

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TROVE BRANDS, LLC,

Petitioner,

v.

CAMELBAK PRODUCTS, LLC,

Patent Owner.

IPR2024-00858

Patent 8,905,252 B2

PATENT OWNER'S SUR-REPLY

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PATENT OWNER’S UPDATED EXHIBIT LIST

Exhibit No.	Description
2001	U.S. Design Patent No. D679,541 to Samartgis
2002	June 17, 2024 Order on Case Schedule in <i>Trove Brands LLC v. CamelBak Prods., LLC and Vista Outdoor Inc.</i> , No. 5:23-cv-4267 (N.D. Cal. Aug. 21, 2023) at Dkt. 92
2003	Docket in <i>Trove Brands LLC v. CamelBak Prods., LLC and Vista Outdoor Inc.</i> , No. 5:23-cv-4267 (N.D. Cal. Aug. 21, 2023)
2004	Initial Infringement Contentions in <i>Trove Brands LLC v. CamelBak Prods., LLC and Vista Outdoor Inc.</i> , No. 5:23-cv-4267 (N.D. Cal. Aug. 21, 2023), served December 21, 2023
2005	Initial Invalidity Contentions in <i>Trove Brands LLC v. CamelBak Prods., LLC and Vista Outdoor Inc.</i> , No. 5:23-cv-4267 (N.D. Cal. Aug. 21, 2023), served January 22, 2024
2006	First Amended Invalidity Contentions in <i>Trove Brands LLC v. CamelBak Prods., LLC and Vista Outdoor Inc.</i> , No. 5:23-cv-4267 (N.D. Cal. Aug. 21, 2023), served July 18, 2024
2007	Notice of Deposition of Erin Jones in <i>Trove Brands LLC v. CamelBak Prods., LLC and Vista Outdoor Inc.</i> , No. 5:23-cv-4267 (N.D. Cal. Aug. 21, 2023), served April 23, 2024
2008	Notice of Deposition of Jeff Sagud in <i>Trove Brands LLC v. CamelBak Prods., LLC and Vista Outdoor Inc.</i> , No. 5:23-cv-4267 (N.D. Cal. Aug. 21, 2023), served April 23, 2024
2009	Declaration of Michael Jobin in Support of Patent Owner’s Response
2010	Claim Construction Order in <i>Trove Brands, LLC v. CamelBak Products, LLC, et al.</i> , No. 23-cv-04267-PCP (N.D. Cal.), Dkt. No. 108 (November 8, 2024) (“CC Order”).
2011	Deposition Transcript of Glenn Vallee, Ph.D. (January 20, 2025) (“Vallee Tr.”).
2012	Merriam-Webster Dictionary – “receive”

2013	Oxford Dictionary – “receive”
2014	Cambridge Dictionary – “receive”
2015	Merriam-Webster Dictionary – “retain”
2016	Oxford Dictionary – “retain”
2017	Cambridge Dictionary – “retain”
2018	Samartgis File History Excerpt – Original Drawings (submitted January 31, 2014)
2019	C.V. of Michael Jobin
2020	Merriam-Webster Dictionary – “stow”
2021	Oxford Dictionary – “stow”
2022	Cambridge Dictionary – “stow”
2023	U.S. Design Patent No. D945,819
2024	U.S. Design Patent No. D751,339
2025	Yeti MagSlider website
2026	RTIC Lid website
2027	E-mail from Board dated May 15, 2025 denying Patent Owner’s request for authorization to file a motion to strike

I. INTRODUCTION

Petitioner fails to rebut Patent Owner’s arguments and supporting evidence and expert testimony. Instead, Petitioner largely retreats from discredited positions in the petition and shifts to entirely new positions. As examples, Petitioner abandons its contention that Figure 9 of Samartgis is the “locking position,” and argues “structural identity” instead of only “equivalence” for the alleged closure retention mechanisms in Samartgis and Leoncavallo. Petitioner submits no expert testimony rebutting Patent Owner’s expert nor supporting these new positions. However, these new positions, even if entertained, fare no better than Petitioner’s original positions that were exposed as incorrect by Patent Owner and from which Petitioner now seeks to distance itself. The Board, therefore, should confirm all Challenged Claims.

II. CLAIM CONSTRUCTION

A. “closure retention mechanism”

Petitioner does not dispute that, in the Petition, it relied only on “spaced apart tabs 56,” which extend from the inner surface of the handle, as the corresponding structure for the “closure retention mechanism” under § 112(f). Reply, 1-2. Nor does Petitioner argue that any broader corresponding structures should be adopted. *Id.* And Petitioner continues to compare the prior art references to only the “spaced apart tabs 56” of the ’252 patent. *Id.*, 15-21. Given that Petitioner’s construction, *i.e.*, the “spaced apart tabs 56” extending from the inner surface of the handle, is

encompassed by the district court’s construction (Reply, 1), Patent Owner agrees with Petitioner that no further construction is necessary. Reply, 2.

B. “when the closure is . . . received by the closure retention mechanism”

This term should be construed to mean “when the closure is accepted, acquired, or engaged by the closure retention mechanism.” POR, 9-13. Petitioner seemingly agrees that the term “receive” means “to accept, to acquire, or to engage.” Reply, 4, n.1. However, contrary to the plain language of the claims and the entirety of the intrinsic evidence, Petitioner seeks to construe “when the closure is . . . received” to have no meaning such that conditional or temporal receipt is not required and permanent engagement is encompassed.

The plain claim language imposes the conditional requirement that the closure is selectively retained in a stowed position by the closure retention mechanism “*when* the closure *is* . . . *received* by the closure retention mechanism.” Use of the words “when . . . received” requires that the closure must have two states: a state when it has not been *received* and a state when it has been *received*, such that this term does not encompass “some time prior to, and independent of” receipt (e.g., always). *Info-Hold, Inc. v. Muzak LLC*, 783 F.3d 1365, 1373-74 (Fed. Cir. 2015) (affirming construction of “when a caller is placed on hold” as “at the moment a caller is placed on hold” and rejecting construction of “at some point prior to, and

independent of, when a caller was placed on hold” because intrinsic evidence did not disclose any actions occurring “before or while the caller is on hold” and because such a construction would improperly read the word “placed” out of the claims).

