UNITED STATES PATENT AND TRADEMARK OFFICE

_____

BEFORE THE PATENT TRIAL AND APPEAL BOARD

_____

BAZOOKA-FARMSTAR, LLC,

Petitioner

v.

NUHN INDUSTRIES LTD.,

Patent Owner

_____

Case No. IPR2024-00098

Patent No. 11,541,708

_____

DECLARATION OF IAN NUHN

IN SUPPORT OF PATENT OWNER'S RESPONSE

Exhibit 2083
Bazooka v. Nuhn - IPR2024-00098
Page 1 of 38

1. I submit this declaration in support of Patent Owner Nuhn Industries Ltd.'s ("Nuhn") Patent Owner response in this proceeding. Below is an index of exhibits that I refer to in this declaration.

Exhibit	Description
2035	Brochure for MY2017 of Nuhn's Gen 1 Lagoon Crawler
2036	Operator's/Safety Manual for the MY2017 of Nuhn's Gen 1 Lagoon Crawler
2037	Parts Catalog for Nuhn's Gen 1 Lagoon Crawler
2038	Brochure for Nuhn's Gen 1 Lagoon Crawler
2039	Brochure for MY2018 of Nuhn's Gen 2 Lagoon Crawler
2040	Operator's/Safety Manual for the MY2019 of Nuhn's Gen 2 Lagoon Crawler
2041	Parts Book for the MY2018 of Nuhn's Gen 2 Lagoon Crawler
2042	Brochure for Gen 2 Lagoon Crawler
2043	Brochure for MY2022 of Nuhn's Gen 3 Lagoon Crawler
2044	Operator's/Safety Manual for the MY2020 of Nuhn's Gen 3 Lagoon Crawler
2045	Parts catalog for the MY2021 of Nuhn's Gen 3 Lagoon Crawler
2046	Brochure for Nuhn's Crawler X
2047	Parts Catalog for the MY2022 of Nuhn's Crawler X
2053	Print No. 1 of Nuhn YouTube Video - "Nuhn Lagoon Crawler Unrivaled Lagoon Agitation!", accessed at https://www.youtube.com/watch?v=fEgvvq9HZk
2054	Lagoon Crawler Prototype Brochure, Aggressive Agitation
2055 **(Under Seal)**	Lagoon Crawler Sales Report - Consolidated Totals
2056 **(Under Seal)**	Lagoon Crawler Sales Report - 2014-2017.5
2057 **(Under Seal)**	Lagoon Crawler Sales Report - 2018-2019

2058 (**Under Seal**)	Lagoon Crawler Sales Report - 2020-2023
2059 (**Under Seal**)	Lagoon Crawler Sales Report - X Models
2060	Print No. 2 of Nuhn YouTube Video - "Nuhn Lagoon Crawler Unrivaled Lagoon Agitation!", accessed at https://www.youtube.com/watch?v=fEgvvq9HZk
2061	*New Lagoon Crawler Demos Will Satisfy Curiosity*, Canada's Outdoor Farm Show Official Show Guide for September 9-11, 2014 in Woodstock, Ontario
2062	H. Rivers, *Farm show opens with a splash*, The Beacon Herald (Sept. 10, 2014)
2063	B. Shypula, *Transforming farming*, The London Free Press (Sept. 9, 2013))
2064	B. Shypula, *Crawler makes manure almost sexy*, The Beacon Herald (Sept. 6, 2013)
2065	30th Annual AMC Engineering Conference Brochure for May 5-7, 2015 in Waterloo, Iowa
2066	Certificate of Services Awarded to Ian Nuhn
2067	M. Beitz, *Crawler is turning heads*, The Beacon Herald at A2 (Jan. 30, 2014)
2068	C. Elmore, *Innovative Uses of Horsepower – A real crapshoot*, Diesel Progress North American Edition (Dec. 2014)
2069	D. Rankin, *Nuhn Industries celebrates employees at expansion grand opening*, 100th lagoon crawler unveiling, St. Marys Independent (Aug. 7, 2015)
2070	B. Reid, *Agitator has reclaimed manure lagoons around the worl*d, Ontario Farmer (Aug. 18, 2015)
2071	L. Cudworth, *Nuhn marks major milestone*, The London Free Press (Aug. 11, 2015)
2072	L. Cudworth, *Marking a major milestone*, The Stratford Beacon Herald (Aug. 7, 2015)
2073	J. Algie, *Made-in-Sebringville lagoon crawler to be featured on Discovery Channel*, Betterfarming.com (Sept. 2, 2015)
2074	B. Reid, Self-propelled, Western Dairy Farmer (Oct. 2015)

2075 (**Under Seal**)	March 21, 2022 Email to Nuhn re: Licensing Lagoon Crawler Technology
2076 (**Under Seal**)	Nuhn Invoice to Eldon C. Stutsman, Inc. (Sept. 9, 2015)
2077 (**Under Seal**)	Nuhn Invoice to Eldon C. Stutsman, Inc. (June 20, 2020)
2078 (**Under Seal**)	Nuhn Invoice to Eldon C. Stutsman, Inc. (Sept. 28, 2020)
2079	Print of Bazooka's YouTube Video - "Meet the Wolverine Agitation Boat," accessed at https://www.youtube.com/watch?v=ehAHKL442as
2080	Discovery Channel's Lagoon Crawler Feature (Sept. 3, 2015)

2. I am Vice President at Nuhn Industries Ltd. ("Nuhn"). I have been working for Nuhn for over 22 years. Nuhn has over 120 years in the agricultural equipment industry, which includes over 50 years in the manure agitation equipment industry. I have over 22 years in the agricultural—and manure agitation—equipment industry.

I. THE HISTORY OF NUHN INDUSTRIES LTD.

3. Nuhn is a family-owned business that has evolved into the leading manufacturer of liquid manure spreaders, liquid manure agitators, liquid manure pumps, manure hauling equipment and slurry tankers.

4. Nuhn was founded in 1902 as Nuhn Welding & Manufacturing in Wartburg, Ontario, Canada. Initially, the business specialized in making horseshoes.

5. Since its founding, Nuhn has consistently adapted to changing needs in the farming industry, creatively providing solutions to that industry. For example, in 1965, Dennis Nuhn made the company's first liquid manure spreader. The spreader was fabricated from an old gas tank with airplane tires.

6. Nuhn's legacy of creativity has led to the development of a broad patent portfolio consisting of innovative, unique designs related to the liquid manure handling industry. The first such patent was an innovative dual tanker design that allows farmers to increase loads by up to 70%, with greater ease of handling.

