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On behalf of **Trove Brands, LLC**

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TROVE BRANDS, LLC
Petitioner
v.

CAMELBAK PRODUCTS, LLC
Patent Owner

IPR2025-00140
Patent 11,851,250

**PETITION FOR *INTER PARTES* REVIEW OF
U.S. PATENT NO. 11,851,250**

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TABLE OF EXHIBITS

Exhibit No.	Description
1001	U.S. Patent No. 11,851,250 (“the ’250 patent”)
1002	Declaration of Glenn E. Vallee, Ph.D.
1003	Japanese Patent Publication No. 2002-211613
1004	Certified English Translation of Japanese Patent Publication No. 2002-211613 (“Nakajima”)
1005	International Publication No. WO 2004/063042
1006	Certified English Translation of International Publication No. WO 2004/063042 (“Ribarits”)
1007	U.S. Patent No. 4,485,963 (“Panicci”)
1008	U.S. Patent No. 6,523,711 (“Hughes”)
1009	Excerpts of the File History of the ’250 Patent
1010	U.S. Patent Application Publication 2005/0029271 (“McDonough”)
1011	CamelBak’s Amended Infringement Contentions for the ’250 patent dated May 5, 2024, in <i>Trove Brands, LLC v. CamelBak Products, LLC, et al.</i> , No. 5:23-cv-04267-PCP
1012	Order Setting Case Schedule in <i>Trove Brands, LLC v. CamelBak Products, LLC, et al.</i> , No. 5:23-cv-04267-PCP

Petitioner Trove Brands, LLC (“Petitioner”) requests *inter partes* review of claims 1–18 (“challenged claims”) of U.S. Patent No. 11,851,250 (“the ’250 patent”), which lists CamelBak Products, LLC (“PO” or “Patent Owner”) as assignee.

I. MANDATORY NOTICES

A. Real Party-In-Interest (37 C.F.R. §42.8(b)(1))

Trove Brands, LLC is the real party-in-interest.

B. Related Matters (37 C.F.R. §42.8(b)(2))

Petitioner has filed a suit against PO seeking a declaratory judgment of noninfringement of the ’250 patent by Petitioner’s Owala Flip (For Kids) product. *Trove Brands, LLC v. CamelBak Products, LLC et al.*, No. 5:23-cv-04267 (N.D. Cal.).

Petitioner is not aware of any other judicial or administrative matter that would affect, or be affected by, a decision in this proceeding.

C. Lead and Backup Counsel (37 C.F.R. §42.8(b)(3))

Petitioner provides the following designation of counsel, all of whom are included in Customer No. 20,995 identified in Petitioner’s Power of Attorney.

Lead Counsel	Back-up Counsel
Ali S. Razai (Reg. No. 60,771) <u>Postal and Hand-Delivery Address:</u> Knobbe, Martens, Olson & Bear, LLP 2040 Main Street, 14th Floor Irvine, CA 92614 Telephone: (949) 760-0404 Facsimile: (949) 760-9502	Joseph F. Jennings (Reg. No. 40,664) Jared Bunker (Reg. No. 58,474) Cheryl Burgess (Reg. No. 55,030) <u>Postal and Hand-Delivery Address:</u> Knobbe, Martens, Olson & Bear, LLP 2040 Main Street, 14th Floor Irvine, CA 92614 Telephone: (949) 760-0404 Facsimile: (949) 760-9502

D. Service Information (37 C.F.R. §42.8(b)(4))

Please address all correspondence to lead counsel and back-up counsel at the addresses shown above. Petitioner also consents to electronic service by email to BoxTrove6@knobbe.com.

E. Payment of Fees (37 C.F.R. §42.103)

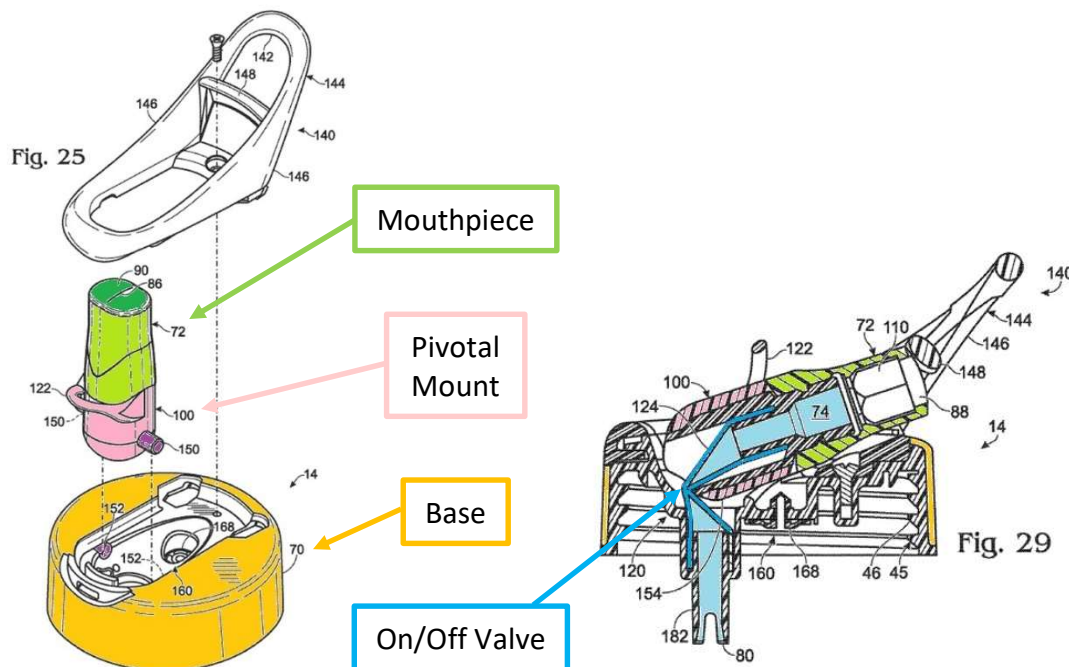
The fee for this petition has been paid. Any additional fees may be charged to Deposit Account 11-1410.

F. Grounds for Standing (37 C.F.R. §42.104)

Petitioner certifies that the '250 patent is available for IPR and that Petitioner is not barred or estopped from requesting IPR. This petition is being filed within one year of service of Patent Owner's amended counterclaim (filed February 16, 2024) alleging infringement of the '250 patent.

II. INTRODUCTION

The '250 patent claims a drink container having a removable cap assembly that generally includes four elements: (1) a cap assembly base; (2) a pivotal mount; (3) a mouthpiece; and (4) a manual on/off valve.



(Ex. 1001, Figs. 25, 29).¹

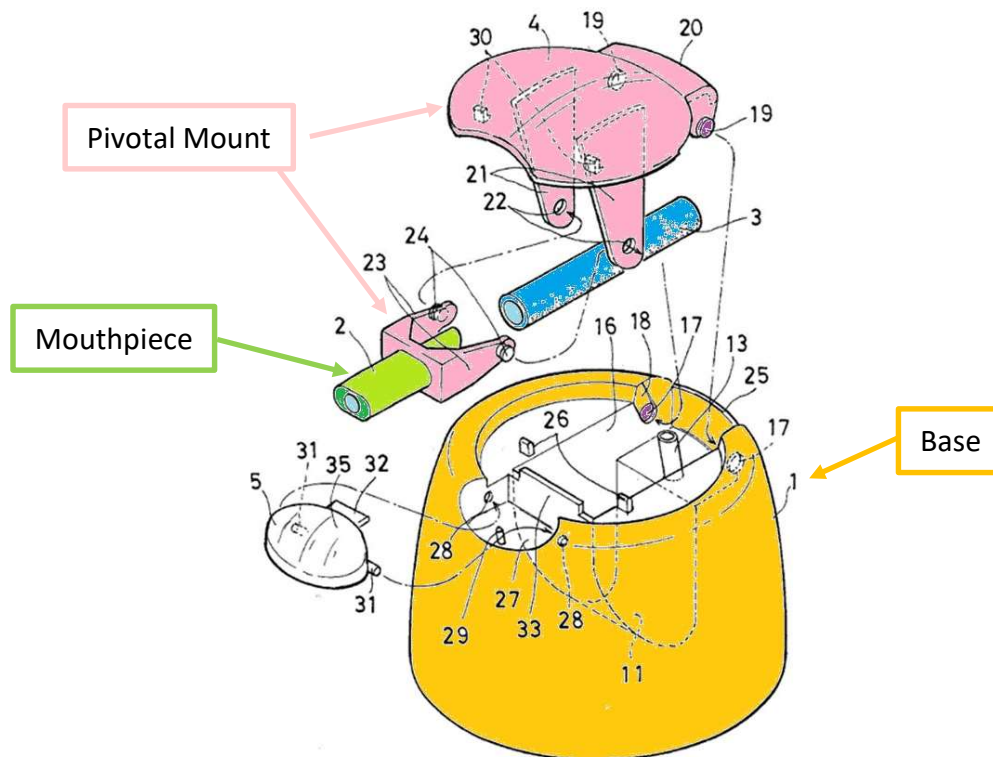
As demonstrated herein, drink containers with cap assemblies as claimed in the '250 patent were known in the art. Because the claimed devices were not patentable at the time of the patent's earliest possible priority date (April 2005), the Board should institute *inter partes* review and cancel the claims.

¹ Figures herein have been colored and annotated for clarity.

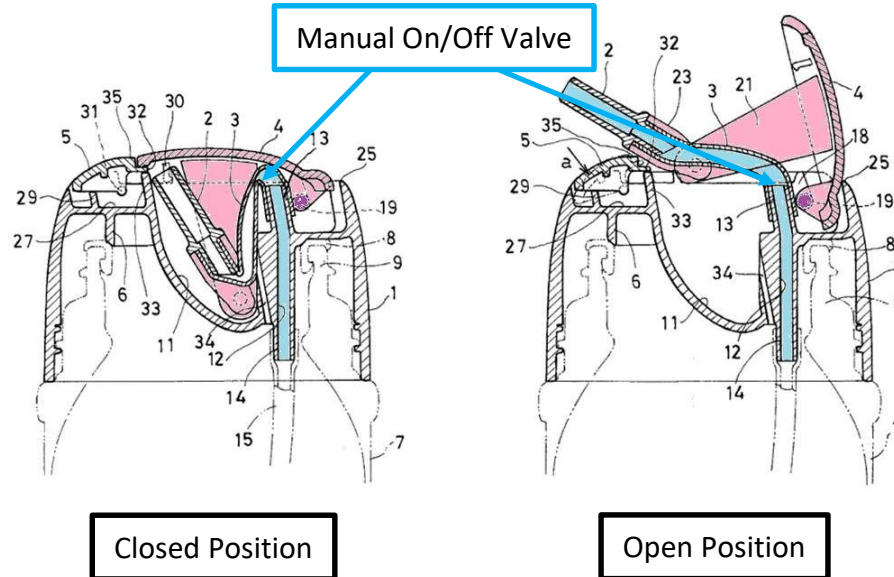
III. BACKGROUND

Drink containers with removable caps have, of course, long been known. Drink cap assemblies with the features claimed in the '250 patent (e.g., base, pivotal mount, mouthpiece, and on/off valve) have also been known since well before the '250 patent's priority date.

For example, Nakajima, which published in 2002, disclosed a removeable cap assembly including a base, a pivotal mount, a mouthpiece, and a manual on/off valve:



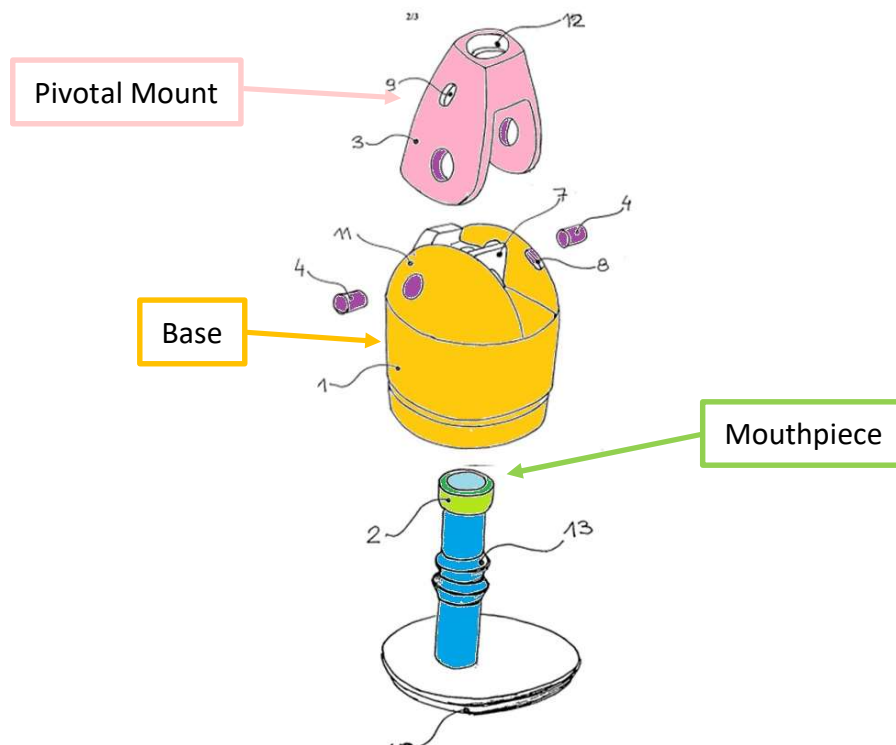
(Ex. 1004, Fig. 1).



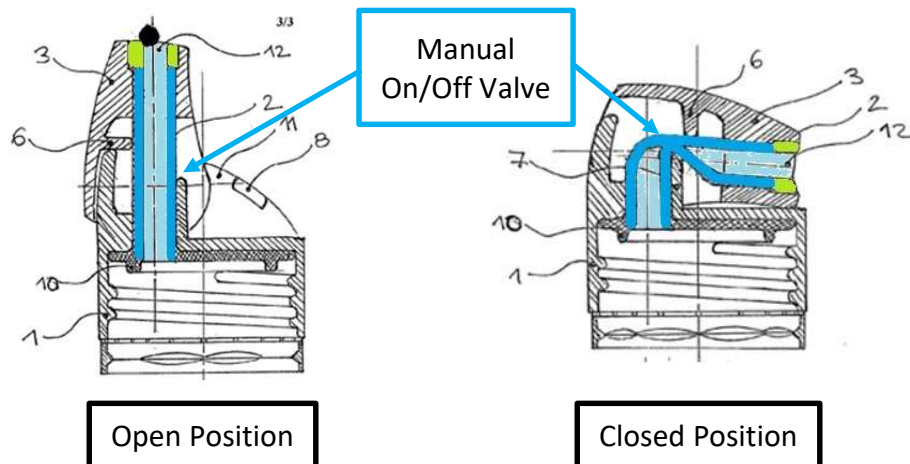
(*Id.*, Figs. 2, 3). Nakajima disclosed additional features, such as a pair of lateral guards on opposite sides of the mouthpiece and a dust cover extending between the guards and extending across a portion of the outlet of the mouthpiece. (*Id.*)

Ribarits also disclosed before the '250 patent a removeable cap assembly including a base, a pivotal mount, a mouthpiece (“sealed tubular element of rubber or latex”), and a manual on/off valve:

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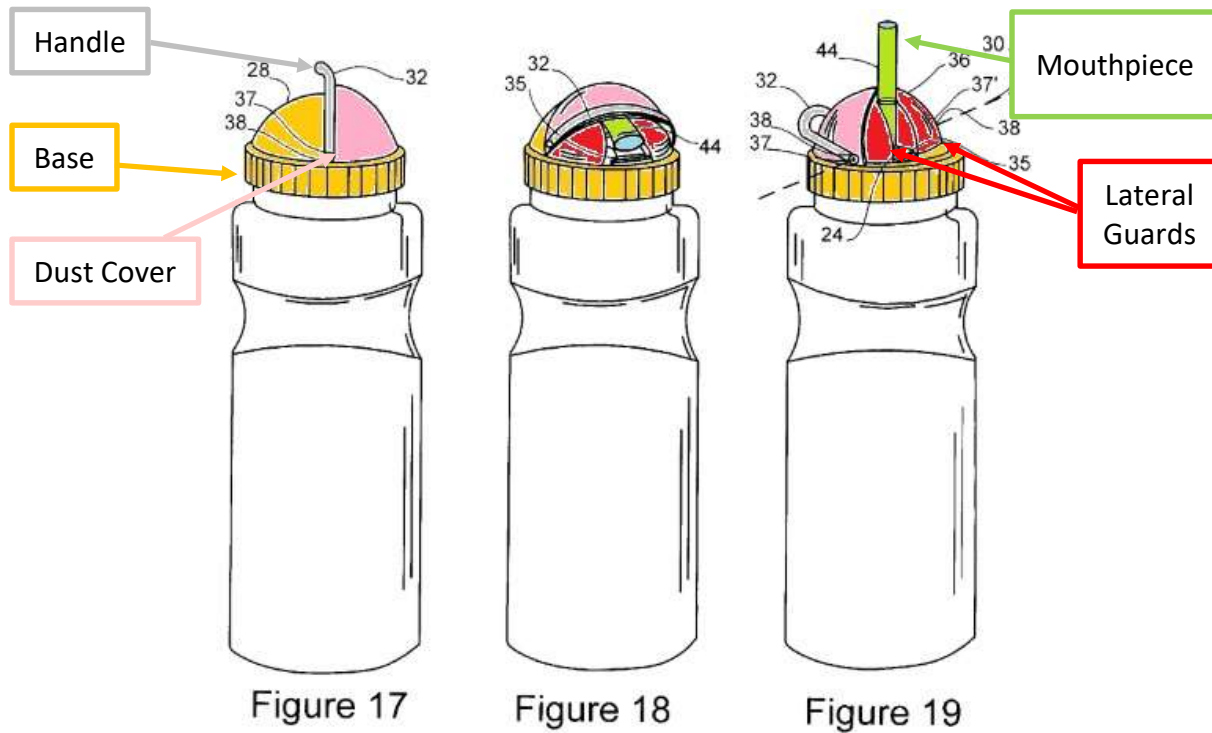


(Ex. 1006, 2, Fig. 2).



(Ex. 1006, Fig. 3).

Hughes, which issued before the '250 patent, also disclosed a removable cap assembly with a pivoting mouthpiece, dust cover, lateral guards, and a carrying handle:



(Ex. 1008, Figs. 17–19). Hughes’ mouthpiece was comprised of a flexible “drinking hose” that collapsed when pivoted into a stowed configuration. (*Id.*, 1:29–32, 9:45–53).

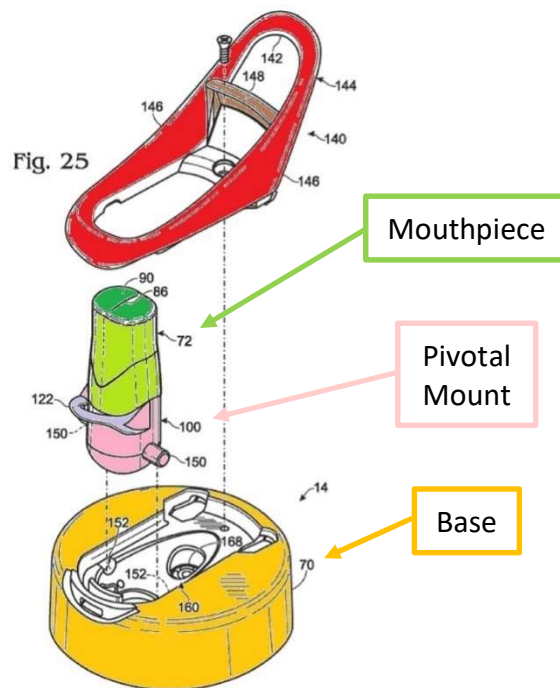
IV. THE '250 PATENT

A. Overview

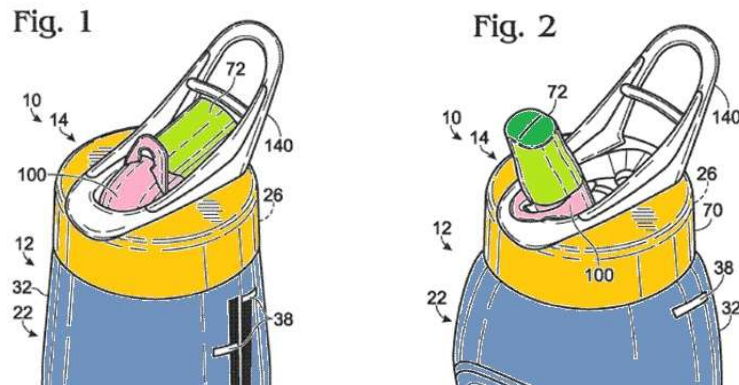
The '250 patent is titled “Drink Bottles” and discloses and claims “drink containers with cap assemblies” that include “drink spout[s]” that are “pivotally

coupled to a base of the cap assembly and includes a mouthpiece.” (Ex. 1001, Abstract).