Specifically, as recited in the claims, the “closure” is configured to be “removably coupled relative to the drink spout,” and the “closure retention mechanism” is “configured to selectively retain the closure in a stowed position . . . *when* the closure *is selectively removed* from the drink spout *and received* by the closure retention mechanism.” The patent expressly defines “selectively” as being a result of “direct or indirect user manipulation.” Ex.1001 at 3:23-29. Thus, a user must be able to directly or indirectly manipulate the closure to transition it from a state of being not removed from the drink spout and not “received by” the closure retention mechanism to a state of being “received by” the closure retention mechanism “*when* the closure is selectively removed from the drink spout.”

Petitioner fails to identify even a single piece of intrinsic evidence supporting its overbroad construction that the closure may be permanently engaged (i.e., always received) by the closure retention mechanism (Reply, 3-5), and Petitioner fails to rebut any of the intrinsic or extrinsic evidence proffered by Patent Owner, which all demonstrates that conditional or temporal engagement, rather than permanent engagement is required. POR, 9-13.

C. “retain the closure in a stowed position”

The intrinsic and extrinsic evidence all demonstrates this phrase means “to hold or keep the closure in a position removed from the drink spout.” POR, 13-14. Petitioner does not dispute the portion requiring “to hold or keep the closure in a position.” Reply, 5, n.3. Instead, Petitioner merely disputes whether the “stowed position” must be a position “removed from the drink spout.” Reply, 5. Petitioner argues the claims recite “retain the closure in a stowed position *relative to the handle*” and that Patent Owner, therefore, is improperly rewriting the claims to recite a different point of reference. *Id.* Not so. Patent Owner has not proposed to construe the “relative to the handle” portion of the claim language. As such, the “relative to the handle” limitation is still required in addition to the “stowed position” limitation. Patent Owner has simply proposed to construe “stowed position” as requiring “a position removed from the drink spout” and not to replace the “relative to the handle” language. Therefore, being in a “position removed from the drink spout” (stowed position) is in no way inconsistent with or mutually exclusive of this position also being “relative to the handle,” which Patent Owner has left unconstrued. Petitioner does not otherwise meaningfully dispute Patent Owner’s construction, nor could it given that it flows directly from the plain claim language itself, which recites “selectively retain the closure in a stowed position relative to the handle *when the closure is selectively removed from the drink spout.*” POR, 13.

**III. PETITIONER HAS FAILED TO PROVE UNPATENTABILITY OF ANY
CHALLENGED CLAIM BY A PREPONDERANCE OF THE EVIDENCE**

A. Grounds 1 and 2 Based on Samartgis Fail

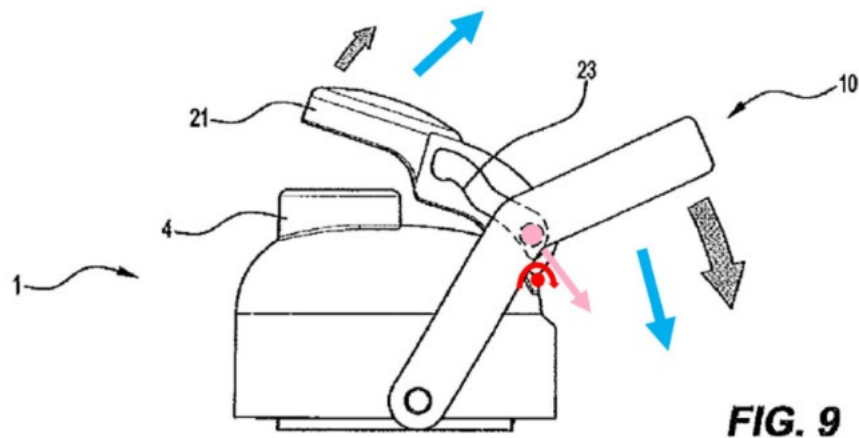
**1. Samartgis Fails to Disclose That the “Closure” is “Retain[ed]”
“In a Stowed Position” by the Closure Retention Mechanism**

In its Reply, Petitioner continues to rely on Figure 9 of Samartgis as the alleged “stowed position” but seemingly abandons its argument that this contention is supported by Figure 9 depicting the “locking position” of Samartgis. Reply, 7. Indeed, Petitioner fails to rebut any of Patent Owner’s arguments or expert testimony that Figure 5 is the “locking position” described in Samartgis—and fails to cite any contrary evidence from Samartgis or its expert—that Figure 9 is the “locking position,” as the Petition had originally contended. Reply, 7-12; Pet., 34; POR, 17-21.

In addition, Petitioner does not dispute the portion of Patent Owner’s construction requiring that the “closure retention mechanism” must “retain” the “closure” by holding or keeping the closure in position. *See* Reply, 5 n.3. However, Petitioner fails to argue or cite any evidence that the closure is held or kept in the position depicted in Figure 9 by the alleged closure retention mechanism (lugs 15 and 16), and Petitioner fails to rebut any of Patent Owner’s argument or evidence demonstrating that Samartgis fails to disclose that the closure is held in the position shown in Figure 9. *Id.*, 7-11. Any suggestion by Petitioner to the contrary should be

disregarded. *Elbit Sys. of Am., LLC v. Thales Visionix, Inc.*, 881 F.3d 1354, 1359 (Fed. Cir. 2018) (“Attorney argument is not evidence and cannot rebut other admitted evidence.”).

Further, Petitioner does not dispute (and actually adopts) Patent Owner’s argument and evidence demonstrating that it is highly likely that Samartgis’s cap and handle could continue to move to the right to more fully open as the handle is rotated to the right from the position shown in Figure 9. Reply, 10 (citing POR, 25; Ex.1004, Fig. 9).

