UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ARROWS UP, LLC **Petitioner**,

v.

OREN TECHNOLOGIES, LLC Patent Owner

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

PATENT OWNER'S SUR-REPLY

TABLE OF CONTENTS

				<u>ige</u>	
I.	Intro	ductio	on	1	
II.	Patent Owner's Response Addresses The Patentability Of All Claims				
III.	The Challenged Claims Are Patentable3				
	A.	Cont	sley Does Not Disclose Stacking Empty Proppant ainers In Close Proximity to a Rail Spur. (All Challenged ms)	4	
		1.	Sheesley's Figures 3 and 5 specifically disclose that its containers are stacked at the frac site or in transit	5	
		2.	Sheesley's Figure 5 does not disclose empty containers stacked in close proximity to a rail spur.	7	
	B.		sley Does Not Disclose "A Second Different End Surface." Challenged Claims)	8	
		1.	Sheesley's silence regarding what Petitioner labels as its "End Walls" is insufficient to show claim 1 is unpatentable.	10	
		2.	Petitioner provides only attorney argument regarding what is "structurally different" between Sheesley's end walls	14	
	C.		sley Does Not Disclose Storing Stacked Containers in Close imity to a Rail Spur. (Claim 2)	17	
		1.	Petitioner provides no evidence in its discussion of claim 1 to support its argument for claim 2	17	
		2.	What a POSITA "could" understand from Sheesley does not evince Sheesley's disclosure	18	
	D.	Rend	sley in Combination with Uhryn Does Not Disclose or ler Obvious Conveying Proppant from Containers to pant Transporting Road Vehicles. (Claim 4)	19	

Patent Owner's Sur-Reply: IPR2018-00733

	1.	Petitioner still provides no rationale for modifying Sheesley.	20
	2.	It would not have been obvious to modify Sheesley to convey proppant from its containers to proppant transporting road vehicles.	20
IV.	Conclusion	1	24

TABLE OF AUTHORITIES

Cases

Application of Hughes, 345 F.2d 184 (C.C.P.A. 1965)	14
Application of Turlay, 304 F.2d 893 (C.C.P.A. 1962)	14
Baker Hughes Oilfield Operations, Inc. v. Smith Int'l, Inc., IPR2016-01452, Paper 31 (P.T.A.B. Feb. 2, 2018)	1
Belden Inc. v. Berk-Tek LLC, 805 F.3d 1064 (Fed. Cir. 2015)	2
Cisco Sys., Inc. v. Focal IP, LLC, IPR2016-01254, Paper 56 (P.T.A.B. Dec. 27, 2017)	19
Duodecad IT Servs. Luxembourg S.A.R.L. v. Wag Acquisition, LLC, IPR2015-01036, Paper 17 (P.T.A.B. Oct. 20, 2016)	9
Enzo Biochem, Inc. v. Gen-Probe, Inc., 424 F.3d 1276 (Fed. Cir. 2005)	16
Gemtron Corp. v. Saint-Gobain Corp., 572 F.3d 1371 (Fed. Cir. 2009)	16
<i>In re Klein by Klein</i> , 987 F.2d 1569 (Fed. Cir. 1993)	11
Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co. Ltd., 851 F.3d 1270 (Fed. Cir. 2017)	4, 13
Olympia Tools Int'l, Inc. v. JPW Indus., Inc., IPR2018-0388, Paper 8 (P.T.A.B. June 20, 2018)	
Santarus, Inc. v. Par Pharm., Inc., 694 F.3d 1344 (Fed. Cir. 2012)	25
Straight Path IP Grp., Inc. v. Sipnet EU S.R.O., 806 F.3d 1356 (Fed. Cir. 2015)	10

Textron Inc. v. Nivel Parts & Mfg. Co., LLC. PGR2017-00035, Paper 9 (P.T.A.B. Jan. 12, 2018)	12, 13
Wasica Finance GmbH v. Cont'l Auto. Sys., Inc., 853 F.3d 1272 (Fed. Cir. 2017)	10, 19
Statutes	
35 U.S.C. § 311(b)	10

INDEX OF EXHIBITS

Exhibit No.	Description
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
	https://web.archive.org/web/20091018063039/http://www.tripleeight.net/containers/20ft-double-door.html/
2011	U.S. Patent No. 8,734,081 to Stegemoeller et al.