An exploded view of an embodiment of the claimed cap assembly is provided in Figure 25, below:

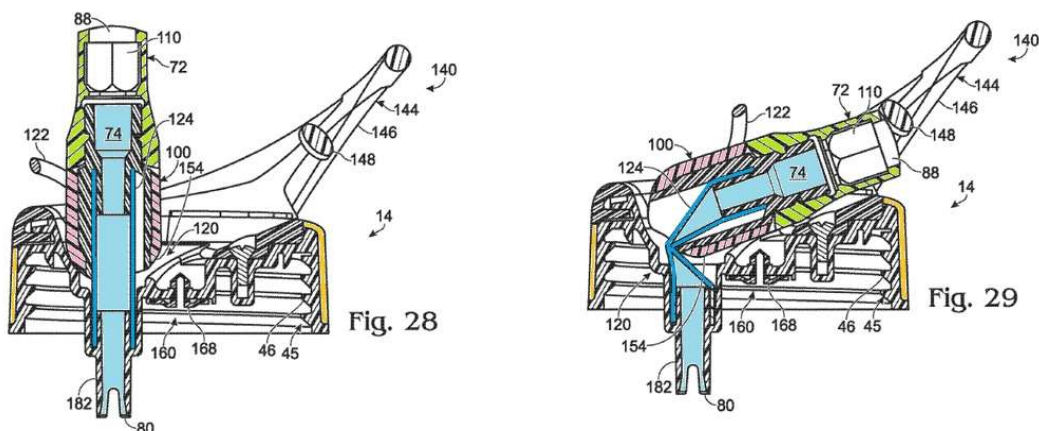


(Ex. 1001, Fig. 25). A mouthpiece (green) is fitted to a mount (pink) and pivots relative to a cap assembly base (yellow). (*Id.*, 16:57–67). The mouthpiece pivots between a stowed position and a dispensing position, as shown in Figures 1 and 2, respectively.



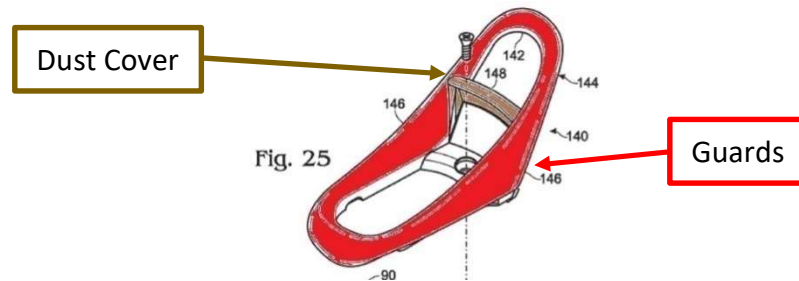
(*Id.*, Figs. 1, 2).

The '250 patent discloses mechanisms that can serve as a manual on/off valve in the cap assemblies. One such valve is shown in Figures 28 and 29, and “includes a flexible tube, or conduit 124” that “collapses” in the stowed configuration, “thereby preventing the flow of drink fluid from the fluid container, through the fluid conduit, and out of the mouthpiece, regardless of the configuration of the mouthpiece.” (*Id.*, 18:14–24).



(*Id.*, Figs. 28, 29).

In some embodiments, the cap assembly also includes a pair of guards (red) and a dust cover (brown):



(*Id.*, Fig. 25, 17:1–11).

B. The Challenged Claims

The '250 Patent issued with 18 claims, of which claims 1, 7, and 13 are independent. (Ex. 1001, Claims). Independent claim 1, is set forth below (with bracketed labels added for reference and the main elements of the drink container bolded).

Claim 1	
Preamble	A drink container, comprising:
1[a]	a fluid container having a neck with an opening and having an internal compartment sized to hold a volume of potable drink fluid;
1[b]	a cap assembly removably coupled to the fluid container to cover the opening, wherein the cap assembly defines a fluid conduit for drink fluid to flow from the fluid container and through the cap assembly to a user, wherein the fluid conduit includes an inlet through which drink fluid from the fluid container may enter the fluid conduit, and a dispensing outlet through which drink fluid in the fluid

Claim 1	
	conduit may be dispensed from the cap assembly to a user, and further wherein the cap assembly comprises:
1[b][1]	a cap assembly base removably coupled to the neck of the fluid container, wherein the cap assembly base is configured to be selectively and repeatedly decoupled from and re-coupled to the neck of the fluid container;
1[b][2]	a pivotal mount coupled to the cap assembly base at two joints that define a pivotal axis for pivotal movement of the pivotal mount relative to the cap assembly base, the pivotal mount defining a hollow passage, the hollow passage having a mount outlet on a distal end of the pivotal mount;
1[b][3]	a mouthpiece coupled to the mount outlet of the pivotal mount for pivotal movement with the pivotal mount relative to the cap assembly base,
1[b][3][i]	wherein the mouthpiece defines a portion of the fluid conduit, including the dispensing outlet;
1[b][3][ii]	wherein the mouthpiece and the pivotal mount are configured to be selectively pivoted between a stowed position and a dispensing position,
1[b][3][iii]	wherein the mouthpiece is at least partially covered by a dust cover when the mouthpiece and pivotal mount are in the stowed position
1[b][3][iv]	and wherein the dispensing outlet is positioned further away from the cap assembly base when the mouthpiece and the pivotal mount are in the dispensing position than when the mouthpiece and the pivotal mount are in the stowed position; and
1[b][4]	an on/off valve having a closed configuration, in which the on/off valve obstructs the fluid conduit to restrict drink

Claim 1	
	fluid from flowing between the inlet and the dispensing outlet, and an open configuration, in which the on/off valve permits drink fluid to flow through the fluid conduit from the inlet to the dispensing outlet;
1[b][4][i]	wherein the on/off valve includes a flexible tube that defines a portion of the fluid conduit;
1[b][4][ii]	wherein when the on/off valve is in the closed configuration, the tube is crimped to obstruct the flow of drink fluid through the fluid conduit; and
1[b][4][iii]	wherein when the on/off valve is in the open configuration, the tube is not crimped and does not obstruct the flow of drink fluid through the fluid conduit.

Independent claim 7 contains all the limitations of claim 1 with the additional limitation “wherein the dust cover remains stationary when the mouthpiece and the pivotal mount are selectively pivoted between the stowed position and the dispensing position.” (Ex. 1001, 20:55–58). Independent claim 13 is identical to claim 7 except that a “dispensing guard” is substituted for the dust cover. (*Id.*, 22:9–15).

The challenged dependent claims add limitations directed to: the structure of the two joints (claims 2, 8, and 14); a handle (claims 3, 9, and 15); lateral guards of the mouthpiece (claims 4, 10, and 16); pivoting of the mouthpiece (claims 5,

11, and 17); and the configuration of the dust cover/dispensing guard (claims 6, 12, and 18).

C. Prosecution History

During prosecution, all 18 claims were rejected as unpatentable as anticipated by U.S. Pat. App. Pub. 2005/0029271 to McDonough. (Ex. 1009, pg. 5). In response, Patent Owner amended claim 1 by adding the limitations, “the pivotal mount defining a hollow passage, the hollow passage having a mount outlet on a distal end of the pivotal mount” and “mouthpiece coupled to the mount outlet.” (*Id.*, pg. 15). Patent Owner amended claims 7 and 13 to include the limitation “wherein the dust cover remains stationary when the mouthpiece and the pivotal mount are selectively pivoted between the stowed position and the dispensing position.” (*Id.*, pp. 17, 19). Patent Owner argued that McDonough did not disclose the claimed subject matter as amended and received a notice of allowance on August 18, 2023. (*Id.*, pp. 22–35).

V. STATEMENT OF RELIEF REQUESTED

A. IPR Grounds

IPR is requested for the following grounds of unpatentability:

Ground	Claims Challenged	35 U.S.C. §	References
1	1, 2, 4–6	103	Nakajima in view of the knowledge of a POSITA
2	1, 2, 4–8, 10–14, 16–18	103	Ribarits in view of Panicci and/or the knowledge of a POSITA
3	3, 9, 15	103	Ribarits in view of Panicci and/or the knowledge of a POSITA and in further view of Hughes

B. The '250 Patent Is Subject to the pre-AIA Prior Art Provisions of the Patent Statute.

The '250 patent claims priority to two provisional applications: Application No. 60/670,828 filed Apr. 11, 2005, and Application No. 60/706,700 filed Aug. 8, 2005. Therefore, the earliest possible effective filing date for the challenged claims is April 11, 2005. In co-pending litigation, PO has contended that challenged claims 1, 2, and 4–6 are entitled to a priority date of April 11, 2005. (Ex. 1011 at 3).

C. The Asserted References Are Prior Art

This Petition relies on the following prior art references:

Exhibit	Reference	Date	pre-AIA Art Type
1004	Nakajima	Published: July 31, 2002	§ 102(a), (b)

Exhibit	Reference	Date	pre-AIA Art Type
1006	Ribarits	Published: July 29, 2004	§ 102(a)
1007	Panicci	Issued: Dec. 4, 1984	§ 102(a), (b)
1008	Hughes	Issued: Feb. 25, 2003	§ 102(a), (b)

This Petition is also supported by the expert declaration of Glenn E. Vallee, Ph.D. (Ex. 1002).

VI. LEVEL OF ORDINARY SKILL

Based on the relevant factors, *In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995), a hypothetical person of ordinary skill in the art (“POSITA”) would have had an undergraduate degree in mechanical engineering or equivalent coursework, and a year or more of experience in designing, prototyping, and/or manufacturing fluid containers or similar products. (Ex. 1002 ¶25). More work experience may substitute for a lower level of education, and vice versa. (*Id.*).

This Petition does not turn on this specific definition of the level of ordinary skill. The claims are anticipated and/or would be obvious from the perspective of a POSITA under any reasonable definition. (*Id.* ¶26).

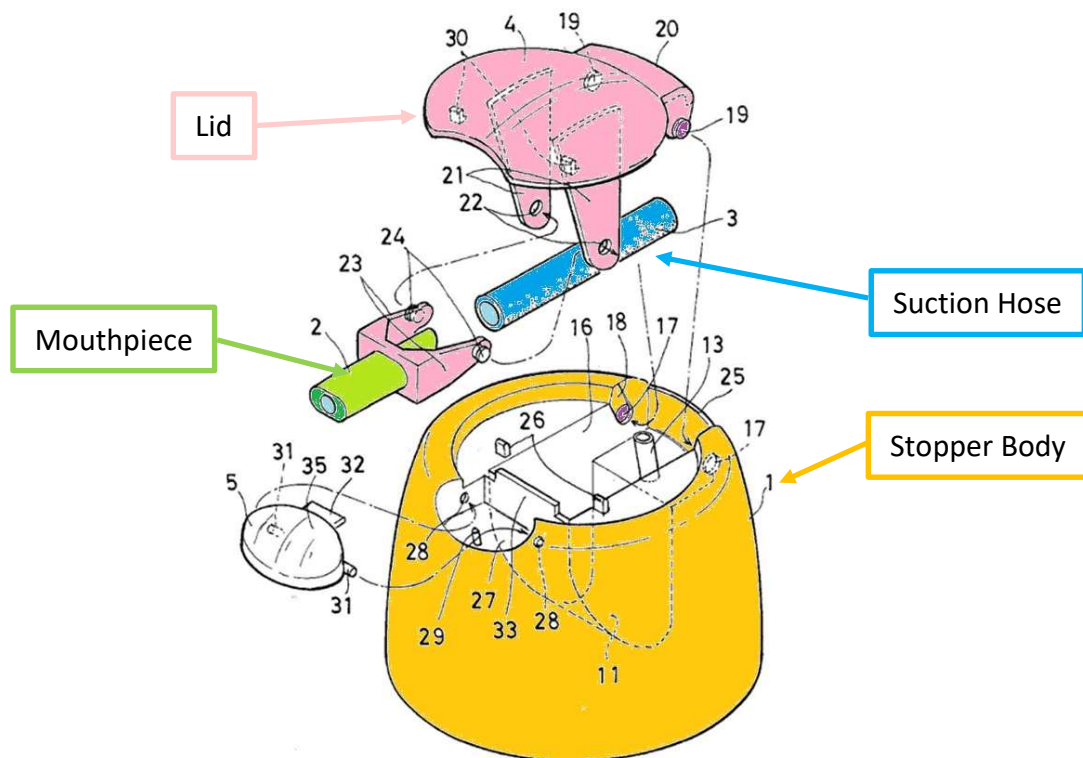
VII. CLAIM CONSTRUCTION

Petitioner submits that no claim terms require construction to resolve the invalidity challenges here. *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co. Ltd. Matal*, 868 F.3d 1013, 1017 (Fed. Cir. 2017).

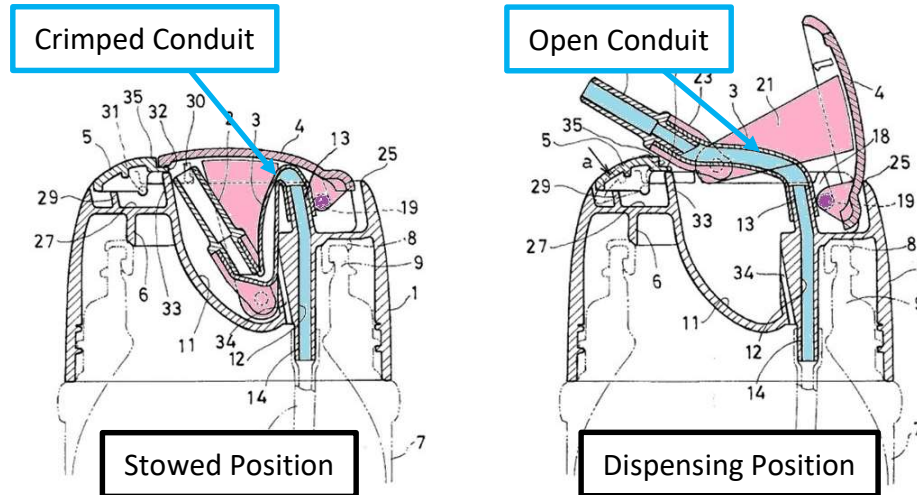
VIII. GROUND 1: CLAIMS 1, 2, AND 4–6 WOULD HAVE BEEN OBVIOUS OVER NAKAJIMA IN VIEW OF THE KNOWLEDGE OF A POSITA

A. Overview of Nakajima

Nakajima (Ex. 1004) is titled “Stopper with Mouthpiece for Liquid Container” and discloses a cap assembly for a drink bottle, where the cap assembly “is composed of a combination of a stopper body 1, a mouthpiece 2, a suction hose 3, a lid 4, and a button 5 serving as a disengaging means.” (Ex. 1004, ¶[0012]).



(Ex. 1004, Fig. 1). Nakajima’s cap assembly includes a manual on/off valve, wherein a flexible suction hose is open in the dispensing position, and crimped in the stowed position to restrict the flow of fluid.



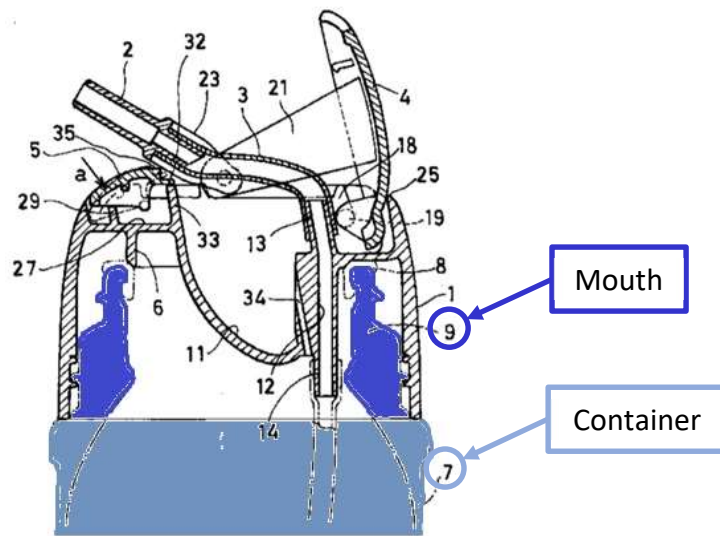
(*Id.*, Figs. 2, 3). Nakajima’s lid is a dust cover that protects the mouthpiece and suction hose from debris when in the stowed position. (Ex. 1004, ¶[0003]; Ex. 1002, ¶48).

B. Claim 1

1. Preamble and Limitation 1[a]: “fluid container”

Nakajima discloses the preamble and limitation 1[a], which recite: “[a] drink container, comprising: a fluid container having a neck with an opening and having an internal compartment sized to hold a volume of potable drink fluid.” (Ex. 1002, ¶¶62–66).

Nakajima discloses “a stopper with a mouthpiece for a water bottle or other liquid container.” (Ex. 1004, ¶[0001]). For example, Figure 2 shows Nakajima’s cap assembly on the neck of a water bottle.

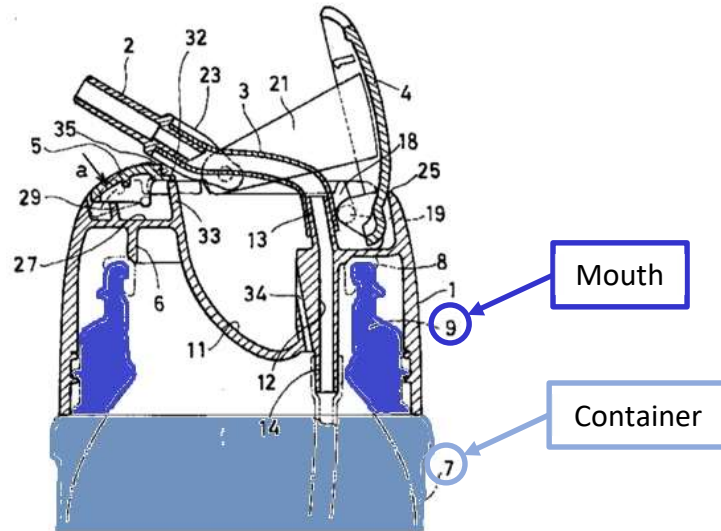


(*Id.*, Fig. 3, ¶[0013]). A POSITA would have understood the “mouth” of the “container” to constitute a neck with an opening. (Ex. 1002, ¶[66]).

2. Limitation 1[b]: Cap Assembly

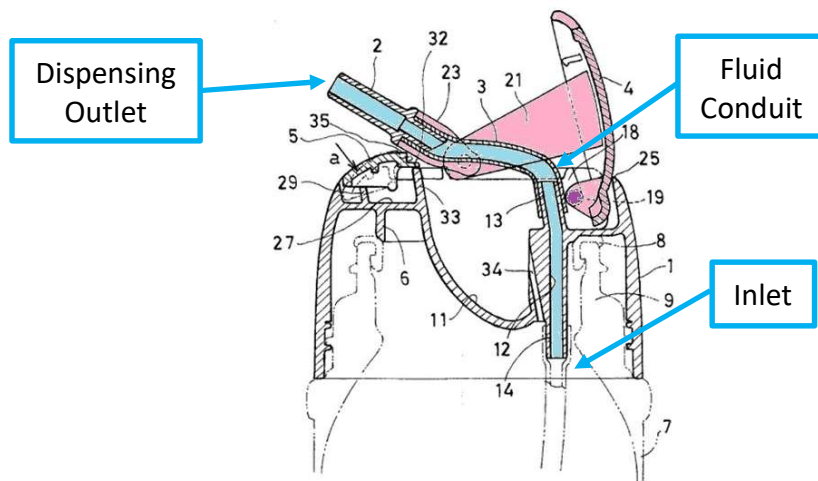
Nakajima discloses limitation 1[b], “a cap assembly removably coupled to the fluid container to cover the opening, wherein the cap assembly defines a fluid conduit for drink fluid to flow from the fluid container and through the cap assembly to a user, wherein the fluid conduit includes an inlet through which drink fluid from the fluid container may enter the fluid conduit, and a dispensing outlet through which drink fluid in the fluid conduit may be dispensed from the cap assembly to a user” (Ex. 1002 ¶¶67–69). Nakajima’s cap assembly is removably coupled to the mouth of the fluid container via “an annular rib 6” that “is used to seal the mouth 9 of the container 7” (Ex. 1004, ¶¶[0012]–[0014]; Ex. 1002,

¶¶68).



