

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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ARROWS UP, LLC  
**Petitioner,**

v.

OREN TECHNOLOGIES, LLC  
**Patent Owner**

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Case No. IPR2018-01230  
Patent No. 9,248,772 B2

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**PATENT OWNER'S RESPONSE**

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## **INDEX OF EXHIBITS**

<b>Exhibit No.</b>	<b>Description</b>
2001	Patent Assignments for Oren Technologies
2002	"U.S. Silica to Acquire Logistics Solutions Provider Sandbox Enterprises," U.S. Silica Holdings, Inc., August 2, 2016
2003	2018-09-17 SandBox's Response to AU's Partial Motion to Dismiss and/or Strike SandBox's First Amended Answer and Counterclaims
2004	Mutual Confidentiality and Non-Disclosure Agreement
2005	Agreed Injunction and Final Judgment
2006	Final Judgment
2007	Uhryn File History Excerpts
2008	Declaration of Fred P. Smith, P.E., C.S.P.
2009	Transcript of April 12, 2019 Robert Schaaf Deposition
2010	Web Archive from October 18, 2009 of 20 ft. ISO Containers with doors on both ends for sale by Triple Eight Containers Limited  <a href="https://web.archive.org/web/20091018063039/http://www.tripleeight.net/containers/20ft-double-door.html/">https://web.archive.org/web/20091018063039/http://www.tripleeight.net/containers/20ft-double-door.html/</a>
2011	U.S. Patent No. 8,734,081 to Stegemoeller et al.

## **I. INTRODUCTION**

Patent Owner Oren Technologies, LLC (“Patent Owner” or “Oren”) was founded by the father-and-son team of John and Josh Oren, and John Oren is the named inventor on U.S. Patent No. 9,248,772 (“the ’772 Patent”). Ex. 1001. Patent Owner has over 60 issued patents and published applications related to logistics solutions and technology, including specialized containers, for the transportation of proppant used in hydraulic fracturing in the oil and gas industry. Ex. 2001. John and Josh Oren also founded SandBox Logistics, LLC (“SandBox”), a “leading provider of innovative logistics solutions and technology for the transportation of proppant used in hydraulic fracturing in the oil and gas industry,” to commercialize their inventions. Ex. 2002 at 1.

The parties here are not strangers to one another. Back in 2014, SandBox and Petitioner Arrows Up, LLC (“Petitioner” or “Arrows Up”) were friends. SandBox retained Arrows Up to help it build a plastic version of its specialized metal containers. Ex. 2003 at 10. To do so, Arrows Up required access to detailed information about SandBox’s metal container and its logistical process for delivering proppant to the well site. SandBox thus required Arrows Up to sign a non-disclosure agreement (“NDA”) before the project began. The NDA provided, among other things, that:

- Arrows Up was prohibited from using information SandBox provided it without SandBox's permission;
- any Arrows Up inventions containing modifications, enhancements, derivations, or other improvements relating to SandBox's equipment design or logistical process for delivering proppant to the well site, referred to as the "Related Inventions," were owned exclusively by SandBox; and
- Arrows Up was required to assign to SandBox all rights to any Related Inventions, including any underlying or resulting intellectual property.

Ex. 2004 ¶¶ 1-2, 8.2. Once the NDA was executed, SandBox sent Arrows Up the technical drawings and photographs of its metal containers. Ex. 2003 at 11. Arrows Up, however, secretly began copying SandBox's ideas almost immediately upon gaining access to SandBox's designs. By April 2014, Arrows Up even created advertising that falsely described SandBox's design concepts as its own inventions. *Id.* at 11. This continued until December 2014, when SandBox filed suit against Arrows Up in state court after discovering what Arrows Up had done. *Id.*; *see also id.* at n.12.

The parties quickly entered into a settlement agreement and release ("Settlement Agreement") that confirmed that Arrows Up would not use any information about SandBox's technology that had been provided under the NDA for any purpose whatsoever. *Id.* at 12. Similar restrictions were adopted into an agreed



permanent injunction issued by the state court in January 2015. *Id.* at 12, n.15; Ex. 2005. Within a few weeks, however, Arrows Up resumed telling the market that pictures of SandBox containers were in fact Arrows Up's products. Ex. 2003 at 12. This led SandBox to file a second state court case in January 2016. *Id.* at 12, n.16.

Arrows Up sought leverage to encourage SandBox to settle the case and avoid its own liability. For example, it used SandBox's design information to file new patent applications aimed at SandBox's own technology. *Id.* at 12. Once the first of these patent applications issued as a patent, Arrows Up promptly sued SandBox for allegedly infringing it. *Arrows Up, LLC v. U.S. Silica Holdings, Inc. and SandBox Logistics, LLC*, Case No. 4:17-cv-01945 (S.D. Tex. June 25, 2017). Arrows Up continued to file patent applications based on information SandBox had disclosed to it under their NDA. As more of its ill-gotten patents issued, Arrows Up amended its complaint to add them to the infringement action against SandBox. Ex. 2003 at 12-13.

Arrows Up continued to seek ways to force SandBox to settle its second state court case. As part of that strategy, Arrows Up filed *inter partes* review ("IPR") petitions challenging four SandBox patents, including this one, on June 11, 2018. IPR2018-01230 (challenging U.S. Patent No. 9,248,772); IPR2018-01231 (challenging U.S. Patent No. 9,617,066); IPR2018-01232 (challenging U.S. Patent No. 9,682,815); IPR2018-01233 (challenging U.S. Patent No. 9,914,602). The four

challenged patents were never asserted against Arrows Up, as SandBox has never sued Arrows Up for patent infringement. Arrows Up's IPRs, including this one, are nothing more than Arrows Up's attempt to get additional ammunition in an attempt to avoid liability for its repeated bad acts.

On July 3, 2018, however, a twelve-person jury unanimously found that Arrows Up breached multiple terms of the NDA, the Settlement Agreement, and committed fraud. Ex. 2003 at 13. The jury awarded SandBox actual and punitive damages totaling over \$43 million. *Id.* The state court, in turn, declared that the “frac sand shipping containers Arrows Up has manufactured, sold, or leased since signing the Settlement Agreement” are “Related Inventions” and “are owned solely and exclusively by Plaintiff SandBox.” Ex. 2006 at 3. The state court further found that Arrows Up converted SandBox's property and awarded SandBox “title to and possession of any frac sand shipping containers that Arrows Up has manufactured, sold, or leased since entering into the Settlement Agreement.” *Id.*

The merits of this challenge are no better than that of the state court case Arrows Up recently lost. As described in detail below, Petitioner has failed to meet its burden to show that there is a reasonable likelihood that claims 1-11 of the '772 Patent (“the Challenged Claims”) are unpatentable.

## II. THE CLAIMED INVENTION

The '772 Patent is directed to a “method of delivering, transporting, and storing proppant for delivery and use at a well site.” Ex. 1001 at Title. Proppant is material, such as grains of sand, ceramic, or other particulates, that is used during hydraulic fracturing operations. *Id.* at 1:36-38. During fracturing operations, a wellbore is drilled into a fossil fuel reservoir rock formation. *Id.* at 1:30-31. A high pressure fracturing fluid, typically consisting of water, proppant, and chemical additives, is injected into the wellbore. The energy of the injection creates new fractures in the fossil fuel reservoir rock formation, which can increase both the rate at which the fossil fuels are extracted and the amount of fossil fuels ultimately recovered from the operation. *Id.* at 1:31-34. The high pressure fracturing fluid contains proppant to help maintain the fracture width and to prevent the fractures from closing when the injection is stopped. *Id.* at 1:34-35.

By far the most dominant form of proppant is silica sand. *Id.* at 1:44-46. In a typical hydraulic fracturing operation, large amounts of proppant are required, but it is difficult to effectively transport proppant to the well site, or to effectively store the proppant once it is transported to the well site. *Id.* at 1:59-63. Prior art methods of transporting proppant using railcars and pneumatic bulk trailers added costs to the fracturing operation (*id.* at 2:29-42), and prior art methods of storing proppant at a well site required large capital investments in the storage facilities (*id.* at 2:1-7).

The '772 Patent addresses these problems by providing a method for delivering, transporting, and storing proppant. *Id.* at Title. Figure 3 of the '772 Patent is presented below.

