UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TROVE BRANDS, LLC,

Petitioner,

v.

CAMELBAK PRODUCTS, LLC,

Patent Owner.

IPR2025-00146

U.S. Patent No. 10,165,879

PATENT OWNER'S PRELIMINARY RESPONSE

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PATENT OWNER'S EXHIBIT LIST

Exhibit No.	Description
2001	Declaration of Michael Jobin ("Jobin Decl.")
2002	Claim Construction Order in *Trove Brands, LLC v. CamelBak Products, LLC, et al.*, No. 23-cv-04267-PCP (N.D. Cal.), Dkt. No. 108 (November 8, 2024) ("CC Order").
2003	File History for U.S. Patent 10,165,879
2004	*Curriculum Vitae* of Michael Jobin
2005	Cambridge Dictionary – "automatically"
2006	Oxford English Dictionary – "automatic"
2007	Meriam-Webster Dictionary – "automatic"

I. INTRODUCTION

Petitioner fails to meet its burden that any of the Challenged Claims are rendered obvious by the combination of Kiyota, Choi, and Ribarits (Ground 1) or Park, Ribarits, and Kiyota (Grounds 2 and 3). Petitioner does not establish a reasonable likelihood that the combination of references discloses "a user release mechanism" or "a rigid collar member that is pivotally coupled to a portion of the cap assembly and through which the tube portion at least partially extends," both of which are required by independent claim 1, the only independent claim. As such, all grounds must fail.

Under Petitioner's own construction and grounds, the "user release mechanism" of the Challenged Claims is a means-plus-function element directed to the sliding member 238 (and its component parts) in the '879 patent.

For Ground 1, Petitioner contends that Kiyota's two-button mechanism is an "equivalent" under § 112(f) to the '879 patent's sliding member 238 (and its component parts). Specifically, Petitioner relies only on Kiyota's mechanism that requires depressing two side buttons using two points of contact (e.g., two fingers) and a mere button-press actuation to cause direct catch disengagement. This arrangement allows the two buttons on the sides to be inadvertently depressed by a

user merely trying to hold the bottle. The '879 patent's mechanism, however, only requires a single point of contact (e.g., one finger) on the top of the bottle, rather than the sides, and that requires a greater application of force by the user because of its use of an intermediary structure to cause indirect, rather than direct, catch disengagement. The '879 patent's mechanism, therefore, reduces the points of contact required while also better preventing inadvertent opening of the mouthpiece from the stowed position. Moreover, Petitioner fails to offer any non-conclusory explanation whatsoever as to how any of the differences between the "way" the two structures operate or the "result" they achieve is insubstantial. As such, Petitioner has failed to show there is a reasonable likelihood that Kiyota's buttons are an "equivalent."

Also for Ground 1, Petitioner contends that a POSITA would have been motivated to combine Choi with Kiyota so as to teach the claimed "rigid collar member." Specifically, Petitioner argues that Choi's pivoting mount could be substituted for Kiyota's straw to render obvious the "pivotally coupled" "rigid collar member." However, a POSITA would not have made this substitution because it would have violated Kiyota's principle of operation and would have rendered it inoperable for its intended purpose. First, Choi's pivoting mount requires that it be

manually moved into position by a user, rather than moved automatically by a bias from the elasticity of a tube. Kiyota's design uses an elastic mouthpiece that pushes the lid upward automatically to open the lid and mouthpiece when released. A POSITA would have recognized that Choi's manual pivoting design would have violated Kiyota's principle of operation and rendered it inoperable for its intending purpose by eviscerating the automatic opening of Kiyota's lid and mouthpiece and requiring use of the user's hands, contrary to the teachings of Kiyota. Second, Choi's design uses a bite-actuated valve that would have been potentially undesirably opened by the design of Kiyota's lid during closing because Kiyota's lid is designed to apply compressive force to the tube during closing. This would have led to potential undesired fluid leakage. Thus, Petitioner fails to establish by a reasonable likelihood that a POSITA would have been motivated to make this combination.

For Grounds 2 and 3, Petitioner again fails to show with a reasonable likelihood that Park discloses the claimed "user release mechanism." While Petitioner contends that Park's "operating button" is an "equivalent" to the '879 patent's sliding member 238 (and its component parts) under § 112(f), Petitioner fails to even argue that the operating button performs the same function, in substantially the same way, with substantially the same result, each of which is

necessary to satisfy its burden of showing that the operating button is equivalent to the "user release mechanism." Instead, the Petition includes a single-sentence summary of Park's operating button, with a citation to a four-page section of its declarant's declaration. While the Board should disregard this impermissible wholesale incorporation by reference that subverts the word count limit, the declaration is nonetheless deficient in showing that Park's operating button is equivalent because it, too, fails to address whether the operating button performs an identical function or whether it achieves substantially the same result.

Also for Grounds 2 and 3, the Petition fails to show with a reasonable likelihood that a POSITA would have been motivated to combine Ribarits with Park to arrive at the claimed "rigid collar member." Here, Petitioner seeks to substitute Ribarits's drinking spout and sealed tubular element with Park's straw and connecting hose. However, Petitioner's reasoning for why a POSITA would have been motivated to make this combination rests on a faulty premise that Ribarits discloses a single-piece construction for its drinking spout and tubular element. This premise is contradicted by both Ribarits itself and by Petitioner's own declarant. As such, Petitioner's proposed combination fails to disclose the "rigid collar member."

Therefore, Petitioner has failed to establish a reasonable likelihood of prevailing on any ground, and Patent Owner respectfully requests that the Board deny institution. Petitioner has submitted the Declaration of Michael Jobin (Ex. 2001) in support of the arguments presented herein.

II. THE '879 PATENT

The '879 patent is titled "Drink Containers," and issued on January 1, 2019. Ex. 1001 (cover). The patent generally describes a drink container with a cap assembly portion and a mouthpiece assembly portion with two configurations, a dispensing configuration and a stowed configuration to selectively restrict the flow of drink liquid. *Id.*, Abstract. The cap assembly may include a "user release mechanism," to automatically release the mouthpiece assembly from the stowed to the dispensing configuration. *Id.*, 1:55-62, 6:22-28; Ex.2001, ¶53. The application that matured into the '879 patent, U.S. Patent Application No. 15/817,013, was filed on November, 17, 2017, and it claims priority to U.S. Patent Application No. 12/357,114, filed on January 21, 2009. *Id.*, p.2.

A. Claims

The ’879 patent has 20 claims. *Id.*, 21:24-24:21. Petitioner challenges claims 1, 3, 5-8, and 10-19 in the Petition. Pet., 16-19. Independent claim 1 is the only independent claim.

Claim 1	
Preamble	**A drink container**, comprising:
1[A]	**a liquid container** having a neck with an opening and having an internal compartment sized to hold a volume of potable drink liquid; and
1[B]	**a cap assembly** removably coupled to the liquid container, the cap assembly comprising:
1[B][1]	**a base** removably coupled to the neck of the liquid container and including a through-passage;
1[B][2]	**a first catch structure** coupled to the base;
1[B][3]	**a mouthpiece assembly** extending through the through-passage of the base and defining a liquid passage through which drink liquid from the liquid container may selectively flow, and further defining an inlet through which drink liquid in the internal compartment may enter the liquid passage and an outlet through which drink liquid from the internal compartment of the liquid container is selectively dispensed; wherein the mouthpiece assembly is configured to be

	selectively configured between a dispensing configuration, in which the liquid passage permits drink liquid to flow from the internal compartment at least into the liquid passage, and a stowed configuration, in which drink liquid is restricted from being dispensed from the liquid container through the liquid passage; wherein the mouthpiece assembly is biased to the dispensing configuration; and wherein the mouthpiece assembly comprises:
1[B][3][a]	**a tube portion** that defines at least a portion of the liquid passage for drink liquid to flow from the internal compartment to the outlet of the mouthpiece assembly; wherein the tube portion includes a crimping region constructed of a resiliently deformable material and adapted to prevent the flow of drink liquid through the liquid passage when the mouthpiece assembly is in the stowed configuration; wherein the crimping region includes opposing walls that are in contact with each other to seal the liquid passage within the crimping region when the mouthpiece assembly is in the stowed configuration;
1[B][3][b]	**a rigid collar member** that is pivotally coupled to a portion of the cap assembly and through which the tube portion at least partially extends; and

1[B][3][c]	**a second catch structure** adapted to be selectively engaged with the first catch structure to retain the mouthpiece assembly in the stowed configuration; and
1[B][4]	**a user release mechanism** adapted to automatically disengage the first and second catch structures upon actuation of the user release mechanism and thereby release the mouthpiece assembly to move via its bias from the stowed configuration to the dispensing configuration;
1[C]	wherein the cap assembly defines **a stowing region** sized to receive at least a portion of the mouthpiece assembly when the mouthpiece assembly is in the stowed configuration;
1[D]	wherein the user release mechanism includes **a sliding member** with a user engagement pad; wherein the user release mechanism is biased to urge the sliding member away from a position where the sliding member disengages the first and second catch structures; and wherein the sliding member is configured to slide relative to the base of the cap assembly to selectively disengage the first and the second catch structures.

Id., 21:24-22:23.

B. Specification

The ’879 patent discloses various embodiments to illustrate the claimed drink containers. Figure 7 below represents an example drink container according to the

'879 patent, including a cap assembly (14) and a mouthpiece assembly (18). *Id.*, 4:14-19, 4:5-63, Fig 7; Ex.2001, ¶56.

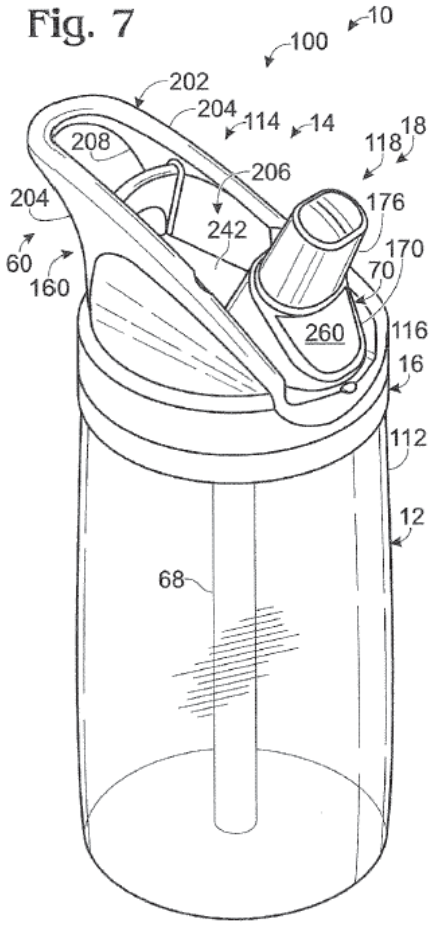
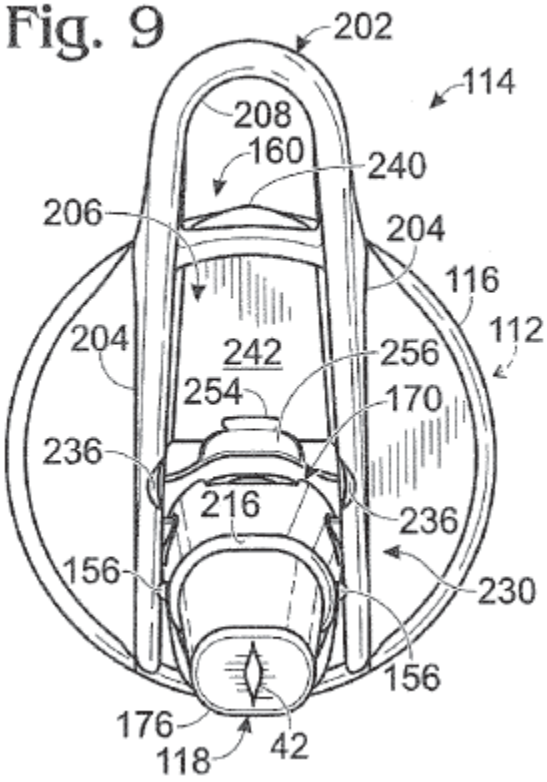


Figure 9 below represents a top view of an exemplary cap assembly (114) that includes a user release mechanism (160), which further includes a user engagement pad (240) and a sliding member including a generally planar portion (242). Ex.1001,

12:63-13:7, Fig. 9; Ex.2001, ¶58. The sliding member is configured to slide upon user actuation of the user release mechanism (160), automatically disengaging the catch structures and releasing the mouthpiece assembly to move from the stowed to the dispensing configuration. Ex.1001, 13:1-5, 13:22-32, Fig. 9; Ex.2001, ¶58.

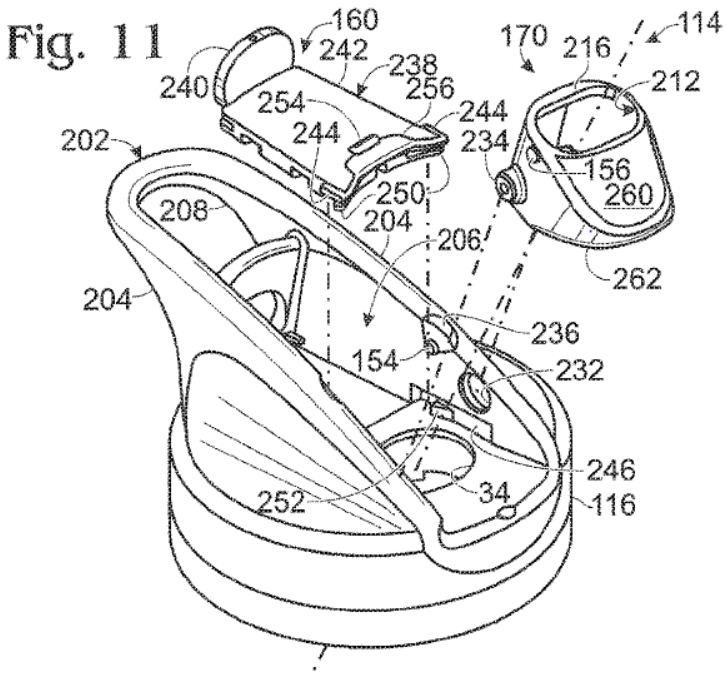
Fig. 9



The exploded view provided by Figure 11 below further illustrates the sliding member 238 and the catch structures 154 and 156. The specification states that "the first catch structure of cap assembly 114 includes a pair of cylindrical depressions 154" and "the second catch structure of the rigid collar member includes a pair of

hemispherical protrusions 156." *Id.* 12:37-41.[1] These catch structures mate when the mouthpiece assembly is in the stowed configuration. *Id.* 12:34-36. Sliding member 238, with its engagement pad 240, is also illustrated below in the exploded view of Figure 11 and, as illustrated, is separate from the first and second catch structures 154 and 156. Ex.2001, ¶59.

[1] A POSITA would have appreciated that elements 154 (the cylindrical depressions) are the locations of the first catch structures since the first catch structures include the cylindrical depressions and would have appreciated that elements 156 are at the locations of the second catch structures since the second catch structures include the hemispherical protrusions 156. As such, they are often reference to as first catch structures 154 and second catch structures 156 for uniformity and consistency. *Id.*, 12:39-41, Ex. 2001, fn 1.



C. Prosecution History

The application that matured into the '879 patent was filed November 17, 2017. The applicant cited Kiyota and Choi in an IDS filed concurrently with the application. Ex. 2003, 238-316. In the first non-final office action of April 2, 2018, the Examiner issued a double patenting rejection over U.S. Patent Number 9,820,595, which granted from the subject application's immediate parent (U.S. Application Number 15/398,569). *Id.*, 203-04. Upon accepting a subsequently filed terminal disclaimer, the examiner allowed all claims as originally filed and did not provide a statement on the reasons for allowance. *Id.*, 166-67, 188. Ex.2001, ¶60.

III. PETITIONER'S GROUNDS AND CITED REFERENCES

Petitioner asserts that the challenged claims would have been anticipated and/or obvious based on three (3) grounds. Ground 1: Petitioner argues that all challenged claims (1, 3, 5-8, and 10-19) are obvious over Kiyota[2] in view of Choi,[3] and in further view of Ribarits.[4,5] Pet., 17, 35-70. Ground 2: Petitioner argues that claims 1, 3, 5-8, 10-13, and 15-19 are obvious over Park[6] in view of Ribarits. *Id.*,

[2] U.S. Patent No. 6,279,773 to Kiyota (Ex. 1004).

[3] U.S. Patent Publication No. 2007/0039959 to Choi (Ex. 1005).

[4] International Publication No. WO/2004/063042 to Ribarits (translated) (Ex. 1009).

[5] While the Petition asserts that all of the challenged claims are obvious over the combination of Kiyota, Choi, and Ribarits under Ground 1, it appears that Ground 1 actually includes two separate grounds of rejection: (1) claims 1, 3, 5-8, and 18-19 are argued as obvious over Kiyota and Choi; and (2) claims 10-17 are argued as obvious over Kiyota, Choi, and Ribarits.