(Ex. 1004, Fig. 3, ¶[0013]).

As shown below, Nakajima's cap assembly includes a fluid conduit from the container to the user:

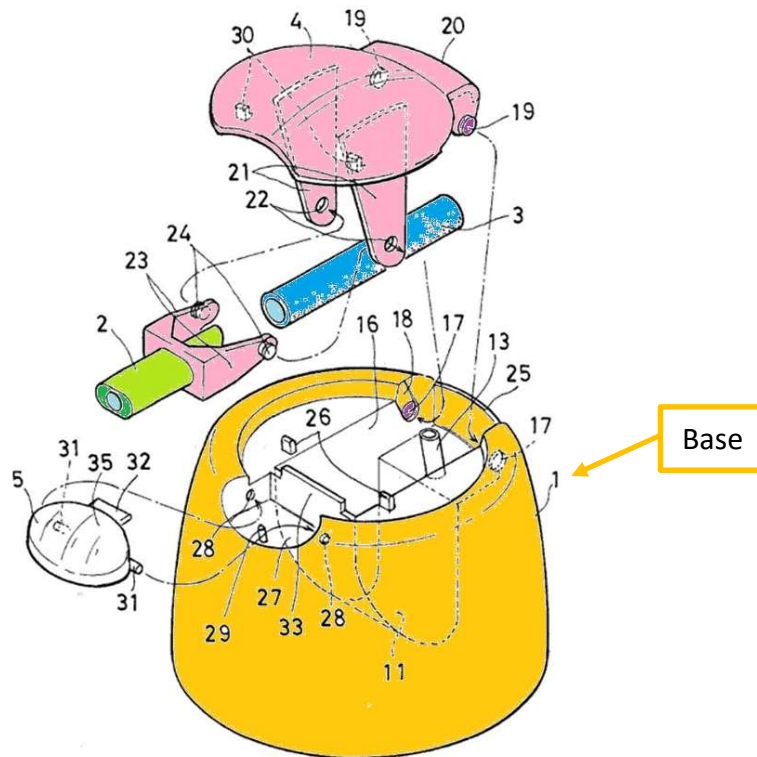


(*Id.*, Fig. 3, ¶¶[0012]–[0014]). Fluid enters the fluid conduit from the container, flows through the “suction hose 3,” and is dispensed from a dispensing outlet at

the end of “mouthpiece 2.” (Ex. 1004, ¶¶[0012]–[0014]; Ex. 1002, ¶69).

a. Limitation 1[b][1]: Cap Assembly Base

Nakajima discloses limitation 1[b][1]: “a cap assembly base removably coupled to the neck of the fluid container wherein the cap assembly base is configured to be selectively and repeatedly decoupled from and re-coupled to the neck of the fluid container” (Ex. 1002 ¶¶70–71). As discussed above, Nakajima discloses that its cap assembly base can be removed and recoupled to the liquid container.

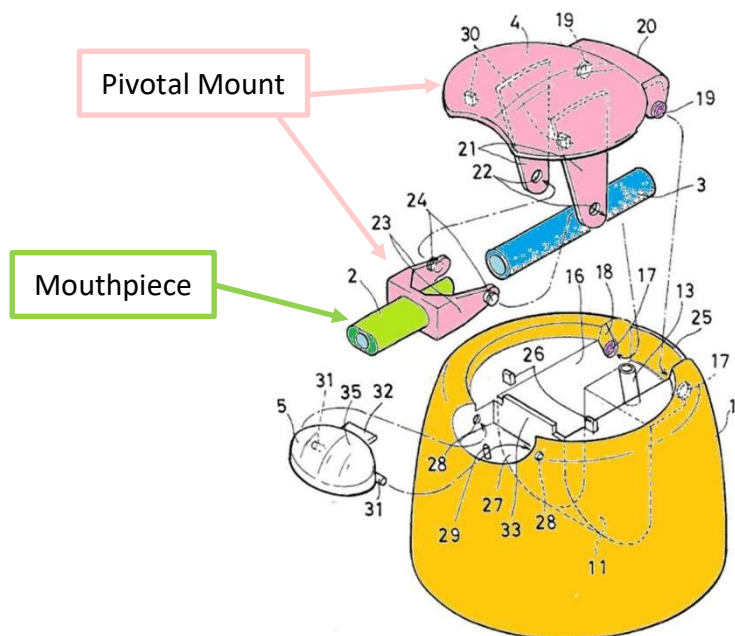


(Ex. 1004, Fig. 1).

b. Limitation 1[b][2]: Pivotal Mount

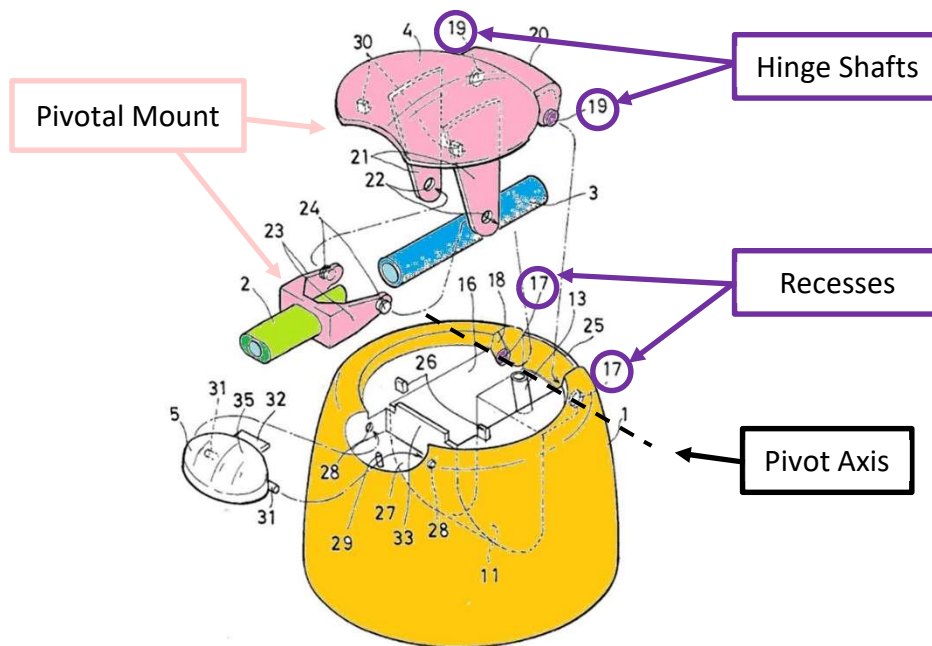
Nakajima discloses limitation 1[b][2]: “a pivotal mount coupled to the cap assembly base at two joints that define a pivotal axis for pivotal movement of the pivotal mount relative to the cap assembly base, the pivotal mount defining a hollow passage, the hollow passage having a mount outlet on a distal end of the pivotal mount;” (Ex. 1002 ¶¶72–75).

Nakajima includes two structures that pivot and form a “pivotal mount.” (*Id.*, ¶73). Nakajima’s pivotal mount, highlighted pink below, comprises the combination of (1) “lid 4” having “leg pieces 21,” and (2) the mouthpiece bracket “arms 23” of “mouthpiece 2.”

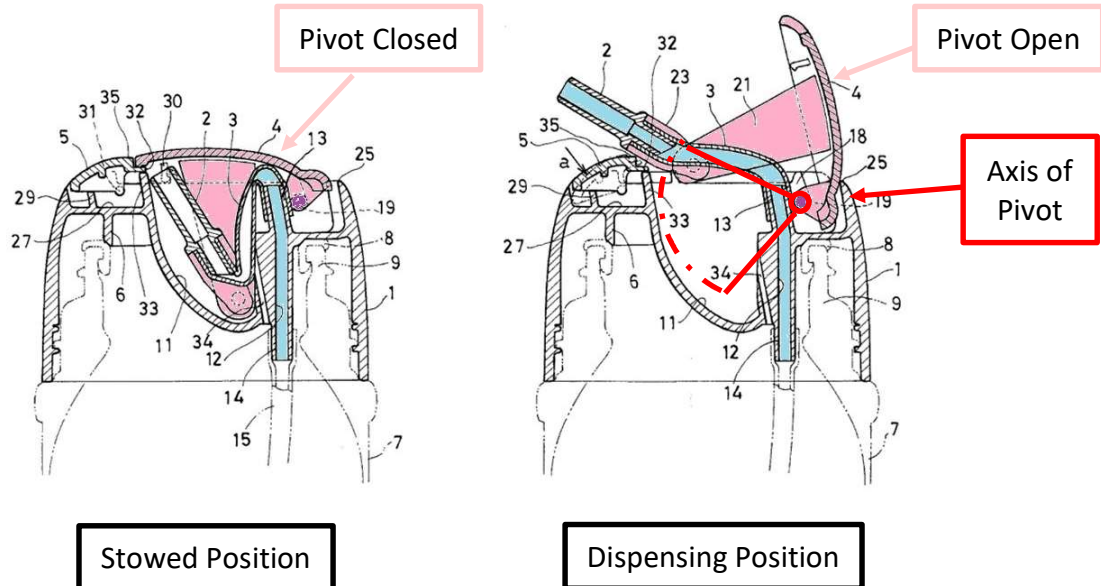


(Ex. 1004, Fig. 1, ¶[0003]; Ex. 1002, ¶74). As shown above, Nakajima’s mouthpiece extends from the base of the bracket formed by “arms 23” of the pivotal mount.

As shown below, a “pair of hinge shafts 19” project laterally from the “hinge portion 20” and are “rotatably fitted into” a corresponding pair of “shaft receiving recesses 17” in the cap assembly base. (Ex. 1004, ¶¶[0015]–[0016]).

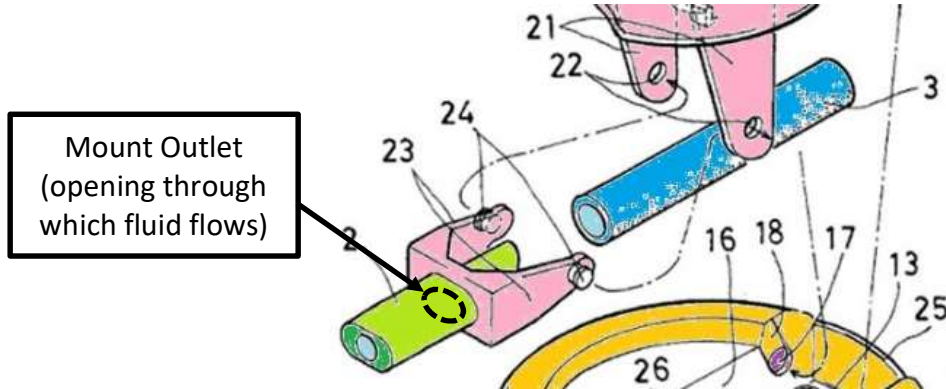


(*Id.* at Fig. 1).

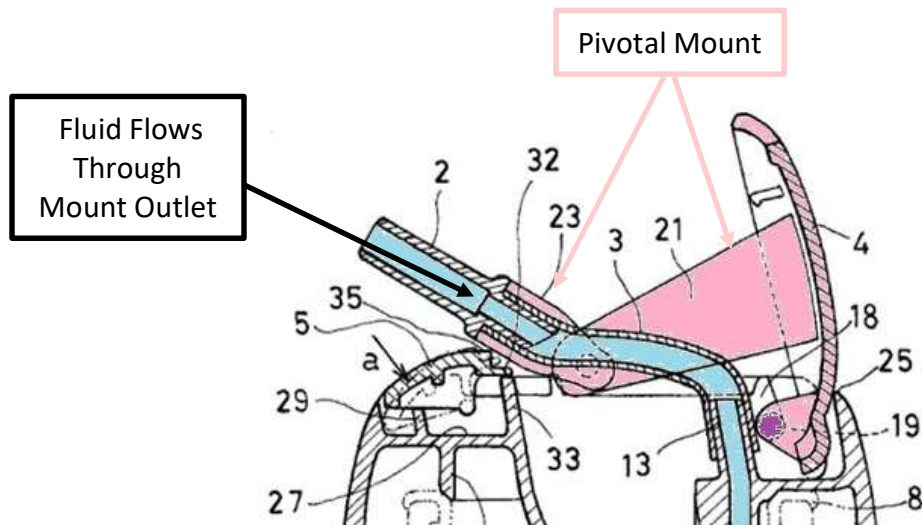


(*Id.*, Figs. 2, 3). Thus, a POSITA would have understood the hinge shafts that project laterally and interact with the recesses comprise two joints that couple the pivotal mount to the cap assembly and define a pivotal axis for pivotal movement of the pivotal mount relative to the cap assembly base. (Ex. 1002, ¶76).

The pivotal mount further defines a hollow passage having a mount outlet on a distal end of the pivotal mount in the bracket formed by “arms 23”, as shown below, which comprises the hollow passage and outlet through which fluid flows from “suction hose 3” to the dispensing end of the mouthpiece:



(Ex. 1004, Fig. 1).



(Ex. 1004, Fig. 3; Ex. 1002, ¶75). Thus, a POSITA would have understood the hollow passage in the bracket formed by “arms 23” to constitute a hollow passage having a mount outlet at the distal end. (*Id.*)

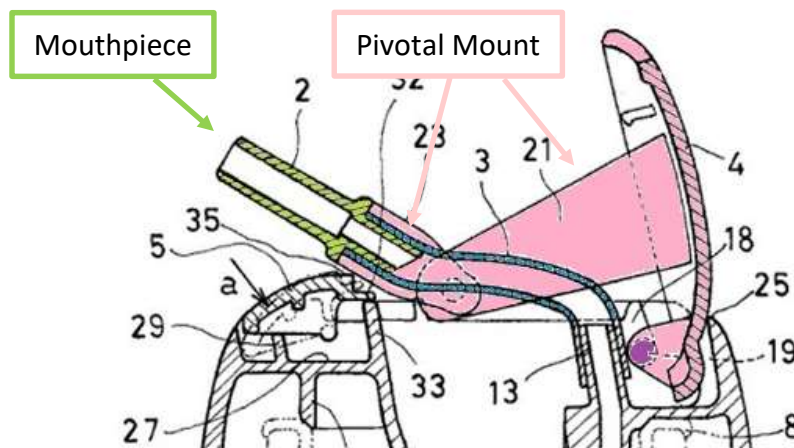
c. Limitation 1[b][3]: Mouthpiece

Limitation 1[b][3] recites: “a mouthpiece coupled to the mount outlet of the pivotal mount for pivotal movement with the pivotal mount relative to the cap assembly base.” This limitation is obvious over Nakajima. (Ex. 1002, ¶¶76–81).

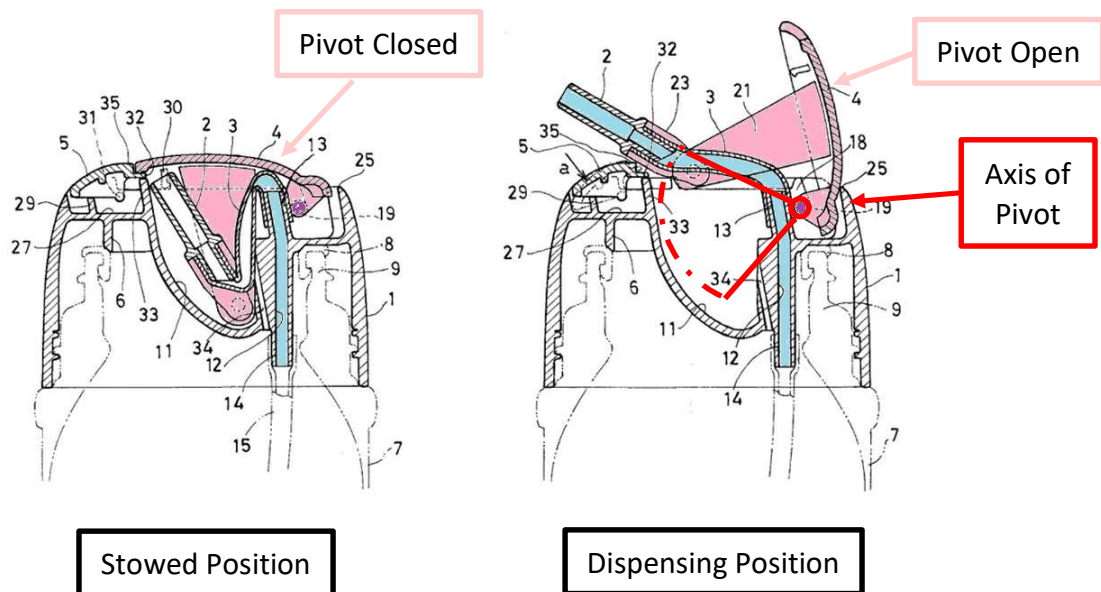
Nakajima describes “mouthpiece 2” and “arms 23” as two portions of a single component (Ex. 1004, ¶[0016]). Thus, Nakajima discloses that the “mouthpiece 2” is coupled to the portion of the pivotal mount formed by “arms 23”.

If the mouthpiece and pivotal mount must be formed of two separable parts, it would have been obvious for a POSITA to form the component in two parts removably coupled to each other, namely (1) a tubular portion configured to provide a fluid conduit and engage a user’s mouth (the “mouthpiece”), which would be removably coupled to (2) a bracket portion with arms 23 configured to pivot when the cap assembly is opened (the “pivotal mount”). (Ex. 1002, ¶78). A POSITA would have recognized such a change to be a routine design choice that would not have altered the overall design or functionality of the Nakajima mouthpiece or pivotal mount. (*Id.*, ¶79).

An example of this modification is shown in Figure 3 below:



(Ex. 1004, Fig. 3; Ex 1002, ¶79). Due to its engagement with the pivotal mount, Nakajima’s mouthpiece “moves up and down in conjunction with the opening and closing of the lid.” (Ex. 1004, ¶[0003]; Ex. 1002, ¶81). The pivoting movement of the mouthpiece is shown below:

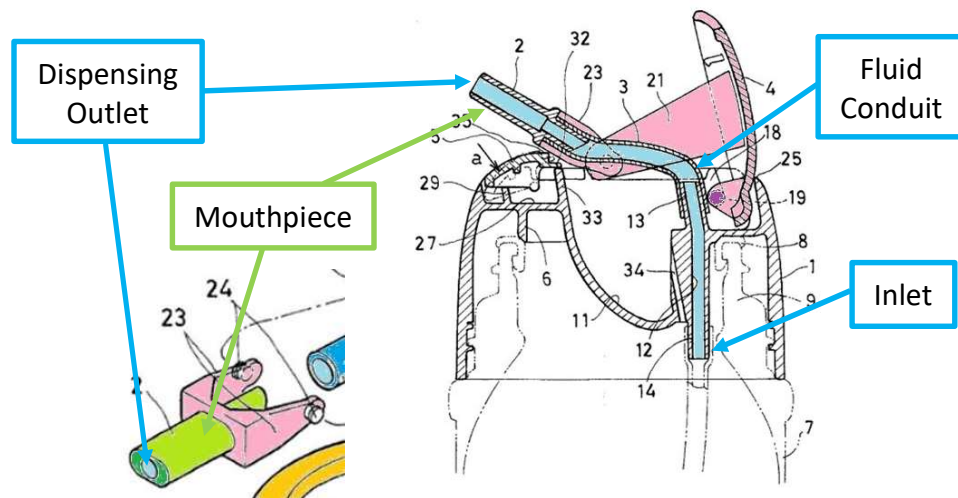


(Ex.1004, Figs. 2, 3).

i. Limitation 1[b][3][i]

Nakajima discloses limitation 1[b][3][i]: “wherein the mouthpiece defines a portion of the fluid conduit, including the dispensing outlet.” (Ex. 1002, ¶¶82–83).

