

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

BAZOOKA-FARMSTAR, LLC,
Petitioner,

v.

NUHN INDUSTRIES LTD.,
Patent Owner.

IPR2024-00004
Patent 11,491,835 B2

Before MEREDITH C. PETRAVICK, MATTHEW S. MEYERS, and
BRENT M. DOUGAL, *Administrative Patent Judges*.

MEYERS, *Administrative Patent Judge*.

PRELIMINARY GUIDANCE
PATENT OWNER'S MOTION TO AMEND

I. INTRODUCTION

On April 16, 2024 we instituted trial as to claims 1–40 of U.S. Patent No. 11,491,835 B2. Paper 12 (“Institution Decision” or “Dec.”). After institution, Patent Owner filed a Motion to Amend that is contingent on the patentability of claims 1–40. Paper 21 (“Motion” or “Mot.”). Petitioner filed an opposition on October 1, 2024. Paper 36 (“Opposition” or “Opp.”)

In the Motion, Patent Owner requested that we provide preliminary guidance concerning the Motion in accordance with the Board’s pilot program concerning motion to amend practice and procedures. Mot. 1; *see also* Notice Regarding a New Pilot Program Concerning Motion to Amend Practice and Procedures in Trial Proceedings under the America Invents Act before the Patent Trial and Appeal Board, 84 Fed. Reg. 9,497 (Mar. 15, 2019) (providing a patent owner with the option to receive preliminary guidance from the Board on its motion to amend) (“Notice”). We have considered Patent Owner’s Motion and Petitioner’s Opposition.

In this Preliminary Guidance, we provide information indicating our initial, preliminary, non-binding views on whether Patent Owner has shown a reasonable likelihood that it has satisfied the statutory and regulatory requirements associated with filing a motion to amend in an *inter partes* review and whether Petitioner (or the record) establishes a reasonable likelihood that the substitute claims are unpatentable. *See* Notice, 84 Fed. Reg. at 9,497 (“The preliminary guidance . . . provides preliminary, non-binding guidance from the Board to the parties about the [motion to amend]”); *see also* 35 U.S.C. § 316(d) (statutory requirements for a motion to amend); 37 C.F.R. § 42.121 (regulatory requirements and burdens for a motion to amend); *Lectrosonics, Inc. v Zaxcom, Inc.*, IPR2018-

01129, Paper 15 (PTAB Feb. 25, 2019) (precedential) (providing information and guidance regarding motions to amend).

For purposes of this Preliminary Guidance, we focus on the proposed substitute claims, and specifically on the amendments proposed in the Motion. *See* Notice, 84 Fed. Reg. at 9,497. We do not address the patentability of the originally challenged claims. *Id.* Moreover, in formulating our preliminary views on the Motion and Opposition, we have not considered the parties' other substantive papers on the underlying merits of Petitioner's challenges. We emphasize that the views expressed in this Preliminary Guidance are subject to change upon consideration of the complete record, including any revision to the Motion filed by Patent Owner. Thus, this Preliminary Guidance is not binding on the Board when rendering a final written decision. *See id.* at 9,500.

II. PRELIMINARY GUIDANCE

A. Statutory and Regulatory Requirements

For the reasons discussed below, at this stage of the proceeding, and based on the current record, it appears that Patent Owner has shown a reasonable likelihood that it has satisfied the statutory and regulatory requirements associated with filing a motion to amend.

1. Reasonable Number of Substitute Claims

Does Patent Owner propose a reasonable number of substitute claims? (35 U.S.C. § 316(d)(1)(B))
Yes. Patent Owner proposes no more than 1 substitute claim for each challenged claim. More particularly, Patent Owner proposes substitute claims 41–80 for original claims 1–40, respectively. Mot. 6–13, 27–40 (Claims App.). Petitioner does not argue otherwise.

2. Respond to Ground of Unpatentability

Does the Motion respond to a ground of unpatentability involved in the trial? (37 C.F.R. § 42.121(a)(2)(i))

Yes. Patent Owner responds to the grounds of unpatentability at pages 14–25 of the Motion. At least one amendment presented is responsive to a ground of unpatentability. Petitioner does not argue otherwise.

3. Scope of Amended Claims

Does the amendment seek to enlarge the scope of the claims? (35 U.S.C. § 316(d)(3); 37 C.F.R. § 42.121(a)(2)(ii))

No. Patent Owner contends that “the proposed claims add only narrowing limitations.” Mot. 2. Because no subject matter is removed along with the addition of new limitations, the amendments do not seek to enlarge the scope of the claims. Petitioner does not argue otherwise.

