

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

PETITIONER'S NOTICE OF APPEAL

In accordance with 35 U.S.C. §§ 141(c), 142 and 37 C.F.R. §§ 90.2 and 90.3(a), Trove Brands, LLC (“Petitioner”) hereby appeals to the United States Court of Appeals for the Federal Circuit for review of the Judgment/Final Written Decision of the Patent Trial and Appeal Board (the “Board”), entered on October 28, 2025, (the “Final Decision,” Paper 32, attached hereto as Exhibit A), and from all underlying orders, decisions, rulings, and opinions related to the Final Decision.

For the limited purpose of providing the Director of the United States Patent and Trademark Office with the information required under 37 C.F.R. § 90.2(a)(3)(ii), Petitioner anticipates that the issues on appeal will include, but are not limited to, whether the Board erred in determining that Petitioner failed to demonstrate that claims 5-7 and 16-19 of U.S. Patent No. 8,905,252 are unpatentable, including by:

1. Misconstruing “closure retention mechanism”;
2. Misconstruing “when the closure is selectively . . . received by the closure retention mechanism”;
3. Finding the claims are neither anticipated nor obvious in view of the prior art Samartgis reference alone and/or in combination with the prior art Gorskey and Johnson references (Grounds 1-2);

4. Finding the claims are neither anticipated nor obvious in view of the prior art Leoncavallo reference alone and/or in combination with the prior art Gorskey, Johnson, and/or Miller references (Grounds 3-4);
5. Finding the claims are not obvious in view of the prior art Miller reference in combination with the prior art Leoncavallo, Gorskey, and/or Johnson references (Grounds 5-6).

In addition, Petitioner also appeals all other issues decided adverse to Petitioner in any orders, decisions, rulings, or opinions.

This Notice of Appeal is timely pursuant to 37 C.F.R. § 90.3, having been duly filed within 63 days after the Final Written Decision.

Contemporaneously with this submission, a copy of the Notice of Appeal is being filed electronically with the Patent Trial and Appeal Board. In addition, a copy of this Notice of Appeal, along with the required docketing fees, is being electronically filed with the Clerk's Office for the United States Court of Appeals for the Federal Circuit.

Dated: December 12, 2025

Respectfully submitted,

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Petitioner's Notice of Appeal
Case IPR2024-00858
Patent 8,905,252 B2

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CERTIFICATE OF SERVICE

In accordance with 37 C.F.R. § 90.2(a)(1) and § 104.2, I hereby certify that on December 12, 2025, in addition to being filed electronically through the Board's P-TACTS System, the original version of the foregoing, Petitioner's Notice of Appeal was filed by USPS Priority Mail Express on the Director of the United States Patent and Trademark Office, at the following address:

Office of the Solicitor
United States Patent and Trademark Office
Mail Stop 8,
P.O. Box 1450
Alexandria, Virginia 22313-1450

I hereby certify that on December 12, 2025, a true and correct copy of the foregoing, Petitioner's Notice of Appeal, along with a copy of the Final Written Decision, was filed electronically with the Clerk's Office of the United States Court of Appeals for the Federal Circuit, at the following address:

Clerk of Court
United States Court of Appeals for the Federal Circuit
717 Madison Place, N.W., Room 401
Washington, DC 20439

Pursuant to 37 C.F.R. § 42.6(e), the undersigned certifies that on December 12, 2025, a complete and entire copy of this Petitioner's Notice of Appeal was served by FedEx Priority Overnight Delivery and via email, to the Patent Owner at the following addresses:

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Dated: December 12, 2025

/ Ali S. Razai /
Ali S. Razai (Reg. No. 60,771)

EXHIBIT A

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

Before LINDA E. HORNER, HYUN J. JUNG, and CARL M. DEFRANCO,
Administrative Patent Judges.

DEFRANCO, *Administrative Patent Judge.*

JUDGMENT
Final Written Decision
Determining No Challenged Claims Unpatentable
35 U.S.C. § 318(a)

I. INTRODUCTION

CamelBak Products, LLC (“CamelBak”) is the owner of U.S. Patent No. 8,905,252 B2 (Ex. 1001, “the ’252 patent”).¹ Trove Brands, LLC (“Trove”) filed a petition for *inter partes* review of claims 5–7 and 16–19 of the ’252 patent. *See* Paper 2 (“Pet.”). We instituted *inter partes* review of all claims as challenged in the petition. Paper 7 (“Inst. Dec.”). In due course, CamelBak filed a patent owner response. Paper 11 (“PO Resp.”). Trove followed with a reply. Paper 20 (“Pet. Reply”). And CamelBak filed a sur-reply. Paper 24 (“PO Sur-Reply”). We held an oral hearing, a transcript of which is in the record. Paper 31 (“Hrg. Tr.”).

We have jurisdiction under 35 U.S.C. § 6. This Final Written Decision is entered pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73. For the reasons below, we determine that Trove fails to demonstrate that claims 5–7 and 16–19 of the ’252 patent are unpatentable under either 35 U.S.C. § 102 or § 103.

II. BACKGROUND

A. *Related Matters*

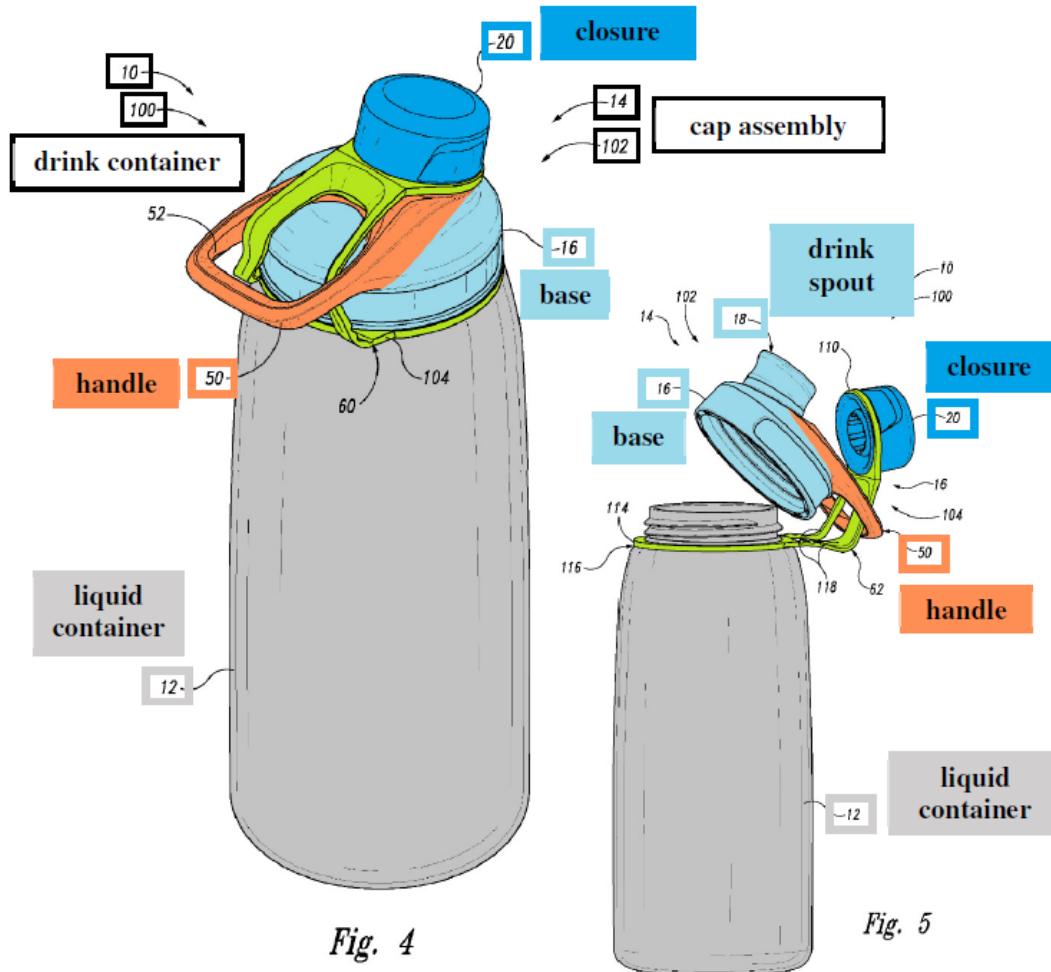
The ’252 patent is the subject of a parallel district court action: *Trove Brands, LLC v. CamelBak Products, LLC*, No. 5:23-cv-04267 (N.D. Cal. Aug. 21, 2023). *See* Paper 4. That case is currently stayed pending final outcome of this *inter partes* review.

B. *Overview of the ’252 Patent (Ex. 1001)*

The ’252 patent relates generally to drink containers that include a liquid container and a cap assembly removably coupled to the liquid

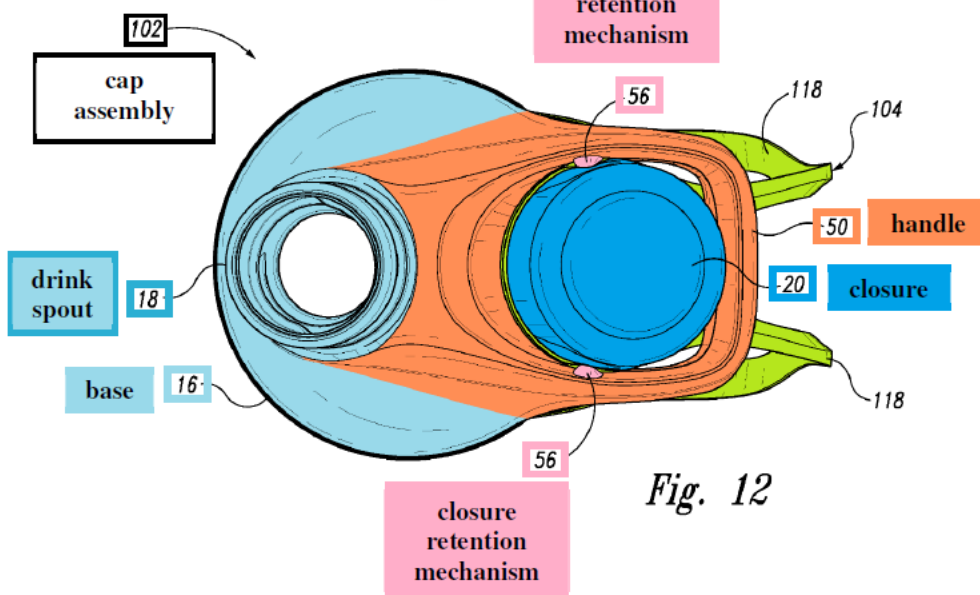
¹ CamelBak is owned by Vista Outdoor Inc., a publicly-traded company. *See* Paper 4.

container. Ex. 1001, Abstract, 4:30–35. Figures 4 and 5, reproduced below and annotated by Trove (Pet. 10), illustrate the liquid container and cap assembly.