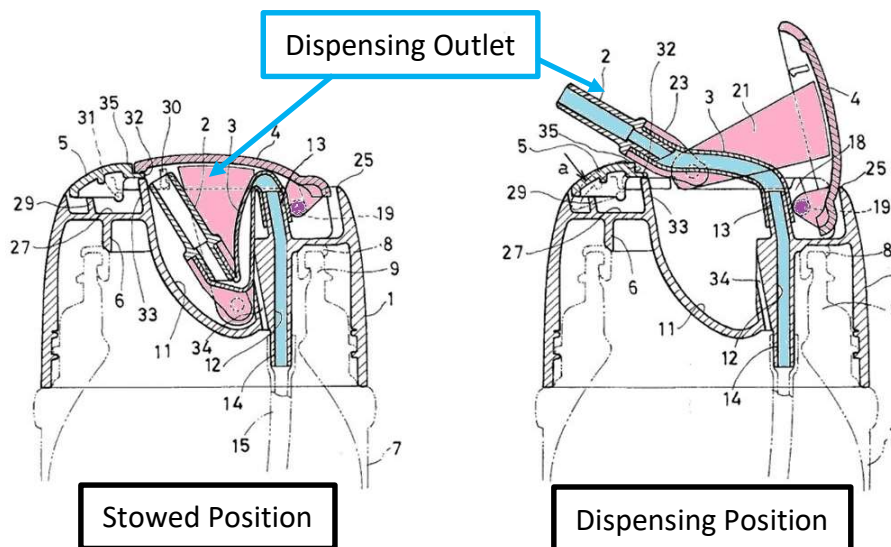
As discussed above, Nakajima’s cap assembly includes a fluid conduit from an inlet and ending with a dispensing outlet. Nakajima’s mouthpiece defines the portion of the fluid conduit that includes the dispensing outlet:



(Ex. 1004, Figs. 1, 3; Ex. 1002, 83).

ii. **Limitation 1[b][3][ii]**

Nakajima discloses limitation 1[b][3][ii]: “wherein the mouthpiece and the pivotal mount are configured to be selectively pivoted between a stowed position and a dispensing position.” (Ex. 1002, ¶¶84–85). As noted above, and shown below in Figures 2 and 3, Nakajima’s mouthpiece and pivotal mount pivot between a stowed position and a dispensing position:

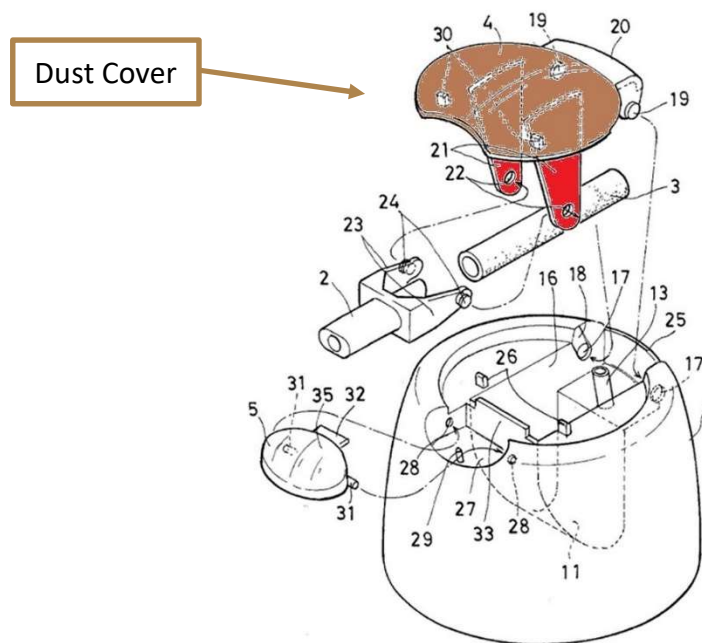


(Ex. 1004, Figs. 2, 3).

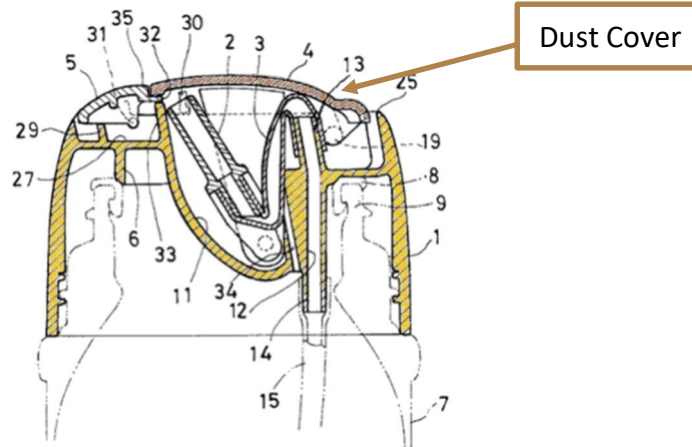
i. Limitation 1[b][3][iii]

Nakajima discloses limitation 1[b][3][iii]: “wherein the mouthpiece is at least partially covered by a dust cover when the mouthpiece and pivotal mount are in the stowed position,” (Ex. 1002, ¶¶86–88).

Nakajima’s lid is a dust cover protecting the dispensing outlet and mouthpiece:



(Ex. 1004, Fig. 1, ¶[0004]; Ex. 1002, ¶88). When the mouthpiece and pivotal mount are in the stowed position, the mouthpiece is at least partially covered by the dust cover:

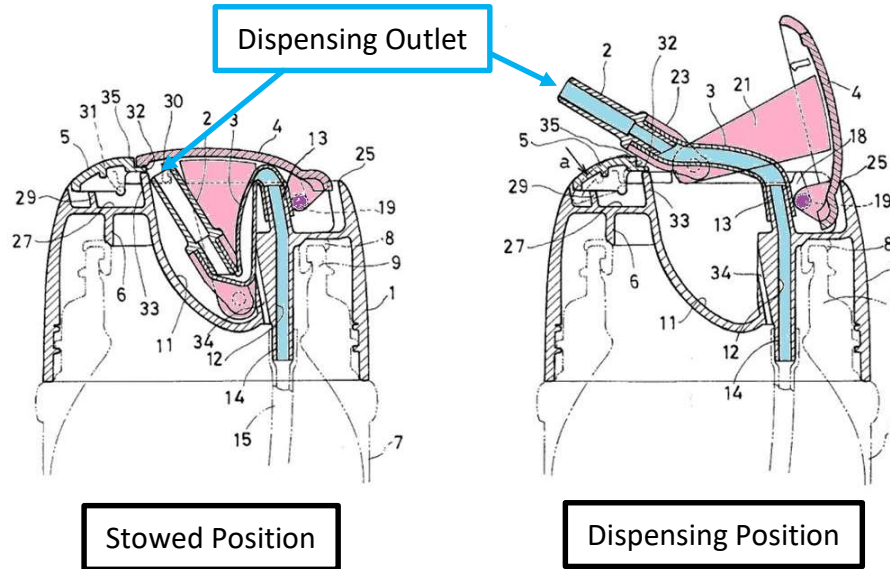


(Ex. 1004, Fig. 2, ¶¶[0013], [0016]; Ex. 1002 ¶90).

i. Limitation 1[b][3][iv]

Nakajima discloses limitation 1[b][3][iv]: “ wherein the dispensing outlet is positioned further away from the cap assembly base when the mouthpiece and the pivotal mount are in the dispensing position than when the mouthpiece and the pivotal mount are in the stowed position” (Ex. 1002, ¶¶89–90).

As discussed above, Nakajima’s mouthpiece and pivotal mount pivot between a stowed position and a dispensing position. As shown below, in the dispensing position, the dispensing outlet is further away from the cap assembly base, as compared to the stowed position:

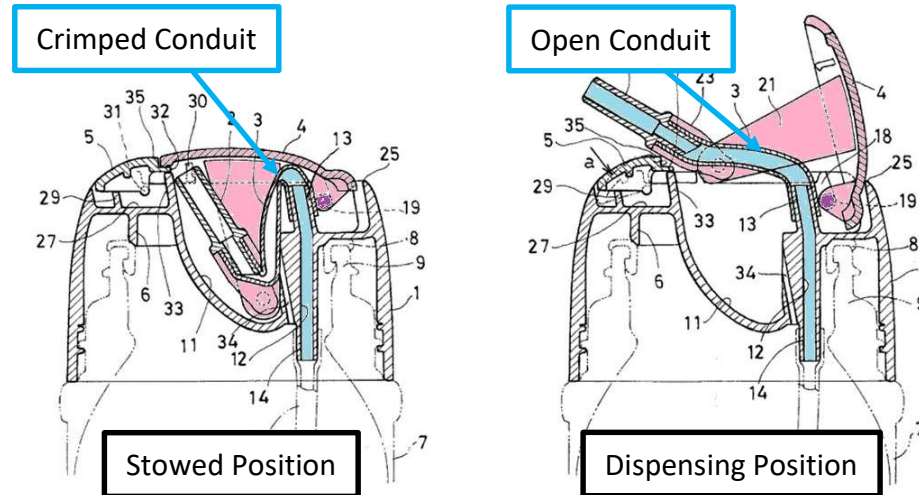


(Ex. 1004, Figs. 2, 3; Ex. 1002, ¶90).

d. Limitation 1[b][4]: On/Off Valve

Nakajima discloses limitation 1[b][4]: “an on/off valve having a closed configuration, in which the on/off valve obstructs the fluid conduit to restrict drink fluid from flowing between the inlet and the dispensing outlet, and an open configuration, in which the on/off valve permits drink fluid to flow through the fluid conduit from the inlet to the dispensing outlet.” (Ex. 1002 ¶¶91–92).

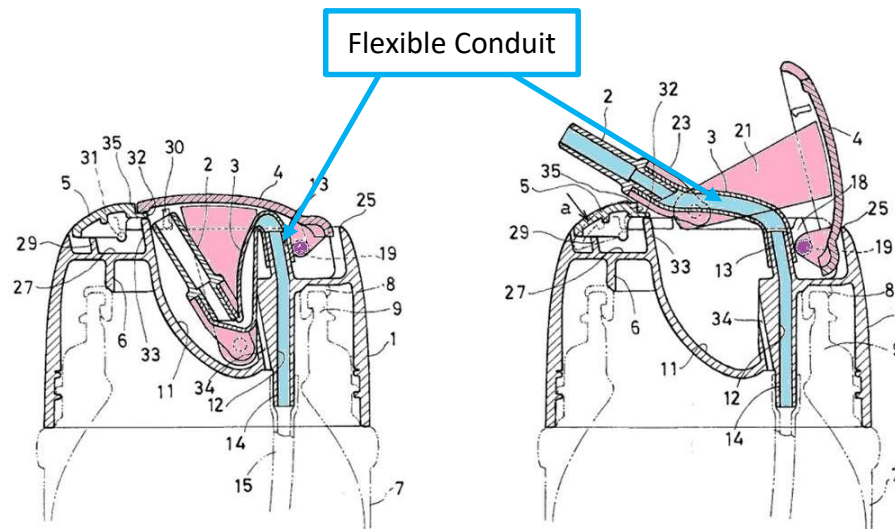
The on/off valve of Nakajima comprises the crimping functionality of the fluid conduit that occurs when the lid and mouthpiece pivot, thereby switching between the stowed position and dispensing position, as shown in Figures 2 and 3 below:



(Ex. 1004, Figs. 2, 3. ¶¶[0022]–[0023]; Ex. 1002, ¶92). As shown above, “suction hose 3” is a flexible tube that forms a portion of the fluid conduit between the inlet and the mouthpiece. Suction hose 3 crimps when the lid is closed, thereby obstructing the fluid conduit and restricting fluid from flowing. (Ex. 1004, ¶¶[0014], [0018]).

i. Limitation 1[b][4][i]

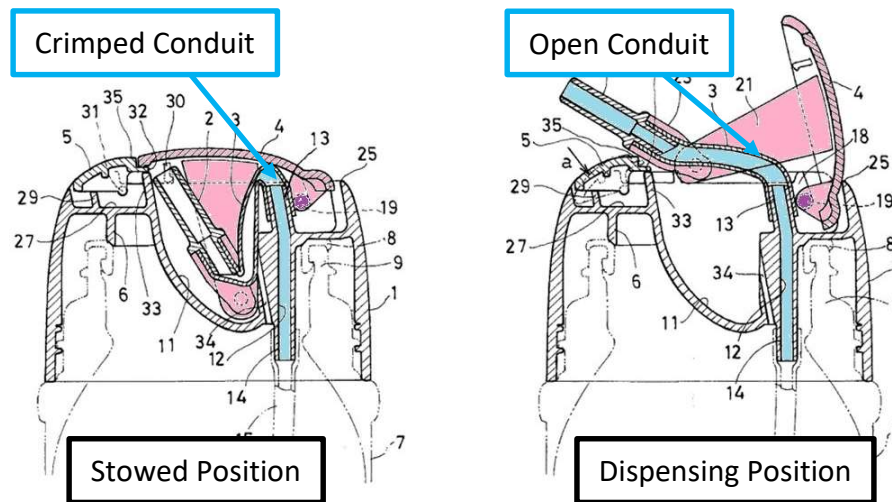
Nakajima discloses limitation 1[b][4][i]: “wherein the on/off valve includes a flexible tube that defines a portion of the fluid conduit,” (Ex. 1002 ¶93–96). Nakajima’s “suction hose 3” is a flexible tube that forms a portion of the fluid conduit between the inlet and the mouthpiece. (Ex. 1004, ¶¶[0014], [0018]).



(Ex. 1004, Figs. 2, 3, ¶[0014]).

i. Limitations 1[b][4][ii]–[iii]

Nakajima discloses limitation 1[b][4][ii]: “wherein when the on/off valve is in the closed configuration, the tube is crimped to obstruct the flow of drink fluid through the fluid conduit;” and limitation 1[b][4][iii] “wherein when the on/off valve is in the open configuration, the tube is not crimped and does not obstruct the flow of drink fluid through the fluid conduit.” (Ex. 1002 ¶93–96). Nakajima’s “suction hose 3” is a flexible tube that forms a portion of the fluid conduit between the inlet and the mouthpiece. (Ex. 1004, ¶[0018]).



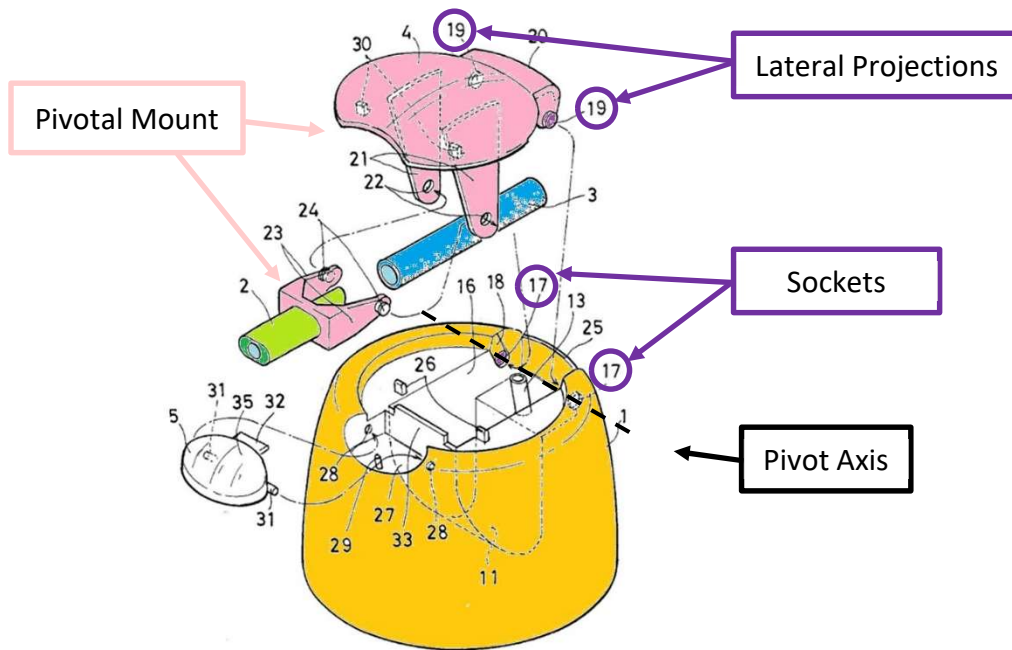
(Ex. 1004, Figs. 2–3, ¶¶[0022]–[0023]; Ex. 1002, ¶94). As shown above, “suction hose 3” crimps when the lid is closed to obstruct the fluid conduit. (Ex. 1004, [0018]). When the lid is opened, the suction hose unfolds, thereby opening the fluid conduit. (See *id.* at ¶[0023]; Ex. 1002, ¶95).

Accordingly, Nakajima either discloses or renders obvious each limitation of claim 1. Thus, claim 1 would have been obvious over Nakajima, in view of the knowledge of a POSITA. (Ex. 1002, ¶96).

C. Claim 2

Claim 2 depends from claim 1, and further recites, “wherein the two joints comprise a pair of lateral projections extending from the pivotal mount that extend into a pair of sockets in the cap assembly base.” Nakajima discloses this additional limitation. (Ex. 1002, ¶¶97–99).

As discussed above and shown below, Nakajima's two joints that define a pivotal axis comprise lateral projections extending from the pivotal mount that extend into a pair of sockets on the cap assembly:



(Ex. 1004, Fig. 1).

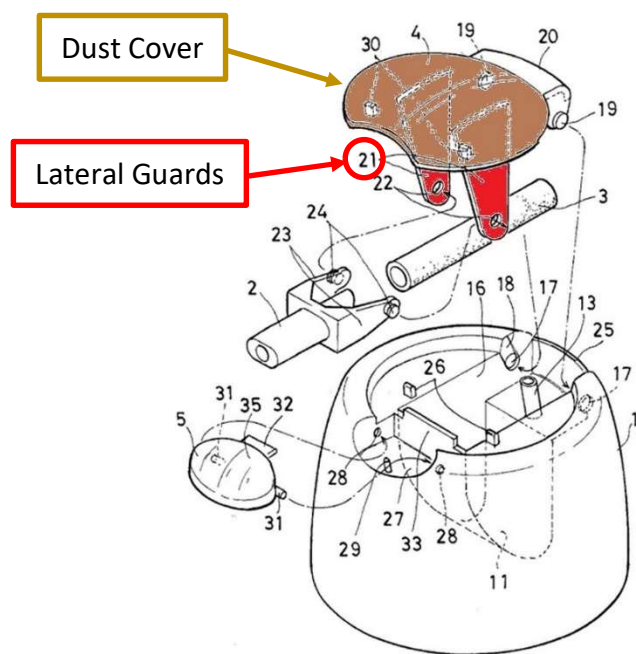
Thus, for the same reasons discussed above in connection with claim 1, claim 2 would have been obvious over Nakajima, in view of the knowledge of a POSITA. (Ex. 1002, ¶101).

D. Claim 4

Claim 4 depends from claim 1, and further recites, “wherein the cap assembly includes a pair of lateral guards that extend on opposed sides of the mouthpiece when the mouthpiece and the pivotal mount are in the stowed position

and wherein the dust cover extends between the pair of lateral guards and is positioned to protect the dispensing outlet of the mouthpiece by extending across at least a portion of the dispensing outlet of the mouthpiece when the mouthpiece and the pivotal mount are in the stowed position.” Nakajima discloses these additional limitations. (Ex. 1002, ¶¶100–104).

Nakajima's "leg pieces 21" extend on opposed sides of the mouthpiece when the pivotal mount and mouthpiece are in the stowed position, as shown below:



(Ex. 1004, Fig. 1, ¶[0016]). Nakajima's lid is a dust cover extending between the pair of lateral guards (i.e. "pair of legs 21").(Ex. 1004, ¶[0004]; Ex. 1002, ¶102). As discussed above, the lid protects the dispensing outlet by extending across at

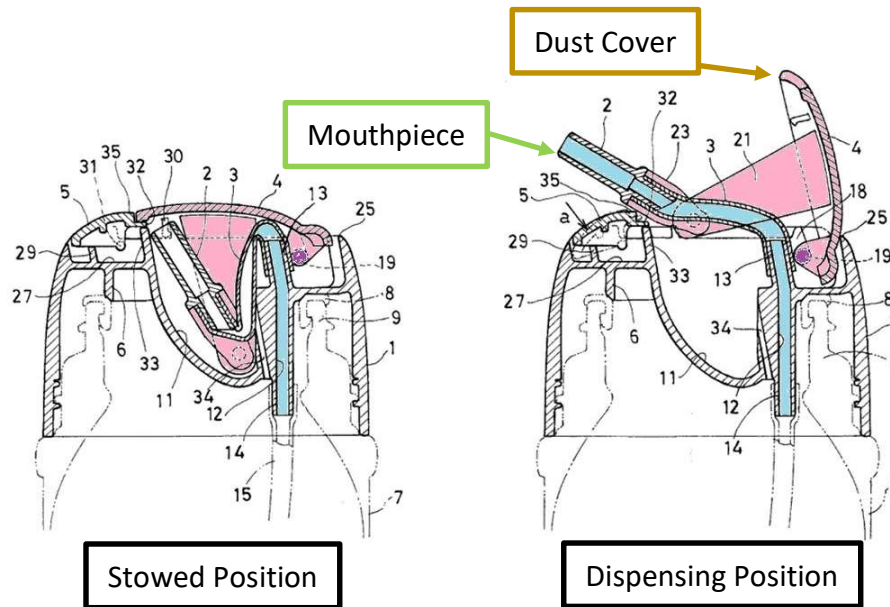
least a portion of the dispensing outlet of the mouthpiece when the mouthpiece and the pivotal mount is in the stowed position. *Id.*

Accordingly, Nakajima discloses the additional limitations of claim 4. (Ex. 1002, ¶104). Thus, for the same reasons discussed above in connection with claim 1, claim 4 would have been obvious over Nakajima, in view of the knowledge of a POSITA. (Ex. 1002, ¶104).

