UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

BAZOOKA-FARMSTAR, LLC

Petitioner,

- vs. -

NUHN INDUSTRIES LTD.,

Patent Owner.

Case No: IPR2024-00004

U.S. Patent No. 11,491,835

PETITIONER'S OPPOSITION TO THE REVISED MOTION TO AMEND *INTER PARTES* REVIEW OF U.S. PATENT NO. 11,491,835

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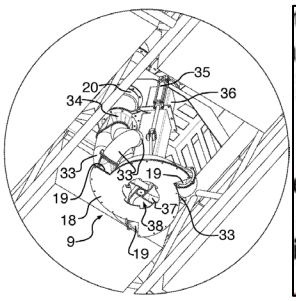
I. INTRODUCTION

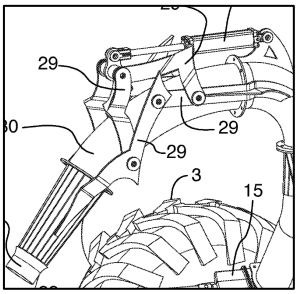
In its Revised Motion to Amend, Nuhn reaches outside the specification of its '835 Patent, trying to identify something patentable over what was already disclosed in the prior art—including its own immersible pump and the Puck Boat. All features of the '835 Patent claims—including Nuhn's new amended claims—were already well known in the industry. Nuhn distorts its alleged invention, trying to avoid the prior art by claiming features and functions that are nothing more than obvious, common sense design choices.

The previously raised Puck, Bryham, and Manure-Manager combination discloses nearly every feature recited in the amended claims. This combination, along with Puck's commercial agitation boat, teaches every single element recited in Nuhn's Revised Motion to Amend. The proposed claims are unpatentable, and Nuhn's Revised Motion to Amend should be denied.

A. Manure-Manager

Manure-Manager describes Nuhn's commercial embodiment (the "Nuhn Pump") of the '758 Patent (EX1028) (incorporated-by-reference into the '835 Patent), which Nuhn withheld during prosecution of the '835 Patent.





EX1001, FIGS. 3 and 5; EX1112, 27.

B. The Puck Boat

The Puck Boat is a commercial embodiment of the of the vehicle described in Puck (EX1014). EX1121, ¶¶4-11. The Puck Boat was publicly used and sold before the effective filing date of the '835 Patent. *Id.*; EX1158, 70:7-16, 82:1-91:5; 97:3-98:8; EX2083, ¶12. The Puck Boat is depicted and described by EX1121-EX1126, EX1160-EX1161, EX1163-EX1168, and the testimony of Mr. Puck (EX1121; EX1158).

II. CLAIM CONSTRUCTION

A. "Along the Longitudinal Centerline"

"Along the longitudinal centerline" should be interpreted as "on or next to the longitudinal centerline." The '835 Patent clarifies this term does not require

mathematical precision, equating it with the phrase, "substantially in the middle of the vehicle." EX1001, 7:52-54. POSAs would have understood that "along" means "on or next to." EX1174, ¶13.

B. "Liquid Manure Pump"

As found in the institution decision (Paper 12 at 18) and outlined in Bazooka's reply brief (Paper 34, Section IV.B), a "liquid manure pump" is properly interpreted as "a pump with a structure capable of pumping liquid with suspended solids."

III. AMENDED CLAIMS 41-80 ARE UNPATENTABLE AS OBVIOUS OVER PUCK IN VIEW OF THE PUCK BOAT, BRYHAM, AND MANURE-MANAGER

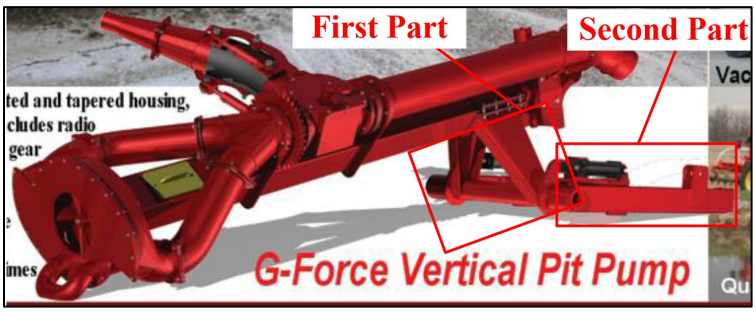
A. Motivation to Combine Puck, the Puck Boat, Bryham, and Manure-Manager

Puck in view of the Puck Boat, Bryham, and Manure-Manager would have rendered claims 41-80 obvious. As detailed in Bazooka's petition in the '708 Patent IPR, a POSA would have been motivated to combine Puck, Bryham, and Manure-Manager. *See* IPR2024-00098, Paper 2 at 108-109; *see also* EX1174, ¶¶31-40. POSAs would have understood the substitution of the Puck pump for the Nuhn Pump to be a matter of design choice. *Id.*; EX1158, 71:18-73:2; 248:8-12.