As shown above, liquid container 12 (grey) is provided with cap assembly 14 for covering the liquid container. The cap assembly includes base 16 and drink spout 18 (light blue), closure 20 (dark blue) for covering the drink spout, and handle 50 (orange) for holding the liquid container.

Figures 7 and 12, also annotated by Trove (Pet. 11) and reproduced below, illustrate closure 20 (dark blue) coupled to the drink spout in a closed position (Fig. 7) and removed from the drink in an open position (Fig. 12).



As shown above, handle 50 (orange) includes a closure retention mechanism consisting of a pair of spaced-apart tabs 56 (pink) on the inner perimeter of the handle for engaging and retaining closure 20 (dark blue) in the stowed position once it is removed from drink spout 18 (light blue). *Id.* at 8:57–60, 13:14–46.

C. The Challenged Claims

Of the challenged claims, claims 5 and 19 are independent. Claim 5 is directed to a drink container having a liquid container and a cap assembly, whereas independent claim 19 is directed to the cap assembly itself and

includes the same elements as the cap assembly of claim 5. Claim 5 is illustrative and reproduced below:

5. A drink container, comprising:

- a liquid container having a neck with an opening and having an internal compartment sized to hold a volume of potable drink liquid; and

- a cap assembly removably coupled to the liquid container, the cap assembly comprising:

- a base removably coupled to the neck of the liquid container;

- a drink spout extending from the base and defining a passage through which drink liquid from the internal compartment of the liquid container may be selectively dispensed;

- a closure configured to be removably coupled relative to the drink spout in a closed position to selectively restrict dispensing of drink liquid through the passage and to selectively permit dispensing of drink liquid through the passage when removed from the drink spout;

- a handle extending from the base, wherein the handle includes a closure retention mechanism configured to selectively retain the closure in a stowed position relative to the handle when the closure is selectively removed from the drink spout and received by the closure retention mechanism.

D. Instituted Grounds of Unpatentability

We instituted *inter partes* review based on the following grounds:

Claims Challenged	35 U.S.C. §	Basis
5–7, 16–19	102, 103	Samartgis ²
16–18	103	Samartgis, Gorskey, ³ Johnson ⁴
5–7, 16, 19	102, 103	Leoncavallo ⁵
17, 18	103	Leoncavallo, Gorskey, Johnson
5–7, 16, 19	103	Miller, ⁶ Leoncavallo
17, 18	103	Miller, Leoncavallo, Gorskey, Johnson

In further support of these challenges, Trove relies on the declaration of Glenn E. Vallee, Ph.D. *See* Ex. 1003 (Parts 1 and 2). CamelBak relies on the rebuttal declaration of Michael Jobin. *See* Ex. 2009. The parties also submit their respective cross-examinations of these expert witnesses. *See* Ex. 1014 (cross of Mr. Jobin); Ex. 2011 (cross of Dr. Vallee).

III. ANALYSIS

A. Level of Ordinary Skill in the Art

Trove proposes that one of ordinary skill in the art would have had—
an undergraduate degree in mechanical engineering or equivalent coursework, and a year or more of experience in designing, prototyping, and/or manufacturing fluid containers or similar products . . . [and that] [m]ore work experience may substitute for a lower level of education, and vice versa.

Pet. 17–18 (citing Ex. 1003 ¶¶ 25–30).

² US 9,272,822 B2, issued Mar. 1, 2016 (Ex. 1004, “Samartgis”).

³ EP 2 177 447 A1, published Apr. 21, 2010 (Ex. 1011, “Gorskey”).

⁴ US 2006/0006578 A1, published Jan. 12, 2006 (Ex. 1012, “Johnson”).

⁵ US 7,753,240 B2, issued July 13, 2010 (Ex. 1005, “Leoncavallo”).

⁶ US D586,184 S, issued Feb. 10, 2009 (Ex. 1006, “Miller”).

CamelBak proposes essentially the same definition—

A person having ordinary skill in the art would have had a bachelor's degree in mechanical engineering or the equivalent coursework and approximately one year of experience with liquid-containing devices, with more work experience substituting for less education and vice versa.

See PO Resp. 7 (citing Ex. 2009 ¶¶ 61–68). Because CamelBak simply paraphrases Trove's slightly more detailed definition of the level of skill in the art, we adopt Trove's definition, as it appears reasonable and consistent with the asserted prior art and the '252 patent.

B. Claim Construction

Claims 5 and 19 recite that the handle on the cap assembly includes “a closure retention mechanism configured to selectively retain the closure in a stowed position relative to the handle when the closure is selectively removed from the drink spout and received by the closure retention mechanism.” Ex. 1001, 18:62–67 (claim 5), 20:32–37 (claim 19).

1. “closure retention mechanism”

Trove proposes that “closure retention mechanism” should be construed as a means-plus-function term under 35 U.S.C. § 112(f). *See* Pet. 18–19; Pet. Reply 1. CamelBak agrees. *See* PO Resp. 8. Indeed, subsequent to our institution decision, the district court in the parallel action held that the “closure retention mechanism” is a means-plus-function term governed by 35 U.S.C. § 112(f). *See* Ex. 2010, at 5–6. We see no reason to depart from that holding and adopt the district court's reasoning in that regard as our own. *See id.* at 6–8.

As for the corresponding structure for performing the recited function⁷ of the claimed “closure retention mechanism,” Trove argues that one skilled in the art “would have understood the corresponding structure . . . is two or more spaced-apart tabs [56] extending from the inner surface of the handle,” as disclosed in the specification of the ’252 patent. *See* Pet. 22–23 (citing Ex. 1003 ¶¶ 47–50); Pet. Reply 1–2. To that end, Trove annotates Figure 7 of the ’252 patent and points to several passages in the specification that describe the corresponding structure for the claimed “closure retention mechanism”—

[T]he closure retention mechanism is on the handle. (Ex. 1001, 8:49–60, 9:12–44, 12:16–23, 13:14–46). . . . *The closure retention mechanism is a pair of spaced-apart, and optionally opposed, tabs 56 that engage and retain the closure in the stowed position.* (*Id.*, 8:53–60, 9:8–11, 13:14–17).

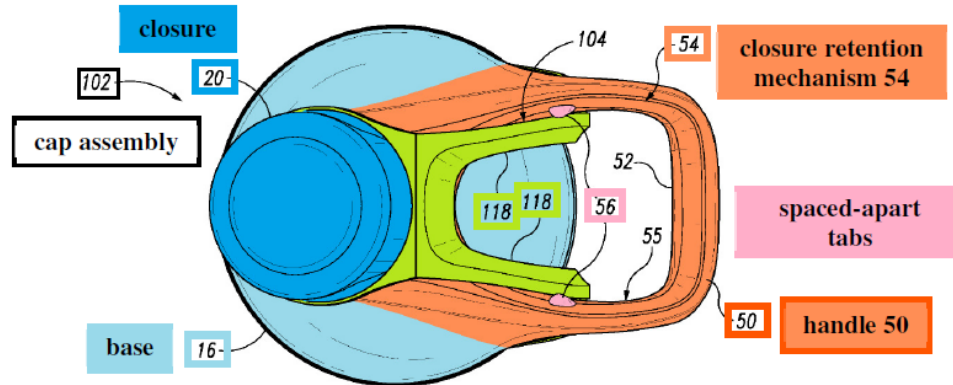


Fig. 7

The spaced-apart tabs 56 extend inward from the closed perimeter of the handle. (*Id.*, Fig. 2, 8:55–60). *The specification*

⁷ Trove and CamelBak agree that the function of the “closure retention mechanism” is to “selectively retain the closure in a stowed position relative to the handle when the closure is selectively removed from the drink spout and received by the closure retention mechanism.” Pet. 20; *see also* Hrg. Tr. 11:12–21 (Trove agreeing); 58:24–59:9 (CamelBak also agreeing).

explains that the tabs may use a friction-fit arrangement and/or a snap-fit arrangement to retain the closure in the stowed position. (Id., 8:49–52). The tabs or closure may be compressible such that when the closure is positioned into the stowed position (i.e., between the tabs) the internal bias, or spring, force created by the compression will maintain the closure in position. (Id., 9:12–44). The closure may include a corresponding structure, such as a depression or channel, that cooperates with the tabs to retain the closure in the stowed position. (Id., 9:45–56).

Pet. 21–22 (emphasis added).

So, per its own construction, Trove admits that the corresponding structure for the claimed “closure retention mechanism” includes friction-fit or snap-fit tabs 56 (pink) on the inner periphery of the handle for gripping closure 20 (dark blue) in a stowed position. In other words, spaced-apart tabs 56 can only perform the recited function by *means of a snap-fit or friction-fit arrangement* that grips and holds the closure in place.

Indeed, the district court in the parallel action construed the same term in the same manner. More specifically, the district court construed the closure retention mechanism as embodying not only “spaced-apart tabs 56,” as Trove argued, but also “multiple other structures in the specification that correspond to the closure retention mechanism’s function,” including “the inner boundary of handle 50 . . . such that the closure will sit snugly within it, specifically in a ‘friction-fit arrangement and/or in a snap-fit arrangement.’” Ex. 2010, at 10 (citing ’252 patent, 8:45–52, 8:58–9:1, 9:30–37). All told, the district court construed the claimed “closure retention mechanism” as “comprising the following structures: closed perimeter 52, closure retention structure 55, spaced apart tabs 56, and corresponding structure 58.” *Id.* at 11.