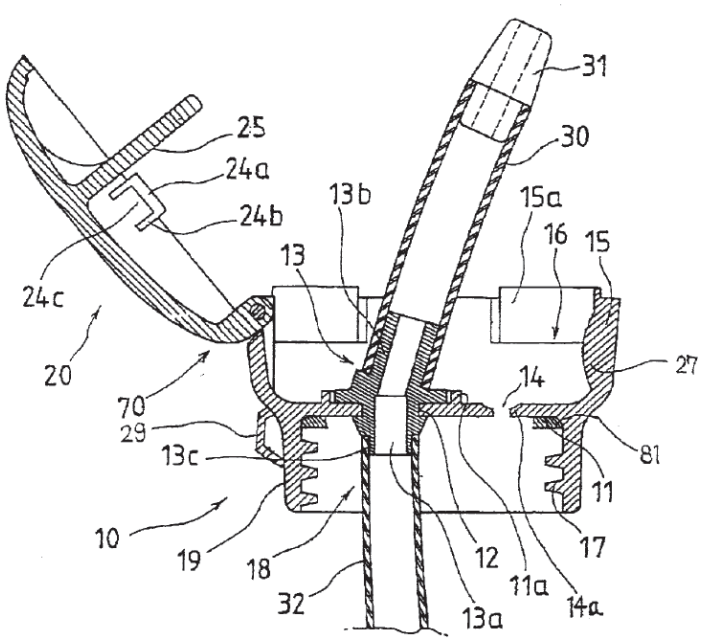
[6] Korea Utility Model Registration No. 20-0282506 to Park (translated) (Ex. 1006).

17, 70-119. Ground 3: Petitioner argues that claim 14 is obvious over Park in view of Ribarits, in further view of Kiyota. *Id.*, 17, 119-121.

A. Kiyota

Kiyota is titled "lid body of beverage container." Ex. 1004, 1. Kiyota was submitted to the Examiner during prosecution of the '879 patent and appears on its face. Ex. 1001, p.2. Kiyota's lid body has two main portions, the main body portion 10 and the openable lid 20, connected by a hinge portion 70. Ex. 1004, 4:54-58.

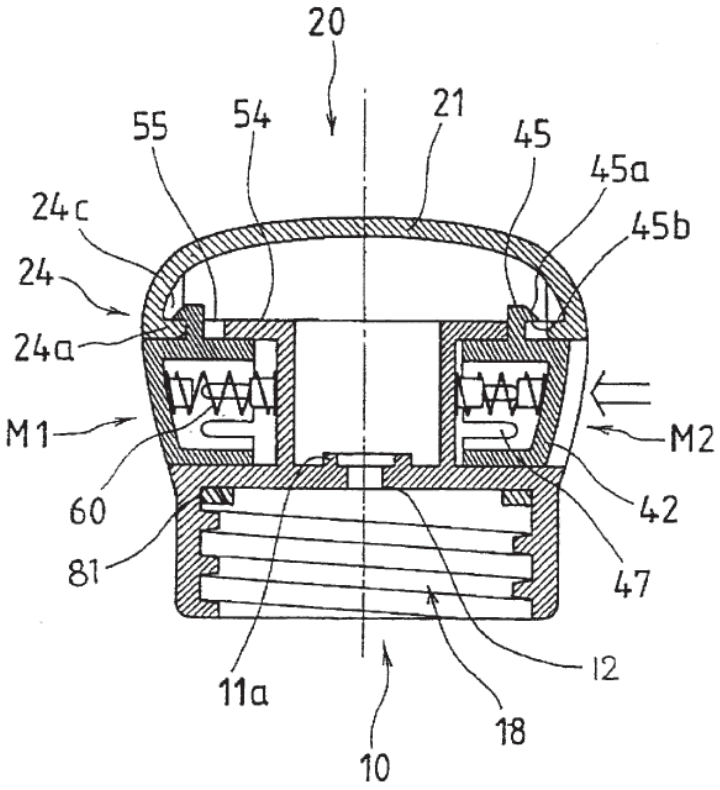
FIG. 6



Id., Fig. 6.

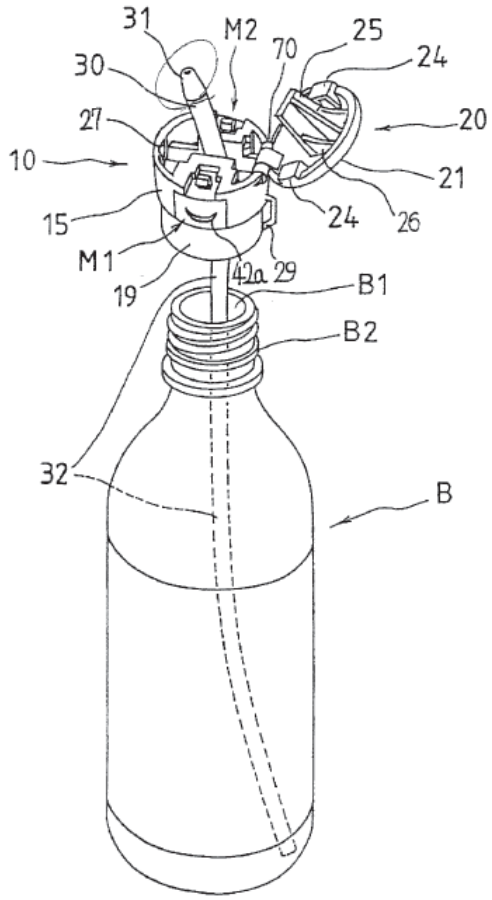
To open the lid and drink from the bottle, the user presses two lock release buttons 40, which are located on either side of the lid. When the user simultaneously presses both lock release buttons 40, a spring 60 is compressed, causing the buttons 40 to move inward. *Id.*, 7:3-9; 7:60-8:2, 8:65-93. This movement of the release buttons 40 causes stopper pieces 45 to disconnect from connection portions 24, allowing the lid 20 to open, as is shown on the right side of Figure 5 below. *Id.*; *see also id.*, Fig. 5.

FIG. 5



Once the lid 20 is open, the user may drink from mouthpiece portion 31. *Id.* 11:23-32. When the user drinks, liquid will travel from the bottom of the beverage container B, through storing suction tube 32, through the coupling tube 13 which allows liquid through the main body portion 10, through the mouthpiece tube 30, and out of the outlet on mouthpiece portion 31. *Id.*, 5:38-46, Fig. 1.

FIG. 1



B. Choi

Choi is titled "drink bottles with bite-actuated mouthpieces." Ex. 1005, p.1. Choi was submitted to the Examiner during prosecution of the '879 patent and appears on its face. Ex. 1001, p.2.

In general, Choi describes drinking bottles that primarily use bite-actuated mouthpieces, which are sealed until a user bites onto them, thus allowing liquid to be dispensed from the bite valve. Ex. 1005, ¶ [0004]. Choi's drinking bottle is also designed to pivot the bite-actuated mouthpiece between a stowed position (illustrated below in Figure 26) and a dispensing configuration (illustrated below in Figure 27). *Id*., ¶ [0062].

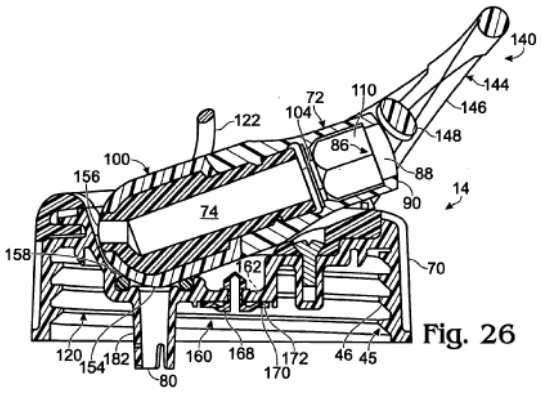


Fig. 26

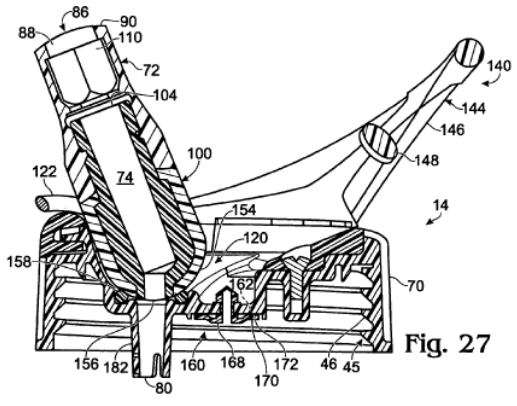
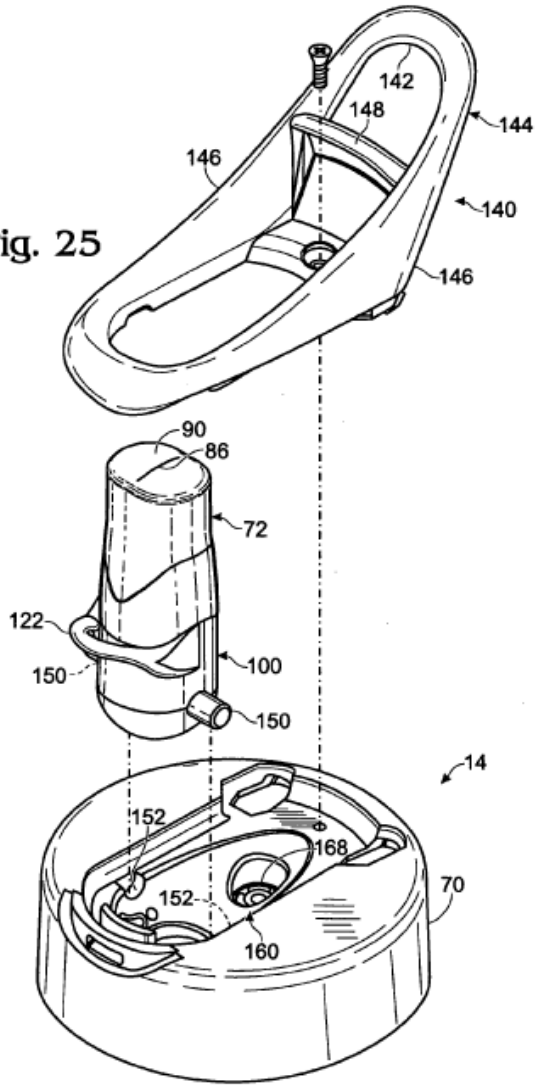


Fig. 27

Id., Fig. 26, Fig. 27.

To pivot the bite-actuated mouthpiece between the stowed and dispensing configuration, the cap assembly uses a pivotally coupled mount 100, illustrated below in the exploded view of Figure 25. *Id.* ¶ [0062], Fig. 25.

Fig. 25

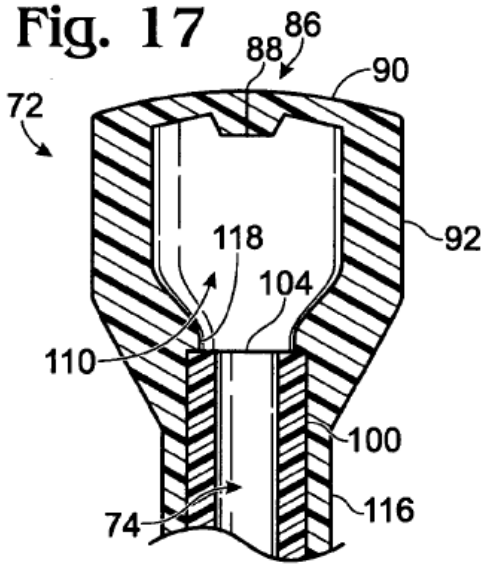


Id. Fig. 25. Mount 100 includes "lateral projections 150 that are received into sockets 152 defined by portions of the base 70 and handle 140 of the cap assembly. The

projections are rotatable within the sockets, and thereby function as rotatable supports, or axles, upon which the mount and any attached mouthpiece may be pivotally moved relative to the base of the cap assembly, such as between stowed and dispensing configurations." *Id.*, [0079].

The mouthpiece 72 may be non-removably secured to the mount 100 or it may be "removably mounted onto mount 100." *Id.*, ¶ [0049]. As illustrated below, a mouthpiece 72 can be positioned on the mount 100, where the "mount 100 defines a portion of fluid conduit 74 which extends from the end region, or outlet, 104 of the mount and into the internal chamber 110 of the mouthpiece" 72. *Id.*, ¶ [0054].

Fig. 17

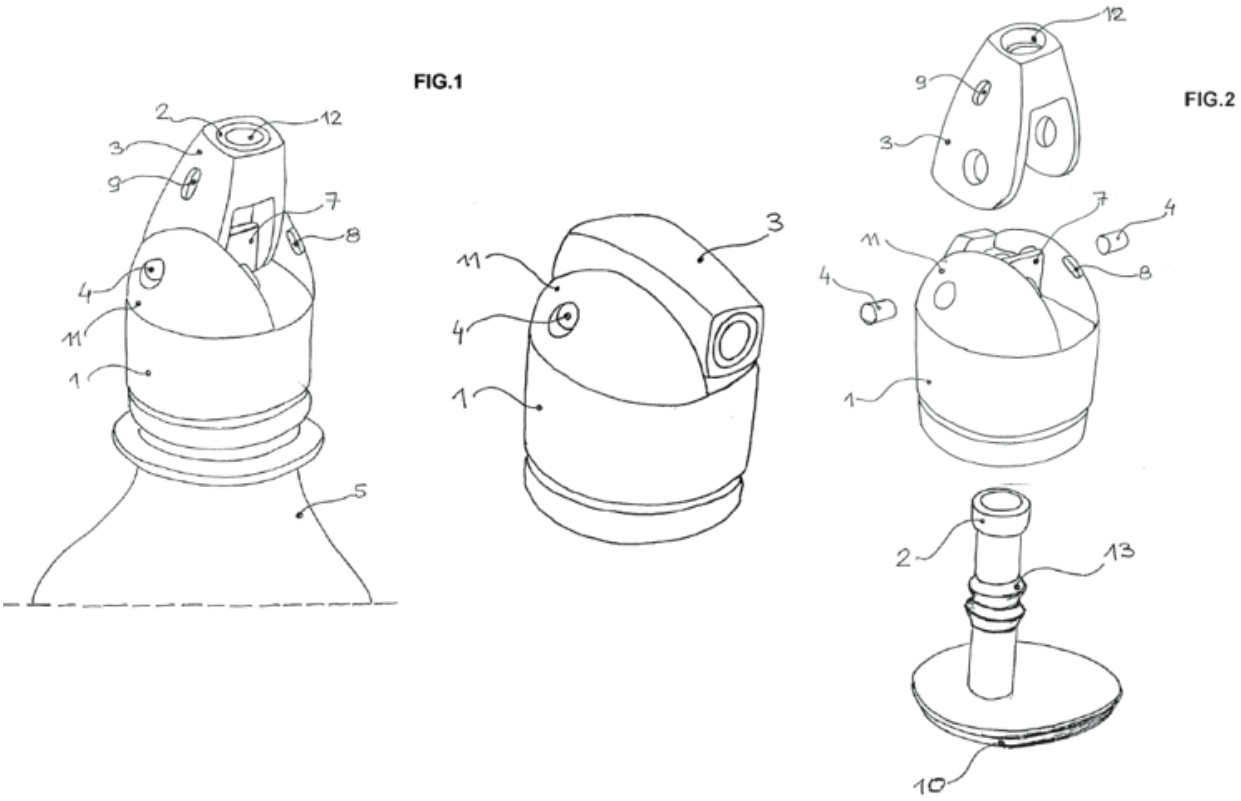


Id., Fig. 17.

C. Ribarits

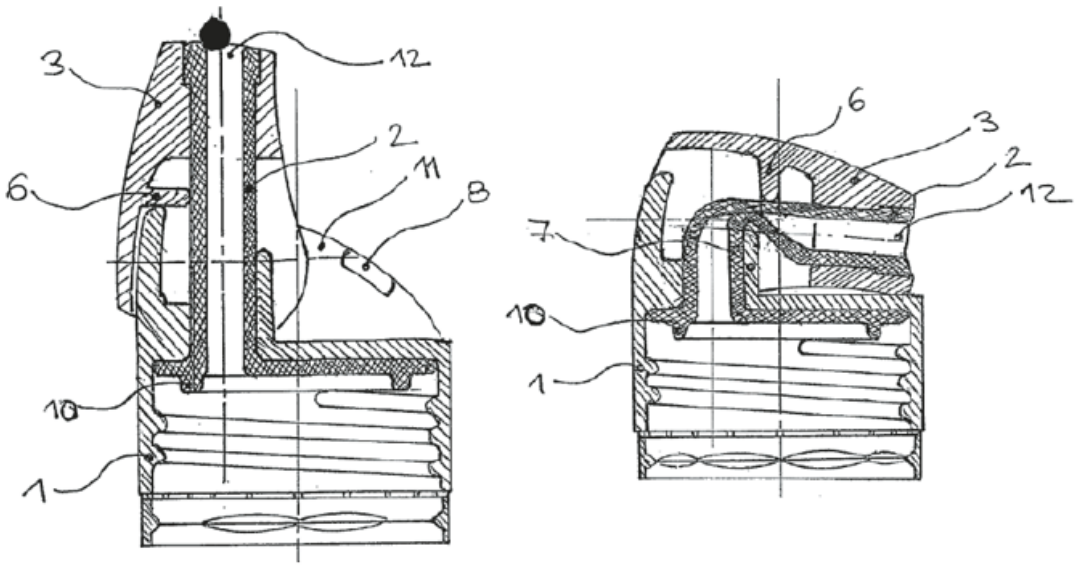
International Publication No. WO 2004/063042 to Ribarits et al. ("Ribarits"), entitled "drinking device," was published on July 29, 2004. The original publication is in German (Ex.1011), and that publication has been translated to English (Ex.1009).

