

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

FOIL BOARDING COMPANY, INC.,
Petitioner,

v.

MHL CUSTOM INC.,
Patent Owner.

IPR2024-00086
Patent 9,359,044 B2

Before BART A. GERSTENBLITH, KEVIN W. CHERRY, and
MICHAEL L. WOODS, *Administrative Patent Judges*.

CHERRY, *Administrative Patent Judge*.

DECISION
Granting Institution of *Inter Partes* Review
35 U.S.C. § 314

I. INTRODUCTION

Foil Boarding Company, Inc. (“Petitioner”) filed a petition to institute *inter partes* review of claims 1, 2, 5–8, 10–15, 17, 18, 20, and 21 (“the challenged claims”) of U.S. Patent No. 9,359,044 B2 (Ex. 1001, “the ’044 patent”). Paper 2 (“Pet.”). MHL Custom, Inc. (“Patent Owner”) filed a Preliminary Response. Paper 6 (“Prelim. Resp.”). With our authorization, Petitioner filed a Reply to the Preliminary Response (“Prelim. Reply,” Paper 10), and Patent Owner filed a Sur-reply (“Prelim. Sur-reply,” Paper 11).

We have authority under 35 U.S.C. § 314 to determine whether to institute an *inter partes* review. The standard for instituting an *inter partes* review is set forth in 35 U.S.C. § 314(a), which provides that an *inter partes* review may not be instituted unless “there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” The Supreme Court has held that the Board, in a decision to institute under 35 U.S.C. § 314(b), may not institute review on less than all claims challenged in the petition. *SAS Inst. Inc. v. Iancu*, 138 S. Ct. 1348, 1355–56 (2018). Moreover, in accordance with our rules, “[w]hen instituting *inter partes* review, the Board will authorize the review to proceed on all of the challenged claims and on all grounds of unpatentability asserted for each claim.” 37 C.F.R. § 42.108(a) (2020); *see also PGS Geophysical AS v. Iancu*, 891 F.3d 1354, 1360 (Fed. Cir. 2018) (interpreting the statute to require “a simple yes-or-no institution choice respecting a petition, embracing all challenges included in the petition”).

Applying those standards, and upon considering the Petition, the Preliminary Response, the Preliminary Reply, the Preliminary Sur-reply, and

the evidence of record,¹ we determine the information presented shows a reasonable likelihood that Petitioner would prevail in establishing the unpatentability of at least one of the challenged claims of the '044 patent. Accordingly, we institute an *inter partes* review of all challenged claims of the '044 patent, based on the grounds asserted in the Petition.

II. BACKGROUND

A. *Related Matters*

The parties identify the following proceedings as related matters involving the '044 patent: *MHL Custom Inc. v. Waydoo USA, Inc.*, No. 1:21-CV-00091 (D. Del.), and *MHL Custom Inc. v Foil Boarding Co. Inc.*, No. 3:22-CV-21258 (N.D. Fla.). Pet. 5; Paper 3, 2. Petitioner further states that “Defendant Waydoo USA is appealing that decision in *MHL Custom, Inc. v. Waydoo USA, Inc.* (Fed. Cir. 24-1036).” Pet. 5. The Parties also indicate that U.S. Patent No. 9,586,659 B2 (“the '659 patent”) claims the benefit of the priority of the filing date of the '044 patent and is the subject of review in IPR2024-00085. Pet. 5; Paper 3, 2–3.²

¹ To clarify the Board’s expectations, all evidence submitted as a PDF should be OCRed and have electronically recognizable text, which can be searched and copied. Exhibits should be cited by exhibit number rather than some other name. When filing evidentiary exhibits, they should be given a short, descriptive name in P-TACTS in addition to the number (Petitioner has done so, but Patent Owner has not). Moreover, all briefing should include page numbering and witness testimony in declarations should include paragraph numbering. Submissions not meeting these expectations may be refused.

² Patent Owner contends that we should dismiss the Petition because Petitioner did not identify all of, what Patent Owner contends, are related matters. See Prelim. Resp. 2–3. In particular, Patent Owner argues that

B. Real Parties-in-Interest

Petitioner identifies itself as the real party-in-interest. Pet. 5. Patent Owner identifies itself as the real party-in-interest. Paper 3, 2.

C. The '044 Patent

The '044 patent is titled “Weight-Shift Controlled Personal Hydrofoil Watercraft.” Ex. 1001, code (54). The '044 patent was filed as U.S. Patent Application No. 14/509,289 on October 8, 2014, and claims priority to Provisional Application No. 61/889,071 filed on October 10, 2013. *Id.* at codes (21), (22), (60).

The '044 patent discloses that hydrofoils have been used on surfboards to provide higher speed and surfing on larger waves. *Id.* at 1:19–30. But according to the '044 patent, conventional electrically powered hydrofoil devices cannot “accurately mimic the experience of surfing or snow boarding” due to deficiencies in their stabilizing components and steering mechanisms. *Id.* at 1:49–55. Accordingly, an objective of the '044 patent is to “provide passive stability in the longitudinal direction, making traditional altitude control systems based on moveable surfaces unnecessary.” *Id.* at 2:5–9. “This is done through a combination of airfoil design, planform design, and tailoring the span-wise twist distribution to achieve desired outcomes.” *Id.* at 2:22–25. Such a design allows control of

Petitioner should have identified the *ex parte* reexamination of the '659 patent (Application No. 90/015,269). *Id.* We decline Patent Owner’s invitation to dismiss the Petition for omitting a reexamination of a related patent, although we agree with Patent Owner that it should have been listed as a related matter.

the board “via weight shift,” much like that in surfing or snowboarding. *Id.* at 2:10–12.

Figure 1 of the '044 patent is shown below.

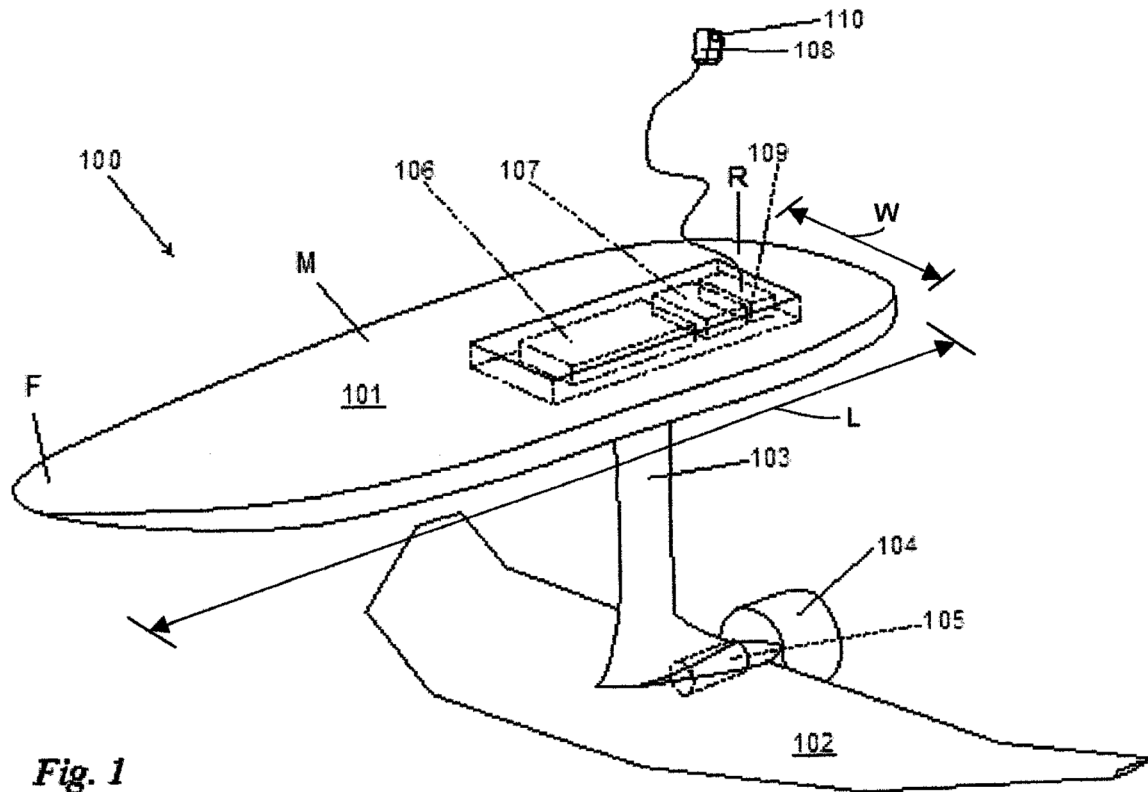


Fig. 1

Figure 1 is a perspective view of a hydrofoil watercraft. *Id.* at 2:39–40. Hydrofoil watercraft 100 includes flotation board 101 and hydrofoil 102 that is spaced below flotation board 101 via strut 103 that connects both hydrofoil 102 and flotation board 101. *Id.* at 3:1–4. Hydrofoil watercraft 100 also includes propulsion system 104, electric motor 105, battery 106, motor speed controller 107, throttle system 108, throttle interface 109, and spring-loaded trigger 110. *Id.* at 3:4–6. Battery 106, motor speed controller 107, and throttle interface 109 are contained in a watertight compartment defined in flotation board 101. *Id.* at 3:21–24. Throttle system 108, throttle

interface 109, and spring-loaded trigger 110 may be in the form of a hand-held device with a cable. *Id.* at 4:16–23.

The '044 patent discloses that hydrofoil 102 “is specifically designed to be statically stable in the longitudinal degrees of freedom via a combination of airfoil design, planform design and span-wise twist distribution.” *Id.* at 3:57–60. Particularly, hydrofoil 102 has a wingspan that “will generally be in the range of 1 to 4 feet,” is “designed to be stable in sideslip (‘weathercock stability’) either via planform design or via the addition of small vertical foils (winglets or fins),” and may have enhanced static longitudinal stability via “a fixed canard or horizontal tail.” *Id.* at 3:60–67. Strut 103’s height H is “greater than the wingspan S of the hydrofoil 102 so that the hydrofoil remains fully submerged even when the user is leaning to turn.” *Id.* at 3:67–4:3.

To operate watercraft 100, a user initially lies prone on flotation board 101, then engages the throttle to accelerate, and then moves to a kneeling or standing position. *Id.* at 4:33–36. As watercraft 100 gains speed, hydrofoil 102 allows sufficient lift to raise flotation board 101 above the water and the user controls altitude of flotation board 101 “by leaning back (to go up) and forward (to go down).” *Id.* at 4:35–39. “The user can steer left or right by leaning in the appropriate direction.” *Id.* at 3:39–40.

D. The Challenged Claims

Petitioner challenges claims 1, 2, 5–8, 10–15, 17, 18, 20, and 21. Pet. 1. Of the challenged claims, claim 1 is the sole independent claim. Claim 1, reproduced below with Petitioner’s identifiers for the claim limitations, is illustrative of the claimed subject matter.