And, consistent with the district court’s construction, the specification of the ’252 patent repeatedly describes the closure retention mechanism as embodying closed perimeter 52, closure retention structure 55, and spaced apart tabs 56—

- As an illustrative, non-exclusive example, the closure retention mechanism may define at least a portion of the closed perimeter 52 of the handle . . . as schematically represented in both of FIGS. 1–2. In some such embodiments, the closure retention mechanism may be configured to retain the closure in the stowed position *in a friction-fit arrangement and/or in a snap-fit arrangement.*” Ex. 1001, 8:44–52 (emphases added).
- As an illustrative, non-exclusive example, the closure retention structure may include at least *a pair of spaced-apart, and optionally opposed, tabs 56 that are configured to selectively engage and retain, or otherwise grip, the closure in the stowed position*, as schematically and optionally illustrated in FIG. 2.” *Id.* at 8:55–60 (emphasis added).
- “In some embodiments, *closure retention structure 55 may include and/or be constructed of a resiliently compressible material, such that the closure retention structure is configured to selectively compress when the closure is being positioned into the stowed position* and to thereby selectively retain the closure in the stowed position, such as by an internal bias, or spring, force created by the closure retention structure. *Such a configuration additionally or alternatively may be described as providing a friction-fit arrangement . . .*” *Id.* at 9:12–20 (emphases added).
- “[W]hen the closure is positioned between and/or otherwise in engagement with the tabs, the tabs engage the closure across the maximum width, such as with *the tabs resiliently deflecting, bending, or compressing to accommodate the greater width of the closure.* Additionally, or alternatively, in some embodiments, the closure may resiliently deflect, bend, or compress to accommodate the narrower width of the tabs.” *Id.* at 9:32–39 (emphasis added).

- “When the closure is operatively positioned within the closed perimeter of the handle into its stowed position as illustrated in FIGS. 10–13, however, such that the tabs engage opposing sides of the closure, the lower portion of the closure is compressed slightly to have a slightly non-circular profile. That is, the closure is slightly compressed between the protrusions, *resulting in a friction-fit between the closure and the closed perimeter of the handle.*” *Id.* at 13:26–34 (emphasis added).
- “[T]he closure retention mechanism is configured to retain the closure in the stowed position in a friction-fit arrangement and/or a snap-fit arrangement. . . . [T]he closure retention mechanism includes spaced apart, and optionally opposed, tabs configured to grip and retain the closure in the stowed position. . . . [T]he closure retention mechanism is constructed of a resiliently compressible material, and wherein the closure retention mechanism is configured to selectively compress when the closure is entering the stowed position and to selectively retain the closure in the stowed position.” *Id.* at 14:33–46 (emphasis added).

Based on the district court’s well-reasoned construction, as supported by the above disclosures from the specification of the ’252 patent and Trove’s own admission, we construe the corresponding structure of the claimed closure retention mechanism as requiring spaced-part tabs that provide a snap-fit or friction-fit arrangement on the inside surface of the handle for gripping and retaining the closure therebetween.

One last note on this issue. During the hearing, Trove appeared to have concern with our consideration of certain aspects of the district court’s claim construction analysis. *See* Hrg. Tr. 13:20–14:13. But our rules duly inform parties in our proceedings that “[a]ny prior claim construction determination concerning a term of the claim in a civil action . . . that is timely made of record in the *inter partes* review proceeding *will be considered.*” 37 C.F.R. 42.100(b) (second emphasis added). And, here, it is

undisputed that the district court's claim construction order was timely made of record. *See* PO Resp. 8–9 (citing Ex. 2010, 5–11); Pet. Reply 1–2 (citing Ex. 2010, 5–11). Moreover, in a pre-hearing conference, we warned the parties, in no uncertain terms, to be prepared to address the district court's analysis, particularly with respect to the snap-fit and friction-fit arrangement of the spaced-apart tabs. *See* Hrg. Tr. 7:10–8:19, 14:6–13. As such, Trove had ample opportunity to anticipate how we might adopt the district court's claim construction analysis, either in whole or in part. Thus, we reject any attempt by Trove now to argue otherwise.

2. “*when the closure is selectively . . . received by the closure retention mechanism*”

CamelBak contends this functional phrase should be construed to mean “when the closure is accepted, acquired, or engaged by the closure retention mechanism.” PO Resp. 9. CamelBak also contends that the claim language imposes a temporal condition on the closure's receipt by the closure retention mechanism. *Id.* at 9–12. According to CamelBak, because the closure is “received by the closure retention mechanism” only “*when* the closure is selectively removed from the drink spout,” that condition means “the closure is not always or permanently engaged by or retained by the closure retention mechanism, such as from manufacture. Otherwise, the closure retention mechanism . . . would not be capable of receiving it.” *Id.* at 10 (emphasis added). Explaining further, CamelBak states that “[u]se 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).” PO Sur-Reply 2.

Trove agrees that the term “receive” means ““to accept, to acquire, or to engage.”” Pet. Reply 4, n.1. However, contrary to CamelBak’s assertions, Trove argues that “when the closure is . . . received” cannot include the “negative limitation” proposed by CamelBak,” but should be construed more broadly to encompass the closure “always or permanently” being in engagement with the closure retention mechanism. *Id.* at 3–4. According to Trove, any narrower construction is “divorced from the claim language” and “import[s] extraneous limitations from the specification into the claims.” *Id.*

We agree with CamelBak that the plain language of the claim imposes a temporal condition on when the closure is received by the closure retention mechanism, namely, only after it is removed from the drink spout. In other words, the closure cannot be in engagement with, i.e., “received by,” the closure retention mechanism while it remains on the drink spout. This interpretation is consistent with the specification, which repeatedly states that spaced-apart tabs 56 “engage” the closure when it is removed from the spout and moved to the stowed position. Ex. 1001, 8:58–60 (“tabs 56 . . . are configured to *selectively engage* and retain, or otherwise grip, the closure in the stowed position”); 9:32–39 (“*when the closure is positioned between and/or otherwise in engagement with the tabs*, the tabs engage the closure across the maximum width, such as with the tabs resiliently deflecting, bending, or compressing to accommodate the greater width of the closure”); 11:36–39 (“the closure retention mechanism 54 may be configured to *engage . . . the closure* to operatively retain the closure in its stowed configuration.”); 13:26–31 (“When the closure is operatively positioned within the closed perimeter of the handle into its stowed position . . . *such*

that the tabs engage opposing sides of the closure, the lower portion of the closure is compressed slightly.’) (emphases added).

Moreover, the specification describes this engagement as occurring by means of a “friction-fit” or “snap-fit” arrangement (*id.* at 8:50–52, 14:33–36), which confirms that the closure is not permanently engaged with the tabs, but rather moved into engagement with the tabs, i.e., “received by the closure retention mechanism” per the plain language of the claim. Thus, the intrinsic evidence—the claim language and the specification—supports a construction that imposes a temporal condition on the recited function of the claimed “closure retention mechanism” such that it receives the closure only after the closure has been removed from the drink spout, meaning the closure is not engaged with the closure retention mechanism before it is selectively removed from the drink spout.

In sum, Trove fails to identify any intrinsic evidence supporting its overbroad construction that the closure may be permanently engaged, i.e., always received, by the closure retention mechanism regardless of the closure’s position. *See* Pet. Reply 3–5. Nor does Trove persuasively rebut the clear intrinsic evidence proffered by CamelBak, all of which demonstrates a conditional or temporal engagement of the closure with the closure retention mechanism, rather than the permanent engagement advocated by Trove. *See* PO Resp. 9–13.

3. *“retain the closure in a stowed position”*

CamelBak contends that this limitation should be construed to mean “to hold or keep the closure in a position removed from the drink spout.” PO Resp. 13–14; PO Sur-Reply 4. Although Trove contends that CamelBak’s construction “impermissibly rewrites” the claim language, Trove nonetheless “does not disagree that it encompasses ‘hold or keep the

closure in a position removed from the drink spout.” Pet. Reply 5 n.3. Indeed, the claim language itself already contemplates just such a construction by expressly reciting that the closure retention mechanism “selectively retain[s] the closure in a stowed position relative to the handle *when the closure is selectively removed from the drink spout.*” Ex. 1001, 18:63–66 (emphasis added). As such, we determine that further construction of this limitation is not necessary to resolve the present dispute.

C. Anticipation/Obviousness Based on Samartgis

Trove argues that claims 5–7 and 16–19 are unpatentable as anticipated by, and/or obvious over, Samartgis. See Pet. 23–45. In doing so, Trove submits annotated Figure 3 of Samartgis, reproduced below, to show how the cap assembly for Samartgis’s liquid container satisfies each element of the challenged claims. *Id.* at 25–45 (citing Ex. 1003 ¶¶ 76–129).