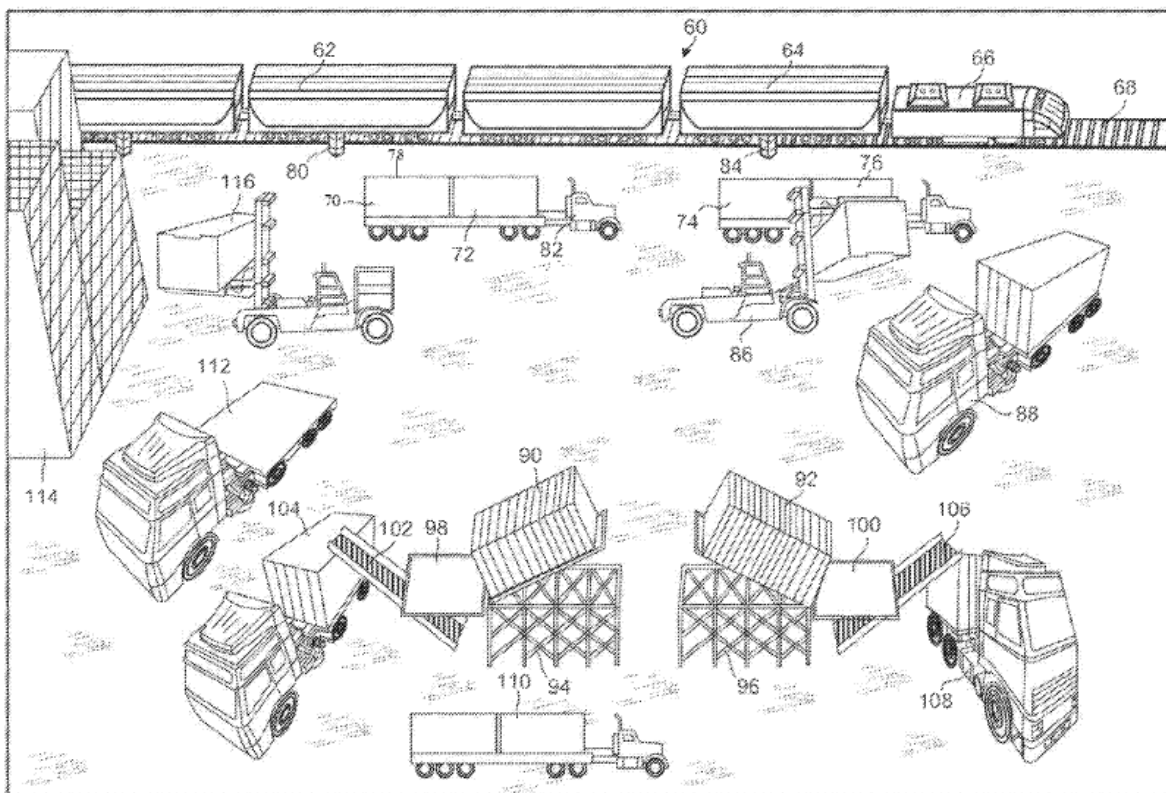


FIG. 3

“FIG. 3 shows a system 60 of the present invention.” *Id.* at 7:54. In the embodiment illustrated in Figure 3, a load of proppant is transported to a desired location using vessel 62 associated with a bulk material train 64. *Id.* at 7:54-64. The proppant is unloaded into containers 70, 72, 74 and 76, which are located in close proximity to the vessel 62 and supported on the beds of trucks. *Id.* at 7:65-8:14. A container loader/unloader 86 lifts and moves the containers as needed. *Id.* at 8:19-

20. Containers 114, which may be either filled with proppant or empty, are shown in a stacked configuration. *Id.* at 8:55-65.

Figure 1 of the '772 Patent illustrates a preferred embodiment of a container:

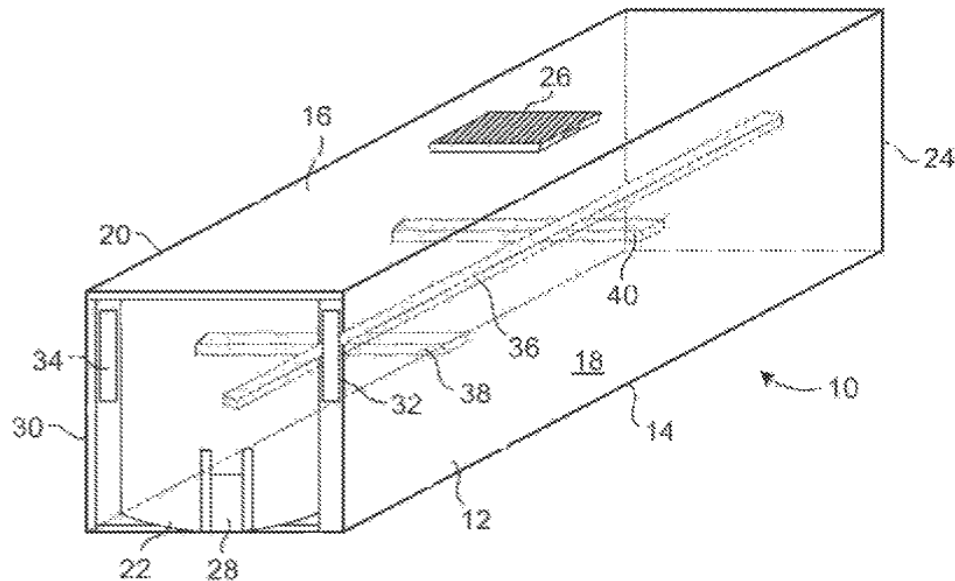


FIG. 1

This preferred embodiment of the '772 Patent's container includes "a bottom wall 14, a top wall 16, a pair of side walls 18 and 20 and a pair of end walls 22 and 24." *Id.* at 6:26-28. "The end wall 22 extends between the bottom wall 14 and the top wall 16," whereas "end wall 24 extends between the bottom wall 14 and the top wall 16 and also between the side walls 18 and 20." *Id.* at 6:32-35. In the preferred embodiment of the '772 Patent's container, "flow gate 28 is positioned on the end wall 22," and "is openable so as to allow the proppant to flow outwardly of the

interior volume of the container.” *Id.* at 6:38-41. End wall 22 in the preferred embodiment also includes inlet 32 (*id.* at 6:53-55) and vent 34 (*id.* at 6:65-67).

Claim 1 of the '772 Patent, set forth below, is the only independent claim:

A method of transporting proppant, the method comprising:

- a) vertically stacking a plurality of empty proppant containers in close proximity to a rail spur so that one of the plurality of empty proppant containers overlies another one of the plurality of empty containers thereby to reduce footprint of the area required adjacent the rail spur to store the plurality of empty proppant containers, each of the plurality of empty containers including at least a first end surface and at least a second different end surface and each of the first and second end surfaces having a plurality of upright structural support members thereon to enhance integrity of the container so that a large amount of weight can be stacked upon the container and so that heavy weight can be stored therein;
- b) filling the plurality of empty proppant containers with proppant from one or more proppant transporting rail vehicles thereby to produce a plurality of proppant filled containers;
- c) transferring the plurality of proppant filled containers with a loader onto one or more support platforms associated with one or more proppant transporting road vehicles.

Claims 2-11 depend from claim 1 and recite additional requirements and method steps. The two dependent claims discussed herein are claims 2 and 4.

Claim 2 recites:

The method of claim 1, wherein the plurality of proppant filled containers comprises a first plurality of proppant filled containers, and the method further comprising:

filling a second plurality of empty proppant containers with proppant from one or more proppant transporting rail vehicles thereby to produce a second plurality of proppant filled containers: and

vertically stacking the second plurality of proppant filled containers with a loader so that one of the plurality of proppant filled containers overlies another one of the plurality of filled containers to reduce the footprint of the area required for storage of the proppant in close proximity to the rail spur.

Claim 4 recites:

The method of claim 1, further comprising:

conveying the proppant from the one or more proppant transporting rail vehicles to the plurality of empty proppant containers on a first conveyor; and

conveying the proppant from one or more of the plurality of proppant tilled<sup>1</sup> containers to one or more proppant transporting road vehicles on a second conveyor.

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<sup>1</sup> Patent Owner agrees with Petitioner that “tilled” should be read as “filled.”

