are two disputes at issue here. First, the parties dispute whether the preamble of claim 1 is limiting. Plaintiff argues it is not; Defendants, that it is. Second, the parties dispute whether Defendants' products satisfy the stability limitations of claim 1. Resolving the second issue necessarily depends on the outcome of the first issue.

1. Whether the Preamble of Claim 1 is Limiting

As an initial matter, it is proper for me to determine whether the preamble of claim 1 is limiting or not. Plaintiff argues that this is a determination to be left for the jury. (D.I. 91 at 41).

Plaintiff is mistaken. Determining the effect of preamble language is a claim-construction issue. *See Cochlear Bone Anchored Solutions AB v. Oticon Medical AB*, 958 F.3d 1348, 1354 (Fed. Cir. 2020). Claim construction and resolving the scope of asserted claims are questions of law left to the court. *See Every Penny Counts, Inc. v. American Express Co.*, 563 F.3d 1378, 1383 (citing *O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1361-62 (Fed. Cir. 2008)). Therefore, I find it is necessary for me to make this determination now.[4]

"[A]s a general rule preamble language is not treated as limiting." *Aspex Eyewear, Inc. v. Marchon Eyewear, Inc.*, 672 F.3d 1335, 1347 (Fed. Cir. 2012). "Whether to treat a preamble as a limitation is 'determined on the facts of each case in light of the overall form of the claim, and the invention as described in the specification and illuminated in the prosecution history.'" *Deere & Co. v. Bush Hog, LLC*, 703 F.3d 1349, 1357 (Fed. Cir. 2012) (quoting *Applied Materials, Inc. v. Advanced Semiconductor Materials Am., Inc.*, 98 F.3d 1563, 1572-73 (Fed. Cir. 1996)). "In general, a preamble limits the invention if it recites essential structure or steps, or if it is necessary to give life, meaning, and vitality to the claim." *Catalina Mktg. Int'l, Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801, 808 (Fed. Cir. 2002) (citation and quotation marks omitted). "The preamble may be limiting to the extent it is 'necessary to provide antecedent basis for the body of the claim.'" *Cochlear Bone*, 958 F.3d at 1355 (quoting *Symantec Corp. v. Computer Assoc. Int'l, Inc.*, 522 F.3d 1279, 1288 (Fed. Cir. 2008)). In addition, the preamble may be limiting when the preamble "is essential to understand limitations or terms in the claim body," recites "additional structure or steps underscored as important by the specification," or there was "clear reliance on the preamble during

[4] While I have construed identical preamble language in the context of claim 1 of the '659 Patent as limiting, both parties agreed the preamble was limiting in that patent.

prosecution to distinguish the claimed invention from the prior art." *Catalina*, 289 F.3d at 808. In other words, there are numerous exceptions to the default rule that a preamble is not limiting.

Plaintiff contends that the preamble is not limiting because there is a presumption against reading a preamble as limiting and this case does not present one of the recognized exceptions to that presumption. Specifically, Plaintiff argues that the "preamble does not: (1) recite essential structure; (2) provide antecedent basis to the claim term at issue; and (3) is not essential to understand limitations or terms in the claim body." (D.I. 91 at 42).

Plaintiff further argues that there was no reliance on the preamble during prosecution. (*Id.* at 43). Plaintiff cites to the fact the preamble was present in the original claim as filed, and the static stability limitation was added to overcome prior art. (D.I. 146 at 2). Plaintiff contends that this shows that neither the inventor nor Examiner relied on the preamble during prosecution because the addition of the static stability limitation would be unnecessary if the preamble were limiting. (*Id.* at 2).

Defendants argue the preamble should be limiting because claim 1 of the '659 Patent, which is part of the same patent family and has an identical specification, recites identical language and both parties agree the preamble is limiting in that context. Defendants contend that there is "no technical or legal justification for why identical preambles should be treated differently." (D.I. 83 at 30). Defendants further argue that the preamble "is limiting because it recites an 'essential' element not found in the body of the claim (i.e., dynamic stability)." (D.I. 106 at 15). To put it another way, Defendants argue that the patent specification "repeatedly defines the invention as an overall stable watercraft," and therefore the preamble should be limiting because only the preamble specifies that the invention is dynamically stable. (D.I. 145 at 3).

