



BAZOOKA-FARMSTAR, LLC (PETITIONER)
v. NUHN INDUSTRIES LTD. (PATENT OWNER)

Case No. IPR2024-00098

U.S. Patent No. 11,541,708

**PATENT OWNER'S MOTION TO EXCLUDE
DEMONSTRATIVES**

March 11, 2025

DEMONSTRATIVE EXHIBIT - NOT EVIDENCE



Who is a POSITA?

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Petitioner's Definition

60. As of August 19, 2013, a POSA would have had a bachelor's degree in mechanical engineering or similar field, and two years of professional experience in marine and off-road vehicles. A POSA would have had a working knowledge of liquid manure, livestock manure handling, fluid pumps, and selecting pumps for various applications, including livestock manure. Lack of work experience can be remedied by additional education, and vice versa.

Patent Owner's Definition

64. Based on this intrinsic evidence, it is my opinion that a POSITA is "a livestock farmer or commercial manure applicator familiar with manure agitation equipment or an engineer with at least 2 years of experience designing agricultural equipment and knowledge of manure agitation equipment."

EX2094, ¶64.

EX1004, ¶60.

PTAB:

a person of ordinary skill in the art had a bachelor's degree in mechanical engineering or similar field, and two years of professional experience in marine and off-road vehicles or agricultural vehicles and machinery. A POSA would have had a working knowledge of fluid pumps and livestock manure. Lack of work experience can be remedied by additional education, and vice versa.

Paper 71 in IPR2023-01161,
pp. 10-11.



Patent Owner's Expert is a POSITA

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Patent Owner's Expert

5. I grew up on a family grain and livestock farm in southern Minnesota where I operated tractors, tillage equipment, skid steers, and manure handling and spreading equipment. My father was a professional mechanic, so we serviced and repaired most of the machinery on our family's operation. I have in-laws who own and operate an 800 head dairy farm near Sioux Falls, South Dakota. I have worked at their dairy farm many times over the past 25 years helping with feeding, equipment maintenance, harvest, tillage, and working with their manure systems. The lagoon on their dairy farm is typical of most lagoons of their herd size in the upper Midwest. It is

7. Prior to joining SDSU in August of 2016, I was employed within the agriculture and construction equipment industry for 20 years in roles ranging from design engineering to product and sales management. My experience includes design of planting and seeding equipment, design of concrete placing and cutting equipment, construction project management, design of high horsepower trash pumps, product/sales management of precision agriculture control systems, and research on cellulosic ethanol production systems.

PTAB Definition

a person of ordinary skill in the art had a bachelor's degree in mechanical engineering or similar field, and two years of professional experience in marine and off-road vehicles or agricultural vehicles and machinery. A POSA would have had a working knowledge of fluid pumps and livestock manure. Lack of work experience can be remedied by additional education, and vice versa.

EX2099, ¶¶ 5, 7.

DEMONSTRATIVE EXHIBIT - NOT EVIDENCE



Patent Owner's Expert is a POSITA

Patent Owner's Expert

PTAB Definition

South Dakota State University, Brookings, SD; www.sdstate.edu; August 2016 to present

Lecturer for Agriculture and Biosystems Engineering Department

- Ag Power and Machinery, Fluid Power Systems, Instrumentation and Controls, ABE Senior Design
- Advisor for International Quarter Scale tractor club that has placed top 3 overall over the last 6 years.

EX2005, 1.

a person of ordinary skill in the art had a bachelor's degree in mechanical engineering or similar field, and two years of professional experience in marine and off-road vehicles or agricultural vehicles and machinery. A POSA would have had a working knowledge of fluid pumps and livestock manure. Lack of work experience can be remedied by additional education, and vice versa.

BOISE STATE UNIVERSITY (BSU) Boise, ID www.boisestate.edu

Masters of Mechanical Engineering with Business Emphasis

Graduation Date: December 2004

GPA: 3.5/4.0

Project Paper: *Design of a Conceptual Biodiesel Production Facility*

SOUTH DAKOTA STATE UNIVERSITY (SDSU), Brookings, SD www.sdstate.edu

BS Agricultural Engineering with Power and Machinery Focus

Graduation Date: May 1997

GPA: 3.6/4.0

EX2005, 2.