### **III. OVERVIEW OF ASSERTED REFERENCES**

#### **A. Sheesley**

Petitioner relies on U.S. Patent Application Publication No. 2013/0206415 to Sheesley (“Sheesley”), filed February 10, 2012 and published August 15, 2013. Ex. 1003 at Cover. Sheesley discloses a “cargo container ... modified to carry a fracing proppant such as sand from a quarry or source to the frac site.” *Id.* at Abstract. Sheesley was before the examiner during prosecution of the ‘772 Patent. Ex. 1001 at 3.

#### **B. Mintz**

Petitioner relies on U.S. Patent No. 8,915,691 to Mintz (“Mintz”), filed January 1, 2012 and issued December 23, 2014. Ex. 1004 at Cover. Petitioner argues Mintz is entitled to claim priority to a provisional patent application, filed December 31, 2010. Paper 1 (“Pet.”) at 11. Mintz discloses an “[a]pparatus for transporting frac sand and/or proppant for use in standard ISO intermodal containers and for delivering frac sand and/or proppant to well sites.” Ex. 1004 at Abstract.

#### **C. Uhryn**

Petitioner relies on U.S. Patent App. No. 2013/0022441 to Uhryn et al. (“Uhryn”), filed May 18, 2012 and published January 24, 2013. Ex. 1005 at Cover. Uhryn discloses a “method of bulk transport of proppant.” Ex. 1005 at Abstract.



Uhyrn was before the examiner during prosecution of the '772 Patent. Ex. 1001 at 3.

#### IV. CLAIM CONSTRUCTION

"A second different end surface": Patent Owner submits that the broadest reasonable construction of "a second different end surface" is "an additional end surface that is not the same as the first end surface." This construction is consistent with the plain meaning of the term and the specification.

At institution, the Board agreed that "the claimed 'second different end surface' limitation requires that the two end surfaces are structurally different." Paper 7 at 8-10. The evidence shows the Board's construction is correct and should be maintained.

"Generally claim terms should be construed consistently with their ordinary and customary meanings." *Merck & Co., Inc. v. Teva Pharma. USA, Inc.*, 395 F.3d 1364, 1370 (Fed. Cir. 2005). "A claim construction that gives meaning to all the terms of the claim is preferred over one that does not do so." *Id.* at 1372; *see also Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1119 (Fed. Cir. 2004) ("all claim terms are presumed to have meaning in a claim"). Therefore, the claim term "a second different end surface" should be construed to give meaning to **both** the word "second" **and** the word "different." The second end surface is not different just because it is not the first end surface; that difference was

already addressed by the use of the word “second.” “Different” must mean something more. And both “second” and “different” should be given their ordinary and customary meanings. Patent Owner’s proposed construction, which states that “a second different end surface” is both an additional end surface (a second, rather than the first, end surface) *and* an end surface that is not the same as the first end surface (a different end surface), comports with the plain and ordinary meaning to a POSITA. *See* Ex. 2008 ¶ 29.

This construction is also consistent with the description of the preferred embodiment of the claimed containers in the specification. Figure 1 depicts the preferred embodiment of the claimed container. Ex. 1001 at Fig. 1. It includes “a pair of end walls 22 and 24.” *Id.* at Fig. 1, 6:26-28. As shown in the figure and described in the specification, in the preferred embodiment, end walls 22 and 24 are not the same. “The end wall 22 extends between the bottom wall 14 and the top wall 16,” whereas end wall 24 extends between those top and bottom walls “and also between the side walls 18 and 20.” *Id.* at 6:32-35. Although the specification does not specifically describe end wall 22 extending between side walls 18 and 20, Figure 1 shows that it does. *Id.* at Fig. 1. “[E]nd wall 22 is recessed inwardly” from the pair of sidewalls and the bottom and top walls, and end wall 22 has a “generally convex surface.” *Id.* at Fig. 1, 6:42-46. Thus, arguments as to these end walls also

apply to the surfaces of these walls. *See also id.* at 7:45-46 (“[T]he end surface 30 has structural uprights 44 and 46 thereon.”).

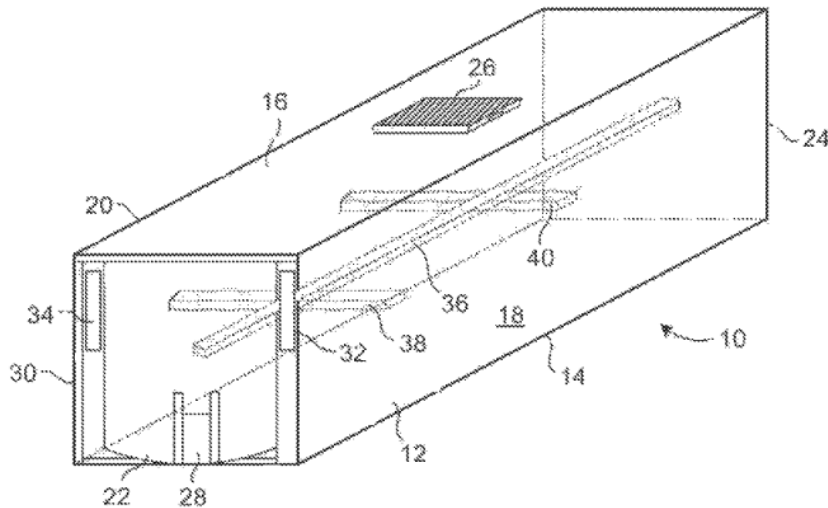


FIG. 1

Neither of those things are true for end wall 24. Additionally, in the preferred embodiment, only end wall 22 includes a flow gate 28, an inlet 32, and a vent 34. *Id.* at Fig. 1, 6:38-39, 6:53-67. These disclosures support Patent Owner’s proposed construction that “a second different end wall” is “an additional end surface that is not the same as the first end surface.”

## V. THE CHALLENGED CLAIMS ARE PATENTABLE

Petitioner asserts three grounds against the Challenged Claims, all based on Sheesley. Pet. at 3. But Sheesley does not disclose several claim limitations, and Petitioner did not assert that these limitations are disclosed or rendered obvious by any other references. In particular, Sheesley does not disclose stacking empty

proppant containers in close proximity to a rail spur or the claimed “second different end surface,” as recited in claim 1 of the '772 Patent. Additionally, Sheesley does not disclose stacking full proppant containers in close proximity to a rail spur, as recited in claim 2 of the '772 Patent. Further, Sheesley does not disclose transferring proppant from the claimed proppant containers to a separate proppant transporting road vehicle, as recited in claim 4 of the '772 Patent, and Uhryn's disclosure does not remedy this failure.

Patent Owner submits an expert declaration from Fred P. Smith, P.E., C.S.P., (Ex. 2008) in support of the nonobviousness of the Challenged Claims. Petitioner's expert declarant, Mr. Schaaf, adds nothing of value in his conclusory “declaration,” and made admissions at deposition that undermine Petitioner's arguments. Mr. Schaaf's declaration merely repeats Petitioner's arguments, only injecting phrases such as “in my opinion” at different points. *Compare generally* Pet. at 23-63 with Ex. 1002 ¶¶ 63-136. “Expert testimony that does not disclose the underlying facts or data on which the opinion is based is entitled to little or no weight.” 37 C.F.R. § 42.65(a). Patent Owner sets forth specifically which of Mr. Schaaf's opinions should be disregarded below.

**A. Sheesley Does Not Disclose Stacking Empty Proppant Containers In Close Proximity to a Rail Spur. (All Challenged Claims)**

**1. Petitioner's evidence is insufficient.**

Claim 1, the only independent claim of the '772 Patent, recites the step of “vertically stacking a plurality of empty proppant containers in close proximity to a rail spur so that one of the plurality of empty proppant containers overlies another one of the plurality of empty containers thereby to reduce footprint of the area required adjacent the rail spur to store the plurality of empty proppant containers.”

Ex. 1001 at Claim 1.

Petitioner asserts that Sheesley “discloses this limitation,” which it labels [1(a)(i)]. Pet. at 24-26; Ex. 1002 ¶¶ 65-69. Petitioner does *not* assert that Sheesley renders this limitation obvious, or that another reference discloses this limitation and renders this limitation obvious in combination with Sheesley. *Id.* That is, although Petitioner's Ground 2 states that claim 1 is rendered obvious by Sheesley, in combination with Mintz, the use of Mintz is expressly limited to meeting the “plurality of upright structural support members” limitation. Pet. at 46-47 (“[T]o the extent that it is found that Sheesley does not disclose ‘each of the first and second end surfaces having a plurality of upright structural support members thereon to enhance integrity of the container so that a large amount of weight can be stacked upon the container and so that heavy weight can be stored therein,’ Mintz discloses

this limitation.”). Thus, Petitioner relies exclusively on the disclosure of Sheesley to disclose limitation [1(a)(i)].