I agree with Plaintiff that the preamble is not limiting. As an initial matter, I am not aware of any case law that states a preamble must be limiting in one patent because the identically worded preamble is limiting in another patent belonging to the same patent family. Defendants have also not supplied any such case law, despite being given additional time to do so. (D.I. 145 at 1).

The proposed identically-worded-preamble rule is inconsistent with the case law.[5] The Federal Circuit has stated "[w]hether to treat a preamble as a limitation is determined on the facts of each case in light of the overall form of the claim[] and the invention as described in the specification and illuminated in the prosecution history." *Cochlear Bone*, 958 F.3d at 1354 (quoting *Deere & Co.*, 703 F.3d at 1357). I am thus required to analyze the form of claim 1 of the '044 Patent, which has significant differences from the form of claim 1 of the '659 Patent, when determining whether the preamble is limiting. Therefore, I do not believe that the presumption against reading a preamble as non-limiting is overcome just because the same preamble is limiting in claim 1 of the '659 Patent.

I do not find that dynamic stability is an "essential" element that requires the preamble to be limiting. Nor do I think dynamic stability is "underscored as important by the specification." *Catalina*, 289 F.3d at 808. Nowhere in the '044 Patent is the term "dynamic stability" or "dynamically stable" used.

The '044 Patent specification does repeatedly describe the invention as being "stable" or having "passive stability," and dynamic stability is a component of those terms. *See* Section III.A.1

[5] Furthermore, I have not applied such a rule even when the claims sharing the identical preamble are part of the same patent. *See Takeda Pharma. Co. v. Actavis Lab'ys FL, Inc.*, 2016 WL 3193188, at *6 n.6, *7 n.7, *7-8 (D. Del. June 6, 2016) (independently analyzing whether identical preamble language is limiting in two separate claims of the same patent), *aff'd in part, rev'd in part sub nom. Nalproprion Pharms., Inc. v. Actavis Lab'ys FL, Inc.*, 934 F.3d 1344 (Fed. Cir. 2019).

supra. "But not every preamble reference to additional structure is limiting, even when the structure is noted in the specification—even, indeed, when the structure is 'underscored as important by the specification.'" *Arctic Cat Inc. v. GEP Power Products, Inc.*, 919 F.3d 1320, 1329 (Fed. Cir. 2019) (quoting *Catalina*, 289 F.3d at 808 ("[W]hen reciting additional structure or steps underscored as important by the specification, the preamble may operate as a claim limitation.")). Furthermore, even though the specification references the importance of stability, it similarly does so with respect to static stability. *See* '044 Patent 2:17-20 ("The prior art in powered hydrofoil surfboards have all relied on moveable surfaces for control, and have ignored the possibility of designing the hydrofoil for passive static stability."); 5:50-54 ("Note that other versions of the hydrofoil are possible: the key is designing the hydrofoil for passive static stability via planform design, airfoil design, and span-wise twist distribution."). Therefore, I read the specification as underscoring the importance that the watercraft have static stability.

The body of claim 1 of the '044 Patent addresses this essential, static stability element of the invention by reciting "a hydrofoil . . . designed to provide passive static stability." ('044 Patent, cl. 1). Because having static stability is already an explicit limitation in the body of the claim, I do not read the preamble as supplying an essential element for claim 1 of the '044 Patent.[6]

Accordingly, I conclude that the preamble of claim 1 of the '044 Patent is not limiting.

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[6] It is this explicit recitation of static stability in the body of the claim 1 of the '044 Patent that differentiates the effect of the preamble in claim 1 of the '044 Patent from the effect of the preamble in claim 1 of the '659 Patent. The body of claim 1 of the '659 Patent does not contain any limitations pertaining to stability. As already discussed, the shared patent specification underscores the importance of the watercraft having static stability. Therefore, the preamble is providing an essential element in claim 1 of the '659 Patent by stating that the watercraft needs to be "stable." Since the preamble is limiting, the full scope of "stable" becomes a limitation.