Ribarits is generally directed to a drinking device that is designed such that it can be opened and closed with one hand. Ex.1009, Abstract, 2. The drinking device includes a closing cap 1, a drinking spout 3 that rotates about two axial pins 4, a bottle 5, and a tubular element 2 that is "inserted into said cap" and also "inserted" in the drinking spout, as shown in the versions of Figures 1 and 2 below. *Id.*, Abstract, 2, claim 1, Fig. 1.



Id. at Figs. 1-2. As shown above, the drinking spout 3 can be in an open position (Fig. 1 at left) or in a closed position (Fig. 1 at right). *Id.* at 2, Fig. 1.

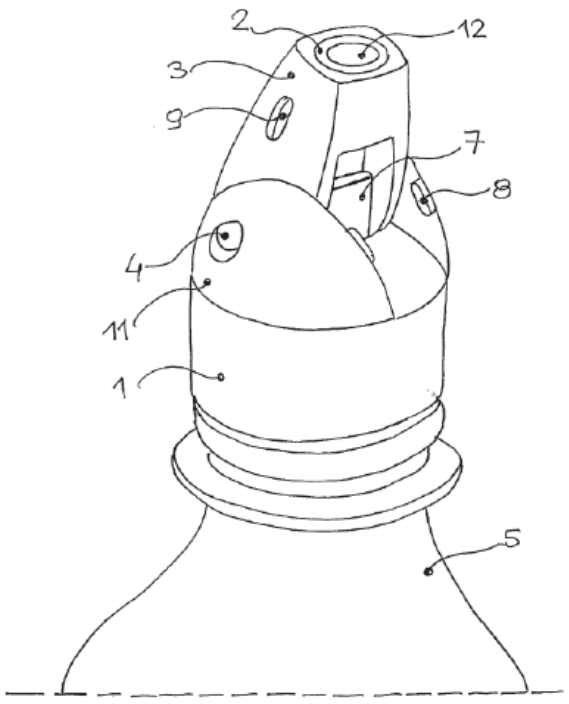
As shown in the version of Figure 3 below, the tubular element 2 is inserted into the cap 1 and drinking spout 3. *Id.*, claim 1 ("[T]he sealed tubular element (2) is inserted into the drinking spout (3).").



Ex.1005, Fig. 3 (excerpt).

When the drinking spout 3 is in the open position, as illustrated to the left above in Figure 3, the tubular element 2 is opened to allow drink to pass through it. *Id.* at 2 ("When the drinking spout is pivoted open, the elastic tube inserted therein is straightened and the opening is thus released."). When the drinking spout is in the closed position, as illustrated to the right above in Figure 3, the tubular element 2 is bent to close it. *Id.* at 2 ("If now the device is to be closed, by folding down the drinking spout, the tube is bent between the outlet opening of the closing cap and the accommodation in the drinking spout by means of the two webs, and the device is closed.").

As shown below, the cap 1 also includes two knobs 8 that can snap into two recesses 9 on the sides of the drinking spout 3 when the spout is in the closed position as a "securing mechanism" to "prevent an accidental opening of the drinking spout." Ex.1005 at Abstract, 2, claim 1, Figs. 1-2.



Ex.1005, Fig. 1 (excerpt).

D. Park

Korean Utility Model Registration Number 20-0282506 to Park et al. ("Park") is entitled "portable water bottle with straw." Ex. 1006. Park's water bottle includes a lid that is designed to cover a straw when the lid is closed and reposition the straw

when the lid is opened. *Id.*, 3. Figure 1 below (left) illustrates the bottle 100 with the lid 110 closed, while Figure 2 below (right) illustrates the bottle 100 with the with the lid 110 open. *Id.*, 4.

FIG. 1

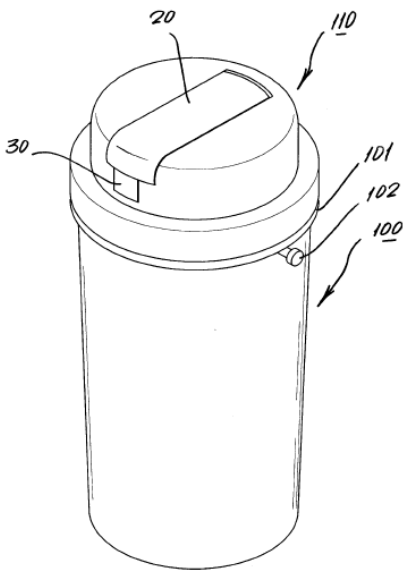
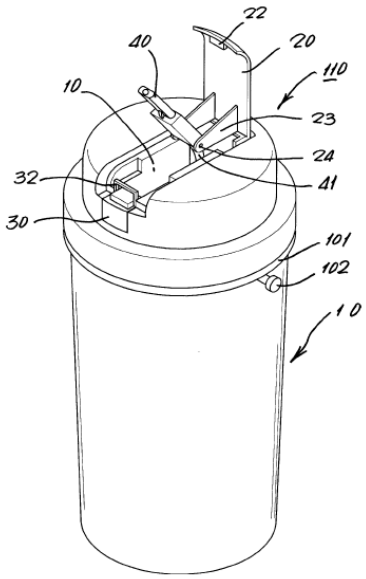


FIG. 2



Id., Fig. 1, Fig. 2.

The bottle includes a drinking straw 40 that is coupled to a connecting hose 41, which is further connected to a guide hose 12 that allows liquid to be drawn from the chamber 10 through the straw 40. *Id.*, 4. This can be seen best in Figure 6 below (bottom, right), which shows the bottle in the open position.

FIG. 3

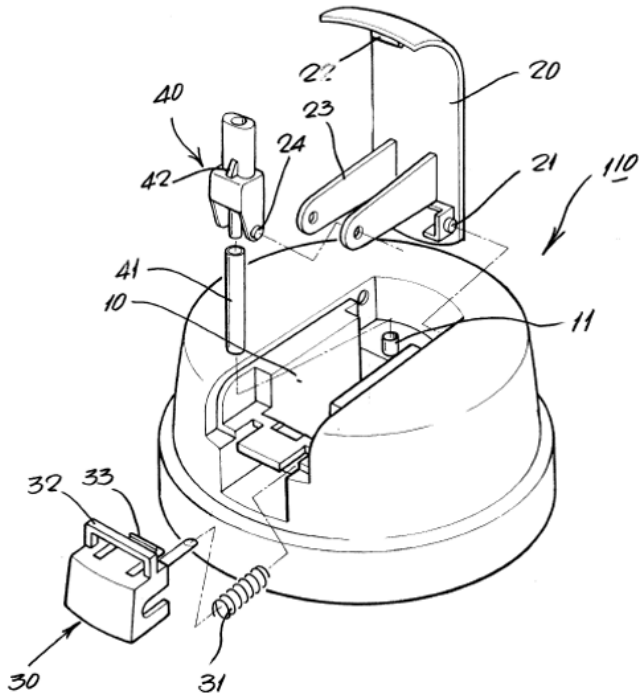


FIG. 5

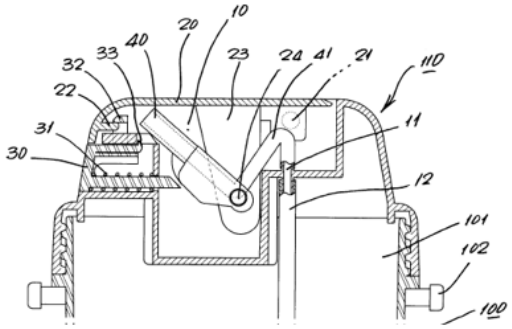
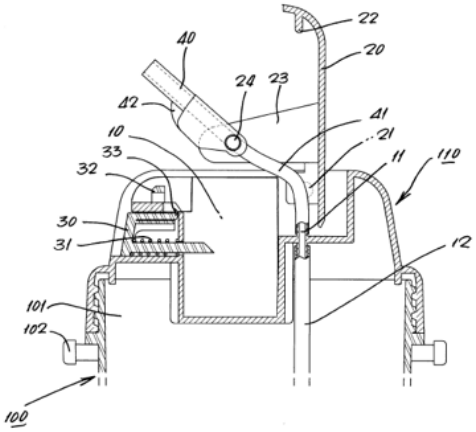


FIG. 6



Id., Fig. 3, Fig. 5, Fig. 6.

When the bottle is in the closed position, the straw 40 and connecting hose 41 are depressed into operating chamber 10, where the connecting hose 41 forms a "double bend" as illustrated above in Figure 5 (top, right), which prevents leakage. *Id.*, 5.

"The straw 40 is axially coupled to the bracket 23 of the cover 20 by the hinge shaft 24," as illustrated in the exploded view provided above by Figure 3 (left). *Id.*,

5. As such, when the cover 20 is opened the straw is "unfolded by the elastic force of the connecting hose 41 and is opened with the rotary shaft 21 as a supporting point." *Id.*

IV. LEVEL OF ORDINARY SKILL IN THE ART

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. Ex.2001, ¶65. Petitioner sets forth a similar, though slightly different, level of ordinary skill in the art. Pet., 18. However, Petitioner fails to show a reasonable likelihood of prevailing on any claim even under the level of ordinary skill in the art Petitioner sets forth, and, thus, Patent Owner discerns no material difference between the definitions provided by the parties for purposes of the Board's decision on whether to institute this proceeding. Petitioner admits as much when it suggests that its "Petition does not turn on [its] specific definition of the level of ordinary skill." Pet., 18; Ex.2001, ¶¶66-67.

V. CLAIM CONSTRUCTION

A. "user release mechanism"

Subsequent to the filing of the Petition, a claim construction order was issued in the co-pending district court case between Petitioner and Patent Owner. *See* Ex.2002. The district court held that the term "user release mechanism" is a means-plus-function term governed by 35 U.S.C. § 112(f), *id*., at 12-15, and construed the corresponding structure for the "user release mechanism" of claim 1 "as including sliding member 238, engagement pad 240, planar portion 242, tabs 244, springs, leaf springs, biasing members 250, tabs 252, collar engagement portion 254, and depression 256." *Id.*, 20. The court further held that the function of the sliding member 238 (and its component parts) is "[a]utomatically disengaging the first and second catch structures upon actuation of the user release mechanism and thereby releasing the mouthpiece assembly to move via its bias from the stowed configuration to the dispensing configuration" and "[u]rging the [sliding member/displacement mechanism] away from a position where the [sliding member/displacement mechanism] disengages the first and second catch structures." *Id.*, 15, 19 (second and third brackets in original).

Petitioner has proposed to construe the "user release mechanism" as being governed by § 112(f). Pet., 20-23. Petitioner asserts that the disclosed corresponding structure of the "user release mechanism" constitutes "sliding member 238 (and its component parts)," *Id.* at 22, and that the its functions are

> "(i) to automatically disengage the first and second catch structures upon actuation of the user release mechanism and thereby release the mouthpiece assembly to move via its bias from the stowed configuration to the dispensing configuration" and (ii) being "biased to urge the sliding member away from a position where the sliding member disengages the first and second catch structures."

Id., 21-22; Ex.2001, ¶73.

For purposes of this proceeding only, Patent Owner does not dispute that the "user release mechanism" is governed by §112(f). Further, for purposes of this proceeding only, Patent Owner also does not dispute including "sliding member 238 (and its component parts)" in the corresponding structure for claim 1.

Further, Patent Owner contends that Petitioner has failed to comply with 37 C.F.R. § 42.104(b)(3) for failing to adequately construe a means-plus-function limitation governed by 35 U.S.C. § 112(f) in a manner that "identif[ies] the specific portions of the specification that describe the structure, material, or acts corresponding to each claimed function." Petitioner merely identifies "sliding

member 238 (and its component parts),” without specifying which particular structures it contends constitutes the “component parts” of sliding member 238 that Petitioner intends to include in its construction. For example, Petitioner does not explain whether it intends to include biasing members 250, and if so, which embodiments of the biasing members 250 are included (e.g., springs, leaf springs, arcuate projections, tabs) or whether it intends to include user engagement pad 240, planar portion 242, wedge-shaped tabs 252, collar engagement portion 254, or depression 256 (each of which are included in the district court construction). *See*, *e.g.*, Ex.1001, at 12:61-13:46; Ex.2002, at 20. Because Petitioner’s construction of the “user release mechanism” is ambiguous as to the “component parts” of sliding member 238 that are part of the corresponding structure required for this alleged means-plus-function element, Petitioner fails to adequately construe a means-plus-function claim limitation it contends is governed by § 112(f) or explain with the requisite “particularity” how structures present in the alleged prior art are “equivalent” to this ambiguously identified corresponding structure. *See* 35 U.S.C. § 312(a)(3) (the petition must identify “with particularity . . . the grounds on which the challenge to each claim is based”); 37 C.F.R. § 42.104(b)(3) (petition must identify “[h]ow the challenged claim is construed” and for means-plus-function

limitations construed under § 112(f), must "identify the specific portions of the specification that describe the structure, material, or acts corresponding to each claimed function."). The Petition should be denied on this basis alone for failing to meet these threshold requirements.

B. "to automatically disengage the first and second catch structures"

Patent Owner submits that the claimed "automatic[]" disengagement means that the claimed disengagement must be at least in part caused by the bias of the mouthpiece assembly as opposed to being wholly caused by the user. This is demonstrated by both the intrinsic and extrinsic evidence. Ex.2001, ¶79.

First, the plain claim language makes this requirement clear. In reciting that the "user release mechanism" performs the function of "automatically disengag[ing] the first and second catch structures," claim 1 recites that "thereby" the mouthpiece assembly is "release[d]" to "move via its bias." Thus, claim 1 makes clear that the mouthpiece assembly has a bias and this automatic action results in the mouthpiece assembly moving via its bias. Ex.2001, ¶80.

Second, the specification confirms this meaning. The '879 patent specification repeatedly equates its use of "automatic" in this manner to movement under the force of a bias, as opposed to being movement that is wholly under the

action of the user (i.e., wholly manual in nature). Ex.1001, at 1:60-61 ("the mouthpiece assembly is biased toward the dispensing configuration ***and thus moves automatically under its bias*** upon release by the user-release mechanism"), 6:25-28 ("the mouthpiece assembly may be configured ***to move automatically via, or under, its bias*** to the dispensing configuration upon release from its stowed configuration."), 11:21-23 ("a portion of the mouthpiece assembly . . . may be biased ***to pivot automatically to the dispensing configuration when not restrained from moving under this bias***."). Ex.2001, ¶81.

Third, this construction is consistent with dictionary definitions and case law that "automatic" or "automatically" requires at least some lack of user intervention, so as to distinguish the term "automatic" from "manual." Ex., 2007, at 1 ("done or produced as if by machine" or "having a self-acting or self-regulating mechanism"); Ex., 2005, at 1 ("If a machine or device does something automatically, it does it independently, without human control"); Ex., 2006, at 2-3 ("self-acting once set in motion" or "[o]f a machine, appliance, etc.: that does not require an operator; that works by itself under fixed conditions, with little or no direct human control"); *Space Sys./Loral, Inc. v. Lockheed Martin Corp.*, 243 F.3d 558, 2000 WL 1205154, at *5 (Fed. Cir. 2000) ("Given its ordinary meaning, the term 'automatically' denotes that

the claimed apparatus is capable of performing east-west stationkeeping independently, without any external control."); *id*. at *6 (agreeing that "manual" operation is "antithetical to the concept of being automatic"); *Lugus IP, LLC v. Volvo Car Corp.*, 2014 WL 2094086, at *7 (D.N.J. 2014) (construing "automatically" in the context of a child car seat that would "automatically retract" into an adult seat "by giving it its plain ordinary meaning shown by a dictionary definition [of a] 'self-acting or self-regulating mechanism that performs a required act at a predetermined point in an operation"); Ex.2001, ¶82. The district court agrees. Ex., 2002, at 16 ("[T]he bias of the mouthpiece towards the dispensing configuration causes the mouthpiece to move automatically . . . .").

A POSITA, therefore, would have understood that the claimed "automatic[]" disengagement means that "the claimed disengagement must be at least in part caused by the bias of the mouthpiece assembly as opposed to being wholly caused by the user." Ex., 2001, ¶83.

VI. GROUND 1 FAILS BECAUSE PETITIONER FAILS TO SHOW THAT KIYOTA DISCLOSES THE CLAIMED "USER RELEASE MECHANISM" OR THAT KIYOTA IN VIEW OF CHOI RENDERS OBVIOUS THE "RIGID COLLAR MEMBER" OF CLAIM 1.

Petitioner fails to show a reasonable likelihood of prevailing on Ground 1 because Petitioner fails to show with a reasonable likelihood that the combination of Kiyota, Choi, and Ribarits discloses or renders obvious at least the "user release mechanism" and "rigid collar member" of claim 1; Ex.2001, ¶84.

For the "user release mechanism," Petitioner only contends this element is disclosed (not rendered obvious) by Kiyota and argues that Kiyota discloses an "equivalent" to the corresponding structure. However, Petitioner proffers nothing more than conclusory argument and expert testimony, which should be disregarded. And Patent Owner proffers reasoned argument and expert testimony below establishing that Kiyota's alleged equivalent does not perform the same function in substantially the same way to achieve substantially the same results. Ex.2001, ¶85.