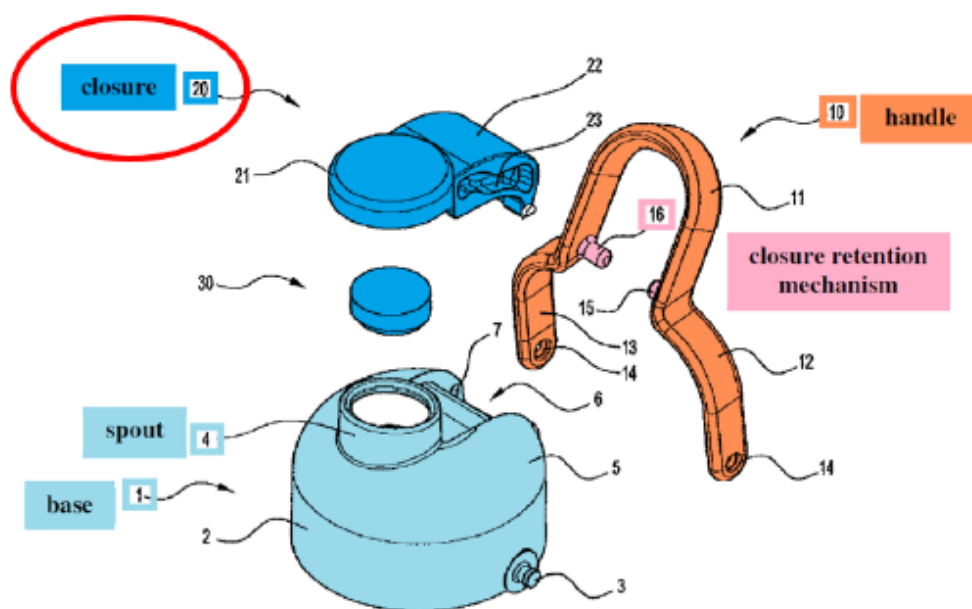


As such, Petitioner does not dispute that Figure 9 is only an intermediate position and there is nothing holding or keeping it in that position, demonstrating that Petitioner has failed to meet its burden of proving that Figure 9 is a “stowed position.”

2. Samartgis Fails to Disclose a “Closure” that is “Received By” a Closure Retention Mechanism

Petitioner does not dispute (and its expert agrees) that Samartgis’s lugs (alleged *closure retention mechanism*) are permanently engaged with the flap member’s tracks 23 (part of the alleged *closure*). POR, 27-29. The dispute regarding this limitation, therefore, largely turns on the proper construction of “when the closure is . . . received by the closure retention mechanism.” As discussed, Petitioner provides no intrinsic or extrinsic evidence supporting its overbroad construction that “when” does not impose any conditional or temporal requirement and instead allows the closure to be permanently engaged with (i.e., always received by) the closure retention mechanism. *See supra* Sec. II.B. Because Petitioner’s construction is incorrect, Samartgis’s permanent engagement between its lugs and tracks fails to satisfy the requirement of “when the closure is . . . received by the closure retention mechanism.”

Finally, to the extent Petitioner is now suggesting that there is temporal or conditional receipt/engagement (instead of permanent engagement) when the lugs reach the “distal end of the tracks 23,” this theory fails because Petitioner did not map only the distal end of the tracks as being the claimed “closure” and instead mapped all of flap member 20 (including all of tracks 23) as being the “closure,” as shown below. POR, 30-31.



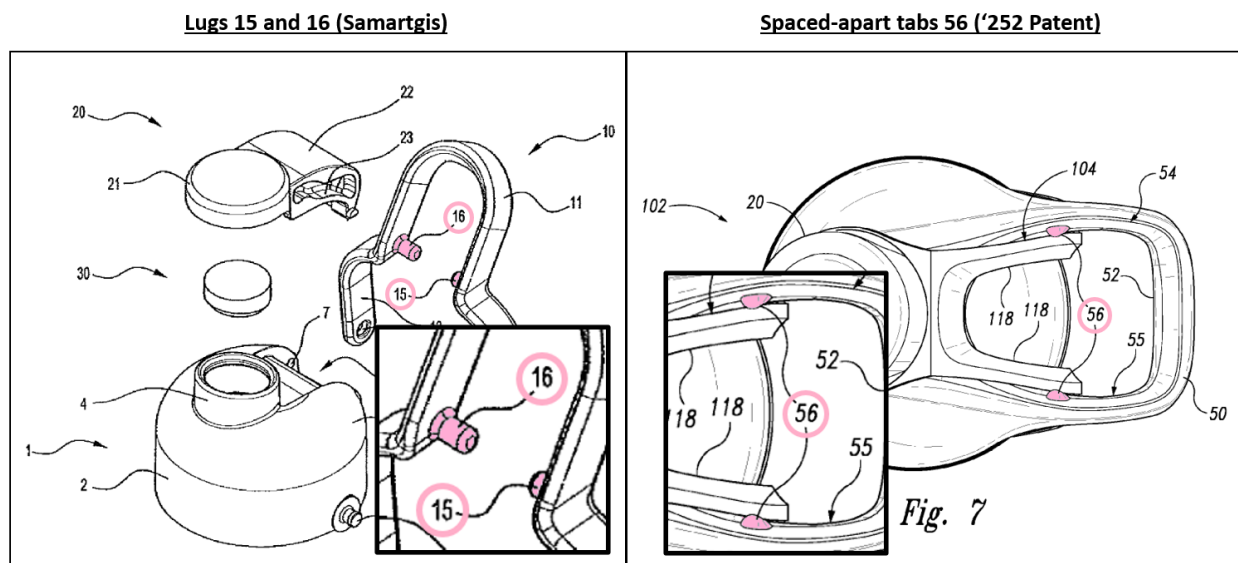
3. The Lugs in Samartgis are not a “Closure Retention Mechanism”

Sec. II.A. As Patent Owner noted, the Petition only argued that lugs 15 and 16 “are at least equivalent” to the spaced-apart tabs 56 and included no argument they were structurally identical. POR, 32-33; Pet., 35. Patent Owner explained at length, supported by expert testimony, why lugs 15 and 16 are not equivalent to the spaced-apart tabs 56 because Petitioner had failed to show that they performed the identical function “in substantially the same way, with substantially the same result.” POR, 33-37 (citing Ex.2009, ¶¶ 110-117).

Petitioner now argues that lugs 15 and 16 are “structurally identical” to the spaced-apart tabs 56. Reply, 15-17. As an initial matter, this argument must be disregarded because it is a new argument raised for the first time in a reply. 37 C.F.R. § 42.23(b); Consolidated TPG (Nov. 2019), at 73; *see also Intelligent Bio-Sys., Inc. v. Illumina Cambridge, Ltd.*, 821 F.3d 1359, 1369 (Fed. Cir. 2016). Patent Owner requested authorization to move to strike this argument, but this request was denied based on the Petition’s use of “*at least* equivalent.” *See* Ex. 2027. The Board, however, invited Patent Owner to argue this point in this sur-reply. *Id.* By arguing the lugs were “at least equivalent,” and not arguing structural identity in the Petition, Petitioner attempted to reserve the right to argue structural identity in a later paper, thereby seeking to circumvent the rule prohibiting new arguments in a reply. Patent Owner has been deprived of the ability to present responsive expert testimony on

this issue given that new testimony cannot be presented in a sur-reply. The Board, therefore, should disregard this argument.