7. An additional patented innovation is an alley vacuum that allows for the cleanup of manure in dairy barns. The inventions described and claimed in these patents have revolutionized how dairy barns are made and how liquid manure is handled.

8. As yet another example, Nuhn developed a multi-outlet pump that enables 30% more volume with the same horsepower as a conventional pump. This patented innovation has taken over the industry given the time savings, fuel savings, and better performance. This pump design has been implemented across a number of different Nuhn product lines, including Nuhn's Vertical Pit Pumps and Nuhn's Manure Lagoon Pumps. Nuhn's Vertical Pit Pumps attach to the rear hitch of a tractor, are driven by the tractor's rear power-take-off ("PTO"), and are

Exhibit 2083
Bazooka v. Nuhn - IPR2024-00098
Page 5 of 38

designed for use in manure pits with substantially vertical walls. One of Nuhn's vertical pit pumps was featured in an advertisement in the January/February 2011 edition of the Manure Manager magazine, which is shown below:

EX1019, p. 27. The vertical pit pump pictured in this advertisement has an overall length of approximately 17 feet, 9 inches, a boom arm that is approximately 11 feet long, a weight of approximately 2,560 pounds, and a minimum horsepower requirement of 95 horsepower. Nuhn's multi-outlet pump design was also implemented in Nuhn's Manure Lagoon Pumps, which also attach to the rear hitch of a tractor and are driven by the tractor's rear PTO, but are designed for use in manure lagoons with sloping banks. One of Nuhn's manure lagoon pumps was

featured in an advertisement in the July/August 2011 edition of the Manure Manager magazine, which is shown below:

EX1020, p. 23. The manure lagoon pump pictured in this advertisement has an overall length of approximately 47 feet, 9 inches, a weight of approximately 7,400 pounds, and a minimum horsepower requirement of 95 horsepower.

9. And most pertinent to my declaration is U.S. Patent No. Patent No. 11,541,708 ("the '708 Patent") and Nuhn's family of related patents for which I am the inventor. The '708 Patent, like the other patents in the same family, is

directed to the Lagoon Crawler. The Lagoon Crawler is my breakthrough liquid manure lagoon agitation invention.

II. BACKGROUND ON NUHN'S LAGOON CRAWLER

10. Nuhn's Lagoon Crawler is an amphibious vehicle that is specially adapted for the particular purpose of disrupting the crust and recirculating liquid manure in a manure lagoon, where the vehicle can drive into, out of, and navigate the manure lagoon by wireless remote control.

11. In 2009–2010, prior to my Lagoon Crawler Invention, the best solution for pumping out a manure lagoon was an agitator that required a long pump driven by a tractor along the bank of a lagoon. Depending on the size of the lagoon, as many as four pump/tractor combinations were required to adequately mix the lagoon, and not leave any solids behind. To the extent this pump/tractor method was not sufficiently effective, lagoon operators would be required to scoop out residual solids from the pit.

12. I attended the 2012 North American Manure Expo show in Prairie du Sac, Wisconsin at which I saw a demonstration of Puck Enterprise's ("Puck") manure agitation boat. I noticed that Puck's manure agitation boat was not performing very well. In fact, it performed so poorly that it was spraying the crowd with manure.

13. After 2012 North American Manure Expo, I heard complaints from others about the Puck boat, including that the pump would clog, the pump could not handle manure in lagoons, and that someone was seriously injured while attempting to clean the pump. I also heard complaints that Puck's boat would get stuck in the manure lagoon when trying to pull it out.

14. Following the 2012 North American Manure Expo show, in late August 2012, I began designing an agitation boat that would utilize Nuhn's Header Series manure pumps. This initial design included only two unpowered wheels—and did not include any powered wheels. In late July 2013, I began designing another agitation boat that also had only two unpowered wheels—and again did not include any powered wheels. Neither of these two early agitation boat designs were ever built. Nor were they amphibious.

15. In early August 2013, I conceived and designed the first Nuhn Lagoon Crawler Prototype. I conceived of and designed the Lagoon Crawler in an effort to solve the considerable deficiencies mentioned above.

16. I started making CAD models on Friday, August 9, 2013 and by the morning of Monday, August 12, 2013, I had enough drawings to start building the first Nuhn Lagoon Crawler Prototype. I continued to design other parts of the first Nuhn Lagoon Crawler Prototype concurrently with the build of the first Nuhn Lagoon Crawler Prototype. The first Nuhn Lagoon Crawler Prototype was

constructed over the next 8 days and was first shown at the 2013 North American Manure Expo on August 20–21, 2013.

17. The ‘708 Patent and Lagoon Crawler overcame drawbacks with Puck’s boat. For example, the Lagoon Crawler made it easier for the vehicle to enter and exit the lagoon, navigate over islands and through shallows where Puck’s boat would get stuck, and chew through the thick crust and vegetation floating on the surface of manure lagoons.

18. A typical lagoon has a berm that requires navigation both up and then back down, whereas Puck’s design required a trailer to launch the boat. Compounding this difficulty was the fact that the terrain around a lagoon is often muddy and wet. A typical problem with Puck’s boat was that it would get stuck on the bank or enter the lagoon too quickly and nosedive under the liquid.

19. Relatedly, Puck’s boat was often ineffective in breaking up thick crust and navigating through portions of a lagoon, either because it could not break through the thick crust and vegetation floating on the surface of the lagoon or it got stuck (i.e., “beached”) in the sludge at the bottom of the lagoon or on “islands” of solid buildup in the lagoon.

20. The Lagoon Crawler—specially adapted for the particular purpose of disrupting the crust and recirculating liquid manure in a manure lagoon, where the

Exhibit 2083
Bazooka v. Nuhn - IPR2024-00098
Page 10 of 38

vehicle can drive into, out of, and navigate through the manure lagoon by wireless remote control—solved these considerable deficiencies.

III. DESIGN, CONFIGURATION, AND FUNCTION OF THE LAGOON CRAWLER

21. As explained, I invented the Lagoon Crawler. I have been responsible for the design, configuration, function, and manufacture of the Lagoon Crawler since the first Lagoon Crawler Prototype through the current model year's Lagoon Crawler X. I am therefore knowledgeable about the design, configuration, and function of Nuhn's Lagoon Crawlers (including each of its models, generations, versions, etc.).

22. The design, configuration, function, and manufacture of Nuhn's Lagoon Crawlers are accurately described by the following Operator's/Safety Manuals and Parts Catalogues which I developed. The Operator's/Safety Manuals and Parts Catalogues are kept by Nuhn in the ordinary course of business and are distributed to dealers and customers who purchase Lagoon Crawlers.