[1Preamble] A passively stable, weight-shift controlled personal hydrofoil watercraft, comprising:

[1A1] a floatation device that has a fore-aft length greater than a lateral width, the floatation device having a top surface and a bottom surface, **[1A2]** wherein a user can be disposed on the top surface of the floatation device in a prone, kneeling, or standing position, **[1A3]** the floatation device having a forward section, a middle section, and a rear section, and the floatation device being controlled via weight shift of the user,³

[1B] a strut having an upper end and a lower end, the upper end fixedly interconnected with the floatation device between the middle section and the rear section of the floatation device;

[1C] a hydrofoil fixedly interconnected with the lower end of the strut, the hydrofoil having no moveable surface and designed to provide passive static stability controlled solely by weight shift of the user;

[1D] a propulsion system for propelling the watercraft in a body of water, wherein the propulsion system is connected to the hydrofoil; and

[1E] the watercraft having no movable steering system.

Ex. 1001, 7:27–48.

³ Petitioner appears to have inadvertently omitted “and designed to provide passive static stability controlled solely by weight shift of the user” for this limitation in its recitation of the claims. *Compare* Pet. 22–23, with Ex. 1001, 7:34–36.

E. Evidence

Petitioner submits the following evidence:

Evidence	Exhibit No.
Declaration of Stefan Brizzolara, Ph.D.	1002
Certified English Translation of Evolo Slutrapport (Ex. 1005) (“EvoloReport”)	1003
Swedish-Language Version of Evolo Slutrapport (allegedly published Apr. 23, 2009)	1005
YouTube.com, <i>Evolo prototype run</i> , at https://www.youtube.com/watch?v=a-_OCN50aWo&t=10s (allegedly published May 5, 2009) (“EvoloVideos-PrototypeRun”)	1006
YouTube.com, <i>Evolo movie</i> , at https://www.youtube.com/watch?v=zL9fO8tF118 (allegedly published June 11, 2009) (“EvoloVideos-EvoloMovie”)	1008
YouTube.com, <i>Test run – the new Torqeedo 4.0 R installed on Evolo!!!</i> , at https://www.youtube.com/watch?v=fKOO0JwQnjc (allegedly published Apr. 29, 2009) (“EvoloVideos-Torqeedo”)	1010
Woolley, US 6,234,856 B1 (issued May 22, 2001, filed Sept. 23, 1999) (“Woolley”) ⁴	1011

⁴ On page 9 of the Petition, US 6,234,856 B1 (issued May 22, 2001, filed Sept. 23, 1999 (“Woolley ’856”)) is identified as Exhibit 1011 and as one of the prior art references applied in grounds 1–5 of Petitioner’s Grounds for Challenge. Pet. 9–10. We note, however, that Petitioner’s Table of Exhibits (*see* Pet. 95) lists as Exhibit 1011 as US 6,443,786 B2 (issued Sept. 3, 2002, filed Mar. 14, 2001 (“Woolley ’786)). *Compare* Pet. 95, *with* Pet. 9. We also note that Woolley ’786 was submitted as Petitioner’s Exhibit 1011. Woolley ’856 and Woolley ’786 appear to have substantially the same disclosures because Woolley ’786 is a child patent to Woolley ’856. Because, in its discussion of Woolley, Petitioner appears to cite to Woolley ’856 (*see, e.g.*, Pet. 26) rather than Woolley ’786 and because Woolley ’856 is the parent patent, we refer to Woolley ’856 hereinafter as “Woolley” for Petitioner’s cited art in its Grounds for Challenge. We have included

Evidence	Exhibit No.
Gleason, US 4,020,782 (issued May 3, 1977, filed Jan. 26, 1976) (“Gleason”)	1012
Manning, US 8,290,636 B2 (issued Oct. 16, 2012, filed Apr. 20, 2008) (“Manning”)	1013
Torqeedo Motor Operating Manual for Torqeedo Cruise 2.0 S/L (published Feb. 2007) (“TorqeedManual”)	1014

Patent Owner relies on the Declaration of Timothy Takahashi (Ex. 2006) in support of its Preliminary Response.

F. Asserted Grounds

Petitioner asserts the following grounds of unpatentability:

Claim(s) Challenged	35 U.S.C. §⁵	References/Basis
1, 2, 5–8, 10–15, 17, 18, 20, 21	103	Evoloreport, Woolley
1, 5–8, 10, 17, 21	103	Evolovideos-PrototypeRun, Evolovideos-Evolomovie, Evolovideos-Torqeedo, ⁶ Woolley
2, 12–14, 20	103	Evolovideos, Woolley, TorqeedoManual

Woolley ’856 as Exhibit 3001. Petitioner is requested to file a corrected Exhibit 1011, and we will expunge the current Exhibit 1011.

⁵ The Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (“AIA”), amended 35 U.S.C. §§ 102, 103. Because the ’044 patent has an effective filing date after the effective date of the applicable AIA amendment, we refer to the AIA version of § 103.

⁶ Petitioner references Evolovideos-PrototypeRun, Evolovideos-Evolomovie, and Evolovideos-Torqeedo collectively as the “Evolovideos.” See Pet. 9, 17–20, 58. For the sake of brevity, we shall do the same for grounds 3–5.

Claim(s) Challenged	35 U.S.C. § ⁵	References/Basis
11	103	Evolovideos, Woolley, TorquedoManual, Gleeson
15, 18	103	Evolovideos, Woolley, TorquedoManual, Manning

III. PATENTABILITY ANALYSIS

A patent claim is unpatentable under 35 U.S.C. § 103 if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. *See KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) when in evidence, objective evidence of nonobviousness. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

“In an [*inter partes* review], the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3) (requiring *inter partes* review petitions to identify “with particularity . . . the evidence that supports the grounds for the challenge to each claim”)). This burden of persuasion never shifts to Patent Owner. *See Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015) (discussing the burden of proof in an *inter partes* review).

We organize our patentability analysis into four sections. First, we address the level of ordinary skill in the art. Second, we address claim construction. Third, we provide an overview of the asserted references. And fourth, taking account of the information presented, we consider whether the Petition satisfies the threshold requirement for instituting an *inter partes* review under 35 U.S.C. § 314(a).

A. Level of Ordinary Skill in the Art

We consider the asserted grounds of unpatentability in view of the understanding of a person of ordinary skill in the art. In assessing the level of ordinary skill in the art, various factors may be considered, including the “type of problems encountered in the art; prior art solutions to those problems; rapidity with which innovations are made; sophistication of the technology; and educational level of active workers in the field.” *In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995) (quoting *Custom Accessories, Inc. v. Jeffrey-Allan Indus., Inc.*, 807 F.2d 955, 962 (Fed. Cir. 1986)). “[O]ne or more factors may predominate.” *Id.*

Petitioner contends that a person of ordinary skill in the art would have “had a masters’s [sic] degree in Aerospace or Naval Engineering, or equivalent experience, and one to two years of experience in the field of watercraft design and construction.” Pet. 20 (citing Ex. 1002 ¶ 18).

Patent Owner contends that a person of ordinary skill in the art would have “had at least a Bachelor’s degree in engineering or physics with experience in fluid dynamics and experience with watercraft, aircraft, or hydrofoil craft, or at least a Bachelor’s degree in the field of engineering specializing in naval architecture and substantial experience with naval

architecture including some experience with watercraft, aircraft, or hydrofoil craft.” Prelim. Resp. 10 (citing Ex. 2006 ¶ 22).

Neither party explains how or why its particular proposal impacts the issues before us in this proceeding. We find that a bachelor’s degree with the accompanying experience proposed by Patent Owner more closely aligns with the prior art of record and the ’044 patent.

We note, however, there is some overlap in the proposed levels of ordinary skill in the art because Patent Owner’s proposal includes “at least” a bachelor’s degree, which would encompass Petitioner’s master’s degree as well. Prelim. Resp. 10. Nonetheless, our determination herein would be the same under either party’s definition.

B. Claim Construction

We consider the proper construction of the claims. In interpreting the claims of the ’044 patent, we “us[e] the same claim construction standard that would be used to construe the claim[s] in a civil action under 35 U.S.C. [§] 282(b).” *See* 37 C.F.R. § 42.100(b) (2020). The claim construction standard includes construing claims in accordance with the ordinary and customary meaning of such claims as understood by one of ordinary skill in the art at the time of the invention. *See id.*; *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–14 (Fed. Cir. 2005) (en banc). In construing claims in accordance with their ordinary and customary meaning, we take into account the specification and prosecution history. *Phillips*, 415 F.3d at 1315–17.

Petitioner contends that “the Board may be advised by a Memorandum Order by the Court in *MHL Custom Inc. v. Waydoo USA, Inc. et al.* (D. Del 1:21-CV-00091) (Ex-1023) issuing the following claim constructions.” Pet. 12. For claim 1, construction of the term “wherein a

user can be disposed on the top surface of the flotation device in a prone, kneeling, or standing position” is that “[p]rone, kneeling, or standing’ are alternatives” and “[o]nly one of them is required.” *Id.* Also, for claim 1, construction of the term “designed to provide passive static stability” is “[d]esigned such that the hydrofoil has an initial tendency to return to its original condition when disturbed without the hydrofoil having any moveable components.” *Id.* at 12–13. For claim 5, construction of the term “wherein the design for providing the passive static stability is achieved through a combination of airfoil design, planform design and tailoring of span-wise twist distribution” is its “[p]lain and ordinary meaning.” *Id.* at 13.

Patent Owner proposes that we construe “wherein a user can be disposed on the top surface of the flotation device in a prone, kneeling, or standing position” as “wherein a user can be disposed on the top surface of the flotation device in each of the following positions: prone; kneeling; or standing.” Prelim. Resp. 19. Patent Owner does not dispute Petitioner’s proposed construction for “designed to provide passive static stability” of claim 1 or respond to Petitioner’s proposed construction for claim 5. *See* Prelim. Resp. 21. At this stage of the proceeding, we determine it is only necessary to address Patent Owner’s proposed construction of “wherein the user can be disposed on the top surface of the flotation device in a prone, kneeling, or standing position” to resolve the present controversy before us.

1. “wherein a user can be disposed on the top surface of the flotation device in a prone, kneeling, or standing position”

With respect to the claim term “wherein a user can be disposed on the top surface of the flotation device in a prone, kneeling, or standing position,” Patent Owner points to passages of the Specification, arguing that all three

positions are possible. Prelim. Resp. 19–21 (citing Ex. 1001, Abstr., 4:13–17, 4:33–40; Ex. 2006 ¶ 18). We do not agree with Patent’s Owner proposed construction because even if the Specification discloses that all three positions are possible, that is not what the plain language of the claim requires. Claim 1 recites “or,” which means that a user can be disposed on the top surface of the flotation device in any one of the three positions. *See, e.g., SkinMedica, Inc. v. Histogen Inc.*, 727 F.3d 1187, 1199 (Fed. Cir. 2013) (“The disjunctive ‘or’ plainly designates that a series describes alternatives.”). Patent Owner does not identify any definition or disclaimer that would modify this plain meaning. *See Thorner v. Sony Computer Entm’t Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012). Thus, we agree with Petitioner and apply the plain and ordinary meaning of the phrase “wherein a user can be disposed on the top surface of the flotation device in a prone, kneeling, or standing position,” to construe “prone, kneeling, or standing” as alternatives, and the prior art need only show one to satisfy this aspect of the claim.

2. *Remaining Terms*

Having considered the record, we determine that no express claim construction is necessary for any claim terms except to the extent as noted above. *See Realtime Data, LLC v. Iancu*, 912 F.3d 1368, 1375 (Fed. Cir. 2019) (“The Board is required to construe ‘only those terms . . . that are in controversy, and only to the extent necessary to resolve the controversy.’”) (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)).