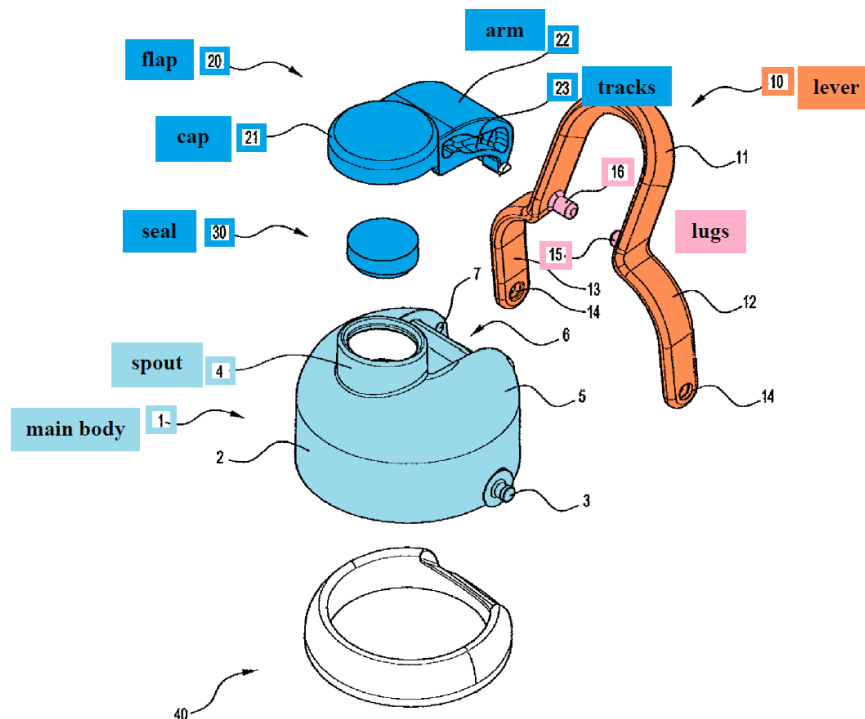


FIG. 3

Annotated Figure 3 is an exploded view of the cap assembly of Samartgis's liquid container. Ex. 1004, 2:19–20. To meet the general components of the claimed “cap assembly,” Trove points to Samartgis's main body 1, spout 4, lever 10, and flap 20 (which includes cap 21 and arm 22), as corresponding, respectively, to the claimed “base,” “drink spout,” “handle,” and “closure.” See Pet. 28–33 (citing Ex. 1004, 2:45–54, 3:1–6, Figs. 1, 3). CamelBak does not dispute Trove's showing for those claim elements. Instead, the parties' dispute centers on whether Samartgis discloses or otherwise suggests the claimed “closure retention mechanism” and the recited function of “when the closure is selectively . . . received by the closure retention mechanism.”

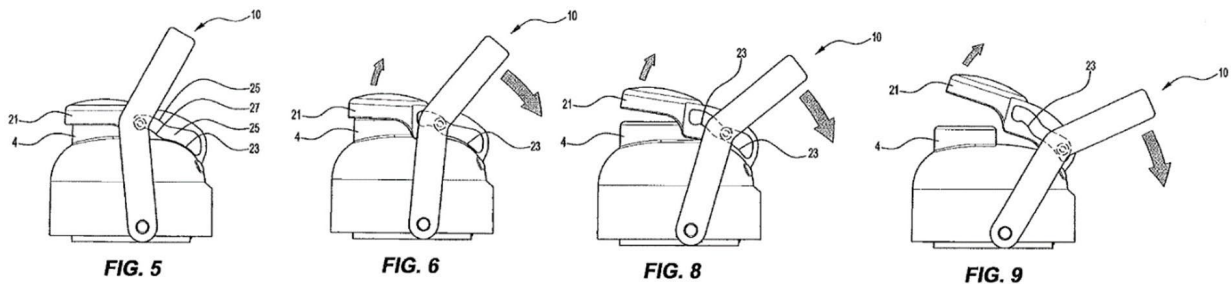
1. “*closure retention mechanism*”

In comparing Samartgis to this means-plus-function limitation, Trove limits its arguments to structural identity, rather than structural equivalence, under § 112(f). See Hrg. Tr. 10:4–6 (“[W]hen it comes to the Leoncavallo and the Samartgis grounds, the Petitioner is arguing identity, not equivalence.”); see also *id.* at 10:17–11:7 (clarifying same).⁸ More specifically, referring to annotated Figure 3 above, Trove points to Samartgis's lugs 15 and 16 (pink) as being structurally identical to the challenged patent's spaced-apart tabs 56, which, as discussed above,

⁸ In its petition, Trove argues both structural identity (Pet. 33–34) and structural equivalence (*id.* at 34–35), as it also does in its reply (Pet. Reply 15–17). During a pre-hearing conference and the hearing, Trove clarified that it was relying solely on structural identity, effectively withdrawing its arguments of structural equivalence as to the Samartgis and Leoncavallo grounds. See Hrg. Tr. 10:3–7 (“As we discussed with the Board, when it comes to the Leoncavallo and the Samartgis grounds, the Petitioner is arguing identity, not equivalence. So the way and result that was all over the papers has nothing to do when it comes to identical structures.”).

correspond to the claimed “closure retention mechanism” under § 112(f). *See* Pet. 33–34 (citing Ex. 1004, Fig. 3; Ex. 1003 ¶ 99); Pet. Reply 6. According to Trove, “lug members 15 and 16 are a closure retention mechanism because they are designed to, and do, perform the claimed function of retaining the closure (flap member 20) in a stowed position relative to the handle (lever/carry member 10) when the closure is removed from the drink spout.” *Id.* at 34 (citing Ex. 1003 ¶ 100).

To that end, Trove submits Samartgis’s Figures 5, 6, 8, and 9, reproduced below, to show how a user, by moving handle 10 (and associated lug members 15 and 16) from left to right along tracks 23, can remove closure 21 from drink spout 4 and stow it relative to the handle. *See* Pet. 34 (citing Ex. 1004, 4:12–30; Ex. 1003 ¶ 100).



As shown above, Figures 5, 6, 8 and 9 depict the progression of lug members 15 and 16 along tracks 23 of flap member 20. According to Trove, “Figure 9 shows the lever 10 in the ‘locking position,’ meaning the closure (flap 20) is retained relative to the handle by the lug members 15 and 16 in the open position.” *Id.* Notably, during the hearing, Trove explained that Samartgis’s lug members 15 and 16 “are identical – it’s the same structure” as the challenged patent’s spaced-apart tabs 52 because, as allegedly shown in Samartgis’s Figure 9, the lug members “snap-fit” into the locking ramp at the far rightmost end of tracks 23. Hrg. Tr. 11:22–12:1, 12:23–13:15, respectively. Trove maintained that position throughout the hearing, as

illustrated by the following exchanges with Trove's counsel—

“[PTAB JUDGE]: Okay. And then I just wondered how locking position meets snap-fit or friction-fit.

[TROVE'S COUNSEL]: Again, when the Samartgis lugs go towards the right-hand side and they go down that ramp, at that point *there is a snap-fit in that particular part*. That's why the locking occurs. . . . As described in the petition, . . . the lug members travel down track 23, toward the right, and down the ramp on the rightmost portion of track 23. As the lug members reach the end of that section, the closure is retained in a stowed position relative to the handle.” (*id.* at 14:22–16:5) (emphasis added);

“[TROVE'S COUNSEL]: This alone, the fact that there's that ramp alone, establishes that the closure was retained in a stowed position relative to the handle because you go past that ramp and you get towards the far end of that ramp, and *the lug members go into a snap-fit in that particular part*.” (*id.* at 20:18–22) (emphasis added); and

“[PTAB JUDGE]: I need to find something in Samartgis that says that there's some sort of snap-fit or friction-fit because it seems like [lugs 15 and 16 are] free to just travel in that channel without necessarily being locked in one place. It seems like it's locked between the locking ramp 27 and the distal end of the channel or track 23, but aside from that, I'm not seeing any friction-fit or snap-fit.

[TROVE'S COUNSEL]: But it is snap-fitting, . . . because at the end of the day, Samartgis' goal is to create a lever that opens without having to touch it by hand, and so it shows *the further right-hand point with the ramps as the point where you go and you snap* so that now you can pour the liquid without having to touch the cap. So when it comes to that particular position, it is showing a position that's stowed relative to the handle based on the lugs that are going into the ramp.” (*id.* at 25:15–26:5) (emphasis added).

We disagree that Samartgis's lugs 15 and 16 are structurally identical to the challenged patent's spaced-apart tabs 56 or that Samartgis's "locking position" amounts to a snap-fit arrangement for the tabs. In our view, the most meaningful difference between Samartgis's lugs 15 and 16 and the challenged patent's spaced-apart tabs 56 is that Samartgis's lugs 15 and 16 are elongated and cylindrical in nature such that they would not facilitate either a snap-fit or friction-fit connection for the closure. More specifically, Samartgis's lugs 15 and 16 are elongated pins or pegs, meaning they have a long, cylindrical-shaped profile for remaining permanently within the closure's tracks 23. In contrast, the challenged patent's spaced-apart tabs 56 are shallow protuberances or bumps, meaning they have a low and rounded profile for temporarily holding the closure in place by means of a snap-fit or friction-fit arrangement. That difference alone persuades us that Samartgis's lugs 15 and 16 for permanent engagement with another structure are *not* structurally identical to the challenged patent's spaced-apart tabs for easy engagement/disengagement with another structure.

Also, we find unpersuasive Trove's argument that Samartgis's Figure 9 depicts lugs 15 and 16 in a "snap-fit" arrangement by disclosing a "locking" position for the lugs when they reach the rightmost end of tracks 23. *See, e.g.*, Hrg. Tr. 12:23–13:15, 14:22–15:2, 20:8–22, 25:15–26:25; *see also* Pet. 34 (citing Ex. 1003 ¶ 100). Trove's argument fails because both Trove and its expert misapprehend the location of Samartgis's "locking position." Rather than being shown in Figure 9, as Trove alleges, Samartgis discloses the locking position for lugs 15 and 16 in Figures 5 and 7, reproduced below and annotated by CamelBak for clarity.