Lagoon Crawler Model	Model Year	First Public Disclosure	Operator's/Safety Manuals, Parts Catalogues, Brochures
Prototype	N/A	August 20-21, 2013 (at 2013 Manure Expo in Ontario, Canada)	Nuhn does not have a user manual or parts catalogue for the prototype, because the Prototype was never sold.

Exhibit 2083
Bazooka v. Nuhn - IPR2024-00098
Page 11 of 38

			However, my CAD model designs of the Prototype are the basis for the Figures in the '708 Patent. The '708 Patent's Figures accurately describe the design, configuration, function, and manufacture of the Prototype. In addition, EX2048 is a true and correct copy of a Lagoon Crawler Prototype brochure. The brochure also accurately describes the design, configuration, function, and manufacture of the Prototype.
Gen 1	2014-2017	2014	EX2036 is a true and correct copy of the Operator's/Safety Manual for Gen 1 which I developed. EX2037 is a true and correct copy of the Parts Catalogue (or Book) for Gen 1 which I developed. EX2035 and EX2038 are true and correct copies of brochures for the Lagoon Crawler Gen 1. EX2035 through EX2038 accurately describe the design, configuration, function, and manufacture of the Lagoon Crawler Gen 1.

Exhibit 2083
Bazooka v. Nuhn - IPR2024-00098
Page 12 of 38

Gen 2	2018-2019	2018	EX2040 is a true and correct copy of the User Manual for Gen 2 which I developed. EX2041 is a true and correct copy of the Parts Catalogue (or Book) for Gen 2 which I developed. EX2039 and EX2042 are true and correct copies of brochures for the Lagoon Crawler Gen 2. EX2039 through EX2042 accurately describe the design, configuration, function, and manufacture of the Lagoon Crawler Gen 2.
Gen 3	2020-2022	November 2019 (in or around)	EX2044 is a true and correct copy of the Operator's/Safety Manual for Gen 3 which I developed. EX2045 is a true and correct copy of the Parts Catalogue (or Book) for Gen 3 which I developed. EX2043 is a true and correct copy of a brochure for the Lagoon Crawler Gen 3. EX2043 through EX2045 accurately describe the design, configuration, function, and manufacture of the Lagoon Crawler Gen 3.

Exhibit 2083
Bazooka v. Nuhn - IPR2024-00098
Page 13 of 38

X	2022-Pres.	June 2, 2021 (on or around)	EX2047 is a true and correct copy of the Parts Catalogue (or Book) for the Lagoon Crawler X which I developed. EX2046 is a true and correct copy of a brochure for the Lagoon Crawler X. EX2046 and EX2047 accurately describe the design, configuration, function, and manufacture of the Lagoon Crawler Gen 2. The Operator's/Safety Manual for the Gen 3 has been the one provided to customers of Crawler X to date.

IV. COMMERCIAL SUCCESS OF NUHN'S LAGOON CRAWLER

23. Nuhn's Lagoon Crawler has been a commercial success since its inception.

24. Exhibits 2055-2059 are a financial report of Nuhn's Lagoon Crawler Sales current through December 6, 2023 ("The Lagoon Crawler Sales Report"). Exhibit 2055 is the "Consolidated Totals" worksheet of the report, which includes total revenue for the Lagoon Crawler models sold between 2014 and December 5,

Exhibit 2083
Bazooka v. Nuhn - IPR2024-00098
Page 14 of 38

2023. Exhibit 2056-2069 are reports of the individual sales for the Lagoon Crawler for 2014-2017, 2018-2019, and 2020-2023, respectively.

25. The Lagoon Crawler Sales Report was QuickBooks generated from invoices for each Lagoon Crawler serial number.[1] As reflected in the Report, Nuhn's Lagoon Crawler sales encompass over [redacted] units sold and have generated over $[redacted] in revenue for Nuhn as of December 6, 2023[2]—and even more as of today. By the time we invoiced our first Lagoon Crawler in January 2014 for

[1] The information in the columns of the report highlighted in grey was manually added based on information from each invoice. The totals in the columns named "Total" is the combined total of USD and CAD. Because of exchange rates of USD and CAD, the actual total amount will vary when taking into account the actual currency received for the product. The "Amount" column was QuickBooks generated for the Lagoon Crawler appearing on the invoice (not taking into account currency conversion). The amount shown is negative due to the way that QuickBooks generated the report; however, all sales were positive values. The "List Price" column is the list price of the Lagoon Crawler including any and all options on the Lagoon Crawler appearing on the invoice. The "Price After Discount" is the net pricing to the customer after discounts were applied. The "List Price (Crawler Only)" column is the list price for the base Lagoon Crawler model only plus the currency surcharge on applicable Canadian transactions. The "Price after Discount (Crawler Only)" column is the net pricing on the base Lagoon Crawler model after dealer discount (special discounts were not deducted as they could potentially be discounts for the other line items on the invoice and not the base Lagoon Crawler model). The "Currency" column identifies the currency in which the invoice was paid; all CAD transactions are colored blue, and any product sold in the US or international is sold in USD.

[2] See the following worksheets of the Lagoon Crawler Sales Report: "2014-2017.5," "2018-2019," "2020-2023," and "X Models" in Exhibits 2056-2057, respectively, which contain sale line items from which I tabulate units sold and "Consolidated Totals" in Exhibit 2055 which contains total revenue numbers.

an order taken in or around November 2013, we had gone from a small company that was not all that well known, to being a household name in the agricultural industry.

26. This is significant not only from a unit sales and revenue perspective, but also from a market share perspective.

27. My market research indicates that Puck's boat occupied about 95% of the manure pumping boat market when Nuhn first introduced the Lagoon Crawler Prototype at the 2013 North American Manure Expo. Fast forward to today, my market research indicates that the market share for Nuhn's Lagoon Crawler has totally eclipsed the market share for Puck's pumping boat. Based on my research—and setting aside Bazooka's copycat Wolverines—I estimate that Nuhn's Lagoon Crawler constitutes at least 90% of the manure pumping boat market as of December 2023 (where we made close to [redacted] Lagoon Crawlers in 2023). Whereas Puck's occupies less than 10% of the manure pumping boat market (or even less if one considers Bazooka's copycat Wolverine sales). My research estimate of Puck's market share today is conservative and based on my research, I estimate that Puck is now making less than [redacted] boats per year.