C. Alleged Prior Art

Before turning to Petitioner's asserted grounds of unpatentability, we provide brief summaries of the asserted references.

1. EvoloReport

The EvoloReport is titled "Final report Evolo" and is a document describing the work performed by a group studying a watercraft called Evolo that was summarized by two individuals and published on April 24, 2009. Ex. 1003, 2.⁷ The EvoloReport discloses that "Evolo is a new type of watercraft that travels on a hydrofoil and is intended for one person. It is powered by an electric motor and is controlled only by means of center of gravity movement. This report presents a brief summary of the results from the project." *Id.* at 3, 546.

Figure 2, reproduced below, shows the "General arrangement of Evolo." *Id.* at 6; *see also id.* at 546 (Fig. 8).

⁷ We use the number at the bottom, center of the pages designated and used by Petitioner.

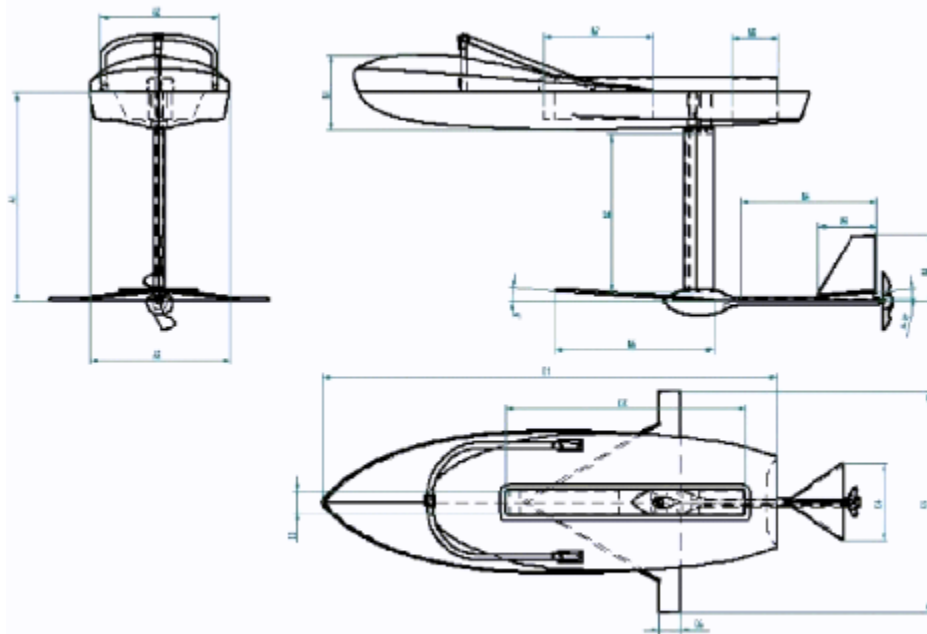


Figure 2 General arrangement of Evolo

Figure 2 above includes a schematic front view, a schematic side view, and a schematic top view of the watercraft Evolo. The EvoloReport discloses that “[t]o minimize energy consumption and meet an environmentally thinking profile, Evolo is based on hydrofoil technology, which lifts the floating body out of the water and thereby reduces Evolo’s resistance and power requirements. With regard to Evolo’s environmental profile, an electric motor was chosen for propulsion.” *Id.* at 8. Evolo has a top floating body to support a driver with room for batteries. *Id.* at 8, 550. A strut connects the floating body to the hydrofoil which is an underwater body that has a shape of a wing “to reduce the resistance and also to increase the course stability.” *Id.* at 9, 549. The hydrofoil works with a propeller and a motor. *Id.* at 9. A stainless steel steering handle is mounted on the floating body and is “designed for a kneeling driver’s position.” *Id.* at 10, 551. Evolo’s throttle is connected via wiring passed from a throttle handle through the strut down to the motor and its control unit. *Id.* at 10. A

Torqueedo motor is used to “deliver[] the power required to drive the Evolo to the flying position, without weighing too much.” *Id.* The EvoloReport discloses that “[t]he purpose of this analysis is to establish a configuration of the hydrofoil so that it is stable in pitch” and that “[b]y stable is meant that if Evolo is exposed to a disturbance, it will return to its initial position.” *Id.* at 62. Stability of Evolo can be “[c]ontrolled by means of center of gravity shift.” *Id.* at 29.

2. *Woolley*

Woolley is titled “Flying Ski.” Ex. 1011,⁸ code (54). Figure 1 of Woolley is reproduced below.

⁸ As noted above in footnote 2, although Woolley ’786 was submitted as Petitioner’s Exhibit 1011, we refer to Woolley ’856, which was identified at page 9 of the Petition as Exhibit 1011 and appears to be the subject of discussion throughout the Petition. We note again that the disclosures of these two patents are substantially identical. Both are prior art to the ’044 patent.

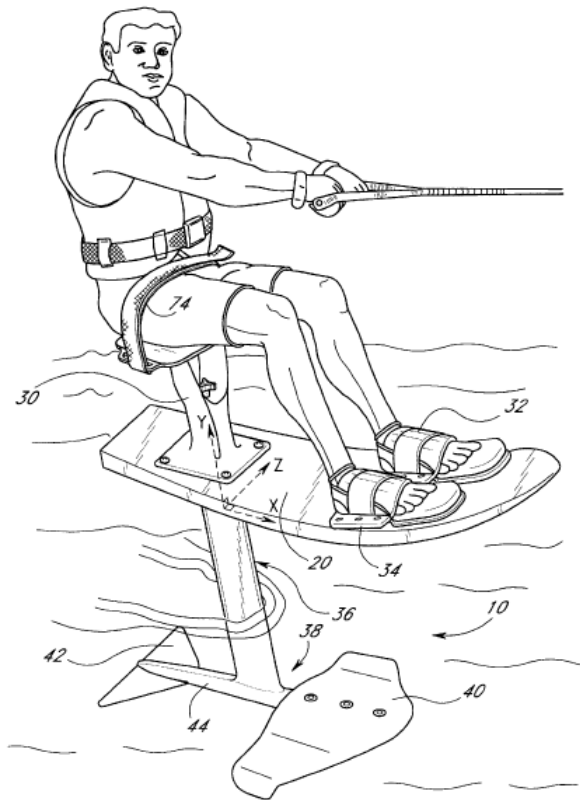


FIG. 1

Figure 1 above is a perspective view of a flying ski in use. *Id.* at 4:38–42. Flying ski 10 includes elongate board 20, seat 30 positioned on an upper face of elongate board 20 to support a rider’s buttocks, elongate strut 36 extending downward from a lower face of elongate board 20, and planning blade 38 connected to the other end of strut 36. *Id.* at 6:7–16. Planning blade 38 includes front blade 40 connected to rear blade 42 via fuselage 44. *Id.* at 6:16–17. Planning blade 38 “provides stability, lift and responsiveness performance characteristics.” *Id.* at 10:22–23. Flying ski 10 “provides a generally stable ride while promptly responding to rider actions.” *Id.* at 16:47–50.

3. *Evolovideos*

Evolovideos is a collection of three videos on YouTube, namely, EvoloVideos-PrototypeRun, EvoloVideos-Evolomovie, and EvoloVideos-Torpeedo, that show prototype testing sessions of the Evolo watercraft, certain aspects of building the Evolo prototypes, and interviews with team members who were involved in the testing. *See* Pet. 17; Exs. 1006, 1008, 1010.

a) *Evolovideos-PrototypeRun*

Evolovideos-PrototypeRun is a video on YouTube that shows a run of a prototype of an Evolo watercraft. *See* Ex. 1006. Frame 1:21 of EvoloVideos-PrototypeRun captured by Petitioner, is reproduced below. *See* Pet. 59.



Frame 1:21 above shows a person on a watercraft utilizing weight-shift to control the watercraft. *See id.*

b) *Evolovideos-Evolomovie*

Evolovideos-Evolomovie is a video on YouTube that shows an Evolo watercraft in various different operating conditions, including while

hydrofoiling and being completely removed from the water such that the hydrofoil and motor are visible. *See* Pet. 18; Ex. 1008. Frame 1:17 of EvoloVideos-EvoloMovie captured by Petitioner, is reproduced below.



Frame 1:17 above shows a captured frame with a rider on a craft in a hydrofoiling condition.

Frame 1:42 of EvoloVideos-EvoloMovie captured by Petitioner, is reproduced below. *See* Pet. 19.



Frame 1:42 above shows a captured frame with a craft removed from the water such that its hydrofoil and motor are visible.

c) EvoloVideos-Torqueedo

EvoloVideos-Torqueedo is a video on YouTube that shows installation of a Torqeedo 4.0 R electric motor into a motor pod of a watercraft and its operation. *See* Pet. 78; Ex. 1010. Frame 0:23 of EvoloVideos-Torqueedo captured by Petitioner, is reproduced below.



Frame 0:23 above shows a captured frame with installation of a Torqeedo 4.0 R electric motor into a motor pod of a watercraft.

4. Gleason

Gleason is titled “Convertible Surfboard.” Ex. 1012, code (54). Gleason discloses “[a] storage compartment 18 is formed in the float member” of its surfboard 10. *Id.* at 2:13–14. Gleason discloses “[a]n electric storage battery 20 is positioned within the storage compartment and is operatively connected with motor 16 by means of electrical conductors 22 an[d] control means 24 which may conveniently be an on-off button switch or the like for activating the starter of the motor.” *Id.* at 2:16–21.

5. *Manning*

Manning is titled “Powered Riding Apparatus with Electronic Controls and Options.” Ex. 1013, code (54). Manning discloses that its objective is “to provide a power water board comprising a booster system electrically associated with a controller wherein said controller includes a wireless interface in communication with a remote module associated with a user.” *Id.* at 2:37–41. As an example, Manning discloses that the resistive value of control lines 110 changes as control lines 110 are stretched when a user makes a fist and that such changes are sensed by user module 120 and the appropriate booster system control signals are sent to controller 34. *Id.* at 9:24–28.

6. *TorquedoManual*

The TorquedoManual is a User Operating manual of a Torquedo motor for models Cruise 2.0 S and Cruise 2.0 L. Ex. 1014, 1. The TorquedoManual discloses that its models “can be operated with lead-acid, lead-gel, AGM or lithium-based batteries.” *Id.* at 13. The TorquedoManual further discloses that “[t]he motor and the electronic control system are located in the pylon.” *Id.* at 23 (emphases omitted).

D. *Whether the EvoloReport and the EvoloVideos Are Prior Art Printed Publications*

Patent Owner argues that Petitioner has failed to show that the EvoloReport and the EvoloVideos qualify as prior art to the ’044 patent. Prelim. Resp. 7–18. In particular, Patent Owner asserts that “the Evolo Report was not publicly available on or before October 10, 2013,” which is the earliest effective filing date of the ’044 patent. *Id.* at 7. Patent Owner also argues that “there is insufficient evidence in the record to establish a

reasonable likelihood that the EvoloVideos were publicly accessible as prior art.” *Id.* at 14.