Even if the Board considers it, Petitioner cannot meet its burden of proving that lugs 15 and 16 are structurally identical to spaced-apart tabs 56. Petitioner's only argument in support is that lugs 15 and 16 and tabs 56 are both "projections that extend from the inner surface of the handle." Reply, 16. That, of course, does not establish they are identical. A simple side-by-side comparison demonstrates they are not:



Ex. 1004, Fig. 3 (annotated); Ex. 1001, Fig. 7 (annotated). As shown, lugs 15 and 16 are elongated, making them longer/taller than they are wide, whereas the spaced-apart tabs 56 are wider than they are long/tall. *See id.* This difference is not surprising given the differences in the "way" they function and the "results" they achieve. POR,

33-37 (citing Ex.2009, ¶¶ 110-117). For example, the lugs do not engage the closure/cap through a friction-fit or snap-fit arrangement that holds the closure/cap by narrowing the width of the handle—unlike the tabs 56. POR, 35-36 (citing Ex.2009, ¶¶ 114-115; Ex.2011 (Vallee Tr.), at 155-157). Instead, the lugs are always engaged with the track 23. *Id.* Thus, the elongated dimensions of the lugs 15 and 16 relative to the tabs 56 is consistent with their purpose of keeping the lugs within the tracks 23, whereas the flatter dimensions of the tabs 56 facilitate snapping the cap/closure in and out of engagement. The lugs 15 and 16 are not “identical” to the tabs 56.

Finally, Petitioner provides no responsive expert testimony and Petitioner fails to address Patent Owner’s arguments as to why the lugs are not “equivalent” to the tabs. Reply, 17. Instead, Petitioner merely reiterates its contention that the lugs perform the same function of receiving and selectively retaining the closure in a stowed position. *See id.* While they do not perform the identical function, as discussed above, *see supra* Secs. III.A.1-III.A.2, even if they did, that is only the first prong of the three-prong test for equivalence. Petitioner has failed to prove the lugs perform in substantially the same “way” as the tabs 56, because the lugs do not resiliently deflect to provide a snap-fit/friction-fit with the cap that allows it to be engaged and disengaged with the lugs in the way that the tabs 56 do—instead, the lugs move by rotating and sliding within the tracks 23 and never disengage from the

tracks. POR, 33-36 (citing Ex.2009, ¶¶113-115; Ex.2011 (Vallee Tr.), at 155-157). Petitioner has also failed to prove the lugs achieve substantially the same result as the tabs 56, because, as Petitioner failed to refute, the lug members 15 and 16 achieve the result of locking Samartgis's cap in the closed position on the drink spout (shown in Figure 5) and do not lock the cap into the alleged "stowed position" of Figure 9 identified by Petitioner and Dr. Vallee. POR, 37 (citing Ex.2009, ¶¶116-117).

4. Petitioner Abandons its Obviousness Arguments Based on Samartgis

Petitioner fails to refute Patent Owner's argument that Petitioner's obviousness positions based on Samartgis were legally deficient. *See* POR, 37-39; Reply, at 6-18.

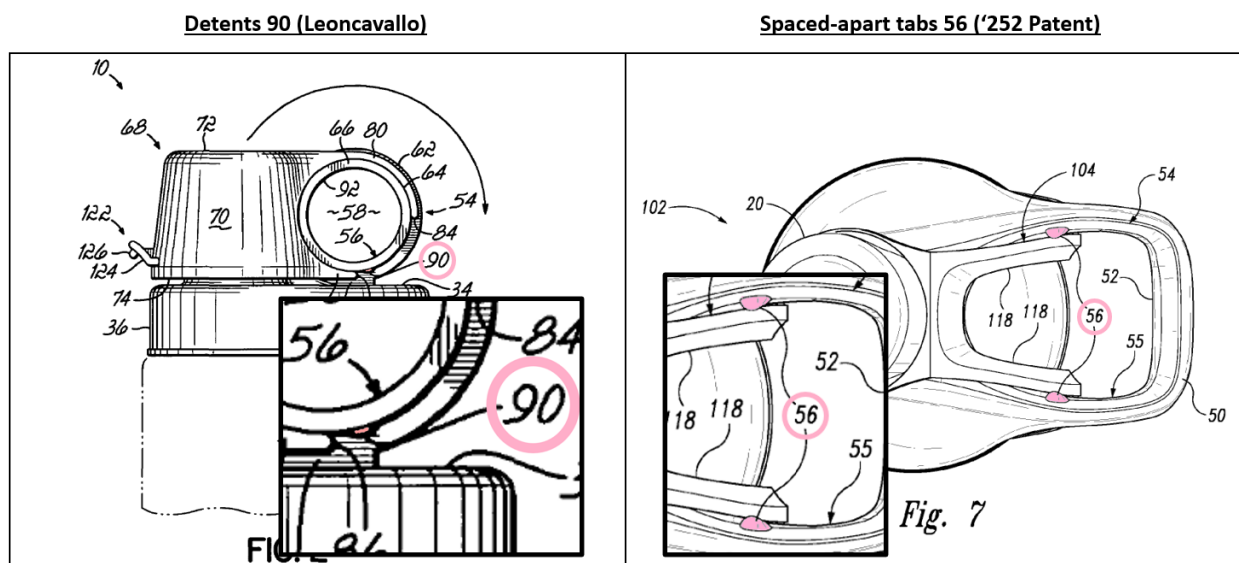
B. Grounds 3 and 4 Based on Leoncavallo Fail

1. Leoncavallo does not disclose or render obvious the "closure retention mechanism"

Like for Samartgis, discussed above, the Petition had only contended that Leoncavallo's detents 90 (i.e., the alleged "closure retention mechanism") are "at least equivalent" to the spaced-apart tabs 56 of the '252 patent. Pet., 68-69. The Petition contains no contention that the detents 90 are structurally "identical" to the spaced-apart tabs 56. *See id.* After Patent Owner thoroughly rebutted the Petition's contention that the detents 90 are "equivalent" to the tabs 56 (POR, 42-48 (citing Ex.2009, at ¶¶118-131)), Petitioner argued for the first time in reply that "the detents

90 are structurally identical to the spaced-apart tabs 56.” Reply, 20. Petitioner’s new argument should be disregarded, as should its attempt to reserve its right with its “at least equivalent” contention, for the same reasons discussed above for Samartgis. *See supra* Sec. III.A.3. While the Board denied Patent Owner’s request for authorization to move to strike this new argument, the Board nonetheless invited Patent Owner to brief the issue in this sur-reply. *See* Ex. 2027.