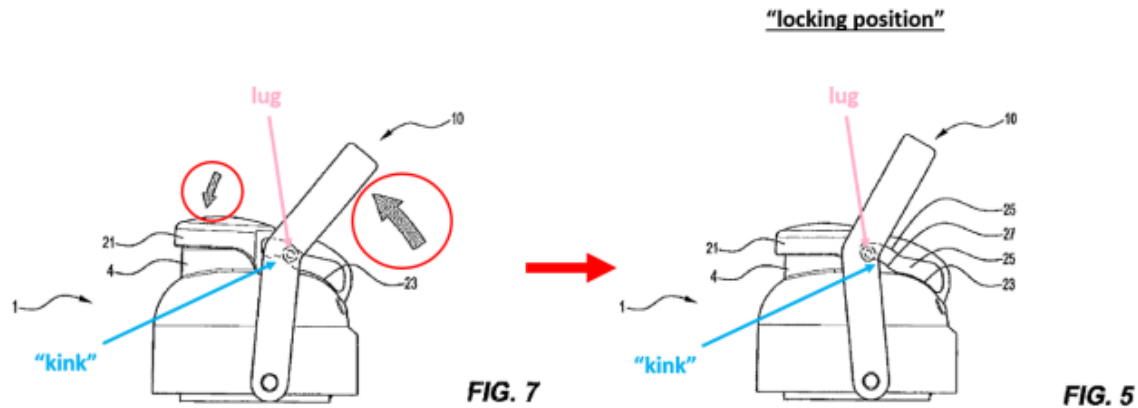


Figure 5, above right, depicts the various ramp sections of Samartgis's track 23, including "*locking ramp and interface section 27*" toward the left end of the track. Ex. 1004, 3:58–4:4 (emphasis added). And Figure 7, above left, depicts handle 10 and one of Samartgis's lugs (pink) being pushed leftward over locking ramp 27, *not* rightward as shown in Figure 9. *Id.* Indeed, Samartgis explicitly states that "FIG. 7 is a view, similar to FIGS. 5 and 6, showing the principle behind *the locking action for the assembly.*" Ex. 1004, 2:27–28 (emphasis added).

As CamelBak's expert credibly testifies, those figures and disclosures clearly indicate that the locking position for Samartgis's lugs 15 and 16 is located at the leftmost end of tracks 23, not the rightmost end as Trove purports with Figure 9. *See* Ex. 2009 ¶¶ 93–94. Moreover, contrary to Trove's position, Samartgis's reference to the "locking position" in conjunction with Figure 9 is that handle 10 "can be *returned* to the locking position, with the actuating pins or lug members 15 and 16 *engaging the anti-tamper ramp section 25,*" which, as shown in Figure 5 above, is located toward the left end of tracks 23.⁹ Ex. 1004, 4:28–34 (emphases added). In other words, one skilled in the art would understand "returned to the locking

⁹ Although the number "25" appears twice in Samartgis's Figure 5, both occurrences are to the left of the rightmost end of the track.

position” as referring to the lugs being returned leftward to ramp sections 25 and 27, not rightward as Trove contends. *See* Ex. 2009 ¶ 98.

Nor do we discern that Samartgis ever describes any sort of locking position, let alone snap-fit, for the lugs in the rightmost, distal end of Samartgis’s tracks 23. Even if closure 21 can be said to be in a stowed position once lugs 15 and 16 progress rightward past locking ramp 27, as shown in Samartgis’s Figure 6, 8, and 9, there is no evidence that lugs 15 and 16 are ever in a locked position, i.e., fixed, once they reach the rightmost end of the tracks. Instead, as CamelBak’s expert credibly testifies, it appears that Samartgis’s handle 10 and associated lugs 15 and 16 are freely moveable along the length of the track between locking ramp 27 and the rightmost distal end of the track. *See* Ex. 2009 ¶¶ 97–99, 102.

Indeed, Trove mischaracterizes the location of locking ramp 27 in Samartgis’s Figure 5 by, first, submitting a blurred version of Figure 5 rather than the actual Figure 5 from the challenged patent, and, then, incorrectly stating that “Samartgis identifies the *distal* portion of the tracks 23 in original Figure 5 as a “locking ramp and interface section 27” when original Figure 5 actually identifies locking ramp 27 as being located in the middle, leftward portion of the tracks. *Compare* Pet. Reply 9, *with* Ex. 1004, 4:3–4, Fig. 5. Aside from that mischaracterization, Trove’s arguments are based on nothing more than speculation and a misapprehension of Samartgis’s statement about the handle being “returned to the locking position,” as discussed above. *See id.* at 8–9 (citing Ex. 1004, 4:28–34). Thus, in the absence of any credible evidence, we are not persuaded that the rightmost end of Samartgis’s tracks 23 amounts to a “locking position” or a snap-fit connection for lugs 15 and 16.

For all the above reasons, we find that Trove fails to demonstrate, by a preponderance of the evidence, that Samartgis discloses the claimed “closure retention mechanism” when properly construed under § 112(f).

2. “*when the closure is selectively . . . received by the closure retention mechanism*”

Trove contends that this functional limitation is met because “[Samartgis’s] Figure 9 shows . . . the closure (flap 20) is retained relative to the handle by the lug members 15 and 16 in the open position” and “[l]ike the opposed tabs of the ’252 patent, the lug members 15 and 16 are projections that extend from the inner surface of the handle to engage the closure.” Pet 34–35. In our institution decision, we initially agreed with Trove, stating that “Samartgis clearly describes and shows flap member 20 [blue], which includes arm member 22 as a ‘principal’ component, being mounted on, i.e., received by, lug members 15, 16 on handle 10.” Inst. Dec 13 (citing Pet. 23–25). That preliminary finding, however, was made before the parties ever disputed the construction of this functional limitation. *See* Pet. 20–21 (stating that “construing [this functional limitation] is not material to the Petition” because the asserted prior art already performs the “the recited function.”); PO Resp. 9 (arguing “the Board should construe” this limitation). But now, with CamelBak having shown that construction of this limitation is material to our analysis, and Trove having had the opportunity to address CamelBak’s proposed construction, we must decide whether Trove demonstrates, by a preponderance of the evidence (rather than simply a reasonable likelihood), that Samartgis discloses this limitation *when properly construed*.

Applying the correct construction (*see supra* Section III.B.2), we agree with CamelBak that Samartgis fails to disclose the recited function of

the closure being in a stowed position “when the closure is selectively . . . received by the closure retention mechanism.” PO Resp. 27–32. As CamelBak correctly notes, neither Trove nor its expert sufficiently explains “how [Samartgis’s] flap member 20 ‘is . . . received by’ the lug members [15 and 16] ‘*when* the closure is selectively removed from the drink spout.” *Id.* at 27 (citing Pet. 33–35; Ex. 1003 ¶¶ 98–102). Instead, Trove argues this limitation is met because “Samartgis discloses that its closure—specifically, the distal end of the tracks 23 (“locking ramp and interface section 27” in original Figure 5)—is received by the closure retention mechanism (lug members 15, 16).” Pet. Reply 14 (citing Pet. 34–35). But Trove’s argument disregards the temporal aspect of “*when* the closure is selectively . . . received” because Samartgis’s closure 20, which indisputably includes tracks 23,¹⁰ is already received by Samartgis’s lug members 15 and 16 (i.e., closure retention mechanism) before the closure is selectively removed from the drink spout. That is, Trove seeks to construe “when the closure is . . . received” to mean that conditional or temporal receipt of the closure is not required and permanent engagement is encompassed, a construction that we reject (as discussed above in Section III.B.2). And, because Trove’s construction is incorrect, the permanent engagement of Samartgis’s tracks and lugs fails to satisfy the claimed function of “when the closure is . . . received by the closure retention mechanism.”

¹⁰ Trove and its expert admit that cap 21, arm 22, *and tracks 23* correspond to the claimed “closure.” See Pet. 25; Ex. 1003 ¶¶ 61, 93; Ex. 2011, 84:22–85:5 (“Q And so since you have opined that the flap member 20 constitutes the claimed closure of claim 5, then the cap member 21, arm 22 and tracks 23 are part of what you contend to be the claimed closure of claim 5, right? A That’s correct.”).

Also, to the extent Trove argues there is temporal or conditional receipt (rather than permanent engagement) when lugs 15 and 16 reach the “distal end of the tracks 23,” that argument fails because, per footnote 11 (on the next page), Trove does not map only the distal end of the tracks to the claimed “closure” and instead maps all of flap member 20 (including the full length of tracks 23). So, because the full length of Samartgis’s tracks 23 are always in engagement with Samartgis’s lugs 15 and 16, we reject Trove’s attempt to limit the closure’s receipt of the lugs to only the distal end of tracks 23.

3. *Obviousness*

Alternatively, Trove argues “[t]o the extent there were any difference between claim 5 and the disclosure of Samartgis, the claim nonetheless would have been obvious to [one skilled in the art]” because “other prior art references relied on in this Petition establish that the features recited in the claimed invention were well-known in the art and represent known techniques that could be used to modify the Samartgis device in the same way.” Pet. 35–36 (citing Ex. 1003 ¶ 103). But, in doing so, Trove relies on conclusory testimony from its expert, who opines, without sufficient evidentiary support, that

[t]o the extent one were to somehow identify a difference between the features as recited in Claim 5 and the teachings of Samartgis, which I do not see, it would have been within the knowledge of one skilled in the art to modify the Samartgis device to achieve such features because *the claimed features were well known in the art and represented simple, known techniques* for beverage containers having removable cap assemblies.

Ex. 1003 ¶ 103 (emphasis added).

That conclusion lacks meaningful support because the only specific evidence of such knowledge cited by Trove’s expert is “Leoncavallo and Miller,” both of which are the basis of Trove’s other grounds that we find fail to disclose key features of the claimed invention.¹¹ Thus, without more, Trove’s obviousness analysis falls far short of what is traditionally required. *See* Pet. 35–36. Indeed, Trove fails to rebut CamelBak’s valid assertions that Trove’s obviousness positions are “legally deficient” because they “fail[] the ‘particularity’ requirement of § 312.” *Compare* PO Resp. 37–39 (citing 35 U.S.C. § 312(a)(3)), *with* Pet. Reply 6–18 (silent in this regard). Given that this obviousness challenge lacks meaningful argument and credible evidentiary support, we reject Trove’s cursory attempt to prove that claims 5–7 and 16–19 are unpatentable as obvious over Samartgis.

