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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

IPR2024-01501
Patent 9,782,028

**PETITION FOR *INTER PARTES* REVIEW OF
U.S. PATENT NO. 9,782,028**

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TABLE OF EXHIBITS

Exhibit No.	Description
1001	U.S. Patent No. 9,782,028 (“the ’028 patent”)
1002	Decision Denying Institution of Inter Partes Review in <i>Zak Designs, Inc. v. CamelBak Products, LLC</i> , PTAB-IPR2022-00803 (PTAB, Oct 25, 2022)
1003	Declaration of Glenn E. Vallee, Ph.D.
1004	United States Patent No. 6,279,773 to Kiyota (“Kiyota”)
1005	Certified English Translation of International Publication No. WO 2004/063042 to Ribarits (“Ribarits”)
1006	Translation Certificate for International Publication No. WO 2004/063042 to Ribarits
1007	International Publication No. WO 2004/063042 to Ribarits
1008	United States Patent Application Publication No. 2007/0039959 to Choi, et al. (“Choi”)
1009	Order on Stipulation and Joint Motion to Amend the Case Schedule in <i>Trove Brands, LLC v. CamelBak Products, LLC, et al.</i> , No. 5:23-cv-04267-PCP (N.D. Cal. June 18, 2024)

Petitioner Trove Brands, LLC (“Petitioner”) requests *inter partes* review of claims 1, 2, 5, 6, 8, 9, 15, 16, and 21 (“challenged claims”) of U.S. Patent No. 9,782,028 (“the ’028 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 ’028 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.). PO has counterclaimed for infringement of the ’028 patent.

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) 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 BoxTrove3@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 '028 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 counterclaim (filed November 8, 2023) alleging infringement of the '028 patent.

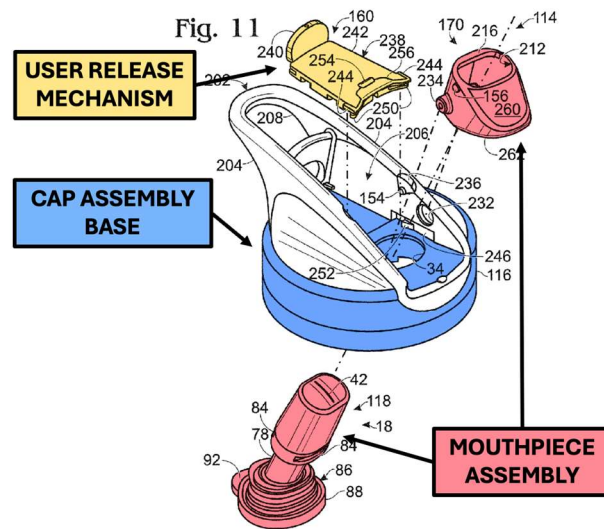
II. INTRODUCTION

The '028 patent discloses and claims drink containers having a removable cap assembly that generally includes three elements:

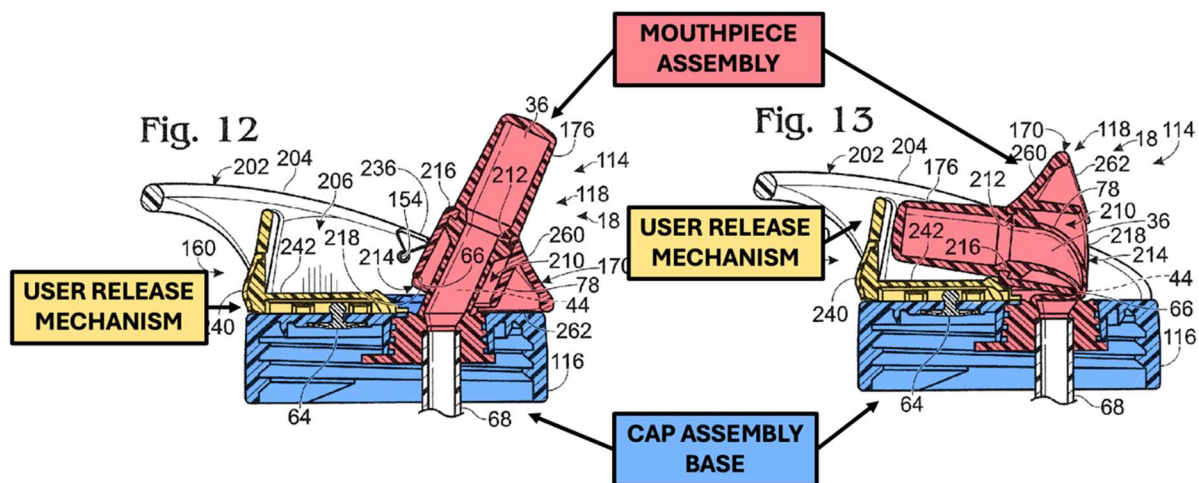
- (1) **a base** for coupling the cap assembly to a container;
- (2) **a mouthpiece assembly** for dispensing liquid, which is configured to move between a stowed (closed) position and a dispensing (open) position; and
- (3) **a user release mechanism** for disengaging catch structures that retain the mouthpiece assembly in the stowed position, allowing the mouthpiece to move to its dispensing position.