Even if this argument is considered, Petitioner cannot meet its burden of proving that Leocavallo’s detents 90 are “structurally identical” to the spaced-apart tabs 56 of the ’252 patent. Petitioner’s only argument is that the detents 90 are “projections, ribs, or stops on the handle,” which Petitioner argues is “like the spaced-apart tabs 56.” Reply, 20. Being “like” the tabs does not, of course, establish that they are identical. A simple side-by-side comparison demonstrates they are not identical:



Ex.1005, Fig. 2 (annotated); Ex.1001, Fig. 7 (annotated). As can be seen, and as described in Leoncavallo, the detents 90 “project outwardly from the outer arcuate surface 64 of the loop 54 [handle].” Ex.1005, 5:33-42. The tabs 56, however, are shown and described as “extending from the closed perimeter and/or . . . as defining a portion of the closed perimeter.” Ex.1001, 8:61-63. Thus, tabs 56 extend inward from the inner surface of the handle, while detents 90 extend outward from the outer surface of the handle. Tabs 56 are also “opposed tabs” that are on opposite sides of the inner surface of the handle, Ex.1001, 8:61-63, while detents 90 are “on opposite sides of the annular rib 62” such that they are on the same side of the handle, as they must be for the detents 90 to contact the connector member 80 at about the same time as the lid rotates from the closed to the open position. Ex.1005, 5:33-36, Fig. 1, Fig. 1A, Fig. 2, Fig. 3. As such, the detents 90 are not “structurally identical” to the tabs 56.

Regarding “equivalence,” Petitioner again merely conflates and re-argues the “function” prong and fails to respond to the litany of reasons set forth by Patent Owner as to how Petitioner failed to meet its burden of satisfying the separate “way” and “result” prongs. POR, 42-48 (citing Ex. 2009, ¶¶118-131). As to the “way,” these reasons include, but are not limited to: i) the outward frictional force of the detents, which are located on the outside, rather than the inward force of the tabs on the inside of the handle, ii) the detents’ failure to ever retain the cap within the

handle, iii) the detents' engagement with a connector member rather than the spout-covering portion of the cap, iv) the detents' continuous frictional engagement through varying degrees of openness of the cap rather than the binary snap-fit arrangement of the tabs, and v) the detents' approximate same location relative to the handle that provides frictional contact at that single location, as compared to the tabs' locations on opposing sides that provide for multiple points of frictional engagement. *Id.* As to the "result," this includes: i) the fact that Leoncavallo's detent design is not mere happenstance but is intentional so as to provide the benefit of avoiding interference with the user's finger or attachment hardware inside the handle, which differs significantly from and would not be achieved by the tabs' intentional stowage of the cap inside the handle, i.e., at a location that Leoncavallo would deem interfering, and ii) that the detents provide for a moving frictional engagement of the cap such that it provides a less forceful retention than the tabs' binary snap-fit arrangement. *Id.* Petitioner wholly fails to acknowledge, much less rebut, any of this litany of expert-testimony-supported reasons as to how the "way" and "result" prongs are not satisfied. *Elbit*, 881 F.3d at 1359 ("Attorney argument is not evidence and cannot rebut other admitted evidence.").

2. Leoncavallo does not disclose or render obvious dependent claim 6

Petitioner contends that claim 6's recitation of "wherein the handle defines a closed perimeter, and wherein the closure retention mechanism defines at least a portion of the closed perimeter" can be satisfied by the detents 90 being on the *outer surface* of the loop member 54. Reply, 21-22. This argument is contrary to both Petitioner's own theory and the '252 patent. As Patent Owner noted, the Petition maps *only* the inner surface of the loop 54 as being the claimed "closed perimeter" defined by the handle and *not* any portion of the outer surface 64 of loop 54 (where the detents 90 are located). This is shown by Petitioner's own yellow annotation below:

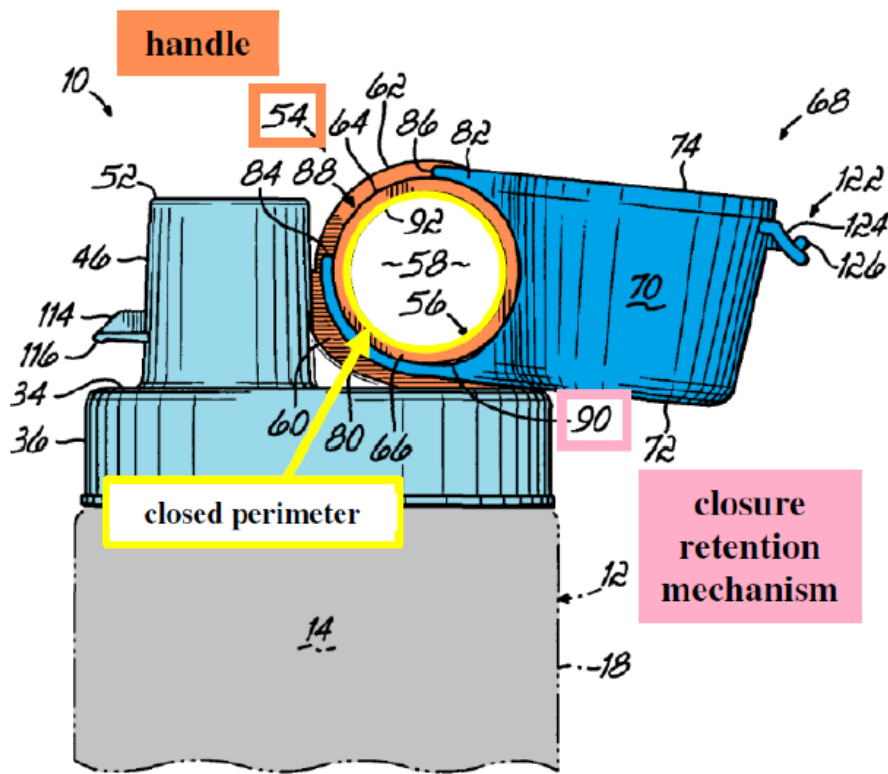
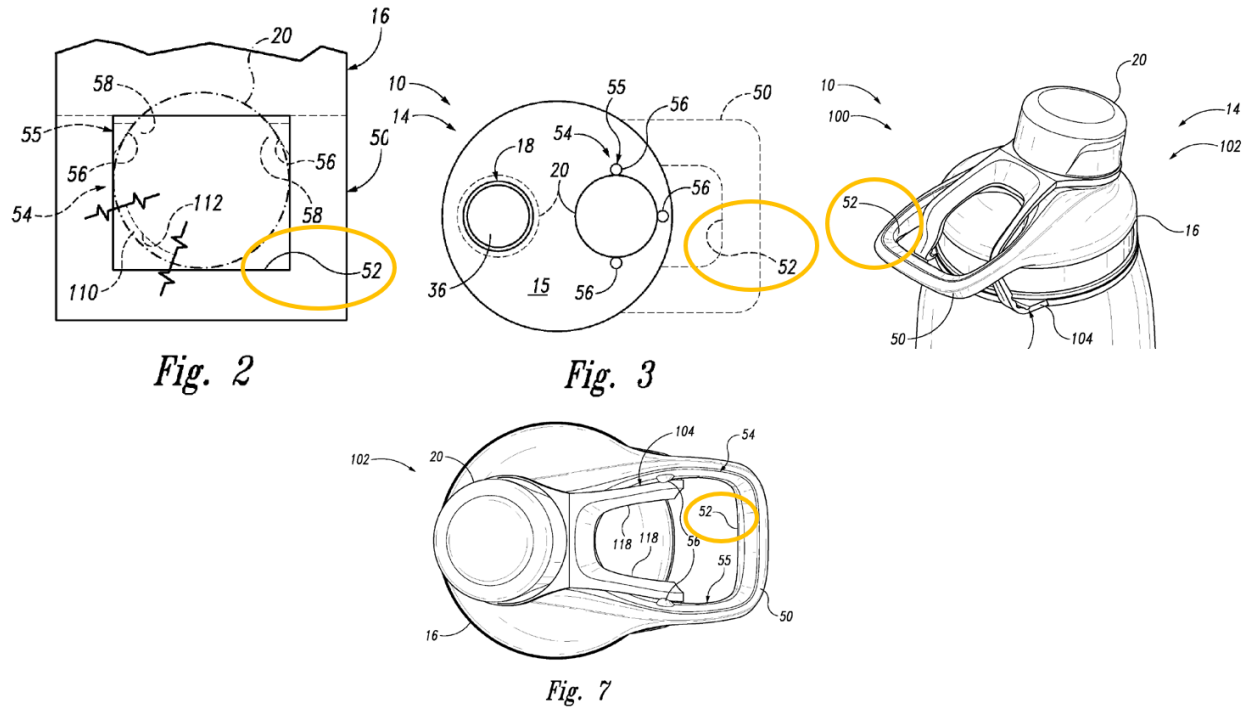