E. Claim 5

Claim 5 depends from claim 1, and further recites, “wherein when the mouthpiece is pivoted from the stowed position to the dispensing position, the mouthpiece pivots away from the dust cover.” Nakajima discloses this additional limitation. (Ex. 1002, ¶¶105–107).

Nakajima’s mouthpiece pivots away from the dust cover (i.e. “lid”) when the mouthpiece is pivoted from the stowed position to the dispensing position, as shown below:



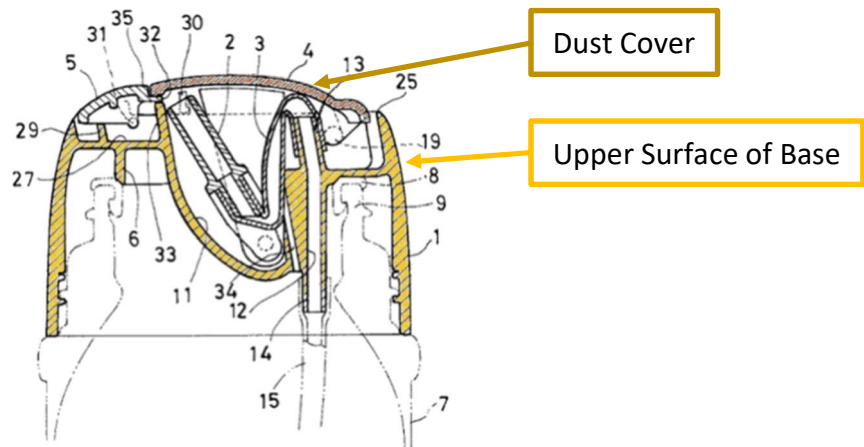
(Ex. 1004, Figs. 2, 3).

Accordingly, Nakajima discloses the additional limitation of claim 5. Thus, for the same reasons discussed above in connection with claim 1, claim 5 would have been obvious over Nakajima, in view of the knowledge of a POSITA. (Ex. 1002, ¶107).

F. Claim 6

Claim 6 depends from claim 1, and further recites, “wherein the dust cover projects above an upper surface of the cap assembly base.” Nakajima discloses this additional limitation. (Ex. 1002, ¶¶108–110).

Nakajima’s dust over (i.e. “lid”) projects above an upper surface of the cap assembly base (i.e. “stopper body”) in both the stowed position and dispensing position, as shown below:



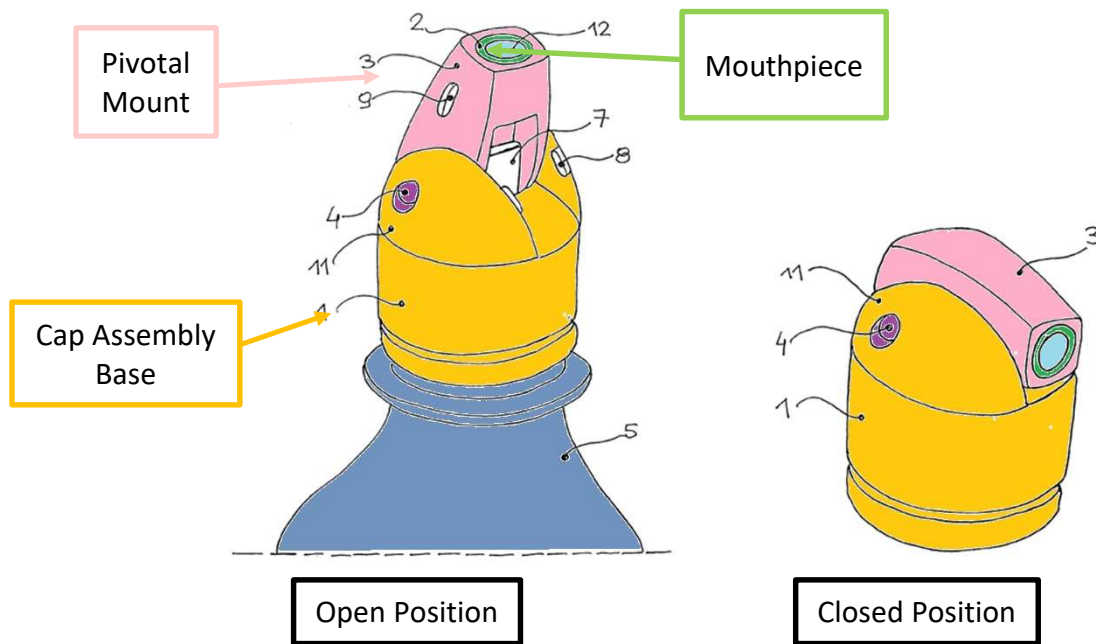
(Ex. 1004, Fig. 2).

Accordingly, Nakajima discloses the additional limitation of claim 5. Thus, for the same reasons as discussed above in connection with claim 1, claim 5 would have been obvious over Nakajima, in view of the knowledge of a POSITA. (Ex. 1002, ¶111).

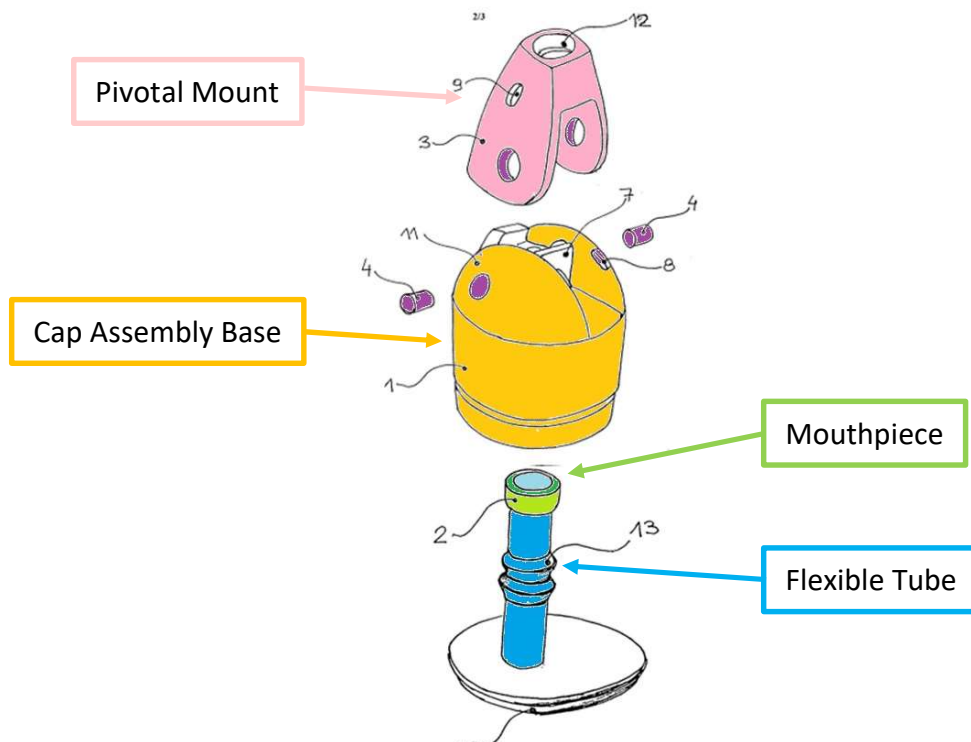
IX. GROUND 2: CLAIMS 1, 2, 4–8, 10–14, AND 16–18 WOULD HAVE BEEN OBVIOUS OVER RIBARITS IN VIEW OF PANICCI

A. Overview of Ribarits

Ribarits (Ex. 1006) is titled “Drinking Device” and discloses a drinking device that includes “a drinking spout” that can be “pivoted” between an open position and a closed position. (Ex. 1006, 2). Ribarits includes a mouthpiece at the end of an elastic tube that provides fluid communication from the drink bottle, through the cap assembly, and to the user’s mouth.

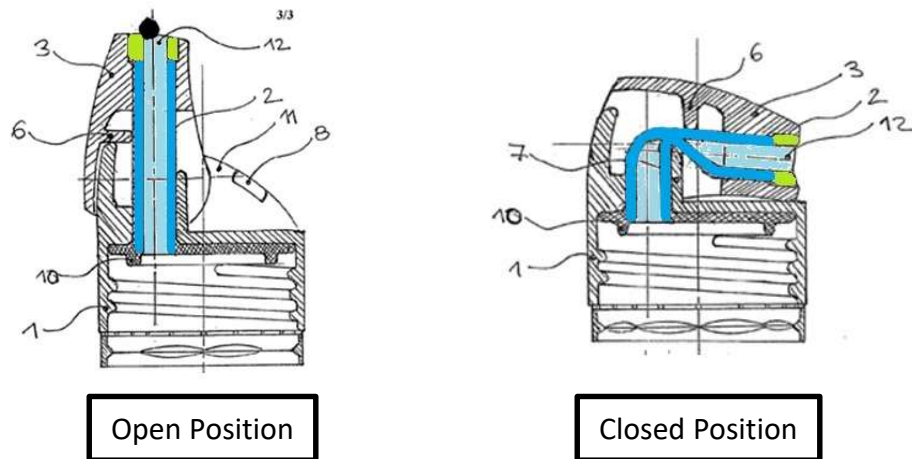


(*Id.*, Fig. 1).



(*Id.*, Fig. 2). The tube functions as an on/off valve that opens and closes based on

the pivoting of the drinking spout, as shown below:



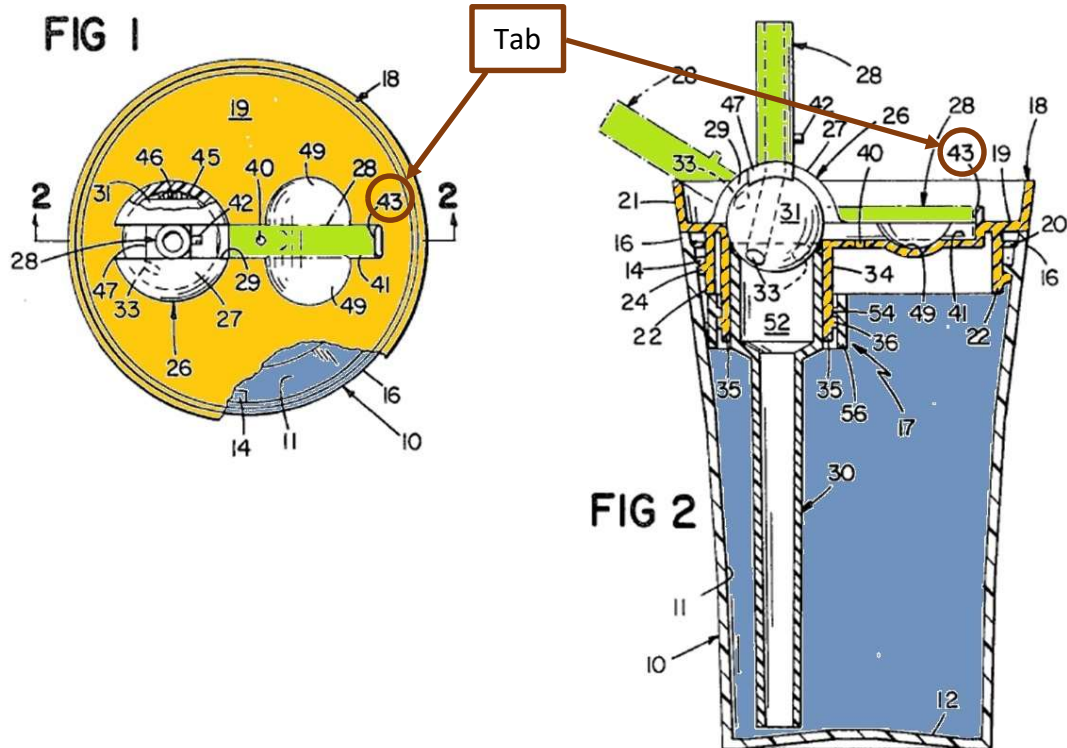
(Ex. 1006, Fig.3).²

B. Overview of Panicci

Panicci (Ex. 1007) is titled “Cup with Pivoting Straw” and discloses a “drinking cup and cover” intended to “provide a means for storing the external straw segment” in a way that minimizes “contamination of the straw or for spilling the contents of the cup[.]” (Ex. 1007, Abstract, 1:29–35).

As shown below, the upper straw (green) pivots into a storage recess in the cap assembly:

² The black dot adjacent the dispensing outlet in Figure 3 appears to be a printing error in the original published patent figure.



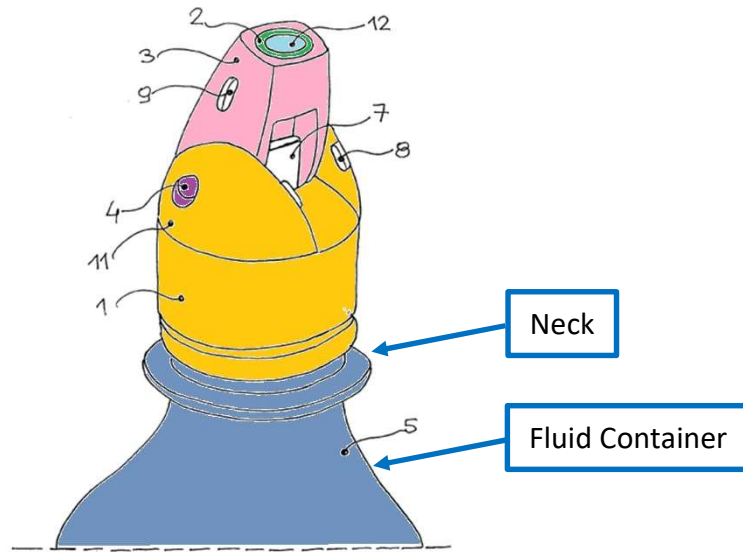
(*Id.*, Figs. 1–2). The end of the recess includes “[t]ab 43,” which is positioned to cover the opening of the straw to avoid contamination of the straw. (*Id.*, 3:45–47).

C. Claim 1

1. Preamble and Limitation 1[a]: “fluid container”

Ribarits discloses the preamble and limitation 1[a]. (Ex. 1002, ¶¶111–114).

Ribarits discloses “a drinking device” that includes a fluid container having a neck with an opening. (Ex. 1006, Abstract). Figure 1 of Ribarits shows a drink container, as item 5:

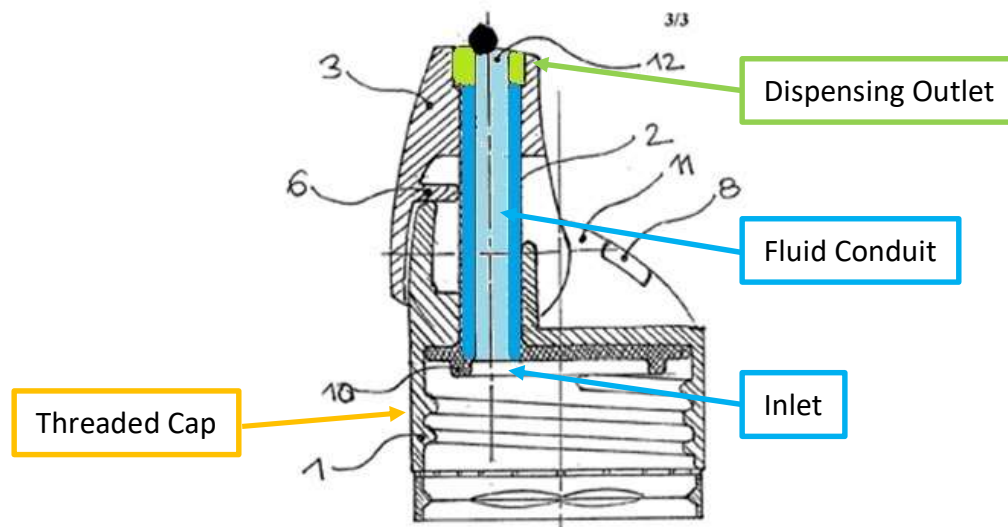


(*Id.*, Fig. 1). A POSITA would have understood that the neck portion of the bottle would have an opening. (Ex. 1002 ¶114).

2. 1[b]: Cap Assembly

Ribarits discloses limitation 1[b]. (Ex. 1002 ¶¶115–117).

Ribarits’ “closing cap” is removably coupled to the fluid container via a threaded connection. (Ex. 1006, 2–3). The cap contains an “elastic tube” that forms a fluid conduit with an inlet at the fluid container and a dispensing outlet at the mouthpiece. *Id.* at 2.

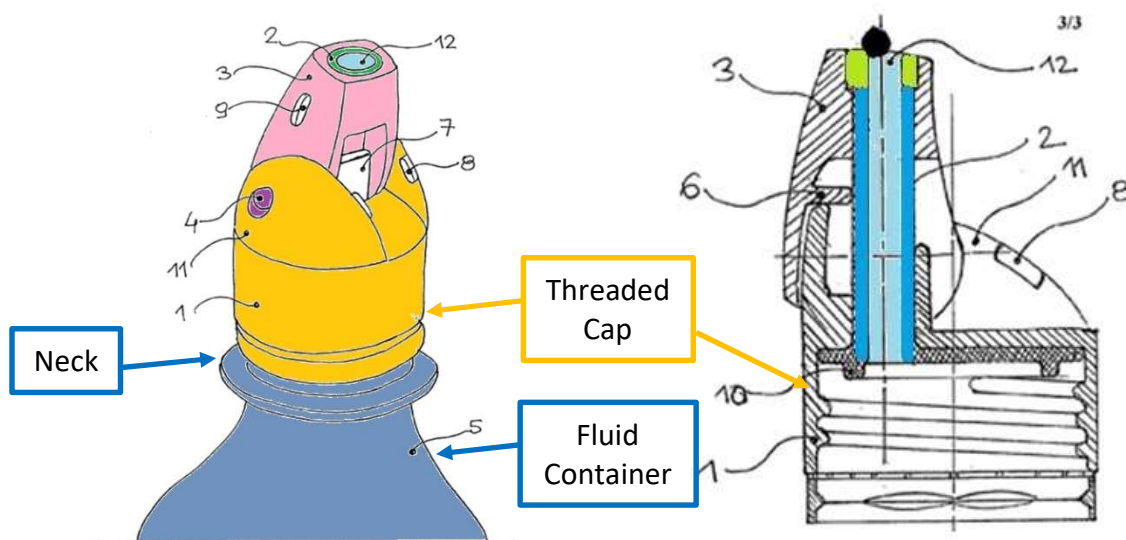


(*Id.*, Fig. 3).

a. 1[b][1]: Cap Assembly Base

Ribarits discloses limitation 1[b][1]. (Ex. 1002 ¶¶118–119).

As discussed above and shown below, Ribarits' cap assembly is removably coupled to the neck of the fluid container via a threaded connection:

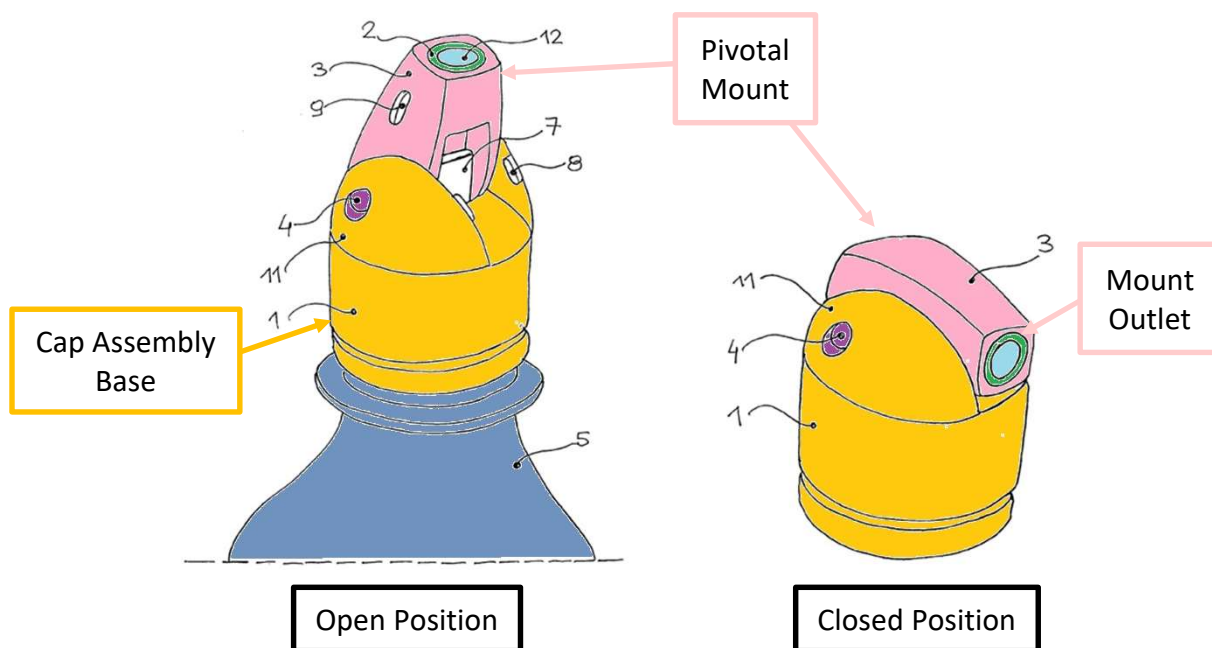


(Ex. 1006, Figs. 1, 3).