I. INTRODUCTION

In its Reply, Petitioner chose to submit *no expert testimony* to rebut Patent Owner's arguments and the analysis of Patent Owner's expert (Mr. Smith). Having shown that the initial "declaration" of Petitioner's expert (Mr. Schaaf) has no probative value because it merely parrots the Petition verbatim (see Paper 14 ("Response") at 14, 20-24, 27-28, 31, 39-40), Petitioner chose to cut bait and rely only on unsupported attorney argument in its Reply. This is remarkable—it confirms that Petitioner's arguments do not withstand scrutiny and that the unrebutted evidence presented by Patent Owner during the trial phase supports the patentability of the Challenged Claims in a Final Written Decision. As the Board has explained, while a "supporting expert declaration is not, per se, a requirement of a reply, ... relying only on attorney argument" "shield[s] [Petitioner's] interpretation" of the evidence from cross-examination and leaves the Board with little evidence "upon which to base its decision." Baker Hughes Oilfield Operations, Inc. v. Smith Int'l, Inc., IPR2016-01452, Paper 31 at 21 n.8 (P.T.A.B. Feb. 2, 2018) (finding claims not unpatentable), vacated on other grounds, Paper 42 (P.T.A.B. Oct. 4, 2018). At this stage, Patent Owner's evidence, including Mr. Smith's expert testimony, stands unrebutted by a POSITA, and the Board should reject Petitioner's unsubstantiated attorney argument.

For the first three claim limitations in dispute, Petitioner specifically argued in its Petition that Sheesley *discloses* these limitations—even though the reference contains no such disclosure. Because Sheesley's disclosure of these limitations is nonexistent, Petitioner retreats to arguing that the reference *could* disclose these limitations, or that the reference *does not preclude* disclosure of these limitations. That is not the test. Petitioner's attempt to loosen the standard for what a reference actually discloses and hand-wave its way to a finding of unpatentability must be rejected. Petitioner's arguments amount to unsupported obviousness arguments when Petitioner has never contended or shown that these limitations would have been obvious to a POSITA. And it is far too late for Petitioner to transform its original arguments that Sheesley "discloses" these limitations into new obviousness theories.

For the one disputed limitation where Petitioner properly invokes the doctrine of obviousness, Petitioner's argument remains legally deficient and reliant on unsupported attorney argument. That a POSITA "could" have envisioned a claim limitation, as Petitioner argues, says nothing about whether a POSITA would have been motivated to make the modification, as is required to show obviousness. Belden Inc. v. Berk-Tek LLC, 805 F.3d 1064, 1073 (Fed. Cir. 2015) ("[O]bviousness 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); *see also* Response at 33-35. And in any event, Patent Owner's unrebutted evidence shows that it would *not* have been obvious to a POSITA to modify Sheesley in the way Petitioner proposes.

Accordingly, Petitioner has failed to show that the Challenged Claims are unpatentable.

II. PATENT OWNER'S RESPONSE ADDRESSES THE PATENTABILITY OF ALL CLAIMS

Petitioner asserts that Patent Owner does not address the "patentability" of certain "limitations" in claims 1 and 4 or "the patentability of claims 3 or 6-11." Paper 21 ("Reply") at 2. First, Patent Owner's suggestion that individual claim limitations are "patentable" or "unpatentable" is mistaken. Second, Patent Owner did address the patentability of all Challenged Claims. Claims 2-11 depend from claim 1. By demonstrating the patentability of claim 1, Patent Owner has demonstrated that claims 1-11 are patentable.¹

III. THE CHALLENGED CLAIMS ARE PATENTABLE

All of Petitioner's arguments rely on the disclosure of Sheesley. But Sheesley does not disclose claim 1's requirement of (i) "stacking a plurality of empty proppant containers in close proximity to a rail spur" or (ii) a "second different end surface."

3

Patent Owner also made additional arguments with respect to claims 2 and 4.

Similarly, Sheesley does not disclose claim 2's requirement of stacking full proppant containers "in close proximity to a rail spur." Finally, Sheesley, alone or in combination with Uhryn, does not disclose or render obvious claim 4's requirement of transferring proppant from claimed proppant containers to a separate "proppant transporting road vehicle."

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

Claim 1 recites the step of "vertically stacking a plurality of empty proppant containers in close proximity to a rail spur" Ex. 1001 at Claim 1. Petitioner does not dispute that it asserted that Sheesley "discloses this limitation," labeled [1(a)(i)]. Paper 1 ("Petition") at 24-26; Response at 15-16; Reply at 10. Whether it would have been obvious to a POSITA is not before the Board.

Sheesley does not explicitly disclose this limitation, and so Petitioner speculates about what a POSITA might envision when attempting to piece together various passages of Sheesley. Reply at 10-15. But Federal Circuit law "does not permit the Board to fill in missing limitations simply because a skilled artisan would immediately envision them." *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co. Ltd.*, 851 F.3d 1270, 1274-75 (Fed. Cir. 2017). Indeed, Petitioner complains about Patent Owner's thorough analysis of Sheesley, calling it a "piecemeal dissection" of the reference. Reply at 11. But Patent Owner's Response accurately

walks through the Sheesley passages cited by Petitioner to demonstrate that Sheesley simply does not disclose this limitation. Response at 16-19.