4. New Matter

Does the amendment seek to add new subject matter? (35 U.S.C. § 316(d)(3); 37 C.F.R. § 42.121(a)(2)(ii))

No. On this record, we find Patent Owner has set forth written description support for the proposed amendments at pages 5–13 of the Motion. Patent Owner asserts that there is written description support in U.S. Provisional Application No. 61/867,598 for each of the proposed substitute claims. Mot. 6–13 (citing Ex. 2081).

“angle adjustment structure”

Petitioner notes that each of claims 55, 56, 71, and 72 recites “wherein the angle adjustment structure adjusts the angular orientation of the at least one fluid nozzle of the liquid manure mover in a horizontal plane.”

Opp. 22. Petitioner argues that the term “angle adjustment structure” “should be construed under § 112(f) because the claim language fails to provide any structure for performing the claimed functions.” *Id.* (citing Ex. 1111 ¶¶ 139–142). Petitioner argues that the Specification, particularly at paragraphs 12 and 28 of the provisional application which Patent Owner relies for support, fails to disclose any structure associated with the claimed function relative to a horizontal plane. *Id.* at 23 (citing Ex. 2081 ¶¶ 12, 28). To the extent that Petitioner is arguing these claimed

limitations lack support,¹ we do not agree at this stage of the proceeding. As Petitioner points out, paragraph 12 discloses that the “adjustment structure [may be] configured to adjust an angular orientation of its respective fluid nozzle(s) in a vertical *and/or* horizontal plane.” *Id.* (quoting Ex. 2081 ¶ 12 (emphasis added)). Petitioner further points out that paragraph 28 discloses that “*articulation means 12*” “is hydraulically powered to cause the nozzle to change angular orientation relative to the vehicle body 1 in a vertical plane.” *Id.* (quoting Ex. 2081 ¶ 28 (emphasis added)). Taking these two disclosures together, namely articulation means 12 and adjustment structure that adjusts angular orientation in a vertical “and/or” horizontal plane, at this stage of the proceeding, it appears that articulation means 12 is the structure associated with both vertical and horizontal plane orientations of the nozzle. The parties are encouraged to further develop their arguments concerning this issue during trial.

“liquid manure pump”

Petitioner notes that the substitute claims recite “liquid manure pump.” Opp. 24. Petitioner argues, “[t]o the extent that [this] term is construed differently than ‘a fluid pump for pumping liquid manure,’ this term lacks written support.” *Id.*

Paragraph 1 of the provisional application, which Patent Owner cites to for support, discloses “the invention relates to *manure pumps* and amphibious vehicles equipped *for pumping liquid manure*.” Ex. 2081 ¶ 1 (emphasis added). We find that this disclosure supports the term “liquid manure pump.” We note that Petitioner’s argument pertains to the issue of claim construction rather than written description. *See* Opp. 6.

“the hydraulic pump is positioned between the power source and the immersible liquid manure pump of the liquid manure mover”

Petitioner notes that each of substitute claims 43 and 59 recites “the hydraulic pump is positioned *between* the power source and the immersible liquid manure pump of the liquid manure mover.” Opp. 25 (emphasis added). Petitioner contends, “[t]o the extent that the word ‘between’ is construed inconsistently with the figures of the ’835 Patent, this term lacks written description support.” *Id.* Petitioner argues, “[t]he

¹ We note that Petitioner does not explicitly argue that the claims lack support under 35 U.S.C. § 112(a) but rather, concludes that “claims 55–56 and 71–72 are invalid under 35 U.S.C. § 112(b) as indefinite.” Opp. 23.

only place in the specification describing the relative positioning of these components is the figures of the '835 Patent.” *Id.*

We note that at pages 4–5 of the Opposition, Petitioner annotates Figures 7 and 2 of the provisional application, respectively, to show locations of power source 7 (red), fluid pump 9 (yellow), and hydraulic pump 10 (blue). *Id.* at 4–5. Petitioner does not explain why these figures do not show hydraulic pump 10 (blue) is positioned *between* power source 7 (red) and fluid pump 9 (yellow). *See* Opp. 4–5. Thus, we find Petitioner’s arguments pertain to the issue of claim construction for the term “between,” rather than written description. *Id.* at 4–5, 25.

B. Patentability

For the reasons discussed below, at this stage of the proceeding, and based on the current record,² it appears that Petitioner (or the record) has shown a reasonable likelihood that proposed substitute claims 41–80 are unpatentable.

Does the record establish a reasonable likelihood that the proposed substitute claims are unpatentable?

