

Filed on Behalf of: Bazooka-Farmstar, LLC

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

BAZOOKA-FARMSTAR, LLC

Petitioner,

- vs. -

NUHN INDUSTRIES LTD.,

Patent Owner

REPLY TO PATENT OWNER RESPONSE IN
INTER PARTES REVIEW OF U.S. PATENT NO. 11,541,708

Case No.: IPR2024-00098

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I. INTRODUCTION

Nuhn's use of "between" in its claims, along with a proper interpretation of the '708 Patent's cited references, demonstrates that a broader construction of "between" is required. Nuhn's expert confirmed this in his deposition. "Between" is not merely "adjacent to"—rather "between" properly encompasses structure "in intermediate relation to."

Nuhn's claims are nevertheless invalid even under Nuhn's restrictive definition. Prior art disclosed buoyant elements "in the space that separates" the wheels. This arrangement was publicly used by Sundstrom since 2006—over seven years before Nuhn's priority date. Like Ian Nuhn, who demonstrated the Nuhn Pump design next to Sundstrom's Stir Dredge in 2012 (EX1097, 113:2-114:24, 154:8-156:20 (referencing EX1128, 18-19)), POSAs seeing Sundstrom's remote-control vehicle would have understood the benefits of Sundstrom's arrangement of buoyant elements and wheels.



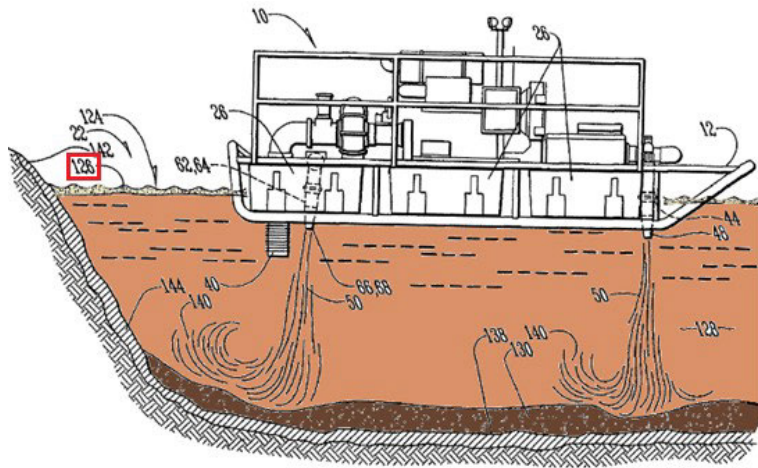
While Nuhn argues about whether prior art pumps include a pump housing with a bottom fluid inlet, it ignores that its own prior art pump—withheld during prosecution (like Sundstrom's Stir Dredge)—discloses its claimed pump features. *See, e.g.*, Paper 21 at 54-57.



Finally, Nuhn's weak, secondary considerations arguments have no nexus and cannot overcome Bazooka's strong case of obviousness. *Wyers v. Master Lock Co.*, 616 F.3d 1231, 1246 (Fed. Cir. 2010). Nuhn's secondary considerations hinge on Ian Nuhn's speculative and self-serving declaration, which is unreliable at best.

II. BACKGROUND

Liquid manure in a lagoon stratifies into a bottom sludge layer with settled solids (brown, below), a watery liquid supernatant above the sludge (light brown), and occasionally, a crust (yellow). EX1014, ¶¶[0003]-[0004]; EX1100, ¶6. Lagoons are agitated by spraying supernatant against the sludge.



EX1014, FIG. 4 (annotated).

Conventional irrigation equipment is used to pump the liquid manure mixture onto farmland, making land application more efficient. EX1061, 15. POSAs understood that liquid manure lagoons have total solids contents of less than about 5% and “[m]anure that has a TS concentration of less than 5 percent ... can be irrigated[.]” EX1060, 81; EX1079, ¶¶17-19.

III. LEVEL OF ORDINARY SKILL

Nuhn advances its rejected, overbroad POSA definition. Paper 21 at 6-7. These definitions matter because Nuhn’s expert is not a POSA. EX1079, ¶29. While farmers may *service* traditional farming equipment, farmers are not ordinarily *equipped to design* multi-functional amphibious vehicles. *Id.*, ¶25. Designing a remote-control amphibious vehicle involves making buoyancy calculations,

specifying transmission systems, and implementing remote-control. These are activities performed by engineers—not farmers. *Id.*

IV. CLAIM CONSTRUCTION

Bazooka identifies “between” and “liquid manure pump” for construction.

A. “Between”

The institution decision preliminarily construed “between” as “in the space that separates.” Paper 10 at 15. Because the intrinsic evidence uses “between” more broadly, “between” should be construed as “in intermediate relation to”—as defined by Merriam-Webster. EX3002, 1. *Wasica Fin. GmbH v. Cont’l Auto. Sys.*, 853 F.3d 1272, 1281 (Fed. Cir. 2017) (“If the intrinsic record supports several definitions of a term, the term may be construed to encompass all such consistent meanings.”).

The ’708 Patent claims recite buoyant elements “between” the front wheels and the rear wheels. Nonetheless, the specification never uses “between” to describe positional arrangements of components. Nuhn’s only support for this term is its figures. But the figures do not support a restrictive definition of “between”—Nuhn’s expert agreed that in Figure 1, when the wheels are lowered below the vehicle body, the buoyant elements remain “between” the wheels. EX1094, 196:25-198:14.