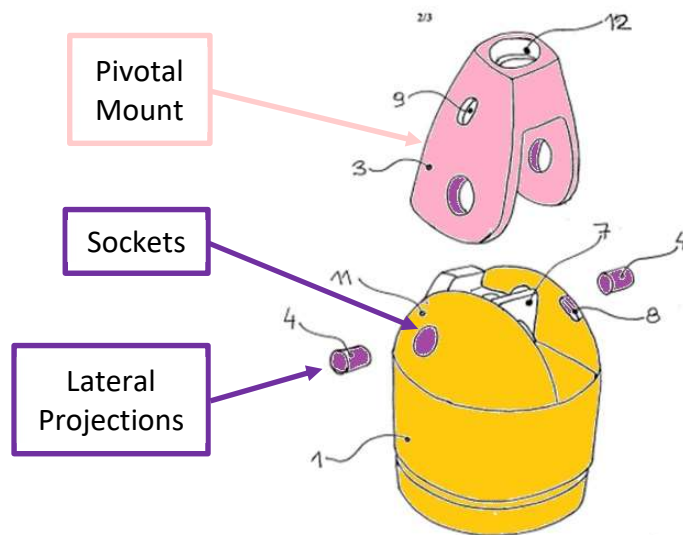
b. 1[b][2]: Pivotal Mount

Ribarits discloses limitation 1[b][2]. (Ex. 1002 ¶¶120–123).

Ribarits’ “drinking spout” is a pivotal mount that pivots relative to the cap assembly base and includes a mount outlet, as shown below:

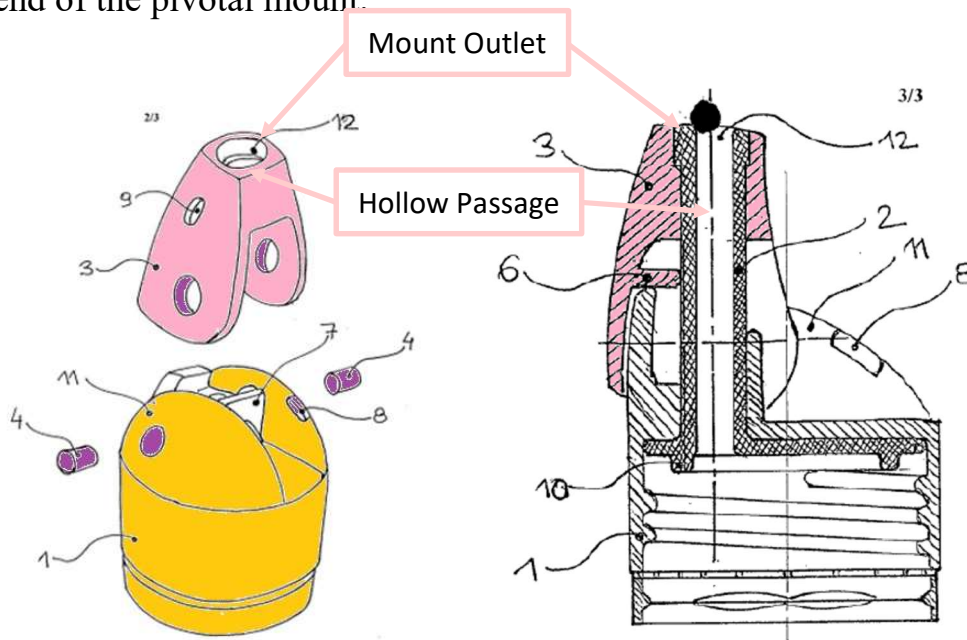


(Ex. 1006, 2, Fig. 1). As shown below, Ribarits’ drinking spout is mounted to the cap assembly by two “axial pins” that extend into a pair of sockets in the cap and engage corresponding sockets on the spout. *Id.* at 3.



(*Id.*, Fig. 2). A POSITA would understand the axial pins extending into the pair of sockets to be two joints that couple the pivotal mount to the cap assembly base. (Ex. 1002, ¶122).

Ribarits' pivotal mount defines a hollow passage with a mount outlet at the distal end of the pivotal mount:

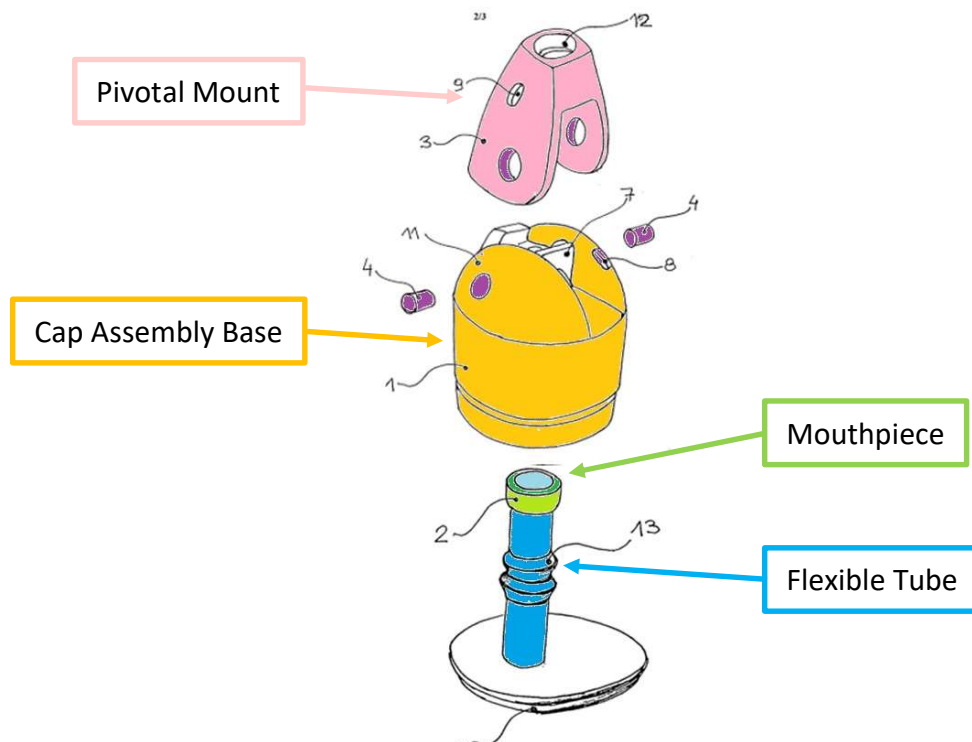


(Ex. 1006 Figs. 2–3, Ex. 1002 ¶123).

c. **1[b][3]: Mouthpiece**

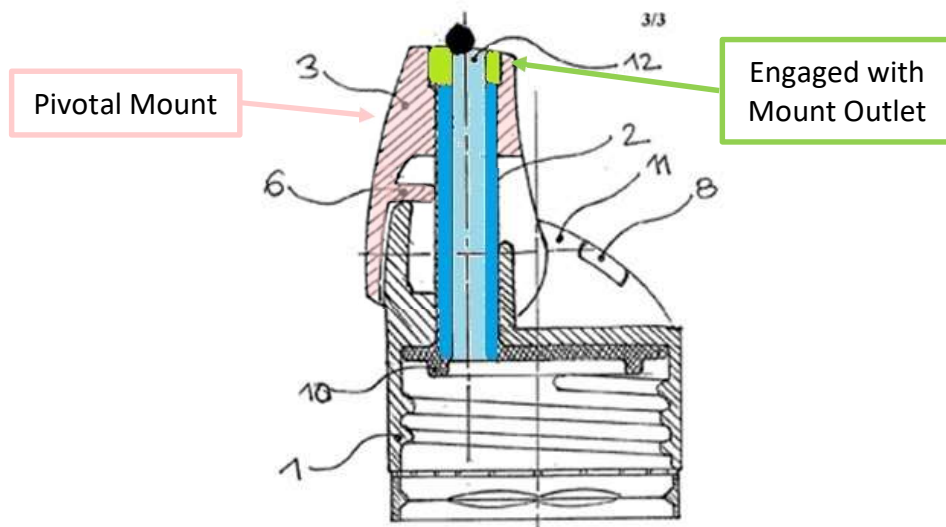
Ribarits discloses limitation 1[b][3]. (Ex. 1002, ¶¶124–127).

The mouthpiece of Ribarits is the end portion of the “tubular element of rubber or latex,” as shown below:

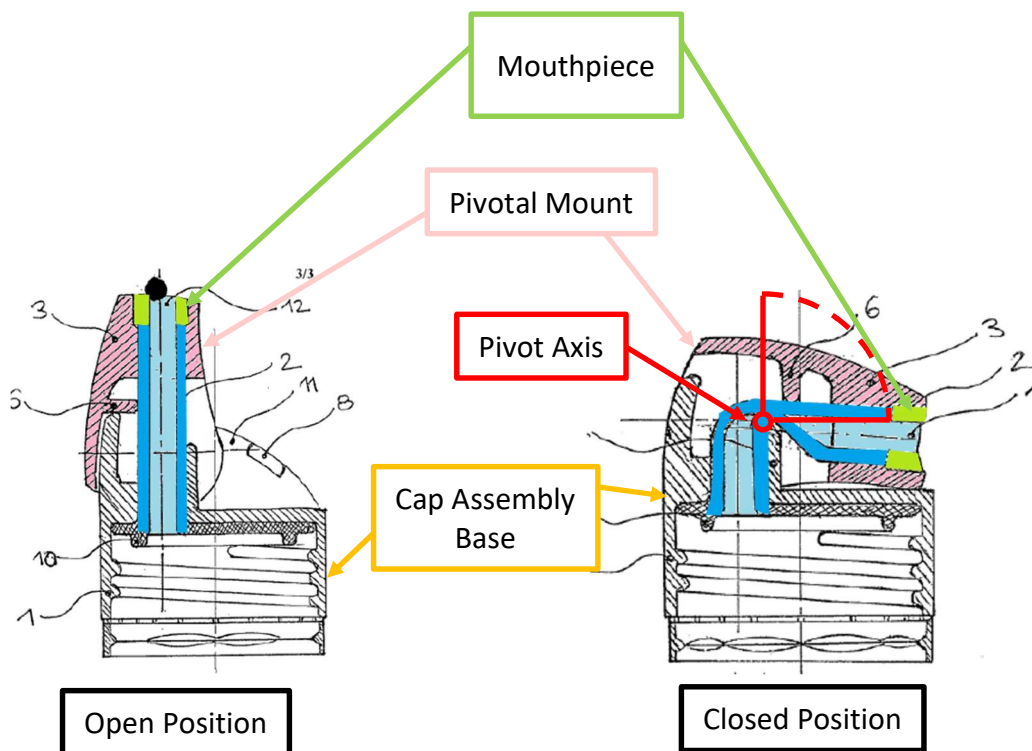


(Ex. 1006, 2, Fig. 2).

Ribarits’ tubular element is inserted through the cap assembly base and the mouthpiece portion couples with the mount outlet to hold the tubular element in place:



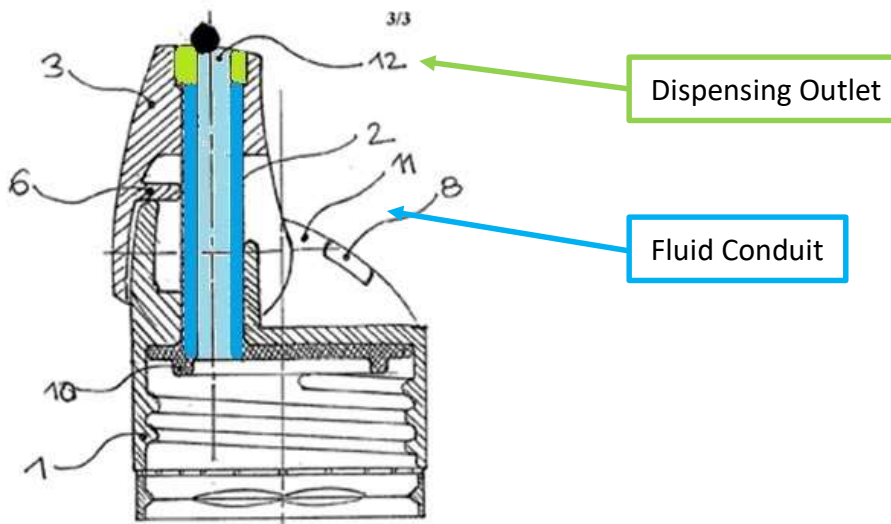
(*Id.*, Fig. 3). When the mouthpiece is coupled to the mount outlet, the mouthpiece and pivotal mount move pivotably relative to the cap assembly base:



(*Id.*, 2, Figs. 3).

i. Limitation 1[b][3][i]

Ribarits discloses limitation 1[b][3][i]. (Ex. 1002 ¶¶128–129). Ribarits' mouthpiece defines the portion of the fluid conduit that includes the dispensing outlet:

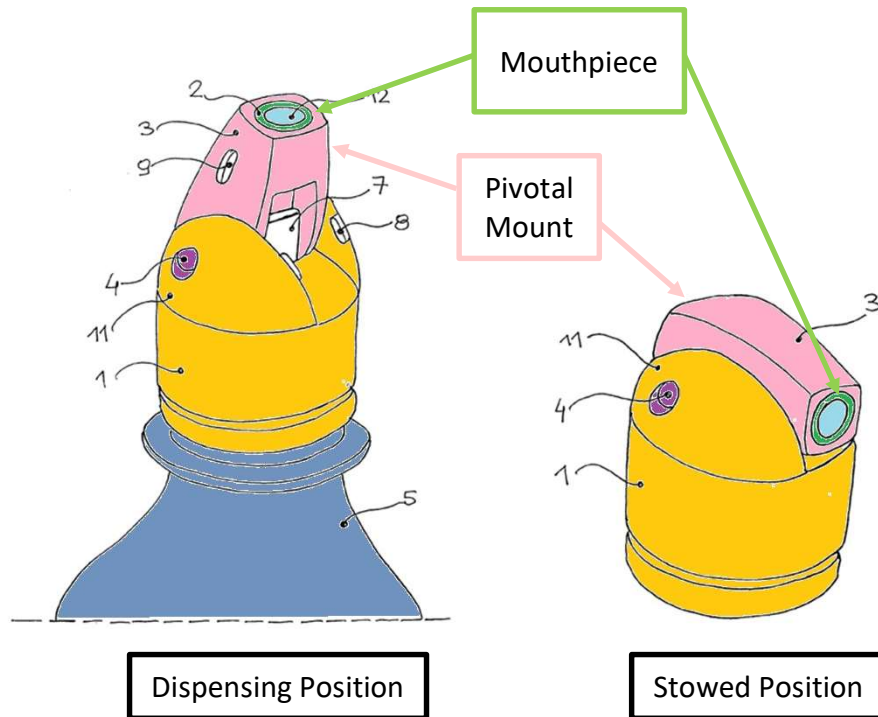


(Ex. 1006, 2, Fig. 3).

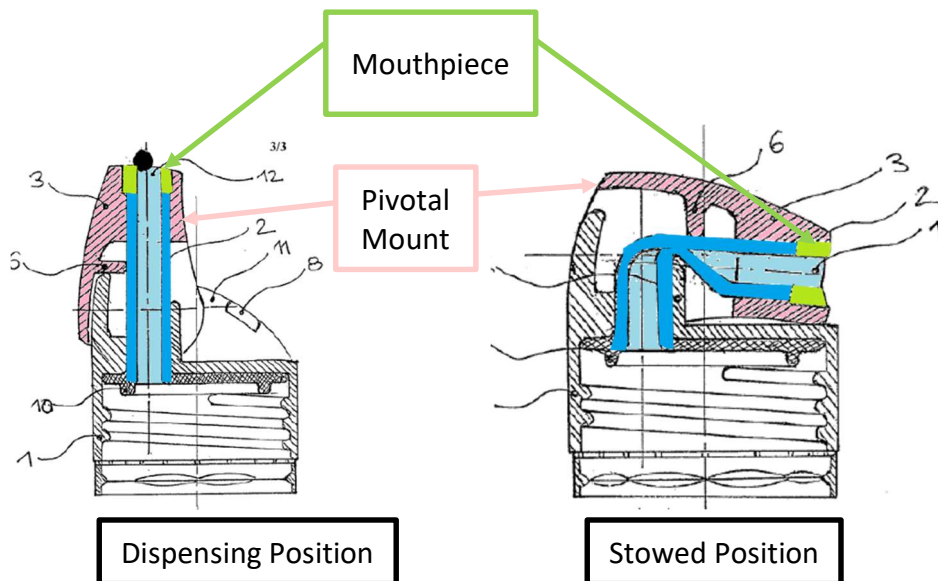
ii. Limitation 1[b][3][ii]

Ribarits discloses limitation 1[b][3][ii]. (Ex. 1002 ¶¶130–131).

Ribarits' mouthpiece and pivotal mount may be selectively pivoted between a stowed position and dispensing position, as shown below:



(Ex. 1006, 2, Fig. 1).



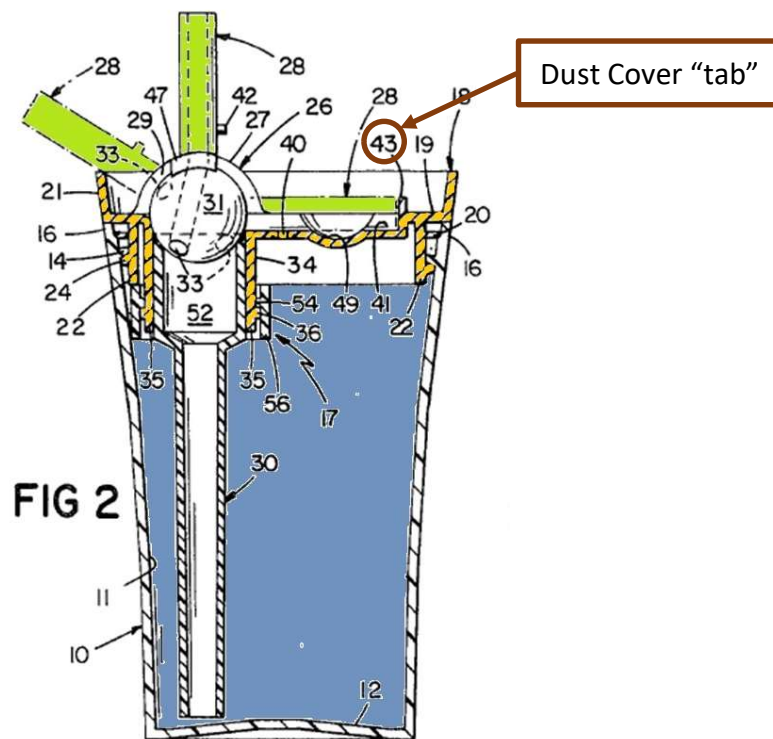
(*Id.*, 2, Fig.3).

iii. Limitation 1[b][3][iii]

Ribarits does not disclose “the mouthpiece is at least partially covered by a

dust cover when the mouthpiece and pivotal mount are in the stowed position.” However, in view of Panicci, it would have been obvious to a POSITA to modify Ribarits to include such a dust cover. (Ex. 1002, ¶¶132–142).