The mouthpiece assembly includes a mouthpiece portion with an outlet, a resilient tube that can be crimped to prevent passage of liquid, and an anchor portion that holds the assembly in place.

An embodiment of the '028 patent is depicted below in Figure 11, which provides an exploded view of the cap assembly.



(Ex. 1001, Fig. 11). The same embodiment, fully assembled, is shown below in its dispensing (Fig. 12) and stowed (Fig. 13) positions. In the stowed position the resilient tube of the mouthpiece assembly is crimped to prevent the passage of liquid.

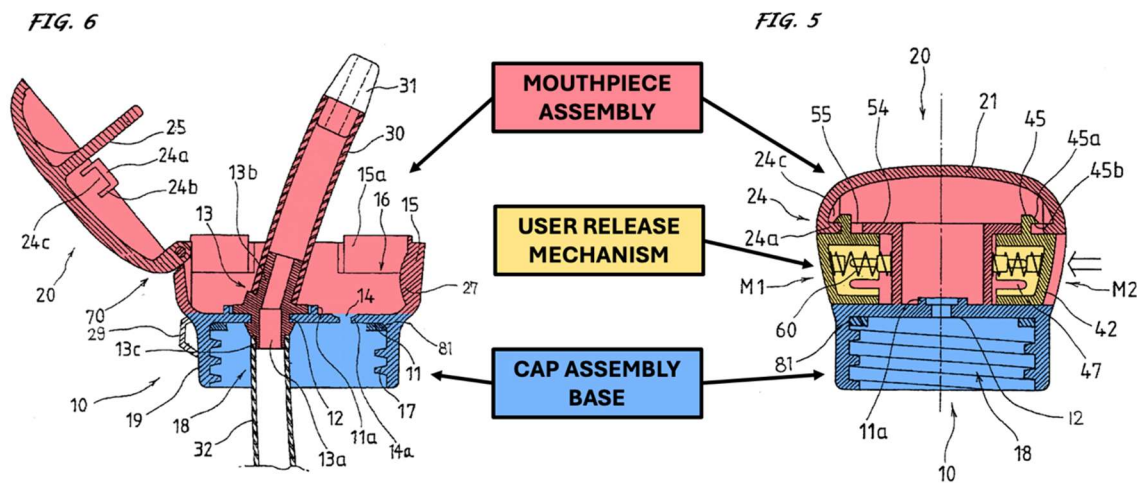


(*Id.*, Figs 12, 13).

III. BACKGROUND

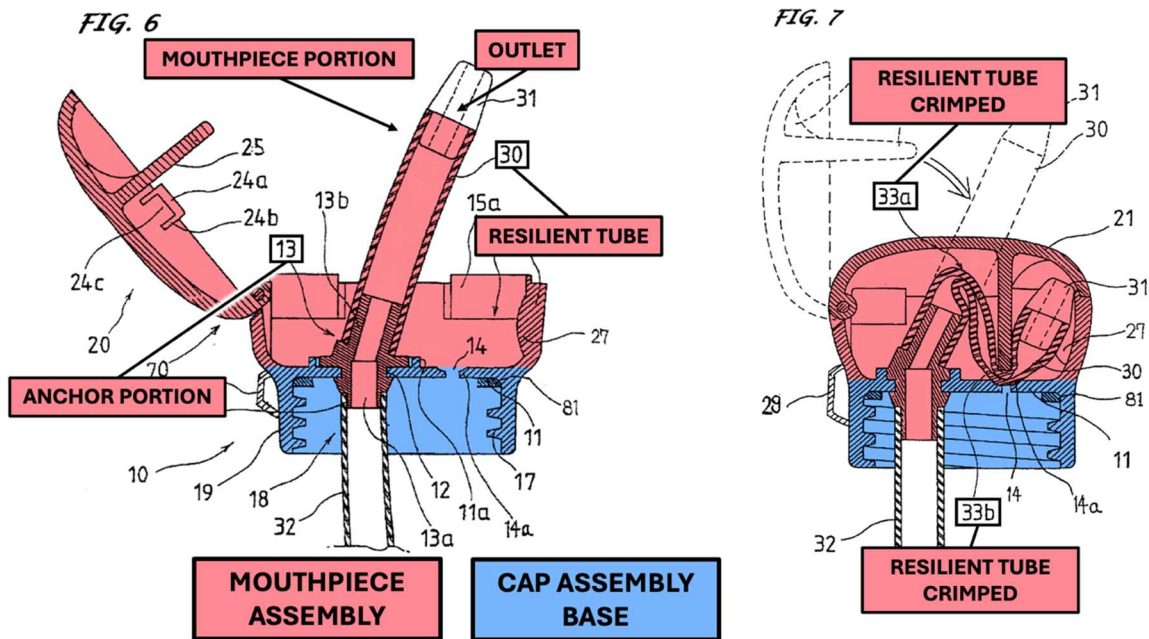
Drink containers with removable caps have, of course, long been known. And cap assemblies with the features claimed in the '028 patent (e.g., base, mouthpiece, and a user release mechanism) have also been known since well before the '028 patent's priority date. (Ex. 1003, ¶42)

For example, Kiyota (Ex. 1004), issued in 2001, disclosed a drink container with removeable cap assembly including a base, a mouthpiece assembly, and a user release mechanism.¹ The cap assembly is shown in figures 5 and 6 below. Figure 6 is cross-section in the open configuration and Figure 5 is another cross-section in the closed configuration.