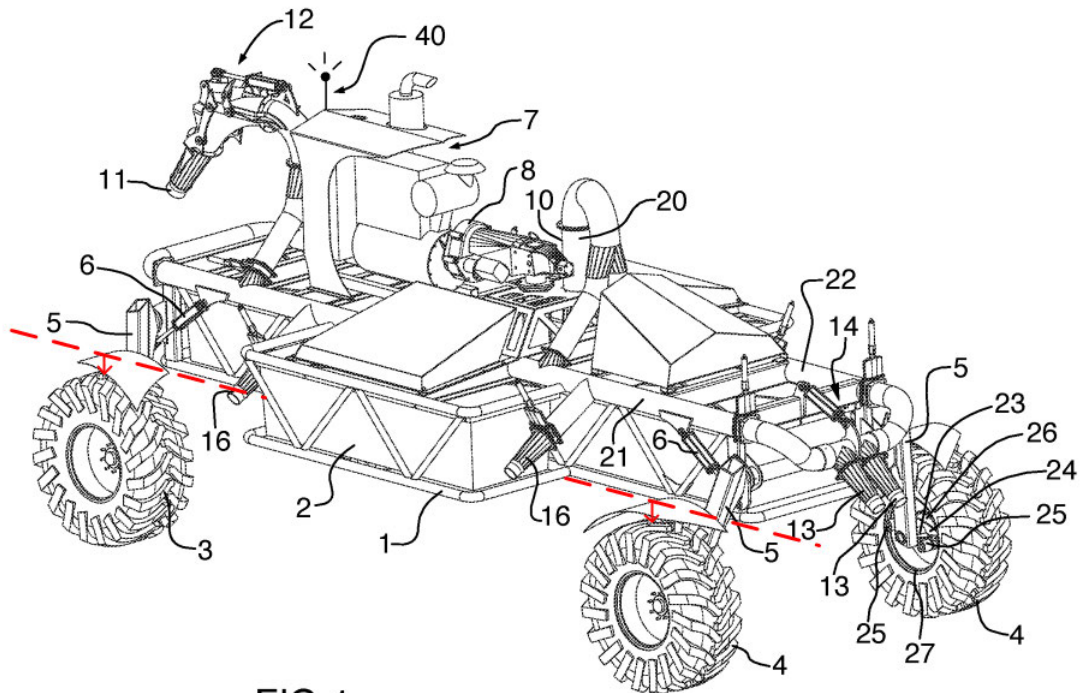
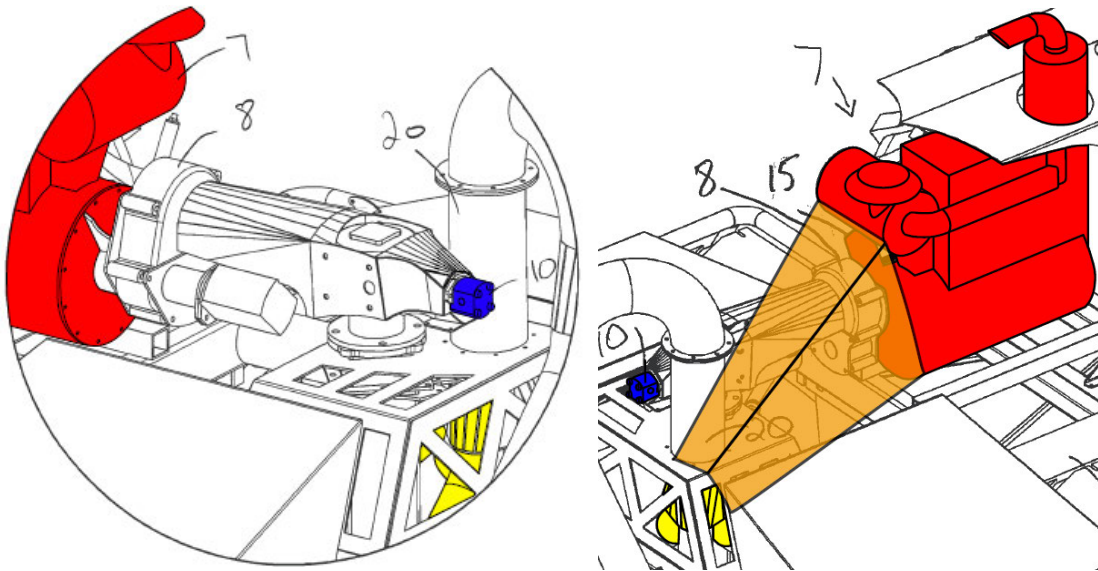


FIG.1

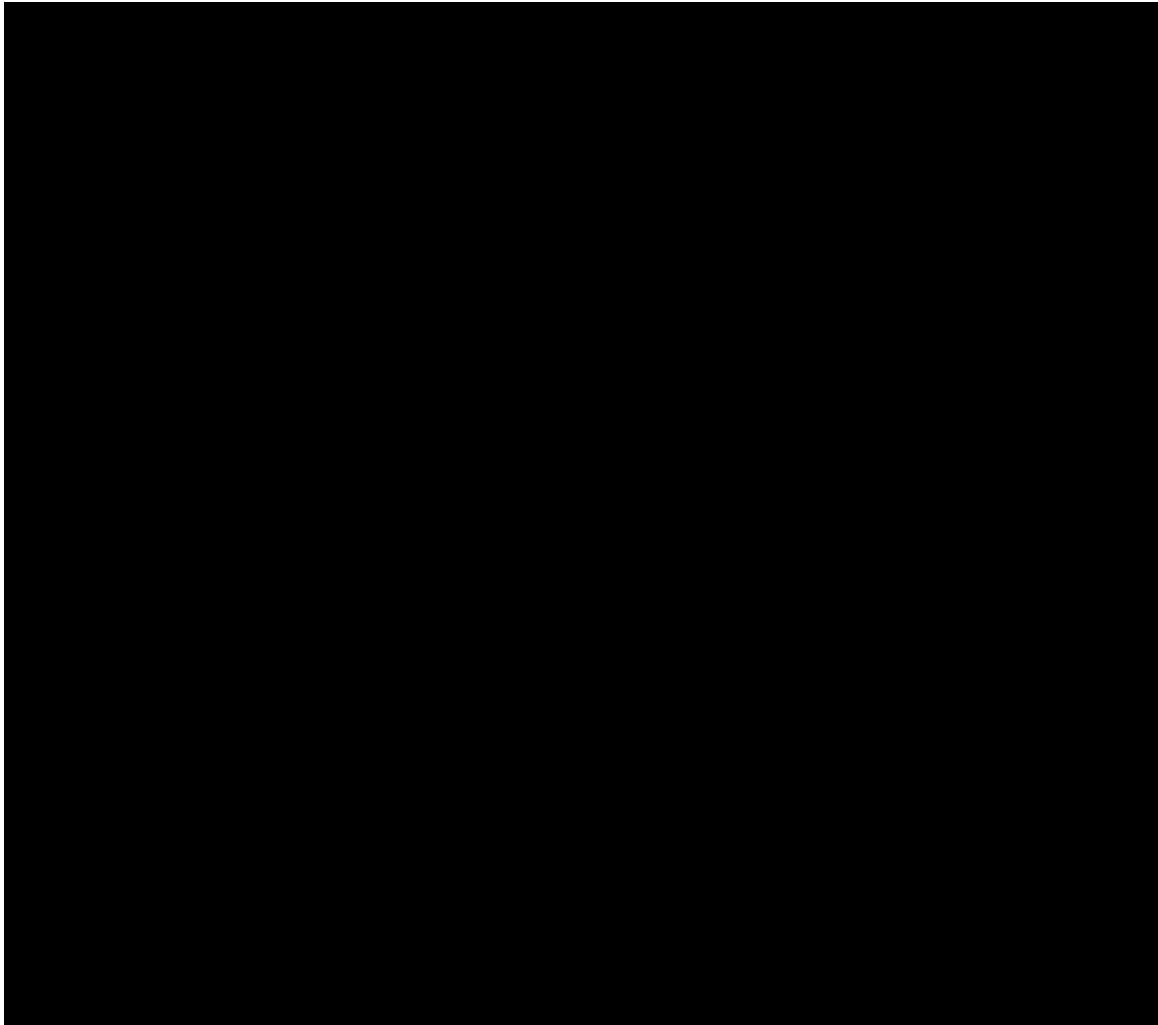
EX1001, FIG. 1 (annotated).

While Nuhn now argues for a restrictive “between” definition, this is inconsistent with its other “between” claims. Nuhn’s motion to amend the ’835 Patent uses “between” in claims 43 and 59 to describe how the “hydraulic pump is positioned” with respect to the “power source and the immersible liquid manure pump.” IPR2024-00004, Paper 21 at 7-9. But the figures show the hydraulic pump 10 (blue) is located above and beside (not within) “the space that separates [(orange)]” the fluid pump 9 (yellow) and the power source 7 (red). EX2081, FIGS. 2, 7 (annotated below). The ’708 Patent’s CAD models confirm this. EX1079, ¶¶41-42. Even though it is not located “in the space that separates,” Nuhn’s expert still

considers the hydraulic pump 10 “between” the fluid pump 9 and the power source 7 in the figures. EX1094, 194:22-195:2.



EX2081, FIGS. 2, 7 (annotated).