In its Revised Motion to Amend (Paper 42) and Reply to Bazooka's Opposition to the Motion to Amend in the '425 Patent IPR (IPR2023-01161, Paper 40), Nuhn argues against the Puck, Bryham, and Manure-Manager combination, focusing on where a POSA would have been motivated to attach the Nuhn Pump to

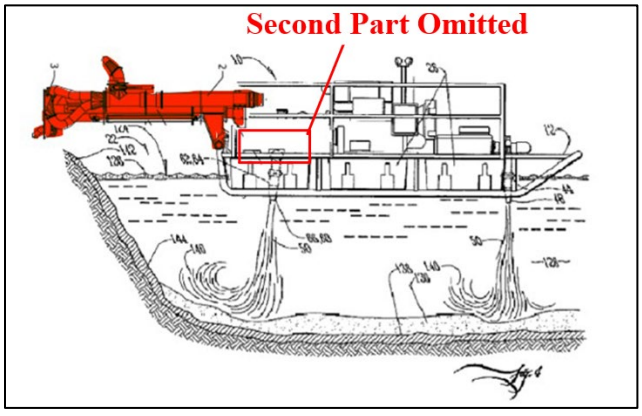
the vehicle. Those arguments incorrectly advocate positioning the pump in a highly unstable arrangement on the vehicle, ignore Puck's pump positioning teachings, and disregard the knowledge and understanding of a POSA.

Nuhn asserted 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.



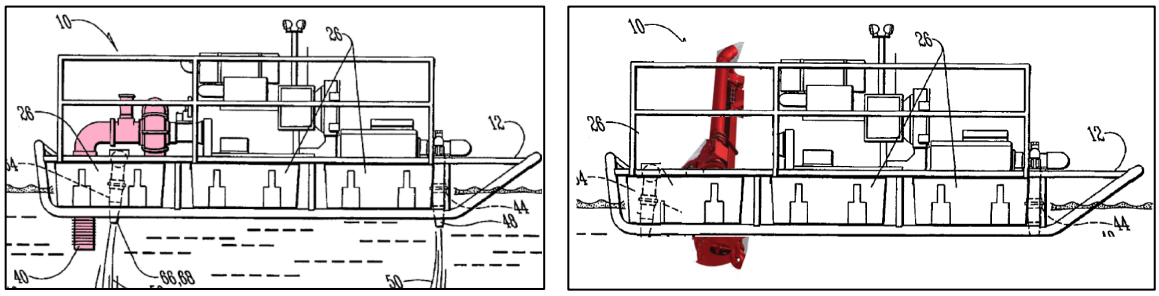
EX1112, 27 (annotated).

However, Manure-Manager does not describe the second part of the frame as mandatory. Nor is pivotability required. Nuhn even omitted this second part of the frame in its own figure, shown below. As shown in Nuhn's figure, a POSA could have easily removed this part of the frame when attaching the Nuhn Pump to Puck.



IPR2023-01161, Paper 40 at 11 (annotated).

When connected to Puck, the pump would be rigidly connected vertically on the vehicle, similar to how Puck describes its pump intake (EX1174, ¶44):



EX1014, FIG. 4; EX1112, 27 (modified and annotated).

Nuhn's expert suggested attaching the pump's boom arm to the rear of the Puck vehicle to allow it to pivot off the rear of the vehicle. But Nuhn's expert—who lacks experience in marine vehicle design—overlooks that such an arrangement significantly impacts the vehicle's stability while afloat. EX1174, ¶¶45-51.

Indeed, Mr. Puck explained in his deposition that early prototypes of the Puck Boat (pictured below) utilized a submersible impeller pump hung through the middle of the vehicle for this very reason. EX1158, 59:25-60:23 (referring to EX1159, 2); Mr. Puck confirmed that centrally locating the pump allowed for the weight of the vehicle and reaction forces generated be the pump to be more centrally located, improving the vehicles' stability. EX1158, 73:20-74:19; EX1121, ¶¶12-13.

EX1159, 1-2.

Thus, as confirmed by Mr. Puck, POSAs would have understood that the more logical location for the Nuhn pump would be to extend through the same space that the pump intake pipe extended on the Puck Boat, as annotated below. EX1158, 73:20-74:19; EX1174, ¶¶46-51. Puck emphasizes the importance of "increas[ing] the stability of the agitator (10)." EX1014, ¶[0041]. Centrally 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 negatively impact the stability, possibly causing the vehicle to capsize. EX1174, ¶¶46-51.

EX1164, 17, 25 (annotated).