FIG. 3

Pet., 71. Further, the '252 patent consistently and repeatedly describes the closed perimeter 52 as being the inner surface, *not* the outer surface, of the handle “within” which the closure is received when in the stowed position. Ex. 1001, Abstract, 1:65-67, 7:62-8:5, 8:44-49, 8:61-63, 13:14-41, Figs 2-4, 7. The closed perimeter is described as a “boundary” “around an opening through which an object may be inserted,” *id.* at 7:62-8:5, and the tabs 56 are described as “extending inward from the closed perimeter” so they engage the closure when it is “within the closed perimeter of the handle in[] its stowed position.” *Id.*, 13:18-31. The figures also

consistently label the inner, *not* outer, surface of the handle as being the closed perimeter 52:



Ex.1001, at Figs. 2-4, 7 (annotated).

Petitioner's reliance, in the alternative, on an alternate embodiment in Leoncavallo fares no better. Petitioner fails to rebut Patent Owner's argument that Leoncavallo only discloses the connector members 80, 82 engaging the inner surface 92 of the loop 54 and is silent as to whether the detents 90 are also positioned on this inner surface in this alternate embodiment. POR, 50-54 (citing Ex.2009, ¶¶137-145); Reply, 22. Petitioner also fails to meaningfully dispute that Leoncavallo expressly teaches away from such positioning because it would allow the user's finger to

interfere with movement of the cap and could cause unintentional opening. POR, 51-52 (citing Ex.2009, ¶¶139-141).

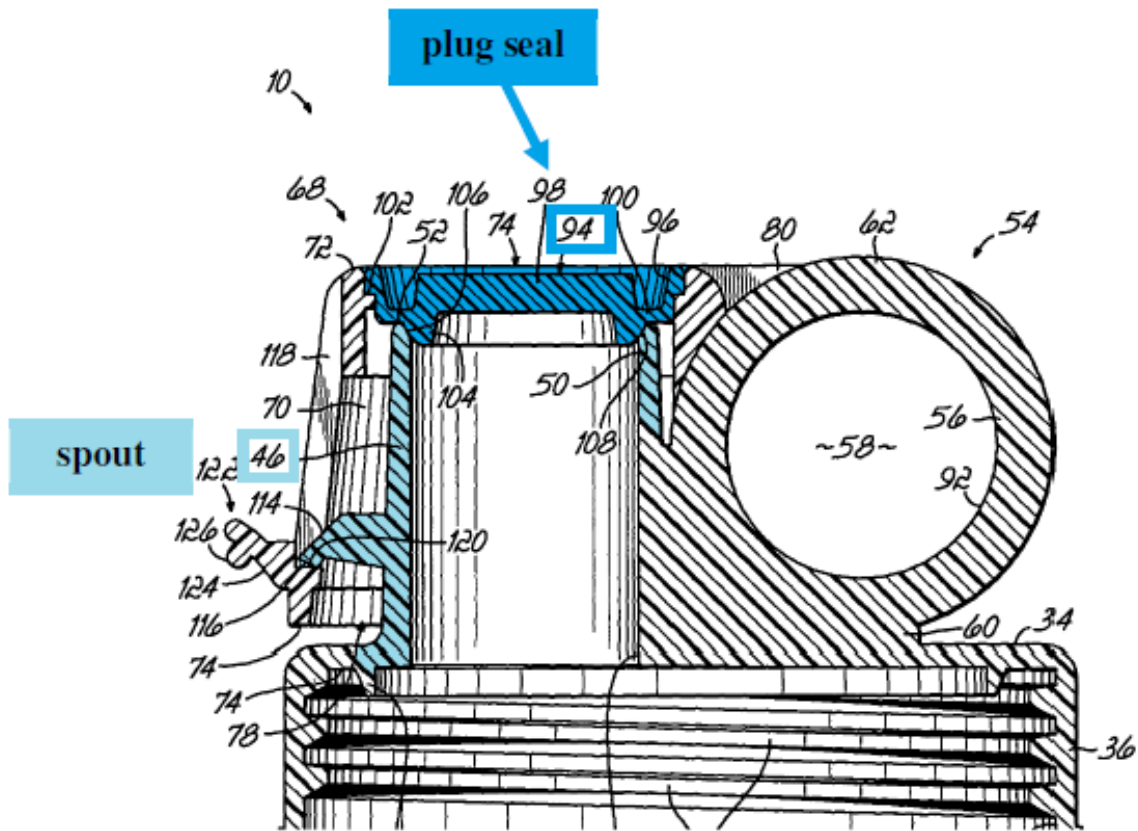
3. Leoncavallo does not disclose or render obvious the limitations of dependent claim 7