1. *Legal Standard*

The determination of whether a document is a “printed publication” under 35 U.S.C. § 102 “involves a case-by-case inquiry into the facts and circumstances surrounding the reference’s disclosure to members of the public.” *In re Klopfenstein*, 380 F.3d 1345, 1350 (Fed. Cir. 2004). “Because there are many ways in which a reference may be disseminated to the interested public, ‘public accessibility’ has been called the touchstone in determining whether a reference constitutes a ‘printed publication.’” *Jazz Pharm., Inc. v. Amneal Pharm., LLC*, 895 F.3d 1347, 1355 (Fed. Cir. 2018) (quoting *In re Hall*, 781 F.2d 897, 898–99 (Fed. Cir. 1986)). The United States Court of Appeals for the Federal Circuit has “interpreted § 102 broadly, finding that even relatively obscure documents qualify as prior art so long as the relevant public has a means of accessing them.” *GoPro, Inc. v. Contour IP Holding LLC*, 908 F.3d 690, 693 (Fed. Cir. 2018).

As the Board has held in a precedential decision, “at the institution stage, the petition must identify, with particularity, evidence sufficient to establish a reasonable likelihood that the reference was publicly accessible before the critical date of the challenged patent and therefore that there is a reasonable likelihood that it qualifies as a printed publication.” *Hulu, LLC v. Sound View Innovations, LLC*, IPR2018-01039, Paper 29 at 13 (PTAB Dec. 20, 2019) (precedential).

2. *EvoloReport*

Petitioner submits that the “EvoloReport is a design document describing the work conducted by a Master’s Level course on Marine

Design/Lightweight Design taught at Kungliga Tekniska högskolan (“KTH”) in Stockholm, Sweden.” Pet. 13. Petitioner notes that the “Evoloreport was authored by the instructors and students in the class.” *Id.* Petitioner submits that the “Evoloreport was uploaded to http://flygmac7.flyg.kth.se/cdio/old_projects/evolo as of 2009.” *Id.* Petitioner also contends that the “Evoloreport was further published when a popular Swedish boating magazine, Båtnytt, published an article in its August 2009 issue, which described the watercraft disclosed in [the] Evoloreport, including several photographs of the watercraft.” *Id.* at 14 (citing Ex. 1018 ¶¶ 29–30). In addition to describing the Evolo watercraft and providing pictures, the article included a link to the project’s webpage that included the Evoloreport. *Id.* at 14–16. Petitioner notes that Båtnytt had a readership of approximately 125,000 readers per issue and was available at public newsstands in Sweden. *Id.* at 16. Petitioner argues that “[t]he article in Båtnytt would have served as a publicly available research aid that would have led a [person of ordinary skill in the art] to the Evolo website, which contained the Evoloreport.” *Id.* (citing *Blue Calypso, LLC v. Groupon, Inc.*, 815 F.3d 1331, 1350 (Fed Cir. 2016)).

Patent Owner raises several arguments why Petitioner has not met its burden of showing a reasonable likelihood that the Evoloreport was publicly accessible. First, Patent Owner argues that the Petition “provides little analysis as to the alleged public availability of the Evolo Report, but rather makes conclusory statements that the Evolo Report was publicly available prior to the priority date of the ‘044 patent.” Prelim. Resp. 8–9. Patent Owner contends that the Petition improperly incorporates arguments from the Declaration of Dr. Kutteneuler (Ex. 1018), which cannot be relied

upon. *See id.* Patent Owner argues that “[t]here must be some evidence demonstrating how a person of ordinary skill in the art, exercising reasonable diligence, could have found the reference, in this case the Evolo Report, online.” *Id.* at 9. Patent Owner asserts that “[b]ased on the lack of evidence supporting Petitioner’s claim, there is no reasonable likelihood that the Evolo Report qualifies as a printed publication.” *Id.* Patent Owner notes that “[e]xisting on a website alone is insufficient to establish that publication is ‘publicly accessible.’” *Id.* at 9–10. Instead, “[s]ome evidence that a person of ordinary skill could have reasonably found the website and then found the reference on that website is required.” *Id.* at 10. Patent Owner argues that “Petitioner has done no more than provide minimal assertions that the Evolo Report was posted somewhere within Dr. Kutteneuler’s website.” *Id.* at 10–11.

Second, Patent Owner argues that Petitioner’s reliance on the Båtnytt article does not cure the deficiencies in Petitioner’s case. *Id.* at 11. In particular, Patent Owner contends that Båtnytt, at the time, was a consumer magazine “with a relatively small circulation” and “a narrow geographic focus” and a person of ordinary skill in the art would not have looked at that type of magazine. *Id.* at 12.

We find that Petitioner has shown a reasonable likelihood that the EvoloReport is a printed publication and prior art. As an initial matter, we note that the Petition contains several pages of explanation (*see* Pet. 13–17), and it is permissible to support that explanation with additional testimony in a declaration. Thus, we do not agree with Patent Owner’s contention that the Petition improperly incorporates by reference from Dr. Kutteneuler’s declaration.

Even without the additional testimony, we find that Petitioner has provided sufficient evidence to establish a reasonable likelihood that the EvoloReport was posted on the Internet without any restrictions by at least 2009 (well before the priority date). *See* Ex. 1018 ¶¶ 18–20. We note that, as Patent Owner correctly contends, posting alone is not enough to show something qualifies as a printed publication and prior art, Petitioner must show “that persons interested and ordinarily skilled in the subject matter or art[,] exercising reasonable diligence, can locate it.” Prelim. Resp. 9 (citing *Acceleration Bay, LLC v. Activision Blizzard Inc.*, 908 F.3d 765, 772 (Fed. Cir. 2018)). The Federal Circuit has recognized that “the presence of a ‘research aid’ can also establish public accessibility.” *Blue Calypso*, 815 F.3d at 1350. On this record, Petitioner has shown a reasonable likelihood that the Båtnytt article is a “research aid” that would have guided a person of ordinary skill in the art to Dr. Kутtenkeuler’s website and to the EvoloReport. *See* Pet. 14–17; Ex. 1018 ¶¶ 29–30; Ex. 1019, 9, 12.

On the current record, we disagree with Patent Owner’s contentions that a person of ordinary skill would not have looked to Båtnytt as a research aid because it is a consumer magazine of limited subscription and geographic reach. *See* Prelim. Resp. 11–14. In support of these contentions, Patent Owner only cites to the testimony of its expert Dr. Takahashi, but we are not persuaded by Dr. Takahashi’s reasoning. *See id.* at 12 (citing Ex. 2006 ¶ 38). Dr. Takahashi opines that a person of ordinary skill in the art would “likely . . . use a free search tool such as scholar.google.com” or “[t]ypical academic articles . . . published by major scientific printing houses (e.g., Elsevier) or by professional societies (e.g., American Society of Mechanical Engineers – ASME).” Ex. 2006 ¶ 38. Dr. Takahashi further

opines “[i]t is extremely unlikely that a [person of ordinary skill in the art] would, when designing a watercraft, look to a boating magazine such as Båtnytt that is (i) directed to a lay (consumer) audience, (ii) has a relatively small circulation (e.g., 104,000 readers at the relevant time frame . . .), (iii) has a narrow geographic focus (e.g., Sweden . . .) and/or (iv) is not typically indexed in Google Scholar or similar academic search engines.”

Id. Dr. Takahashi does not cite any sources to support his opinion.

We do not necessarily agree that a magazine of more than 100,000 subscribers has limited circulation, or that a magazine found in a relatively large, wealthy, and highly developed country, such as Sweden, is necessarily geographically limited. In any event, we find that, even if limited, this level of distribution is sufficient at this stage to show a reasonable likelihood that a person of ordinary skill would have been able to locate Dr. Kutteneuler’s website and the EvoloReport. As for Patent Owner’s contention that a person of ordinary skill would not have been aware of Båtnytt because it is directed to a lay audience, we disagree. The ’044 patent is directed to a “personal watercraft.” Ex. 1001, 1:13. On the current record, we disagree with Patent Owner and Dr. Takahashi that a person of ordinary skill in the art designing “personal watercraft” for consumers would not be interested in magazines related to boating and watercraft for customers of their designs. Indeed, a person of ordinary skill in the art in “personal watercraft” would need to be aware of the design needs of consumers for such craft. *See KSR*, 550 U.S. at 421 (noting a person of ordinary skill will be sensitive to “design need[s] or market pressure[s]”). Finally, we decline to impose any requirement that an article be found in any particular database, to be considered a printed publication. Dr. Takahashi provides no support for his

contention that a person of ordinary skill would “likely” rely on Google Scholar and not some other search engine. Ex. 2008 ¶ 38. Even if he is correct, we find the other evidence sufficient to establish a reasonable likelihood that a person of ordinary skill would have access to the Båtnytt article and it would have guided such person to the EvoloReport.

Accordingly, we find that Petitioner has shown a reasonable likelihood that the EvoloReport is a prior art printed publication.

3. *EvoloVideos*

Petitioner contends that in addition to the EvoloReport, “throughout 2008 and 2009, both the instructor of the class, Jakob Kутtenkeuler, and project members published a number of videos on YouTube related to the watercraft disclosed in EvoloReport.” Pet. 17 (citing Ex. 1018, 5; Exs. 1006, 1008, 1010). Petitioner argues that “Jakob Kутtenkeuler uploaded, on or about June 11, 2009, a video of the final Evolo prototype showing the testing sessions that took place during 2009.” *Id.* at 17–18 (citing Ex. 1018, 4; Ex. 1008; Ex. 1009). Petitioner asserts that “[t]he video has been publicly accessible since it was uploaded.” *Id.* at 18 (citing Ex. 1018, 5). Petitioner contends that

YouTube and Twitter are both mainstream Internet-based platforms that are used to disseminate information about projects and updates in the state of the art (e.g., a new type of recreational/sporting watercraft) to interested members of the public, including [person of ordinary skill in the art]. These platforms are well-known, public (e.g., no access restrictions), searchable, and intended to reach a wide audience.

Id. Petitioner notes that “[t]o date, the three EvoloVideos have received over 17,000, 72,000, and 12,000 views.” *Id.* (citing Exs. 1007, 1009, 1022). Petitioner further submits that “[t]he description page of EvoloVideos-

EvolMovieYouTube further contains description of the Evolo watercraft being an ‘electrically propelled hydrofoil watertoy’ and a link to additional information, containing a link to the EvoloReport.” *Id.* (citing Ex. 1009).

Patent Owner argues that “there is insufficient evidence in the record to establish a reasonable likelihood that the Evolo Videos were publicly accessible prior art.” Prelim. Resp. 14. Patent Owner asserts that YouTube has different privacy settings, and that under some of those settings the video may not have been locatable with a search. *Id.* at 14–15. Patent Owner also argues that, even assuming that Dr. Kутtenkeuler remembers events correctly and he “permitted the video to be viewed publicly,” Petitioner failed to submit evidence showing that the EvoloVideos-EvolMovie (Ex. 1007) was either indexed or searchable. *Id.* at 16. Patent Owner makes similar contentions regarding the other EvoloVideos. *See id.* at 17–18.

On this record, we find that Petitioner has established a reasonable likelihood of showing that the EvoloVideos are prior art printed publications. Here, Petitioner has provided evidence that the videos were uploaded to YouTube and were capable of being viewed by the public. Patent Owner speculates that it is possible the videos were not searchable. At this stage of the proceeding, we find Dr. Kутtenkeuler’s testimony to be sufficient to establish a reasonable likelihood that the videos were accessible to the public. Petitioner has also provided extensive evidence that the Evolo project was promoted at different conferences, in the Båtnytt magazine, and that at least some of the videos were shown on a television program on the Discovery channel. *See* Ex. 1018 ¶¶ 24–37. At this stage of the proceeding, we find this evidence sufficient to meet the reasonable likelihood of prevailing standard that the EvoloVideos are prior art printed publications.