¹ Kiyota was listed among the cited references on the face of the '028 patent, but it was never applied by the Examiner.

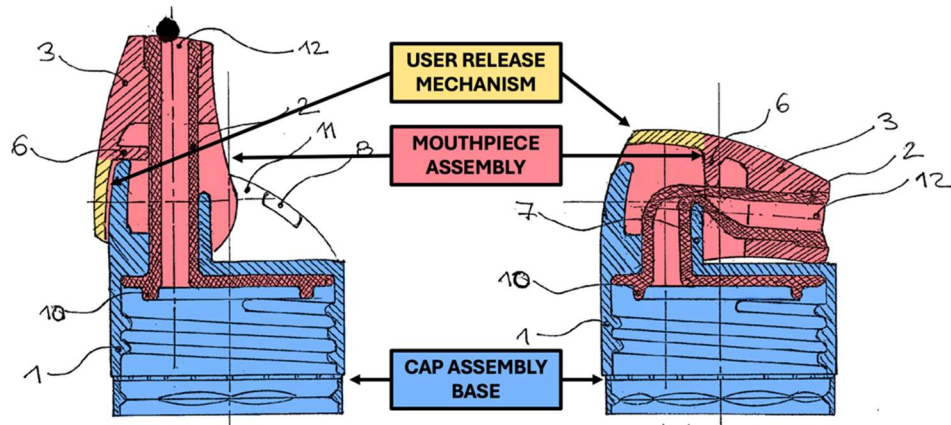
(Ex. 1004, Figs. 5, 6). The Kiyota mouthpiece assembly includes a mouthpiece portion with an outlet, a resilient tube 30, which is crimped at 33a and 33b to prevent passage of liquid when the mouthpiece assembly is stowed, and an anchor portion 13 that holds the assembly in place.



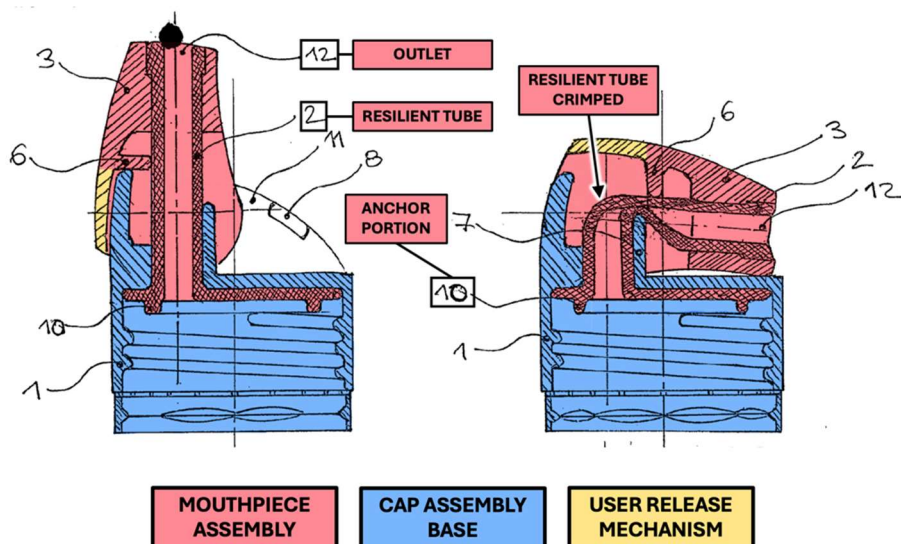
(*Id.*, Figs. 6, 7)

Ribarits (Ex. 1005), which published in 2004, disclosed another example of a drink container with removeable cap assembly including a base, a mouthpiece assembly, and a user release mechanism:²

² Ribarits was never cited during examination of the '028 patent.



(Ex. 1005, Fig 3). As highlighted below, the Ribarits mouthpiece assembly includes a mouthpiece portion with an outlet, a resilient tube, which is crimped to prevent passage of liquid when the mouthpiece assembly is stowed, and an anchor portion that holds the assembly in place. Ribarits includes a user release mechanism that allows a user to open the mouthpiece assembly from its closed, crimped position.

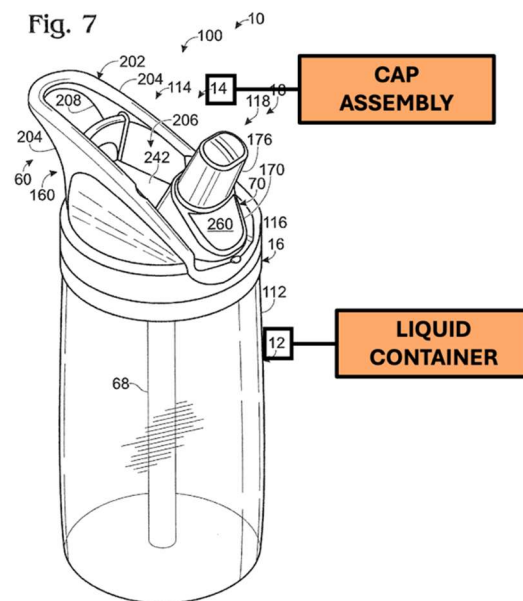


(*Id.*, Fig 3)