2. Non-Infringement of the '044 Patent

Defendants' motion for summary judgment of non-infringement of the '044 Patent is premised on the preamble of claim 1 of the '044 Patent being limiting and requiring the additional limitation of dynamic stability. (D.I. 83 at 29-31). Because I have determined that the preamble to claim 1 is not limiting, there is no dynamic stability limitation in the claims of the '044 Patent. Therefore, Defendants' motion for summary judgment of non-infringement of the '044 Patent is denied.

3. Infringement of the '044 Patent

Plaintiff moves for summary judgment that Defendants infringe claim 1 of the '044 Patent, and, by extension, all other claims of the '044 Patent, on the ground that there is no genuine issue of fact that Defendants' accused products are statically stable.[7] Plaintiff argues that the testimony of its expert witness, Mr. Barry, and the analysis he conducted of the accused products, demonstrates that the accused products are passively statically stable. (D.I. 80 at 24-26). Plaintiff contends that because Defendants have not produced any affirmative evidence to dispute that the accused products are passively statically stable, there is no disputed fact in the record that prevents finding that the accused products infringe the '044 Patent. (*Id.* at 25-26).

Defendants argue, "There is a genuine dispute as to whether [Plaintiff] has evidence sufficient to meet its burden for showing even static stability." (D.I. 93 at 25). Defendants contend that their expert witness, Dr. Triantafyllou, has "explained that in trying to show static stability of the Accused Products, Mr. Barry concocted his own stability standard rather than assess them according to the standard set out in the Asserted Patents." (*Id.* at 26). Defendants further argue,

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[7] The parties agree that the only claim limitation in question is whether Defendants' products meet the stability limitation of claim 1. As discussed above, claim 1 of the '044 Patent only requires static stability because the preamble is not limiting.

"Without undisputed evidence that the Accused Products meet the standard set out in the Asserted Patents—which [Plaintiff] does not have because Mr. Barry did not so opine—summary judgment of infringement is improper." (*Id.*). Defendants also argue that summary judgment is improper because Mr. Barry did not examine all of the accused products for infringement. (*Id.*).

I agree with Defendants that there exists a genuine issue of material fact. Plaintiff has provided evidence through Mr. Barry's testimony and analysis to show that Defendants' accused products are statically stable. Defendants' expert responded by noting that Mr. Barry's analysis deviates from that included in the asserted patents, and the reason for doing so goes unexplained. (D.I. 85-1, Ex. 8, ¶ 17). A reasonable juror could weigh the testimony by the parties' experts and reach the conclusion that Plaintiff has not carried its burden to show that Defendants' products are statically stable.

Therefore, I will deny summary judgment as to infringement of the '044 Patent.

C. WRITTEN DESCRIPTION OF CLAIMS 16-20 OF THE '659 PATENT

Defendants move for summary judgment of invalidity for lack of written description for claims 16-20 of the '659 Patent. Claim 16, which is representative of the other claims,[8] reads as follows:

> 16. A personal hydrofoil watercraft, comprising:
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> a surfboard-shaped flotation device that has a fore-aft length greater than a lateral width, the flotation device having a top surface and a bottom surface, wherein the top surface has a substantially horizontal supporting surface configured to support a user in a prone, kneeling, or standing position, the flotation device having a forward section, a middle section, and a rear section;
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> a hydrofoil interconnected with the surfboard-shaped flotation device, the hydrofoil having a strut and a first hydrofoil wing, an upper end of the strut being fixedly interconnected with the surfboard-shaped flotation device;

[8] Claims 17-20 are dependent claims that depend on claim 16.

> a propulsion system attached to the surfboard-shaped flotation device for propelling the watercraft in a body of water, the propulsion system comprising a battery, an electric motor, a motor speed controller, and a propulsor, wherein the propulsor is selected from a propeller, a ducted propeller, or a pump-jet, and the battery and motor speed controller are contained in a watertight compartment integrated into the flotation device;
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> the watercraft having no movable steering system;
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> a handheld controller having a throttle; and
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> a throttle interface, wherein the throttle is adapted to send electronic signals to the throttle interface that cause an output of the propulsion system to change.