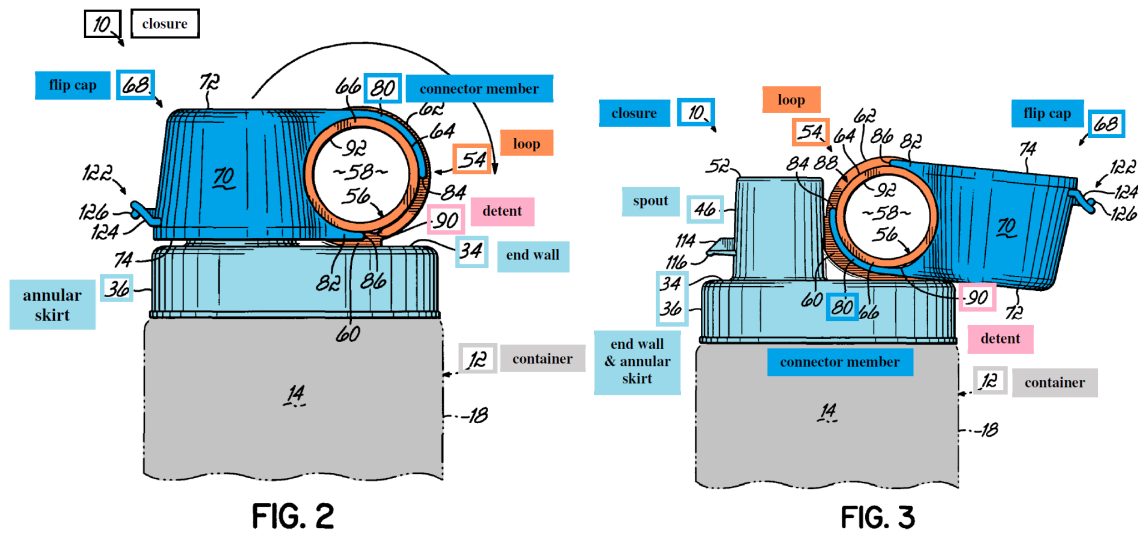
D. Obviousness of Claims 16–18 Based on Samartgis, Gorskey, and Johnson

Claims 16–18 depend from claim 5. Ex. 1001, 20:1–15. Trove contends that the “features of the drink spout/closure engagement,” as recited in claims 16–18, are taught or suggested by Gorskey and Johnson. Pet. 45. Trove does not rely on Gorskey or Johnson to cure Samartgis’s failure to teach or suggest the “closure retention mechanism” of claim 5. *See id.* at 45–55. As such, Trove’s failure with respect to claim 5 also applies to its challenge of dependent claims 16–18. Thus, for the same reasons as discussed above with respect to claim 5, we conclude that Trove fails to demonstrate that claims 16–18 are unpatentable as obvious over Samartgis, Gorskey, and Johnson.

¹¹ Trove’s expert also references “other pieces of prior art” as indicative of such knowledge, but fails to identify such art with any specificity. Ex. 1003 ¶ 103.

E. Anticipation/Obviousness Based on Leoncavallo

Trove also argues that claims 5–7, 16, and 19 are unpatentable as anticipated by, and/or obvious over, Leoncavallo. *See* Pet. 55–79. Trove submits annotated Figures 2 and 3 of Leoncavallo, reproduced below, to show how Leoncavallo’s cap assembly (closure 10) satisfies key elements of those challenged claims. *See id.* (citing Ex. 1003 ¶¶ 155–201).



Annotated Figure 2 (above left) depicts Leoncavallo’s cap assembly in a closed position, and annotated Figure 3 (above right) depicts it an open position. Ex. 1005, 2:64–67. Referencing those figures, Trove points to the following components in Leoncavallo as corresponding to certain basic elements of independent claims 5 and 19:

Claim Elements	Leoncavallo
“base”	annular skirt 36, end wall 34 (light blue)
“drink spout”	spout 46 (light blue)
“closure”	flip cap 68, including connector member 80 (dark blue)
“handle”	loop 54 (orange)

See Pet. 55–67 (highlighting where each claim element is found in Leoncavallo’s Figs. 2 and 3).

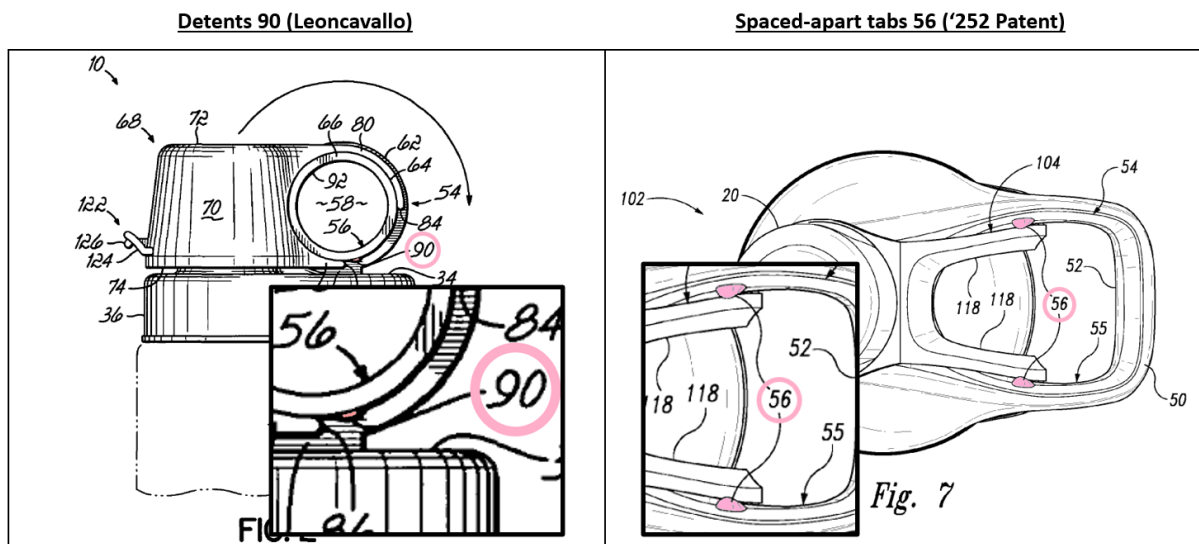
CamelBak does not dispute Trove's showing that Leoncavallo discloses those basic claim elements. Instead, the parties' arguments center on whether Leoncavallo discloses or otherwise suggests the claimed "closure retention mechanism."

1. "closure retention mechanism"

For the claimed "closure retention mechanism," Trove contends that Leoncavallo's detents 90 (pink) are structurally identical to the challenged patent's spaced-apart tabs 56 because Leoncavallo's detents 90 "are configured to frictionally engage the connector member 80 as it travels about the loop 54 [i.e., handle]." *See* Pet. 67–68; *see also* Pet. Reply 20 ("But the detents 90 are structurally identical to the spaced-apart tabs 56."). Trove also argues that, "like the spaced-apart tabs 56" of the challenged patent, Leoncavallo similarly describes detents 90 as "projections, ribs, or stops on the handle" for performing the same function as recited in the claims, i.e., "selectively retain the closure in a stowed position relative to the handle when the closure is selectively removed from the drink spout and received by the closure retention mechanism." Pet. Reply 20 (*comparing* Ex. 1001, 10:9–10, *with* Ex. 1005, 5:33–36).

Although we agree that Leoncavallo's detents 90 may perform the same function as the challenged patent's spaced-apart tabs 56, nonetheless, they are not structurally identical. Trove's sole support for structural identity is that, "like the spaced-apart tabs 56" of the challenged patent, Leoncavallo's detents 90 "are projections, ribs, or stops on the handle." Pet. Reply 20. But, being "like" something does not necessarily mean it is structurally identical to it. Indeed, CamelBak's side-by-side comparison of Leoncavallo's detents 90 and the challenged patent's spaced-apart tabs 56,

as annotated by CamelBak and reproduced below, demonstrates they do not share structural identity. *See* PO Sur-Reply 13.



As shown above left, and described in Leoncavallo, detents 90 “project outwardly from the outer arcuate surface 64 of the loop 54 [handle].” Ex. 1005, 5:33–42. In contrast, as shown above right and described in the challenged patent, spaced-apart tabs 56 are shown as “extending from the closed perimeter and/or . . . as defining a portion of the closed perimeter” of handle 50. Ex. 1001, 8:61–63. In other words, the challenged patent’s spaced-apart tabs 56 extend *inward from the inside of the handle*, whereas Leoncavallo’s detents 90 extend *outward from the outside of the handle*. That is a key distinction given Trove’s construction of the “corresponding structure” for the claimed “closure retention mechanism” as being “spaced-apart tabs extending from *the inner surface of the handle*.”¹² Pet. 22–23; Pet. Reply 1 (emphasis added). So, by Trove’s own

¹² Indeed, we agreed with Trove’s construction in that regard, as did the district court in the parallel action. *See supra* Section III.A.1 (“Based on the district court’s well-reasoned construction, . . . , we construe the corresponding structure of the claimed ‘closure retention mechanism’ as

admission, because Leoncavallo's detents 90 are on the outside of the handle, they cannot be identical to the challenged patent's spaced-apart tabs 56.

Moreover, the challenged patent's spaced-apart tabs 56 are "opposed tabs" that are on opposite sides of the inner surface of the handle. Ex. 1001, 8:61–63. On the other hand, Leoncavallo's detents 90 are on the same side of the handle, which they must be in order for detents 90 to contact connector member 80 as the closure rotates about the handle. Ex. 1005, 5:33–36, Figs. 1, 1A, 2, 3. That is another key distinction.

With those notable differences in mind, we find that Leoncavallo's detents 90 are not "structurally identical" to the challenged patent's spaced-apart tabs 56. Thus, Trove fails to demonstrate, by a preponderance of the evidence, that Leoncavallo discloses the corresponding structure for the claimed "closure retention mechanism" of independent claims 5 and 19. As such, Trove fails in its challenge of independent claims 5 and 19, as well as dependent claims 6, 7, and 16, based on Leoncavallo alone.

2. *Obviousness*

Similar to the Samartgis ground, Trove summarily argues "[t]o the extent there were any difference between claim 5 and the disclosure of Leoncavallo, the claim nonetheless would have been obvious to [one skilled in the art]" because "other prior art references relied on in this Petition establish that the features recited in the claimed invention were well known in the art and represent known techniques that could be used to improve the Leoncavallo device in the same way." Pet. 70 (citing Ex. 1003 ¶ 177). But,

requiring spaced-part tabs that provide a friction-fit or snap-fit connection *on the inside surface of the handle* for gripping and retaining the closure therebetween." (emphasis added)).

in support, Trove merely cites conclusory testimony from its expert, who opines, without sufficient evidence, that

[t]o the extent one were to somehow identify a difference between the features as recited in Claim 5 and the teachings of Leoncavallo, which I do not see, it would have been within the knowledge of one skilled in the art to modify the Leoncavallo device to achieve such features because *the claimed features were well known in the art and represented simple, known techniques* for beverage containers having removable cap assemblies.