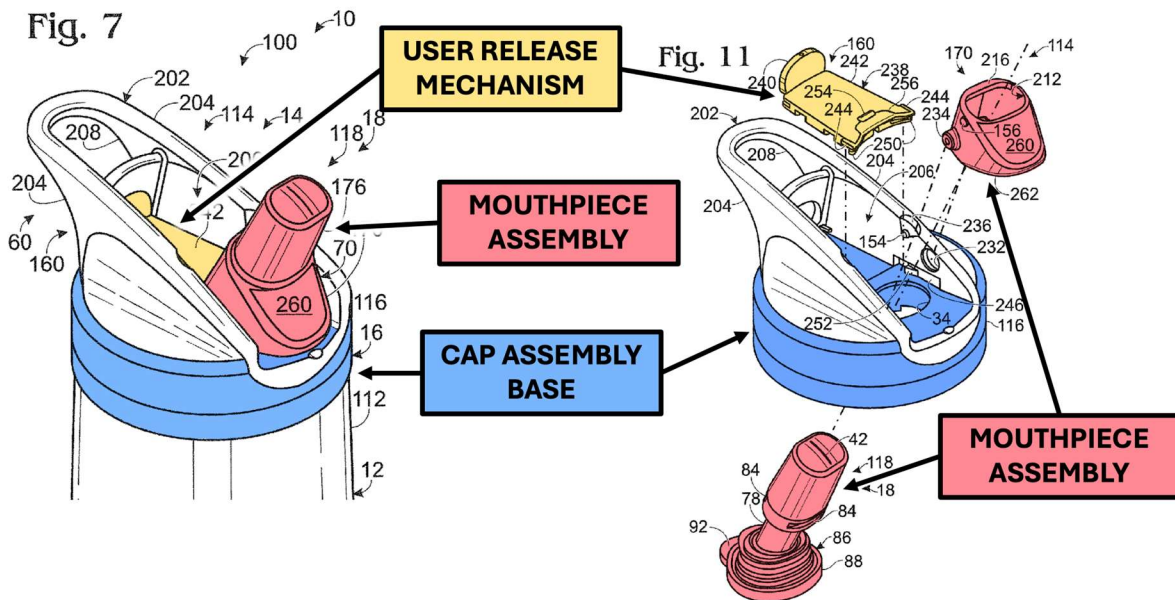
IV. THE '028 PATENT

A. Overview

The '028 Patent discloses and claims drink containers that include a liquid container and a cap assembly removably coupled to the liquid container. (Ex. 1001, 4:11-12). Figure 7 shows the '028 Patent's liquid container and cap assembly.

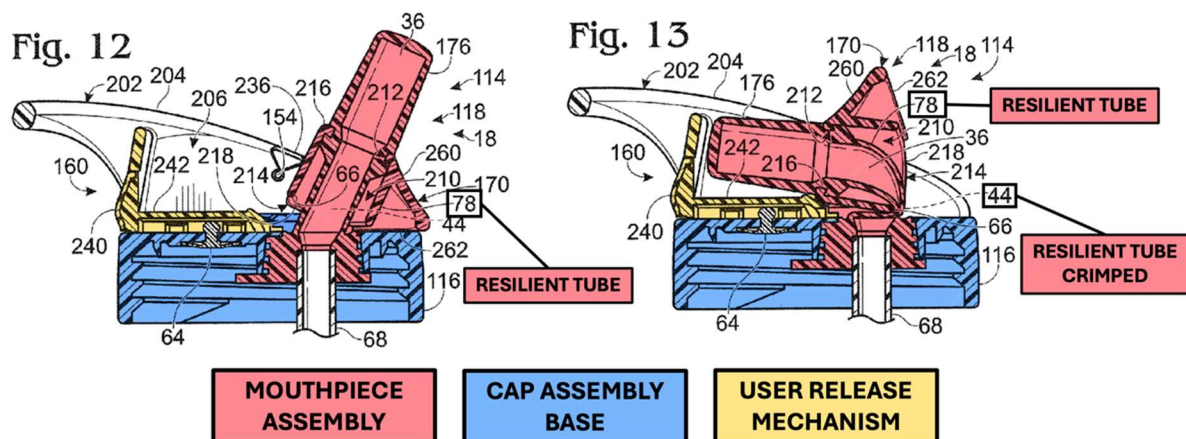


(*Id.* Fig. 7). The cap assembly includes a base, a mouthpiece assembly, and a user release mechanism, shown below in Figures 7 and 11.