('659 Patent, cl. 16). Defendants assert the claims are invalid for lack of written description because they do not contain a stability limitation (i.e., do not require the watercraft to be statically stable, dynamically stable, or both), but the specification of the Asserted Patents "clearly discloses the alleged invention as being a stable hydrofoil watercraft, and never suggests that the alleged invention can be anything other than stable." (D.I. 83 at 26). Defendants further contend that the file history of the '044 Patent shows the patent examiner "explicitly relied on the hydrofoil providing static stability in allowing the '044 [P]atent." (*Id.*). Defendants analogize the present case to *ICU Medical, Inc. v. Alaris Medical Sys., Inc.*, 558 F.3d 1368, 1377-79 (Fed. Cir. 2009).

Plaintiff does not dispute that neither static stability nor dynamic stability (or both together) are limitations of the claims 16-20 of the '659 Patent. Plaintiff asserts the written description requirement is met because the patent specification does not limit the invention to a "stable" watercraft. Plaintiff analogizes the present case to *ScriptPro LLC v. Innovation Assoc., Inc.*, 833 F.3d 1336, 1340-42 (Fed. Cir. 2016). Plaintiff argues that a stable watercraft is just one purpose of the invention and claims 16-20 of the '659 Patent are written to address other purposes of the invention, such as not having a movable steering system, providing a "surfing feel," and being easy to transport and maintain. (D.I. 91 at 39).

The written description requirement contained in 35 U.S.C. § 112 requires that the specification "clearly allow persons of ordinary skill in the art to recognize that [the inventor] invented what is claimed." *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc) (alteration in original). "In other words, the test for sufficiency is whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date." *Id.* "When determining whether a specification contains adequate written description, one must make an 'objective inquiry into the four corners of the specification from the perspective of a person of ordinary skill in the art.'" *Bos. Sci. Corp. v. Johnson & Johnson*, 647 F.3d 1353, 1366 (Fed. Cir. 2011) (quoting *Ariad*, 598 F.3d at 1351).

The written description inquiry is a question of fact. *Ariad*, 598 F.3d at 1351. Although it is a question of fact, "[c]ompliance with the written description requirement . . . is amenable to summary judgment in cases where no reasonable fact finder could return a verdict for the non-moving party." *PowerOasis, Inc. v. T-Mobile USA, Inc.*, 522 F.3d 1299, 1307 (Fed. Cir. 2008). "A party must prove invalidity for lack of written description by clear and convincing evidence." *Vasudevan Software, Inc. v. MicroStrategy, Inc.*, 782 F.3d 671, 682 (Fed. Cir. 2015).

I find that Defendants are entitled to summary judgment that claims 16-20 of the '659 Patent are invalid for lack of written description. The patent specification does not disclose that the patentee possessed a personal hydrofoil watercraft that lacks both static and dynamic stability. There is no genuine disputed fact about this.

The specification of the '659 Patent only, and repeatedly, describes the invention as being a watercraft that is either stable or at least has static stability. For example, the abstract of the patent recites, "A passively stable personal hydrofoil watercraft . . . ." ('659 Patent at Abstract). The

patent specification further recites, "The hydrofoil of the present invention has been designed to provide passive stability in the longitudinal direction, making traditional altitude control systems based on moveable surfaces unnecessary." (*Id.* at col. 2:8-12).

Static stability distinguishes the invention from the prior art. The specification recites, "The prior art in powered hydrofoil surfboards have all relied on moveable surfaces for control, and have ignored the possibility of designing the hydrofoil for passive static stability. . . . [T]he present invention is specifically designed to achieve desired levels of stability and controllability without the need for moveable surfaces." (*Id.* at col. 2:20-26). The patent specification further emphasizes that the hydrofoil should be designed to provide static stability to the watercraft, even for undisclosed embodiments. (*Id.* at col. 5:62-65 ("Note that other versions of the hydrofoil are possible: the key is designing the hydrofoil for passive static stability via planform design, airfoil design, and span-wise twist distribution.")). The patent specification attributes the ability to be controlled by weight shift to the stability of the watercraft. The specification states, "This invention exploits passive stability to obviate the necessity for mechanisms or active control systems to provide stability. This passive stability allows the watercraft to be controlled by weight shift rather than by mechanical systems." (*Id.* at col. 6:7-11). There is nothing in the patent specification to suggest that a watercraft that is both statically and dynamically unstable is part of the disclosure. *See LizardTech, Inc. v. Earth Resource Mapping, Inc.*, 424 F.3d 1336, 1346 (Fed. Cir. 2005).