Petitioner's Expert is not an expert on liquid manure or manure pumps

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Petitioner's Expert

3. As both an undergraduate and graduate student, my studies focused on the topics of fluid mechanics, acoustics, and dynamics and vibrations. I spent considerable time working in research facilities at the University of Michigan, including the Marine Hydrodynamics Laboratory, and at government research facilities, including the U.S. Navy's William B. Morgan Large Cavitation Channel. Much of my experimental research involved the use of various instruments and sensors, but also myriad pumps for moving fluids in research applications. I am familiar with pumping applications, pump selection processes, and motors and controllers for pumping systems.

PTAB Definition

a person of ordinary skill in the art had a bachelor's degree in mechanical engineering or similar field, and two years of professional experience in marine and off-road vehicles or agricultural vehicles and machinery. A POSA would have had a working knowledge of fluid pumps and livestock manure. Lack of work experience can be remedied by additional education, and vice versa.

EX1004, ¶3.



Petitioner's Expert is not an expert on liquid manure or manure pumps - 1st Declaration [EX1004]

The following opinions by Dr. Winkle are inadmissible and should be excluded: EX1004, ¶¶68-87

68. A POSA would have understood that "liquid manure" refers to a type of manure with the lowest solids content contained therein. A POSA would have understood that the solids concentration in the liquid volume of a typical liquid manure lagoon is on the order of a few percent or less, and liquid manure is readily pumped using water pumps. *See infra* Section V.B.iii.a.

86. Screens and filters are well known for enhancing the manure pumping capabilities of conventional water pumps. Screens and filters similar to the type described in Carrier have been specifically used for this purpose. The screen provided in Carrier would enhance the ability of the Carrier pump to pump liquid manure.

EX1004, ¶¶ 68, 86.

Petitioner's Expert is not an expert on liquid manure or manure pumps - 2nd Declaration [EX1079]

The following opinions by Dr. Winkle are inadmissible and should be excluded: EX1079, ¶¶19, 59

POSAs would have understood that, since conventional irrigation pumps could pump 5% total solid post-agitation mixtures onto farm fields, such pumps would also pump the near water-like consistency of pre-agitation supernatant to agitate the lagoon into a homogeneous mixture.

a POSA would have understood that a “fluid pump for pumping liquid manure” would cover pumps capable of pumping high volumes of water from lakes and streams, which at least are capable of pumping such low solid content forms of liquid manure.

EX1079, ¶¶ 19, 59.

Ian Nuhn's Testimony is Admissible and Corroborated by Documentation

- Evidence of Commercial Success = Nuhn Declaration [EX2083], ¶¶23-28; Nuhn Sales Reports [EX2055-2059].
- Evidence of Unexpected Results = Nuhn Declaration [EX2083], ¶¶29-33; Prairie Declaration [EX2099], ¶¶703-707; Product Videos [EX2006; EX2007].
- Evidence of Industry Praise = Nuhn Declaration [EX2083], ¶¶34-52; News Publications [EX2061-EX2074]; Discovery Channel Segment [EX2080].
- Evidence of Skepticism and Surprise = Nuhn Declaration [EX2083], ¶¶53-63; Discovery Channel Segment [EX2080].
- Evidence of Licensing = Nuhn Declaration [EX2083], ¶¶64-67; Puck Email [EX2075].
- Evidence of Copying = Prairie Declaration [EX2099], ¶¶708-728; Nuhn Declaration [EX2083], ¶¶68-76; Bazooka Patent Apps. [EX2048-EX2050]; Stutsman Invoices [EX2076-EX2078].
- Evidence of Long Felt Need = Nuhn Declaration [EX2083], ¶¶17-20, Prairie Declaration [EX2099], ¶¶700-702; [EX1001], 1:38-54.

DEMONSTRATIVE EXHIBIT - NOT EVIDENCE



Ian Nuhn's Testimony About Market Share is Admissible and Based on Personal Knowledge

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Q. What do you base your statement on, you had an idea of how many Puck boats were made?

A. Puck has a unique serial number for their boat. And they go -- they literally count up. So I believe around the time that this came out -- I'm speculating sitting here, but I believe it was -- they were at least close to a hundred serial numbers. That was the highest serial number I had heard.

Q. So you're basing your market share data on something you heard about the number of Puck's boats that were sold at some point in time?