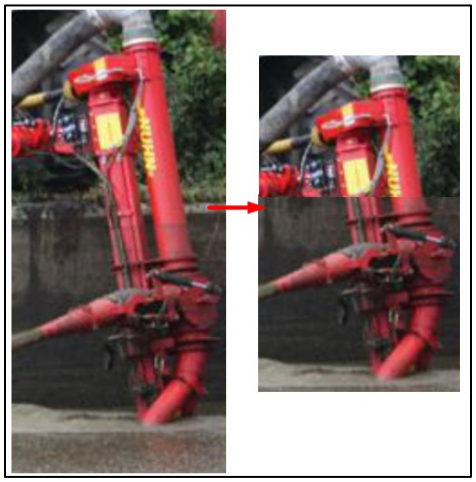
Nuhn previously argued that if the Nuhn Pump was placed on Puck, it would extend too far below the Puck vehicle. IPR2023-01161, Paper 40 at 11-12 and EX2099, ¶361. But merely scaling the Puck vehicle and Bryham wheels to accommodate the Nuhn Pump—or vice versa—would alleviate any such issue.

EX1174, ¶¶52-54. Furthermore, considering the figure relied on by Nuhn's expert (IPR2023-01161, EX2099, ¶363) and Manure-Manager (EX1112, 27), it is apparent that the purpose of the elongated body and driveshaft 28 on the Nuhn Pump is to permit the pump to extend from elevated surfaces to variable depths in reservoirs. EX1174, ¶55. The '758 Patent recognizes this, noting that the length of the pump body and driveshaft 28 is adjustable. EX1028, 6:14-16. POSAs would have understood that pump bodies could be extended or shortened as desired.

This is evidenced by pre-2013 modifications made to the length of the Doda Super 150 Pump—which Mr. Lonnemann and Mr. Puck confirmed ***was the same pump used on the SenwaTec Amphi-King and the Puck prototype manure agitation boat***. EX1158, 62:23-63:24 (referencing EX1012 and EX1159); EX1131, 69:6-15 (referencing EX1012).

EX1159, 2; EX1012, 1 (annotated).

The extended driveshaft of the Nuhn Pump would be unnecessary when connecting the Nuhn Pump to Puck. Puck and the Puck Boat each use a pump intake arranged immediately below the vehicle body, rather than extending to the bottom of the lagoon. *See* EX1014, FIG. 4; EX1164, 17. As Mr. Puck confirmed, POSAs would have understood that it is beneficial to draw from this location, as opposed to the thicker sludge layer from the bottom of the lagoon. EX1121, ¶14; EX1174, ¶58; EX1014, ¶¶[0035]-[0036]. Thus, POSAs would have understood that it would be beneficial to shorten the Nuhn Pump elongated body when implementing the Nuhn Pump on Puck, as the pump length was adjustable as follows:



EX1112, 27 (modified).

Finally, Nuhn's expert alleged that the Nuhn Pump PTO input would be misaligned with the Puck engine drive shaft when placed on the vehicle. IPR2023-01161, EX2099, ¶¶361-364. But POSAs would have understood that the Nuhn Pump

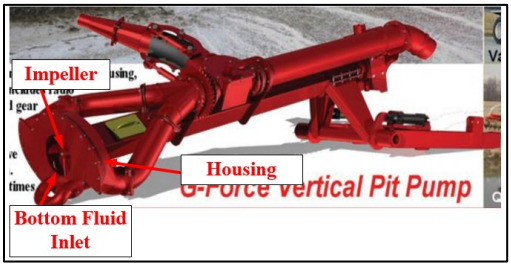
could be powered with a hydraulic motor to overcome any such issue. Bryham teaches a hydraulic transmission for powering the vehicle wheels and its components. Nuhn's expert acknowledges that POSAs used hydraulic transmissions to power PTO driven components (like the Nuhn Pump) since the 1970s. EX1174, ¶59. Mr. Puck even testified that he easily performed this same modification on the Doda Super 150 Pump when fitting it onto his prototype manure agitation vehicle. EX1158, 50:6-53:13. POSAs would have recognized that when using a hydraulic transmission, the position of a hydraulic motor could be easily adjusted to power the Nuhn Pump. *Id.*; EX1174, ¶¶60-62.

Thus, rather than hanging the heavy Nuhn Pump "at the far end of an articulating boom arm hanging off the rear of Puck's Boat" as Nuhn incorrectly asserts (EX2099, ¶112), POSAs would have understood that the more natural and stable location for the Nuhn Pump would be to extend through the already-present pump intake opening on the Puck vehicle. EX1174, ¶63. The Puck vehicle and Nuhn Pump could be scaled to accommodate each other, and Bryam's hydraulic transmission could be utilized to power the Nuhn Pump.

B. Claim 41

Elements [41.0]-[41.2], and [41.5]: Puck, the Puck Boat, Bryham, and Manure-Manager would have rendered obvious Elements [41.0]-[41.2] and [41.5]. Paper 2 at 83-89.