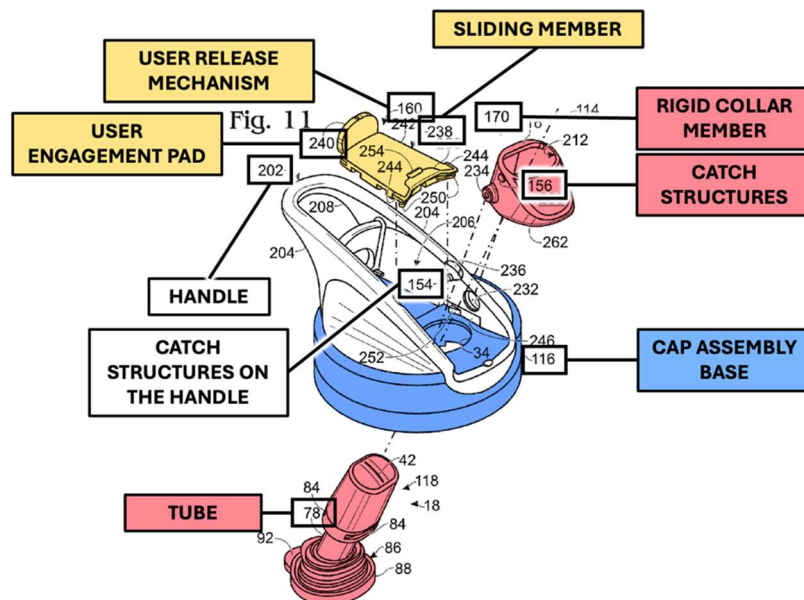
(*Id.* Figs. 7, 11).

As shown below in Figures 12 (mouthpiece assembly open) and 13 (mouthpiece assembly closed), the '028 Patent's mouthpiece assembly includes a tube 78 that is crimped to restrict the flow of drink liquid when the mouthpiece assembly is in its closed configuration.



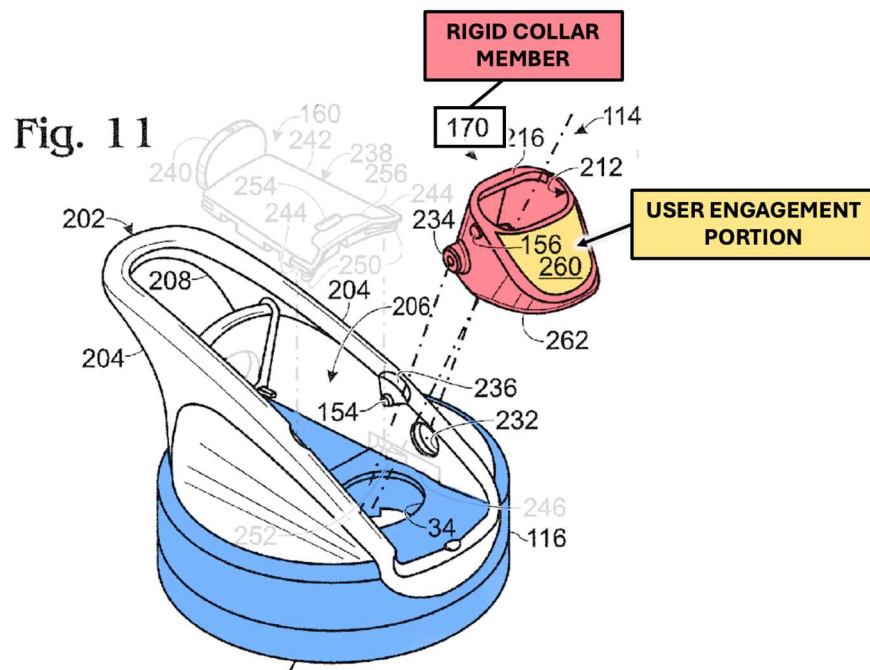
(*Id.*, Figs 12, 13).

The '028 Patent discloses two embodiments of its user release mechanism. The first embodiment, user release mechanism 160, is highlighted below. In this embodiment, the mouthpiece is held in its closed configuration by catch structures (protrusions 156) on rigid collar member 170 which engage with catch structures (depressions 154) on handle 202. (*Id.* at 12:22-37). Pressing user engagement pad 240 on sliding member 238 forces the sliding member between base 116 and rigid collar member 170, urging the collar upwards to disengage catch structures 154 and 156. (*Id.* at 13:15-25). With the catch structures disengaged, the mouthpiece pivots into its dispensing configuration due to the bias created by tube 78. (*Id.* at 12:50 – 13:39).



(*Id.*, Fig. 11).

In second embodiment, which can be an alternative or an additional user release mechanism, highlighted in Figure 11 below, a user can press the mouthpiece assembly directly at user engagement portion 260 on rigid collar member 170 to disengage the catch structures 154 and 156, which pivots the mouthpiece into its dispensing configuration. (Id. at 13:40-52).



(*Id.*, Fig. 11).

B. The Challenged Claims

The '028 Patent issued with 21 claims, of which claims 1, 18, and 21 are independent. (Ex. 1001, Claims). Independent claims 1 and 21 are challenged in this petition. Independent claim 1 is set forth below (with claim limitations labeled added for reference and the main elements of the drink container bolded).

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;
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 the liquid passage restricts the flow of drink liquid 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 mouthpiece portion that includes the outlet;
1[B][3][b]	a tube that defines at least a portion of the liquid passage for drink liquid to flow from the internal compartment to the mouthpiece portion, wherein

Claim 1	
	the tube includes a crimping region constructed of a resiliently deformable material and is adapted to restrict the flow of drink liquid through the liquid passage when the mouthpiece assembly is in the stowed configuration, and where the mouthpiece portion and the tube are constructed as a unitary assembly of the resiliently deformable material;
1[B][3][c]	an anchor portion extending from the tube distal the mouthpiece portion, wherein the anchor portion is sized to restrict passage of the anchor portion through the through-passage of the base of the cap assembly;
1[B][3][d]	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.