As is stated in the plain claim language, element [1(a)(i)] requires “vertically stacking a plurality of empty proppant containers in close proximity to a rail spur.” Ex. 1001 at Claim 1. Sheesley does not disclose this portion of element [1(a)(i)].

Petitioner first argues that Sheesley generally discloses that modified containers may be stacked while empty. Pet. at 24. But Petitioner's citations show that Sheesley only discloses empty containers stacked at the frac site. *Id.* (citing Ex. 1003 (Sheesley) at [0018], [0021], Fig. 3). Though Petitioner implies that Sheesley's Figure 3 illustrates the general stacking of empty containers, Sheesley specifically states that “[a]t the *well site to be fraced*, modified cargo containers 270 can be stacked as shown in FIG. 3.”<sup>2</sup> Ex. 1003 at [0083]. And paragraph [0018] of Sheesley cited by Petitioner states that containers can be stacked “either while in transit or at the frac site.” *Id.* at [0018]. This disclosure provides no support for “vertically stacking a plurality of empty proppant containers in close proximity to a rail spur,” as required by claim 1, and is not nearly as broad as Petitioner suggests. Ex. 2008 ¶ 36.

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<sup>2</sup> All emphasis added unless otherwise indicated.

Next, Petitioner argues that Sheesley discloses filling containers at a rail site. Pet. at 24-25. Even taken at face value, this statement does not disclose “stacking a plurality of empty proppant containers in close proximity to a rail spur,” as required by the claim language, because Petitioner does not argue these are “stacked,” “empty,” or “in close proximity to a rail spur.” *See id.*; Ex. 2008 ¶ 37.

Petitioner's final argument is that Sheesley's containers “may be filled while in a stacked configuration,” citing to paragraphs [0023] and [0084] as well as Figure 5 of Sheesley. Pet. at 25. Paragraph [0023] of Sheesley describes Figure 5 as “showing sand flowing through stacked modified cargo containers” and paragraph [0084] explains how “one modified cargo container, while stacked, can feed directly into another modified cargo container located there below.” Ex. 1003 at [0023], [0084]. However, Sheesley states, and Figure 5 confirms, that “FIG. 5 illustrates the loading of multiple modified cargo containers 302, 304, 309 and 311 *while sitting on rail car* 313.” Ex. 1003 at [0085]. Thus, at best, Sheesley discloses *filling* stacked containers *on* a rail car, not “*vertically stacking* a plurality of empty containers *in close proximity to* a rail spur.” Ex. 2008 ¶ 38.

Petitioner's conclusory statement that empty proppant containers could be filled “on the rail spur,” which “would necessarily be in ‘close proximity’ to the rail spur” is simply wrong. Pet. at 26. The '772 Patent makes clear that “in close proximity to” is distinct from “on.” Ex. 2008 ¶¶ 39-41.

Figure 3 of the '772 Patent “is an illustration of the system of the present invention.” Ex. 1001 at 6:19-20. Specifically, “bulk material train 64 is driven by an engine 66 located *on* a rail spur 68” and “in the present invention, the bulk material is delivered by the bulk material train 64 to the desired location.” *Id.* at 7:57-61. Bulk material train 64 includes a vessel 62 “in the nature of hoppers associated with [] bulk material train 64.” *Id.* at 7:56-57. In contrast, “containers 70, 72, 74 and 76 can be located *in proximity* to the vessel 62 and adjacent to the bulk material train 64.” *Id.* at 7:66-8:1. This is shown below in annotated Figure 3 where the rail spur 68, engine 66, and bulk material train 64 are outlined in red and the containers 70, 72, 74 and 76 are outlined in blue:

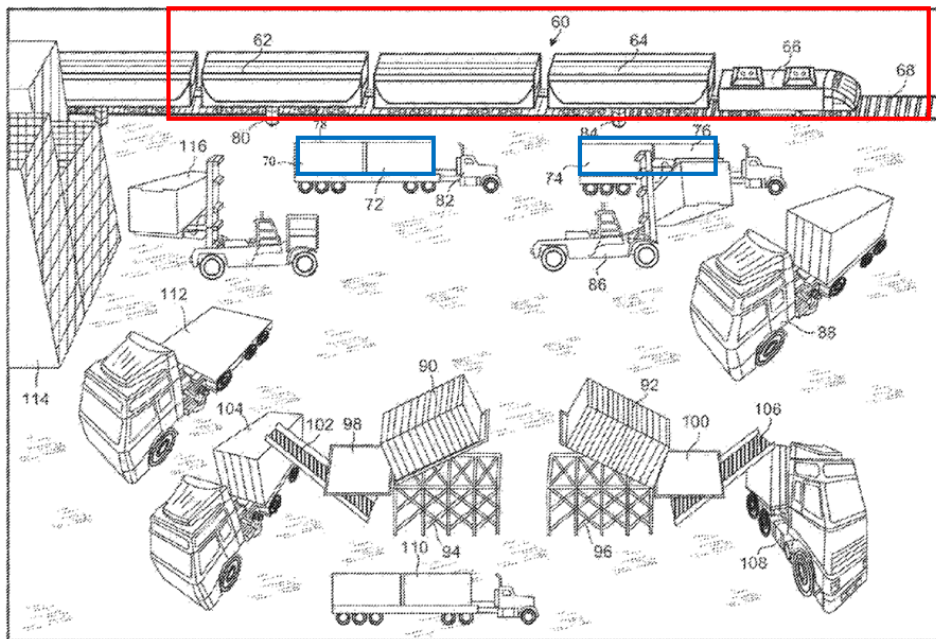


FIG. 3

While it is clear that bulk material train 64 and engine 66 are on rail spur 68, it is similarly clear that containers 70, 72, 74, and 76 are situated in close proximity



to the rail spur, not on it. *See* Ex. 2009 (4/12/19 Schaaf Dep. Tr.) at 32 (“Q: And bulk material train 64 is driven by engine 66, correct? A: That’s correct, yes. Q: And that is located on rail spur 68, correct? A: Yes.”); *id.* at 33 (“Q: These containers marked 70, 72, 74, and 76 are in close proximity to the vessel 62 of the bulk material train 64, right? A: That’s correct, yes.”); *id.* at 42 (“Q: “[Y]ou wouldn’t say containers 70, 72, 74, and 76 are on rail line 68, correct? A: That’s correct, yes.”). Indeed, an invention whose stated purpose is to “provide a system for the storage and transport of proppant that can be located in proximity to the rail spur” (Ex. 1001 at 4:17-19) would not store empty containers on rail cars on the rail spur. The stated advantage of the system of Figure 3 is that “[t]he vessel 62 of the bulk material train 64 can be immediately unloaded at this desired location so that the engine 66 can return the bulk material train 64 for other railroad usages.” *Id.* at 7:61-64. If the bulk material train 64 on rail spur 68 were used to store empty containers, engine 66 would not be free to return bulk material train 64 for other railroad usages. Ex. 2008 ¶¶ 40-41. Rather, it would continue to be used to store empty containers. *Id.* Thus, Petitioner’s showing of stacked containers filled *on* a rail car does not disclose “vertically stacking a plurality of empty containers *in close proximity to* a rail spur” as required by element [1(a)(i)].

**2. Mr. Schaaf's declaration adds no probative value.**

Throughout its arguments that Sheesley discloses element [1(a)(i)], Petitioner cites to paragraphs 65-66 and 68-69 of Mr. Schaaf's declaration. Pet. at 24-26. Even assuming that Petitioner also meant to cite to paragraph 67 of Mr. Schaaf's declaration, all five paragraphs should be given no weight. "Merely repeating an argument from the Petition in the declaration of a proposed expert, does not give that argument enhanced probative value." *Robert Bosch Tool Corp. v. SD3, LLC*, IPR2016-01755, Paper 15 at 17 (P.T.A.B. Mar. 31, 2017) (citing 37 C.F.R. § 42.65(a), giving expert declaration "no probative weight" and denying institution); *see also Securenet Techs., LLC v. Icontrol Networks, Inc.*, IPR2016-01911, -01916, Paper 9 at 11, 14-15 (P.T.A.B. Mar. 31, 2017) (denying institution and stating expert testimony is conclusory where it merely repeated Petitioner's conclusory argument "without adequate elaboration or explanation"); *InfoBionic, Inc. v. Braemer Mfg., LLC*, IPR2015-01704, Paper 11 at 6 (P.T.A.B. Feb. 16, 2016) (denying institution where expert's testimony was not "persuasive or helpful as it repeats the Petitioner's arguments and offers little or no elaboration"); *Qualcomm Inc. v. ParkerVision Inc.*, IPR2015-01819, Paper 8 at 29 (P.T.A.B. Mar. 8, 2016) (denying institution and finding expert testimony regarding motivation to combine not credible "because it essentially repeats the arguments advanced by Qualcomm in its Petition.")).