Element [41.3]: Puck teaches a vehicle with a pump. POSAs 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 a drive shaft powering an impeller in a housing with a bottom fluid inlet. EX1112, 27; EX1174, ¶68. This drive shaft would be oriented substantially vertically when the Nuhn Pump is implemented on Puck to pump liquid manure.

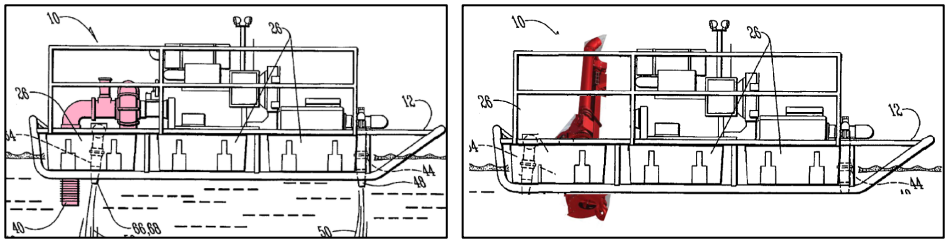


EX1112, 27 (annotated).

As illustrated below and detailed above, when substituting the Puck pump for the Nuhn Pump, a POSA would have located the Nuhn Pump in the same location in which the Puck Boat's intake pipe was arranged, as the vehicle already includes an access point through which the pump could extend into the manure lagoon. EX1174, ¶¶69-71. This arrangement would place the pump in the liquid manure when the vehicle is floating.

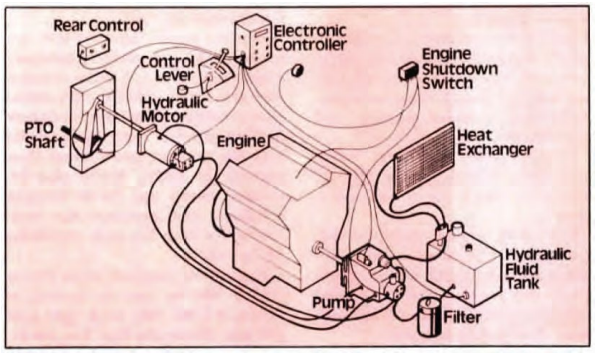
The Nuhn pump impeller draws liquid manure in through the bottom opening in the pump housing. The pump housing and impeller would be positioned along the

underside of the floatable vehicle body, rearward of the front of the vehicle and forward of the rear of the vehicle body. Like the Puck intake pipe, when mounted in this orientation, the Nuhn Pump, including its housing and drive shaft, would have a constant, substantially vertical, angular orientation relative to the vehicle body. *Id.*



EX1014, FIG. 4; EX1112, 27 (modified and annotated).

As described in the petition and recognized in the institution decision, POSAs would have been motivated to utilize the hydraulic drivetrain of Bryham to power Puck's slurry pump, as a hydraulic transmission is one of a finite number of options for transmitting power on a moving vehicle and has a high likelihood of success. Paper 2 at 87; Paper 12 at 51, 56; EX1174, ¶72-73. For the same reasons, POSAs would have been motivated to use Bryham's hydraulic transmission to power the Nuhn Pump. Indeed, Nuhn's expert identified the following analogous prior art hydraulic transmission system for driving a PTO. IPR2023-01161, EX2029, ¶172.



EX1129, 18.

As evidenced by Mr. Puck's conversion of the Doda Super 150 from a PTO to a hydraulic drive (EX1158, 49:10-52:7), POSAs would have understood that such hydraulic transmissions were frequently used to drive pumps used for liquid manure EX1147, ¶72-73; EX1114, 2 ("Fisher Pumps offers PTO and hydraulic drive units").

It would have been obvious to POSAs to connect the Nuhn Pump fluid output to the transport pipe 42 on the Puck vehicle such that liquid manure could be pumped through Puck's nozzles to propel the vehicle while floating. EX1174, ¶74.

Element [41.4]:[2] Bryham describes a hydraulic transmission that utilizes a hydraulic pump to drive the hydraulic fluid. EX1015, 2:66-67, 16:1-6. As described

[2] Substitute claims 41 and 80 are inconsistently listed on pages 4-6, 9-10, 27-28, and 40-41. For the purposes of this Opposition, Bazooka interprets claims 41 and 80 to not include the fluid nozzle and pump positional features recited on pages 4 and 10. To the extent that these features are found to be included in claims 41 and 80,

in the petition and recognized in the institution decision, rather than using multiple engines, a POSA 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. Paper 2 at 86-87; Paper 12 at 54-56; EX1174, ¶75-78. Puck's high-powered engine would easily power each of these components, and doing so would be cheaper, lighter, and more efficient than providing separate engines for each component. *Id*.