Leoncavallo also fails to satisfy claim 7's recitation that "in the stowed position, the closure is positioned at least partially within the closed perimeter" for similar reasons as for claim 6. As discussed, neither Petitioner's own mapping nor the '252 patent's understanding of the "closed perimeter" defined by the handle allows it to be the outer surface of the handle. Further, as also discussed, Leoncavallo does not disclose that the detents 90 are moved to the inside of the loop in the alternate embodiment relied on by Petitioner in the alternative. As such, there is no evidence that this alternate embodiment would even meet the limitations of the base independent claim 5. POR, 55-56. Petitioner fails to respond. Reply, 22.

4. Petitioner fails to show a reason to combine Johnson and/or Gorskey with Leoncavallo to achieve the invention of claims 17 and 18

Petitioner, for the first time in reply, cites to expert testimony and makes arguments from its expert's declaration (Ex.1003, ¶204) that were not contained in the Petition as to why Gorskey and Johnson allegedly provide "a more secure, robust defense against inadvertent spills or leaking" than Leoncavallo's plug seal 94. Reply, 22-23; Pet., 77-78. Leoncavallo's plug seal already "automatically sealingly engages

with” Leoncavallo’s spout “to prevent undesired leakage of liquid” and “forms an essentially watertight and leak-proof seal.” Ex.1005, 6:7-12, 7:3-7; POR, 56-60. Petitioner argues Gorskey’s “locking groove” that engages a “complementary locking ridge” makes its seal more secure (Reply, 23), but Leoncavallo already includes a latch member 114 having a “chamfered surface 116” that “is brought into releasable locking engagement with the locking surface 120 of the flip cap 68 as shown in FIG. 4” to hold the seal in place. Ex.1005, 6:40-48, Fig. 4. And neither Petitioner nor its expert explain how Gorskey’s locking mechanism would provide a better seal than Leoncavallo’s locking mechanism. Further, Petitioner argues that Johnson’s plug “seals the spout on both the inside and outside.” Reply, 23. But Leoncavallo’s plug does so as well, because its plug has “a depending annular sealing wall 104” that engages and seals with “a chamfered portion 106” on the inside of the top edge 52 of the spout 46, as well as “a radially outward sealing surface 108” that also “sealingly engages” with the chamfered portion 106, as shown below in Petitioner’s annotated version of Figure 4. Ex.1005, 6:2-7. As can also be seen, the plug seal, made of a compressible elastomeric material, extends beyond/outside of the spout, as well. *Id.*, Fig. 4; POR, 58 (citing Ex.2009, ¶¶155-156).



Pet., 58. Petitioner has provided no evidence rebutting Patent Owner’s expert’s conclusion that “[t]here is no evidence that either Johnson or Gorskey provides a stronger seal than Leoncavallo.” POR, 58-59 (citing Ex.2009, ¶156. Finally, Petitioner also fails to rebut his opinion that a POSITA would not have looked to either Johnson’s mass-produced, single-use food packaging or Gorskey’s method for sealing opened food-packaging bags, especially where there is no indication they are applicable to refillable drink containers or are even watertight. POR, 59-60 (citing Ex.2009, ¶¶157-163).

C. Petitioner's Grounds 5 and 6 Based On Miller Fail

1. Miller does not Disclose Numerous Elements of Claims 5 and 19

As Patent Owner explained, the Miller design patent does not disclose (1) “a drink spout extending from the base,” (2) a “closure” that is “configured to be removably coupled relative to the drink spout,” or (3) the “closure retention mechanism.” POR, 60-67. Petitioner’s arguments as to each are unavailing and counter to its expert’s testimony.

First, there is no dispute that none of Miller’s figures show “a drink spout extending from the base.” Petitioner speculates that the drink spout must be present because Miller’s figures show “multiple structural features” and a “distinct upward projection shape.” Reply, 26-27 (discussing attorney annotations of a “hinge,” “hinge pin,” “closure,” “tab,” and “indentation”), 28. But none of these features demonstrates that Miller has a “drink spout extending from the base.” Glossing over this deficiency, Petitioner repeats its expert’s unsupported conclusion that Miller would “necessarily include an opening forming a passageway for dispensing the beverage.” Pet., 85; Reply, 28-29. But even Dr. Vallee conceded that “just a hole in the base” would not satisfy the claimed “drink spout *extending from the base*,” and nothing in Miller suggests that anything other than a hole would be present under the cap. Ex. 2011, 194:15-21. Petitioner’s only rebuttal is that the “shape of the

closure would have communicated to one skilled in the art that Miller includes a spout.” Reply, 28. But again, Petitioner fails to address that the drink spout must “extend[] from the base” and cannot be a mere hole. As Patent Owner’s expert explained, plenty of designs were known to use mere holes rather than spouts “extending from the base.” Ex.2009, ¶¶165-173. Moreover, Dr. Vallee’s observation that flip closures covering a spout were conventional does not mean that Miller discloses a “spout extending from the base” or that one would be obvious, especially where many other similar cap assemblies used passageways that do not extend from the base. *Id.*; POR, 62-63.

Second, Petitioner fails to meaningfully respond to Patent Owner’s argument that Miller lacks any disclosure of a closure “configured to be removably coupled relative to the drink spout.” It is undisputed that Miller does not show what resides under the closure, so there is no evidence of whether or how the closure engages with any spout, if such a spout even exists. Petitioner’s only rebuttal is to repeat the conclusory and unsupported statement of its expert that “coupling would be ‘necessary to allow the user to close the spout and prevent spills or leakage when not in use.’” Reply, 29. Of course, this assumes there is a spout under the closure and ignores other means to prevent spills. Ex. 2009, ¶176. More importantly, Dr. Vallee’s assertion that the required “coupling” must exist lacks factual or evidentiary

support and is entitled to no weight. 37 C.F.R. § 42.65(a); *see also Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 9 (P.T.A.B. August 24, 2022) (precedential).