For the "rigid collar member," Petitioner does not contend that Kiyota discloses this element and instead attempts to combine Choi to render obvious this element. But Petitioner's proposed combination would plainly change the principle

of operation of Kiyota and render it inoperable for its intended purpose. And none of Petitioner's alleged motivations to combine is credible. Ex.2001, ¶86.

The Petition does not cure these deficiencies in its challenges to any of the dependent claims. *See* Pet., 48–69. Accordingly, the defects to independent claim 1 infect all challenged claims under Ground 1. Ex.2001, ¶87.

A. The Petition fails to show that Kiyota discloses a "user release mechanism," as required by claim 1.

In Ground 1, Petitioner relies on Kiyota alone as disclosing an alleged "equivalent" under 35 § 112(f) of the corresponding structure of the '879 patent for the claimed "user release mechanism" of claim 1, but Petitioner's highly conclusory analysis is directed only at whether Kiyota's structure allegedly performs the same function and fails to analyze whether it does so in substantially the same way to achieve substantially the same result. In addition, Patent Owner presents reasoned argument and evidence below that establishes that Kiyota's alleged user release mechanism does not perform the recited function in substantially the same way to achieve substantially the same result. By failing to present non-conclusory argument or evidence in support of these two additional required prongs and given Patent Owner's contrary reasoned argument and evidence, Petitioner fails to establish by a

reasonable likelihood that this claim element is satisfied by Kiyota. As such, Ground 1 should be rejected[7]. Ex.2001, ¶88.

Petitioner contends that "user release mechanism" should be construed as a means-plus-function limitation under §112(f), the district court did so in the related litigation, and Patent Owner does not dispute that §112(f) applies for the purposes of this proceeding. (*see supra* Sec. V.A.) (citing Ex.2002, 15, 19-20). Petitioner acknowledges that this means the "user release mechanism" must be construed to cover the disclosed corresponding structure in the written description of the '879 patent that corresponds to the recited function of the "user release mechanism," as well as "equivalent" structures under § 112(f). Pet., 21; Ex.2001, ¶89.

Claim 1 requires:

> a user release mechanism adapted to automatically disengage the first and second catch structures upon actuation of the user release mechanism and thereby

[7] While the Petition states claim 1 is obvious over the combination of Kiyota, Choi, and Ribarits, only Kiyota and Choi are relied on for alleged invalidity under § 103. *See* Pet., 31 ("Kiyota in combination with Choi[] discloses a drink container having all of the limitations recited in Claim 1.").

> release the mouthpiece assembly to move via its bias from the stowed configuration to the dispensing configuration;
>
> wherein the user release mechanism includes a sliding member with a user engagement pad.

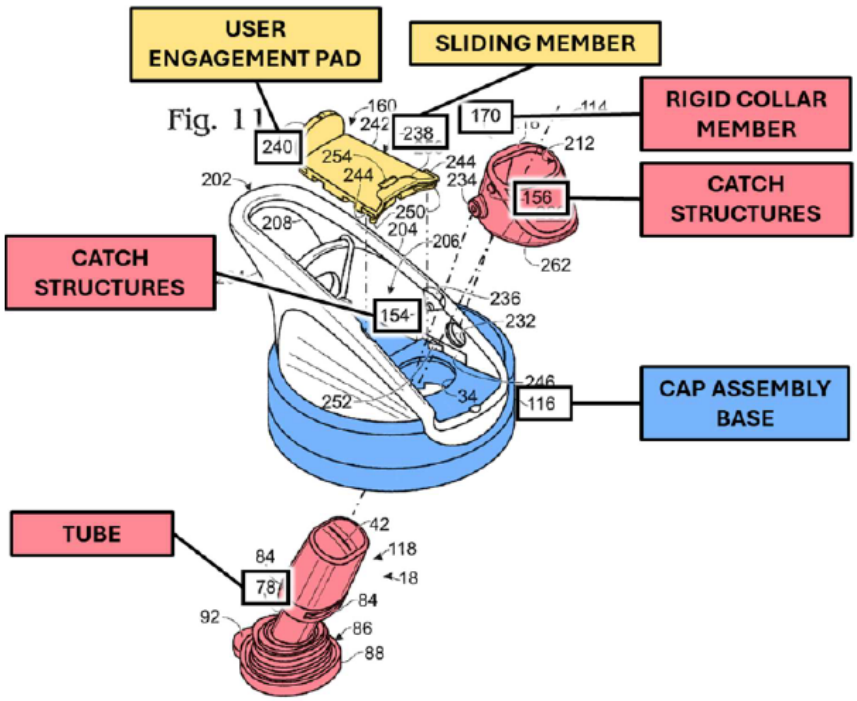
The Petitioner argues that the primary reference Kiyota *discloses* the claimed "user release mechanism." Petitioner does not rely on Choi or Ribarits for this element, nor does it contend that the "user release mechanism" is rendered obvious by Kiyota. Ex.2001, ¶91.

Petitioner asserts that the "structures in Kiyota that perform the claimed user release mechanism function are equivalent to the structures of the '879 patent." Pet., 44-46. Petitioner contends in highly conclusory fashion that Kiyota discloses structures that "perform the claimed function in the same way to achieve the same result." Pet., 45 (citing Ex.1003, ¶98); Ex.2001, ¶92.

In asserting that Kiyota discloses the "user release mechanism," Petitioner construes the claimed "user release mechanism" to require the "sliding member 238 (and its component parts)" of the '879 patent as the corresponding structure. Pet., 22. Petitioner then contends that when "a user pushes a sliding element forward, towards the mouthpiece assembly, to disengage the catch structures" in the '879 patent, "[t]his is substantially the same in Kiyota where a user presses buttons 40,

which slide to automatically disengage the first and second catch structures." Pet., 45-46 (citing Ex.1003, ¶98); Ex.2001, ¶93.

The Petition includes an annotated Figure 11, reproduced below, from the '879 patent to illustrate the "sliding member 238" and its "user engagement pad 240." Pet., 23.



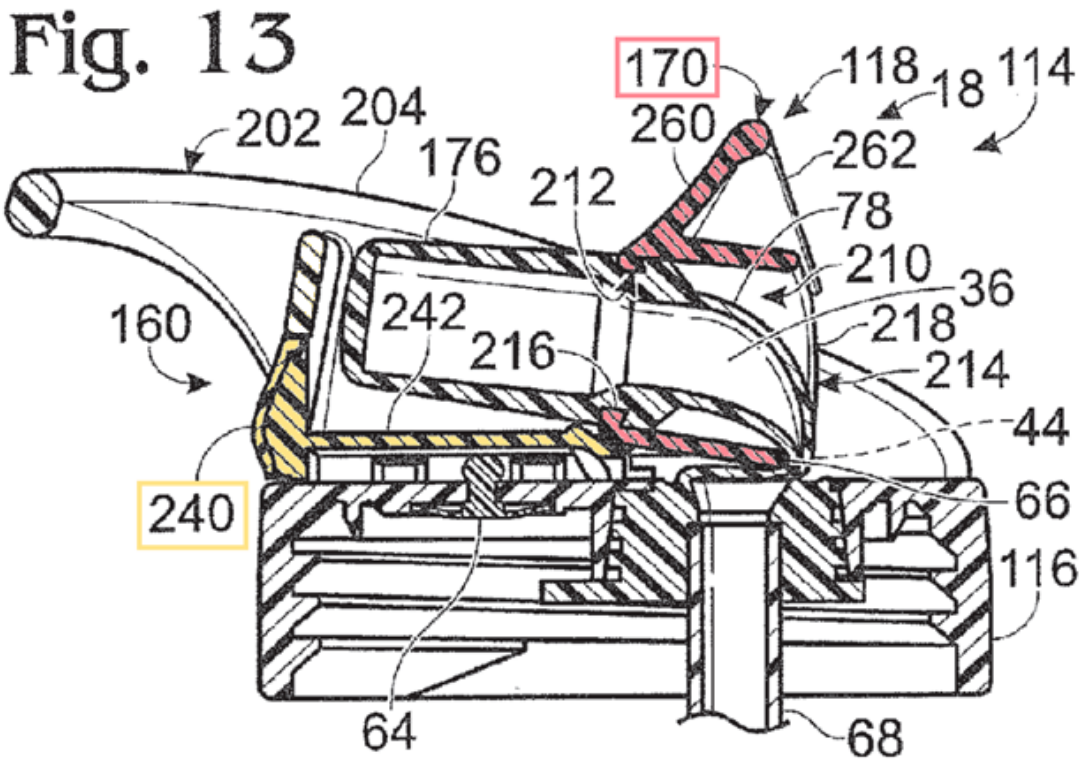
Id. (citing Ex.1001, FIG. 11 (annotated by Petitioner)). The Petition describes the sliding member 238 as performing the following functions:

> "(i) to automatically disengage the first and second catch structures upon actuation of the user release mechanism

> and thereby release the mouthpiece assembly to move via its bias from the stowed configuration to the dispensing configuration" and (ii) being "biased to urge the sliding member away from a position where the sliding member disengages the first and second catch structures."

Id., 21-22; Ex.2001, ¶94.

The following annotations to Figure 13 of the '879 patent further illustrate how the sliding member structure interacts with the rigid collar member 170 to disengage the catch structures 156 and 154. Ex. 1001, 13:21-32.



Id., Fig.13 (Patent Owner's annotations colored to correspond with Petitioner's annotations.); Ex. 2001, ¶95.

Petitioner fails to show that Kiyota discloses a structure that performs "the identical function, in substantially the same way, with substantially the same result" as the "sliding member 238 (and its component parts)" of the '879 patent. *Kemco Sales, Inc. v. Control Papers Co.*, 208 F.3d 1352, 1364 (Fed. Cir. 2000); Pet., 22 (construing the corresponding structure); Ex.2001, ¶96.

1. The Petition fails to adequately construe the corresponding structure it relies upon for the "user release mechanism."

The Petition should be denied for failing to comply with 37 C.F.R. § 42.104(b)(3) and 35 U.S.C. § 312(a)(3), as set forth above in Section V.A, for failing to satisfy the requirement to identify corresponding structure with "specific[ity]" and thereby failing to satisfy the requirement to set forth how the prior art renders the claims unpatentable "with particularity," because Petitioner fails to explain what "component parts" of sliding member 238 it contends are included in its construction for the claimed "user release mechanism." *See supra* Sec. V.A.

2. The Petition argues the "function" prong and only asserts that "substantially the same" function is performed, not that the "identical" function is performed, as required.

Petitioner's only contention with regard to the requisite three-part legal test for establishing an "equivalent" is present in Kiyota under § 112(f) is that when "a

user pushes a sliding element forward, towards the mouthpiece assembly, to disengage the catch structures" in the '879 patent, "[t]his is ***substantially the same*** in Kiyota where a user presses buttons 40, which slide to automatically disengage the first and second catch structures." Pet., 45-46 (citing Ex.1003, ¶98). But this assertion only argues *substantially the same function* is performed because the automatic disengagement of the catch structures is merely the recited function, which is only the first prong of the required three-prong test. Ex.2001, ¶¶97-98. Arguing only the function is insufficient because the "way" and "result" prongs are separate and independent requirements. *Odetics, Inc. v. Storage Tech. Corp*., 185 F.3d 1259, 1267 (Fed. Cir. 1999) ("Functional identity and either structural identity or equivalence are ***both necessary***."); *Chiuminatta Concrete Concepts, Inc. v. Cardinal Indus., Inc.*, 145 F.3d 1303, 1309 (Fed. Cir. 1998) (finding the "way" prong not satisfied as an independent requirement even though the structures performed the same function). Further, Petitioner only asserts "substantially the same" function is performed, Pet., 45-46, when the law requires performance of the *identical* function. *Kemco Sales,* 208 F.3d at 1364 (requiring "the identical function" be performed).

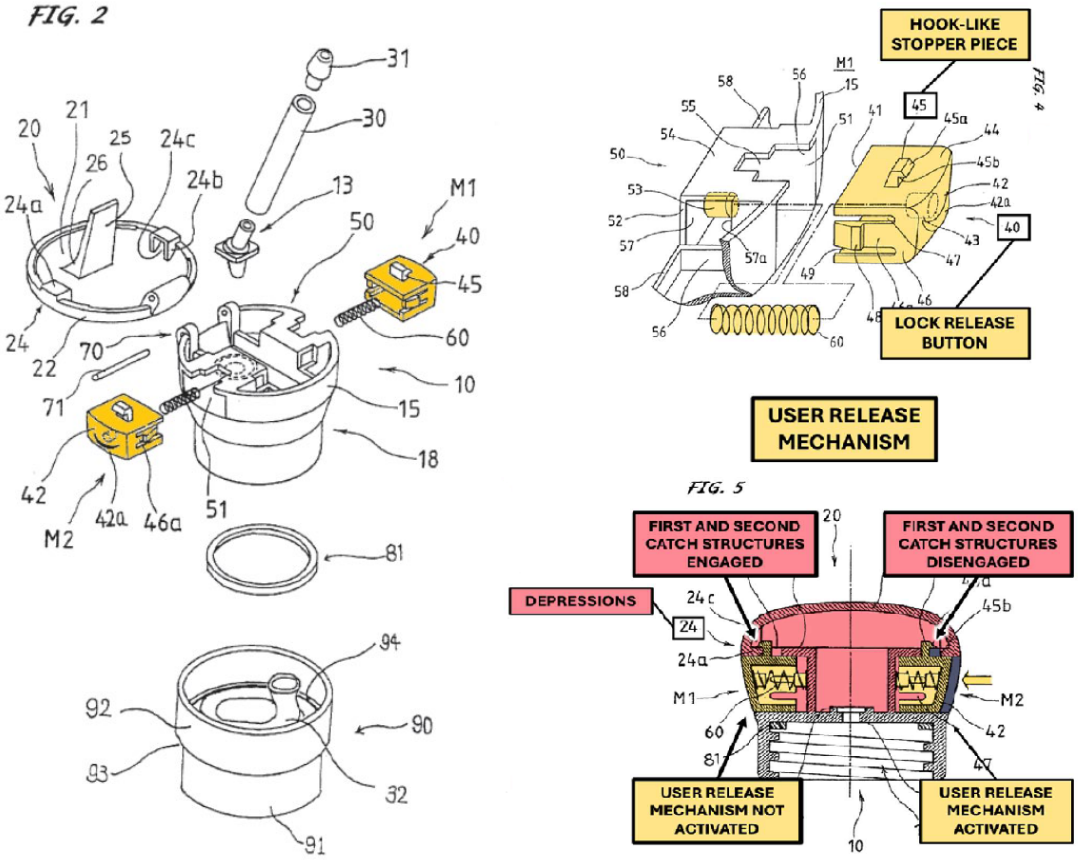
3. The Petition and Dr. Vallee fail to argue the "way" or "result" prongs in any non-conclusory manner.

Petitioner merely asserts, in highly conclusory fashion, devoid of any analysis, that the structures in Kiyota and the '879 patent are equivalent because "[t]hey perform the claimed function in the same way to achieve the same result." Pet. 45 (citing Ex. 1003, ¶ 98). Ex.2001, ¶99. Dr. Vallee's declaration is equally conclusory, as it, too, fails to provide any analysis comparing the "way" or the "result" of Kioyta's buttons with the "sliding member 238 (and its component parts)" of the '879 patent. *See* Ex.1003 ¶98; Ex.2001, ¶99. As discussed, Petitioner offers only a single sentence comparing only the function performed by the two; however, even if this sentence is generously construed as comparing "how" both structures operate—that they both involve pushing a structure forward toward a mouthpiece assembly to disengage catch structures—neither Petitioner nor its declarant explain why this alleged similarity demonstrates satisfies the "way" prong or the "result" prong *See* Pet., 45–46; Ex.1003, ¶98; Ex.2001, ¶98.

4. Kiyota's buttons are not "equivalent" to the sliding member 238 of the '879 patent.

Petitioner ignores differences that are apparent even from its own summaries of the '879 patent and Kiyota. For example, the '879 patent describes a single sliding

member 238 that performs the recited function by lifting another portion of the mouthpiece assembly—rigid collar 170—which *indirectly* disengages the catch structures. *See* Pet., 22 (annotating Ex.1001, Fig. 11); Ex.1001, 12:54–65, 13:15–25; Ex.2001, ¶100. In contrast, Kiyota discloses two "lock release buttons 40, 40" that must be "simultaneously depressed," and which *directly* disengage the alleged catch structures that are integral to each lock release button ("stopper pieces 45, 45" disengage from depressions 24*c*, 24*c*). Ex.1004, 8:65–9:7; *see* Pet., 45; Ex.1003, ¶ 97 (describing that Kiyota's buttons must be "simultaneously depressed"); Ex.2001, ¶100. Kiyota's structures are illustrated by the annotations below.

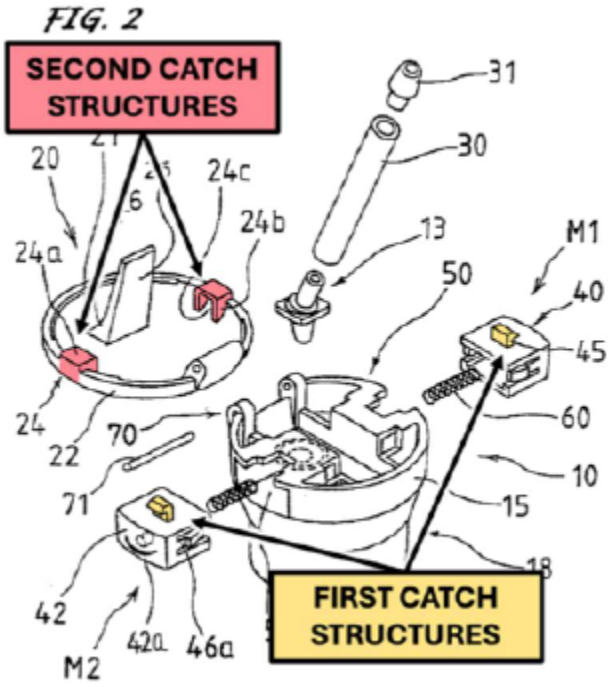


Ex.2001, ¶100 (left); Pet., 45 (right); *see* Ex.1004, Figs. 2, 4, 5.