Element [41.6]: Puck discloses modular dock sections (26, 32) that are submerged when the vehicle is floating and are arranged in front of and to each side of the intake pipe of the Puck pump. EX1014, ¶¶[0022]-[0023], FIGS. 1-2. As described above, a POSA would have understood it to be obvious to have arranged the Nuhn Pump intake in the same location as Puck's intake pipe when substituting the Nuhn Pump for Puck's pump. *Supra* Sections III.A and III.B, Element [41.3].

The Puck Boat includes a pair of rear nozzles connected to a yoke positioned rearward of the pump intake (annotated below). As shown above (*supra* Section III.B, Element [41.3]) when substituting the Nuhn Pump for Puck's pump,

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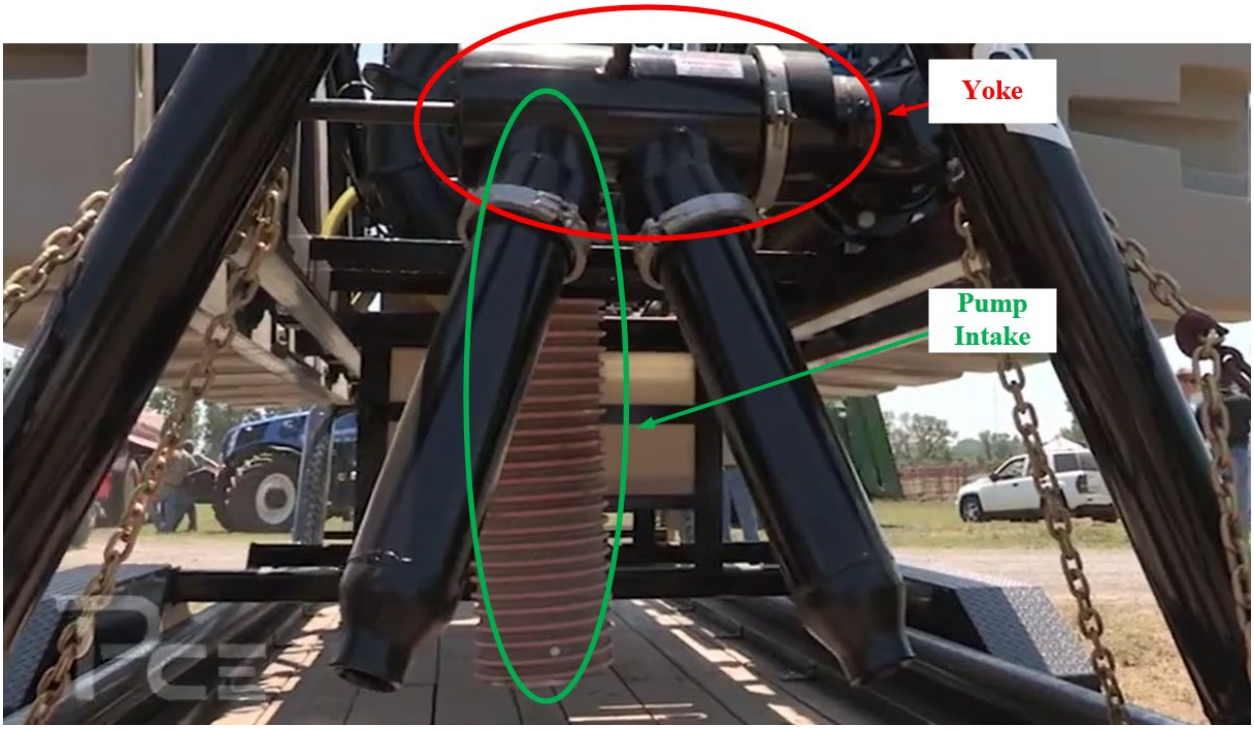
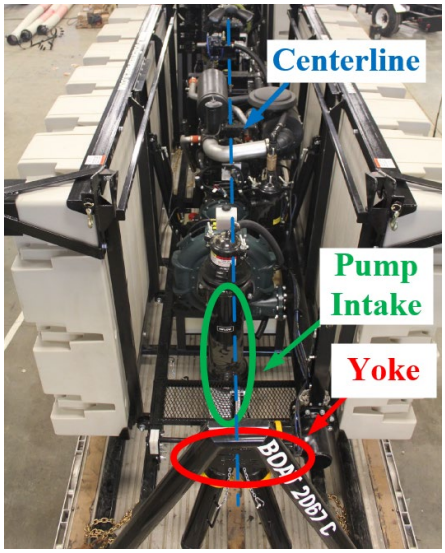
Bazooka requests that the Revised Motion to Amend be denied for failing to clearly show the changes to the claims, as required by 37 C.F.R. § 42.121(b).

POSAs would have understood it to be obvious to position the rear nozzles and yoke rearward of the pump intake to provide space for the Nuhn Pump housing, as taught by the Puck Boat.



EX1125, 0:45 (annotated).