28. Nuhn is particularly proud of the commercial success that the Lagoon Crawler has enjoyed given that we decided to cut substantially all paid for advertisements of the Lagoon Crawler after 2019 but—as reflected in the Lagoon

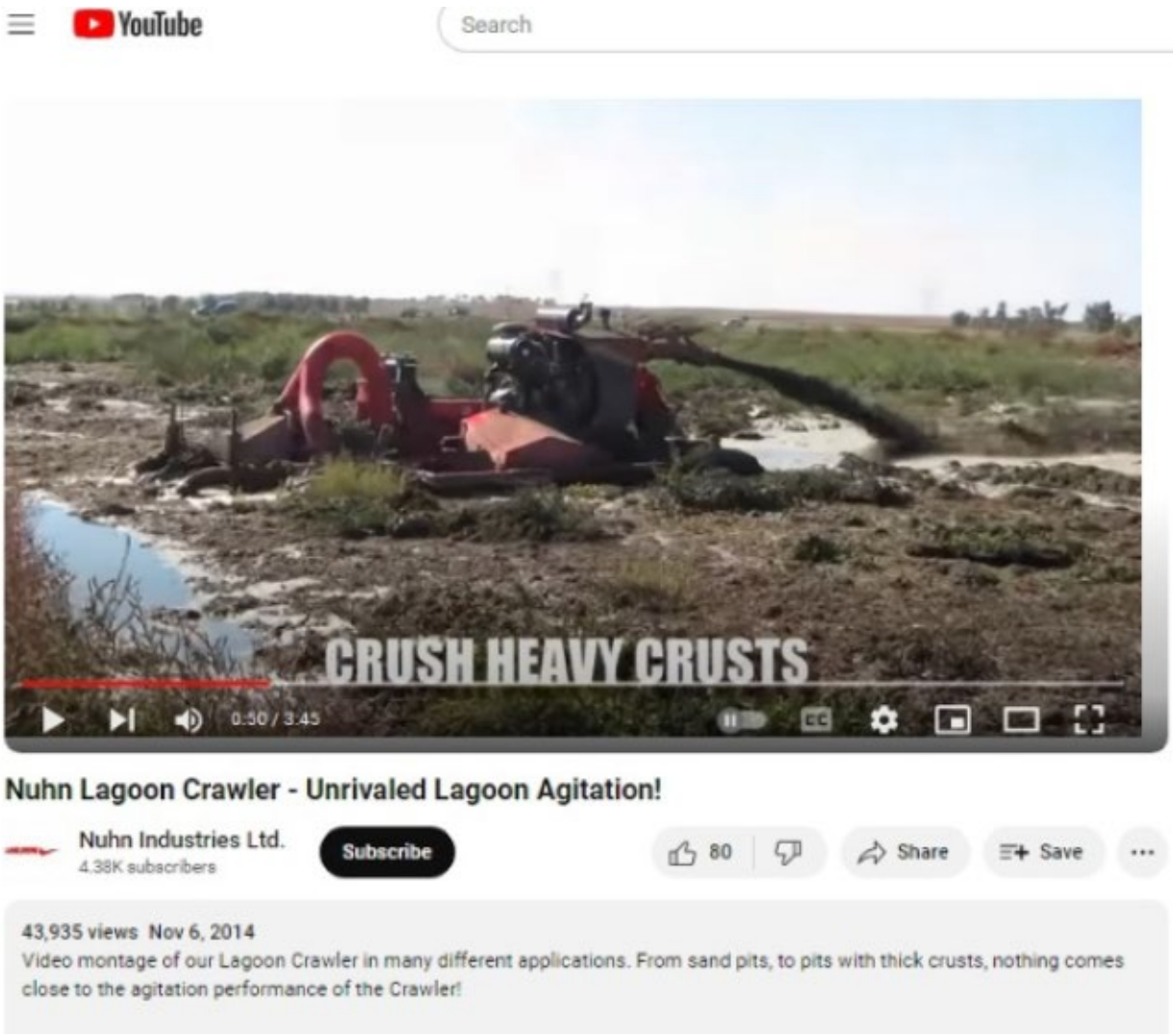
Crawler Sales Report at Exhibits 2055-2059 have gone on to sell over [redacted] Lagoon Crawlers since 2020. This is a testament to the fact that the Lagoon Crawler's success can only be attributed to the liquid manure lagoon agitation design that I invented.

V. UNEPXECTED RESULTS

29. Although I intended and expected my Lagoon Crawler invention to perform for manure lagoon agitation purposes, others in the industry did not expect the Lagoon Crawler to be able to agitate manure lagoons that were severely crusted over.

30. But in reality, when the Lagoon Crawler is controlled to enter a manure lagoon, the combination of the churning ground engaging wheels and the displacement of the Crawler's floatable vehicle body breaks through and disrupts the crust creating a "pocket" or opening in the crust within which the Crawler can start to operate without the pump becoming clogged by the crust. I did not expect that the churning wheels of the Lagoon Crawler would help the Lagoon Crawler navigate/chew through thick crust, where the Puck boat would often get stuck and other pumps would not work. Moreover, the displacement of the floatable vehicle body and churning wheels unexpectedly worked in synergy with the pump to more effectively agitate and mix the crust in with the other contents of the manure lagoon by creating this working "pocket" or opening.

31. A video on Nuhn's YouTube page shows this "pocket" where the Lagoon Crawler is at work.



EX2060, which is a true and correct copy of a series of screenshots taken from a video of the Lagoon Crawler on Nuhn's YouTube page accessible at https://www.youtube.com/watch?v=fEgvvq9HZk.

32. Some in the industry might have expected the Lagoon Crawler's powered wheels to carry the Crawler to and from a manure lagoon (there was

skepticism on this point though as I explain below). But the ability of the Lagoon Crawler to "chew" a hole through the crust of poorly maintained manure lagoons and start a "working zone" or "pocket" for the pump to operate in is a new and unexpected result provided by the combination of the churning wheels and displacement of the Crawler's floating vehicle body. This new capability allows the Lagoon Crawler to agitate manure lagoons that remained inaccessible/unserviceable to Puck's pumping boat and also unexpectedly increased agitation/mixing performance and efficiency exponentially.

33. While I expected my Lagoon Crawler invention to perform for manure lagoon agitation purpose, I did not expect that it would agitate a manure lagoon in significantly less time and using significantly less fuel than when using multiple stand-alone pumps. For example, I know from my experience in the industry that it was typical for farmers to rent multiple stand-alone manure pumps to agitate a lagoon (*e.g.*, using a tractor to transport them around the perimeter of the lagoon). The convention was to rent four pumps to agitate one lagoon. After the Lagoon Crawler came out, farmers began renting a single Lagoon Crawler—instead of four pumps—to agitate one lagoon in about the same amount of time as it would take using four pumps. Not only this, but the Lagoon Crawler did a better job. And less fuel is consumed by the Lagoon Crawler because four fuel burning tractors are no longer needed. In other words, the Lagoon Crawler reduces the

amount of fuel required to agitate a manure lagoon by about ¼ when compared to using tractor-driven manure pump agitators.