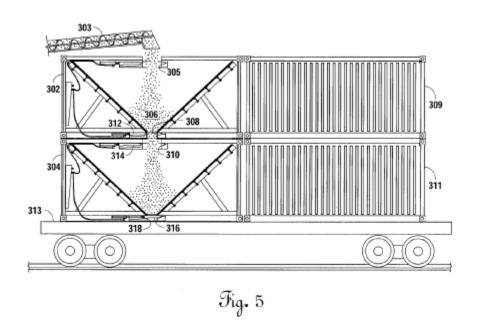
In its Reply, Petitioner begins by restating the same portions of Sheesley that Patent Owner already addressed in its Response (*see* Reply at 10-11; Response at 15-19), and again jumping to the conclusion that Sheesley discloses this limitation. Petitioner then disputes Patent Owner's arguments and Mr. Smith's testimony with respect to Sheesley's Figures 3 and 5. Reply at 12-15. As discussed below, Petitioner's arguments with respect to Sheesley's Figures 3 and 5 rely on conclusory attorney argument and are incorrect.

1. Sheesley's Figures 3 and 5 specifically disclose that its containers are stacked at the frac site or in transit.

Petitioner argues that Figure 3 stands for the general proposition that Sheesley's containers can be stacked and that this may be done anywhere, even though this is not disclosed by Sheesley. Reply at 12-13. Patent Owner and Mr. Smith already addressed this argument, confirming that the cited portions of Sheesley do not actually disclose to a POSITA "vertically stacking a plurality of empty proppant containers in close proximity to a rail spur," as required by claim 1. Response at 16; Ex. 2008 ¶ 36. Rather, Sheesley specifically discloses that its containers are stacked at the frac site or in transit. *Id.*; Ex. 1003 ("Sheesley") at [0018] ("[T]]he modified frac containers may be stacked in any conventional means,

either while in transit or at the frac site."). Patent Owner's suggestion that Sheesley could have disclosed that empty containers are stacked near a rail spur is irrelevant.

Next, Petitioner asserts that "Sheesley quite clearly teaches that the containers may be stacked in other locations," citing to Figure 5. Reply at 12. But Figure 5 supports *Patent Owner's* position.



Petitioner admits that Figure 5 discloses stacked containers on a rail car, consistent with Sheesley's teaching that its containers are stacked at the frac site or, as relevant to Figure 5, "in transit." Reply at 12; Sheesley at [0018]. Again, whether it would have been possible to stack containers in transit is not the issue. The issue is whether Sheesley discloses stacking empty containers in close proximity to a rail spur, as claimed. That disclosure simply isn't present.

2. Sheesley's Figure 5 does not disclose empty containers stacked in close proximity to a rail spur.

Petitioner further attempts to refute Patent Owner's argument and Mr. Smith's testimony that Sheesley only discloses filling stacked containers *on* a rail car, not *in close proximity to* a rail spur, as claimed. Reply at 13-15. Petitioner again relies on conclusory and unsupported attorney argument to stretch Sheesley beyond its disclosure of stacked containers at the frac site or in transit. Mr. Smith provided unrebutted expert testimony that "Figure 5 ... teaches against stacking empty containers near the rail spur. Instead, Sheesley discloses transporting empty containers on a rail car to the rail spur to be filled, and then taking the full containers off of the rail car for delivery to the well site." Ex. 2008 ¶ 38; Response at 17.

Similarly, Petitioner provides unsupported attorney argument regarding what "in close proximity to" would supposedly mean to a POSITA and complains that Patent Owner has made a "backdoor claim construction argument." Reply at 14-15. Whether characterized as a claim construction argument or not, Mr. Smith specifically set forth how the '772 Patent "distinguishes between being on a rail spur on the one hand and in close proximity to a rail spur on the other." Ex. 2008 ¶ 39. Neither Patent Owner nor Mr. Smith limited "in close proximity to" to a preferred embodiment of the '772 Patent (as Patent Owner suggests), but simply explained how "in close proximity to" is distinct from "on." Petitioner includes a dismissive footnote stating that "containers stacked on a rail car 'would necessarily be in 'close

proximity' to the rail spur." Reply at 14 n.3. But as explained in detail in the Response, Petitioner's conclusory statement is inconsistent with the disclosure and purpose of the '772 Patent and contradicted by Mr. Schaaf's testimony on cross-examination. Response at 18-19.

Petitioner attempts to downplay Mr. Schaaf's testimony by claiming in a footnote that he was merely "answering specific questions about the components portrayed in Figure 3, not offering a universal definition of the terms 'on' and 'in close proximity to." Reply at 15 n.4. Petitioner cannot nullify Mr. Schaaf's admissions, which are consistent with Mr. Smith's testimony. As Mr. Smith explained "the proppant containers being filled in Figure 5," which are described as "on" a rail spur, "are not in close proximity to a rail spur." Ex. 2008 ¶ 38.