Paragraphs 65-69 of Mr. Schaaf's declaration simply parrot the Petition *verbatim*, the only difference being the addition of "it is my opinion that," "in my opinion," and "[t]herefore, in my opinion" in paragraphs 66, 68, and 69, respectively. Compare Pet. at 24-27 with Ex. 1002 ¶¶ 65-69. These sections of the Petition (left) and Mr. Schaaf's Declaration (right) are shown with additional (or substitute) language underlined in red (citations to Mr. Schaaf's Declaration in the Petition omitted).

Petition at 24-27	Ex. 1002 ¶¶ 65-69
<p>Sheesley discloses that the modified containers may be stacked while empty. <i>See</i> Ex. 1003 (Sheesley) ¶[0021] ("FIG. 3 is a pictorial illustration of the stackability of modified cargo containers with or without sand therein."); ¶[0018] ("Also, the modified frac containers may be stacked in any conventional mean, either while in transit or at the frac site."); Fig. 3. As shown in Figure 3, such containers are stacked so that one empty container overlies another empty container, necessarily reducing the footprint of the area taken up by the containers.</p>	<p><u>65.</u> Sheesley discloses that the modified containers may be stacked while empty. <i>See</i> Ex. 1003 (Sheesley) ¶[0021] ("FIG. 3 is a pictorial illustration of the stackability of modified cargo containers with or without sand therein."); ¶[0018] ("Also, the modified frac containers may be stacked in any conventional mean, either while in transit or at the frac site."); Fig. 3. As shown in Figure 3, such containers are stacked so that one empty container overlies another empty container, necessarily reducing the footprint of the area taken up by the containers.</p>

Petition at 24-27	Ex. 1002 ¶¶ 65-69
<p>Sheesley further discloses that the modified containers can be filled with proppant at a rail site. As disclosed in Sheesley, the modified container can be used to obtain proppant at any of the locations in the supply chain. Specifically, Sheesley explains that “sand from the sand quarry 30 <i>or source</i> can now be loaded by a conveyer 268 to a modified cargo container.” Ex. 1003 (Sheesley) ¶[0078] (emphasis added); Abstract (“A cargo container is modified to carry a fracing proppant such as sand from a quarry or source to the frac site.”). The source where proppant is obtained “may be at any point along a supply chain of said proppant.” Ex. 1003 (Sheesley) at claim 21; claim 15. As Sheesley explains, the supply chain includes a rail site. <i>See</i> Ex. 1003 (Sheesley) ¶[0017] (“The modified cargo containers can then move through all of the normal modes of transportation including ship, barge, rail or by truck, all the way to the frac</p>	<p><u>66</u>. Sheesley further discloses that the modified containers can be filled with proppant at a rail site. As disclosed in Sheesley, the modified container can be used to obtain proppant at any of the locations in the supply chain. Specifically, Sheesley explains that “sand from the sand quarry 30 <i>or source</i> can now be loaded by a conveyer 268 to a modified cargo container.” Ex. 1003 (Sheesley) ¶[0078] (emphasis added); Abstract (“A cargo container is modified to carry a fracing proppant such as sand from a quarry or source to the frac site.”). The source where proppant is obtained “may be at any point along a supply chain of said proppant.” Ex. 1003 (Sheesley) at claim 21; claim 15. As Sheesley explains, the supply chain includes a rail site. <i>See</i> Ex. 1003 (Sheesley) ¶[0017] (“The modified cargo containers can then move through all of the normal modes of transportation including ship, barge, rail or by truck, all the way to the frac</p>

Petition at 24-27	Ex. 1002 ¶¶ 65-69
<p>site”); ¶[0019]; ¶[0042]; ¶[0049]; ¶[0077]; ¶[0078]; Fig. 1. Thus, Sheesley discloses containers that may be filled with proppant at a rail site.</p>	<p>site”); ¶[0019]; ¶[0042]; ¶[0049]; ¶[0077]; ¶[0078]; Fig. 1. Thus, <u>it is my opinion that</u> Sheesley discloses containers that may be filled with proppant at a rail site.</p>
<p>Moreover, Sheesley discloses that the modified containers may be filled while in a stacked configuration, where container 302 “receives sand 306 from auger 303 through upper hatch 305,” and “may feed sand 306 or any other granular proppant therein through lower hatch 308 in modified cargo container 302 and upper hatch 310 into modified cargo container 304 located immediately there below.” Ex. 1003 (Sheesley) ¶[0023]; ¶[0084]; Fig. 5. As shown in FIG. 5 (reproduced below), the container 302 underlies the source of proppant, auger 303.</p>	<p><u>67.</u> Moreover, Sheesley discloses that the modified containers may be filled while in a stacked configuration, where container 302 “receives sand 306 from auger 303 through upper hatch 305,” and “may feed sand 306 or any other granular proppant therein through lower hatch 308 in modified cargo container 302 and upper hatch 310 into modified cargo container 304 located immediately there below.” Ex. 1003 (Sheesley) ¶[0023]; ¶[0084]; Fig. 5. As shown in FIG. 5 (reproduced below), the container 302 underlies the source of proppant, auger 303.</p>

Petition at 24-27	Ex. 1002 ¶¶ 65-69
A POSITA at the time would understand that Sheesley's auger could provide proppant received from a rail car on the rail spur (the "source" on the supply chain of proppant) into Sheesley's empty proppant containers, and that such containers would necessarily be in "close proximity" to the rail spur.	<u>68. In my opinion</u> , a POSITA at the time would understand that Sheesley's auger could provide proppant received from a rail car on the rail spur (the "source" on the supply chain of proppant) into Sheesley's empty proppant containers, and that such containers would necessarily be in "close proximity" to the rail spur.
Sheesley therefore discloses this limitation.	<u>69. Therefore, in my opinion</u> , Sheesley discloses this limitation.

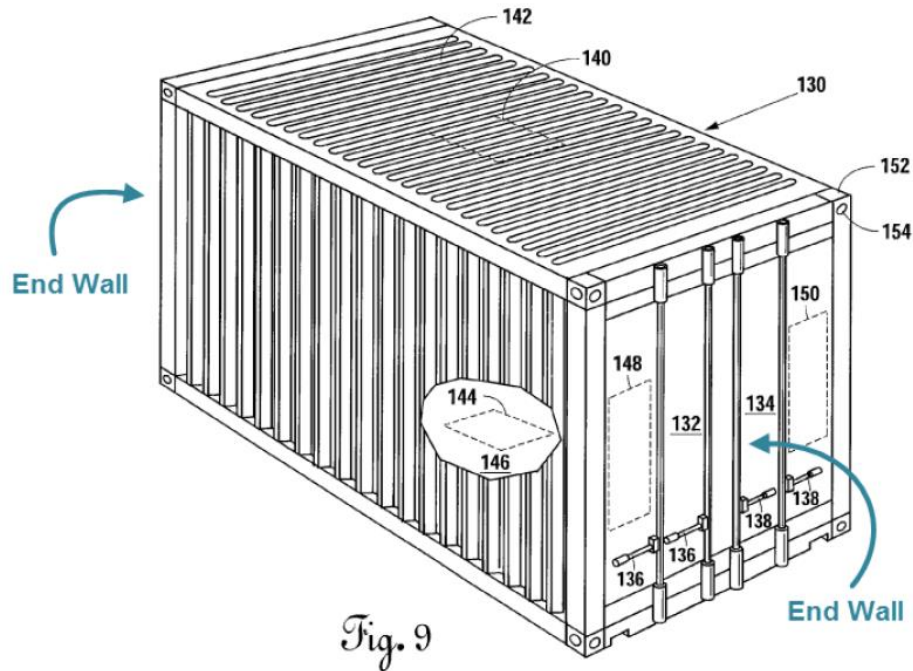
It is beyond clear that Mr. Schaaf's opinions are not his own, but are instead those of Petitioner's lawyers who prepared the Petition. Thus, paragraphs 65-69 of Mr. Schaaf's declaration add no probative weight to Petitioner's arguments and should be disregarded.