EX1080-EX1081 (annotated).

The hydraulic pump 10 is located “in intermediate relation to” the fluid pump 9 and the power source 7. EX1079, ¶¶34-43. Thus, “a more expansive ordinary meaning of ‘between’ is evidenced by the intrinsic evidence[.]” *OsteoMed LLC v. Stryker Eur. Operations Holdings LLC*, IPR2022-00488, Paper 35 at 13-16 (PTAB Feb. 17, 2023) (rejecting restrictive “in the space separating” definition of “between”). Claim terms in continuation patents must be construed consistently. *SightSound Techs., LLC v. Apple Inc.*, 809 F.3d 1307, 1316 (Fed. Cir. 2015). Given

Nuhn's broader usage of "between" in the '835 Patent claims, "between" should be construed consistently in the '708 Patent.

Nuhn's claims in its pending application—along with its expert's related deposition testimony—also confirms that a broader "between" definition is required. EX1079, ¶44.

Other intrinsic evidence—including the '708 Patent's cited references—support this broader definition. Bailey, which uses "between" to refer to the position of the vehicle axles, was misinterpreted in the institution decision. EX1079, ¶¶46-51. Regardless, Nuhn's expert considers the red circles (below) in FIG. 6 "between" Bailey's yellow wheels. EX1094, 99:7-23. Because these intermediate axles 128 are not located "in the space that separates" wheels 126, 124, "between" should be construed as "in intermediate relation to."

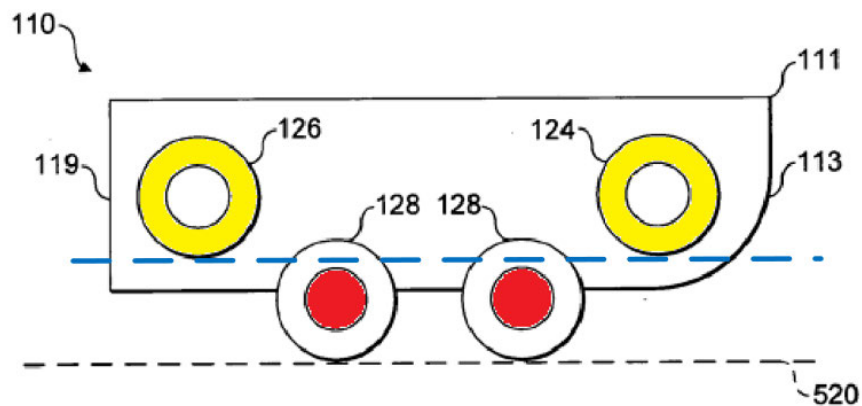


FIG. 6

EX2084, FIG. 6 (annotated).

Other cited art, including Knowles and Tews, uses “between” to describe components “in intermediate relation to”—but not “in the space that separates” each other. EX1079, ¶¶52-55. Nuhn’s expert agrees. *Id.*

Nuhn’s expert did not consider this intrinsic evidence when developing his opinions on “between.” EX1094, 78:11-15, 115:11-20, 118:1-119:10, 172:6-22, 210:5-12. Because the intrinsic evidence uses “between” inconsistently with Nuhn’s narrow construction, the PTAB should apply the broader definition “in intermediate relation to.”

B. “Liquid Manure Pump”

“Liquid manure pump” properly covers “a pump with a structure that is capable of pumping liquid with suspended solids.” EX1079, ¶¶56-66; IPR2024-00004, Paper 12 at 18.

V. GROUND 1: CLAIM 23 IS ANTICIPATED BY BENNETT-II

Nuhn argues claim 23 is patentable because Bennett-II does not teach foam filled buoyant elements between the wheels. Nuhn is wrong.

First, Bennett-II teaches front and rear “load wheels 75” arranged on each side of the vehicle. Nuhn argues that the load wheels are not the same as the ’708 Patent wheels. This is irrelevant. Claim 23 separately recites the ground engaging propulsion structure and the wheels—it does not require the wheels be ground engaging. EX1079, ¶¶69-70.

Next, the PTAB encouraged the parties to “address the meaning of ‘chamber’....” Paper 10 at 47. Nuhn concedes this point, acknowledging Bennett-II’s “two chambers” are “annotated in green and blue above[.]” Paper 21 at 11 (citing EX1017, FIG. 7B (annotated)). The PTAB’s dictionary properly defines “chamber” as an “artificial ... cavity” (EX3003), and “cavity” as “an unfilled space within a mass.” EX1123, 1. Bennett-II’s voids between cross members 34 are spaces within the mass of tub 40. EX1079, ¶¶72-73.

Moreover, while Nuhn disputes whether Bennett-II’s chambers are foam filled, Bennett-II states: “frame assembly 30 and/or tub 40 may include ... foam material inserts in order to fill volume voids....” EX1013, ¶[0051]. Bennett-II describes that the “frame assembly 30 includes ... cross members 34.” *Id.*, ¶[0050]. The spaces separating cross members 34 are volume voids. EX1079, ¶¶72-73.

Nuhn’s arguments about the buoyant elements’ positions are unavailing. Claim 23 says nothing about the buoyant elements being located inside versus outside the vehicle body. Nuhn’s arguments about what sides the wheels are arranged on are contradicted by claim differentiation. Paper 10 at 12-13.

VI. GROUNDS 2-8: CLAIMS 1-38 ARE OBVIOUS

A. Grounds 2 and 6: Claims 1-38 Are Obvious Over Truxor in View of Yoon or Carrier / and Manure-Manager.

The Truxor combinations render obvious claims 1-38. Truxor and Yoon or Carrier render the vehicle features obvious. Manure-Manager teaches the remaining pump features.

i. The Truxor Combinations Render Obvious Buoyant Elements Positioned Between the Front and Rear Wheels.

Nuhn argues that when substituting the Truxor tracks for wheels, POSAs would jettison Truxor's pontoons. Paper 21 at 29-30. Nuhn is wrong for several reasons.

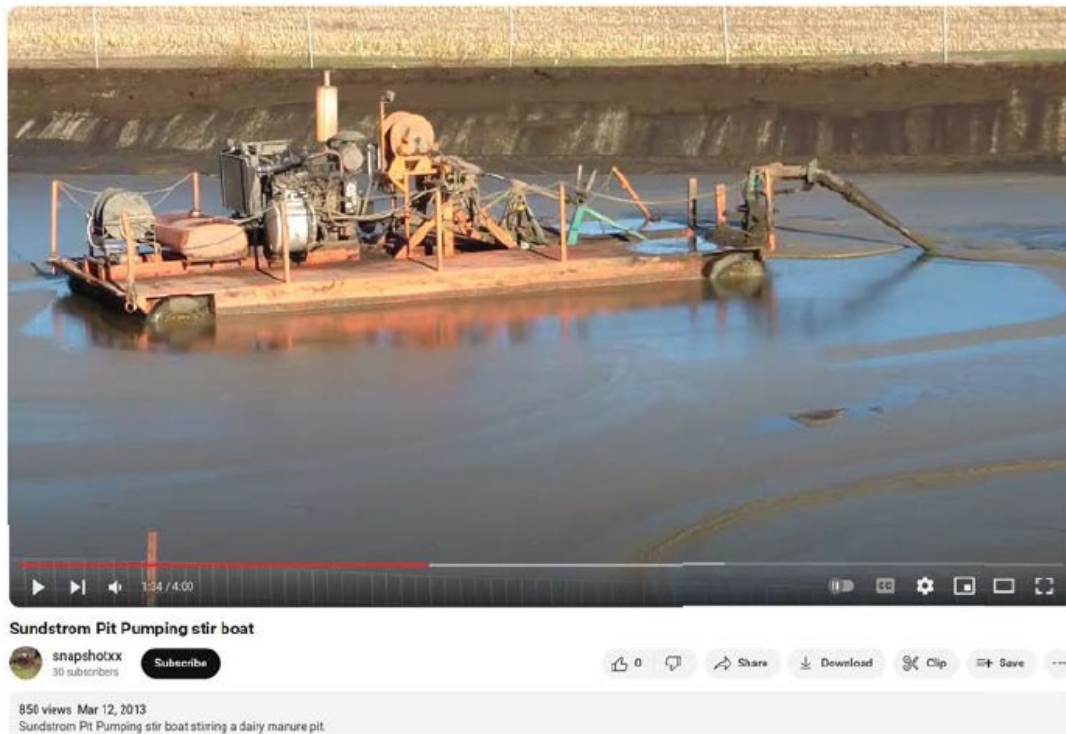
First, a POSA would not have removed Truxor's pontoons—as they are the only portions of the vehicle that allow it to float. POSAs would have recognized that the pontoons' shape could be modified to accommodate wheels powered by Truxor's hydraulic motors. EX1079, ¶¶77-78.