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

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 does not contest that it asserts that Sheesley "discloses this limitation," [1(a)(ii)], not that Sheesley renders it obvious. Petition at 26-27; Response at 25; Reply at 3.

In its Institution Decision, the Board agreed with Patent Owner's claim construction for the phrase "a second different end surface," ruling that "the claimed 'second different end surface' limitation requires that the two end surfaces are

structurally different." Paper 7 at 10. Petitioner did not proffer a construction for "second different end surface" in its Petition, and did not contest Patent Owner's and the Board's construction in its Reply. Thus, the Board should adopt the construction it set forth in the Institution Decision in its Final Written Decision. *See Duodecad IT Servs. Luxembourg S.A.R.L. v. Wag Acquisition, LLC*, IPR2015-01036, Paper 17 at 9 (P.T.A.B. Oct. 20, 2016) ("The parties have not further argued claim construction and we hereby adopt our preliminary constructions as final along with our reasoning expressed in our Decision to Institute.").

Rather than dispute Patent Owner's and the Board's claim construction, Petitioner attempts to analogize the disclosure of "a second different end surface" in the '772 Patent with the nonexistent disclosure in Sheesley. Reply at 8-9. They are nothing alike. As the Board explained, the '772 Patent "does describe the two end walls (and, therefore, end surfaces) of the container differently." Paper 7 at 9. Indeed, the Board affirmatively relied on this evidence in support of its construction. *Id.* at 9-10.

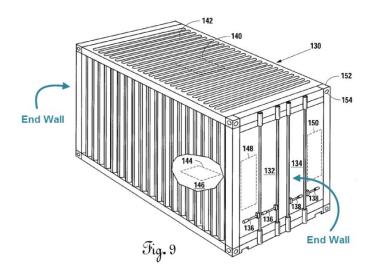
Petitioner additionally states that "the '772 patent fails to support a second end surface that is structurally different from the first." Reply at 9. Not only is this incorrect, as discussed above, but to the extent Petitioner is suggesting that claim 1 of the '772 Patent is invalid as lacking written description, such challenges are not part of *inter partes* review. *Straight Path IP Grp., Inc. v. Sipnet EU S.R.O.*, 806 F.3d

1356, 1363 (Fed. Cir. 2015) ("written-description and enablement challenges were not, and could not have been, part of the inter partes review that is now before us"); 35 U.S.C. § 311(b) (limiting challenges to prior-art challenges).

As explained below, in contrast to the '772 Patent, Sheesley contains no disclosure of "a second different end surface."

1. Sheesley's silence regarding what Petitioner labels as its "End Walls" is insufficient to show claim 1 is unpatentable.

Petitioner cannot show that Sheesley discloses "a second different end surface" as properly construed because Sheesley is completely silent as to the structure of the unnumbered and non-depicted surface that Petitioner labels as its second "End Wall." To show disclosure of a claim limitation, a prior art reference must disclose the claim limitation with "sufficient precision and detail" to establish that it existed in the prior art. *See Wasica Finance GmbH v. Cont'l Auto. Sys., Inc.*, 853 F.3d 1272, 1284 (Fed. Cir. 2017) (citations omitted). No amount of citations to numbered items on the *visible* "End Wall" of Figure 9 can provide the required "precision and detail" to establish that Sheesley discloses a second different end surface that is structurally different. Figure 9 of Sheesley (reproduced below from page 27 of the Petition) and the corresponding text does not include *any* information about the unnumbered, non-depicted, and non-described "End Wall."



Nevertheless, Petitioner restates Sheesley's disclosure of doors 132 and 134, handles 136 and 138, and control panel openings 148 and 150 shown on the visible "End Wall" of Figure 9 and notes that Sheesley "does not indicate equivalent features on the far side of the container." Reply at 5-6. This is undisputed and irrelevant—Sheesley does not describe "the far side" of the container at all. Petitioner speculates that "Figure 9 of Sheesley suggests that such equivalent features would be indicated if they were part of Sheesley's invention" because features 144 and 146 are indicated in a cutaway view. Reply at 5-6 n.1 (emphasis in original). Petitioner's speculation about Sheesley's drafter's annotation tendencies is "in a class with wishful thinking." In re Klein by Klein, 987 F.2d 1569, 1573 (Fed. Cir. 1993) (finding statements about what drawings disclose to be "wholly unjustified" where the Board "magnified a drafting practice" "into an alleged suggestion for an ornamental design through the exercise of hindsight"). That Mr. Smith agreed there is no disclosure either way in Sheesley Figure 9 is of no

consequence. Reply at 6. Indeed, Mr. Smith's testimony that Sheesley is not even clear which "End Wall" other figures, such as Figure 3, depict—quoted by Petitioner (*id.* at 6)—supports that the non-depicted, non-described "End Wall" is presumptively identical to the depicted "End Wall."