VI. RECEPTION AND PRAISE OF NUHN'S LAGOON CRAWLER

34. My Lagoon Crawler invention has been well received and highly praised—since its introduction at the 2013 North American Manure Expo on August 20–21, 2013—with its ability to disrupt the crust and circulate liquid manure in a manure lagoon, while reliably driving into, out of, and navigating the manure lagoon by wireless remote control. I go through some of the examples below, which align with news reports that we have either kept in our files since the time of publication or have since been able to locate.

35. Nuhn took home the "Innovation Award" at the 2013 Farm Progress Show in Decatur, Illinois. Nuhn received for its Lagoon Crawler innovation making an impulsive impact on the industry. Receiving this award was a big deal to Nuhn due to the prestige that it carries in the farming community. Nuhn's award was reported, for example, in EX2061 (Canada's Outdoor Farm Show Official Show Guide for September 9- 11, 2014 in Woodstock, Ontario) at 20 (accurately noting that the Lagoon Crawler "wowed the industry by winning an innovation award at the Farm Progress Show in Decatur, Illinois last August"); *see also, e.g.*, EX2062 (H. Rivers, *Farm show opens with a splash*, The Beacon Herald (Sept. 10, 2014) at 2 (accurately reporting the Lagoon Crawler "wowed the industry by

Exhibit 2083
Bazooka v. Nuhn - IPR2024-00098
Page 20 of 38

winning an innovation award in Illinois at the Farm Progress Show" the last year in 2013); EX2063 (B. Shypula, *Transforming farming*, The London Free Press (Sept. 9, 2013)) at 1 (reporting that the Lagoon Crawler "took the innovation award at the largest farm show in the U.S. last month" at "the 2013 Farm Progress Show in Illinois"); EX2064 (B. Shypula, *Crawler makes manure almost sexy*, The Beacon Herald (Sept. 6, 2013) (reporting that "Nuhn Industries' futuristic machine wins innovation award at major U.S. farm show").

36. In addition to receiving the Innovation Award, I was invited to speak at the 30th Annual AMC (Ag Machinery Conference) Engineering Conference in Waterloo, Iowa scheduled for May 5-7, 2015. The Conference was titled "30 Years of Innovation" *See* EX2065, which is a true and correct copy of the brochure for the conference which Nuhn received. The brochure features the Lagoon Crawler on its cover. EX2065 (30 Years of Innovation, 30th Annual AMC Engineering Conference) at 1. I spoke at a "New Products" session on May 7, 2024 about the Lagoon Crawler in highlight of the Crawler's remote controlled amphibious agitation technology for manure lagoons. EX2065 at 4.

37. I was awarded a Certificate of Service from the AMC Conference for my contribution to the "Technical Session New Products" that was "[i]n recognition of leadership in promoting the philosophy, worthwhile purposes, and

high ideals of the AMC." *See* EX2066 (Certificate of Service), which is a true and correct copy of the certificate.

38. Exhibit 2063 is a true and correct copy of The London Free Press from September 9, 2013 with an article entitled "Transforming farming" emphasizing how the Lagoon Crawler "can drive itself into the lagoon, re-circulate the water using jets and create a homogenized liquid . . ." *See* EX2063 (B. Shypula, *Transforming farming*, The London Free Press (Sept. 9, 2013)) at 1. The London Free Press noted that "[s]ome people have tried mounting pumps on boats" but that "there's nothing else like the crawler on the market." *Id.* The London Free Press accurately touts the Lagoon Crawler as a "kick-ass amphibious lagoon crawler that is making waves in farming circles." *Id.* The London Free Press accurately emphasized the Lagoon Crawler as a "floating, remote-controlled machine" with a reputation that "has rippled far beyond Southwestern Ontario" where Nuhn is headquartered. *Id.* The London Free Press accurately acknowledged that "the reaction was practically viral." *Id.* The Lagoon Crawler featured in the article is the Lagoon Crawler Prototype.

39. Exhibit 2064 is a true and correct copy of The Beacon Herald with an article entitled "Crawler makes manure almost sexy" from September 6, 2013. *See* EX2064 (B. Shypula, *Crawler makes manure almost sexy*, The Beacon Herald (Sept. 6, 2013)) at 1. The Beacon Herald provided a similar report.

40. Exhibit 2067 is a true and correct copy of The Beacon Herald from Thursday, January 30, 2014. The Beacon Herald reported that Nuhn's "Crawler is turning heads" and pictures one of the first Lagoon Crawler Gen 1 units.." *See* EX2067 (M. Beitz, *Crawler is turning heads*, The Beacon Herald at A2 (Jan. 30, 2014) at 2. The article accurately emphasizes the Lagoon Crawler's design to "crawl into liquid manure lagoon, float there as it agitates the solids from the bottom, and then pump the nutrient rich mixture out into farm fields before driving out again." *Id.* The Beacon Herald accurately describes the Lagoon Crawler's reception as being "nuts" and the "global" manure lagoon agitation issue being solved. *Id.*

41. Exhibit 2061 is a true and correct copy of *Canada's Outdoor Farm Show Official Show Guide* for September 9-11, 2014 in Woodstock, Ontario. Nuhn attended this show with the Lagoon Crawler where it demonstrated the Crawler's capabilities. The Guide accurately reports on the "HYPE" with the Lagoon Crawler and emphasizes its "ability to drive itself into and maneuver itself with a manure lagoon." EX2061 (*New Lagoon Crawler Demos Will Satisfy Curiosity*, Canada's Outdoor Farm Show Official Show Guide for September 9-11, 2014) at 20. The Guide accurately reports that "[f]or farmers who have seen or purchased a Crawler, their expectations have been exceeded" and empathizes how it "impresses

farmers with its ability maneuver within the lagoons, agitate solids from the bottom surfaces . . . ." *Id.*

42. Exhibit 2062 is a true and correct copy of The Beacon Herald from Wednesday, September 10, 2014 with the article entitled "*Farm show opens with a splash*." *See* EX2062 (H. Rivers, *Farm show opens with a splash*, The Beacon Herald (Sep. 10, 2104) at 2. The Beacon Herald reported on Canada's Outdoor Farm Show mentioned above for 2014—which Nuhn attended with the Lagoon Crawler—and declared the Lagoon Crawler as the "star" among "750 exhibitors spread over 40 hectares" of the Show. *Id.* The Beacon Hearld reported on the Ontario's agriculture minister describing the show as "the world's greatest outdoor farming show." *Id.*

43. Exhibit 2068 is a true and correct copy of the December 2014 issue of Diesel Progress North American Edition (December 2014) entitled "Newsmaker[s] of the Year 2014." *See* EX2068 (*C.* Elmore, *Innovative Uses of Horsepower – a real crapshoot*, Diesel Progress North American Edition (Dec. 2014) at 28-32. The issue features the article *Innovative Uses of Horsepower – A Real Crapshoot* about the "new mobile liquid manure agitator" and accurately reporting that the Lagoon Crawler had simply been a "showstopper" since its introduction and garnered coverage for Nuhn in everything from local newspapers and television to international trade publications. *See id.* at 28, 32.