E. Objective Indicia of Nonobviousness

Patent Owner argues that evidence of commercial success, long-felt yet unresolved need, failure of others, industry praise (including licensing), copying, and unexpected results weigh against a finding of obviousness. *See* Prelim. Resp. 51–60.

This Decision is not a final determination of unpatentability. Rather, it is simply a determination that Petitioner has shown a reasonable likelihood that at least one of the Challenged Claims is unpatentable.

Petitioner has not had the opportunity to address Patent Owner’s objective indicia evidence, which is oftentimes very fact-intensive. At this stage of the proceeding, we note that Patent Owner has presented some objective evidence of nonobviousness, but at this time, in view of the preliminary posture of the proceeding, we determine that Petitioner has met its burden of showing a reasonable likelihood of success. During the trial phase of this proceeding, the parties will have a full opportunity to submit argument and evidence addressing this issue, giving us the opportunity to assess the evidence based on a fully developed record.

F. Alleged Ground of Unpatentability over the EvoloReport and Woolley

Petitioner contends that claims 1, 2, 5–8, 10–15, 17, 18, 20, and 21 of the ’044 patent are unpatentable under 35 U.S.C. § 103 as obvious over the EvoloReport and Woolley. Pet. 20–58. Patent Owner offers counterarguments. Prelim. Resp. 22–32.

1. *Claim 1*

- a) *[1Preamble]: “A passively stable, weight-shift controlled personal hydrofoil watercraft, comprising:”*

Petitioner argues that, to the extent that the preamble of claim 1 is limiting, the EvoloReport discloses a weight-shift controlled personal hydrofoil water. Pet. 21. Petitioner notes that, the EvoloReport states that “Evolos is a new type of watercraft that travels on a hydrofoil and is intended for one person. It is powered by an electric motor and is controlled only by means of center of gravity movement.” *Id.* (citing Ex. 1003, 546; Ex. 1002 ¶¶ 36–37). As we explain in detail below with respect to Element [1C], Petitioner contends that to the extent that the EvoloReport does not sufficiently disclose a watercraft that is passively stable, it would have been obvious to someone skilled in the art to modify the EvoloReport using the skill in the art of a person of ordinary skill in the art or combine it with Woolley to make it passively stable. *Id.* (citing Ex. 1002 ¶ 37).

At this stage, Patent Owner addresses “passively stable” in its discussion of Element [1C].

We determine that Petitioner has shown, to the extent it is limiting, that the EvoloReport, and alternatively the combination of the EvoloReport and Woolley, satisfies Element [1Preamble]. With respect to the requirement that the watercraft be “passively stable,” we discuss the parties’ positions and that limitation in detail in our discussion of Element [1C], below. *See infra* § III.F.1.f.

- b) [1A1]: “a floatation device that has a fore-aft length greater than a lateral width, the floatation device having a top surface and a bottom surface,”

Petitioner submits that the EvoloReport discloses this limitation.
Pet. 21–22 (citing Ex. 1002 ¶¶ 38, 41, 42).

The EvoloReport discloses the use of a watercraft, or flotation device, with a “floating body.” *See* Ex. 1003, 550. The EvoloReport teaches that its flotation device “has sufficient volume to stay afloat with the drive.” *Id.* The EvoloReport further discloses that the device has an overall length (bow to stern) of C1, which is given as a length of 2313 millimeters, and an overall breadth (port to starboard) of A3, measuring 701 millimeters. *Id.* at 546–47.

Patent Owner does not dispute these assertions. *See generally* Prelim. Resp.

At this preliminary stage of the proceeding, based on the current briefing and evidence, Petitioner has shown a reasonable likelihood that the EvoloReport satisfies Element [1A1].

- c) [1A2]: “wherein a user can be disposed on the top surface of the flotation device in a prone, kneeling, or standing position,”

Petitioner submits that the EvoloReport discloses a watercraft that is designed for use with a “kneeling driver’s position” holding the handles on the top surface of the flotation device. Pet. 22 (citing Ex. 1003, 551; Ex. 1002 ¶ 43).

Patent Owner refers to the claim construction discussed above regarding “prone, kneeling, or standing,” and argues that the “device of the

Evoloreport *only* allows a user to be disposed in a kneeling position.”

Prelim. Resp. 23.

For the reasons discussed above, we disagree with Patent Owner’s argument, as it is premised on an overly narrow construction of the limitation. *See supra* § III.B.1.

Furthermore, *even if* we adopted Patent Owner’s proposed construction that requires the claimed device to be configured to accommodate a user in each of the standing, prone, *and* kneeling positions, it appears that the device described in the Evoloreport is *capable* of allowing a user to be disposed on the top surface in a standing, kneeling, and prone position. A prior art structure satisfies a functional limitation in an apparatus claim if the structure is capable of performing the recited function. *See, e.g., In re Schreiber*, 128 F.3d 1473, 1478–79 (Fed. Cir. 1997) (explaining that a device disclosed in a prior art reference was capable of performing a function recited in the claimed apparatus).

Patent Owner submits the following annotated image from the EvoloReport:

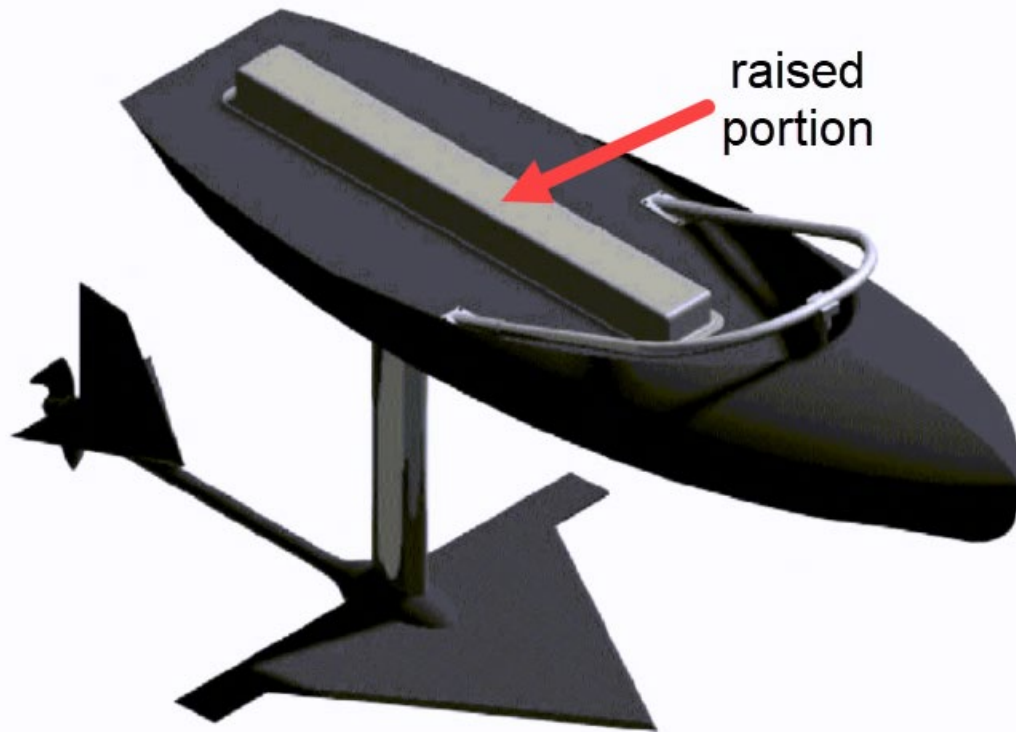


Figure 1 Evolo's final design

Prelim. Resp. 23. Patent Owner’s reproduction of Figure 1, which shows Evolo’s final design (Ex. 1003, 3), includes an annotation in the form of a red arrow pointing to a rectangular structure, which is on the top surface of the flotation device and parallel to the centerline of the Evolo watercraft that Patent Owner identifies as a “raised portion.” *See* Prelim. Resp. 23. Patent Owner, supported by Dr. Takahashi’s testimony, argues that the claim requires the flotation device to have a “substantially flat surface,” and that the raised portion of the Evolo watercraft would prevent a user from being in a prone or standing position. *See id.* at 23–24 (citing in part Ex. 2006 ¶ 63).

We disagree with Patent Owner’s position, as claim 1 does not recite structure, such as a “substantially flat top surface,” which would exclude the

watercraft disclosed in the EvoloReport from satisfying the claim. *See* Ex. 1001, 7:27–48. Furthermore, it appears that a user would be capable of being “disposed on the top surface of the flotation device in a prone, kneeling, or standing position,” with the presence of the raised portion, thereby meeting the claim limitation even under Patent Owner’s construction. The claim does not recite structure that requires a certain level of comfort when a user is disposed in the prone position, and we see nothing in the embodiment disclosed in the EvoloReport that would necessarily preclude a person from lying in the prone position, even with the “raised portion” present. *See, e.g.*, Ex. 1003, 3.

At this preliminary stage of the proceeding, based on the current briefing and evidence, Petitioner has shown a reasonable likelihood that the EvoloReport satisfies Element [1A2].

d) [1A3]: *“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,”*

Petitioner submits that the EvoloReport discloses a “floatation device having a forward section, a middle section, and a rear section.” Pet. 22–23 (citing in part Ex. 1003, 546; Ex. 1002 ¶¶ 44, 45).⁹

Patent Owner does not dispute these assertions. *See generally* Prelim. Resp.

⁹ Petitioner addresses “being controlled via weight shift of the user” in limitation [1C] below.

At this preliminary stage of the proceeding, based on the current briefing and evidence, Petitioner has shown a reasonable likelihood that the EvoloReport satisfies Element [1A3].