The yoke and nozzles are each shown directly rearward of Puck's pump intake along the longitudinal centerline of the vehicle. Replacing Puck's intake with the Nuhn Pump housing would place it along the longitudinal centerline of the vehicle with the yoke and nozzles directly behind it.



EX1164, 25 (annotated).

When submerged, each of the yoke and nozzles function to keep floating solid material away from the bottom opening of the pump. EX1158, 111:1-112:17; EX1174, ¶83. As shown below and confirmed by Mr. Puck, POSAs would have recognized from public demonstrations of the Puck Boat that when the Puck Boat is propelled by the front cannon, the yoke becomes submerged while the Puck Boat moves rearwardly. *See ParkerVision Inc. v. Qualcomm Inc.*, 903 F.3d 1354, 1361 (Fed. Cir. 2018) ("a prior art reference … render[s] obvious an apparatus claim … even if it does not meet the claim limitations in all modes of operation.").

EX1165, 0:38; *see also* EX1158, 111:1-112:8 (discussing EX1165).

Furthermore, POSAs would have recognized that the Puck Boat is designed such that the foldable dock sections can be partially raised, improving the turning capabilities of the vehicle while floating. EX1158, 107:1-108:25 (referencing EX1164, 1). POSAs would have recognized that when the dock sections are partially raised, the vehicle sits even lower in the fluid and the yoke would be submerged while the vehicle is floating, thereby keeping floating solid material away from the bottom fluid opening of the pump. *Id.*; EX1125, 3:55; EX1174, ¶¶84-85; *see also ParkerVision*, 903 F.3d at 1361. Alternatively, a POSA would have understood that the inclusion of an "additional dock section" as taught by Puck, rearward of the pump intake would have been obvious. EX1174, ¶¶86-89; EX1014, ¶[0023].

C. Claims 42, 44-46, 48

Puck, the Puck Boat, Bryham, and Manure-Manager would have rendered obvious Claims 42, 44-46, 48. Paper 2 at 89-95.

D. Claim 43

Bryham discloses a hydraulic power transmission for driving the wheels. EX1015, 2:66-67, 16:1-6. As noted above (*supra* Section III.B, Elements [41.3]-[41.4]), a POSA would have been motivated to utilize the Puck engine to power the Bryham hydraulic transmission and to use this hydraulic transmission to drive the Nuhn Pump on Puck. A POSA would have been motivated to do so because of the efficiency benefits associated with using a single power source to power multiple components. Paper 2 at 86-87; Paper 12 at 51, 54, 56; EX1174, ¶91.

E. Claims 47, 49-56

Puck discloses remote control of the vehicle nozzles. Paper 2 at 88-89; 98-99. Both Puck and Manure-Manager disclose articulation cylinders for moving the nozzles in a vertical plane. EX1014, ¶[0030]; EX1112, 27. POSAs would have understood that these cylinders are hydraulic cylinders. EX1174, ¶94. Each of these articulation cylinders are coupled to a linkage. EX1014, FIGS. 1-2; EX1112, 27. POSAs would have understood it to be obvious 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. EX1174, ¶95.

Manure-Manager also discloses a sun gear next to the nozzle. POSAs would have understood (as confirmed by the ’758 Patent), that this sun gear adjusts the angular orientation of the nozzle in a horizontal plane. EX1174, ¶96-99; *see also*

EX1170, 5 (describing 200° horizontal rotation). As confirmed by the '758 Patent, POSAs would have also understood that the sun gear is driven by a corresponding vertical moon gear powered by a hydraulic motor, as was known for controlling nozzle direction on pumps used in manure lagoons since as early as 2006:

EX1169, 6-7, 15 (describing a "[f]ingertip [h]ydraulic [c]ontrol [o]ption for the rotation of the nozzles").

POSAs would have understood it to be obvious to retain these structures when substituting the Nuhn Pump for the Puck pump, as the Puck Boat marketing materials described the benefits of having such a fluid nozzle above the surface for disrupting crust and cleaning banks on lagoons. EX1121, ¶4. Retaining these structures would allow for better control of the direction of the fluid output of the fluid nozzle in a vertical or horizontal plane. *Id.*; EX1174, ¶99; *see also* EX2083, ¶12 (indicating the importance of fluid output control on the Puck vehicle).

F. Claim 57

Puck, the Puck Boat, Bryham, and Manure-Manager would have rendered obvious Claim 57. *Supra* Section III.B.

G. Claims 58-72

Puck, the Puck Boat, Bryham, and Manure-Manager would have rendered obvious Claims 58, 60-62, and 64 (*supra* Section III.C); Claim 59 (*supra* Section III.D); and Claims 63, 65-72 (*supra* Section III.E).

H. Claims 73-78

Puck, the Puck Boat, Bryham, and Manure-Manager would have rendered obvious Claims 73-78. Paper 2 at 100.