EX1006, 2 (modified).

POSAs would have understood this arrangement to be advantageous because it would keep the pontoons stably located while maintaining the vehicle width suitable for highway travel. EX1079, ¶¶79-83.

POSAs would have understood this modification to be trivial based on the available prior art—including the Sundstrom Stir Boat—disclosing this same arrangement of buoyant elements and wheels.



EX1100, ¶¶7, 11-13.

Nuhn argues that POSAs would have looked to SenwaTec and installed pontoons outboard of the wheels, but this configuration would require additional setup/takedown time when transporting the vehicle, introduce additional failure modes, and could snag on debris. When considering these two options, POSAs would have understood the Sundstrom Stir Boat arrangement to have provided better stability and transportability—yielding predictable results and a reasonable expectation of success. *See Uber Techs., Inc. v. X One, Inc.*, 957 F.3d 1334, 1340 (Fed. Cir. 2020) (when the prior art leaves POSAs with two design choices, each choice is an obvious variant); EX1079, ¶82.

Regardless, when construed properly, POSAs would have understood the configuration taught by SenwaTec includes pontoons “between” the front and rear wheels. *Infra* Section VI.B.i.

ii. Truxor Discloses a Pump Capable of Pumping Liquid Manure.

POSAs would have understood that the Truxor Doro Pump was capable of pumping liquid manure. Nuhn incorrectly argues that the Doro Pump could only pump light sediment. As the institution decision recognizes, however, Truxor describes that the Doro Pump can also pump roots, harder sediments, stones, bits of wood, and pure sand. Paper 10 at 16-17 (citing EX1006, 10). Mr. Olofsson confirmed this. EX1110, 104:18-107:1. POSAs would have recognized that the Doro Pump contains many structural similarities to prior art pumps Nuhn concedes would pump liquid manure. EX1079, ¶¶84-97.

Nuhn attempts to distinguish Truxor from dredging vehicles (EX1055, 1075, and 1076) used to pump higher solid content manures. However, Nuhn does not identify any dredging vehicles incapable of pumping dilute liquid manures, which Mr. Prairie concedes may have less than 5% total solids. EX1095, 186:3-24. *See ParkerVision, Inc. v. Qualcomm Inc.*, 903 F.3d 1354, 1361 (Fed. Cir. 2018).

iii. The Truxor Combinations Disclose Wireless Remote Control.

Nuhn advances its same, previously rejected arguments. Paper 10 at 22-24; Paper 21 at 32-34. Nuhn admits Melnikov identifies a remote-control amphibious pumping vehicle and describes the presence of operators on the Truxor vehicle as a drawback. Paper 10 at 22-24. Nuhn does not contest that adding remote control to Truxor is within the ability of one of skill in the art. *Id.*, 24. As Mr. Olofsson testified, *remote control was added to the Truxor DM5000 prior to 2013*. EX1110, 109:14-133:9.

While Nuhn points to some purported difficulty in remotely controlling hydraulics, Nuhn ignores that in 2013, adding remote control to hydraulic vehicles was well known. EX1079, ¶¶107-113. Furthermore, Nuhn ignores that in many instances, remote control of the vehicle allows the operator to position themselves in a better position to observe the vehicle than if they were seated thereon. EX1079, ¶¶105-106. Regardless, Nuhn does not contest that Truxor would be safer to operate with remote-control.

iv. POSAs Would Have Been Motivated to Add Manure-Manager with a Reasonable Expectation of Success.

Nuhn argues that dredging pumps cannot handle solids in liquid manure (Paper 21 at 27) while, in the same breath, suggesting that Nuhn's Pit Pump could not handle solids when dredging (*id.* at 35). Nuhn cannot have it both ways. A POSA

would have understood that there is considerable overlap between dredging and manure pumping applications given the use of pumps for both applications. Both of these pumps are structurally similar—they are each centrifugal pumps with bottom fluid inlets, impeller housings, vertically oriented driveshafts. EX1079, ¶¶249-253. Nuhn identifies no *structural* differences rendering the Nuhn Pump unable to perform the dredging functions of the Doro Pump. POSAs would have understood that the Nuhn Pump could be substituted for the Doro Pump to provide enhanced pumping capabilities and efficiency for Truxor's vehicle. *Id.*

Nuhn argues about the size of the Nuhn Pump and its pivoting boom arm. However, POSAs would have understood that the Nuhn Pump's elongated body and boom arm (used for hanging the Nuhn Pump from elevated surfaces into manure reservoirs (EX2083, ¶8)) are not required when attaching the Nuhn Pump to Truxor because the DM5000 already includes an adjustable front lift for dropping the pump to its desired depth. EX1079, ¶¶259-261. By removing the pivoting boom arm and reducing the size of the elongate body, the Nuhn Pump could be sized compatibly with the Truxor vehicle.

Nuhn and its expert also argue about the horsepower and transmission for the Nuhn Pump. But Nuhn's own literature shows that the Nuhn Pump can provide 4500GPM at Truxor's 35 horsepower. EX1083, 8; EX1009, 13; EX1079, ¶258. And while the Nuhn Pump may be PTO driven, Nuhn's expert acknowledges that

hydraulic transmissions were known for powering PTO driven components. EX1079, ¶¶255-257. Truxor's hydraulic motor could power the Nuhn Pump drive shaft, just as the Truxor hydraulic motor powers the Doro Pump drive shaft.



EX1019, 27 (modified); EX1006, 5 (modified).

v. Dependent Claims 2-16, 18-20, 22, and 24-38 Are Obvious.

Manure-Manager renders obvious claims 2-7, 19-20, 29-34. While Manure-Manager does not specify the material of the fluid outlets, POSAs would have been motivated to use a flexible material to reduce material fatigue and failure. EX1079, ¶¶266-267. Additionally, Manure-Manager discloses a linkage for directing the fluid outlet. Truxor discloses a four-bar linkage. POSAs would have understood it to be obvious to use such a four-bar linkage to direct the outlet. EX1079, ¶268; EX1019, 27.