**B. Sheesley Does Not Disclose "A Second Different End Surface." (All Challenged Claims)**

**1. Petitioner's evidence is insufficient.**

Claim 1 of the '772 Patent requires a container "including at least a first end surface and at least a second different end surface." Ex. 1001 at Claim 1. Again, Petitioner asserts that Sheesley "discloses this limitation," not that Sheesley renders it obvious. Pet. at 26-27; Ex. 1002 ¶¶ 70-71. Petitioner specifically identifies the

two “End Walls” of Sheesley’s Figure 9, and states that this shows both a first end surface and a second different end surface. Pet. at 26-27. Petitioner’s annotated version of Sheesley’s Figure 9 is reproduced below:



As discussed *supra* section V.A.1, Ground 2 does not address this limitation. Thus, Petitioner relies exclusively on the disclosure of Sheesley to disclose this limitation, which it labels [1(a)(ii)]. Petitioner has failed to demonstrate Sheesley discloses “a second different end surface.”

At institution, the Board agreed with Patent Owner’s claim construction for “a second different end surface,” finding that “the claimed ‘second different end surface’ limitation requires that the two end surfaces are structurally different.” Paper 7 at 10. The Board preliminarily found, however, that Petitioner’s cite to paragraph [0050] of Sheesley, which states that the container “has doors 132 and

134, on the one end thereof,” was sufficient to establish a “reasonable likelihood” that Sheesley teaches this limitation. *Id.* at 16-17. But Petitioner has made no showing that the two identified “End Walls” are structurally different. Pet. at 26-27. Indeed, Petitioner does not even state which of the two “End Walls” in its annotated Figure 9 is the first end surface and which is the second end surface. *Id.* Respectfully, the Board’s preliminary finding is incorrect, as the evidence shows that Sheesley does not teach this limitation.

Petitioner’s inability to map the claim to this prior art stems from the fact that Sheesley simply does not have the required disclosure. Only one of the alleged “End Walls” in Sheesley’s Figure 9 has even been given a reference number. The lack of a reference number for what Petitioner labels only as an “End Wall” confirms that there is no discussion of this aspect of the container shown in Figure 9 of Sheesley from which the Board could find that this unreferenced “End Wall” was not the same as the “End Wall” labeled with, *inter alia*, doors 132 and 134. Nowhere does Sheesley state that the unreferenced “End Wall” annotated by Petitioner is structurally different from the other “End Wall.”

Paragraph [0050] of Sheesley, on which Petitioner relies, states that “a standard 8 ft. x 8-1/2 ft. x 20 ft. cargo container 130 is shown.” Ex. 1003 at [0050]. And Sheesley’s statement that the container “has doors 132 and 134, on the one end thereof” does not mean that the other end does not have the same doors. *Id.* Sheesley



simply does not describe another “End Wall.” Indeed, every figure of Sheesley that shows an “End Wall” as labeled by Petitioner shows it equipped with doors. *Id.* at Figs. 3-4, 7-10, 14-15. A POSITA would know that many ISO containers were and are available with doors on both ends, including standard 20 ft. cargo containers as disclosed by Sheesley. Ex. 2008 ¶ 46; Ex. 2010 (20 ft. ISO Containers with doors on both ends).

Sheesley is silent as to whether the hidden “End Wall” labeled by Petitioner is the same as the visible one. Faced with this complete lack of disclosure in Sheesley, Petitioner would only be able to rely on inherent disclosure of this limitation to carry its burden to show that claim 1 is unpatentable, though nowhere does Petitioner make an inherency argument. Even if Petitioner did attempt to show inherency, at most it is *possible* that the hidden “End Wall” does not have the same doors as the visible “End Wall.” But “mere possibility is not enough.” *PersonalWeb Techs., LLC v. Apple, Inc.*, 917 F.3d 1376, 1382 (Fed. Cir. 2019) (“The mere fact that a certain thing *may* result from a given set of circumstances is not sufficient.”).

## **2. Mr. Schaaf's declaration adds no probative value.**

Petitioner also cites to paragraphs 70-71 of Mr. Schaaf's declaration in support of its argument that Sheesley describes both a first end surface and a second different end surface. Pet. at 27. But again, Mr. Schaaf's declaration simply parrots the Petition *verbatim*, aside from adding “it is my opinion that” in paragraph 71.

*Compare* Pet. at 26-27 with Ex. 1002 ¶¶ 70-71. As discussed *supra* section V.A.2, this testimony adds no probative weight to Petitioner's position and should be disregarded.

**C. Sheesley Does Not Disclose Storing Stacked Containers in Close Proximity to a Rail Spur. (Claim 2)**

**1. Petitioner provides no evidence in its discussion of claim 1 to support its argument for claim 2.**

Petitioner admits that claim 2 “requires *filling and stacking* a *second* plurality of containers in close proximity to the rail spur.” Pet. at 33. Petitioner then states that in its discussion of claim 1 (no specific element is cited), it identified where “Sheesley discloses filling and stacking a first plurality of containers in close proximity to the rail spur with a loader.” *Id.* Petitioner appears to be referencing limitation [1(a)(i)], which requires stacking a plurality of *empty* containers in close proximity to a rail spur.

First, as discussed *supra* section V.A.1, Petitioner has not shown that Sheesley discloses stacking containers *in close proximity* to a rail spur. Second, Petitioner does not offer any explanation as to how Sheesley discloses stacking *full* containers in close proximity to a rail spur as required by claim 2. Petitioner only states that Sheesley discloses that modified cargo containers may be filled while stacked on a rail car. *Id.* at 24-26. *On* a rail car is not the same as *in close proximity* to a rail spur. *See supra* section V.A.1. Nowhere does Petitioner provide evidence, or even

argue, that full containers themselves are stored in a stacked configuration in close proximity to the rail spur, as required by claim 2.

**2. Petitioner's assertion regarding what a POSITA "could" do fails to show Sheesley discloses the claim 2 limitations.**

Petitioner states that Sheesley "discloses" the limitations of claim 2, not that Sheesley renders them obvious. Pet. at 34; Ex. 1002 ¶ 81. Without any support for claim 2 in its arguments for claim 1, Petitioner is left only with a conclusory argument that admits Sheesley lacks the required disclosure. In particular, Petitioner's argument is limited to the statement that "[a] POSITA would understand that multiple containers *could* be filled with proppant and stacked at the rail spur, particularly in light of Sheesley's disclosure of multiple filled and stacked containers as shown in Figure 3 below." Pet. at 33. Petitioner statement that multiple containers *could* be filled with proppant concedes that Sheesley does not *actually* disclose this claim 2 limitation. Of course, actual disclosure is required to meet a claim limitation. *PAR Pharm., Inc. v. TWI Pharm., Inc.*, 773 F.3d 1186, 1194 (Fed. Cir. 2014) (in an obviousness determination, "[w]e first must determine whether [the accused infringer] carried its burden to prove that all claimed limitations are disclosed in the prior art"); see *Medichem, S.A. v. Rolabo, S.L.*, 437 F.3d 1157, 1164 (Fed. Cir. 2006) (stating that we consider motivation to combine and reasonable expectation of success only "if all the elements of an invention are found in a combination of prior art references").