- e) *[1B]: “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;”*

Petitioner submits that the EvoloReport discloses this structure. Pet. 23–24 (citing Ex. 1003, 211–15, 546, 549–50, Fig. 10; Ex. 1002 ¶¶ 46–47). We reproduce Figure 10 of the EvoloReport, below:

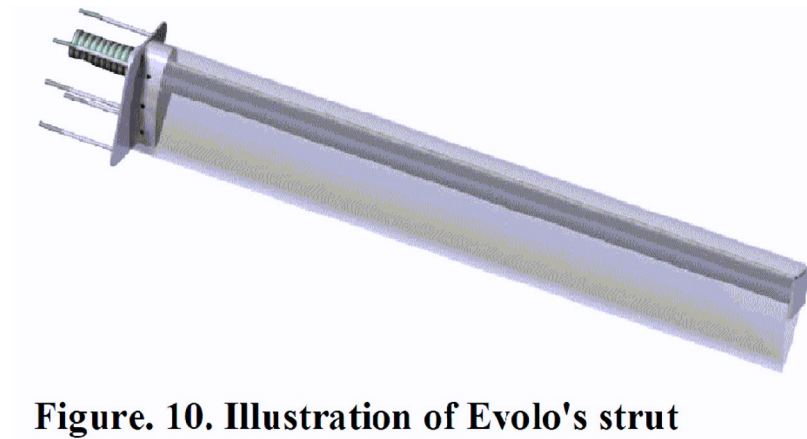


Figure. 10. Illustration of Evolo's strut

Figure 10 is an illustration of Evolo's strut. Ex. 1003, 549. The EvoloReport discloses a “strut is the part that connects the floating body and the hydrofoil.” *Id.*

We further reproduce Figure 2 from the EvoloReport's “final design” (Ex. 1003, 4), below:

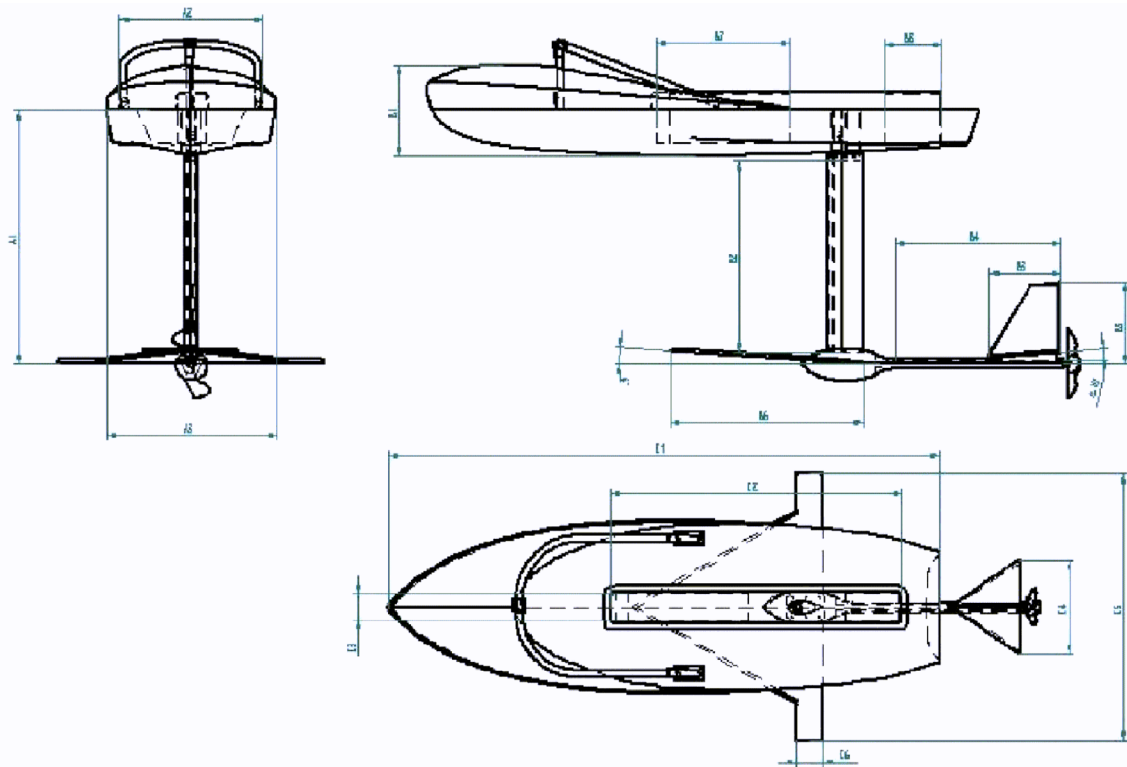


Figure 2 General arrangement of Evolo

Figure 2 is titled, “Figure 2 General arrangement of Evolo.”

Ex. 1003, 4. As shown above, the “strut” appears to connect the triangular-shaped forward hydrofoil to the flotation device, at a location between the middle and rear section of the flotation device. *See id.*

Patent Owner does not dispute these assertions. *See generally* Prelim. Resp.

At this preliminary stage of the proceeding, based on the current briefing and evidence, Petitioner has shown a reasonable likelihood that the EvoloReport satisfies Element [1B].

- f) [1C]: “a hydrofoil fixedly interconnected with the lower end of the strut, the hydrofoil having no moveable surface and designed to provide passive static stability controlled solely by weight shift of the user;”

Petitioner submits that the EvoloReport discloses this structure, citing in-part Figure 9 of the report. See Pet. 24. We reproduce Figure 9 from the EvoloReport, below:



Figure. 9. Illustration of Evolo's underwater body

Figure 9 is an “[i]llustration of Evolo’s underwater body.” Ex. 1003, 546.

Dr. Brizzolara testifies that the Evolo’s “hydrofoil has no moveable surface” (Ex. 1002 ¶ 49) and that the hydrofoil “was designed to be ‘controlled by means of a center of gravity shift’” (*id.* ¶¶ 50–52).

Petitioner further submits that the EvoloReport discloses that both pitch stability and rolling stability are factors in the design of the disclosed EvoloReport hydrofoil. Pet. 25 (citing Ex. 1003, 58–62). The EvoloReport uses the term “stable” to mean passive static stability as contemplated by the ’044 patent (“By stable is meant that if Evolo is exposed to a disturbance, it

will return to its initial position.”). *Id.* at 25–26 (citing Ex. 1003, 58–62 (“The purpose of this analysis is to establish a configuration of the hydrofoil so that it is stable in pitch.”), 88–98; Ex. 1002 ¶ 53).

To address the requirement that the watercraft be “passively stable” (as recited in the preamble) and that the hydrofoil be “designed to provide passive static stability” (as recited in Element [1C]) Petitioner cites to Woolley’s teachings. *See* Pet. 20–24 (addressing “passively stable” (recited in the preamble)), 26–29 (addressing “passive static stability” (recited in Element [1C])). Petitioner submits that Woolley teaches “a hydrofoil fixedly interconnected with the lower end of a strut, the hydrofoil having no moveable surface and designed to provide passive static stability controlled solely by weight shift of the user.” Pet. 26 (citing Ex. 1002 ¶ 55). Petitioner refers to Woolley’s planing blade, shown above by reference numeral 38 in Woolley’s Figure 1, and submits that “the purpose of the planing blade is to provide a combination of ‘stability, lift, and responsiveness.’” *Id.* (citing Ex. 1011,¹⁰ 6:16–18, 10:22–27; Ex. 1002 ¶ 55). Petitioner’s declarant, Dr. Brizzolara, testifies that Woolley’s use of “counteracting forces between the upward force caused by the forward blade of the hydrofoil and the downward force caused by the rear blade of hydrofoil is a well-known method for increasing pitch stability.” Ex. 1002 ¶ 57.

Petitioner further submits that the “forward blades and rear blades disclosed within Woolley show the use of winglets or fins at their ends . . . [and that] these features are used to provide roll and yaw stability.” Pet. 27 (citing Ex. 1011, Figs. 6A, 9A, 10A, 11A; Ex. 1011, 11:6–15 (“[t]he

¹⁰ All citations are to Woolley ’856, not Woolley ’786.

relatively large distance of the edge of the blade from the plane of symmetry A increases the moment created by water acting on the surface of the blade”); Ex. 1002 ¶ 58).

Petitioner submits that “Woolley’s disclosure of both pitch stability along with roll and yaw stability through the use of the hydrofoil discloses a hydrofoil designed to provide passive static stability.” Pet. 28.

Based on Woolley’s teachings, Petitioner reasons that a “[person of ordinary skill in the art] would have been motivated to combine [the] EvoloReport with Woolley to provide for a passively stable hydrofoil.” Pet. 26.

Alternatively, Petitioner also reasons, “[t]o the extent that the disclosed hydrofoil in Woolley could be found to not be designed to provide passive static stability, a [person of ordinary skill in the art] would have sufficient knowledge to modify the disclosed hydrofoil in Woolley such that it was designed to provide passive static stability.” Pet. 29 (citing Ex. 1002 ¶ 62).

Patent Owner argues that “the Evolo Report lacks any evidence of success in achieving longitudinal stability.” Prelim. Resp. 25. Patent Owner further argues that the “Evolo Report teaches away from a passively stable configuration” as a “[person of ordinary skill in the art] would recognize that the device of the ‘Evolo Report could only be stabilized using some sort of active control system (e.g., through the use of moveable hydrodynamic control surfaces) and, thus, would lead a [person of ordinary skill in the art] to use such an active control system.’” *Id.*

Patent Owner further argues that there is “neither a motivation to combine the EvoloReport with Woolley nor is there a reasonable expectation

of success in achieving the claimed invention.” Prelim. Resp. 25–26. Patent Owner points out that Woolley is designed to be pulled by a powered watercraft, whereas the device in the EvoloReport is self-propelled. *See id.* at 26–27. Dr. Takahashi testifies that “the propulsive force differs significantly between the watercraft of the Evolo Report and the watercraft described in Woolley.” Ex. 2006 ¶ 73. Patent Owner contends that a “hydrofoil is not designed in a vacuum; the positioning of the propulsive forces, among other things, must be considered when considering hydrofoil craft stability.” Prelim. Resp. 27 (citing Ex. 2006 ¶ 74). Dr. Takahashi testifies that the “hydrofoil configuration of Woolley would be unworkable on the device described in the Evolo Report, as this combination would result in an unstable hydrofoil.” Ex. 2006 ¶ 74. Patent Owner further points out that Woolley’s device is not controlled by weight-shifting, but by the towing watercraft. *See* Prelim. Resp. 28 (citing Ex. 2006 ¶¶ 53, 54).

Even though we see nothing in the EvoloReport that rises to the level of *teaching away* (i.e., discourages, discredits, or criticizes) from the proposed combination, at this stage of the proceeding, we note that Patent Owner’s arguments have merit. *See in re Fulton*, 391 F.3d 1195, 1201 (Fed. Cir. 2004) (“A reference does not teach away . . . if it merely expresses a general preference for an alternative invention but does not ‘criticize, discredit, or otherwise discourage’ investigation into the invention claimed.”). Indeed, Woolley’s towed-device is different from the self-propelled device described in the Evolo Report. Although we believe Dr. Brizzolara’s testimony and reasoning are sufficient, at this stage, to satisfy Petitioner’s burden of showing a reasonable likelihood of success, there are questions whether the stability taught by Woolley’s towed device

would have led a skilled artisan to achieve stability with the self-propelled device taught in the EvoloReport. In particular, given Dr. Takahashi's testimony, we have questions about Dr. Brizzolara's testimony that Woolley's use of "counteracting forces between the *upward force caused by the forward blade* of the hydrofoil and the *downward force caused by the rear blade* of hydrofoil is a well-known method for increasing pitch stability" (Ex. 1002 ¶ 57 (emphases added)) when applied to the self-propelled watercraft shown and described in the EvoloReport. For example, Dr. Takahashi's testimony that Woolley's "tow rope significantly contributes to any stability of the watercraft" (Ex. 2006 ¶ 72) raises questions regarding Petitioner's application of Woolley's teachings. Compare, e.g., Ex. 1002 ¶ 55, with, e.g., Ex. 2006 ¶¶ 58–79. At this preliminary stage, however, neither party has had the opportunity to cross-examine the opposing party's witness, and it would be beneficial for our consideration of this issue to have the record further developed following institution.

Accordingly, we determine that Petitioner has shown a reasonable likelihood that the combination of the EvoloReport and Woolley satisfies Element [1C].

g) [1D]: "*a propulsion system for propelling the watercraft in a body of water, wherein the propulsion system is connected to the hydrofoil; and*"

Petitioner submits that the EvoloReport discloses a watercraft with a propulsion system for propelling the craft in a body of water, wherein the propulsion system is connected to the hydrofoil. Pet. 29–30 (citing Ex. 1002 ¶ 63). Petitioner further submits that the device disclosed in the

Evoloreport uses an “electric motor coupled with batteries and a propellor to provide a propulsion system for propelling the watercraft in a body of water.” *Id.* (citing Ex. 1003, 551–52; Ex. 1002 ¶ 63). Petitioner also submits that the propulsion system is directly connected to the hydrofoil. *Id.* (citing Ex. 1003, 549; Ex. 1002 ¶ 63).