Ex. 1003 ¶ 177 (emphasis added).

As mentioned earlier, that sort of conclusion lacks meaningful support because the only evidence of such knowledge cited by Trove’s expert is “Samartgis and Miller,” both of which are the basis of Trove’s other grounds that we find fail to disclose key features of the claimed invention. Thus, without more, Trove’s obviousness analysis falls far short of what is traditionally required. *See* Pet. 69–70. Indeed, Trove fails to rebut CamelBak’s valid assertions that Trove’s obviousness positions are “legally deficient” because they “fail[] the ‘particularity’ requirement of § 312.” *Compare* PO Resp. 37–39 (citing 35 U.S.C. § 312(a)(3)), *with* Pet. Reply 18–21 (silent in this regard). Given that this obviousness challenge lacks meaningful argument and credible evidentiary support, we reject Trove’s cursory attempt to prove that claims 5–7, 16, and 19 are unpatentable as obvious over Leoncavallo.

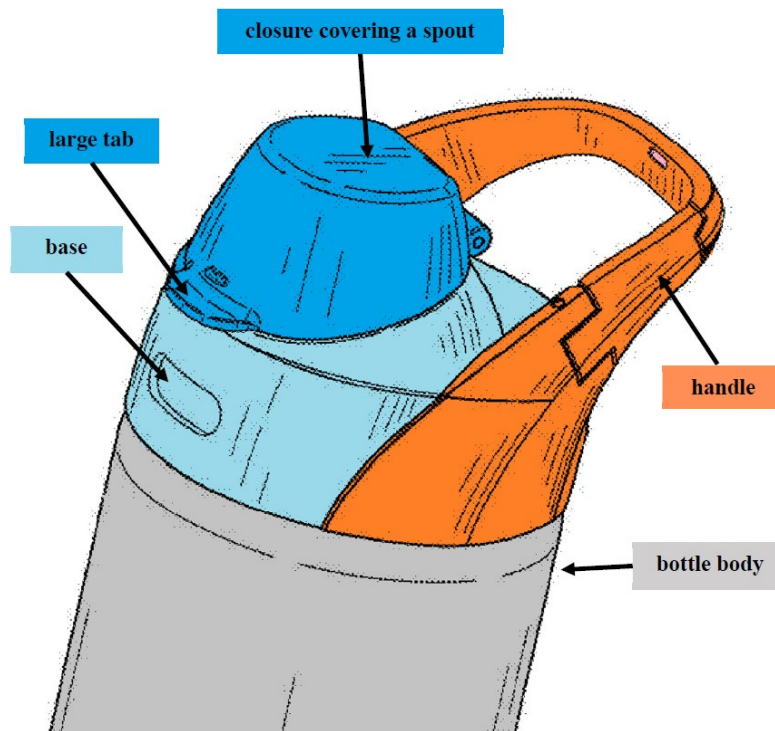
F. Obviousness of Claims 17 and 18 Based on Leoncavallo, Gorskey, and Johnson

Claims 17 and 18 depend from claim 5. Ex. 1001, 20:9–15. Trove contends that the “features of the drink spout/closure engagement,” as recited in claims 17 and 18, are taught or suggested by Gorskey and

Johnson. Pet. 77. But Trove does not rely on either Gorskey or Johnson to cure the deficiency of Leoncavallo to teach or suggest the claimed “closure retention mechanism” of claim 5. *See id.* at 78–79 (contending that Gorskey and Johnson only disclose “the additional limitation of claims 17 and 18”). As such, Trove’s failure with respect to claim 5 also applies to its challenge of dependent claims 17 and 18. Thus, for the same reasons as discussed above with respect to claim 5, we conclude that Trove fails to demonstrate that claims 17 and 18 are unpatentable as obvious over Leoncavallo, Gorskey, and Johnson.

G. Obviousness Based on Miller and Leoncavallo

Trove also argues that claims 5–7, 16, and 19 are unpatentable as obvious over Miller and Leoncavallo. *See* Pet. 79–97 (citing Ex. 1003 ¶¶ 211–238). Trove submits annotated Figure 1 of Miller, reproduced below, to show how the cap assembly of Miller’s beverage container satisfies certain basic elements of the challenged claims. *See id.* at 80–89.

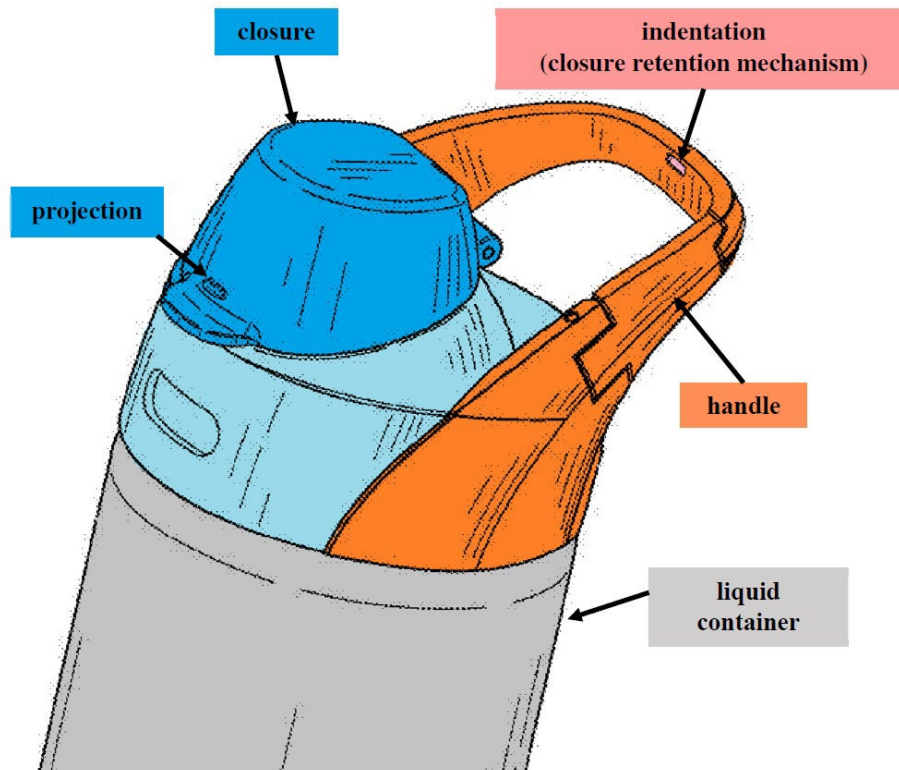


As shown above, Trove annotates Miller’s Figure 1 to add labels and colors not found in any of Miller’s figures or Miller’s brief description of such figures. *Compare* Ex. 1006 (original Figs. 1–7), *with* Pet. 80–81 (annotating Fig. 1). Nonetheless, Trove submits that one skilled in the art “would have discerned from the figures” that Miller discloses or suggests the basic elements of the claimed “cap assembly” as labeled in the above figures. *See* Pet. 82–88 (citing Ex. 1003 ¶¶ 213–28).

We tend to agree with Trove that one skilled in the art would have understood Miller as showing the basic elements of claims 5 and 19, namely, a liquid container having a cap assembly that includes a base, a drink spout, a closure, and a handle. But our agreement with Trove’s showing ends there. For the following reasons, Trove does not persuade us that Miller, either alone or in combination with Leoncavallo, discloses or suggest the claimed “closure retention mechanism.”

1. “closure retention mechanism”

For this limitation, Trove argues only structural equivalence under § 112(f). *See* Hrg. Tr. 11:7–8 (“The grounds that are based on Miller – that’s the design patent – all grounds based on Miller, the argument is equivalency.”). In particular, Trove submits annotated Figure 1 from Miller, reproduced below, to allege that Miller shows a “projection” on the closure (dark blue) and an “indentation” (pink) on the handle and that they are structurally equivalent to the challenged patent’s disclosure of spaced-apart tabs 56, which correspond to the claimed “closure retention mechanism.” *See* Pet. 88–93 (citing Ex. 1003 ¶¶ 229–233).



Again, Trove annotates Figure 1 above to add labels not found anywhere in Miller’s figures or Miller’s brief description of such figures. *Compare* Pet. 89 (annotating Fig. 1), with Ex. 1006 (original Figs. 1–7). Although we agree that Miller’s Figures 4 and 5 support the assertion of a “projection” on Miller’s closure, nowhere do we discern any support for the assumption by Trove and its expert that the oval-shaped spot on Miller’s handle is necessarily an “indentation.” *See* Pet. 89. Nor do we discern any support for the assumption that one skilled in the art “would recognize that the projection is *positioned to align with the indentation* on the inside of the handle, and that when mated the projection and indentation *would snap together.*” *Id.* (citing Ex. 1003 ¶ 230) (emphasis added).