1. 35 U.S.C. § 103 – Obviousness

Yes. On the current record, it appears that Petitioner has shown a reasonable likelihood that claims 41–80 would have been obvious over

² We express no view on the patentability of original claims 1–15 in this Preliminary Guidance. Instead, we focus on limitations added to those claims in the Patent Owner’s Motion to Amend.

Puck,³ Puck Video,⁴ Bryham,⁵ and Manure-Manager⁶ and that claim 57 would have been obvious over Sundstrom⁷ and Bryham.

Claims 41–80 over Puck, Puck Video, Bryham, and Manure-Manager

Petitioner argues that the combination of Puck, Puck Video, Bryham, and Manure-Manager would have rendered obvious the added limitations in each of substitute claims 41, 57, 79, and 80, and their respective dependent claims. Opp. 6. Petitioner asserts that “Manure-Manager describes [Patent Owner’s] commercial embodiment (the ‘Nuhn Pump’) of the ’758 Patent (EX1028) (incorporated-by-reference into the ’835 Patent).” *Id.* at 1. Petitioner reproduces portions of the pump shown on page 27 of Manure-Manager to compare with the pump shown in Figure 8 of the ’835 patent (and also the nozzle shown on page 27 of Manure-Manager to compare with the nozzle shown in Figure 5 of the ’835 patent). *Id.* at 2. Petitioner asserts that Puck Video “is a YouTube video that depicts and describes the commercial embodiment of the vehicle described in Puck.” *Id.* Petitioner argues that Puck Video “discloses the [Puck] vehicle having a front nozzle positioned above the floatable vehicle body.” *Id.*

Petitioner asserts that a person of ordinary skill in the art “would have been motivated to combine Puck, Bryham, and Manure-Manager” in view of “Puck’s pump position teachings.” *Id.* at 6–7 (citing Ex. 1111⁸ ¶¶ 48–57). Particularly, Petitioner argues that even though the Nuhn Pump depicted on page 27 of Manure-Manager has a two-part frame, (1) “Manure-Manager does not describe the second part of the frame as mandatory,” (2) “[n]or is pivotability required,” and (3) “[Patent Owner] even omitted this second part of the frame in its own figure” (annotated Figure 4 of Puck reproduced on page 7 of the Opposition) in its argument in IPR2023-01161. *Id.* at 7. Consequently, in response to Patent Owner’s

³ US 2014/0112093 A1, published Apr. 24, 2014 (Ex. 1014, “Puck”).

⁴ YouTube video that allegedly shows the vehicle disclosed in Puck (Ex. 1014) and can be accessed at <https://ptacts-intservices.uspto.gov/PTABE2ECommonServices/petitions/1554688/download-documents?artifactId=170898116> (Ex. 1122, “Puck Video”).

⁵ US 7,314,395 B2, issued Jan. 1, 2008 (Ex. 1015, “Bryham”).

⁶ MANURE Manager, Vol. 9, No. 1, Annex Publishing & Printing Inc., January/February 2011 (Ex. 1112, “Manure-Manager”).

⁷ Declaration of Ernie Sundstrom dated August 1, 2024 (Ex. 1120, “Sundstrom”).

⁸ Declaration of Eric Winkel dated October 1, 2024.

argument that “since the Nuhn Pump includes a two-part pivotable frame, the only way to mount it on Puck would be to hang it off the rear of the vehicle,” Petitioner argues that a person of ordinary skill in the art “could have easily removed this part of the frame when attaching the Nuhn Pump to Puck.” *Id.*

Petitioner also contends that “[w]hen connected to Puck, the pump would be rigidly connected vertically on the vehicle, similar to how Puck describes its pump intake.” *Id.* at 8 (citing Ex. 1111 ¶¶ 60–61). Petitioner argues that in contrast to a vertical connection, “attaching the pump’s boom arm to the rear of the Puck vehicle to allow the pump to pivot off the rear of the vehicle,” as proposed by Patent Owner, would “significantly shift[] the center of gravity of the vehicle to the rear, compromising the vehicle’s stability while afloat.” *Id.* Petitioner argues that a person of ordinary skill in the art “would have understood that the more logical location for the Nuhn pump would be to extend through the already defined space for the pump intake” of Puck’s vehicle shown in its Figure 1. *Id.* at 9. Petitioner argues, “[c]entrally locating the pump minimizes negative effects of reaction forces and allows the weighty pump to be more stably located over the vehicle hull. . . , rather than off the rear of the vehicle, which could cause liquid manure to flow over the deck of the vehicle, possibly causing the vehicle to capsize.” *Id.* Petitioner argues that “merely scaling the Puck vehicle and Bryham wheels to accommodate the Nuhn Pump would alleviate any [] issue” of “the Nuhn pump [extending] too far below the Puck vehicle.” *Id.* at 10. Further, Petitioner contends, “Puck shows the pump intake arranged immediately below the vehicle body, rather than extending to the bottom of the lagoon” and a person of ordinary skill in the art “would have understood that it would be beneficial to draw from this location” such that “the Nuhn Pump elongated body could be shortened, and that it would be beneficial to do so, when implementing the pump on Puck.” *Id.* at 10–11 (citing Ex. 1014, Fig. 4). Finally, Petitioner argues that a person of ordinary skill in the art “would have recognized that when using [a] hydraulic transmission, the position of the hydraulic motor could be easily adjusted to accommodate the position of the Nuhn Pump PTO input.” *Id.* at 11.