Petitioner's final argument confirms that Sheesley does not disclose limitation [1(a)(ii)] as a matter of law. Petitioner suggests that by disclosing *nothing* about the "End Wall" not shown in Figure 9, Sheesley somehow discloses at least *two* "End Walls," one with and one without doors. Reply at 9. Petitioner's contention that Sheesley, through silence, discloses a genus (the purported "End Wall") and at least two species (doors and no doors) is unsupportable. The Board previously addressed a similar issue in *Textron Inc. v. Nivel Parts & Mfg. Co., LLC.* PGR2017-00035, Paper 9 (P.T.A.B. Jan. 12, 2018).

In *Textron*, the petitioner contended that a prior art reference ("Liu") disclosed to a POSITA that its "stationary cargo board" was "plastic instead of metal or wood, which were conventional construction materials for these types of apparatus." *Id.* at 23-24. However, Liu did "not disclose anything about the material" of the element at issue. *Id.* at 24. The Board stated that case law does not support that "a missing claim element may be satisfied by a reference if an artisan of ordinary skill would 'at once envisage' the missing element upon reading the reference." *Id.* The Board further cited Federal Circuit law distinguishing a finding of anticipation—where a

prior art reference "never disclosed the specific combination," but taught that any of five disclosed binding agents could be used with any of three disclosed coating techniques, such that it "effectively taught fifteen combinations, one of which anticipated the challenged claim"—from the situation at issue. *Id.* (citing *Nidec Motor*, 851 F.3d at 1274). The distinction was that anticipation could be found when "the reference disclosed the subject matter of the claim element," not when the reference "does not disclose anything about" the claim element. *Id.*

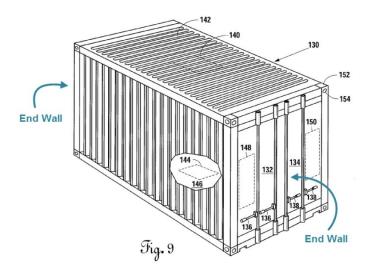
Similar to Petitioner's arguments here, the petitioner in *Textron* additionally contended that "the genus of possible materials is small (metal or plastic)" and thus the prior art reference allegedly disclosed a plastic claim element. *Id.* But the Board disagreed and distinguished the facts of *Textron* from case law where "the references at issue actually disclosed the genus, of which there were an allegedly small number of species" because "Liu discloses nothing about materials." *Id.* at 25. The Board accurately stated that though "Liu seems to broadly disclose that the components are made of some material," the petitioner could not "read[] into this lack of disclosure a purported genus with only two species—metal and plastic." *Id.* Petitioner's position here compels the same result. Based on the lack of disclosure in Sheesley, Petitioner cannot maintain that Sheesley discloses a genus with only two species—a structure with doors and some unknown structure without doors.

Finally, even if Petitioner were right that Sheesley could be "alternatively interpreted to show" an "End Wall" including doors and some unknown structure without doors (it is not), it is still the case that Sheesley does not disclose limitation [1(a)(ii)] as a matter of law. See Application of Hughes, 345 F.2d 184, 188 (C.C.P.A. 1965) ("if we accept arguendo the [B]oard's position that [a reference] can be alternatively interpreted to show either of two final core structures, then [it] becomes an ambiguous reference which will not support an anticipation rejection"); Application of Turlay, 304 F.2d 893, 899 (C.C.P.A. 1962) ("we cannot, with any degree of certainty, ascertain whether [a reference] discloses one or two exhaust valves in each bank communicating with the transverse passage. Under these circumstances we cannot agree with the majority of the [B]oard that [it] anticipates applicant's appealed claim."). Petitioner's attempt to reverse the requirement that it must show sufficient disclosure in the prior art does not withstand scrutiny.

2. Petitioner provides only attorney argument regarding what is "structurally different" between Sheesley's end walls.

Petitioner's interpretation of Sheesley is based entirely on attorney argument. Patent Owner, Mr. Smith, and Petitioner all agree that a POSITA would have known that ISO containers existed with doors on both ends. Ex. 1017; Ex. 2008 ¶ 46; Ex. 2010. Petitioner confirms that a POSITA knew that many ISO containers were available with doors on both ends by submitting its own version of Exhibit 2010 at Exhibit 1017. Reply at 8. Whether a specific company (Triple Eight Containers)

sold such a container as its "standard" or its "alternative" version (Reply at 8) has no effect on the existence of such containers or a POSITA's knowledge of the same. Pairing this evidence with the fact that "the far end of the container portrayed in [Sheesley's] Figure 9 is obscured" (Reply at 4), Sheesley simply does not disclose whether the end surfaces in Petitioner's annotated Figure 9 (shown immediately below from page 27 of the Petition) are structurally different as required.