Truxor in view of Yoon or Carrier renders obvious claims 8-15, 18, 22, 24-28, and 35-38. Paper 2 at 37-55; *supra* Section VI.A.i. Truxor renders obvious Claim 16. Even if “substantially in a middle of the vehicle” refers to the fore-and-aft direction, Truxor discloses that its components are arranged substantially in the middle of the vehicle in the fore-and-aft direction. EX1079, ¶118.

B. Ground 3 and 7: Claims 1-38 Are Obvious Over SenwaTec in View of Yoon or Carrier / and Manure-Manager.

The SenwaTec combinations render obvious claims 1-38. SenwaTec and Yoon or Carrier teach the vehicle features. Manure-Manager teaches the remaining pump features.

i. SenwaTec Discloses Buoyant Elements Positioned Between the Front and Rear Wheels.

To the extent “between” is properly interpreted to mean “in intermediate relation to,” SenwaTec teaches stabilizer pontoons, at least a portion of which are in intermediate relation to the front wheel and the rear wheel on each side of the vehicle.



EX1012, 1 (annotated).

Even if “between” is restricted to “in the space that separates,” SenwaTec discloses a middle wheel in this space on each side of the vehicle.² A POSA would have understood from SenwaTec that the wheels are pneumatic wheels, which would be buoyant in water or liquid manure. EX1079, ¶¶123-129.



EX1012, 1 (annotated).

ii. SenwaTec Discloses a Liquid Manure Pump.

POSAs would have understood SenwaTec’s “powerful centrifugal pump” would be capable of pumping liquid manure. *See supra* Section VI.A.ii. As shown in pre-2013 EX1031, EX1072, the Amphi-King pumped solid-laden waste that was

² “[A] petitioner is entitled under the APA to respond to new claim construction arguments made by a patent owner or adopted by the Board....” *Axonics, Inc. v. Medtronic, Inc.*, 75 F.4th 1374, 1382 (Fed. Cir. 2023).

applied to agricultural fields. EX1031 at 8:54-10:18; EX1077, ¶¶10-13; EX1078, ¶¶7-10. POSAs would have understood that manure is applied to agricultural fields as fertilizer and would have understood EX1031 demonstrates that the pump was capable of pumping liquid manure. EX1079, ¶¶130-147. While Nuhn differentiates between human manure and other animal manures based on treatment methods, this is a distinction without a difference. EX1077, ¶32; EX1100, ¶14; EX1079, ¶¶139-146.

iii. The SenwaTec Combinations Disclose Wireless Remote Control.

POSAs would have been motivated to combine Yoon or Carrier with SenwaTec for the same reasons as Truxor. Paper 2 at 55-57. Nuhn advances the same arguments as it does for Truxor—which the PTAB already rejected. Paper 10 at 26-31; Paper 21 at 47-48; EX1079, ¶¶148-158. Nuhn does not contest that adding remote control to SenwaTec would be within the ability of a POSA or would render the vehicle safer to operate. Paper 10 at 24, 30-31.

iv. POSAs Would Have Been Motivated to Add Manure-Manager with a Reasonable Expectation of Success.

As explained above, a POSA would have understood that the Nuhn Pump could be substituted for SenwaTec's dredge pump to provide enhanced dredging capabilities. *Supra* Section VI.A.iv.

Furthermore, given SenwaTec's publicized uses for agitation of fecal material, POSAs would have been motivated to use the Nuhn Pump on SenwaTec due to Nuhn's advertisements, describing the enhanced manure pumping capabilities of the Nuhn Pump. EX1031 at 8:54-10:18; EX1077, ¶¶10-13; EX1078, ¶¶7-10; EX1083; EX1019, 27; EX1020, 23; EX1079, ¶¶271-272.

A POSA would have understood that the Nuhn Pump's pivoting boom arm and extended body could be omitted or shortened to render the pump more suitable for implementation on the Amphi-King. Nuhn's own product literature states that SenwaTec's 67HP would be capable of powering the Nuhn Pump at 5500GPM. EX1083, 8. SenwaTec's hydraulic transmission could be readily configured to power the Nuhn Pump PTO input. EX1079, ¶¶273-275.



EX1012, 1 (modified); EX1019, 27 (modified).

v. Dependent Claims 2-16, 18-20, 22, and 24-38 Are Obvious.

The addition of Manure-Manager renders obvious claims 2-7, 19, 29-33. *Supra* Section VI.A.v; SenwaTec's four-bar linkage renders obvious claim 7. EX1079, ¶279.

SenwaTec in view of Yoon or Carrier renders obvious claims 8-15, 18, 20, 22, 24-28, and 34-38. Paper 2 at 62-72; *supra* Section VI.B.i.

SenwaTec renders obvious Claim 16. Even if “substantially in a middle of the vehicle” refers to the fore-and-aft direction, SenwaTec discloses a center of gravity substantially in the middle of the vehicle in the fore-and-aft direction. EX1079, ¶163.

C. Grounds 4-5 and 8: Claims 1-38 Are Obvious Over Puck and Bryham or in Further View of Bennett-II / and Manure-Manager.

The Puck and Bryham combinations render obvious claims 1-38. Puck and Bryham render obvious the vehicle features. Manure-Manager teaches the remaining pump features.

i. Manure-Manager Discloses a Bottom Fluid Inlet in the Liquid Manure Pump Housing.

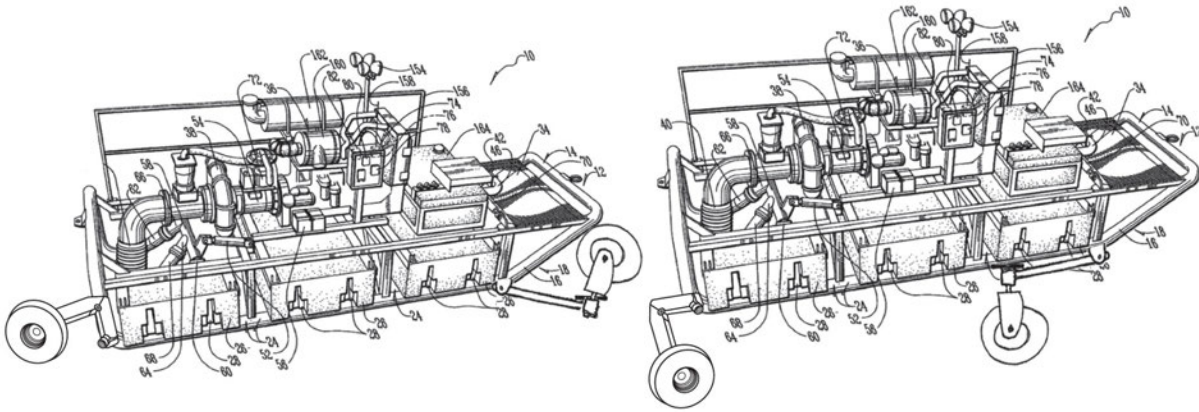
Nuhn concedes that it would have been obvious to combine Manure-Manager with Puck and Bryham. Manure-Manager discloses a pump housing with a bottom fluid inlet. The classification of Puck's intake pipe is irrelevant.

ii. The Puck Combinations Render Obvious Buoyant Elements Positioned Between the Front and Rear Wheels.