Challenged independent claim 21 is similar, but it does not recite the first and second catch structures. Claim 21 adds a limitation that the mouthpiece portion, tube and anchor portion of the mouthpiece assembly are “resilient” and constructed as a unitary assembly.

The challenged dependent claims add limitations directed to: the structure of the user release mechanism (claim 2); the structure of the crimping region (claim 5); a handle and lateral guards that define a stowing region (claim 6); the structure of the mouthpiece portion, tube, and anchor portions of the mouthpiece assembly (claims 8, 9); the structure of the anchor portion of the mouthpiece assembly (claim 15); and a straw (claim 16).

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, 5, 6, 8, 9, 15, 16, 21	103	Kiyota
2	1, 2, 5, 6, 8, 9, 15, 21	103	Ribarits
3	6, 9, 21	103	Kiyota + Ribarits
4	16	103	Kiyota or Ribartis + Choi

B. The '028 Patent Is Subject to the pre-AIA Prior Art Provisions of the Patent Statute.

The '028 patent claims priority to Application No. 12/357,114, filed on January 21, 2009, which is now U.S. Patent No. 8,191,727. Therefore, the earliest

possible effective filing date for the challenged claims is January 21, 2009. The patent is therefore subject to pre-AIA prior art provisions.

C. The Asserted References Are Prior Art

This Petition relies on the following prior art references:

Exhibit	Reference	Date	pre-AIA Art Type
1004	Kiyota	Issued Aug 28, 2001	§ 102(b)
1005	Ribarits	Published: July 29, 2004	§ 102(b)
1008	Choi	Published: Feb. 22, 2007	§ 102(b)

This Petition is also supported by the expert declaration of Glenn E. Vallee, Ph.D. (Ex. 1003).

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. 1003, ¶29). 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.* at ¶30).

VII. CLAIM CONSTRUCTION

A. “User Release Mechanism”

Claims 1 and 21 recite “user release mechanism.” This term is governed by 35 U.S.C. §112, paragraph 6 because it recites a nonce “mechanism” for performing a claimed function without reciting structure for performing that function. *See Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1348-49 (Fed. Cir. 2015) (quotation omitted). A POSITA would not have understood the term “user release mechanism” to have a sufficiently definite meaning as the name for a structure that performs the claimed function. (Ex. 1003, ¶39).

The term “mechanism” is often found to be a non-structural generic term that invokes §112(f). *See, e.g., Welker Bearing Co. v. PHD, Inc.*, 550 F.3d 1090, 1096 (Fed. Cir. 2008) (“colorant selection mechanism”); *Toro Co. v. Deere & Co.*, 355 F.3d 1313, 1325 (Fed. Cir. 2004) (“control mechanism”); *Media Rights Techs., Inc. v. Capital One Fin. Corp.*, 800 F.3d 1366, 1373 (Fed. Cir. 2015) (“compliance mechanism”). The claimed “user release mechanism” does not recite structure for performing the claimed function. (Ex. 1003, ¶39). The modifier “user release” is

not structural; it merely describes, at a high level, the function performed by the mechanism. The Board should therefore construe “user release mechanism” as a means-plus-function limitation.

Claims 1 and 21 use somewhat different language for the “user release mechanism.” The specific constructions appropriate for each claim are addressed below in ground 1.

In the district court action Patent Owner contends “user release mechanism is not governed by §112, paragraph 6, and instead covers all structures for performing the recited function. Either way, the claims are invalid as described herein.

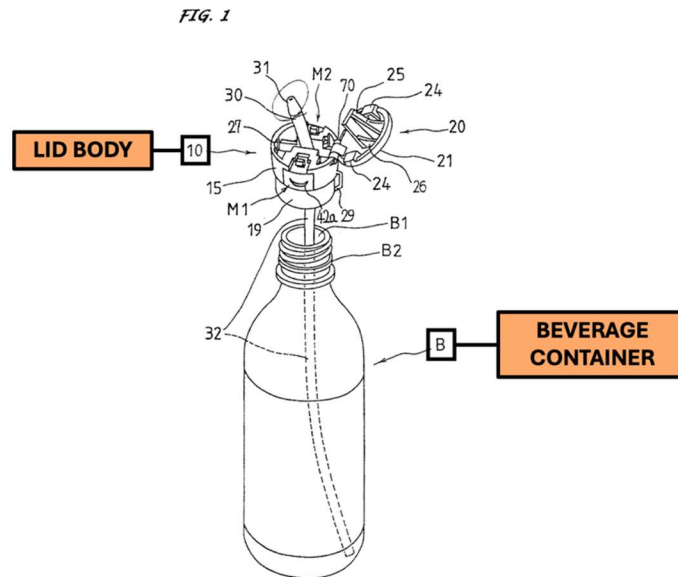
B. Other Claim Constructions

Petitioner submits that no other 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).