44. Exhibit 2069 is a true and correct copy of the St. Marys Independent from Friday, August 7, 2015. The St. Marys Independent reported Nuhn's "100th lagoon crawler unveiling" and accurately emphasized the Lagoon Crawler's "remote-controlled amphibious pump designed for agitating large lagoons for manure." *See* Ex. 2069 (D. Rankin, *Nuhn Industries celebrates employees at expansion grand opening*, *100th lagoon crawler unveiling*, St. Marys Independent (Aug. 7, 2015)) at 9.

45. Exhibit 2070 is a true and correct copy of the August 18, 2015 issue of Ontario Farmer with an article entitled "Agitator has reclaimed manure lagoons around the world" about the Lagoon Crawler. *See* EX2070 (B. Reid, *Agitator has reclaimed manure lagoons around the* world, Ontario Farmer (Aug. 18, 2015)) at 52. The article accurately describes how "[i]nterest in the machine's potential was immediate with orders received from similar machines yet to be built" after the Lagoon Crawler was featured at a manure expo that Nuhn attended. The article emphasized that the Lagoon Crawler "can enter earthen liquid manure storage ponds for agitation process," and the "high pressure" at which pumping occurs that "allows the breaking up of any settling solids that have occurred over time." *Id.* The article also accurately emphasized how "[t]he machine is remotely controlled" and how "[i]f the machine gests hung up while floating over old material, the wheels will then move it forward." *Id.* The article further accurately reports on how

the Lagoon Crawler is able to solve problems with manure lagoons becoming unusable due to middle portions filling with solids by accessing all areas of the lagoons. *Id.*

46. Exhibit EX2071 is a true and correct copy of the Business section from the London Free Press from Tuesday, August 11, 2015. The London Free Press reported on Nuhn's "major milestone" with the Lagoon Crawler. *See* EX2071 (L. Cudworth, *Nuhn marks major milestone*, The London Free Press (Aug. 11, 2015)) at 1. The London Free Press also reported on Nuhn's "100th" Lagoon Crawler "to roll off the line," emphasizing that "[t]he remote-controlled machine is amphibious" and "goes into sewerage lagoons, pulls the sludge off the bottom and pumps it onto the land for fertilizer," noting that "it's hard to believe it floats." *Id.* The London Free Press also emphasized that unlike the Lagoon Crawler, "[t]o pull nutrients out of the lagoons, famers were using pumps that spray more water than nutrients from the bottom and don't provide consistent application of fertilizer to the land." *Id.* The London Free Press declared the Lagoon Crawler "a dream come true." *Id.*

47. Exhibit 2072 is a true and correct copy of the Stratford Beacon Herald from August 7, 2015 with an article entitled "Marking a major milestone" about the Lagoon Crawler. *See* EX2072 (L. Cudworth, *Marking a major milestone*, The

Stratford Beacon Herald (Aug. 7, 2015)) at 3. The Stratford Beacon Herald provides a similar report.

48. Exhibit 2073 is a true and correct copy of a print out of an article from Better Farming's website entitled "Made-in-Sebringville lagoon crawler to be featured on Discovery Channel" from September 2, 2015, which Nuhn printed a couple days after it first posting. *See* EX2073 (J. Algie, *Made-in-Sebringville lagoon crawler to be featured on Discovery Channel*, Betterfarming.com (Sept. 2, 2015)). The article touts that Nuhn "has sold its "remote-controlled, four-wheel-drive" Lagoon Crawler "to customers in Russia, China, the United States, Alberta and Manitoba." *Id.* at 1. The article explains how "Newspaper coverage of the company's expansion led to interest from Discovery Channel producers of The Daily Planet, a science magazine program" and that the Lagoon Crawler was to appear September 3, 2015 during the program's "Extreme Machine Week" feature series. *Id.* As Better Farming reported, I appeared along with the Lagoon Crawler on this program.

49. Exhibit 2080 is a true and correct copy of the Discovery Channel's segment on the Lagoon Crawler for the Daily Planet that aired on September 3, 2015 during Extreme Machine Week. *See* Ex. 2080 (Discovery Channel Segment).

The segment—in which I appear—features the Lagoon Crawler. The Discovery Channel provided this copy of the segment to me after it aired.[3]

50. The segment acknowledges how the Lagoon Crawler "makes small work out of a big job" whereas "farmers used to have to back agitators into the lagoon from several spots on shore" (*see* around 3m:10s). *Id.* On the program, a "savvy" dairy farmer, Henry Koscamp, who has "never seen this machine working before" notes that he wants to "see what it can do to get this crust busted up and how fast it can do it" (*see* around 3m:27s). Mr. Koscamp skeptically notes that he "needs to be sold on this" (*see* around 3m:40s). The program demonstrates the Lagoon Crawler operating as designed to disrupt the crust and circulate liquid manure in a manure lagoon, while reliability driving into, out of, and navigating the manure lagoon by wireless remote control (*see around* 3m:34s). The Lagoon Crawler performed beautifully as documented in the segment in efficiently disrupting a thick crust on Mr. Koscamp's manure lagoon. Mr. Koscamp explained that "what usually takes me 3-4 hours to get to this point. . . we're there in 10-15 minutes" with the Lagoon Crawler (*see* around 4m:38s). According to Mr. Koscamp, he "never thought it could be done. This is good" (*see* around 4m:40s).

[3] I previously added the "Discovery" logo overlay to the video to emphasize that this segment was aired on the Discovery Channel when playing the video at our booth at tradeshows.