As outlined in the declaration of Dr. Winkel, a POSA would have been motivated to place one wheel of Bryham at each corner of Puck's steel frame 14, as this is the conventional arrangement of wheels on a four-sided vehicle like Puck. EX1079, ¶¶166-168.

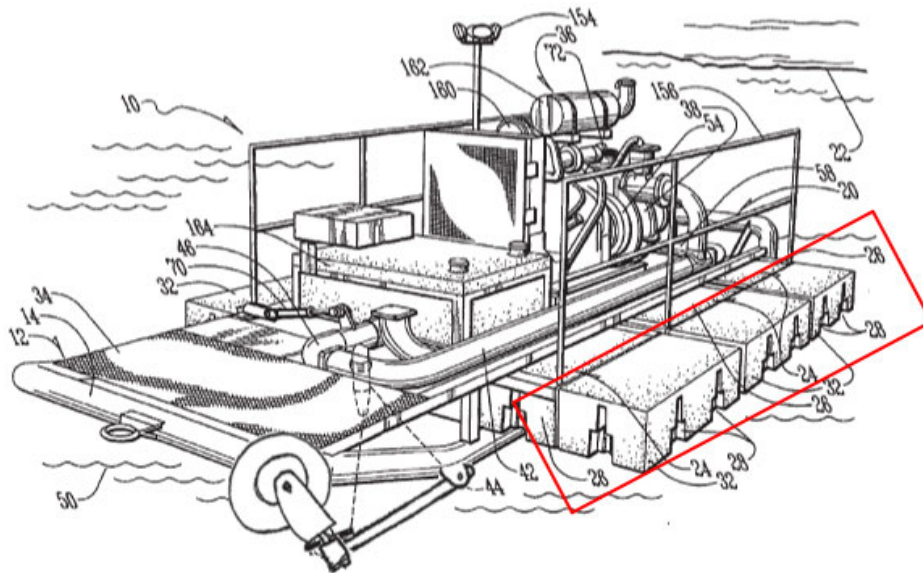
Nuhn contends that this would require discarding Bryham's steerable front wheel in favor of adding another pair of Bryham's rear wheels. While that may be one way to add the wheels, one could also simply place one steerable front wheel at each front corner of the vehicle. This arrangement is commonly used on four-wheeled vehicles. *Id.* POSAs would have understood that the wheels' retractable

functionality could be retained when implemented on Puck to reduce the vehicle's draft and drag it moves within the lagoon. *Id.*; EX1015, 9:1-10.



EX1014, FIG. 1; EX1015, FIGS. 3, 13 (modified).

Puck discloses dock sections 26 and additional dock sections 32 extending outboard of the steel frame 14 of Puck's vehicle body 16.



EX1014, FIG. 2; EX1015, FIG. 3 (modified and annotated).

A POSA would have understood that when Bryham's wheels are mounted to Puck's steel frame and retracted, Puck's dock sections 26/32 are arranged between ("in intermediate relation to" / "in the space that separates") the front and rear wheels on each side of the vehicle. EX1079, ¶170. This same arrangement is disclosed by Sundstrom—another prior art amphibious manure agitation vehicle.



EX1100, ¶7.

A POSA looking at the Sundstrom's teachings would have understood that Sundstrom's arrangement of floatable elements in the space that separates the wheels is beneficial, as it allows the wheels and floatable elements of the vehicle to be positioned furthest outboard from the vehicle centerline (providing additional stability) while keeping the width of the vehicle sized to permit "highway travel." EX1014, ¶[0009]; EX1079, ¶171. Thus, POSAs would have been motivated to retain this arrangement when combining the teachings of Puck and Bryham.

Nuhn ignores Sundstrom's teachings, arguing about whether one would add more than four wheels to Puck. Even accepting Nuhn's argument, POSAs would

have understood Bryham's "balloon type tires" would be air filled. Such intermediate wheels would properly be considered "floatable elements." EX1015, Abstract; EX1079, ¶173; *supra* Section VI.B.i. Either way, POSAs would have understood that Sundstrom's or SenwaTec's wheel arrangement teachings could be utilized on Puck with a reasonable expectation of success. *See Uber Techs.*, 957 F.3d at 1340.

iii. Puck and Bryham Disclose "the Power Source Configured to Provide Power to Both the Ground Engaging Propulsion Structure and the Liquid Manure Pump."

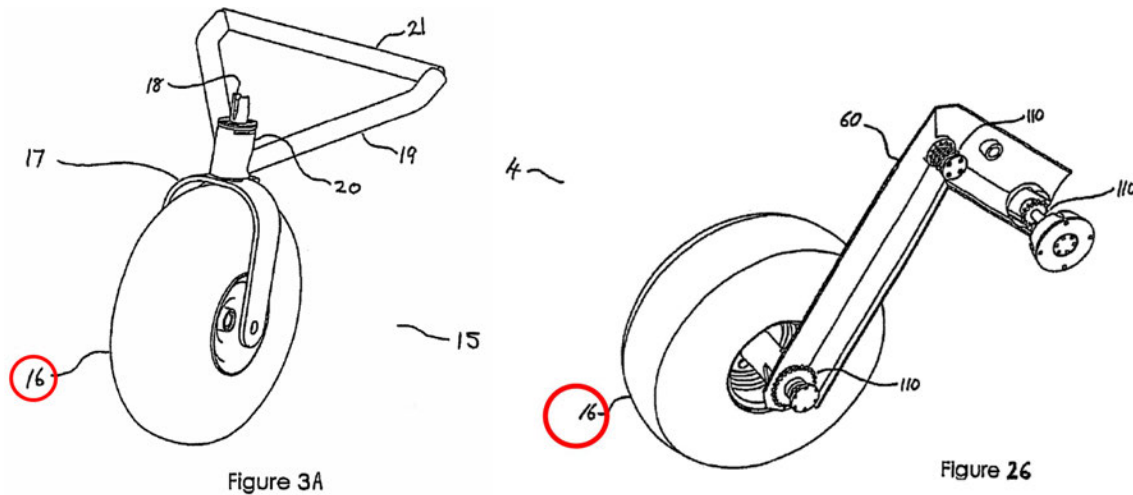
Nuhn misses the mark, focusing on Puck's battery-powered pump. As the PTAB recognized, however, it would have been obvious to have used "Puck's internal combustion engine to power *the hydraulic pump [and] ground engagement means ... of Bryham*["] Paper 10 at 37 (emphasis added). Nuhn fails to address this argument.

POSAs understood adding extra engines created "extra cost and complications," (EX1122, 5) and would have been motivated to power Bryham's wheels with Puck's engine. EX1079, ¶¶175-183.

iv. Bryham Discloses Each Wheel Powered By a Hydraulic Motor.

As explained above, POSAs would have understood that a pair of Bryham's steerable front wheels could be used to support the two front corners of Puck's

rectangular frame. EX1079, ¶167. Nuhn argues that Bryham's front wheel is not powered because no hydraulic motor is illustrated in Figure 3A. Paper 21 at 66-67. But Bryham's *text* describes that "one or more of the ground engaging means" is powered by "hydraulic motors." EX1015, 6:47-53 (emphasis added). Specifically, Bryham describes that "[t]he hydraulic motor 108 can be mounted directly beside or within the ground engagement means 16 [(circled on the front and rear wheels below).]" *Id.*, 16:6-8.



EX1015, FIGS. 3A, 26 (annotated).