I agree with Defendants that the present case is similar to *ICU Medical*. In *ICU Medical*, the patent at issue claimed medical valves with spikes and without spikes (i.e., valves without the spike limitation). The specification of the patent, however, only described "medical valves with spikes." *Id.* at 1378. The Federal Circuit upheld the district court's grant of summary judgment

that the "spikeless" claims were invalid for lack of written description because a POSA would not have understood the patentee to have invented a "spikeless" medical valve. *Id.* at 1378-79.

Similarly, in the present case, the '659 Patent only discusses a watercraft that is at least statically stable. There is nothing in the specification that would signal to a POSA that the patentee invented a watercraft that is statically unstable. Furthermore, at oral argument, Plaintiff failed to point to any disclosure in the patent specification of a description or embodiment of a watercraft that was not at least statically stable. (D.I. 147 at 73:9-23). *See ICU Medical*, 558 F.3d at 1379.

While Plaintiff argues that this case is more analogous to *ScriptPro LLC v. Innovation Assoc., Inc.*, 833 F.3d 1336 (Fed. Cir. 2016), I disagree. In *ScriptPro*, the Federal Circuit reversed the district court's ruling that claims without a limitation of employing a "sorting and storage scheme based on patient-identifying information" were invalid for lack of written description. *Id.* at 1341.The Federal Circuit noted that while the patent specification "focuses on embodiments employing a sorting and storage scheme based on patient-identifying information," it is not a limitation of the invention because the invention is used to solve many problems, not all of which involve using a scheme based on patient-identifying information. *Id.* Specifically, the Federal Circuit cautioned that "a specification's focus on one particular embodiment or purpose cannot limit the described invention where the specification expressly contemplates other embodiments or purposes." *Id.* at 1341.

Plaintiff's arguments that watercraft stability is just one solution the invention addresses, like the scheme in *ScriptPro*, misses the mark. First, in *ScriptPro*, the Federal Circuit stated that the "patent's express disclosure that sorting and storing can be done in a number of ways distinguishes this case from . . . *ICU Medical*." *Id.* Specifically, the Federal Circuit found that the invention was not limited to using a patient-identifying information sorting scheme because the

patent specification disclosed that "any predetermined storage scheme will do." *Id.* Unlike in *ScriptPro*, there is no such express disclosure in the '659 Patent specification that the watercraft can be statically and dynamically unstable. Nor is there anything that could reasonably be interpreted as an implied disclosure.

Second, the Federal Circuit noted that the patent in *ScriptPro* was aimed at addressing multiple problems and that the different claims were directed at "covering these different aspects of the invention." *Id.* at 1342. In this case, however, the patent specification clearly describes static stability as a limitation of the invention as a whole, not an aspect of some embodiments or one purpose. *See* p.19 *supra*. The patent specification is not just describing some embodiments as stable or having static stability. (*See, e.g.*, '659 Patent, col. 2:9-12; 2:23-25, 5:62-65). Nor is the specification describing stability as just one purpose of the invention. The patent specification, instead, is emphasizing that it is the stability of the watercraft – or at the least static stability provided by the hydrofoil – that permits the invention to achieve the full scope of its purposes such as not having a moveable steering system. (*See id.* at col. 6:7-11).

Therefore, I find that Defendants are entitled to summary judgment that claims 16-20 of the '659 Patent are invalid for lack of written description.