Petitioner's reply exhibit (Ex. 1017) only serves to further confirm Patent Owner's position and evidence—"[a] POSITA at the time of invention would recognize that many ISO containers were made with doors on both ends, including the 20 ft. long ISO container disclosed in Sheesley's Figure 9 and were readily available." Ex. 2008 ¶ 46; Ex. 2010; Ex. 1017.

Petitioner states that "even if the back wall of Sheesley was equipped with doors, the front wall would still be structurally different" because one door would have "control panels." Reply at 7. But Petitioner's attorney argument about what a

POSITA would consider a "structural difference" is not evidence and, in any event, is wrong. *See Gemtron Corp. v. Saint-Gobain Corp.*, 572 F.3d 1371, 1380 (Fed. Cir. 2009) (reasoning that a party's "unsworn attorney argument ... is not evidence" and thus cannot rebut record evidence); *Enzo Biochem, Inc. v. Gen-Probe, Inc.*, 424 F.3d 1276, 1284 (Fed. Cir. 2005) ("Attorney argument is no substitute for evidence."). Mr. Smith specifically explained that in embodiments of Sheesley equipped with a set of doors on both ends, the sets of doors "wouldn't be structurally different" even if only one set had control panels or control panel openings. Ex. 1016 at 42-44 ("[W]hen I look at the structure I am looking at what makes the door strong and it is the tubing that goes around the door and that part, not the plate part, that would make any difference.").

Similarly, Petitioner states that Sheesley's Figure 16 indicates a control panel "on one end only" and speculates that Sheesley's doors are always depicted with control panel cutouts. Reply at 7. Again, Mr. Smith's unrebutted testimony confirmed that neither Sheesley's "control panel" nor the "cut-outs" would be a structural difference between two sets of doors. Ex. 1016 at 42-44. And Petitioner's suggestion that the "cut-outs" would only be on one set of doors of Sheesley's container is pure speculation. Sheesley is simply silent as to the structure of the "End Wall" not shown in Figure 9.

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

Petitioner does not contest that claim 2 "requires filling and stacking a second plurality of containers *in close proximity to the rail spur*." Petition at 33. Petitioner likewise does not dispute that its position is that Sheesley "discloses" the limitations of claim 2. Petition at 34; Response at 28; Reply at 16. Petitioner is incorrect.

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

As discussed *supra* Section III.A, Petitioner has not shown that Sheesley discloses stacking containers *in close proximity* to a rail spur. Instead, Petitioner repeats its arguments that a POSITA would understand from Sheesley that "multiple containers *could* be filled and stacked *at* the rail spur." Reply at 16-17 (quotation omitted). Petitioner's closest evidence from Sheesley discloses only that modified cargo containers may be filled while stacked *on* a rail car. *Id.* at 17. But being located *on* a rail car is not the same as being *in close proximity* to a rail spur. *See supra* section III.A. As shown above, Sheesley only discloses stacking full containers at the frac site or in transit (on a rail car), not "that containers may be stacked and filled *anywhere* in the supply chain" as Petitioner's attorneys contend. Reply at 18. No amount of attorney argument can overcome Mr. Smith's unrebutted

² All emphasis added unless otherwise noted.

expert testimony. Ex. 2008 ¶ 51 ("Sheesley does not disclose that the filled containers are stored in close proximity to the rail spur, rather they must be hauled from the rail spur to a separate storage location."); Response at 30-31. Petitioner's arguments rest on mere attorney say-so.

Further, Petitioner's complaint about Patent Owner allegedly "misrepresent[ing] the scope of claim 2" is simply wrong. Reply at 18. Indeed, in the sentence immediately preceding this accusation, Petitioner quotes Patent Owner's statement that Sheesley "does not disclose stacking filled containers in close proximity to the rail spur as claimed." Id. This straightforward statement comes directly from the language of claim 2: "vertically stacking the second plurality of proppant *filled containers* ... to reduce the footprint of the area required for storage of the proppant in close proximity to the rail spur." Ex. 1001 at Claim 2. Nowhere does Patent Owner state that claim 2 requires "storing large quantities of proppant at the rail spur," as Petitioner contends. Reply at 18. Petitioner's purported grievance is unfounded.

2. What a POSITA "could" understand from Sheesley does not evince Sheesley's disclosure.

As discussed in Patent Owner's Response, Petitioner's statement that "[a] POSITA would understand that multiple containers *could* be filled with proppant and stacked at the rail spur" from Sheesley's disclosure is legally insufficient. Petition at 33; Response at 29. In Reply, Petitioner continues to incorrectly assert

that "the claimed configuration is within the range of options disclosed by Sheesley." Reply at 19. But as discussed *supra* Sections III.A and III.C.1, Sheesley's "range of options" does not include stacking containers in close proximity to a rail spur. Petitioner's response is that Sheesley need not "explain every detail." Reply at 19 (citing Cisco Sys., Inc. v. Focal IP, LLC, IPR2016-01254, Paper 56 at 65 (P.T.A.B. Dec. 27, 2017)). There is no dispute that prior art must be read from the point of view of a POSITA, but Petitioner cannot fill gaps in Sheesley's disclosure with unsupported conjecture. Petitioner's attempt to create additional disclosure in Sheesley, simply because it believes a POSITA would envision it, must be rejected. Wasica, 853 F.3d at 1284. Indeed, as set forth in the Response, Petitioner's statement that multiple containers *could* be filled with proppant concedes that Sheesley does not *actually* disclose this claim 2 limitation. Response at 29.