Pre-2013 advertisements from Sealegs (Bryham's assignee) confirm that all Bryham's wheels are powered by individual motors. EX1079, ¶¶193-199 (citing EX1111).

v. Remote-Control Wheels Use the Same Remote-Control Principles Taught by Puck.

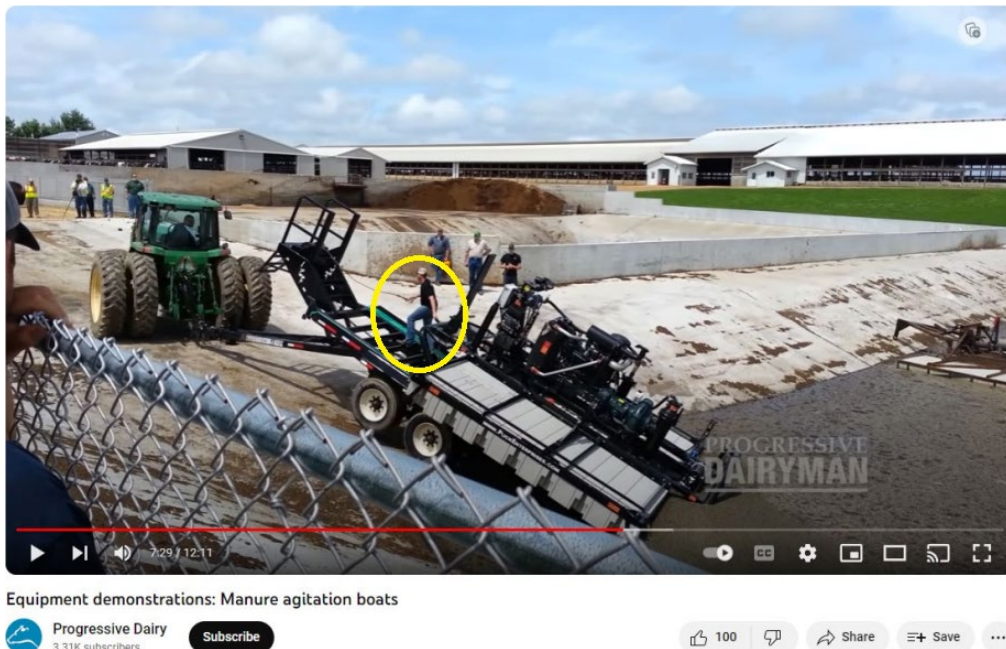
The well-known nature of remote control in 2013 is evident from the '708 Patent, which provides no specifics on how the remote control is configured, constructed, or programmed. EX1079, ¶188.

Puck teaches a “wireless receiver” and “wireless transmitter” allowing its control panel “to operate as a wireless remote control, actuated by a remote[-]control system[.]” EX1014, ¶[0031]. These components remotely control valves directing fluid flow. EX1079, ¶¶189-190; EX1014, ¶¶[0031], [0033]. POSAs would have understood that remote control of Bryham's wheels (as taught by Bennett-II (EX1017)) could be achieved through remote control of Bryham's valves (as taught by Puck) that direct hydraulic fluid to Bryham's wheel motors. EX1079, ¶¶189-190; EX1015, 16:1-11. Likewise, POSAs would have understood that Bryham's hydraulic “steering actuator” could be remotely controlled using Puck's remote control hydraulic actuator teachings. EX1015, 6:16-38; EX1014, ¶[0031]; EX1079, ¶191.

vi. POSAs Would Have Been Motivated to Combine Puck and Bryham.

First, Nuhn asserts there would have been no motivation to combine because Puck does not illustrate an operator within a manure lagoon. Paper 21 at 70-71.

However, Puck's launching process *does* put a user in close proximity to the reservoir, as illustrated in Nuhn's video:



EX2008, 6 (annotated); EX1118, 7:22-10:09.

This user was at risk of falling or being dragged into the reservoir while Puck was sliding or pushed off the trailer. To remove Puck from the lagoon, a user would need to approach, or wade into the lagoon to secure the trailer's cable to Puck. EX1079, ¶¶203-204. As taught by Bryham, POSAs would have been motivated to make launching and retrieving easier and safer by adding Bryham's wheels to Puck to remove users from this environment. *Id.*

Second, Nuhn contends that POSAs concerned with mitigating effects of corrosion would not add Bryham's wheels to Puck. Paper 21 at 71. But Bryham's wheels were designed for corrosive environments. EX1015, 1:55-58. On the other

hand, vehicle trailers are often constructed from less corrosion-resistant materials than the vessels they launch. EX1079, ¶¶205-206. Bryham acknowledges this, teaching that the sea is highly corrosive to the towing vehicle and trailer and that its amphibious wheel system solves such problems. EX1015, 1:55-58.

Finally, Nuhn cites problems with its own Lagoon Crawler wheels locking as bases for why one would not add Bryham's hydraulic wheels to Puck. Paper 21 at 72-73. However, POSAs already knew bypass valves could be easily added to address this issue, as detailed in Carrier. EX1079, ¶¶207-210. Such bypass valves permit movement of the wheels even if the vehicle breaks down.

Regardless, Puck would have faced the same problems as Nuhn's Lagoon Crawler if it broke down, requiring the same extraction method to retrieve the stranded vehicle. As the PTAB acknowledges, there are trade-offs with every design choice. Paper 10 at 24. Hydraulic transmissions were one of a finite number of transmission options and would have provided a reasonable expectation of success. EX1079, ¶¶200-211.

vii. POSAs Would Have Had a Reasonable Expectation of Success in Combining Puck and Bryham.

A POSA would have understood that Bryham's "all terrain balloon type tires" with optional "metal studs" used "to enable the boat to travel over a variety of

shoreline terrain” would be capable of navigating the shoreline of a manure lagoon. EX1015, Abstract, 2:48-53; *see also* EX1079, ¶¶212-222; EX1111, 1.

POSAs would have understood that placing Bryham's wheels at each corner of Puck would address any of Nuhn's alleged instability or traction issues. EX1079, ¶¶223-228.

viii. Dependent Claims 2-16, 18-20, 22, and 24-38 Are Obvious.

Puck in view of Bryham / and Bennett-II renders obvious claims 8-15, 18, 22, 24-28, and 35-38. Paper 2 at 89-90; *supra* Section VI.C.ii. The addition of Manure-Manager renders obvious claims 2-7, 19-20, 29-34. *Supra* Section VI.A.v.

Puck renders obvious Claim 16. Even if “substantially in a middle of the vehicle” refers to the fore-and-aft direction, Puck discloses that its components are arranged substantially in the middle of the vehicle in the fore-and-aft direction. EX1079, ¶283.

D. Nuhn's Secondary Considerations Lack Nexus and Do Not Overcome the Strong Obviousness Case.

Nuhn has the burden of showing “a legally and factually sufficient connection between [its] evidence and the patented invention.” *Fox Factory, Inc. v. SRAM, LLC*, 944 F.3d 1366, 1373 (Fed. Cir. 2019). Only after showing that (1) its asserted evidence of secondary considerations is tied to a specific product, and (2) that product is coextensive with the patent claims, may a nexus be presumed. *Id.* “A

patent claim is not coextensive with a product that includes a ‘critical’ unclaimed feature ... that materially impacts the product’s functionality[.]” *Id.* at 1375.