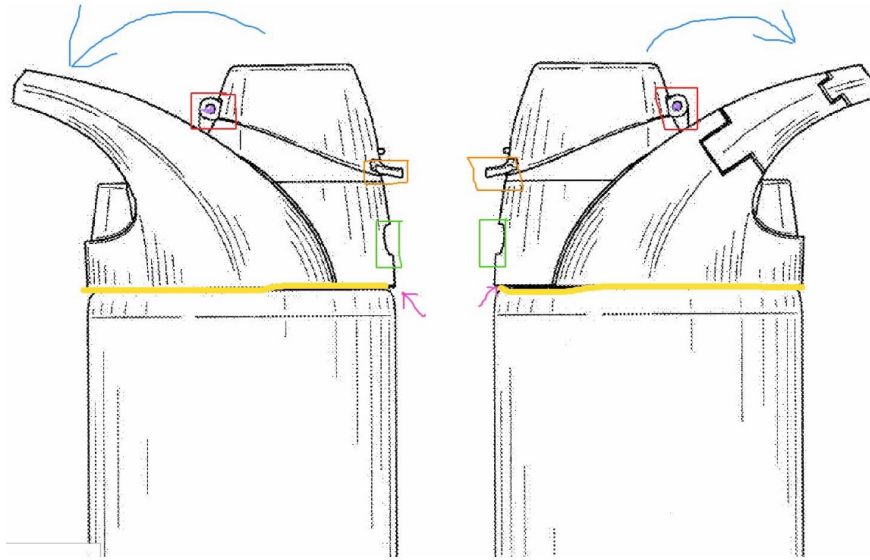
The key problem with Trove’s assumptions is that Miller is a design patent that depicts only “ornamental” aspects of a “beverage container” without any description of the way in which it functions. *See* Ex. 1006,

Figs. 1–7. Thus, to the extent Trove contends that Miller’s so-called “projection” and “indentation” show a closure retention mechanism, it is based purely on speculation about the means and function of the ornamental design shown in Miller. That is a critical flaw in Trove’s challenge based on Miller, especially given that the claimed “closure retention mechanism” is indisputably a means-plus-function limitation where disclosure of both the means of a snap-fit arrangement and the function of selective removal of the closure and its reception within the inside perimeter of the handle are critical to our determination.

On its face, Miller neither shows nor suggests such means or function. Indeed, nowhere does Miller ever depict the closure in an open position or otherwise indicate how the so-called “indentation” and “projection” might cooperate together, let alone in a snap-fit arrangement. *See* Ex. 1006, Figs. 1–7. And, in the absence of any meaningful description in Miller, we agree with CamelBak’s expert that it “would be purely speculative from the standpoint of [one skilled in the art]” to say that Miller’s so-called “indentation” is part of a snap-fit arrangement for the projection on Miller’s closure. *See* Ex. 2009 ¶ 177. At most, Miller suggests nothing more than what we previously found one skilled in the art would have discerned from Miller’s figures, namely, a liquid container having a closure with a projection and a handle with a spot on it. Saying any more involves pure speculation.

Moreover, notably disconcerting about Trove’s argument for this challenge is its attempt to have us believe that CamelBak’s expert admitted that the oval-shaped spot on Miller’s handle indicates the “presence of an ‘indentation.’” Pet. Reply 26–27. Upon closer inspection, however, it is clear that CamelBak’s expert was referring to an “indentation” or “groove”

on another part of Miller’s drink container separate and apart from Miller’s handle, namely, an “oval-shaped indentation” on the face of Miller’s base, as indicated by the green box in the exhibit, reproduced below, from the cross-examination of CamelBak’s expert, or a “little groove” at the juncture of the cap assembly and liquid container, as indicated by the pink arrow and yellow line in the same exhibit. *See* Ex. 1014, 148:4–150:16 (discussing Ex. 1021).



Conspicuously absent from Trove’s cross-examination, despite Trove having the opportunity to do so, is any questioning of CamelBak’s expert about the oval-shaped spot *on Miller’s handle*. *See* Ex. 1014, 132:21–151:8. Thus, without more, Trove does not persuade us that Miller alone discloses or suggests structure that is equivalent to the challenged patent’s spaced-apart tabs on the handle.

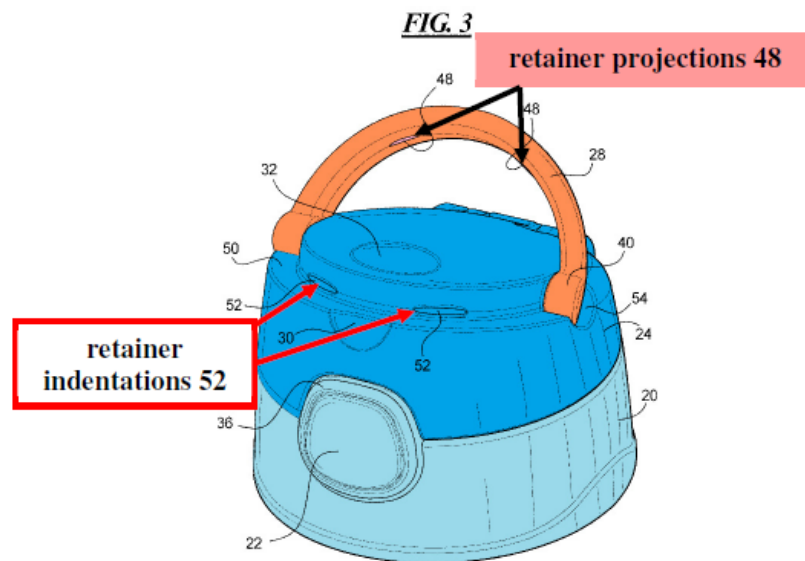
2. Trove’s Additional Reliance on Lane

Also, we disagree with Trove’s contention that Miller would have been understood to disclose a “closure retention mechanism” because one skilled in the art “would have recognized that using one or more cooperating projections and indentations on a closure and handle to removably connect the two together was conventional at the time of the invention.” Pet. 90. In

support, Trove relies on yet another reference, Lane, as reflecting the “background knowledge and common sense” of one skilled in the art. *Id.* (citing Ex. 1007).

At the outset, we note that Trove’s contention is premised on the assumption that Miller actually discloses or suggests an “indentation,” an assumption that we just rejected (as discussed above). That alone dooms Trove’s attempt to use Lane to fill in the gap left by Miller’s silence.

Nonetheless, even accepting *arguendo* Trove’s assumption that Miller discloses a projection and an indentation, we disagree that Lane somehow proves that they operate together in a snap-fit arrangement to perform the claimed function. To that end, Trove submits annotated Figure 3 of Lane, reproduced below. *See* Pet. 90–91 (citing Ex. 1007, 3:26–43, Figs. 1, 3).



As shown above, and described in Lane, *the closure 24 (blue) selectively receives and retains handle 28 (orange) in a stowed position when the closure is covering the drink spout, i.e., a closed position. See* Ex. 1007, 3:26–43. That operation, however, is opposite of Miller, which allegedly

depicts *the handle* selectively receiving and retaining the closure in a stowed position *when the closure is removed* from the drink spout, i.e., in an open position. *See* Ex. 2009 ¶ 178. Put another way, as described in Lane, *the closure serves as a handle retention* mechanism; whereas, as in Miller, *the handle serves as a closure retention* mechanism. Thus, we fail to see how Lane’s disclosure of a stored position for a drink bottle’s *handle*, as opposed to its closure, would have been understood by one skilled in the art as conventional wisdom or common sense applicable to Miller’s disclosure of a stowed position for a drink bottle’s *closure*. *See id.*

In sum, we find that Lane’s handle has a retention mechanism that is the opposite of what Trove speculates is present in Miller. As such, we also find that Lane does not support Trove’s assertion that one skilled in the art would have understood Miller’s alleged disclosure of an “indentation” on the handle as being structurally equivalent to the challenged patent’s spaced-apart tabs on the handle. *See* Ex. 2009 ¶ 178. Moreover, it is undisputed that Miller does not disclose or suggest that its closure pivots to cooperate with the handle’s alleged “indentation” so as to stay open, i.e., be selectively retained, by means of a snap-fit arrangement.

3. *Trove’s Additional Reliance on Samartgis and Leoncavallo*

We also reject the notion that Samartgis and Leoncavallo establish that “a pivotal closure cooperating with a handle to maintain the closure open while drinking was conventional at the time of the invention.” Pet. 91. That argument fails because, as discussed above, Trove fails to prove that either Samartgis or Leoncavallo teaches the claimed “closure retention mechanism.” *See* Ex. 2009 ¶ 179. Thus, neither Samartgis nor Leoncavallo cures the deficiency in Miller. *See id.* ¶ 180.

4. Conclusion

In the end, Trove’s arguments for this challenge only serve to underscore its reliance on speculation. Thus, considering the evidentiary record as a whole, we are not persuaded that Trove proves, by a preponderance of the evidence, that the combination of Miller and Leoncavallo (and Lane) discloses or suggests structure that is equivalent to the challenged patent’s spaced-apart tabs.

H. Obviousness of Claims 17 and 18 Based on Miller, Leoncavallo, Gorskey, and Johnson

As mentioned earlier, claims 17 and 18 depend from claim 5. Ex. 1001, 20:9–15. Similar to its earlier challenges, Trove contends that “the additional limitations of Claims 17–18” are taught or suggested by Gorskey and Johnson. Pet. 97. But Trove does not rely on either Gorskey or Johnson to cure the deficiency of Leoncavallo and Miller to teach or suggest the claimed “closure retention mechanism” of claim 5. *See id.* at 97–98. As such, Trove’s failure with respect to claim 5 also applies to its challenge of dependent claims 17 and 18. Thus, for the same reasons as discussed above with respect to claim 5, we conclude that Trove fails to demonstrate that claims 17 and 18 are unpatentable as obvious over Miller, Leoncavallo, Gorskey, and Johnson.

IV. CONCLUSION

Claims	35 U.S.C. §	Basis	Claims Shown Unpatentable	Claims Not Shown Unpatentable
5–7, 16–19	102, 103	Samartgis		5–7, 16–19
16–18	103	Samartgis, Gorskey, Johnson		16–18
5–7, 16, 19	102, 103	Leoncavallo		5–7, 16, 19
17, 18	103	Leoncavallo, Gorskey, Johnson		17, 18
5–7, 16, 19	103	Miller, Leoncavallo		5–7, 16, 19
17, 18	103	Miller, Leoncavallo, Gorskey, Johnson		17, 18
Overall Outcome				5–7, 16–19

V. ORDER

Accordingly, it is hereby:

ORDERED that claims 5–7 and 16–19 of U.S. Patent 8,905,252 B2 have not been shown to be unpatentable under either 35 U.S.C. §§ 102 or 103; and

FURTHER ORDERED that, because this is a Final Written Decision, the parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

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Patent 8,905,252 B2

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