51. Exhibit 2074 is a true and correct copy of the October 2015 issue of Western Dairy Farmer with an article about the Lagoon Crawler entitled "Self-propelled". *See* EX2074 (B. Reid, *Self-propelled*, Western Dairy Farmer (Oct. 2015)) at 26. The article touts that the Lagoon Crawler's concept has "saved lagoons around the world." *Id.* It likened Lagoon Crawler's entrance into the industry to one "usually reserved for rock stars" acclaiming the Lagoon Crawler as "the unveiling of a revolutionary piece of farming technology." *Id.*

52. Similar to other reports of the Lagoon Crawler, the article emphasizes the Lagoon Crawler's ability to enter earthen liquid manure storage ponds by wireless remote control to break up the crust in areas that aren't normally reachable. *Id.*

VII. SKEPTISM AND SURPRISE

53. Although the Lagoon Crawler has enjoyed great commercial success and been lauded by others, the industry was not without skepticism as to whether Nuhn's Lagoon Crawler could successfully disrupt the crust and circulate liquid manure in a manure lagoon, while reliably driving into, out of, and navigating the manure lagoon by wireless remote control.

54. For example, Nuhn—including myself and Dennis Nuhn (President of Nuhn Industries Ltd.)— attended many tradeshows in 2013 and 2014 when the Lagoon Crawler Prototype and Gen 1 Crawler were released throughout the United

Exhibit 2083
Bazooka v. Nuhn - IPR2024-00098
Page 29 of 38

States, Canada, and even in Germany and Russia. Despite the praise that the Lagoon Crawler ultimately received, others in the industry expressed skepticism that the Lagoon Crawler would successfully or reliability perform to disrupt the crust and circulate liquid manure in a manure lagoon, while reliably driving into, out of, and navigating the manure lagoon by wireless remote control.

55. Even Dennis expressed skepticism to me that the Lagoon Crawler would be as much of a success as it was. Dennis early on indicated to me in 2013—while I was working on the Prototype—that I should be focusing my attention on more important matters.

56. I repeatedly received skeptical feedback from others at these tradeshows around the 2013 to 2014 period, including many centered around the invention's ground engaging structure, such as:

a. the Lagoon Crawler's ground engaging structure (the wheels) were going to get stuck and become inoperative on solids in manure lagoons, impeding our ability to retrieve the Crawler;

b. the Lagoon Crawler's ground engaging structure (the wheels) are going to leak inside of the liquid manure lagoon and cause the Crawler's hydraulic system to fill with manure thereby rendering the Crawler inoperable;

c. the Lagoon Crawler's ground engaging structure (the wheels) will not have enough traction to be wireless remote controlled to drive out of the liquid manure lagoon; and

d. liquid manure would leak into the Lagoon Crawler's planetary gearbox for the ground engaging wheels causing the ground engaging structure to fail.

57. The skeptical feedback that I received from others at these tradeshows around the 2013 to 2014 period was also directed other components and features of the Lagoon Crawler, such as:

a. the Lagoon Crawler's hydraulic system fittings are going to corrode, causing the Crawler to lose its oil;

b. the structure of the Lagoon Crawler is going to be destroyed by the gases in the manure lagoon;

c. the electrical connections of the Lagoon Crawler are going to be corroded by the gases from the liquid manure in the lagoon;

d. the Lagoon Crawler would operate uncontrollably in the manure lagoon and be ineffective unless it is grounded by fixed connected to hold back its agitation power (*e.g.*, buoyed to the bottom of the lagoon, tied off land);

e. the manure pump being part of the Lagoon Crawler, as opposed to putting the pump on the bottom of the lagoon to suck out the solids.

58. Even early suppliers for the Lagoon Crawler didn't take the Lagoon Crawler seriously, consistent with the reporting in EX2068 (C. Elmore, *Innovative Uses of Horsepower – A Real Crapshoot,* Diesel Progress North American Edition (December 2014)) at 29, 32.

59. And some of our customers of other Nuhn products even told Nuhn that they would never buy a Lagoon Crawler because it would be a maintenance nightmare. But now these skeptical customers each own a couple of Lagoon Crawlers.

60. Mr. Koscamp—the dairy farmer whose manure lagoon was pumped by the Lagoon Crawler in the Discovery Channel segment during Extreme Machines week—also skeptically "need[ed] to be sold on this" because he "never thought it could be done (*see* around 3m:40s and 4m:40s). *See* EX2080.

61. The success of the Lagoon Crawler has quieted most of these concerns, but the design is not without drawbacks/trade-offs. On occasion, a Lagoon Crawler will break down or run out of fuel while out in a manure lagoon. The hydraulic system that drives the wheels is configured such that the wheels are locked and will not rotate when there is no hydraulic flow (i.e., when the hydraulic pump is not running). This prevents the vehicle from rolling when it is powered off

Exhibit 2083
Bazooka v. Nuhn - IPR2024-00098
Page 32 of 38

and therefore acts as a parking brake. However, this also means that if the vehicle breaks down or runs out of gas, the hydraulically powered wheels will not turn and impede retrieval from the manure lagoon.

62. When one of Nuhn's Lagoon Crawlers breaks down or runs out of fuel in a manure lagoon, the extraction method is to have a person ride out to the stranded machine on another Lagoon Crawler and strap them together so that the working machine can pull the stranded machine out of the lagoon. I have done this personally on several occasions over the years.

63. In my opinion, a person who is primarily attempting to address the safety problems associated with the proximity of agitation equipment operators and hazardous manure lagoons environments would consider tractor-mounted manure pumps as the safest option since they can be retrieved without operators venturing in close proximity to the manure lagoon, even if the equipment breaks down or runs out of fuel.

VIII. OTHERS' DESIRE TO LICENSE THE LAGOON CRAWLER

64. My Lagoon Crawler invention proved so successful that [redacted] —has sought a license to the Lagoon Crawler technology which includes the '708 Patent and the family of related patents.

65. Exhibit 2075 is a true and correct copy of an email that the [redacted] sent to me.

66. This email indicates to me that [redacted] wanted to license Nuhn's Lagoon Crawler technology—including the '708 Patent—for purposes of commercializing a new [redacted] branded manure agitation boat.

67. Since 2013, we had gone from having no place in the manure pumping boat market [redacted], who now wanted to license Nuhn's patented technology.

IX. OTHERS COPYING NUHN'S LAGOON CRAWLER

68. The near identicality between Nuhn's Lagoon Crawler and Bazooka's Wolverine (other than the Wolverine looking like a Lagoon Crawler knock off) leaves no doubt in my mind that Bazooka copied our Lagoon Crawler.