I. Claim 79

Element [79.0]-[79.1] and [79.4]-[79.6]: Puck, the Puck Boat, Bryham, and Manure-Manager would have rendered obvious Elements [79.0]-[79.1] and [79.4]-[79.6]. *Supra* Section III.B, Elements [41.0]-[41.1] and [41.4]-[41.6].

Element [79.2]: Puck, the Puck Boat, Bryham, and Manure-Manager would have rendered obvious Element [79.2]. *Supra* Section III.B, Element [41.2].

Bryham describes a "ground engagement means" comprising a set of wheels and a "hydraulic motor 108 … which can [] drive the ground engagement means." EX1015, 2:66-67, 16:4-6. Bryham further describes that "one ***or more*** of the ground engaging means supported thereon is provided with motive power.… [T]he motive

power is provided by … hydraulic motor**s**." EX1015, 6:47-53 (emphasis added). Thus, Bryham discloses a plurality of ground engaging elements (i.e. wheels) that are powered by separate hydraulic motor**s**. A POSA would have understood that each of the wheels could be independently powered for better traction using the separate, hydraulic motors taught by Bryham. *See id.*, FIG. 23 (showing a hydraulic motor 108 (orange) powering a single wheel 16 (green)); EX1174, ¶¶104-106. Indeed, Maurice Bryham, the inventor of EX1015, confirmed that the commercial embodiment of Bryham was all-wheel drive. EX1176, 16:25-17:23.

A POSA 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 (EX1014, ¶[0022]) of Puck. EX1174, ¶106. It would have been a matter of design choice for a POSA 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*. Such modification would not have provided unexpected results and would have amounted to a more stable, "obvious variation[] consistent with the principles known in th[e] art." *Id.*; *Ex Parte Ostendorff*, No. 2016-004235, at 9 (PTAB Mar. 26, 2018).

Element [79.3]: Puck, the Puck Boat, Bryham, and Manure-Manager would have rendered obvious the black, yellow, green, blue, and brown limitations of Element 79.3. *Supra* Section III.B, Element [41.3]; EX1174, Section V.

A POSA would have understood it to be obvious to have mounted the bottom portion of the Nuhn Pump to the underside of the vehicle to provide for increased stability and longevity of the vehicle. EX1174, ¶108.

As noted above, when substituting the Nuhn Pump for Puck's pump, a POSA would have located the Nuhn Pump intake in the same location as the Puck pump intake, as the vehicle already includes an access point through which the pump could extend into the liquid of the manure lagoon. *Supra* Section III.A and III.B, Element [41.3]. When positioned in this arrangement, the Nuhn Pump would be located rearward of the front of the vehicle body and forward of the rear of the vehicle body and between the four ground engaging wheels. EX1174, ¶¶109-112.

J. Claim 80

Element [80.0]-[80.1] and [80.3]-[80.6]: Puck, the Puck Boat, Bryham, and Manure-Manager would have rendered obvious Elements [80.0]-[80.1] and [80.3]-[80.6]. *Supra* Section III.B, Elements [41.0]-[41.1] and [41.3]-[41.6] and Section III.I, Element [79.3].

Element [80.2]: Puck, the Puck Boat, Bryham, and Manure-Manager would have rendered obvious Element [80.2]. *See supra* Section III.I, Element [79.2]. A POSA would have understood that arranging one wheel at each corner of the vehicle frame of Puck would result in a front set of wheels at the front of the floatable vehicle body and a rear set of wheels at the rear of the floatable vehicle body. EX1174, ¶114.

IV. THE AMENDED CLAIMS ARE INVALID UNDER §112(a)

Where the language of a substitute claim "does not appear *in ipsis verbis* in the original disclosure, a mere citation to the original disclosure without any explanation as to why a [POSA] would have recognized that the inventor possessed the claimed subject matter as a whole may be … inadequate." *Toshiba Corp. v. Optical Devices, LLC*, IPR2014-01441, Paper 36 at 34 (PTAB Mar. 8, 2016). "[A] description that merely renders the invention obvious does not satisfy the [written description] requirement." *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1352 (Fed. Cir. 2010) (*en banc*). Nuhn provides no explanation in its Revised Motion to Amend as to why a POSA would have recognized that the '835 Patent discloses the claimed features. Instead, Nuhn only lists paragraph numbers of its provisional application. As explained below, the '835 Patent lacks written description support for numerous claimed terms. Nuhn's Revised Motion to Amend should be denied.

A. "The Pump Housing Is Mounted to the Underside of the Floatable Vehicle Body"

Amended claims 79 and 80 include the claim term:

the pump housing is mounted to the underside of the floatable vehicle body

No description of the mounting location of the pump housing is provided in the specification of the '835 Patent. The Revised Motion to Amend lists various paragraphs of EX2081 for support, but none of these paragraphs describe the claimed mounting location. Paragraphs [0019] and [0024] refer to Figures 3 and 8.