As to Puck Video, Petitioner argues that it “discloses a front nozzle placed ‘above the surface’ to ‘clean up banks’ of the lagoon and break up any crusts that are present” and thus, a person on ordinary skill in the art “would have recognized these advantages and would have been motivated

to include the front nozzle into the Puck, Bryham, Manure-Manager combination to provide this same functionality.” *Id.* at 12.

With respect to claim 41, Petitioner argues that a person of ordinary skill in the art “would have been motivated to substitute Puck’s pump with the Nuhn Pump to take advantage of Nuhn’s self-described improved efficiency and manure pumping capabilities of the Nuhn Pump, which is an immersible pump that includes substantially vertical drive shaft powering an impeller.” *Id.* at 12–13 citing Ex. 1111 ¶ 81). In line with the above contentions, Petitioner argues, a person of ordinary skill in the art “would have located the Nuhn Pump in the same location as the location in which Puck’s pump intake pipe was arranged, as the vehicle already includes an access point through which the pump could extend into the liquid of the manure lagoon.” *Id.* at 13 (citing Ex. 1111 ¶ 82). Petitioner further argues that a person of ordinary skill in the art “would have been motivated to use the high-powered internal combustion engine of Puck to power Bryham’s wheels and the Nuhn Pump using Bryham’s hydraulic transmission.” *Id.* at 14–15 citing Ex. 1111 ¶ 85).

With respect to claim 43, Petitioner argues that a person of ordinary skill in the art “would have been motivated to utilize [Bryham’s] hydraulic pump and transmission for driving the Nuhn Pump on the Puck vehicle due to efficiency benefits associated with using a single power source to power multiple components.” *Id.* at 15–16 (citing Ex. 1111 ¶ 91). According to Petitioner, a person of ordinary skill in the art “would have been motivated to keep the hydraulic pump of Bryham in th[e] same position when implementing Bryham’s hydraulic drivetrain to keep the center of gravity of the vehicle located in a central location on the vehicle, maximizing vehicle stability.” *Id.* at 16 (citing Ex. 1111 ¶¶ 91–92).

With respect to claims 47 and 49–56, Petitioner argues that it would have been obvious to “use this same structure [(hydraulic cylinder)] on the front nozzle of Puck to better control the direction of the fluid output of the front nozzle in a vertical or horizontal plane” and to “couple the cylinder to a four-bar linkage, as such linkages were well known in the art for extending the stroke length of a cylinder.” *Id.* at 17 (citing Ex. 1111 ¶ 95).

With respect to claim 57, Petitioner argues that it would have been obvious to “have arranged the Nuhn Pump on the Puck vehicle through the same opening that the Puck intake pipe extends” when substituting the Nuhn Pump on the Puck vehicle because the result is “the housing and

impeller being positioned along the underside of the floating vehicle body” as discussed for claim 41. *Id.* at 18.

With respect to claim 79, Petitioner argues that a person of ordinary skill in the art “would have also understood that the most logical location for attaching the wheels of Bryham would have been to place one wheel at each corner of the steel frame . . . of the Puck vehicle” and that it would have been a matter of design choice “to use four independently-powered wheels, especially given Puck’s rectangular shape, and Bryham teaches *at least* three independently powered wheels, including four powered wheels.” *Id.* at 19–20 (citing Ex. 1111 ¶ 107).

With respect to claim 80, Petitioner relies on the same reasoning discussed for claim 41 and 79. *Id.* at 21.