Patent Owner does not dispute these assertions. *See generally* Prelim. Resp.

At this preliminary stage of the proceeding, based on the current briefing and evidence, Petitioner has shown a reasonable likelihood that the Evoloreport satisfies Element [1D].

h) [1E]: “the watercraft having no movable steering system.”

Petitioner submits that the watercraft disclosed in the Evoloreport has no movable steering system. Pet. 30 (citing Ex. 1002 ¶ 64). Petitioner further submits that the device uses a “fixed, unmovable handle for the rider to hold onto the watercraft and apply weight shifting.” *Id.* (citing Ex. 1003, 551; Ex. 1002 ¶ 64).

At this stage of the proceeding, Patent Owner does not dispute that the Evoloreport accounts for this limitation. *See generally* Prelim. Resp. The Evoloreport discloses that its watercraft “is powered by an electric motor and is controlled only by means of center of gravity movement.” Ex. 1003, 3.

At this preliminary stage of the proceeding, based on the current briefing and evidence, Petitioner has shown a reasonable likelihood that the Evoloreport teaches Element [1E].

i) *Summary as Claim 1*

At this preliminary stage, Petitioner has shown a reasonable likelihood that the combination of the EvoloReport and Woolley satisfies claim 1.

2. *Claims 2, 5–8, 10–15, 17, 18, 20, and 21*

Patent Owner does not raise any arguments regarding dependent claims 2, 5–8, 10–15, 17, 18, 20, and 21, other than those we have considered above with respect to claim 1. *See* Prelim. Resp. 32. We have reviewed Petitioner’s contentions regarding claims 2, 5–8, 10–15, 17, 18, 20, and 21, and determine that Petitioner has shown a reasonable likelihood that the combination of the EvoloReport and Woolley satisfies the subject matter of these dependent claims.

3. *Summary as to Obviousness Based on the EvoloReport and Woolley*

Petitioner demonstrates a reasonable likelihood of showing that the subject matter of claims 1, 2, 5–8, 10–15, 17, 18, 20, and 21 would have been obvious over the combined disclosures of the EvoloReport and Woolley.

G. *Alleged Ground of Unpatentability over EvoloVideos and Woolley*

Petitioner contends that claims 1, 5–8, 10, 17, and 21 of the ’044 patent are unpatentable under 35 U.S.C. § 103 as obvious over the EvoloVideos and Woolley. Pet. 58–75. Patent Owner offers counterarguments. Prelim. Resp. 32–50.

1. *Alleged Improper Combination of the EvoloVideos*

The EvoloVideos refer to a collection of three separate videos: (1) the Evolo Prototype Run (Ex. 1006); (2) the Evolo Movie (Ex. 1008); and

(3) the Torquedo Video (Ex. 1010). Pet. 58. Petitioner reasons that a person of ordinary skill in the art “would have been motivated to combine the disclosures of these three videos because the videos are related to the disclosure of the same information—the development of the Evolo Project.” *Id.* (citing Ex. 1002 ¶ 110).

Patent Owner contends that the grounds based on the EvoloVideos are improper because they “conflate[] these three separate videos into a single prior art reference.” Prelim. Resp. 33. Patent Owner also contends that the combination of the EvoloVideos “results in voluminous and excessive grounds.” Prelim. Resp. 2 (quoting *Adaptics Ltd. v. Perfect Co.*, IPR2018-01596, Paper 20 at 18 (PTAB Mar. 6, 2019)).

On this record, we find that Petitioner has shown sufficiently that a person of ordinary skill in the art would have been motivated to combine the teachings of the EvoloVideos because they are related to common subject matter. Patent Owner is free to explore any differences between the EvoloVideos during the trial. We also do not agree with Patent Owner that Petitioner’s five grounds are excessive. Thus, on the present record, we do not agree with Patent Owner that the combination of the EvoloVideos is improper.

2. *Claim 1*

- a) *[1Preamble]: “A passively stable, weight-shift controlled personal hydrofoil watercraft, comprising:”*

Petitioner contends that, to the extent that the preamble of claim 1 is limiting, the EvoloVideos disclose a weight-shift controlled personal hydrofoil watercraft. Pet. 58–59. In support of this position, Petitioner submits the following image:



The image is a snapshot of the EvoloVideos-PrototypeRun video. *See* Ex. 1006, 1:21; Ex. 1002 ¶ 110.

Petitioner argues that the EvoloVideos disclose a single person on a watercraft utilizing weight-shift to control the watercraft. Pet. 59 (citing Ex. 1006, 1:21; Ex. 1002 ¶ 110). As we explain in detail below with respect to Element [1C], Petitioner contends that to the extent the EvoloReport does not sufficiently disclose a watercraft that it passively stable, it would have been obvious to one skilled in the art to modify the EvoloReport using the skill in the art of a person of ordinary skill in the art or combine it with Woolley to make it passively stable. *Id.* (citing Ex. 1002 ¶ 110).

At this stage, Patent Owner addresses “passively stable” in its discussion of Element [1C].

We determine that Petitioner has shown, to the extent it is limiting, that the EvoloVideos, and alternatively the EvoloVideos in combination with Woolley, satisfy the preamble of claim 1. With respect to the

requirement that the watercraft be “passively stable,” we discuss that limitation in detail in our discussion of Element [1C], below. *See infra* § III.G.2.f.

- b) [1A1]: “a floatation device that has a fore-aft length greater than a lateral width, the floatation device having a top surface and a bottom surface,”

Petitioner submits that the EvoloVideos disclose this limitation. *See* Pet. 59–61 (citing Ex. 1002 ¶ 111). In support of this assertion, Petitioner submits the following snapshot from the EvoloVideos-PrototypeRun:



Id. at 59 (citing Ex. 1006, 0:27–0:30). The above snapshot depicts a screenshot of the EvoloVideos-PrototypeRun at 0:27. *See* Ex. 1006, 0:27. In particular, the screenshot appears to depict a floatation device, unmounted, along a pier with several people hovering over the watercraft. *See id.*

Petitioner also submits the following screenshot of the EvoloVideos-PrototypeRun:



Pet. 61 (citing Ex. 1006, 0:09; Ex. 1002 ¶ 111). The above screenshot depicts what appears to be a side view of the Evolo watercraft, out of the water and mounted on two wooden boat stands. *See* Ex. 1006, 0:09.

Dr. Brizzolara references these screenshots and testifies that the EvoloVideos disclose that the floatation device has a top surface and a bottom surface. *See* Ex. 1002 ¶ 111.

Patent Owner does not dispute these assertions. *See generally* Prelim. Resp.

At this preliminary stage of the proceeding, based on the current briefing and evidence, Petitioner has shown a reasonable likelihood that the EvoloVideos satisfy Element [1A1].

c. [1A2]: “wherein a user can be disposed on the top surface of the flotation device in a prone, kneeling, or standing position,”

Petitioner submits that the EvoloVideos disclose this limitation. *See* Pet. 61–62. In support of this assertion, Petitioner submits the following snapshot from the EvoloVideos-PrototypeRun:



Id. at 62 (citing Ex. 1006, 1:21; Ex. 1002 ¶ 112). The above image appears to depict a user kneeling on the Evolo watercraft. *See* Ex. 1006, 1:21.

Patent Owner refers to its claim construction position discussed above regarding “prone, kneeling, or standing.” *See* Prelim. Resp. 35–37. Patent Owner argues that the “device of the Evolo Videos only allows a user to be disposed in a kneeling position.” *See id.* at 35.

For the same reasons discussed above, we disagree with Patent Owner’s argument, as it is premised on an overly narrow construction of the limitation. *See supra* § III.B.1. Further, we disagree that the “raised portion” depicted on Evolo’s watercraft would render the watercraft

incapable of allowing a user to be disposed on the top surface of the floatation device in a prone, kneeling, or standing position, as recited in the limitation. *See supra* § III.F.1.c. In other words, even if we adopted Patent Owner’s narrow construction, which requires the claimed device to be configured to accommodate a user in the standing, prone, *and* kneeling positions, it appears that the device depicted in the EvoloVideos would be *capable* of performing this function. *See Schreiber*, 128 F.3d at 1478–79.

At this preliminary stage of the proceeding, based on the current briefing and evidence, Petitioner has shown a reasonable likelihood that the EvoloVideos satisfy Element [1A2].

- c) [1A3]: “*the floatation device having a forward section, a middle section, and a rear section, and the floatation device being controlled via weight shift of the user,*”

Petitioner submits that the EvoloVideos disclose a watercraft with a forward, middle, and rear section. *See* Pet. 62 (citations omitted).¹¹

As shown in the snapshot reproduced above, at least the EvoloVideos-PrototypeRun depicts a flotation device having a forward, middle, and rear section. *See, e.g.*, Ex. 1006, 0:09.

Patent Owner does not dispute these assertions. *See generally* Prelim. Resp.

At this preliminary stage of the proceeding, based on the current briefing and evidence, Petitioner has shown a reasonable likelihood that the EvoloVideos satisfy Element [1A3].

¹¹ Petitioner addresses the “controlled via weight shift of the user” in limitation [1C] below.

- d) [1B]: “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;”

Petitioner submits that the EvoloVideos disclose the use of a strut having an upper end and a lower end with the upper end fixedly interconnected with the flotation device between the middle section and the rear section of the flotation device. Pet. 63 (citing Ex. 1006, 0:09; Ex. 1002 ¶ 114). Petitioner cites to the snapshot, reproduced above, of the Evolo watercraft out of the water and on stands. *See id.* (reproducing the snapshot at Ex. 1006, 0:09).

Patent Owner does not dispute these assertions. *See generally* Prelim. Resp.

At this preliminary stage of the proceeding, based on the current briefing and evidence, Petitioner has shown a reasonable likelihood that the EvoloVideos satisfy Element [1B].

- e) [1C]: “a hydrofoil fixedly interconnected with the lower end of the strut, the hydrofoil having no moveable surface and designed to provide passive static stability controlled solely by weight shift of the user;”

Petitioner submits that the EvoloVideos disclose a hydrofoil fixedly interconnected with the lower end of the strut. Pet. 63 (citing Ex. 1006, 0:09; Ex. 1002 ¶ 115).

Dr. Brizzolara testifies that the EvoloVideos-PrototypeRun discloses a hydrofoil with no moveable surface, as the “user of the watercraft is shown to control the watercraft solely by the weight shift of the user.” *See* Ex. 1002 ¶ 116 (citing Ex. 1006, 0:50–1:00); *see also* Pet. 63–64.

As with Petitioner’s challenge based on the EvoloReport and Woolley, Petitioner reasons that a person of ordinary skill in the art “would have been motivated to combine the watercraft disclosed in the EvoloVideos with Woolley to provide for a passively stable hydrofoil.” Pet. 64 (citing Ex. 1002 ¶ 117).

In addition to repeating the same arguments pertaining to the combinability of Woolley’s teachings, as discussed with respect to the EvoloReport, Patent Owner also argues that the EvoloVideos fail to show a hydrofoil “having no movable surface” that is also “weight-shift controlled.” See Prelim. Resp. 46–49. Patent Owner explains, “Contrary to Dr. Brizzolara’s assertion, this clip from [the EvoloVideos-Prototype Run] is wholly insufficient to establish that the watercraft depicted therein includes a “hydrofoil having no moveable surface and designed to provide passive static stability controlled solely by weight shift of the user,” as recited in claim 1. *Id.* at 46–47.