These figures only show the ***positioning*** of the fluid pump—not that it is ***mounted to the underside*** of the vehicle body. Indeed, an examination of the CAD files, which Ian Nuhn testified that the '835 Patent figures were derived from, confirms that there is no mounting of the pump housing to the underside of the vehicle body. Rather, the pump is attached to the frame at the top side of the vehicle body. EX1174, ¶115-120. The '835 Patent lacks any support for this term.

B. "To Keep Floating Solid Material Away from the Bottom Fluid Opening in the Pump Housing of the Immersible Liquid Manure Pump"

Amended claims 41, 57, 79, and 80 include the claim term:

to keep floating solid material away from the bottom fluid opening in the pump housing of the immersible liquid manure pump

"Functional limitations recited in the negative may describe a capability or structural element." *LifeNet Health v. LifeCell Corp*., 837 F.3d 1316, 1326 (Fed. Cir. 2016). "Here, neither the original claim language nor the written description reasonably conveys that the inventor[] possessed this negative limitation." *Healthier Choices Mgmt. Corp. v. Philip Morris Prods. S.A.*, No. 2023-1529, 2024 U.S. App. LEXIS 29741, at *10 (Fed. Cir. Nov. 22, 2024). Nothing in the specification excludes the passage of floating solid material into the bottom fluid opening of the pump housing. Where the "specification is itself silent regarding a negative limitation, testimony from a skilled artisan as to possibilities or probabilities that the

recited element would be excluded [does] not suffice." *Id.* (quoting *Novartis Pharms. Corp. v. Accord Healthcare, Inc.*, 38 F.4th 1013, 1017 (Fed. Cir. 2022)).

Nowhere does the '835 Patent explain that the submerged components of the vehicle function "to keep floating solid material away from the bottom fluid opening." Indeed, depending on the strength of the pump, size of the submerged components or the characteristics of the floating material, floating solid material may be drawn below the submerged components into the bottom fluid opening of the pump. EX1174, ¶125-127. The '835 Patent provides no teaching or rationale describing this claimed functionality or how it is achieved.

V. THE REVISED MOTION TO AMEND DOES NOT COMPLY WITH 37 C.F.R. § 42.121

Nuhn's Revised Motion to Amend fails to comply with the regulatory requirements of 37 C.F.R. §42.121. That section requires a motion to amend to both identify the support for each element in the original disclosure in the application for the patent ***and*** in the earlier-filed disclosure for which the benefit of the earlier filing date is sought. *Lectrosonics, Inc. v. Zaxcom, Inc.*, IPR2018-01129, Paper 15, 7-8 (PTAB Feb. 25, 2019) (precedential). The Revised Motion to Amend does not even provide a copy of, let alone cite instances in U.S. Patent Application No. 17/201,100 (the application for the '835 Patent) where support for its substitute claims can be found. *See CBS Interactive Inc. v. Helferich Patent Licensing, LLC*, IPR2013-00033,

Paper 122, 53-54 (PTAB Mar. 3, 2014) (denying motion to amend for failure to identify support in the application for the patent and each earlier filed priority application). Nor does it do so for any intermediate continuation applications to which the '835 Patent claims priority. *See id.*

This requirement matters because "if any application in the priority chain fails to make the requisite disclosure of subject matter, the later-filed application is not entitled to the benefit of the filing date of applications preceding the break in the priority chain." *Holmer v. Harari*, 681 F.3d 1351, 1355 (Fed. Cir. 2012). While the '835 Patent purports to incorporate-by-reference Nuhn's provisional application, that incorporation-by-reference is defective because it is missing from Nuhn's PCT application. EX1177, 1. Thus, Nuhn cannot rely solely on its provisional application for its written description support under §112(a). *Holmer*, 681 F.3d 1351 at 1355. "The burden should not be placed on the Board to sort through [Patent Owner's] patents and the original disclosures of the [non-provisional] application and the two earlier-filed applications for which benefit is sought, to determine whether each proposed substitute claim is supported[.]" *CBS Interactive, LLC*, IPR2013-00033, Paper 122, 53-54.

VI. CONCLUSION

For the foregoing reasons, Bazooka asks that the PTAB deny Nuhn's Revised Motion to Amend.

Respectfully submitted,

MERCHANT & GOULD P.C.

Date: December 23, 2024

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CERTIFICATION OF SERVICE

The undersigned certifies, in accordance with 37 C.F.R. § 42.6(e), that service was made on Counsel for Patent Owner as detailed below.

Date of service:	December 23, 2024
Manner of service:	Electronic mail addressed to: bluchsinger@harnessip.com syackey@harnessip.com mcutler@harnessip.com
Documents served:	Petitioner's Opposition to the Revised Motion to Amend, *Inter Partes* Review of U.S. Patent No. 11,491,835
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