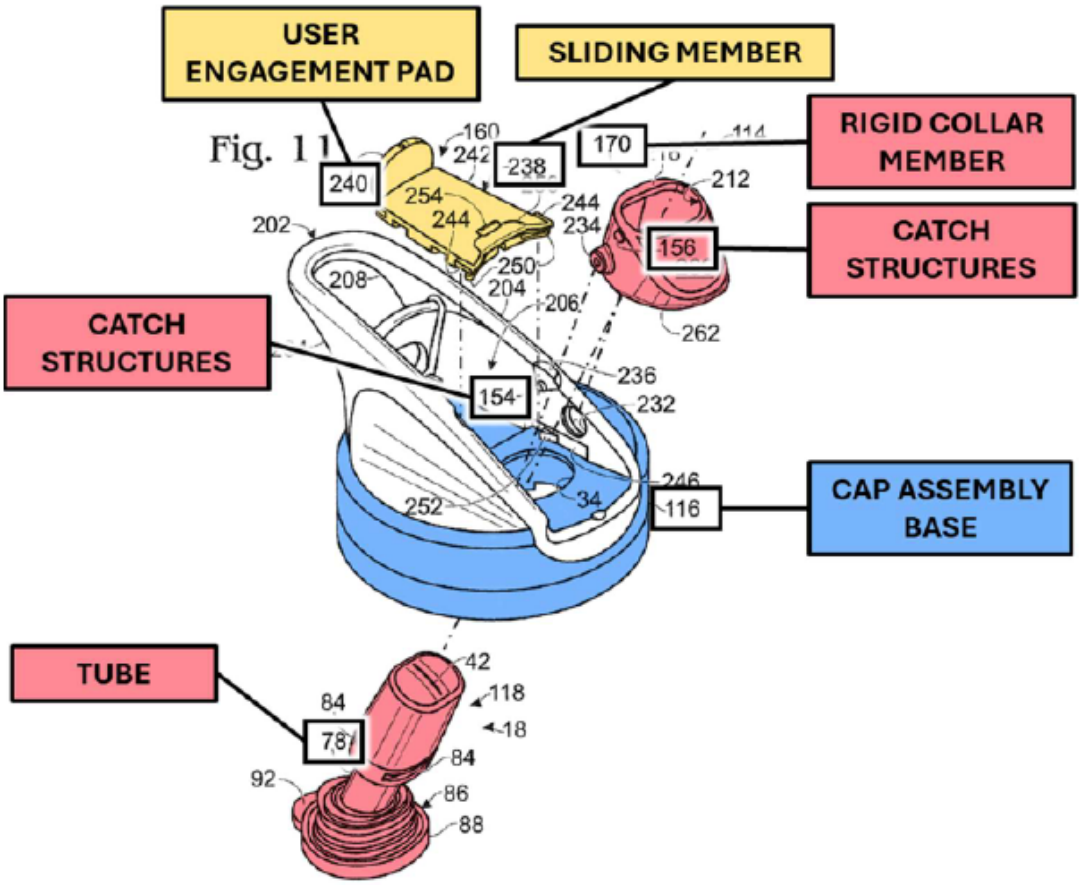
Releasing the alleged mouthpiece in Kiyota requires a user to press simultaneously on two distinct, opposing buttons (40) on the sides of the cap assembly, where the '879 patent describes a user only engaging a single sliding member 238 on the top of the cap assembly. Ex.1001, 12:63-68, 13:22-32; Ex.1004, 8:65-9:7; Ex.2001, ¶101. Kiyota's device would not function without *both* buttons being pressed because each button has a stopper piece (an alleged catch mechanism).

See, e.g., Ex. 1004, Fig. 5; *see also id.* 8:65–9:7; Ex. 2001, ¶101. Engaging only one of Kiyota's buttons to disengage its stopper piece would still leave the other stopper piece fully engaged and the lid would not open. Ex. 2001, ¶101. Thus, Petitioner fails to "certainly" show "*a* structure" in Kiyota that performs an identical function in substantially the same way as the sliding member 238 of '879 patent.

Further, in Kiyota's alleged equivalent structure, the alleged catch structures are integral with the lock release buttons and thus are directly disengaged by operation of the buttons, as can be seen below in Figure 2 reproduced from the Petition. Ex. 1004, 7:10-11; Ex.2001, ¶102.



Pet., 44 (annotating Ex. 1004, Fig. 2). However, the '879 patent's sliding member 238, instead, forces movement of the rigid collar member, which indirectly disengages the catch structures that are not integral to the sliding member 238 and are located elsewhere, as can be seen in Petitioner's own annotations of Figure 11 that annotate the catch structures in pink, which are visibly separate from and not an integral part of the sliding member 238 annotated in yellow. Ex.1001, 12:63-68, 13:22-32; Ex.1004, 6:28-35; Ex.2001, ¶102.



Pet., 23 (annotating Ex.1001, Fig. 11); Ex.2001, ¶102.

Further, since Kiyota's stopper pieces 45 (alleged first catch structures) are each integral with the lock release buttons 40, depressing the lock release buttons 40 causes the stopper pieces 45 to clear the interference with connecting portions 24 (alleged second catch structures). Ex.2001, ¶103. This is substantially different from the way the slider member of the '879 patent works to push against the rigid collar

member 170 to cause forceful distortion of components that disengages the catch structures. Ex.2001, ¶103.

The presence of at least these differences, including i) two buttons requiring simultaneous actuation on the sides rather than a single button located elsewhere, ii) direct disengagement rather than indirect disengagement of catches, and iii) disengagement of catches through clearing interference rather than forceful distortion, demonstrates that Kiyota's lock release buttons 40 do not operate in substantially the same way nor achieve substantially the same result as the sliding member 238 of the user release mechanism in the '879 patent. *See* Ex.2001, ¶103.

These differences would not have been insubstantial for many reasons. *Id.* ¶¶104-108. A POSITA would have appreciated that the '879 patent's sliding member 238 would have been advantageous over Kiyota's two buttons 40, because the sliding member would only require one point of contact, and thus only one finger, while Kiyota's buttons would require two points of contact, and thus at least two fingers. *Id.* The '879 patent's structure would have also been superior through its use of sliding member 238, which is positioned on top of the bottle near the handle, rather than Kiyota's structure, which requires buttons on the sides of the bottle where the user may be attempting to grip the bottle—posing a risk that the user might

inadvertently depress the buttons with their grip and thereby unintentionally open the spout. *Id.* ¶105. Further, the '879 patent's sliding member 238 requires more forceful pressure from a user's finger because the mechanism must indirectly dislodge the mouthpiece and collar from the catch structures on the cap assembly base using an intermediary structure, the rigid collar member 170, to cause forceful distortion of the catches. *Id.* ¶106. This contrasts with Kiyota's use of buttons that only require a quick instantaneous horizontal in-and-out motion of a user's fingers (which could result from merely gripping the bottle) because the catch structure is a small, integral hook on the button itself that is directly disengaged and that merely clears interference rather than using a forceful distortion. *Id.* As a consequence, the '879 patent's mechanism better prevents inadvertent openings in a superior way, as compared to Kiyota's structure and its use of indirect forceful distortion, rather than using mere direct clearing of interference to disengage the catches. *See id.* ¶¶103, 106. Further, because Kiyota includes two buttons that must be pressed to open it to the dispensing configuration, its locking design has more individual components, adding to the design's cost and complexity. *See id.* ¶107.

The Petition was required to address these differences and explain why they are not insubstantial. The Board's governing regulations require that a petition

identify (i) how each "challenged claim is to be construed" (which includes identifying corresponding structure for means-plus-function elements), (ii) "[h]ow the construed claim is unpatentable," and (iii) "specific portions of the evidence that support the challenge." 37 C.F.R. § 42.104(b)(3)-(5). By failing even to address the differences between the identified corresponding structure in the '879 patent and the disclosure of Kiyota, including their "way" and their "results," which are both required to satisfy the tripartite test for § 112(f) "equivalents," Petitioner fails to satisfy its fundamental obligation to explain the challenge on which its Petition is based or to even state a prima facie case of alleged unpatentability.

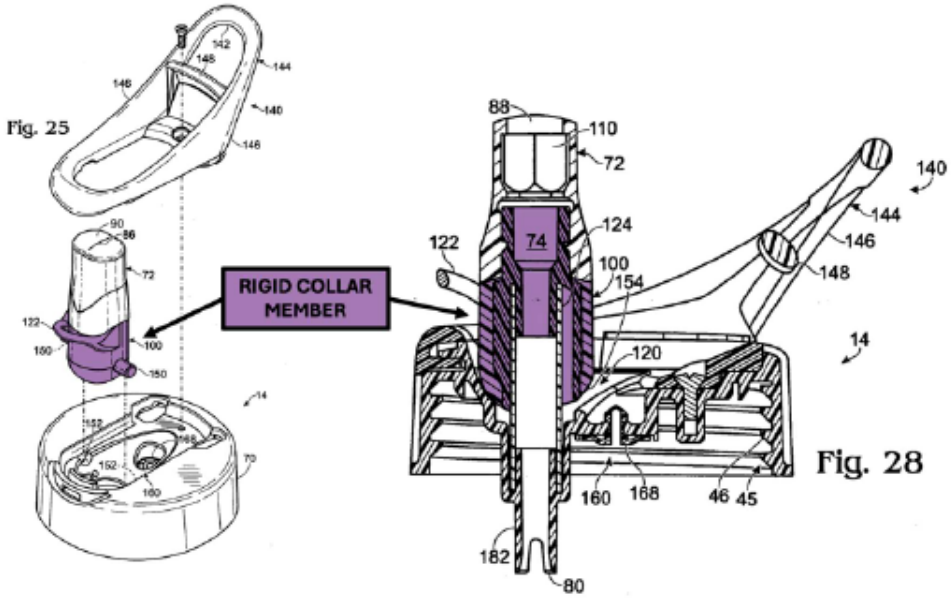
Moreover, Dr. Vallee's declaration simply concludes the "way" and "results" prongs are satisfied and is, therefore, legally insufficient to show unpatentability. Ex.1003, ¶ 98 (failing to support the "way" and "results" prongs); *See* 37 C.F.R. § 42.65(a) ("Expert testimony that does not disclose the underlying facts or data on which the opinion is based is entitled to little or no weight."); *see also TQ Delta, LLC v. CISCO Sys., Inc.*, 942 F.3d 1352, 1358–63 (Fed. Cir. 2019) (same); *DSS Tech. Mgmt., Inc. v. Apple Inc.*, 885 F.3d 1367, 1376 (Fed. Cir. 2018) (same); Ex. 2001 ¶110.

B. A POSITA would not have been motivated to combine Choi's alleged "rigid collar member" with Kiyota to arrive at Claim 1.

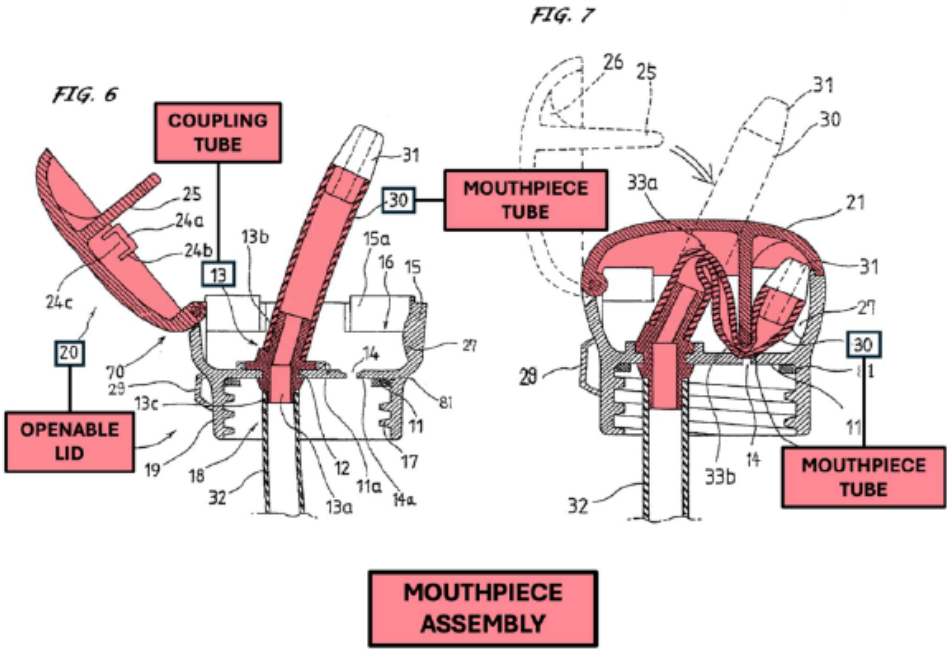
Next, Petitioner also fails to show by a reasonable likelihood that a POSITA would have been motivated to combine Choi with Kiyota to render obvious the "rigid collar member" of claim 1.[8] *See generally*, Pet., 39-43. Claim 1 recites "a rigid collar member that is pivotally coupled to a portion of the cap assembly and through which the tube portion at least partially extends." Ex.1001, 21:65-68; Ex. 2001, ¶112.

The Petition relies on combining the teachings of Choi to modify Kiyota to allegedly render this limitation obvious. Pet., 39-43. Specifically, Petitioner asserts that Choi's mount (annotated in purple and labeled as "rigid collar member" by Petitioner below, top) and mouthpiece could be substituted for Kiyota's mouthpiece (annotated in red by Petitioner below, bottom) to disclose the claimed "rigid collar member." Pet. 42; *see also id.*, 40; Ex. 2001, ¶113.

[8] As previously noted, only Kiyota and Choi are relied on in the Petition to alleged claim 1 is obvious. *See supra*, fn. 7.



Pet., 40 (annotating Ex. 1005, Fig. 25 and Fig. 28); Ex. 2001 ¶113.



Pet., 35 (annotating Ex. 1004, Fig. 6, and Fig. 7); Ex. 2001 ¶113.

Contrary to Petitioner's position, a POSITA would not have found it obvious to modify Kiyota's mouthpiece tube to include Choi's manually pivoting mouthpiece and mount, as such a modification would have rendered Kiyota inoperable for its intended purpose and would have thereby violated its principle of operation. Ex. 2001, ¶114; *Univ. of Md. Biotechnology Inst. v. Presens Precision Sensing Gmbh*, 711 F. App'x 1007, 1010 (Fed. Cir. 2017) ("[A] person of ordinary skill generally would not be motivated to modify a reference by contradicting its basic teachings, or by making it 'inoperable for its intended purpose.'") (internal citations removed) (citing *In re Gordon*, 733 F.2d 900, 902 (Fed. Cir. 1984)).

Kiyota's lid opens from a stowed configuration to a dispensing configuration via the upward force caused by the bias of the elasticity of the mouthpiece tube pushing the lid open. Ex. 1004, 3:5-7-12 (Kiyota states that "the invention notices elasticity and flexibility of a mouthpiece tube . . . to be stood with its elasticity by releasing the stored state at the time of use."). This principle of operation does not require the user to manually raise the mouthpiece tube into a dispensing position for use. *Id.*, 11:18:23 ("[T]here is no need to push open the openable lid 20 by hands."); Ex. 2001, ¶115.

On the other hand, Choi's mount for its bite-actuated mouthpiece must be manually pivoted by a user. Ex. 1005, ¶ [0077]; Ex. 2001, ¶116. This manual method has the advantage of giving Choi's drinking spout "a range of positions, or configurations" that can be manually selected by the user. Ex.1005, ¶ [0048]; Ex. 2001, ¶116. But incorporating Choi's mount (what Petitioner alleges is a "rigid collar member") into Kiyota's design would render Kiyota inoperable and violate its principle of operation. Ex. 2001, ¶116. Specifically, the elasticity of Kiyota's mouthpiece tube is critical to its operation because it opens the lid and provides access to the mouthpiece tube when transitioning to a dispensing configuration. *Id.*, ¶ 116 (citing Ex. 1004, 11:18:23). Replacing the elastic mouthpiece tube with Choi's rigid manually pivoting and user positionable mount and mouthpiece would eliminate Kiyota's ability to automatically open from the upward force exerted by the elasticity of Kiyota's alleged mouthpiece on the lid to open it. Pet., 42-43. Ex. 2001 ¶116. As such, in Petitioner's proposed combination with Choi, a user would be required to disengage Kiyota's lock buttons, manually lift its lid, and then manually raise a pivotally attached and user-positionable mount and mouthpiece. Ex. 2001, ¶116. Without manually opening the lid, the pivotally attached mount would be completely inaccessible, since Kiyota's lid covers the entire mouthpiece

tube when closed. *Id.* Because Kiyota, as modified with Choi's rigid pivoting mount in the manner proposed by the Petition, would no longer operate as intended to automatically open the lid by the elasticity, a POSITA would not have been motivated to use Choi's mount and mouthpiece and the "rigid collar member" in Kiyota, since this would have violated its principle of operation by rendering its means of opening the lid inoperable. *Id.*; *see also*, *In re Gordon*, 733 F.2d at 902.