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 containers to one or more proppant transporting road vehicles on a second conveyor." Ex. 1001 at Claim 4. Petitioner labels this limitation [4(b)] and argues that Sheesley "renders this limitation obvious" or Uhryn "teaches" this limitation.

Petition at 55-57; Ex. 1002 ¶¶ 121-24. But Petitioner's attorney argument on Reply cannot overcome Mr. Smith's reasoned analysis.

1. Petitioner still provides no rationale for modifying Sheesley.

Petitioner devotes a single paragraph regurgitating its Petition's arguments that Sheesley *could be modified* to render limitation [4(b)] obvious, but again provides *no rationale* for the modification. Reply at 20-21. The Reply contains only attorney argument insufficient to overcome the Petition's failing. Petitioner's argument about what a POSITA *could* have done is legally insufficient. *Belden*, 805 F.3d at 1073; Response at 32-35. And Petitioner's explanation that Mr. Schaaf was "identifying the specific teachings of Sheesley that would inform a person of ordinary skill in the art that Sheesley discloses this limitation" shows that Petitioner and Mr. Schaaf either (1) do not understand the teachings of Sheesley, or (2) simply ignore them. Reply at 24-25. As explained immediately below, though a POSITA "could" use hindsight to reconstruct claim 4 of the '772 Patent, Sheesley teaches away from that path.

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

In its Response, Patent Owner and Mr. Smith clearly set out that "Sand Kings, mountain movers, and Frac Sanders are trailers that can be transported on the road, not proppant transporting road vehicles—they are not transported while full of

sand." Ex. 2008 ¶ 56; Response at 36-37. In addition to relying on Sheesley (Ex. 1003) and Uhryn (Ex. 1005) themselves, Patent Owner and Mr. Smith relied on Stegemoeller (Ex. 2011) for its teaching that "mountain movers" are "positioned on a well site pad while the unit is empty" and "may *then* be filled." Ex. 2008 ¶ 56. Thus, neither Sheesley's "Sand King" (Ex. 1003 at [0083]) nor Uhryn's "mountain mover/sand king" (Ex. 1005 at [0020]) satisfy the "proppant transporting road vehicles" claimed in limitation [4(b)]. Ex. 2008 ¶ 56. Petitioner does not take on this position, address Stegemoeller, or dispute its disclosure. Instead, Petitioner attempts to move the goalposts by pointing to a different product without *any* argument or testimony that it would have been used with Sheesley.

To attempt to support its position, Petitioner submits a web archive showing a "'Mini' Sand Storage Trailer" purportedly offered by "Cambelt International" in February 2012. Reply at 22; Ex. 1018. But Petitioner offers no expert support or evidence that these "'Mini' Sand Storage Trailers" are the "Sand Kings" or "mountain movers" disclosed by Sheesley, Uhryn, or Stegemoeller and discussed by Mr. Smith. As Mr. Smith explained, "a Sand King is a Frac Sand Handling and Storage Solution manufactured and sold by Convey-All." Ex. 2008 ¶ 56. And Sheesley discloses the "Frac Sander" is "made by NOV-HPCO." Ex. 1003 at [0083]. Cambelt International's "'Mini' Sand Storage Trailer" that it markets as "called a frac sander," is not the Sand King or the Frac Sander product disclosed by Sheesley

or the "mountain mover/Sand King" disclosed by Uhryn. These are the only teachings that Petitioner relied upon as disclosing the "proppant transporting road vehicles" claimed in limitation [4(b)]. That a "'Mini' Sand Storage Trailer," described as a "frac sander" that can go "over-the-road," existed in the marketplace does not show that such a product would have been used with Sheesley to render claim 4 obvious. And Petitioner supplies no expert testimony to support this incorrect contention.

Conversely, Patent Owner argued in its Response, supported by Mr. Smith's unrebutted testimony, that Sheesley would not be modified to use a "proppant transporting road vehicle" as claimed. Response at 38-39; Ex. 2008 ¶¶ 57-58. Even if the "over-the-road frac sander" shown in Exhibit 1018 could have been used with Sheesley's system and it were properly considered a "proppant transporting road vehicle" (there is no evidence that it could or is), Mr. Smith testified that "[t]aking the proppant out of Sheesley's modified cargo containers and putting it in a proppant transporting road vehicle is *expressly against the teachings of Sheesley* and a POSITA would not be motivated to do so." Ex. 2008 ¶ 58.