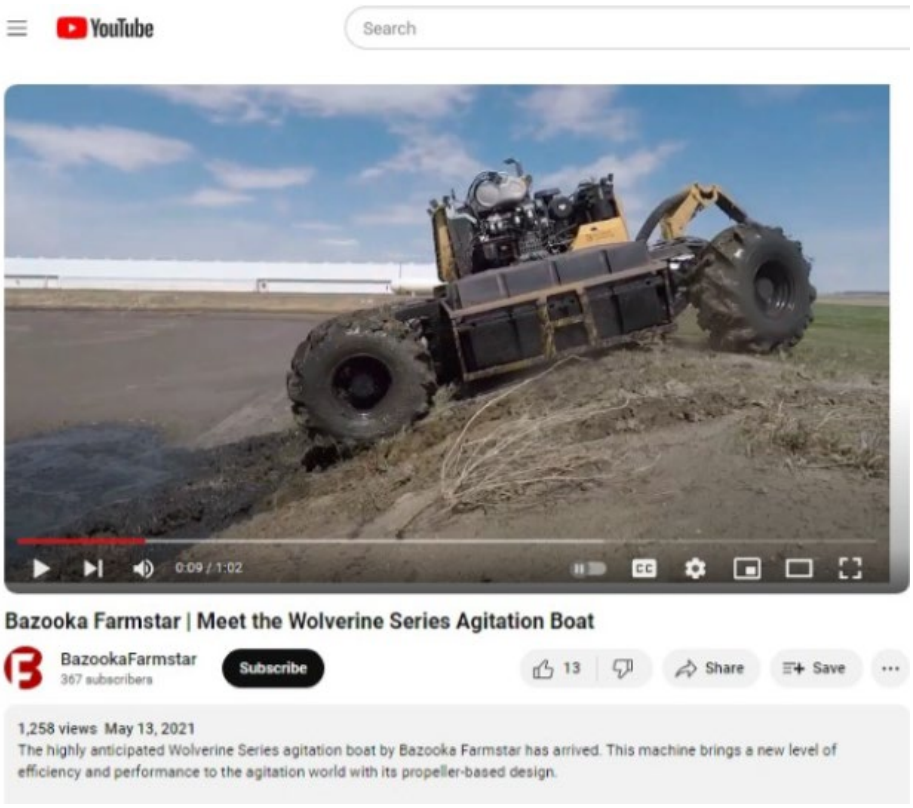
69. This conclusion becomes inescapable when considering the relationship between Bazooka's parent company Eldon C. Stutsman, Inc. ("Stutsman") and Nuhn. Stutsman was buying Lagoon Crawlers from Nuhn as early as 2015. This is reflected in the Lagoon Crawler Sales Report attached as Exhibits 2055-2059, which identifies the same Stutsman customer as "Stutsman, Inc." *See, e.g.,* EX2056 (Lagoon Crawler Sales Report (2015-2017.5)) at 3 (row 119, 132, 145)

70. Exhibits 2076-7078 are example sales invoices from Nuhn paid by Stutsman for the Lagoon Crawler maintained in the ordinary course of Nuhn's business after being distributed to customers and stamped as "PAID" upon receipt of payment. Exhibit 2076 is Nuhn Invoice No. 15310 for Nuhn's Lagoon Crawler sales to Stutsman on **September 9, 2015**.[4] Exhibit 2077 is Nuhn Invoice No. 31083 for one of many additional Nuhn Lagoon Crawler sales to Stutsman on **June 20, 2020**. Exhibit 2078 is Nuhn Invoice No. 32274 for yet another one of many additional Nuhn Lagoon Crawler sales to Stutsman on **September 28, 2020**.

71. As a customer of the Lagoon Crawler, Nuhn made copies available to Stutsman of the Lagoon Crawler Owners Manuals and Parts Catalogues discussed above.

[4] I note that the Lagoon Crawler Sales Report may refer to Stutsman as "Stutsman Inc." as short for "Eldon C. Stutsman, Inc." But the corresponding invoices for Stutsman refer to the full "Elcon C. Stutsman, Inc." name, with Eldon C. Stutsman, Inc. being the company to whom Nuhn has sold the Lagoon Crawlers.

72. Notably, after Stutsmans had been purchasing Lagoon Crawlers during these years, Bazooka all of the sudden began marketing its copycat Wolverine agitation boat at least as early as May 23, 2021 or before. Attached as Exhibit 2079 is a true and correct copy of a series of screen shorts taken from a video posted on the BazookaFarmstar YouTube channel on May 13, 2021, which is accessible at https://www.youtube.com/watch?v=ehAHKL442:



73. Based on Bazooka's access to the Lagoon Crawler and associated documentation through Stutsman—and the sheer similarity of the Wolverine to the Lagoon Crawler—I cannot draw any conclusion other than Bazooka copied the Lagoon Crawler.

74. On top of this, I have had conversions with a service mechanic at Stutsman.

75. I knew the service mechanic because he serviced Lagoon Crawlers that Stutsman sold. The Stutsman mechanic had contacted me many times to ask my advice on how to service Lagoon Crawlers. During one of these conversations (occurring to the best of my recollection in or around summer 2021) I asked the Stutsman mechanic what he thought of Bazooka's Wolverine. He expressed to me that he was uncomfortable with the Wolverine. He admitted to me that Stutsman had him work with Bazooka to advise on Bazooka's design for a yet-to-be-released manure lagoon agitation vehicle, due to his experience working servicing the Lagoon Crawlers sold by Stutsman. He explained to me that he felt increasingly uncomfortable as Bazooka's manure lagoon agitation vehicle—ultimately released as the Wolverine—began more and more to mimic the Lagoon Crawler. The only conclusion I can draw from the Stutsman mechanic's explanation is that he understood Bazooka was copying Nuhn's patented Lagoon Crawler and felt uneasy about being involved in Bazooka's activities.

76. The Stutsman mechanic's admission to me provided me with context for a prior encounter with Eric Hahn (a manager at Bazooka) and Phil Minino (a head engineer at Bazooka), when Nuhn was at the World Ag Expo in Tulare, California in February 2020. At that expo, Eric and Phil were spending a lot of

time walking around the Lagoon Crawler at Nuhn's booth and talking back and forth to one another. But when they saw me, they appeared to turn sheepish as if they had been caught doing something improper and walked away. This encounter stands out to me, because Bazooka was a customer purchasing other products from Nuhn at this point in time, and I thought we had a good relationship. Based on Eric's and Phil's demeanor at the World Ag Expo, I suspected something might be amiss.

I declare that all statements made herein of my knowledge are true, and that all statements made on information and belief are believed to be true, and that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

Dated: August 14, 2024

Ian Nuhn

63439632.1