Additionally, incorporating Choi's mount would also render Kiyota's lock release buttons unsatisfactory for their intended purpose of holding the mouthpiece in a "folded," "storing position" and unlocking and automatically opening the lid so that "the mouthpiece tube 30" is raised "by its elasticity" with "no need to push open the openable lid 20 by hands" and "no need to pull out and raise the mouthpiece tube 30 from the storing portion by hands." Ex. 2001, ¶117 (quoting Ex. 1004, 11:10-11; *id.*, 11:18-22). Instead, by applying Choi's design, the mount and mouthpiece would have to be raised manually by hand, violating Kiyota's principle of operation. Ex. 2001, ¶117 (citing Ex. 1005, ¶ [0004] (describing how the mouthpiece "cooperates with the cap to provide a manual on/off valve to selectively restrict flow of drink fluid from the bottle.")). Since Choi's mount and mouthpiece are manual, pressing the lock release buttons in Kiyota, when modified by Choi, would not automatically

open the lid or raise Kiyota's mouthpiece to a drinking position nor would the buttons serve to hold the folded mouthpiece in the storing position, since the mouthpiece would already remain in the stored position unless and until opened manually by the user. Ex. 2001, ¶117; *see also*, *In re Gordon*, 733 F.2d at 902.

Although there would be no motivation for a POSITA to make this combination because it would violate Kiyota's principle of operation and render Kiyota's design inoperable, Petitioner and its declarant Dr. Vallee allege reasons a POSITA would have been motivated to make this combination, but each is tenuously-supported and fails for the reasons discussed below. Ex. 2001, ¶118.

First, Petitioner alleges that the combination "would provide the advantage of a bite-actuated mouthpiece." Pet., 42. This does not address why a POSITA would be motivated to use Choi's mount for pivoting a mouthpiece for a "rigid collar member," because the bite-actuated portion has nothing to do with the alleged rigid collar member portion that constitutes the component that is allegedly being combined. Ex. 2001, ¶119, (citing Ex. 1005, ¶ [0046] ("cap assembly 14 may include a mount 100 to which the bite-actuated mouthpiece is removably mounted, or secured.")). That is, combining Choi's mount as a "rigid collar member" does not require combining its bite-actuated valve. Ex. 2001 ¶119. Further, a POSITA would

have viewed the bite-actuated valve of Choi as potentially problematic in Kiyota. Ex. 2001, ¶120. Such valves are opened by "compressive forces," Ex. 1005, ¶ [0052], and combining Choi's bite-actuated valve with Kiyota could have caused the undesirable result of Kiyota's "pressure piece 25," which applies pressure to the mouthpiece tube during closing, Ex. 1004, 10:1-5, applying undesired compressive forces to the bite-actuated valve during closing, causing potential undesired leakage during closing. Ex. 2001, ¶120.

Second, Petitioner alleges that "the combined cap assembly would offer improved leak protection and mouthpiece orientation control." Pet. 42-43. However, as just noted, there would be no additional leak protection, since the combination could potentially result in Kiyota's design accidentally compressing and opening the bite valve during closing. *Id.* Further, as discussed above, any such additional "orientation control" that stems from the manual nature of Choi's mount would entirely negate Kiyota's use of the elasticity of its mouthpiece tube to automatically open its lid and mouthpiece, thereby violating its principle of operation of rendering its opening mechanism inoperable. Ex. 2001, ¶121.

Third, Petitioner alleges "the combined cap assembly" would also include "Kiyota's easy cleanability and superior protection for the mouthpiece when

stowed." Pet., 42-43. This language is parroted from Dr. Vallee's declaration. Ex. 1003, ¶ 91. Neither Petitioner nor its declarant have explained how Choi's pivoting mount used with Kiyota's design would be any easier to clean when stowed. In Kiyota's design, the stowed configuration encloses the mouthpiece, and changing the mouthpiece as proposed by Petitioner would not make it any more accessible for cleaning. Ex. 2001, ¶122 (citing Ex. 1004, 10:13-17). Likewise, since Kiyota encloses the mouthpiece portion with the lid, any modification to the mouthpiece portion to combine Choi's mount as a "rigid collar member" would be equally enclosed, and therefore, equally inaccessible. *Id.* Further, adding an additional component in the form of Choi's mount as a "rigid collar member" to Kiyota's mouthpiece tube would make the tube less accessible for cleaning, not more, by partially covering the tube with another component. Ex. 2001, ¶122.

Fourth, Petitioner asserts that "combining Kiyota and Choi is no more than the simple substitution of one known element (Choi's mouthpiece assembly) for another known element (Kiyota's mouthpiece assembly) to obtain predictable results." Pet., 43. This is similarly unsupported by Dr. Vallee's declaration. Ex. 1003, ¶ [0090]. However, as previously discussed, Petitioner's proposed modification is not a simple replacement of one element for another, because

substituting Kiyota's automatically opening elastic mouthpiece tube with Choi's manually opening pivot would have violated Kiyota's principle of operation and would have rendered Kiyota inoperable for its intended purpose because its automatic-opening nature would be eviscerated. Ex. 2001, ¶123.

Fifth, Petitioner asserts that the "combination also represents the use of known techniques . . . to modify or improve a similar device, namely Kiyota's mouthpiece assembly." Pet., 43. However, even if Choi's pivoting mount and bite-actuated mouthpieces were known, their use in Kiyota's device does not improve it. Ex. 2001, ¶124. As noted, using Choi's bite-actuated mouthpiece with Kiyota would potentially cause it to accidentally open and leak during the closing of Kiyota's lid. *Id*. Further, the manual pivot of Choi's mount would have prevented Kiyota's lid from opening without manually opening it. *Id*. Thus, a POSITA would not have predicted that this modification would improve Kiyota's device. *Id.*

Sixth, Petitioner asserts that "bite-actuated mouthpieces and pivoting rigid collars were well known, leading a POSITA to reasonably expect success." Pet., 43; Ex. 2001, ¶125. However, mere knowledge of known alternative devices does not by itself establish motivation to combine or substitute it with other known devices. *Virtek Vision Int'l ULC v. Assembly Guidance Sys., Inc.*, 97 F.4th 882, 886-87 (Fed.

Cir. 2024) ("The mere fact that these possible arrangements existed in the prior art does not provide a reason that a skilled artisan would have substituted" one for the other).

Finally, Petitioner asserts that "the combination applies known techniques (using a pivoting rigid collar to control the orientation of a mouthpiece and using a bite-actuated mouthpiece to prevent leaks) to a known device (Kiyota's mouthpiece assembly) that is ready for improvement and yields predictable results, namely fewer leaks and more precise control over the orientation of Kiyota's mouthpiece portion." Pet., 43. However, as discussed, adding Choi's manual control would not be considered an improvement to Kiyota, because it violates Kiyota's principle of operation of providing an automatically opening lid and mouthpiece that does not require the user to "push open the openable lid 20 by hands" nor to "pull out and raise the mouthpiece tube 30 from the storing portion by hands." Ex.1004, 11:18-22; Ex. 2001, ¶126 (citing Ex. 1004, 9:9-16). Moreover, using the bite-actuated mouthpiece would not have necessarily prevented leaks, since the design of Kiyota's lid would apply a compressive force during closing that could open the bite valve and cause leaks. Ex. 2001, ¶126.

Because Petitioner has failed to show by a reasonable likelihood that Kiyota discloses a "user release mechanism" or that a POSITA would have been motivated to combine Choi's alleged "rigid collar member that is pivotally coupled to a portion of the cap assembly and through which the tube portion at least partially extends" (Ex.2001 ¶127), the Board should reject Ground 1 in its entirety.

VII. GROUNDS 2 AND 3 FAIL BECAUSE THE PETITION FAILS TO SHOW THAT THE COMBINATION OF PARK AND RIBARITS DISCLOSES THE CLAIMED "RIGID COLLAR MEMBER" OR "USER RELEASE MECHANISM" REQUIRED BY CLAIM 1.

Petitioner challenges claims 1, 3, 5-8, 10-13, and 15-19 under Ground 2 based on the combination of Park and Ribarits. And Petitioner challenges claim 14 under Ground 3 based on the combination of Park, Ribarits, and Kiyota. Since claim 14 depends from claim 11, which depends from claim 1, claim 14 includes each element of claim 1. Because Petitioner fails to show by a reasonable likelihood that each element of claim 1 is rendered obvious by Park and Ribarits, Grounds 2 and 3 fail in their entirety. Ex. 2001, ¶128.

In particular, Petitioner only relies on Park allegedly disclosing the claimed "user release mechanism" of claim 1 but fails to show by a reasonable likelihood that Park discloses an "equivalent" to the "sliding member 238 (and its component

parts).” And Petitioner fails to show by a reasonable likelihood that a POSITA would have been motivated to combine Ribarits with Park to render obvious the “rigid collar member that is pivotally coupled to a portion of the cap assembly and through which the tube portion at least partially extends” of claim 1. And there is no allegation in Ground 3 that combining Kiyota cures these deficiencies. For these reasons, Grounds 2 and 3 should be rejected.

A. Petitioner fails to show that the combination of Park and Ribarits discloses a “user release mechanism” as required in claim 1.

As discussed above, Petitioner and the district court have construed the “user release mechanism” as a means-plus-function term governed by § 112(f), and Patent Owner does not dispute this conclusion for purposes of this proceeding. *See supra* Sec. V.A. As also discussed above, Petitioner contends that the corresponding structure of the “user release mechanism” in claim 1 of the ’879 patent is the “sliding member 238 (and its component parts).” *See supra* Sec., V.A. (citing Pet., 22).

Petitioner relies only on Park as disclosing the “user release mechanism” of claim 1. Specifically, Petitioner argues Park discloses an “equivalent” to the ’879 patent’s “sliding member 238 (including its component parts” through Park’s disclosure of “locking means comprising operating button 30 fastened at the front

surface of the opening chamber 10 that is configured to be moved forward and backward, and hook 32 . . . for locking and unlocking the cover 20." Pet., 96 (internal quotations removed) (citing Ex. 1006, 4); Ex. 2001, ¶130.

However, Petition fails to show with a reasonable likelihood that Park's locking means is an "equivalent" under § 112(f) to the "sliding member 238 (and its component parts)" of the '879 patent because Park's locking means (the button 30 having hook 32) does not perform the "the identical function, in substantially the same way, with substantially the same result" as the sliding member 238 and its component parts. Ex. 2001, ¶131; *Kemco Sales, Inc.* 208 F.3d 1364.

1. The Petition fails to adequately construe the corresponding structure it relies upon for the "user release mechanism."

The Petition should be denied for failing to comply with 37 C.F.R. § 42.104(b)(3) and 35 U.S.C. § 312(a)(3), as set forth above in Section V.A, for failing to identify the "component parts" it contends are part of the corresponding structure.

2. The Petition fails to argue in non-conclusory fashion that the requirements for an "equivalent" under § 112(f) are met and instead relies on improper incorporation by reference of testimony that is itself insufficient.

The Petition argues in pure conclusory fashion that Park discloses a "locking means" comprising an "operating button 30" that "performs the recited function, and

which is equivalent to the structure recited in the '879 patent." Pet, 95-96. Petitioner's entire argument is reproduced below:

> Limitation 1[B][4] is a means-plus-function limitation. Park discloses a user release mechanism that performs the recited function, and which is equivalent to the structure recited in the '879 patent. (Ex. 1003, ¶¶262-265). Park discloses "locking means" comprising "operating button 30 fastened at the front surface of the operating chamber 10" that "is configured to be moved forward and backward, and a hook 32 … for locking and unlocking the cover 20 … ." (Ex. 1006, 4).

Pet., 95-96 (ellipses in original); Ex. 2001, ¶132. The Petition entirely fails to apply the three-part test for establishing an "equivalent" under § 112(f). *Kemco Sales*, 208 F.3d at 1364. First, the Petition fails to assert in even conclusory fashion that Park's "operating button 30" performs the identical function in the claim. Ex. 2001, ¶132. For example, the Petition provides no explanation whatsoever for how Park's operating button 30 "automatically disengage[s] the first and second catch structures upon actuation." Further, the Petition also provides no explanation for how any such disengagement in Park is "automatic," *i.e.*, in a manner that satisfies the proper construction of this term, which requires that the bias of the mouthpiece be at least part of the cause of the disengagement rather than being caused entirely by the user.

Id. See supra Sec. V.B. As discussed in more detail below, Park's operating button 50 does not satisfy this construction. *See infra* Sec. VII.A.3.a.

In addition, the Petition is entirely silent as to any argument that Park's operating button performs the claimed function in substantially the same way to achieve substantially the same result as the corresponding structure of the '879. *See* Pet., 95-96. Indeed, the Petition does not even specify which corresponding "structure recited in the '879 patent" it is purportedly comparing to Park's "locking means" comprised of operating button 30. *See id*.

The Board should reject Petitioner's Grounds 2 and 3 because of this failure of proof alone based on the Petition's wholesale failure to argue or provide any explanation whatsoever as to how Park allegedly discloses an equivalent under § 112(f) of the claimed "user release mechanism" of claim 1 under the required three-part test.

While the Petition provides no argument or explanation as to how Park satisfies the three-part test for an "equivalent" under § 112(f), the Petition does cite to numerous paragraphs of its declarant's declaration that purport to provide such an analysis. *See* Pet., 96 (citing Ex. 1003, ¶¶262-265); Ex. 2001, ¶133. These arguments contained only in the declaration and not set forth in the Petition,

however, should be disregarded. A petitioner may not incorporate by reference arguments set forth only in a declaration into a petition. 37 C.F.R. § 42.6(3) ("Arguments must not be incorporated by reference from one document into another document."); *Cisco Sys., Inc. v. C-Cation Techs., LLC*, IPR2014-00454, Paper 12, at 10 (P.T.A.B. Aug. 29, 2014) (informative) (same); *ZTE (USA), Inc. v. Elecs. & Telecomm. Research Inst.*, IPR IPR2015-00029, Paper 12, at 7 (P.T.A.B. Mar. 20, 2015) (routine) (same); *Microsoft Corp. v. Throughputer, Inc.*, IPR2023-00852, Paper 18, at 7-8 (P.T.A.B. Nov. 9, 2023) (routine) (same); *see also Kaz USA, Inc. v. Exergen Corp.*, No. IPR2016-01437, Paper 43, at 52-53 (P.T.A.B. Dec. 22, 2017) (routine) (same). The Petition's only contention that Park discloses the "user release mechanism" of claim 1 is no more than a one-sentence summary of Park's operating button and a conclusory statement that the button "is equivalent to the structure recited in the '879 patent." Pet., 95-96. Petitioner fails to argue that Park's operating button performs an identical function, fails to argue that it performs the function in substantially the same way and fails to argue that the operating button achieves substantially the same result. *Id.*

Rather than provide such arguments, the Petition cites to *nearly four pages of text* in Dr. Vallee's declaration, without providing so much as even a parenthetical

summary of this testimony. *Id.*, 96 (citing Ex. 1003, ¶¶262-265). Because such a wholesale incorporation by reference from an expert declaration into a petition is prohibited, these paragraphs of Dr. Vallee's declaration should be disregarded.

Even though the cited testimony should not be considered because it is not argued in the Petition, the only actual comparison of Park's operating button that is performed by Dr. Vallee to the sliding member 238 (and its component parts) of the '879 patent appears at paragraph 265, where Dr. Vallee merely states his opinion that the operating button "performs the same function, in the same way, to achieve the same result." Ex. 1003, ¶ 265. Immediately following this statement, Dr. Vallee attempts to support this conclusion by providing one example of how Park's operating button allegedly performs a function in substantially the same way. *Id.* Yet Dr. Vallee fails to provide any testimony as to (1) whether the button performs *an identical function* and (2) whether the button achieves *substantially the same result*. *See id.* Thus, Dr. Vallee fails to opine on two of the three prongs necessary to establish an equivalent structure under § 112. Ex. 2001, ¶133; *Kemco Sales, Inc.* 208 F.3d 1364.

The Board, therefore, should deny institution on Grounds 2 and 3 for these additional reasons, because the Petition may not incorporate these arguments by

reference and because even if these arguments were incorporated, they fail to even assert that all three prongs of the test for an "equivalent" are met.