THE WITNESS: I believe when I'm saying this in today's date, I recall seeing a listing for a used Puck boat from 2013 and seeing that -- the serial number it was, and that's where I'm coming up with this from.

EX1098, 215:24-216:3.

EX1098, 215:10-22.

The Statements in Olofsson's Declaration Are by a Different Witness (Arnoldsson) and Olofsson Lacks Personal Knowledge

Q Did you write this declaration?

A No.

Q Do you know who wrote it?

A Yeah, I think it was the -- the CEO now for Truxor Wetland Equipment, Mr. David Arnoldsson.

Q He -- he wrote this declaration?

A Yeah, I suppose so. I'm not a hundred percent sure of that. But he gave it to me to read and write -- write my signature.

Q Did you make any revisions to this declaration --

A No.

Q -- from what he gave to you?

A No.

Q Did you -- did you review all the exhibits to this declaration prior to signing it?

A Yes.

Q Did you prepare the exhibits to this declaration?

A No. I think it was Mr. Arnoldsson, also.

EX1110, 211:5-22.

DEMONSTRATIVE EXHIBIT - NOT EVIDENCE

The Statements in Olofsson's Declaration Are by a Different Witness (Arnoldsson) and Olofsson Lacks Personal Knowledge

Q So if we turn to Paragraph 14 of your declaration --

A Yeah.

Q -- there's a -- what appears to be a screenshot in Paragraph 14.

Do you see that?

A Yes.

Q What is this screenshot from?

A I don't really know what it's from, but probably from -- from our -- from Arnoldsson's computer. And he has

search in our -- our -- what you say, where we -- where we save all these documents.

Q Did you take this screenshot?

A No.

EX1110, 219:12-24.

14. As shown below, Truxor created Exhibit E and Exhibit F on April 26, 2013, as reflected in the screenshot of Truxor's business records, detailing the create date of these documents (Exhibit E file name: "Truxor 2013 US inch FloridAquatic, John Farell"; Exhibit F file name "Truxor 2013 US inch Hockney").

	Truxor 2013 US inch FloridAquatic, John Farell	2013-04-26 10:43
	Truxor 2013 US inch FloridAquatic, John Farell	2013-04-26 10:40
	Truxor 2013 US inch Hockney	2013-04-26 10:44
	Truxor 2013 US inch Hockney	2013-04-26 10:39

EX1008, ¶14.

Lonnenmann's Declaration was Informally Translated from German to English by the Witness, a Software Translation Tool, and a Colleague

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Q (By Mr. Yackey, continuing) Who -- who -- so did you write the German language declaration?

A Yes, yes.

Q Who -- who translated it from German to English?

MR. STEMLER: Objection, form. Objection, harassment. The witness said that he understands the -- the declaration. This is irrelevant.

MR. YACKEY: Taylor, I'm just trying to -- as far as I know, this German language version of his declaration has not been produced, and I just want to know if he wrote it into German and I'm just asking who translated it.

A So I did it in -- in German. I translated in -- in English with help -- with translation -- translating tool. And we have -- I have a colleague in -- at Berky

and he's very -- his family is German, but he lives about 12, 13 years in Bangkok. He's very familiar with the -- the -- the English language and he --

THE INTERPRETER: He helped me, he proofed it.

Q And you said that you first wrote this declaration in German, correct?

A Yes.

EX1109, 140:3-5.

Q (By Mr. Yackey, continuing) And you used DeepL to translate your German language declaration into English?

A Yes.

EX1109, 144:8-10.

EX1109, 125:4-22.

DEMONSTRATIVE EXHIBIT - NOT EVIDENCE

Lonnemann Doesn't Understand the Distinction Between Animal "Manure" and Human Waste

DeepL. Okay. The word doesn't even have it.

DeepL doesn't even have it.

THE WITNESS: Jauche. So maybe you can see it -- see it here.

THE INTERPRETER: Jauche is also slurry. Jauche is called slurry -- jauche is called slurry in English. That's jauche. And then mist. Let's see. Dung. Dung.

THE WITNESS: Dung?

THE INTERPRETER: Dung, yeah. Dung. They're the terms "slurry" and "dung".

THE WITNESS: Okay.

(By Mr. Yackey, continuing) So have you -- have you ever seen the Amphi-King in -- in dung or mist?

No, not in life, no.

Have you seen a video of it?