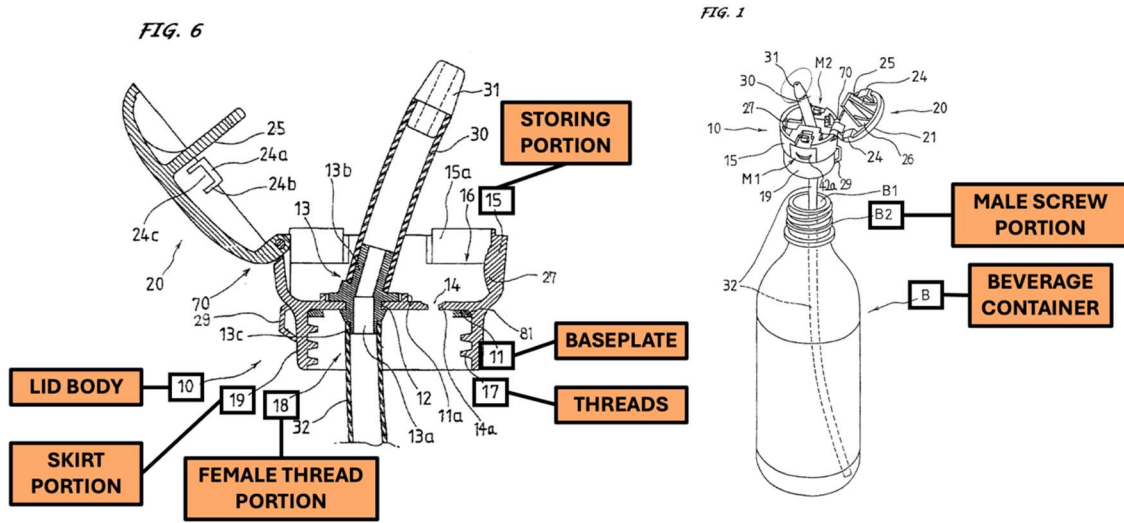
VIII. GROUND 1: CLAIMS 1, 2, 5, 6, 8, 9, 15, 16, AND 21 ARE OBVIOUS IN VIEW OF KIYOTA

A. Overview of Kiyota

Kiyota discloses a lid body 10 for use with a beverage container B. (Ex. 1004, Abstract, Title, 1:5-7; Ex. 1003, ¶43).

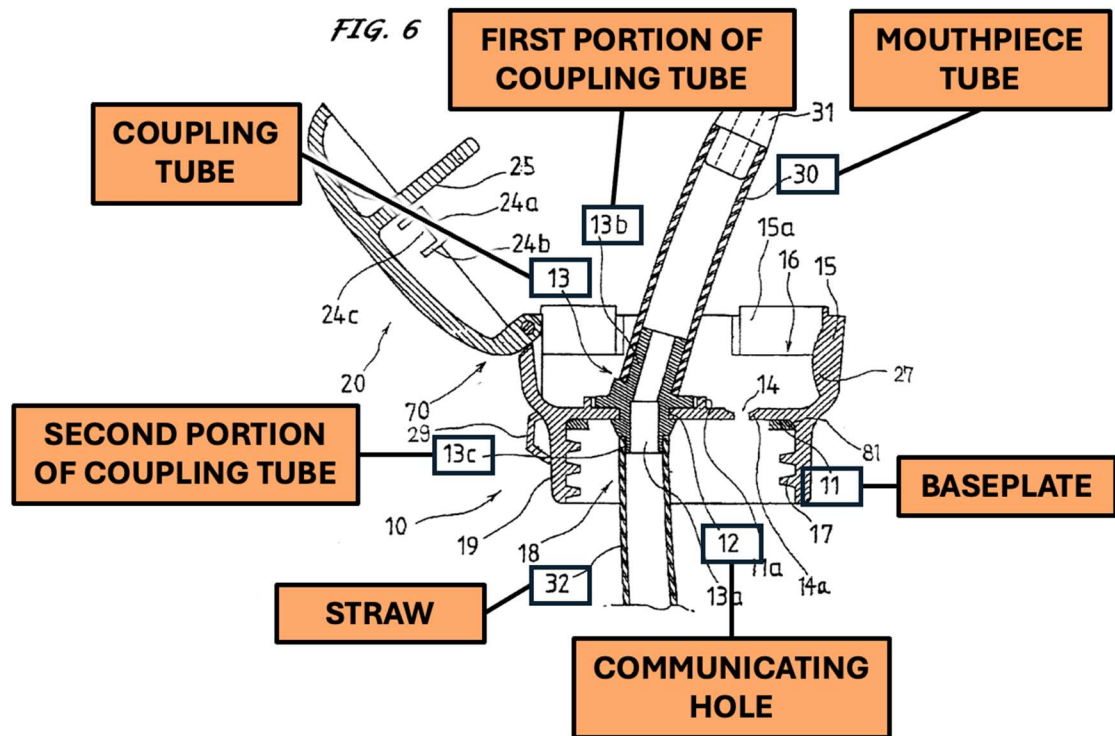


(Ex. 1004, Fig. 1). The lid body 10 is divided into a storing portion 16 positioned above a baseplate 11 and a thread portion 18 extending below the baseplate. (*Id.* at 4:66-5:1). The thread portion 18 includes a skirt portion 19 extending downward from the periphery of the baseplate 11. The inner wall of the skirt portion includes threads (female screw portion 17) for mating with the male screw portion B1 of the beverage container B. (*Id.* at 8:58-64).



(*Id.*, Figs 1, 6).