D. ANTICIPATION OF THE '044 PATENT AND '659 PATENT

Plaintiff moves for summary judgment on Defendants' counterclaims that the Asserted Patents are invalid as anticipated by Plaintiff's products. (D.I. 80 at 26-37; *see also* D.I. 13 at 13-14). Defendants concede that they are not arguing that Plaintiff's own products invalidate the Asserted Patents. (D.I. 93 at 27 ("Waydoo is not asserting that the Asserted Patents are invalid over MHL's own products.")). Therefore, this issue is moot and Plaintiff's motion is dismissed.

Plaintiff also moves for summary judgment on Defendants' counterclaims that the Asserted Patents are invalid as anticipated by the Evolo Report. The Evolo Report is a 554 page report from "a graduate-level student project that was completed in 2009 by naval architecture students at the Royal Institute of Technology in Stockholm, Sweden." (D.I. 80 at 26-37).[9]

There are two issues to this dispute.

The first issue is whether the Evolo Report discloses the static stability limitation of the claims 1-22 of the '044 Patent and claims 1-15 of the '659 Patent.[10] Plaintiff argues it does not; Defendants argue it does.

The second issue is whether the Evolo Report is a printed publication. Plaintiff argues the Evolo Report is not because it was not publicly accessible before the priority date of the Asserted Patents. Defendants argue there is a genuine issue of material fact as to whether the Evolo Report was publicly accessible.

I address each issue in turn.

1. Does the Evolo Report Disclose the Static Stability Limitation?

"To show that a patent claim is invalid as anticipated, the accused infringer must show by clear and convincing evidence that a single prior art reference discloses each and every element of a claimed invention." *Silicon Graphics, Inc. v. ATI Tech., Inc.*, 607 F.3d 784, 796 (Fed. Cir. 2010). "[E]very element of the claimed invention [must be described], either expressly or inherently, such

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[9] Plaintiff argue that Defendants improperly combine multiple Evolo-related references into one anticipation analysis. Defendants argue in their briefing that the Evolo Report itself is the single prior art reference that anticipates the Asserted Patents. (D.I. 93 at 30). Therefore, for purposes of this motion, I focus only on the Evolo Report.

[10] Plaintiff also argues that claims 16-20 of the '659 Patent are not invalidated by anticipation because the Evolo Report does not disclose a motor speed controller, but this issue is moot as I have found claims 16-20 of the '659 Patent to be invalid for lack of written description. *See* Section III.C *supra*.

that a person of ordinary skill in the art could practice the invention without undue experimentation." *Callaway Golf Co. v. Acushnet Co.*, 576 F.3d 1331, 1346 (Fed. Cir. 2009). As with infringement, the court construes the claims and compares them against the prior art. *See Enzo Biochem, Inc. v. Applera Corp.*, 599 F.3d 1325, 1332 (Fed. Cir. 2010). "While anticipation is a question of fact, it may be decided on summary judgment if the record reveals no genuine dispute of material fact." *Encyclopaedia Britannica, Inc. v. Alpine Elecs. of Am., Inc.*, 609 F.3d 1345, 1349 (Fed. Cir. 2010).

Plaintiff argues that the Evolo Report does not disclose a statically stable watercraft. Specifically, Plaintiff argues that Defendants cannot meet their burden because Dr. Triantafyllou did not mathematically assess the stability of the watercraft disclosed in the Evolo Report. (D.I. 80 at 34-35). Plaintiff also cites to Mr. Barry's expert report to show that the Evolo Report discloses a statically unstable watercraft (*Id.* at 35-36).

Defendants argue that there is a material issue of fact as to whether the Evolo Report discloses a statically stable watercraft because Dr. Triantafyllou concluded that the Evolo Report discloses a statically stable watercraft. (D.I. 93 at 32 (citing D.I. 85-1, Ex. 7, ¶¶ 220-241)). Defendants contend that Dr. Triantafyllou responded to the arguments raised by Plaintiff's expert, Mr. Barry. (D.I. 93 at 32 (citing D.I. 85-1, Ex. 9, ¶¶ 71-77)).

I find there are genuine issues of material fact as to whether the Evolo Report discloses a statically stable watercraft. Both parties rely on the testimony of their expert witnesses to establish their positions. A reasonable juror could weigh the testimony by the parties' experts and reach the conclusion that Defendants have shown that the Evolo Report discloses a statically stable watercraft.