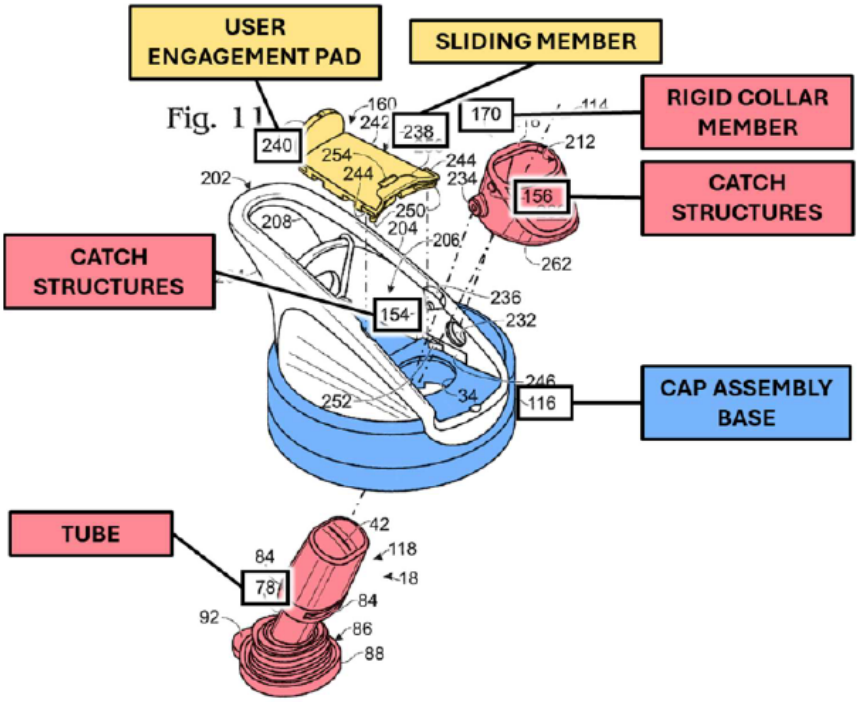
3. Park's operating button is not equivalent to the sliding member 238 of the '879 patent.

While the Board should deny institution as to Grounds 2 and 3 for Petitioner's failure to meet its burden of showing that Park discloses an equivalent to the corresponding structure of the claimed "user release mechanism," these grounds nonetheless should be rejected because Patent Owner's evidence below demonstrates that Park's operating button does not satisfy the requirements for being an "equivalent" under § 112(f) to the "sliding member 238 (and its component parts)" of the '879 patent.

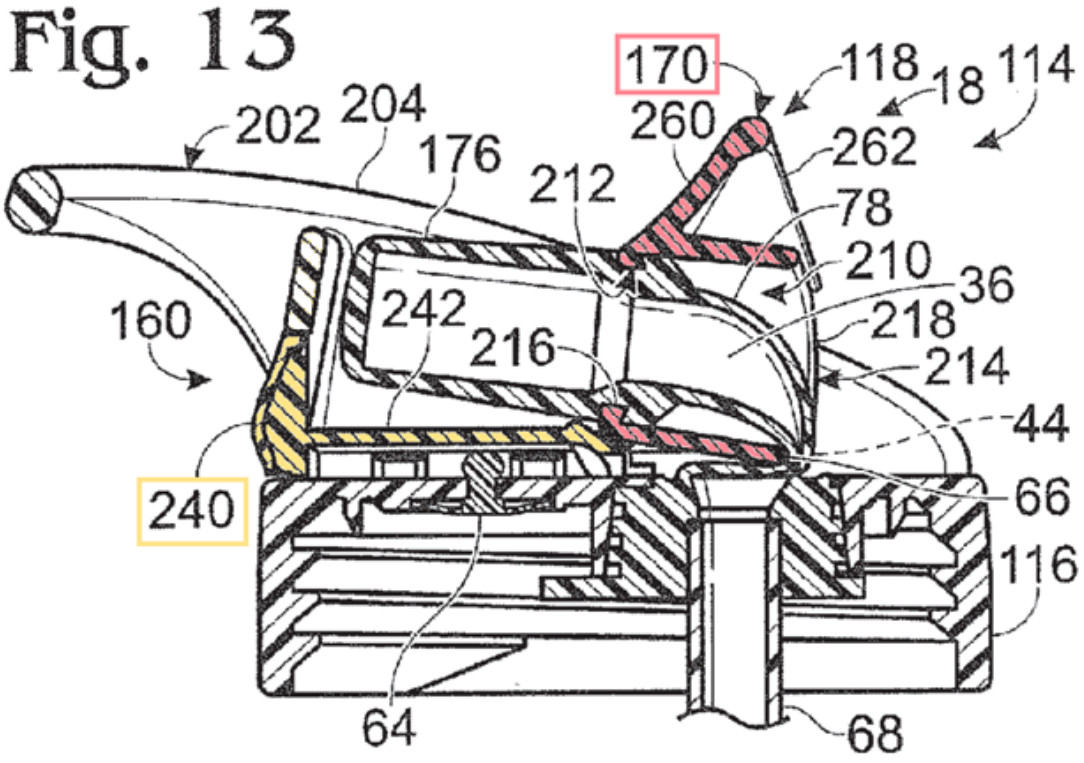
a) Park's operating button does not perform the identical function of "automatically disengage[ing] the first and second catch structures upon actuation"

Park's operating button does not perform an identical function to that recited in claim 1 for the '879 patent's sliding member 238 (and its component parts). At a minimum, Park's button does not function to "automatically disengage the first and second catch structures upon actuation." Ex. 2001, ¶134.

Petitioner's annotated version of Figure 11 from the '879 patent illustrates the sliding member 238, including the user engagement pad 240, in yellow below.



Pet., 23 (annotating Ex.1001, Fig. 11). The sliding member 238 is also shown in the cross-sectional side view of Figure 13 below, which Patent Owner has annotated using Petitioner's color scheme:



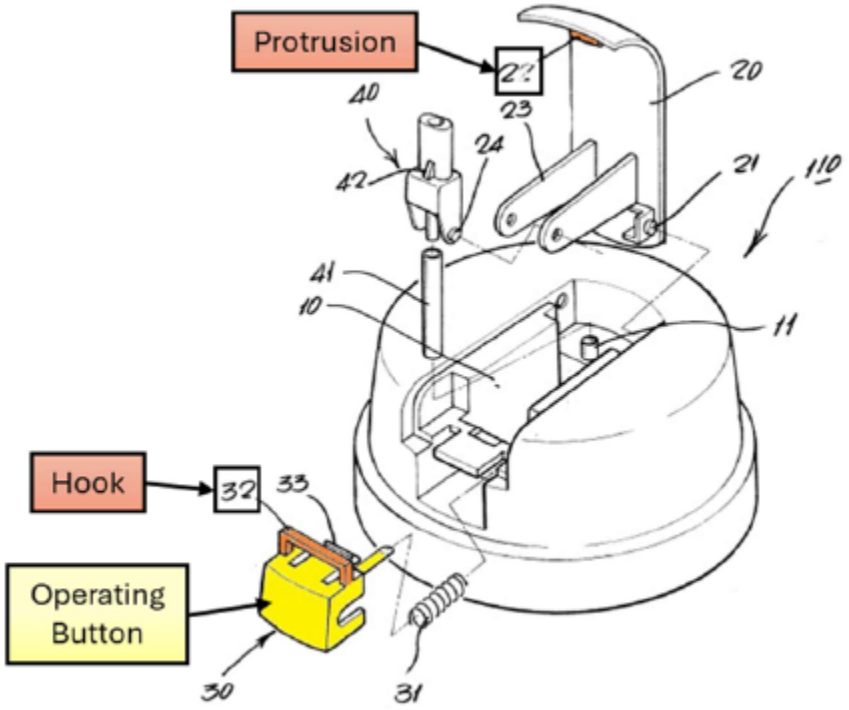
Ex. 1001, Fig. 13 (annotated); Ex. 2001, ¶135.

The sliding member 238 functions to "automatically disengage" the catch structures as recited in claim 1. Ex. 2001, ¶136. When the mouthpiece is in the stowed configuration, the catch structures are engaged, and there is a force acting against this engagement from the bias of the mouthpiece. *Id.* 5:61-67; *see also id.*, 12:49-51. Ex. 2001, ¶136. As can be seen in Figure 13, "upon actuation of the user release mechanism 160 [which includes the sliding member 238], the collar engagement portion engages rim 216 of the rigid collar member and forces

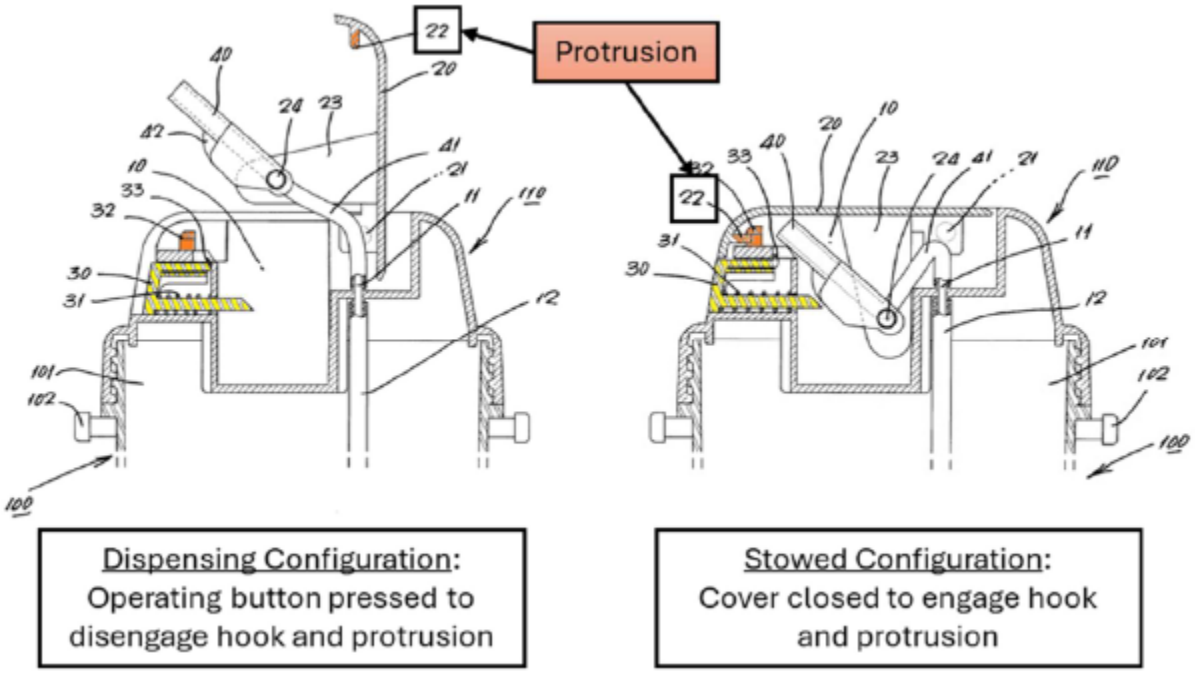
disengagement of the first and second catch structures." *Id.*, 13:29-32; Ex. 2001, ¶136. This action is "automatic" because, when the sliding member 238 is engaged, it imparts a force onto the rim of the rigid collar member, which then applies a force to the first and second catches (154 and 156) that combines with the force applied by the bias of the mouthpiece assembly to the first and second catches (154 and 156) to disengage them. Ex. 1001, 13:22-32; Ex. 2001, ¶136. Thus, this disengagement is not the result of entirely user-applied force but is instead also, in part, the result of the force from the bias of the mouthpiece assembly. Ex. 2001, ¶136. This disengagement then allows the mouthpiece assembly to move via its bias from the stowed configuration to the dispensing configuration. *Id.* A POSITA would have understood the disengagement of the catches to happen "automatically" because the disengagement of the catches is at least in part caused by the bias as opposed to being wholly caused by the user. Ex. 2001, *Id.*; *see also supra* Sec. V.B.

Park's operating button does not perform the identical function of "automatically disengage[ing] the first and second catch structures upon actuation" because the bias of its alleged mouthpiece assembly does not participate in this disengagement, which is instead entirely caused by user action. Ex. 2001, ¶137. As illustrated below, Petitioner alleges that Park's hook 32 is the first catch structure

and that protrusion 22 is the second catch structure (each annotated by Petitioner in orange).



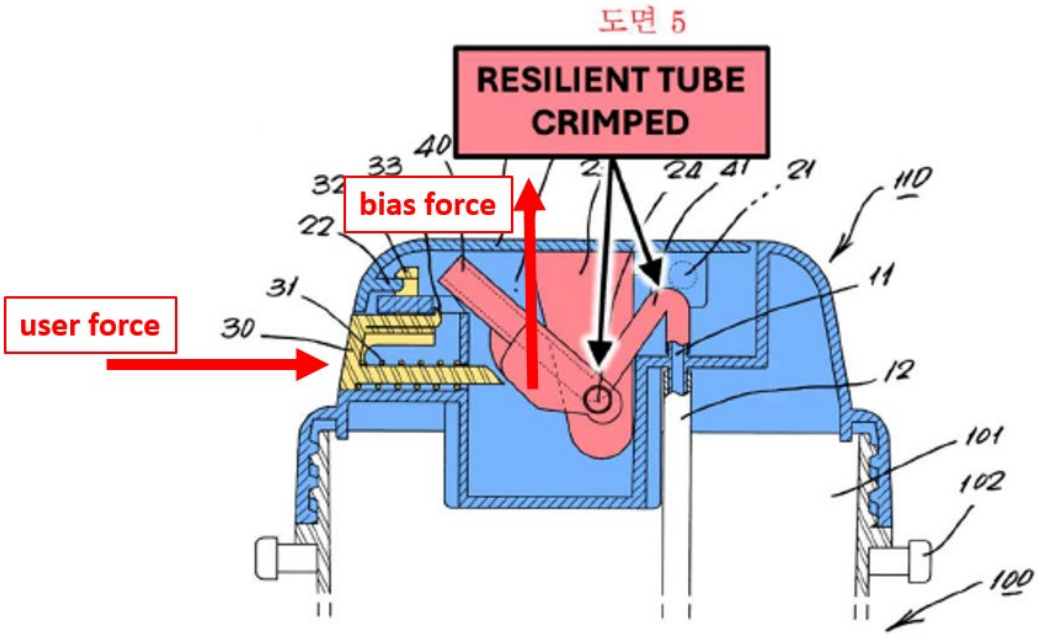
Pet., 94 (annotating Ex. 1006, Fig. 3). As can be seen in the illustration below, the user presses the operating button forward against a spring 31, and in doing so, moves the hook to a position where it disengages from the protrusion. Ex. 1006, 5 (As a result of the operating button being pressed, "the hook 32 formed on the front side of the operating button 30 is disengaged from the protrusion 22."); Ex. 2001, ¶137.



Pet., 95 (annotating Ex. 1006, Fig. 6 (left) and Fig. 5 (right)).

A POSITA would have understood that Park does not disclose that its operating button "automatically disengage[s]" the catch structures (i.e., hook 32 and protrusion 22), as claimed by the '879 patent. Ex. 2001, ¶138. This is because the hook 32 and protrusion 22 are wholly disengaged by the user pressing the operating button without the assistance of any bias from the mouthpiece assembly. *Id.* Park's hook is disengaged solely based on its position. *Id.* When the button is pressed, the hook moves to a position where it no long restricts the protrusion from moving upward with the cover due to the elastic force of the connecting hose. *Id.* (citing Ex.

1006, 5, Fig. 6). While the elastic force of the connecting hose provides an upward force that helps to open the cover, Park does not disclose that the hose provides any lateral force in the direction of the button press to help the user apply force against the spring 31 to disengage the hook 32 from the protrusion 22. *Id.*, ¶139. And a POSITA would not have understood that it does. *Id*. As shown below by Petitioner's annotated version of Figure 5 of Park, with Patent Owner's annotations added showing "user force" and "bias force," the mouthpiece assembly does not apply force in the direction of the user force so as to assist with the disengagement of the hook 32 and protrusion 22. *Id.*



Pet., 10; Ex.1006, Fig. 5 (annotated). Further, to the extent the mouthpiece assembly asserts any lateral bias, it would have been understood by a POSITA to be outward, to the left, in Figure 5 above, i.e., in a direction *opposite* the user's button press force, because of the direction of the crimp, and this opposite force would, of course, not have assisted with disengagement of the catches. Ex. 2001, ¶139.