In the ’835 Patent IPR, Nuhn identified six other features, unclaimed in the ’708 Patent, that it describes as “material” and “directly contribut[ing] to the new and unexpected results and commercial success” described in this IPR. IPR2024-00004, Paper 21 at 15-20. Nuhn’s Lagoon Crawlers include each of these features. EX1079, ¶¶285-343. “In light of [Nuhn’s] own assertions about the significance of the[se] unclaimed features, no reasonable fact finder could conclude that these features are insignificant.” *Fox Factory*, 944 F.3d at 1375. Nuhn fails to show its secondary considerations are tied to its claims; they are irrelevant.

i. Nuhn’s Market Share “Research” Is Unreliable; Its “Commercial Success” and “Industry Praise” Is Tied to Unpatented Features.

Nuhn’s arguments are based on [REDACTED]
[REDACTED] EX1098, 217:19-23, 221:17-25, 223:18-228:18. Such “generalized and vague testimony of a single employee” is insufficient. *Les Ateliers Beau-Roc Inc. v. Air Power Sys. Co.*, IPR2020-01702, Paper 32 at 30 (PTAB Apr. 18, 2022).

Ian Nuhn’s own statements indicate that any success is due to the products’ appearance, having “massive wheels [and] the brilliant red paint job[.]” EX2067, 2. He admits that “*I think because we made it look the way it does people are proud*

to fork over that kind of change[.]” EX2068, 30 (emphasis added). But paint jobs and monster tires do not confer patentability. [REDACTED]

[REDACTED]
EX1096, 173:3-174:16, 155:4-5; *McNeil-PPC, Inc. v. L. Perrigo Co.*, 337 F.3d 1362, 1370 (Fed. Cir. 2003).

ii. Nuhn's “Long Felt Need” Was Already Solved.

Nuhn argues it solved the problem of breaking crust, mixing solids, and forming slurry in large lagoons. Paper 21 at 16-17. But Puck, Sundstrom, and SenwaTec's products already did this. EX1014, ¶¶0036]; Nuhn's “long-felt need” was solved. EX1079, ¶¶344-346.

iii. Nuhn's Copying Allegations Are Wrong.

Nuhn's copying “evidence” fails. [REDACTED]

[REDACTED] *Wyers*, 616 F.3d at 1246. Nuhn's only copying “evidence” comes from Ian Nuhn's recollection of a discussion with a mechanic in 2021. EX2083, ¶¶74-75. But Nuhn did not provide any declaration from this mechanic.

The Wolverine is *not* a copy of the Lagoon Crawler. EX1079, ¶¶353-354. The Wolverine utilizes propellers—not nozzles—for propulsion and agitation. EX2104, 1; *see* EX1001, 3:59-60 ([T]he vehicle does not comprise a propeller.”). And the Wolverine's wheels do not raise and lower.

iv. Nuhn's Unexpected Results Were Known.

Nuhn argues that its product unexpectedly replaces four shore-mounted pumps. Paper 21 at 19, 21-22. *But Puck advertised this same statistic since 2011.* EX1104, 1:04-1:28.

Nuhn also argues that its wheels break crust and create a “pocket.” Paper 21 at 19-21. But that was already disclosed in Truxor and SenwaTec—and is wholly absent from the claims. EX1079, ¶¶347-350; *Kao Corp. v. Unilever U.S., Inc.*, 441 F.3d 963, 970 (Fed. Cir. 2006) (explaining, “results must be shown to be unexpected compared with the closest prior art”); *Kennametal, Inc. v. Ingersoll Cutting Tool Co.*, 780 F.3d 1376, 1385 (Fed. Cir. 2015) (requiring secondary considerations to result from something “claimed and *novel* in the claim”). The only relevant difference from Truxor/SenwaTec *in the claims* is remote control, which was obvious to add—and was added to both Truxor and SenwaTec. EX1110, 184:7-185:7; EX1109, 27:20-28:09. Regardless, providing remote control is not an unexpected result of adding a remote control. EX1079, ¶¶347-350.

v. Any Praise Was Not Due to Patentable Differences Between the Lagoon Crawler and the Prior Art.

Nuhn's “industry praise” is irrelevant if not attributable to the differences between the patented product and the prior art. *Asyst Techs., Inc. v. Emtrak, Inc.*, 544 F.3d 1310, 1316 (Fed. Cir. 2008). The only relevant claimed difference between

the Lagoon Crawler and the SenwaTec/Truxor vehicles is remote control. But Nuhn's Lagoon Crawler "praise" relates to the bright red paint job, knobby tires, and jacked-up-Ferrari look. *See supra* Section VI.D.i. **Not** remote control. Nuhn's alleged praise cannot overcome the strong obviousness case, especially where others already added remote control to amphibious vehicles. EX1005; EX1010; EX1028.

vi. [REDACTED] Is Irrelevant.

Nuhn relies on a single email, arguing that others sought rights to its patent. Paper 21 at 23. "[E]vidence of a single license agreement[,] let alone a single *email*, is 'insufficient to demonstrate 'commercial acquiescence' supporting non-obviousness.'" *Cisco Sys. Inc., v. SSL Servs. LLC*, IPR2015-01754, Paper 58 at 36 (PTAB Feb. 22, 2017).

This email does not seek to license the '708 Patent—it was sent before the '708 Patent was even filed. The email suggests [REDACTED]

[REDACTED] *Les Ateliers Beau-Roc Inc.*, IPR2020-01702, Paper 32 at 36-37. [REDACTED]

[REDACTED] (Paper 2 at 1-2). *See Bosch Auto. Serv. Sols., LLC v. Matal*, 878 F.3d 1027, 1038 (Fed. Cir. 2017).

vii. Nuhn's "Industry Skepticism" Is Unsupported and Contrary to the Prior Art.

Nuhn's alleged skepticism about hydraulically driven wheels is unsupported. Others used and marketed amphibious vehicles with hydraulically-driven wheels in manure and corrosive environments before Nuhn's Lagoon Crawler. *See* EX1074; EX1031; EX1012; EX1015.

Nuhn's alleged skepticism about the vehicle's nozzles/pump being uncontrollable or prone to clogging is also unsupported. Puck and Sundstrom already successfully used similar arrangements in its products. *See* EX1014; EX1099, ¶¶3, 7; EX1100.

Nuhn's only skepticism evidence is from its owner, Ian Nuhn. Paper 21 at 24-25; EX2083, ¶¶53-63; EX1098, 17:10-13. [REDACTED]

[REDACTED] This does not support that "a number of industry experts expressed skepticism." Paper 21 at 24.

VII. CONCLUSION

Petitioner asks that the PTAB issue a final written decision, finding Claims 1-38 unpatentable, and the Director cancel these claims.

Respectfully submitted,

Date: November 6, 2024

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CERTIFICATE OF WORD COUNT

Pursuant to 37 C.F.R. §42.24, the undersigned attorney for the Petitioner, Bazooka-Farmstar, LLC, declares that the argument section of this document has 5507 words, according to the word count tool in Microsoft Word™.

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CERTIFICATE OF SERVICE

The undersigned certifies, in accordance with 37 C.F.R. §§42.105 and 42.6, that service was made on the Patent Owner as detailed below.

<i>Date of service</i>	November 6, 2024
<i>Manner of service</i>	Electronic mail addressed to: bluchsinger@harnessip.com syackey@harnessip.com mcutler@harnessip.com
<i>Documents served</i>	Reply To Patent Owner Response in <i>Inter Partes</i> Review of U.S. Patent No. 11,541,708
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