As explained in our discussion of Petitioner’s challenge based on the EvoloReport and Woolley, Patent Owner’s arguments have merit, but we find that Petitioner has presented sufficient evidence to meet its burden of showing a reasonable likelihood of prevailing. There are questions as to whether the stability provided by Woolley’s towed device would have led a skilled artisan to modify the self-propelled device taught in the EvoloVideos, as Patent Owner argues. See Prelim. Resp. 41–49. Our ability to weigh the conflicting testimony between the parties’ declarants would be more complete upon cross-examination, and we believe the current state of the record warrants further development of the issue. Compare, e.g., Ex. 1002 ¶ 40, with, e.g., Ex. 2006 ¶¶ 95–101.

At this stage of the proceeding, and upon reviewing the EvoloVideos, it appears that the rider in the videos shifts his weight from side-to-side to cause the watercraft to turn. *See, e.g.*, Ex. 1006, 0:35–0:53. It also appears, from the bottom of the Evolo watercraft that the hydrofoil has no movable surface or movable steering parts (as discussed below in the context of Element [1E]). *See, e.g., id.* at 0:09.

At this preliminary stage of the proceeding, based on the current briefing and evidence, Petitioner has shown a reasonable likelihood that the EvoloVideos in combination with Woolley satisfy Element [1C].

f) *[1D]: “a propulsion system for propelling the watercraft in a body of water, wherein the propulsion system is connected to the hydrofoil; and”*

Petitioner submits that the EvoloVideos disclose a propulsion system for propelling the watercraft in a body of water, wherein the propulsion system is connected to the hydrofoil. Pet. 65 (citing Ex. 1006, 0:09; Ex. 1002 ¶ 118). We reproduce the following snapshot from the EvoloVideos-PrototypeRun:



Evolò prototype run

Ex. 1006, 0:12. The above snapshot depicts several people launching the Evolo watercraft into the water. *See id.* As can be seen from the snapshot, the watercraft has a propeller with two blades connected, either directly or indirectly, to what appears to be the hydrofoil. *See id.*

Patent Owner does not dispute these assertions. *See generally* Prelim. Resp.

At this preliminary stage of the proceeding, based on the current briefing and evidence, Petitioner has shown a reasonable likelihood that the EvoloVideos satisfy Element [1D].

g) [1E]: “the watercraft having no movable steering system.”

Petitioner submits that the watercraft depicted in the EvoloVideos has no moveable steering system. Pet. 65 (citing Ex. 1002 ¶ 119).

Patent Owner argues that the “prototype(s) of the watercraft depicted in EvoloVideos is not shown at a level of detail sufficient to ascertain whether or not a movable steering system is present.” Prelim. Resp. 49.

Upon review of the EvoloVideos-PrototypeRun, including the screenshot reproduced above with the watercraft on stands, it appears that the watercraft does not have a movable steering system. *See* Ex. 1006, 0:09. From this screenshot, it does not appear that the watercraft has, e.g., a steering wheel, handlebar, or rudder. *See id.*

At this preliminary stage of the proceeding, based on the current briefing and evidence, Petitioner has shown a reasonable likelihood that the EvoloVideos satisfy Element [1E].

h) Summary as Claim 1

At this preliminary stage, Petitioner has shown a reasonable likelihood that the combination of the EvoloVideos and Woolley satisfies claim 1.

3. Claims 5–8, 10, 17, and 21

Patent Owner does not raise any arguments regarding dependent claims 5–8, 10, 17, and 21 other than those we have considered above with respect to claim 1. *See* Prelim. Resp. 50. We have reviewed Petitioner’s contentions regarding claims 5–8, 10, 17, and 21, and determine that, based on the current briefing and evidence, Petitioner has shown a reasonable likelihood that the combination of the EvoloVideos and Woolley satisfies the subject matter of these dependent claims.

4. *Summary as to Obviousness Based on the EvoloVideos and Woolley*

Petitioner demonstrates a reasonable likelihood of showing that the subject matter of claims 1, 5–8, 10, 17, and 21, and would have been obvious over the combined disclosures of the EvoloVideos and Woolley.

H. *Remaining Grounds*

Petitioner contends that claims 2, 12–14, and 20 of the '044 patent are unpatentable under 35 U.S.C. § 103 as obvious over the combination of the EvoloVideos, Woolley, and the TorquedoManual; claim 11 of the '044 patent is unpatentable under 35 U.S.C. § 103 as obvious over the combination of the EvoloVideos, Woolley, the TorquedoManual, and Gleeson; and claims 15 and 18 of the '044 patent are unpatentable under 35 U.S.C. § 103 as obvious over the combination of the EvoloVideos, Woolley, the TorquedoManual, Gleason, and Manning. *See* Pet. 75–94. Patent Owner contends that since “the Petition fails to establish a reasonable likelihood that claim 1 is obvious. . . . Petitioner has also necessarily failed to establish a reasonable likelihood that” each of these dependent claims is obvious. *Id.* at 50 (referring to claims 2, 12–14, and 20), 50–51 (asserting the same regarding claim 11), 51 (asserting the same regarding claims 15 and 18). Prelim. Resp. 50–51.

We have reviewed Petitioner’s contentions and determine that Petitioner establishes a reasonable likelihood of prevailing in showing claims 2, 12–14, and 20 of the '044 patent are unpatentable under 35 U.S.C. § 103 as obvious over the combination of the EvoloVideos, Woolley, and the TorquedoManual; claim 11 of the '044 patent is unpatentable under 35 U.S.C. § 103 as obvious over the combination of the EvoloVideos, Woolley,

the TorqeedoManual, and Gleeson; and claims 15 and 18 of the '044 patent are unpatentable under 35 U.S.C. § 103 as obvious over the combination of the EvoloVideos, Woolley, the TorqeedoManual, Gleason, and Manning.

IV. DISCRETION UNDER 35 U.S.C. § 314(a)

Patent Owner argues that we should exercise our discretion under 35 U.S.C. § 314(a) and deny institution. Prelim. Resp. 3–5.

Section 314(a) does not require the Director to institute an *inter partes* review. *See Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1367 (Fed. Cir. 2016) (“[T]he PTO is permitted, but never compelled, to institute an IPR proceeding.”). Rather, a decision whether to institute is within the Director’s discretion, and that discretion has been delegated to the Board. *See* 37 C.F.R. § 42.4(a); *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2140 (2016) (“[T]he agency’s decision to deny a petition is a matter committed to the Patent Office’s discretion.”).

In determining whether to exercise discretion to deny institution under § 314(a) on behalf of the Director for reason of parallel court proceeding(s), we are guided by the Board’s precedential decisions in *NHK Spring Co. v. Intri-Plex Techs., Inc.*, IPR2018-00752, Paper 8 (PTAB Sept. 12, 2018) (“*NHK*”), and *Apple Inc. v. Fintiv Inc.*, IPR2020-00019, Paper 11 (PTAB Mar. 20, 2020) (“*Fintiv*”). In *NHK*, the Board found that the “advanced state of the district court proceeding” was a “factor that weighs in favor of denying” the petition under § 314(a). *NHK*, Paper 8 at 20. The Board determined that “[i]nstitution of an *inter partes* review under these circumstances would not be consistent with ‘an objective of the AIA . . . to provide an effective and efficient alternative to district court litigation.’” *Id.* (quoting *Gen. Plastic Indus. Co. v. Canon Kabushiki Kaisha*, IPR2016-

01357, Paper 19 at 16–17 (PTAB Sept. 6, 2017) (precedential as to § II.B.4.i)).

In *Fintiv*, the Board explained that “cases addressing earlier trial dates as a basis for denial under *NHK* have sought to balance considerations such as system efficiency, fairness, and patent quality.” *Fintiv*, Paper 11 at 5. On June 21, 2022, the Director of the United States Patent and Trademark Office (“USPTO”) issued a Memorandum¹² to clarify “the PTAB’s current application of *Fintiv* to discretionary institutions when there is parallel litigation” and “confirm[] that the precedential import of *Fintiv* is limited to the facts of that case.” Memorandum 2. In particular, the Memorandum sets forth that: (1) the PTAB will not rely on the *Fintiv* factors to discretionarily deny institution “where a petition presents compelling evidence of unpatentability” (*id.* at 2); (2) the *Fintiv* factors do not apply to parallel U.S. International Trade Commission proceedings (*id.* at 2–3); (3) the PTAB will not discretionarily deny institution “where a petitioner presents a stipulation not to pursue in a parallel proceeding the same grounds or any grounds that could have reasonably been raised before the PTAB” (*id.* at 3); and (4) “the PTAB will consider the median time from filing to disposition of the civil trial for the district in which the parallel litigation resides” (*id.*).

Patent Owner argues that we should exercise our discretion under 35 U.S.C. § 314(a) to deny institution because “all of the *Fintiv* factors support discretionary denial.” Prelim. Resp. 4.

¹² Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation, available at https://www.uspto.gov/sites/default/files/documents/interim_proc_discretionary_denials_aia_parallel_district_court_litigation_memo_20220621_.pdf.

With its Reply, Petitioner provides a *Sotera* stipulation. *See* Prelim. Reply 3 (“Petitioner stipulates that, if the Board institutes this IPR, it will not pursue in the parallel proceeding the specific grounds raised in this IPR or any other ground that reasonable [sic] could have been raised in this IPR.”). Petitioner also notes that the parties have stipulated to a stay of the district court proceeding pending our decision on institution. *See id.* at 1; Ex. 1024. In its Preliminary Sur-reply, Patent Owner acknowledges that “Petitioner has offered a *Sotera* stipulation in their reply,” but argues that “this does not obviate potential inefficiencies.” Prelim. Sur-reply 3.

The Memorandum explains that, when a petitioner makes a *Sotera*-type stipulation, “it mitigates concerns of potentially conflicting decisions and duplicative efforts between the district court and the PTAB” and “[w]ith such a stipulation, if an IPR or PGR is instituted, the grounds the PTAB resolves will differ from those present in the parallel district court litigation.” Memorandum 7 (citing *Sotera*, Paper 12 at 18–19). Pursuant to the Memorandum, we “will not discretionarily deny institution of an IPR or PGR in view of parallel district court litigation where a petitioner stipulates not to pursue in a parallel district court proceeding the same grounds as in the petition or any grounds that could have reasonably been raised in the petition.” *Id.* Accordingly, because Petitioner has offered a stipulation like that in *Sotera*, we do not exercise our discretion to deny institution under *Fintiv*.

V. CONCLUSION

For the foregoing reasons, we conclude that the information presented in the Petition establishes a reasonable likelihood that Petitioner would prevail in showing that claims 1, 2, 5–8, 10–15, 17, 18, 20, and 21 of the

'044 patent are unpatentable. At this preliminary stage, we have not made a final determination as to the patentability of the challenged claims or any underlying factual and legal issues.

VI. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review of claims 1, 2, 5–8, 10–15, 17, 18, 20, and 21 of the '044 patent is hereby instituted on all grounds of unpatentability set forth in the Petition; and

FURTHER ORDERED that pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial commencing on the entry date of this Decision.

IPR2024-00086
Patent 9,359,044 B2

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