On this record, Petitioner has shown sufficiently that the limitations of substitute claims 41–80 are taught or suggested by the combination of Puck, Puck Video, Bryham, and Manure Manager. Petitioner’s reasons for combining these references have a rational underpinning and are supported by expert testimony (Ex. 1111), which is un rebutted at this stage of the proceeding. We note that much of Petitioner’s arguments equate to the principle that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference but rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. *See In re Keller*, 642 F.2d 413, 425 (CCPA 1981). Further, the Supreme Court has emphasized that “the [obviousness] analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *KSR Int’l v. Teleflex Inc.*, 550 U.S. 398, 418 (2007). As noted by the Court in *KSR*, “[a] person of ordinary skill is also a person of ordinary creativity, not an automaton.” *Id.* at 421. “The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *Id.* at 416. At this stage of the proceeding, nothing in the record suggests that Petitioner’s proposed combination of known prior art elements according to their known functions would involve more than routine engineering efforts. Accordingly, on this record, Petitioner has shown a reasonable likelihood of establishing that substitute claims 41–80 are unpatentable under 35 U.S.C. § 103 as obvious over Puck, Puck Video, Bryham, and Manure Manager.

Claim 57 over Sundstrom and Bryham

Petitioner argues that the combination of Sundstrom and Bryham would have rendered obvious the added limitations in substitute claim 57. Opp. 21. Petitioner asserts that Sundstrom discloses that the Sundstrom Stir Dredge is a manure agitation vehicle. *Id.* at 3 (citing Exs. 1120, 1153, 1154, 1128). Petitioner asserts that “Sundstrom discloses a floatable vehicle body with four wheels, a power source, pump, conduit, and nozzle, which are remote controlled to provide steering while floating.” *Id.* at 22 (citing Ex. 1120 ¶¶ 9, 12). Petitioner argues that a person of ordinary skill in the art “would have been motivated to combine Sundstrom and Bryham for the same reasons identified with respect to Puck and Bryham.” *Id.* at 21–22 (citing Ex. 1120 ¶ 26). Petitioner further argues that a person of ordinary skill in the art (1) “would have been motivated to power the wheels using the hydraulic power transmission of Bryham,” (2) “would have been motivated to use this same transmission to power the Sundstrom pump . . . , which features an immersible impeller positioned along the underside of the vehicle body” and “would have been motivated to extend the remote-control capabilities . . . of Sundstrom to control the powered wheels.” *Id.* at 22 (citing Ex. 1120 ¶¶ 19, 17, 21, 116–117).

On this record, Petitioner has shown sufficiently that the limitations of substitute claim 57 are taught or suggested by the combination of Sundstrom and Bryham. Petitioner’s reasons for combining these references have a rational underpinning and are supported by expert testimony (Ex. 1120), which is unrebutted at this stage of the proceeding. Accordingly, on this record, Petitioner has shown a reasonable likelihood of establishing that substitute claim 57 is unpatentable under 35 U.S.C. § 103 as obvious over Sundstrom and Bryham.

We acknowledge that Patent Owner has not yet had the opportunity to respond to Petitioner’s contentions that proposed substitute claims 41–80 are unpatentable under 35 U.S.C. § 103 as obvious, especially in view of newly cited Manure-Manager, Puck Video, and Sundstrom. Patent Owner will have the opportunity to do so in its reply to Petitioner’s Opposition (or in a revised motion) in this proceeding.

2. 35 U.S.C. §§ 112(a) and 112(b) – Written Description and Indefiniteness

No. Petitioner raised unpatentability arguments under 35 U.S.C. § 112(a) based on lack of written description for the substitute claims, which we

have addressed above in Section II.A. Petitioner's argument under 35 U.S.C. § 112(b) based on indefiniteness for the substitute claims are similarly unpersuasive as they also relate only to claim construction. For the reasons discussed above, based on the current record, Petitioner has not shown a reasonable likelihood of establishing that the substitute claims are unpatentable under 35 U.S.C. § 112(a) as lacking written description support and under 35 U.S.C. § 112(b) as indefinite.

III.CONCLUSION

This concludes the Preliminary Guidance, which is Patent Owner's first option under the Board's pilot program. Notice, 84 Fed. Reg. at 9,497. Patent Owner has an additional option under the Board's pilot program to file a revised MTA by DUE DATE 3. Paper 13.

In addition to those two options under the Board's pilot program, Patent Owner is reminded that amendments of the challenged claims may also be pursued in a separate reissue or reexamination proceeding before, during, or after an AIA trial proceeding, including subsequent to the issuance of the Final Written Decision. We draw Patent Owner's attention to the April 2019 *Notice Regarding Options for Amendments by Patent Owner Through Reissue or Reexamination During a Pending AIA Trial Proceeding*. See 84 Fed. Reg. 16,654 (Apr. 22, 2019). If Patent Owner chooses to file a reissue application or a request for reexamination of the challenged patent, we remind Patent Owner of its continuing obligation to notify the Board of any such related matters in updated mandatory notices. See 37 C.F.R. § 42.8(a)(3), (b)(2).

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