### 3. Petitioner's evidence is insufficient.

Petitioner supports its argument that Sheesley discloses claim 2 with Figure 3 of Sheesley. Pet. at 34. As an initial matter, Sheesley's Figure 3 discloses stacked containers "[a]t the well site to be fraced," not at the rail spur. Ex. 1003 at [0083]. Furthermore, Sheesley teaches that rail spurs and frac sites are distinct. Ex. 2008 ¶¶ 50-51. Figure 2 of Sheesley depicts storage locations (red) separate from the rail spur (blue) as shown below:

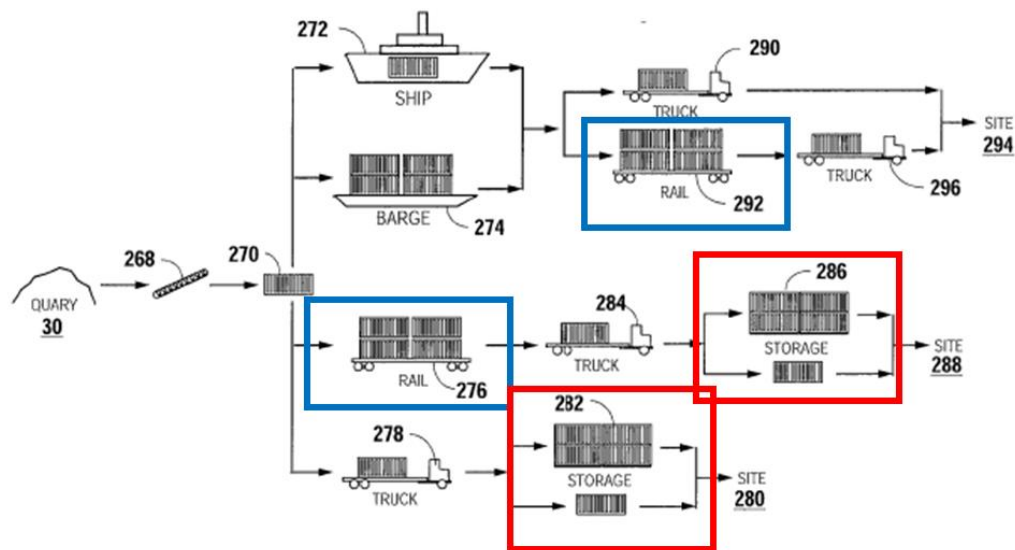


Fig. 2

Sheesley states that the containers 270 "can be taken directly to the fracing site 280 or placed in storage 282 at the fracing site 280." Ex. 1003 at [0079]. Sheesley then specifically distinguishes between the rail spur location and the frac site location: "Concerning sand being hauled by rail 276, the modified cargo containers 270 will have to be off-loaded onto flatbed truck trailer 284, which flatbed truck trailer 284

can then take the modified cargo containers 270 filled with fracing sand either to storage 286 or to the fracing site 288.” Ex. 1003 at [0080]; *see id.* at [0081] (“If being hauled by the flatbed truck trailer 290, the modified cargo container 270 can be taken directly to the fracing site 294. However, if modified cargo containers 270 are being transported by rail car 292, they must be off-loaded onto flatbed truck trailer 296 prior to be [sic] taken to the fracing site 294.”). Sheesley discloses that its container is offloaded from the rail spur to a flatbed truck and then taken to the frac site to be stored; it does not disclose stacking filled containers in close proximity to the rail spur as claimed. Ex. 2008 ¶¶ 50-51.

**4. Mr. Schaaf's declaration adds no probative value.**

Petitioner's last citation is to paragraphs 80-81 of Mr. Schaaf's declaration. Pet. at 34. But again, Mr. Schaaf simply parrots the Petition's arguments *verbatim* aside from adding “in my opinion” and “[i]t is therefore my opinion that” in paragraphs 80 and 81 respectively. *Compare* Pet. at 33-34 with Ex. 1002 ¶¶ 80-81. As discussed *supra* section V.A.2, this testimony adds no probative weight to Petitioner's position and should be disregarded.

**D. Sheesley in Combination with Uhryn Does Not Disclose or Render Obvious Conveying Proppant from Containers to Proppant Transporting Road Vehicles. (Claim 4)**

Claim 4 of the '772 Patent depends from claim 1 and recites, *inter alia* “conveying the proppant from one or more of the plurality of proppant [f]illed<sup>3</sup> containers to one or more proppant transporting road vehicles on a second conveyor.” ’772 Patent, Claim 4. Petitioner labels this limitation [4(b)] and argues that Sheesley “renders this limitation obvious” or Uhryn “teaches” this limitation. Pet. at 55-57; Ex. 1002 ¶¶ 121-24. Petitioner is wrong on both accounts.

**1. Petitioner provides no rationale for modifying Sheesley.**

Petitioner provides only a conclusory argument that is legally insufficient to show Sheesley renders limitation [4(b)] obvious. In particular, Petitioner’s argument is limited to the statement that “[a] POSITA would understand that proppant *could* just as easily be unloaded from the filled containers by opening the lower hatch, unloading proppant onto a second conveyor which conveys proppant into proppant transporting road vehicles, particularly where Sheesley discloses the use of a conveyor to unload containers, and that containers may be emptied into bulk proppant containers such as the Sand King.” Pet. at 55-56.

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<sup>3</sup> Patent Owner agrees with Petitioner that “tilled” should be read as “filled.”

Petitioner's argument about what a POSITA *could* have done is legally insufficient to make a prima facie case of obviousness. It is black letter law that “[r]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007) (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)); *Belden Inc. v. Berk-Tek LLC*, 805 F.3d 1064, 1073 (Fed. Cir. 2015) (“obviousness concerns whether a skilled artisan not only *could have made* but *would have been motivated to make* the combinations or modifications of prior art to arrive at the claimed invention”) (emphasis in original).

In *Kahn*, the Federal Circuit explained that there must be “some rationale, articulation, or reasoned basis to explain why the conclusion of obviousness is correct.” *Kahn*, 441 F.3d at 987. Likewise, in *InTouch*, the Federal Circuit rejected as insufficient expert testimony as to the expert’s belief that a POSITA could have combined the references, rather than whether a POSITA would have been motivated to combine the references. *InTouch Techs., Inc. v. VGO Commc’ns, Inc.*, 751 F.3d 1327, 1352 (Fed. Cir. 2014) (rejecting expert “testimony [that] primarily consisted of conclusory references to her belief that one of ordinary skill in the art *could* combine these references, not that they *would* have been motivated to do so”) (emphasis in original); *see also Genetics Inst., LLC v. Novartis Vaccines &*

*Diagnostics, Inc.*, 655 F.3d 1291, 1304 (Fed. Cir. 2011) (“[T]he district court correctly required as part of the *prima facie* obviousness inquiry the identification of some reason that would have prompted a researcher to modify the prior art compounds in a particular manner to arrive at the claimed compounds.”).

Here, Petitioner merely asserts that a POSITA “could” have modified Sheesley to arrive at limitation [4(b)]. That is not the relevant inquiry. Petitioner provided no rationale or articulated reasoning required to show *why* a POSITA would seek to modify Sheesley to arrive at claim 4, and thus Petitioner’s obviousness analysis is fatally flawed.

The PTAB consistently rejects obviousness arguments that are not supported by any rationale for modifying or combining references. *See e.g., Axon Enter., Inc. v. Digital Ally, Inc.*, IPR2017-00515, Paper 10 at 20 (P.T.A.B. July 6, 2017) (finding rationale to modify a reference “insufficient” where the expert’s “opinions say no more than that a person of ordinary skill in the art *could* have made the proposed modification”); *Resmed Ltd. v. Fisher & Paykel Healthcare Ltd.*, IPR2016-01734, Paper 11 at 26 (P.T.A.B. Mar. 13, 2017) (expert testimony that outlined whether straps “could” connect two structures “does not explain sufficiently why a person of ordinary skill in the art would have been motivated to”); *Olympia Tools Int’l, Inc. v. JPW Indus., Inc.*, IPR2018-00388, Paper 8 at 19 (P.T.A.B. June 20, 2018) (“the mere