Petitioner's attorney argument purportedly refuting Mr. Smith's position is incorrect and unsupported by expert testimony. Petitioner contends that Sheesley "contemplates that some handling may happen" and that unloading proppant from Sheesley's container 270 to the Sand King 300 proves its point that "Sheesley does

not teach the complete elimination of transferring or handling sand." Reply at 23-24. This argument is a strawman. Mr. Smith never testified that Sheesley teaches "the complete elimination of transferring or handling sand," but instead stated that "[a] POSITA reading Sheesley would understand that the benefit is that the proppant can be transported in the container from the quarry to the well site in the container, without being removed or transferred, saving time and money." Ex. 2008 ¶ 57. Certainly Sheesley contemplates sand must be handled at the quarry and the well site, but it teaches that "[t]he sand never has to be handled again ... as it moves from the quarry to the frac site." Sheesley at [0017]; Ex. 2008 ¶ 57. Removing sand from Sheesley's container to place it into a "proppant transporting road vehicle" necessarily contemplates handling sand between the quarry and the frac site, contrary to Sheesley's teachings. Ex. 2008 ¶¶ 57-58. And Petitioner's example of "post-container transfer" is a transfer from "the modified cargo container 270 to a bulk sand container 300 at the frac site," which is entirely consistent with Mr. Smith's testimony and Sheesley's disclosure. Reply at 24; Sheesley at [0083].

Similarly, Petitioner relies on a new citation to Sheesley ([0044]) for the proposition that "loading proppant into road vehicles is known in the art." Reply at 22-23. But the inquiry is not whether "loading proppant into road vehicles" was known in the art, but whether a POSITA would have been motivated to combine such a step with Sheesley's disclosure. Olympia Tools Int'l, Inc. v. JPW Indus., Inc.,

IPR2018-0388, 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"). It is clear why Petitioner was unable to provide expert testimony on this portion of Sheesley to support its position. Paragraphs [0042]-[0049] of Sheesley explicitly discuss the prior art problem Sheesley seeks to solve: "[e]ach time the sand has to be handled through a conveyer, it is an additional expense. Each additional expense means that sand costs more money for the well operator, which goes into additional costs of producing oil, which flows on to the end consumer through higher prices of gasoline, diesel fuel, or natural gas." Sheesley at [0049]. This is exactly the process that Petitioner advocates—"proppant could just as easily be unloaded from filled containers by opening the lower hatch, unloading proppant onto a second conveyor which conveys proppant into proppant transporting road vehicles" (Reply at 24 (quoting Ex. 1002 ¶ 121))—and that Sheesley teaches away from. Ex. 2008 ¶¶ 57-58. Petitioner's suggested combination is not only "not a preferred embodiment," but Sheesley provides "clear discouragement of that combination." Reply at 24 (citing Santarus, Inc. v. Par Pharm., Inc., 694 F.3d 1344, 1355-56 (Fed. Cir. 2012)).

IV. CONCLUSION

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

DATED: August 30, 2019

Respectfully submitted,

/s/ Gianni Cutri

Gianni Cutri (Reg. No. 52,791) KIRKLAND & ELLIS LLP

Attorney for Patent Owner

CERTIFICATE OF COMPLIANCE

This Patent Owner's Sur-Reply complies with the type-volume limitations as mandated in 37 C.F.R. § 42.24, totaling 5,502 words. Counsel has relied upon the word count feature provided by Microsoft Word.

DATED: August 30, 2019 Respectfully submitted,

/s/ Gianni Cutri

Gianni Cutri (Reg. No. 52,791) KIRKLAND & ELLIS LLP 300 North LaSalle Chicago, Illinois 60654

Email: gcutri@kirkland.com

Tel: (312) 862-3372 Fax: (312) 862-2200

Attorney for Patent Owner

CERTIFICATE OF SERVICE

The undersigned hereby certifies that the above-captioned "PATENT OWNER'S SUR-REPLY" was served in its entirety on August 30, 2019, via electronic service on lead counsel for Petitioners, as consented to by the parties:

Allison Lucier at allison.lucier@hklaw.com

Service was also made via electronic service on Petitioners' back-up counsel:

robert.hill@hklaw.com steven.jedlinski@hklaw.com Arrows-Up-IPR-Distribution@hklaw.com

DATED: August 30, 2019 Respectfully submitted,

/s/ Gianni Cutri

Gianni Cutri (Reg. No. 52,791) KIRKLAND & ELLIS LLP 300 North LaSalle Chicago, Illinois 60654 Email: gcutri@kirkland.com

Tel: (312) 862-3372 Fax: (312) 862-2200

Attorney for Patent Owner