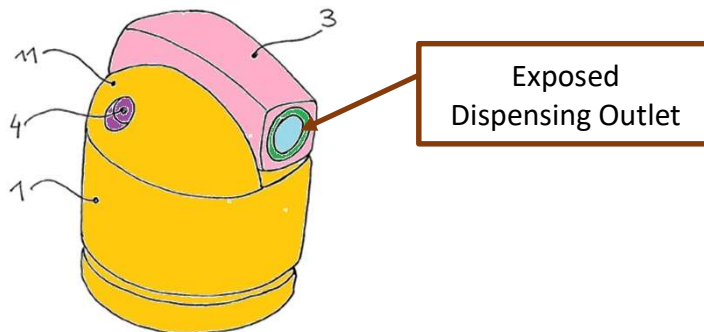
Panicci discloses a “tab 43” that serves as a dust cover to protect the exposed end of a drinking straw when pivoted to a stowed position:



(Ex. 1007, Figs. 2). A POSITA would have been motivated to modify Ribarits to add a dust cover similar to Panicci’s ‘tab,’ to prevent unwanted contamination and/or fluid leakage for several reasons. (Ex. 1002, ¶¶134).

First, at the time of invention, the use of dust covers was a well-known technique in the design of drink container closures with mouthpieces. (Ex. 1002,

¶135). Such a dust cover would be particularly suited to Ribarits because, as shown below, Ribarits’ dispensing outlet remains exposed when in the stowed position:



(Ex. 1006, Fig. 1; Ex. 1002, ¶136).

A POSITA would have been motivated to add a dust cover to protect Ribarits’ dispensing outlet to improve hygiene and reduce the risk of accidental leakage from the spout. (Ex. 1002, ¶137). Panicci confirms this motivation, noting that one of the objects of its invention is “to provide a means for storing the external straw segment in a compact configuration that *minimizes the opportunity for contamination of the straw or for spilling the contents of the cup ...*.” (Ex. 1007, 1:29–35 (emphasis added); Ex. 1002, ¶138).

A POSITA would have understood such a modification would be nothing more than the application of a known technique (i.e. the use of dust covers) to improve a known device (i.e. the Ribarits cap assembly) to yield predictable results (i.e. protection of a dispensing outlet from unwanted contamination or

leakage). (Ex. 1002, ¶139). Likewise, a POSITA would have understood the modification would constitute nothing more than the addition of a known prior art element (i.e. a dust cover) according to its established function (i.e. to cover an exposed surface) to obtain a predictable result (i.e. the protection of a dispensing outlet from unwanted contamination or leakage). (Ex. 1002, ¶140).

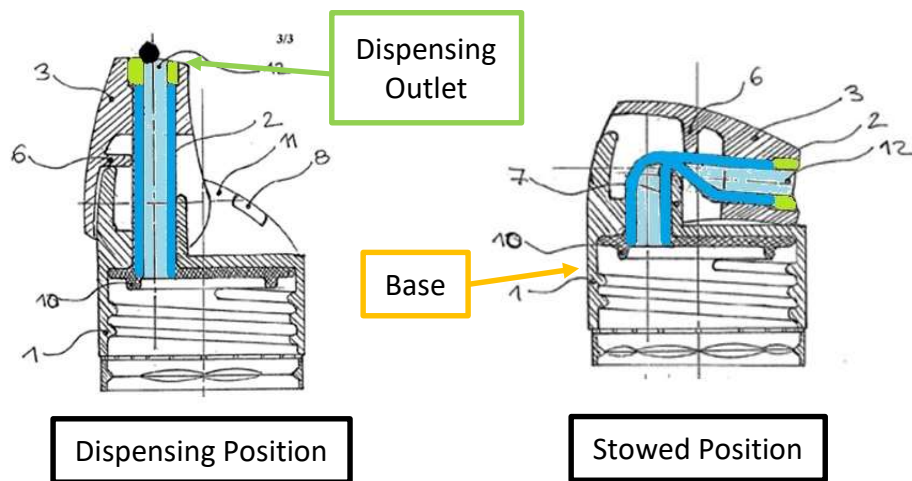
Finally, in view of the numerous prior art examples known at the time of the invention, a POSITA would have had a reasonable expectation of success in implementing a dust cover to improve the Ribarits design. (Ex. 1002, ¶141). Indeed, adding a dust cover to protect the exposed end of Ribarits dispensing outlet in the stowed configuration would not have required any rearrangement or modification of any of the other components of the Ribarits cap assembly. (*Id.*)

Accordingly, limitation 1[b][3][iii] is obvious over Ribarits, in view of Panicci. (Ex. 1002, ¶142).

iv. Limitation 1[b][3][iv]

Ribarits discloses limitation 1[b][3][iv]. (Ex. 1002 ¶¶143–144).

As discussed above, Ribarits’ drinking spout pivots between a stowed position and a dispensing position:

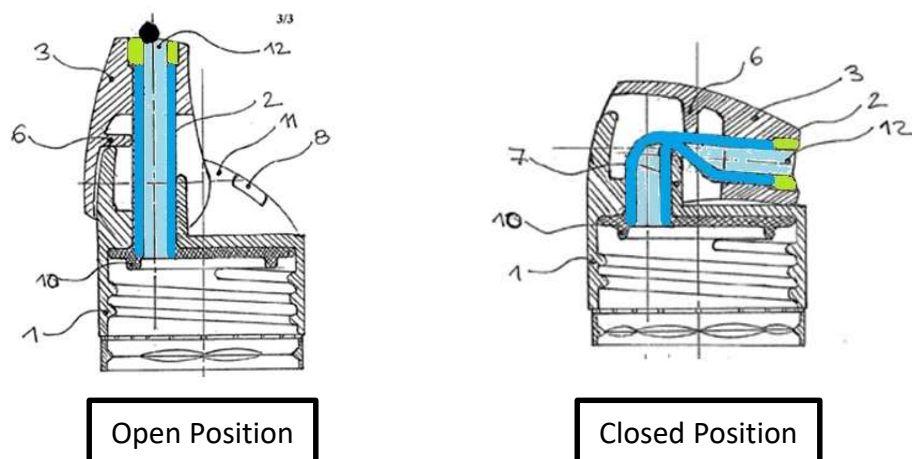


(Ex. 1006, 2, Fig. 3). As shown above, in the dispensing position, the dispensing outlet is positioned further away from the cap assembly base than in the stowed position.

d. 1[b][4]: On/Off Valve

Ribarits discloses limitation 1[b][4]. (Ex. 1002 ¶¶145–147).

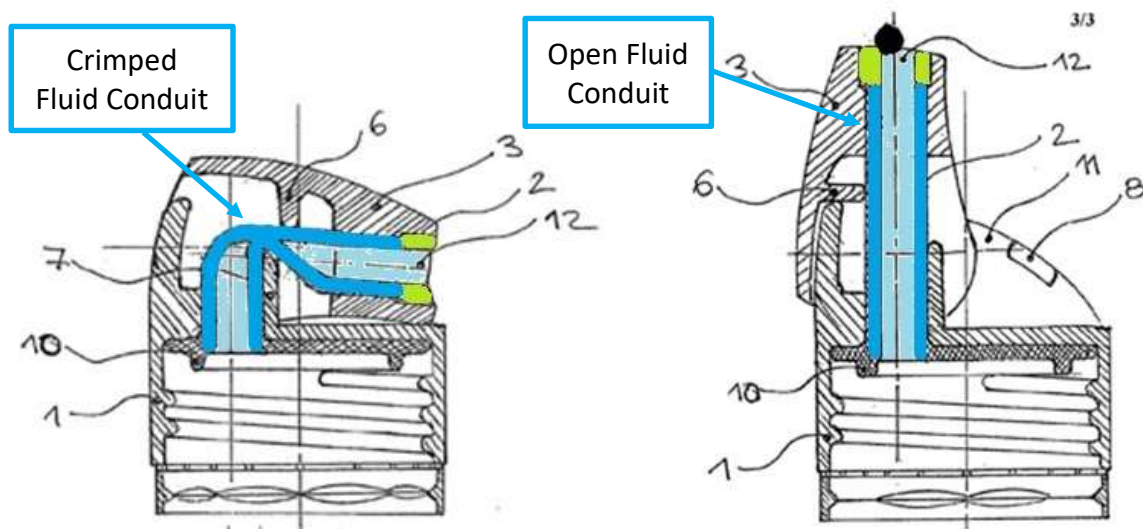
Ribarits’ “sealed tubular element” is an on/off valve that opens and closes based on the pivoting of the drinking spout, as shown below:



(Ex. 1006, 2, Fig. 3). In the closed position, the valve obstructs fluid flow through the fluid conduit, and in the open configuration, the valve permits fluid to flow through the fluid conduit from the inlet at the cap assembly base to the dispensing outlet at the opposite end. (*Id.*; Ex. 1002, ¶147).

i. Limitation 1[b][4][i]–[iii]

Ribarits further discloses limitations 1[b][4][i]–[iii]. (Ex. 1002 ¶¶148–152). Ribarits’ “tubular element 2” is a flexible tube that defines a fluid conduit from the inlet to the dispensing outlet:



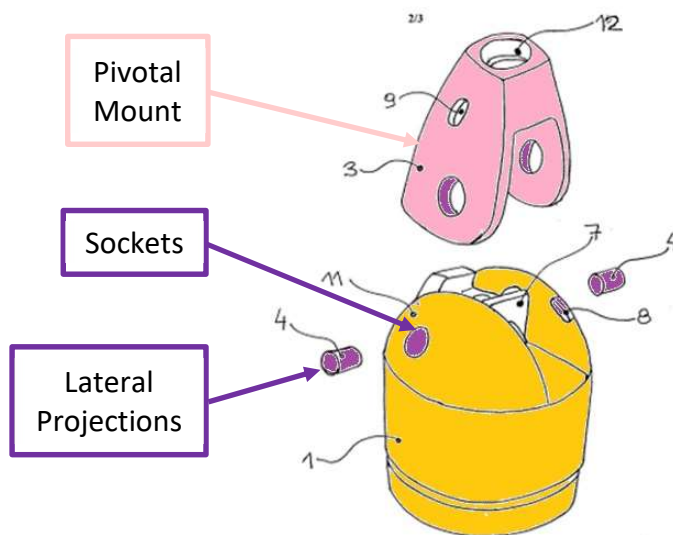
(Ex. 1006, 3, Fig. 3). In the closed configuration, the flexible tube crimps to obstruct fluid flow, while in the open configuration, the flexible tube straightens to allow fluid to flow. (*Id.* at 2).

For the reasons discussed above, each limitation of claim 1 is either

disclosed by Ribarits, or obvious over Ribarits in view of Panicci. (Ex. 1002 ¶152).

D. Claim 2

Ribarits also discloses the additional limitation of claim 2. (Ex. 1002, ¶¶153–160). As discussed above and shown below, Ribarits’ drinking spout is mounted to the cap assembly by two “axial pins” that extend into a pair of sockets in the cap and engage corresponding sockets on the spout. Ex. 1006 at 3.



(*Id.*, Fig. 2). A POSITA would understand the axial pins to constitute lateral projections extending from Ribarits’ pivotal mount when the device is assembled. (Ex. 1002, ¶155).

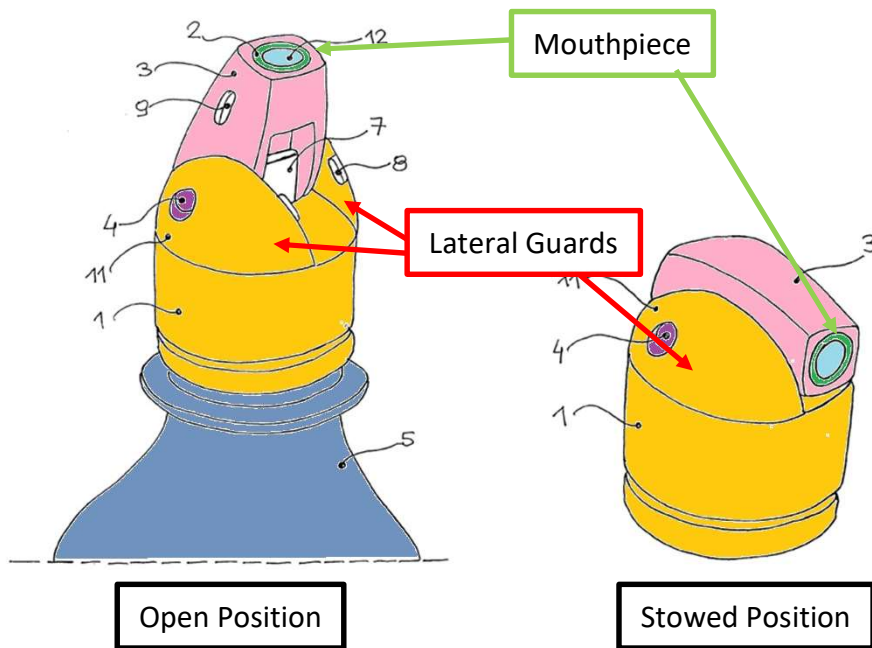
To the extent a POSITA would not have understood Ribarits’ “axial pins” to constitute a “pair of lateral projections” extending from the pivotal mount, it

would have been obvious to include this feature in view of the knowledge of a POSITA. (Ex. 1002, ¶156). That is because the concept of using projections and sockets to create a pivoting hinge was well-known at the time of invention. (*Id.*, ¶157). The prior art includes numerous examples of such pivotable connections in the context of reusable beverage containers like Ribarits. Nakajima, for example, includes two pivoting hinge joints comprised of lateral projections rotatably fitted into corresponding sockets. (*Id.*) In view of this and similar prior art devices, a POSITA would have readily understood the desirability of substituting the axial pins with lateral projections formed on the pivotal mount and would have had a reasonable expectation of success in doing so. (*Id.*, ¶¶157–159).

E. Claim 4

Ribarits in view of Panicci also discloses the additional limitation of claim 4. (Ex. 1002, ¶¶161–165).

Ribarits' cap assembly includes a pair of lateral guards on opposed sides of the mouthpiece, as shown below:



(Ex. 1006, Fig. 1). When the pivotal mount is in the stowed position the pair of lateral guards extend on opposite sides of the pivotal mount and mouthpiece. (Ex. 1002, ¶163).

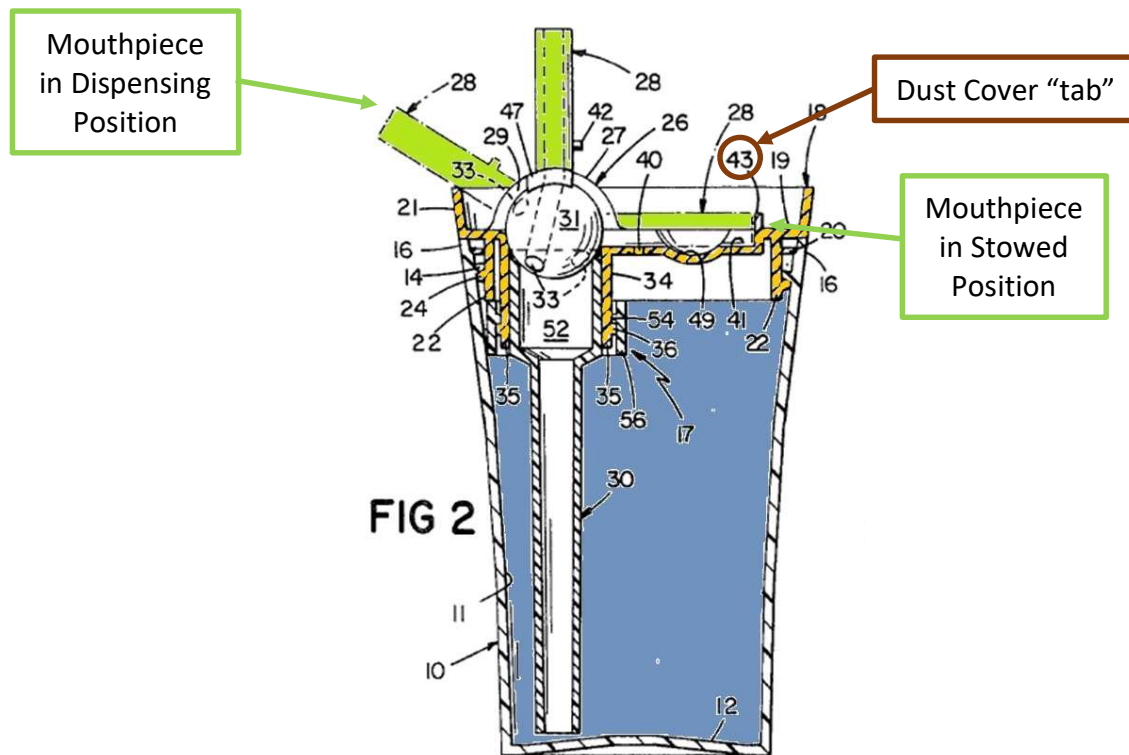
Ribarits does not disclose “[a] dust cover extend[ing] between the pair of lateral guards and is positioned to protect the dispensing outlet[.]” However, as discussed above, in view of Panicci, it would have been obvious to a POSITA to modify Ribarits to include such a dust cover. (Ex. 1002, ¶164).

Accordingly, claim 4 is obvious over Ribarits, in view of Panicci. (Ex. 1002, ¶165).

F. Claim 5

Ribarits in view of Panicci also discloses the additional limitation of claim 5. (Ex. 1002, ¶¶166–170).

Panicci’s mouthpiece (i.e. “upper straw 28”) pivots away from the dust cover (i.e. “tab 43”) when the straw moves from the stowed position to the dispensing position.



(Ex. 1007, Fig. 2).

Likewise, the mouthpiece of Ribarits pivots away from the cap assembly when moving from the stowed position to the dispensing position. Thus, in modifying Ribarits to include Panicci’s dust cover, a POSITA would have

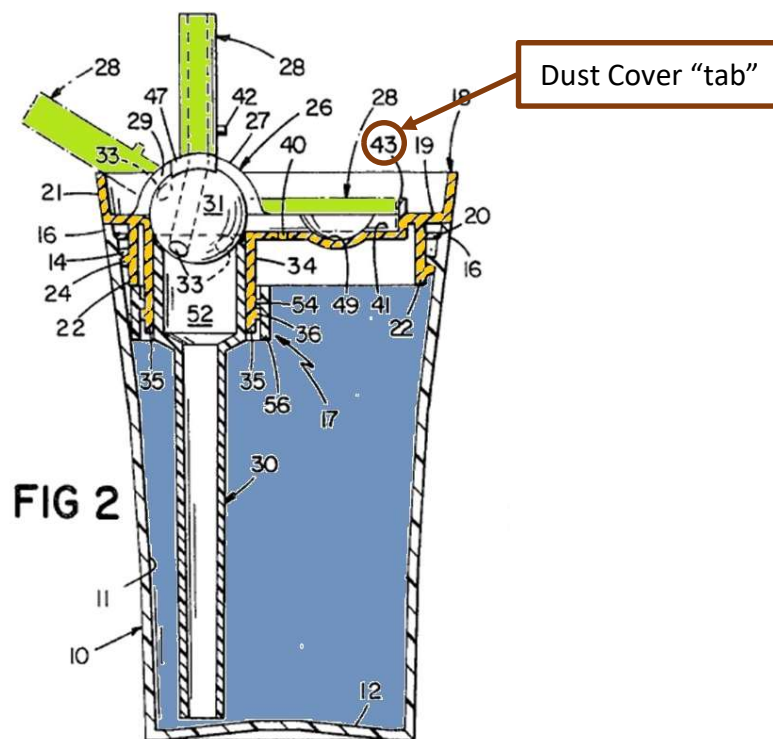
understood Ribarits' mouthpiece would pivot away from the dust cover when moving from the stowed position to the dispensing position. (Ex. 1002, ¶171).

Accordingly, claim 5 is obvious over Ribarits, in view of Panicci. (Ex. 1002, ¶169).

G. Claim 6

Ribarits in view of Panicci also discloses the additional limitation of claim 6. (Ex. 1002, ¶¶171–175).

Panicci's dust cover projects above an upper surface of the base of the cap assembly:



(Ex. 1007, Fig. 2).