2. Is the Evolo Report a Printed Publication?

"Whether a reference qualifies as a "printed publication" under § 102(b) is a legal conclusion based on underlying factual findings." *Jazz Pharm., Inc. v. Amneal Pharm., LLC*, 895 F.3d 1347, 1356 (Fed. Cir. 2018). "A reference is considered publicly accessible if it was disseminated or otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter or art, exercising reasonable diligence, can locate it." *Acceleration Bay, LLC v. Activision Blizzard Inc.*, 908 F.3d 765, 772 (Fed. Cir. 2018) (citation and internal quotation marks omitted). "The test for public accessibility is not 'has the reference been indexed?'" *Id.* at 774. Instead, "the ultimate question is whether the reference was 'available to the extent that persons interested and ordinarily skilled in the subject matter or art[,] exercising reasonable diligence, can locate it.'" *Voter Verified, Inc. v. Premier Election Sols., Inc.*, 698 F.3d 1374, 1380 (Fed. Cir. 2012) (quoting *SRI Int'l, Inc. v. Internet Sec. Sys., Inc.*, 511 F.3d 1186, 1194 (Fed. Cir. 2008)).

Plaintiff argues the Evolo Report was not publicly accessible before the priority date of the Asserted Patents. (D.I. 80 at 30-32). Plaintiff specifically contends that there is no evidence that the Evolo website, which contained a link to the Evolo Report, was indexed by Google, would turn up on a Google search in 2013, or was otherwise accessible to a POSA before the Asserted Patents' priority date. (D.I. 32).

Defendants argue that Plaintiff is not entitled to summary judgment because there is evidence that the Evolo Report was publicly accessible before the Asserted Patents' priority date. Therefore, there is a disputed material of fact, making summary judgment inappropriate. Defendants argue that the record contains evidence that the Evolo Report was downloaded in the United States before the priority date of the Asserted Patents; that their expert Mr. Lanterman

concluded that the Evolo website was likely indexed by Google and had regular activity, and that an article published in the Swedish magazine Båtnytt ("Boat News") in August 2009 detailed the Evolo project and contained a link to the Evolo website. (D.I. 93 at 28-30).

I find there is a genuine issue of material fact as to whether the Evolo Report was publicly accessible to a POSA prior to October 2013. Plaintiff concedes that there was at least one user in the United States (or at least outside of Sweden and Switzerland) who downloaded the Evolo Report. (D.I. 80 at 16, n.7). Further, the article in Båtnytt may also have served as a publicly accessible "research aid" that would have led a POSA to the Evolo website, which contained the Evolo Report. *See, e.g.*, *Blue Calypso, LLC v. Groupon, Inc.*, 815 F.3d 1331, 1350 (Fed. Cir. 2016); *Bruckelmyer v. Ground Heaters, Inc.*, 445 F.3d 1374, 1379 (Fed. Cir. 2006). For these reasons, I find a reasonable jury could determine that the Evolo Report was publicly accessible before the Asserted Patents' priority date.

Therefore, I find Plaintiff is not entitled to summary judgment on Defendants' counterclaims that the Asserted Patents are anticipated by the Evolo Report.

E. PLAINTIFF'S STANDING

Plaintiff moved for summary judgment on Defendants' affirmative defense that Plaintiff lacks standing. (D.I. 79). After oral argument, Defendants stated they are not challenging standing. (D.I. 145).

Therefore, I will dismiss Plaintiff's motion for summary judgment on standing as moot.

IV. CONCLUSION

For the reasons stated above, I deny Plaintiff's motion for summary judgment for infringement of the '044 Patent, deny Plaintiff's motion for summary judgment for the Asserted

Patents not being invalid as anticipated by the Evolo Report, and dismiss Plaintiff's motion for summary judgment on Defendants' lack of standing argument.

I deny Defendants' motion for summary judgment for non-infringement of the '044 Patent and '659 Patent and grant Defendants' motion for summary judgment of invalidity for lack of written description for claims 16-20 of the '659 Patent.

An appropriate order will issue.