Yes, it -- it was in the video when it is dung. So it is -- when it is dung, then it was in the video we saw some minutes before -- or some hours before.

Q (By Mr. Yackey, continuing) No. I'm asking -- I'm trying to focus on animal excrement, you know, manure.

THE INTERPRETER: Jauche and dung. Okay.

THE WITNESS: Okay.

Q (By Mr. Yackey, continuing) Have you ever seen it pump that?

A No.

EX1109, 182:21-183:2.

EX1109, 181:20-182:13.

The Puck Declaration [EX1099] Should be Excluded as Containing Improper Testimony From a Lay Witness

6. High pressure / high volume pumps available in 2012 for pumping water from lakes and streams for firefighting are capable of pumping liquids with suspended solids, especially if the suspended solids had a total solid content of about 5% or less. Such pumps could pump liquid with an even higher solid content. Such pumps are also capable of pumping liquid manure (mixtures of water and animal waste with a total solid content of less than about 5%). Such pumps could also pump mixtures of water and animal waste with even higher solid contents.

EX1099, ¶¶6-7.

7. Agricultural irrigation pumps are also capable of pumping liquids with suspended solids, especially liquids with a total solid content of less than 5%. Agricultural irrigation pumps, which are water pumps, are commonly used to pump liquid manure and were commonly used to pump liquid manure prior to 2012.

The Sundstrom Declaration [EX1100] Should be Excluded as Containing Improper Testimony From a Lay Witness

human sewage. I have used the Sundstrom Boat to pump animal manure and human sewage. Because the two types of waste are similar in terms of pumpability, the same pumps can be used to pump both fluids.

We chose to use a mechanical connection instead of a hydraulic connection as it was less expensive, and we wanted to keep our price-point low. However, a mechanical drive system could have easily been replaced with a hydraulic drive system as the two are easily interchangeable.

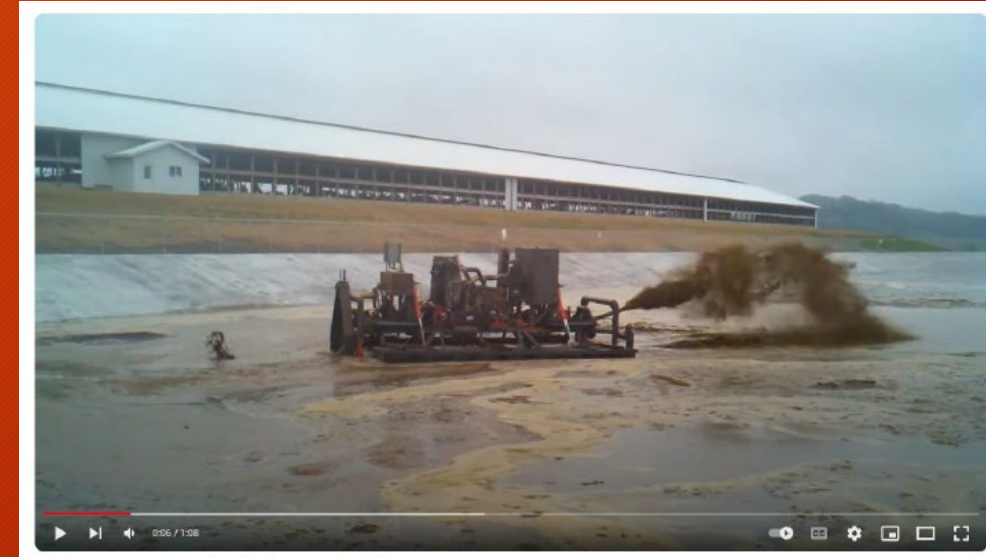
EX1100, ¶¶14, 19.

The Sundstrom Declaration [EX1100] Should be Excluded as Containing Improper Testimony From a Lay Witness

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47. As another example of a manure agitation boat publicly used at least by May 2013, Christopher Lindstrom designed a manure agitation boat with a hydraulically powered pump that was similar to the Sundstrom Boat. A video of this manure agitation boat was uploaded to YouTube and publicly available on May 17, 2013, at Our designed manure agitation boat on its first run!! (youtube.com) (<https://www.youtube.com/watch?v=EsBzgDfjsq0>).

48. Included below is a true and accurate screenshot of Christopher Lindstrom's manure agitation boat.



EX1100, ¶¶47, 48.