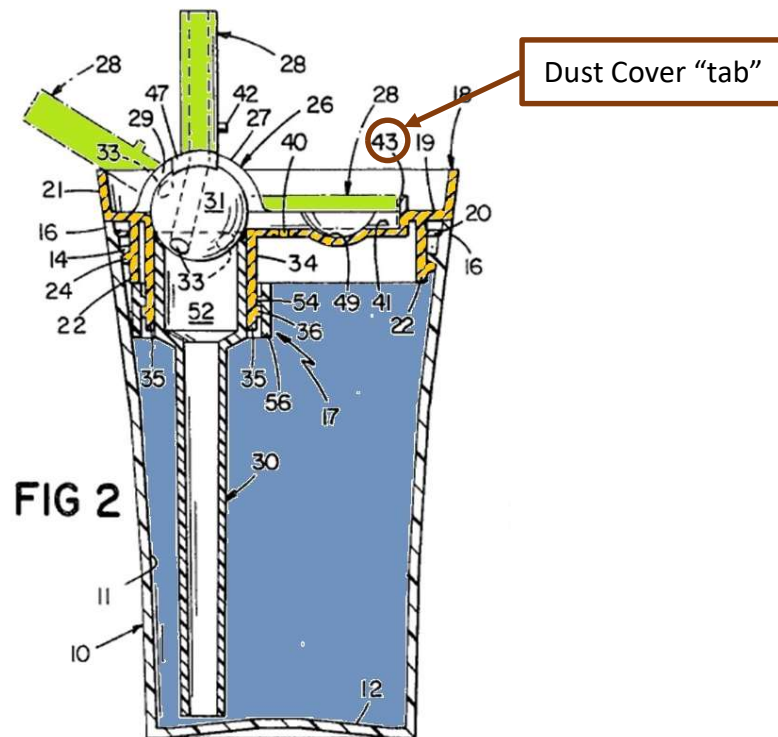
Accordingly, claim 6 is obvious over Ribarits, in view of Panicci. (Ex. 1002, ¶175).

H. Claim 7

Independent claim 7 contains all the limitations of independent claim 1, and one additional limitation: “wherein the dust cover remains stationary when the mouthpiece and the pivotal mount are selectively pivoted between the stowed position and the dispensing position.” (Ex. 1001, 20:55–58).

For the same reasons as discussed in claim 1 above, Ribarits in view of Panicci renders obvious the limitations of claim 1. As discussed below, Panicci discloses the additional limitation of claim 7. Thus for the same reasons discussed in connection with claim 1 above, claim 7 would have been obvious over Ribarits in view of Panicci. (Ex. 1002, ¶176–179).

Panicci discloses a “[t]ab 43” that serves as a dust cover to protect the exposed end of a drinking straw when pivoted to a stowed position:



(Ex. 1007, Fig. 2, 3:45–46). Panicci’s “tab” remains stationary at the position identified above, regardless of the position of the mouthpiece. (Ex. 1002, ¶178).

For the same reasons discussed above in claim 1, a POSITA would have been motivated to modify Ribarits to add a dust cover similar to Panicci’s “tab.” Thus, claim 7 is obvious of Ribarits, in view of Panicci. (Ex. 1002, ¶179).

I. Claims 8, 10–12

Claims 8 and 10–12 depend from claim 7 with the same additional limitations as claims 2 and 4–6, respectively. Thus, for the same reasons discussed in claims 2 and 4–6 above, claims 8 and 10–12 would have been obvious over Ribarits in view of Panicci. (Ex. 1002, ¶180–190).

J. Claim 13

Claim 13 contains all the limitations of claim 7 but discloses a “dispensing guard” instead of a “dust cover.” (Ex. 1001, 22:9–16). The specification of the ’250 patent discloses the dispensing guard is adapted to “protect the dispensing face of the bite-actuated mouthpiece when the mouthpiece is in [the] stowed configuration.” (Ex. 1001, 17:4–6).

For the same reasons as discussed in claim 7 above, Ribarits in view of Panicci renders obvious the limitations of claim 7. As discussed below, Panicci discloses the dispensing guard of claim 13. Thus for the same reasons discussed in connection with claim 7 above, claim 13 would have been obvious over Ribarits in view of Panicci. (Ex. 1002, ¶191–193).

Panicci discloses a “tab 43” that serves as a dispensing guard to protect the exposed end of a drinking straw when pivoted to a stowed position. (Ex. 1007, 3:45–46). For the same reasons discussed above in claim 1, a POSITA would have been motivated to modify Ribarits to add a dispensing guard similar to Panicci’s “tab.” Thus, claim 13 is obvious over Ribarits, in view of Panicci. (Ex. 1002, ¶193).

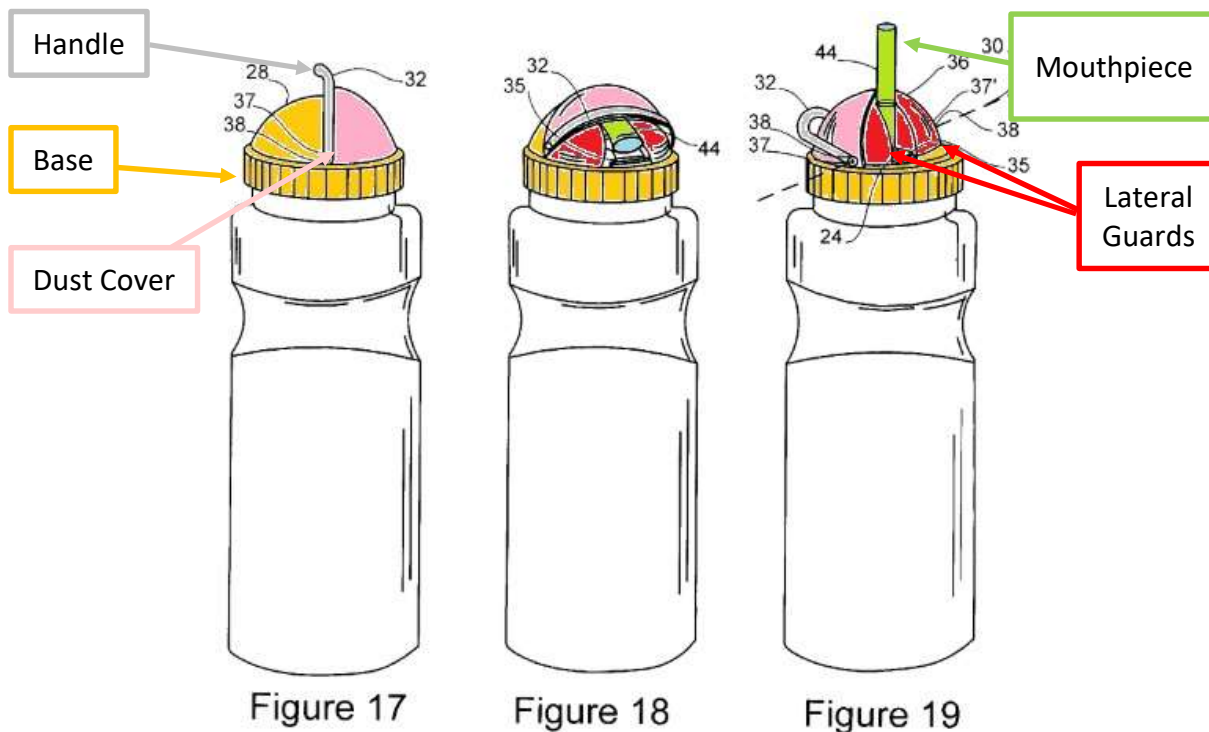
K. Claims 14, 16–18

Claims 14 and 16–18 depend from claim 13 with the same additional limitations as claims 2 and 4–6. Thus, for the same reasons discussed in claims 2 and 4–6 above, claims 14 and 16–18 would have been obvious over Ribarits in view of Panicci. (Ex. 1002, ¶194–205).

X. GROUND 3: CLAIMS 3, 9, AND 15 WOULD HAVE BEEN OBVIOUS OVER RIBARITS IN VIEW OF PANICCI AND HUGHES

A. Overview of Hughes

Hughes (Ex. 1008) is titled “Automatic Valved Bottle Cap for use with Liquid Containers” and discloses a removable cap assembly with a pivoting mouthpiece, dust cover, lateral guards, and a carrying handle:

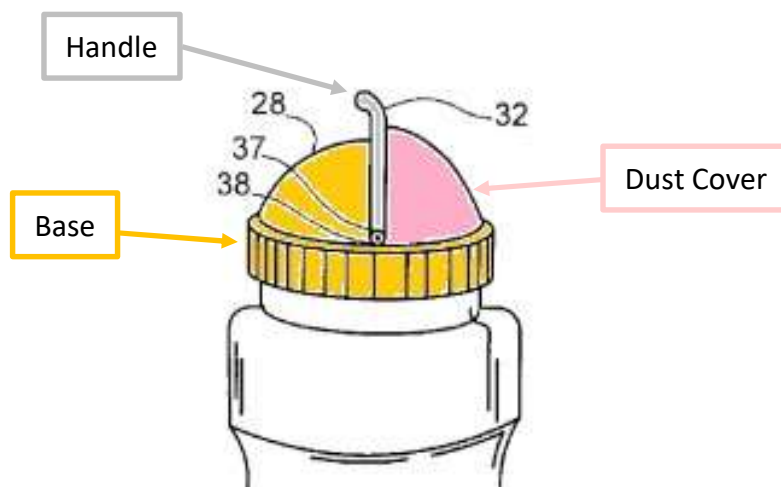


(Ex. 1008, Figs. 17–19). Hughes’ mouthpiece is comprised of a flexible “drinking hose” that collapses when pivoted into a stowed configuration. (*Id.* at 9:45–53). In the stowed configuration, the mouthpiece is secured in a channel formed by a pair of lateral guards, which is, in turn, covered by a domed dust cover. (*Id.*)

B. Claim 3

Claim 3 depends from claim 2, and further recites: “wherein the cap assembly base further comprises a handle that extends from the cap assembly base, and further wherein the handle is secured to the cap assembly base in a position that obstructs removal of the pair of lateral projections from the pair of sockets.” These additional limitations would have been obvious over Ribarits as modified by Panicci, in further view of Hughes. (Ex. 1002, ¶¶206–212).

Hughes discloses a handle that extends from the cap assembly base:



(Ex. 1008, Fig. 17). The handle in Hughes is secured to the cap assembly via a pair of axle pins that engage the cap assembly and allow for pivotal movement of the handle and cover. (*Id.*, 4:63–5:4).

It would have been obvious to a POSITA to add the handle of Hughes to the cap assembly of Ribarits to achieve the claimed invention for several reasons. (Ex. 1002, ¶209).

First, the use of carrying handles for fluid containers was commonplace at the time of the invention. (Ex. 1002, ¶209). Basic reusable water bottles, such as in Hughes, routinely included handles to facilitate carrying. (*Id.*) Accordingly, a POSITA would have recognized the desirability of adding a handle to the Ribarits cap assembly. (*Id.*) Doing so would have constituted nothing more than a routine design choice for a POSITA. (*Id.*)

Moreover, a POSITA would have been motivated to add Hughes' handle to the Ribarits cap assembly for at least two reasons. (Ex. 1002, ¶210). First, as noted above, handles were well-known to facilitate carrying of a water bottle. Second, it was equally well-known to a POSITA that for liquid containers intended to hold cold beverages, the use of a handle would minimize the transfer of heat from the user's hand, and thereby ensure the contents of the container remained colder for longer. (*Id.*)

In adding the Hughes handle to the Ribarits cap assembly, a POSITA would have been motivated to secure the handle via the existing sockets in Ribarits' cap assembly base because doing so would not require any modification to the Ribarits design. (Ex. 1002, ¶211). In this configuration, as in Hughes, the handle could optionally be rotated into a carrying and a retracted position. (*Id.*) Because such a configuration would cover the sockets in the Ribarits cap assembly base, it would have the added benefit of obstructing removal of the pivotal mount from the cap assembly base at the point of connection between the lateral projections and sockets. (*Id.*)

Likewise, a POSITA would have had a reasonable expectation of success in modifying Ribarits to include Hughes' handle because, as noted above, it could be accomplished in the same manner as in the Hughes device (i.e. by attaching the handle via sockets in the cap assembly base) and doing so would not require any change the design of the Ribarits cap assembly base. (*Id.*)

Accordingly, claim 3 would have been obvious over Ribarits, in view of Hughes. (Ex. 1002, ¶212).

C. Claims 9–15

Claims 9 and 15 depends from claims 7 and 13, respectively, with the same additional limitation as claim 3. Thus, for the same reasons discussed in claim 3

above, claims 9 and 15 would have been obvious over Ribarits in view of Panicci, and further in view of Hughes. (Ex. 1002, ¶¶213–218).

XI. SECONDARY CONSIDERATIONS

Secondary considerations should be considered but do not control the obviousness conclusion. *Newell Cos., Inc. v. Kenney Mfg. Co.*, 864 F.2d 757, 768 (Fed. Cir. 1988). Where, as here, a strong *prima facie* case of obviousness has been made, even relevant secondary considerations supported by substantial evidence may not dislodge an obviousness conclusion. *Leapfrog Enters. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1162 (Fed. Cir. 2007). Petitioner is aware of no evidence supporting a claim for secondary considerations.

XII. DISCRETIONARY DENIAL UNDER §314(A) IS NOT APPROPRIATE

The Board should decline to exercise its discretion under §314(a). Efficiency, fairness, and the merits support institution despite the existence of co-pending litigation. *Apple v. Fintiv*, IPR2020-00019, Paper 11 (P.T.A.B. Mar. 20, 2020) (“*Fintiv*”). Each *Fintiv* factor is discussed below.

A. Factor 1: Potential Stay

When this IPR is instituted, Petitioner will move to stay the district court action as it pertains to the '250 patent pending resolution of this IPR. Thus, this factor weighs against discretionary denial.

B. Factor 2: Proximity of Trial to FWD

Trial in the district court action is scheduled for September 2025. (Ex. 1012). As the Office has recognized, district court trial dates are often subject to change and other factors including median time-to-trial for civil actions are relevant in this analysis. *See* Director Memorandum, *Interim Procedure for Discretionary Denials in AIA-Post Grant Proceedings With Parallel District Court Litigation*, U.S. PATENT AND TRADEMARK OFFICE (June 21, 2022) at 8–9. Applying the median time-to-trial in the Northern District of California of 48.9 months (Federal Court Management Statistics, June 2024, https://www.uscourts.gov/sites/default/files/data_tables/fcms_na_distprofile0630.2024.pdf) results in a trial date around October 2027, 18 months after the projected deadline of a final written decision in this action. Thus, this factor weighs against discretionary denial.

C. Factor 3: Investment in Parallel Proceeding

Petitioner filed its complaint on August 21, 2023, and PO filed its initial counterclaim alleging infringement of several patents November 8, 2023. On February 16, 2024, PO amended its counterclaims to include the '250 Patent. Fact discovery in the district court action remains pending. The district court has not yet construed claim terms. No expert reports have been served.

Fact discovery does not close until December 2024, and even after that, much work would still remain, including expert reports, expert discovery, dispositive motions, pretrial motions, and trial. Ex. 1012. The “remaining investment” outweighs any investments made. *Samsung Elecs. Am. Inc. v. Snik LLC*, IPR2020-01428, Paper 10 at 11 (P.T.A.B. Mar. 9, 2021); *Huawei Techs. Co. v. WSOU Invs., LLC*, IPR2021-00226, Paper 10 at 13–14 (P.T.A.B. June 10, 2021). Thus, this factor weighs against discretionary denial.

D. Factor 4: Overlapping Issues

Petitioner’s district court invalidity contentions contain various prior-art references not at issue in the IPR. Moreover, if this IPR is instituted and the district court action is stayed as to the '250 patent, Petitioner could not pursue in the action any invalidity ground raised or that could have been reasonably raised

in this IPR. *Cal. Inst. of Tech. v. Broadcom Ltd.*, 25 F.4th 976 (Fed. Cir. 2022).

Thus, little concern of duplicative efforts or conflicting decisions exists.

Furthermore, Petitioner stipulates that, if this IPR is instituted, it will not pursue in the district court proceeding the same grounds of invalidity raised in this Petition or any grounds that it could have reasonably been raised in this Petition. This factor weighs against discretionary denial.

E. Factor 5: The Parties

While the same parties are involved here as in the district court, this factor is not determinative. The Board repeatedly declines to exercise its discretion to deny institution under such circumstances. *See, e.g., NanoCollect Biomedical, Inc. v. Cytonome/ST, LLC*, IPR2020-00551, Paper 19 at 2–25 (P.T.A.B. Aug. 27, 2020); *VMware, Inc. v. Intellectual Ventures I LLC*, No. IPR2020-00470, Paper 13 at 20, 22 (P.T.A.B. Aug. 18, 2020); *Samsung Electronics Co., Ltd. v. Dynamics, Inc.*, IPR2020-00502, Paper 34 at 13–14 (P.T.A.B. Aug. 12, 2020).

F. Factor 6: Other Circumstances

This Petition’s merits are particularly strong, which favors institution. *Fintiv*, IPR2020-00019, Paper 11 at 18. Moreover, denying institution would negate Congress’s intent in providing a 1-year period to file petitions.

Accordingly, the *Fintiv* analysis favors institution.

XIII. DISCRETIONARY DENIAL UNDER §325(D)
IS NOT APPROPRIATE

This Petition presents a strong case of unpatentability and rests on prior art and arguments not previously presented to the PTO, and discretionary denial under §325(d) is thus not warranted.

In a §325(d) analysis, the Board considers several factors delineated in *Becton, Dickinson & Co. v. B. Braun Melsungen AG*, IPR2017-01586, Paper 8 (P.T.A.B. Dec. 15, 2017). Factors (a), (b), and (d) relate to whether the art or arguments are substantially the same as those previously presented, while factors (c), (e), and (f) relate to whether the petition has demonstrated a material error by the PTO during prior consideration. *Advanced Bionics, LLC v. Med-EL Elektromedizinische Geräte GmbH*, IPR2019-01469, Paper 6 at 10 (P.T.A.B. Feb. 13, 2020). The Board considers the second set of factors only if the first set of factors weighs in favor of exercising discretion. *Id.* at 8.

A. Factors (a), (b), and (d)

The two primary references relied on in this Petition (Nakajima and Ribarits), which are applied in the asserted grounds covering all challenged claims, were not submitted to the PTO and have not previously been considered. *See* (Ex. 1001 at 1–2). The remaining reference, Panicci, was submitted by PO in an IDS but was not applied by the Examiner. Thus, any arguments relating to this

reference likewise has not been considered by the PTO and its prior submission to the PTO does not weigh in favor of exercising discretion. *See (id.)*; *Cisco Sys., Inc. v. NetSocket, Inc.*, IPR2023-00607, Paper 11 at 22 (P.T.A.B. Sept. 26, 2023).

Because all of the grounds, covering all challenged claims, apply art that was not previously presented to the PTO, and because each ground includes arguments not previously considered by the PTO, the Board should not exercise its discretion to deny the Petition under §325(d). *See, e.g., Samsung Elecs. Co., Ltd. v. Collect, LLC*, IPR2020-00471, Paper 15 at 9–17 (P.T.A.B. Aug. 18, 2020) (declining to exercise discretion where petition relies on art not before the PTO in a majority of asserted grounds); *Brunswick Corp. v. Volvo Penta of the Ams., LLC*, IPR2020-01512, Paper 15 at 16–21 (P.T.A.B. Mar. 11, 2021) (declining to exercise discretion where petition includes grounds covering all challenged claims that do not contain cumulative arguments).

B. Factors (c), (e), and (f)

As discussed above, none of the art relied upon in this Petition was substantively evaluated during examination. Accordingly, there is no overlap between discussion of the references in this Petition and the arguments presented in prior examination. Because the references as applied in this Petition present a strong case for unpatentability, the Examiner clearly and materially erred in not

applying them. Accordingly, these factors weigh strongly against exercising discretion. *See, e.g., Fusion Orthopedics, LLC v. Extremity Med., LLC*, IPR2023-00894, Paper 15 at 34–35 (P.T.A.B. Nov. 17, 2023).

For the above reasons, the Board should not exercise discretion under §325(d).

XIV. CONCLUSION

Petitioner respectfully requests cancellation of the challenged claims for the reasons described above.

Dated: November 5, 2024 By: /Ali S. Razai/
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Joseph F. Jennings (Reg. No. 40,664)
Jared Bunker (Reg. No. 58,474)
Cheryl Burgess (Reg. No. 55,030)
KNOBBE MARTENS OLSON & BEAR, LLP

CERTIFICATE OF COMPLIANCE

Pursuant to 37 C.F.R. §42.24(d), the undersigned certifies that the foregoing **PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 11,851,250**, exclusive of the parts exempted as provided in 37 C.F.R. §42.24(a), contains 8,438 words and therefore complies with the type-volume limitations of 37 C.F.R. §42.24(a).

Dated: November 5, 2024 By: /Ali S. Razai/

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KNOBBE MARTENS OLSON & BEAR, LLP

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on the date below a copy of this **PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 11,851,250** **PETITIONER’S POWER OF ATTORNEY, AND EXHIBITS 1001 – 1012** were served by Priority Mail Express on the Patent Owner at the correspondence address of record for the subject patent as follows:

165846 - Reed Smith LLP (972852)
IP Docketing Dept.
P.O. Box 488
Pittsburgh, PA
UNITED STATES

A courtesy copy has been sent by email on this day to Patent Owner’s counsel of record in the matter identified in Section I.B of the Petition as follows:

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