Because the mouthpiece assembly provides no lateral bias assisting the user to depress the button against the spring and move the position of the hook so that it disengages from the protrusion, a POSITA would have understood that the hook and protrusion are not "automatically" disengaged. *Id.*, ¶140. Thus, Park's operating button does not perform the identical function of the "user release mechanism" in the '879 patent of "automatically disengage[ing] the first and second catch structures upon actuation."

b) Park's operating button does not perform the function in substantially the same "way" as the sliding member 238 of the '879 patent

Moreover, the Petition also fails on these grounds because the "way" Park's operating button functions and the "result" it achieves are not substantially the same as for the sliding member 238 (and its component parts) of the '879 patent. *Id.*, ¶141. As noted, the way in which Park's operating button functions is to be pressed against

the spring without assistance of any bias from the connecting hose so as to slide the hook (alleged first catch member) from one location where it is engaged with the protrusion to another location where it is disengaged from the protrusion. *Id.* (citing Ex. 1006, Figs. 5 and 6). In contrast, the ’879 patent’s sliding member places a force on the rigid collar that, in combination with the force from the bias of the mouthpiece, is great enough to automatically disengage the catch mechanism. *Id.* (citing Ex. 1001, 13:29-32). A POSITA would have understood that the difference in the “way” these two structures function is not insubstantial because Park’s mechanism disengages without any bias, while the ’879 patent’s mechanism disengages with the assistance of a bias from the mouthpiece applied between the catch structures, which is more user friendly because of the assistance. *Id.*

c) Park’s operating button does not achieve substantially the same “result” as the sliding member 238 of the ’879 patent

The “result” of a user engaging Park’s operating button is to move the location of the hook (one of the alleged catch mechanisms) against the entire force of the spring, while the “result” of pushing the engagement pad 240 of the sliding member 238 in the ’879 patent is to impart enough additional force (over that of the force already applied by the bias) between the two catch structures until the force holding

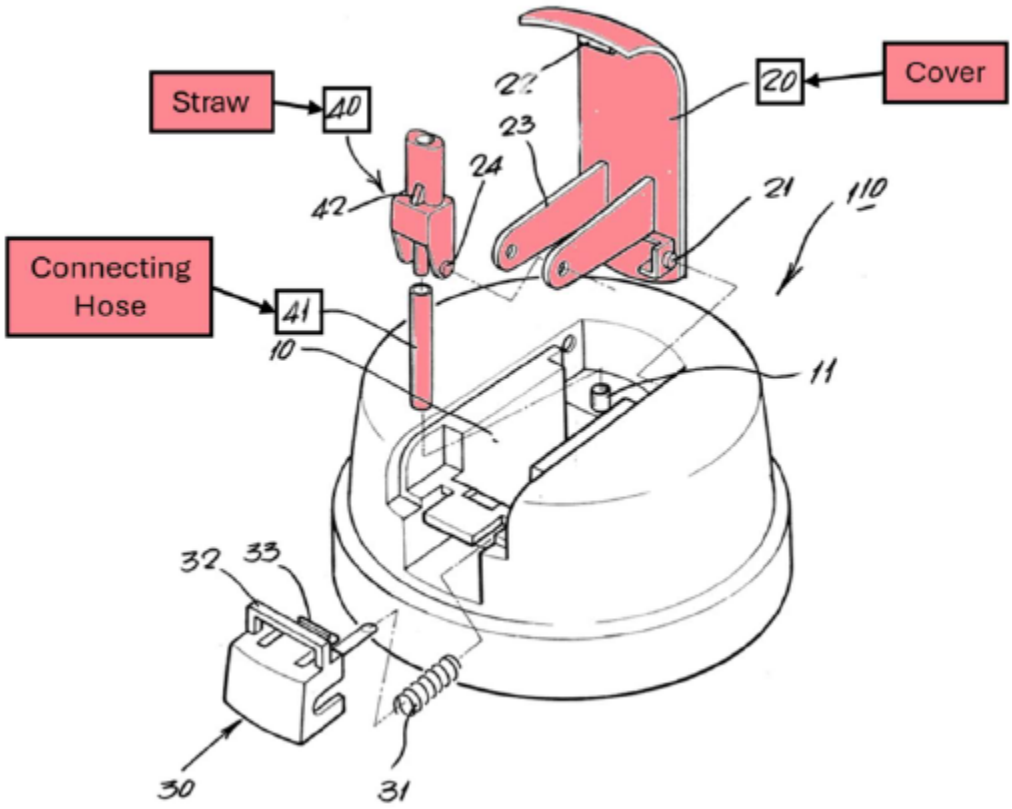
them together is overcome and they disengage. *Id.*, ¶142. Thus, Park does not disclose a structure equivalent to the "user release mechanism" of the '879 patent because the operating button does not perform the same function in substantially the same way to achieve substantially the same result.

B. Petitioner fails to show by a reasonable likelihood that a POSITA would have been motivated to combine Ribarits's alleged "rigid collar member" with Park for claim 1.

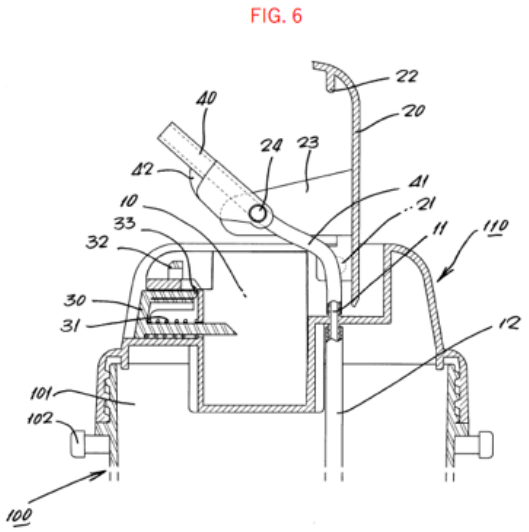
The Petition also fails on Ground 2 and 3 because it does not show with a reasonable likelihood that a POSITA would have been motivated to combine Ribarits's alleged "rigid collar member" with Park to satisfy that element of claim 1. As noted by Petitioner, "Park does not disclose . . . 'a rigid collar member that is pivotally coupled to a portion of the cap assembly and through which the tube portion at least partially extends.'" Pet., 73; Ex. 2001, ¶143.

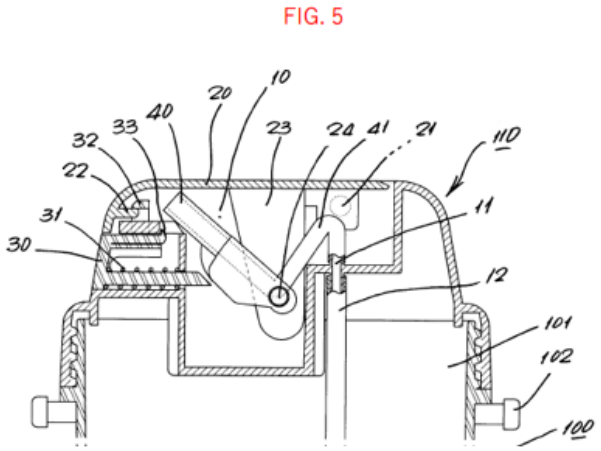
Claim 1 requires "a rigid collar member that is pivotally coupled to a portion of the cap assembly and through which the tube portion at least partially extends." Ex. 1001, 21:65-68. Dr. Vallee correctly points out that Park's "tube portion of the mouthpiece assembly does not extend through the straw" and thus "a person of ordinary skill in the art would not understand 'straw 40' to constitute the claimed rigid collar member." Ex. 1003, ¶ 254; Ex. 2001, ¶144. Petitioner's annotated

Figure 3 from Park illustrates the straw 40 and how it is connected to connecting hose 41, which does not run through the straw 40. Ex. 2001, ¶144.



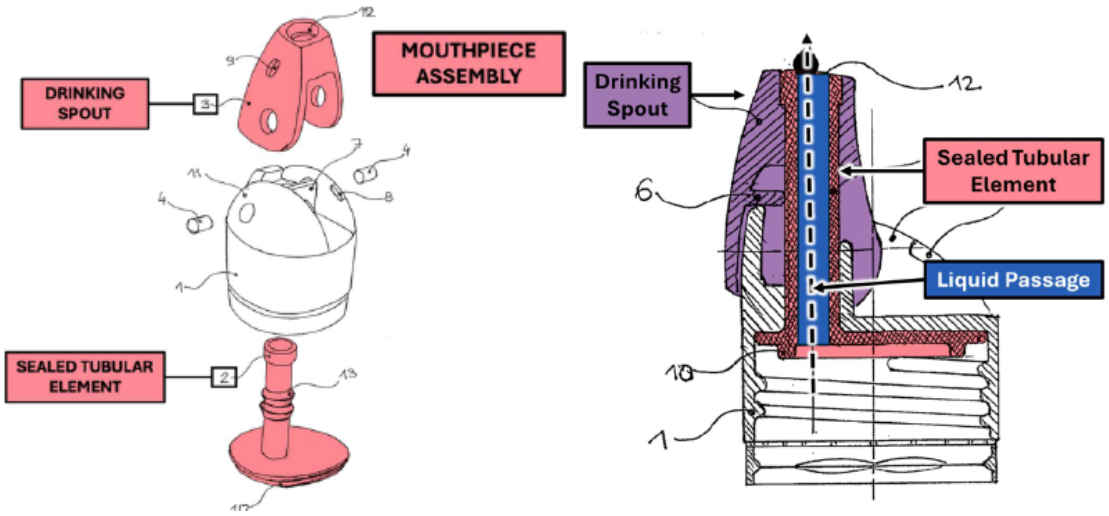
Pet., 91 (annotating Ex. 1006, Fig. 3). As further illustrated below in Figures 5 and 6, when assembled, the straw 40 couples to a connecting hose 41, that connects to hose 12. Ex. 1006, 4.





Id., Fig. 5, Fig. 6. "The straw 40 is axially coupled to the bracket 23 of the cover 20 by the hinge shaft 24" so that "the cover is unfolded by the elastic force of the connecting hose 41." *Id.* 5; Ex. 2001, ¶144.

Because Park does not disclose a "rigid collar member" through which a tube extends, Petitioner attempts to combine Ribarits's drinking spout, which as illustrated below, includes a sealed tubular element 2 that extends within drinking spout 3 to deliver liquid, as illustrated by Petitioner's annotated figures below from Ribarits. Pet., 92-93; Ex. 2001, ¶145.

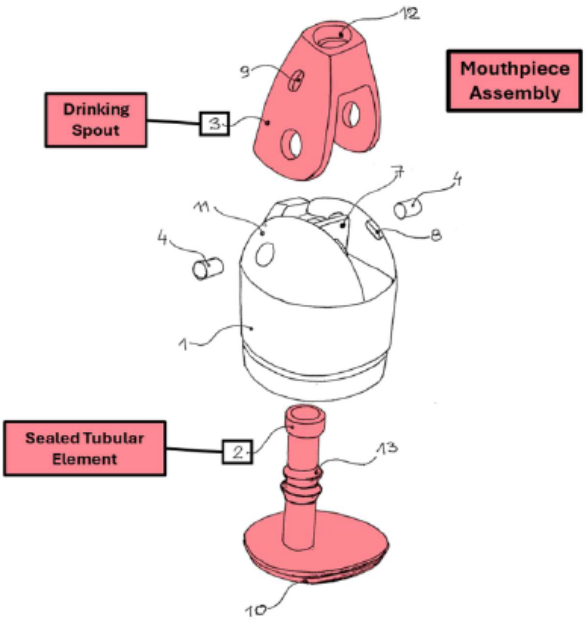


Pet., 92 (annotating Ex. 1009, Fig. 2) (left); *id.*, 93 (annotating Ex. 1009, Fig. 3) (right).

The Petition, however, fails to show by a reasonable likelihood that a POSITA would have been motivated to make this combination by modifying Park to include Ribarits's drinking spout and sealed tubular element. *See generally*, Pet., 74-79; Ex. 2001, ¶146.

First, Petitioner states that a POSITA would have "been motivated to construct Park's straw and connecting hose as a unitary assembly of resiliently deformable material, as in Ribarits" and would have "recognized Ribarits' one-piece construction . . . to be a routine engineering choice." Pet., 75-76. Petitioner's motivation is based on a faulty understanding that somehow Ribarits has a "one-

piece," "unitary" design for its drinking spout and sealed tubular element such that it provides the benefits of requiring "fewer parts," improving efficiency, and reducing manufacturing costs. Ex. 2001, ¶147 (quoting Pet., 75-76). Ribarits does not support this argument because Ribarits uses a two-piece design for the drinking spout and sealed tubular element. *Id.* Petitioner's own expert, Dr. Vallee, illustrates this in his declaration, annotating Figure 2 from Ribarits, reproduced below.



Ex. 1003, ¶ 254 (annotating Ex. 1009, Fig. 3) (showing two separate and distinct elements for the drinking spout 3 and the sealed tubular element 2). Dr. Vallee even refers to this as a "multi-part assembly." Ex. 1003, ¶ 203 ("another multi-part assembly (Ribarits' mouthpiece assembly)."). Petitioner wrongly contends that

Ribarits describes a "one-piece construction" and has further failed to show how swapping two pieces from Ribarits (the drinking spout and sealed tubular element) with two pieces from Park (the straw and connecting hose) "would have resulted in fewer parts" and thereby improved efficiency or reduced manufacturing costs. Pet., 76; Ex. 2001, ¶147.

Second, Petitioner asserts that "a POSITA would have recognized that such a rigid collar member [(Ribarits's drinking spout)] could be molded with the same shape as portion [sic] of Park's 'straw 40' that is coupled to 'cover 20.'" Pet., 77; Ex. 2001, ¶148. However, simply because a POSITA allegedly *could* mold Ribarits's drinking spout to the same shape as Park's straw does not provide a motivation to do so. *TQ Delta, LLC v. Cisco Sys.*, 942 F.3d 1352, 1359-60 (Fed. Cir. 2019) (reversing a finding of invalidity where "the expert testimony primarily consisted of conclusory references to [the expert's] belief that one of ordinary skill in the art could combine these references, not that they would have been motivated to do so") (internal quotations removed) (brackets in original) (citing *InTouch Techs., Inc. v. VGo Communs., Inc.*, 751 F3d 1327, 1352 (Fed. Cir. 2014).

Third, Petitioner argues a POSITA would have been motivated because "as in Ribarits, the use of a rigid collar [(the drinking spout)] would provide[] support for

the more flexible mouthpiece and tube portions of the mouthpiece assembly." Pet., 77 (citing Ex. 1003, ¶ 201). Petitioner's assertion and Dr. Vallee's declaration are each completely without support, and neither even attempts to explain why or how using Ribarits's drinking spout and tubular element would provide more "support." *See* Pet., 77; *see also* Ex. 1003, ¶ 201. Neither should be given weight. C.F.R. § 42.65(a) ("Expert testimony that does not disclose the underlying facts or data on which the opinion is based is entitled to little or no weight."). Moreover, Petitioner seems to be asserting that Ribarits's design would provide additional support for a portion of a tube running through the mouthpiece. Ex. 2001, ¶149. However, Park does not have this problem since its design does not have a portion of the connecting hose running through the straw portion, as also noted by Dr. Vallee. *Id.*, ¶150 (citing Ex. 1003, ¶ 254). Petitioner is essentially arguing that its proposed combination solves a problem that only the combination itself creates—namely, a tube portion running through the mouthpiece that is further protected by the same mouthpiece. *Id*.

Fourth, Petitioner argues a POSITA would have been motivated because "as in Ribarits, the flexible mouthpiece and tube portions of the mouthpiece assembly could be inserted through and removed from the rigid collar" and "[a] POSITA

would have recognized the design because it would have facilitated removal of the single-piece construction for cleaning, maintenance, or replacement." Pet., 77 (citing Ex. 1003, ¶ 202). Here again, Petitioner relies on an incorrect understanding that Ribarits's drinking spout and sealed tubular element are a "single-piece construction," which its own declarant contradicts. Ex. 1003, ¶ 203 ("another multi-part assembly (Ribarits' mouthpiece assembly)."). However, as mentioned, Ribarits's drinking spout and sealed tubular element are two separate pieces, and this two-piece design does not offer fewer components than the two pieces in Park (the connecting hose and straw) that Petitioner suggests it replace. Ex. 2001, ¶151. Further, there is no evidence in the Petition or the declaration that a POSITA would recognize Ribarits's design as providing for enhanced "cleaning, maintenance, or replacement." *See* Pet., 77; *see also* Ex. 1003, ¶ 202. To the contrary, "cleaning, maintenance, or replacement would be more cumbersome using Ribarits's design. Ex. 2001, ¶151. This is because Ribarits's sealed tubular element has "several projecting sealing rings" that would require disassembly of the closing cap of the drinking device for cleaning, maintenance, or replacement of parts, while Park's straw and connecting hose could be disassembled with just the lid raised. *Id.* (quoting Ex. 1009, claim 2); *see also*, *id.* (citing Ex. 1006, Fig. 4).

Finally, Petitioner argues that a POSITA would have had a reasonable expectation of success because a "POSITA would have readily understood that Park would accommodate a single-piece construction" and "the combination would have involved no more than the routine substitution of one mouthpiece assembly with another to provide the same overall functionality." Pet., 77-78. However, again Petitioner relies on its faulty understanding that Ribarits's drinking spout and tubular member are a "single-piece construction." Ex. 2001, ¶152. A POSITA would not have understood Ribarits to provide a "single-piece construction." *Id.* Further the benefits that Petitioner alleges a POSITA would have recognized from using Ribarits's construction, including "reduced risk of inadvertent leakage, improved manufacturing efficiency, reduced manufacturing costs, and improved maintenance" are parroted directly from Dr. Vallee's declaration, which offers no support or analysis as to how any of these benefits would have flowed from using Ribarits's design. Pet., 78 (citing Ex. 1003, ¶ 203); Ex. 2001, ¶152; C.F.R. § 42.65(a) ("Expert testimony that does not disclose the underlying facts or data on which the opinion is based is entitled to little or no weight.").

Because Petitioner has failed to show by a reasonable likelihood that Park discloses an equivalent of the '879 patent's alleged corresponding structure of the

"user release mechanism," i.e., sliding member 238 (and its component parts), and because Petitioner has failed to show that a POSITA would have been motivated to combine Ribarits's "rigid collar member" with Park to arrive at claim 1, Ex. 2001, ¶153, Petitioner has failed to show a reasonable likelihood of prevailing under Grounds 2 and 3.

VIII. CONCLUSION

For at least the foregoing reasons, Patent Owner respectfully requests that the Board deny institution of the Petition.

Dated: March 14, 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 PRELIMINARY RESPONSE, according to the word-processing system used to prepare the paper and not including those parts excluded by § 42.24(a)(1), has 13,829 words, which is within the type-volume limit set by § 42.24.

By: */Ryan J. Schletzbaum/*
Ryan J. Schletzbaum
Lead Counsel for Patent Owner

CERTIFICATE OF SERVICE

Pursuant to 37 CFR § 42.6(e), the undersigned certifies that on March 14, 2025, a complete and entire copy of the foregoing Patent Owner's Preliminary Response and Exhibits 2001-2007 were provided via e-mail to Petitioner's counsel of record as follows:

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