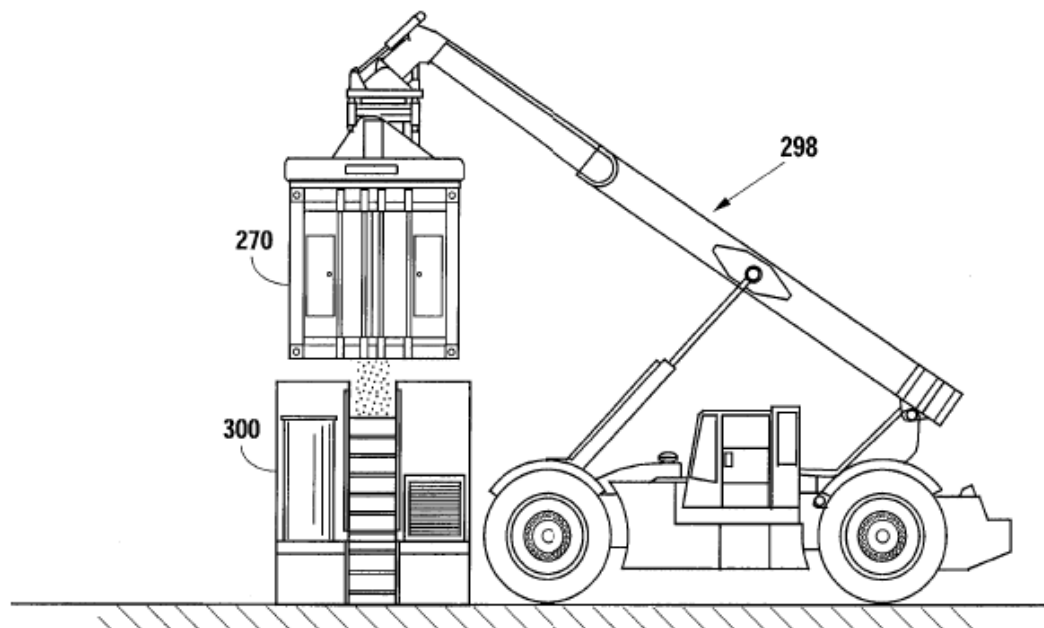
fact that a person having ordinary skill in the art could make such a change is insufficient evidence of a motivation to combine”).

**2. It would not be obvious to modify Sheesley to convey proppant from its containers to proppant transporting road vehicles.**

Additionally, it would *not* be obvious to modify Sheesley in the way Petitioner proposes. Though Sheesley does disclose unloading proppant from its containers onto a conveyor that conveys proppant into a blender, Petitioner does not suggest a blender is a claimed “proppant transporting road vehicle.” Pet. at 55. Indeed it could not—a blender is not a “proppant transporting road vehicle.” Ex. 2008 ¶ 55. Thus, Petitioner’s citations to Sheesley’s paragraphs [0084] and [0089], as well as Figures 5 and 7, do not render this limitation obvious.

Recognizing this failure, Petitioner again resorts to speculation and hindsight bias to claim that “proppant could just as easily be unloaded from the filled containers by opening the lower hatch, unloading proppant onto a second conveyor which conveys proppant into proppant transporting road vehicles.” Pet. at 55-56. Petitioner suggests that this is so because Sheesley’s “containers may be emptied into bulk proppant containers such as the Sand King,” citing Sheesley at paragraph [0083]. Pet. at 56. But Petitioner’s citation confirms its position is wrong. Paragraph [0083] of Sheesley states that “one of the modified cargo containers 270 full of sand” can be unloaded “to a bulk sand container 300 at the frac site (see FIG.

4)” and that this bulk sand container is also known as “Sand King 300.” Ex. 1003 at [0083]. Figure 4 of Sheesley is reproduced below:



*Fig. 4*

Sheesley labels item 300 as a “bulk sand container,” which is simply not a “proppant transporting road vehicle” as claimed. Ex. 2008 ¶ 56. Figure 4 depicts “bulk sand container 300” without wheels and nowhere does Sheesley discuss or Petitioner explain how it would be used as a “proppant transporting road vehicle.”

Sheesley's identification of item 300 as a "Sand King"<sup>4</sup> confirms it would not. Ex. 1003 at [0083]. A Sand King is a frac sand handling and storage solution manufactured and sold by Convey-All. Ex. 2008 ¶ 56. Although the Sand King can be transported over the road, it is not transported over the road while full of proppant, and is not itself a "road vehicle" as required by the claim. *Id.* Instead, the Sand King is transported on a road vehicle to the well site while empty, and only there is it set-up to receive proppant. *Id.* Petitioner admits as much, labeling the Sand King a "bulk proppant container." Pet. at 56.

Uhryn makes this clear: "A mountain mover 64, *also called a sand king*, may be connected to *receive proppant* from the proppant transfer device 58, the mountain mover 64 being provided to load one or more blenders 66 *on site* for mixing proppant into treatment fluids for injection downhole into a well 68 *at the well site* 18." Ex. 1005 at [0020]. A "mountain mover," as used in Uhryn is described as a "horizontal storage unit" in U.S. Patent No. 8,734,081 to Stegemoeller, filed November 20, 2009. Ex. 2011 at cover; 1:17-20. That patent further explains that "[a] horizontal

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<sup>4</sup> Sheesley also identifies item 300 as the "Frac Sander as is made by NOV-HPCO." Ex. 1003 at [0083]. Sheesley correctly equates the Frac Sander with the Sand King as they are essentially the same product. Ex. 2008 ¶ 56.

storage unit may be positioned on a well site pad *while the unit is empty*. The horizontal storage unit may *then be filled*, via tractor-trailer proppant transport vehicles, for example.” *Id.* at 1:20-23. Thus, Sheesley’s “bulk sand container”/Sand King/mountain mover/”horizontal storage unit”/Frac Sander is not the claimed proppant transporting road vehicle and cannot render this limitation obvious. Ex. 2008 ¶ 56.

Further, it would be contrary to the teachings of Sheesley to unload a container filled with proppant into a separate proppant transporting road vehicle. Ex. 2008 ¶¶ 57-58. Sheesley sets out its invention as follows:

The modified cargo containers may be taken directly to the quarry and loaded with sand. The modified cargo containers can then move through all of the normal modes of transportation including ship, barge, rail or by truck, all the way to the frac site. ***The sand never has to be handled again.*** All that has to occur is the modified cargo container is moved from one mode of transportation to another (*i.e.*, ship-to-rail-to-truck) as it moves from the quarry to the frac site.

Ex. 1003 at [0017]. Sheesley minimizes and reduces sand handling because “[i]n the fracturing of a single well, the amount of proppant such as sand that is used can cost five or six million dollars. ***Most of the cost of the sand is for handling.*** If the sand can be ***handled fewer times***, the cost can be greatly reduced.” *Id.* at [0009]. A

POSITA would not understand Sheesley to disclose unloading its container into a proppant transporting road vehicle, which necessarily then transports proppant along a road, because such a teaching runs directly contrary to Sheesley's stated purpose and invention. *See Tec Air, Inc. v. Denso Mfg. Michigan Inc.*, 192 F.3d 1353, 1360 (Fed. Cir. 1999) ("A reference may be said to teach away ... if it suggests that the line of development flowing from the reference's disclosure is unlikely to be productive of the result sought by the applicant.") (quotation omitted). Therefore, a POSITA would not understand it to render this limitation obvious. Ex. 2008 ¶¶ 57-58.

**3. Uhryn does not teach conveying proppant from proppant filled containers to proppant transporting road vehicles.**

Petitioner states that "[t]o the extent that this limitation is not rendered obvious by Sheesley alone, it is rendered obvious by Sheesley in view of Uhryn." Pet. at 56. But Petitioner relies on Uhryn's mountain mover/Sand King 64 as the claimed "proppant transporting road vehicle." Pet. at 56-57. As discussed *supra* section V.D.2, a mountain mover/Sand King is decidedly not a "proppant transporting road vehicle" and Petitioner's argument must be rejected. *See* Ex. 2008 ¶ 59.

**4. Mr. Schaaf's declaration adds no probative value.**

Petitioner's last citations are to paragraphs 121-24 of Mr. Schaaf's declaration. Pet. at 55-57. But again, Mr. Schaaf simply parrots the Petition's arguments *verbatim* aside from adding "it is my opinion" or "in my opinion" in each

paragraph. *Compare* Pet. at 55-57 with Ex. 1002 ¶¶ 121-24. As discussed *supra* section V.A.2, this testimony adds no probative weight to Petitioner's position and should be disregarded.

## **VI. CONCLUSION**

Petitioner has failed to meet its burden to show that the Challenged Claims of the '772 patent are unpatentable.

DATED: April 29, 2019

Respectfully submitted,

/s/ Gianni Cutri

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**CERTIFICATE OF COMPLIANCE**

This Patent Owner's Response complies with the type-volume limitations as mandated in 37 C.F.R. § 42.24, totaling 8,653 words. Counsel has relied upon the word count feature provided by Microsoft Word.

DATED: April 29, 2019

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**CERTIFICATE OF SERVICE**

The undersigned hereby certifies that the above-captioned "PATENT OWNER'S RESPONSE" and Exhibits 2008-2011 were served in their entirety on April 29, 2019, via electronic service on lead counsel for Petitioners, as consented to by the parties:

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