Third, as to the “closure retention mechanism,” Petitioner’s arguments only serve to underscore its reliance on speculation. Once again, there is no dispute that Miller does not show any alleged “projection” snapping into the alleged “indentation.” Moreover, the alleged “projection” cannot be literally the same as the spaced-apart tabs 56 required for the “closure retention mechanism” because unlike the ’252 Patent, the alleged “projection” in Miller is not on the inner surface of the handle. Pet. 88-89. Rather than rebut Patent Owner’s arguments and legal authority, Petitioner simply restates the speculative conclusion that the “projection snaps into the handle’s closure retention mechanism (indentation), thereby retaining the closure in the stowed position relative to the handle.” This functional description is nowhere in Miller and reason alone to reject Petitioner’s contention as to this element. *See Wasica Fin. GmbH v. Cont’l Auto. Sys., Inc.*, 853 F.3d 1272, 1284 (Fed. Cir. 2017) (“[I]t has long been understood that ambiguous references do not, as a matter of law, anticipate a claim.”).

2. Petitioner Has Failed to Show that The Elements Missing from Miller would have been Obvious over Leoncavallo or the Knowledge of a POSITA

Not only are the above limitations missing from Miller, Petitioner fails to rebut Patent Owner's arguments demonstrating that none of the elements would have been obvious in view of Leoncavallo or the knowledge of a POSITA.

First, with respect to the "drink spout" limitation, Petitioner fails to address Leoncavallo's embodiment that uses a mere opening (rather than a spout), which would have also provided "a convenient way for the user to drink," Petitioner's only stated motivation for why a POSITA would have specifically chosen to combine Leoncavallo's spout embodiment with Miller. Reply, 31; POR, 67-69. Petitioner entirely ignores and fails to rebut Patent Owner's argument and expert testimony explaining a host of reasons why Leoncavallo's opening would have been more convenient than its spout embodiment—which eviscerates Petitioner's motivation to combine, which was nothing more than "a convenient way for the user to drink." *Id.* (citing Ex.2009, ¶¶181-183). Petitioner's attorney argument cannot rebut this evidence. Additionally, and as explained at Section III.C.1, *supra*, Petitioner's attempt to fill this missing limitation with Dr. Vallee's opinions are conclusory and unsupported.

Second, and with respect to the requirement that the closure be "configured to be removably coupled relative to the drink spout," Petitioner again fails to respond

to Patent Owner’s arguments. Specifically, Patent Owner explained why (1) Petitioner’s positions were conclusory and unsupported, and (2) a POSITA would not have been motivated to combine Miller with Leoncavallo’s spout-based closure over simpler and superior options, including Leoncavallo’s alternative “outlet” that also uses a plug seal. POR, 69-70; Ex. 2009, ¶¶ 184, 185. These arguments and supporting opinions are un rebutted.

Third, for the “closure retention mechanism,” Petitioner similarly fails to rebut any of Patent Owner’s arguments on why it would not have been obvious over Miller in view of the knowledge of one of skill in the art to arrive at the claimed “closure retention mechanism.” POR. 70-71.¹ Likewise, Petitioner fails to show it met its burden of proving how or why the “knowledge of one skilled in the art” or known alleged closure retention mechanisms using protrusions on handles would have motivated a POSITA to arrive at the required tabs 56.

¹ Petitioner also does not deny that its obviousness challenge for the “closure retention mechanism” in Claims 5 and 19 is not based on combining Miller with Leoncavallo or in view of the teachings in Leoncavallo. *See* POR, 70.

3. Petitioner’s Ground 5 Based on Miller in view of Leoncavallo Fails To Explain How such a Combination Would Have Been Made or How it Would Work

Patent Owner explained why Petitioner’s obviousness theories failed to articulate how components relating to Leoncavallo’s closure mechanism would have been combined with Miller’s unknown and unspecified components or how they would have worked together. POR, 71-73 (citing Ex. 2009, ¶ 188). Petitioner did not respond other than to allege that “the ‘252 patent is ‘simple.’” Reply, 30. A Petitioner cannot carry its burden to show obviousness where there is no “clear, evidence-supported account” of “how the combination” would work. *Personal Web Techs., LLC v. Apple, Inc.*, 848 F.3d 987, 994 (Fed. Cir. 2017); *see also Apple v. Uniloc Luxembourg S.A.*, IPR2018-00420, (PTAB August 6, 2018), Paper 7, at 18.

4. Petitioner’s Ground 6 Based on Miller in view of Leoncavallo in Further View of Gorskey or Johnson Fails to Establish a Specific Motivation to Combine for Particular Missing Limitations or How such a Combination Would Have Been Made

Ground 6 requires the combination of Miller, Leoncavallo, and either Gorskey or Johnson. As explained by Patent Owner, the Petition fails to set forth an explicit motivation to combine Miller with either Gorskey or Johnson. POR, 73-74. Indeed, the three sentences comprising all of Ground 6 rely on combining Leoncavallo with Gorskey or Johnson and omit any specific analysis as why the same reasoning for a different primary reference (Leoncavallo) would apply for Miller. Petitioner’s only

rebuttal is to regurgitate the same disjointed analysis for separately combining Miller with Leoncavallo and Leoncavallo with Gorskey or Johnson. Reply, 31-32. For the reasons set forth by Patent Owner, this analysis is insufficient for Petitioner to meet its burden. *See* POR, 73-74. Additionally, Patent Owner's explanation for why a POSITA would not be motivated to combine the references in Ground 6 went un rebutted. *See* POR, 73-74, Ex. 2009, ¶¶ 192-194.

IV. CONCLUSION

For at least the foregoing reasons, the patentability of the Challenged Claims should be confirmed.

Dated: July 2, 2025

Respectfully submitted,

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CERTIFICATE OF WORD COUNT

Pursuant to 37 C.F.R. § 42.24(d), the undersigned certifies that the foregoing PATENT OWNER'S RESPONSE, according to the word-processing system used to prepare the paper and not including those parts excluded by § 42.24(a)(1), has 5,550 words, which is within the type-volume limit set by § 42.24.

By: /Ryan Schletzbaum/
Ryan Schletzbaum

CERTIFICATE OF SERVICE

Pursuant to 37 CFR § 42.6(e), the undersigned certifies that on July 2, 2025, a complete and entire copy of the foregoing Patent Owner's Sur-reply and Exhibit 2027 were provided via e-mail to Petitioner's counsel of record as follows:

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