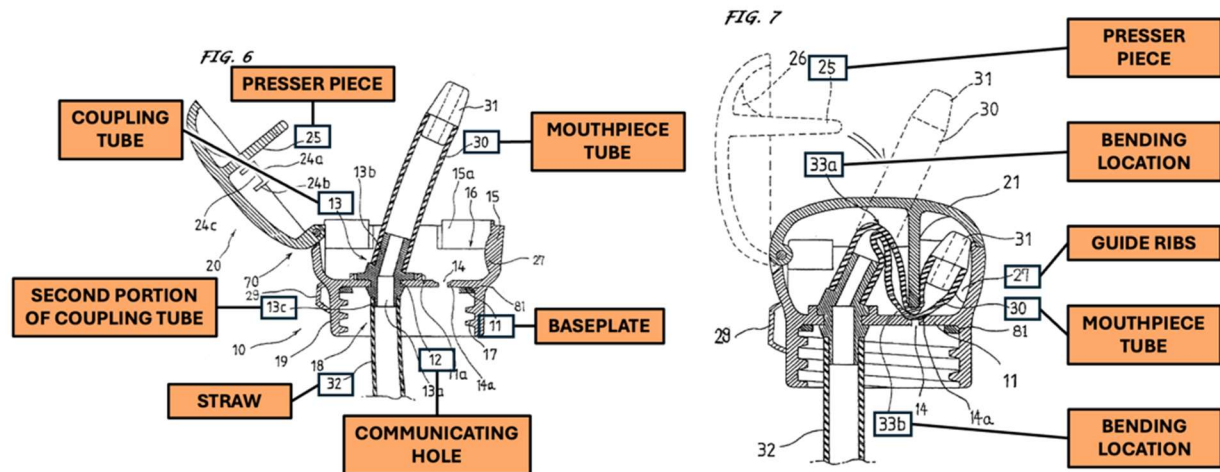
The lid body permits a user to drink from the beverage container and includes means for storing the mouthpiece when the mouthpiece is closed. More specifically, the lid body includes a coupling tube 13 that extends through baseplate 11 that divides the storing portion (above) and thread portion (below) the baseplate. The coupling tube 13 includes flanges that secure it in the through-passage (communicating hole 12) of baseplate 11. Coupling tube 13 also includes a first coupling portion 13b for connecting to a mouthpiece tube 30 from which a user may drink the beverage. The coupling tube includes a second coupling portion 13c for connecting to a straw or suction tube 32 extending into the beverage container. (*Id.* at 5:29-44).



(*Id.*, Fig. 6)

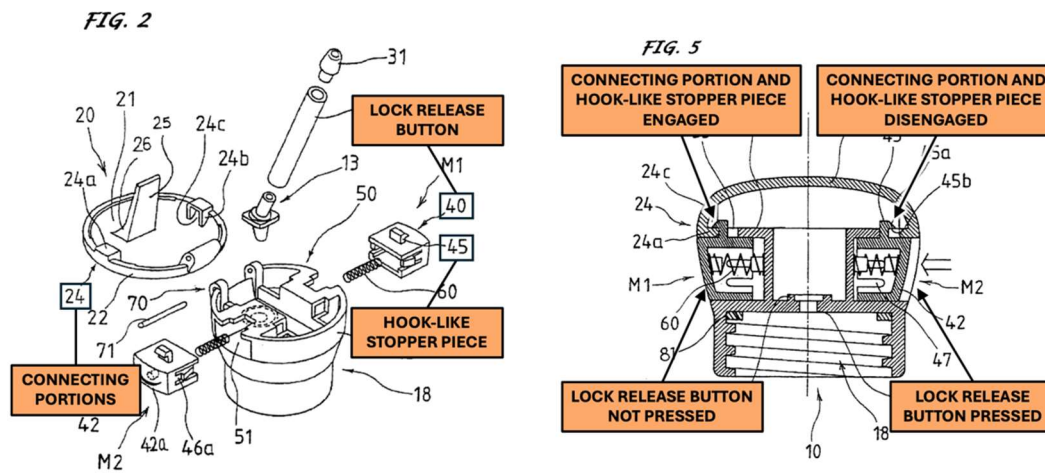
The storing portion of the lid body 10 also includes a lid portion 20 that includes a presser piece 25 that works with the mouthpiece tube 30 to close the tube for storage. Specifically, as depicted in Figures 6 and 7 below, presser piece 25 presses down on mouthpiece tube 30 as the lid body is closed. The mouthpiece is thus pressed against baseplate 11 when it is closed and placed in its stored position. In this stored position the mouthpiece tube 30 is crimped at bending locations 33a and 33b. (*Id.* at 10:6-13). Guide ribs 27 guide the mouthpiece tube into its closed and stored position as it is pressed down by the presser piece 25.

(*Id.* at 8:6-8)



(*Id.*, Figs. 6, 7).

The lid portion also includes catch structures (connecting portions 24) to maintain the lid and mouthpiece tube in a closed, stored position. Specifically, when the lid is closed the connecting portions 24 catch on hook-like stopper pieces 45 (shown below in Figure 2). The hook-like stopper pieces 45 are on the upper surface of lock release buttons 40. (*Id.* at 9:51-57; 10:33-38). When a user presses the lock release buttons the connecting portions and hook-like stopper pieces disengage and the lid 20 is released. This allows the mouthpiece tube 30 to return to its open, dispensing position. (*Id.* at 7:60-8:2; 9:4-13).



(*Id.*, Figs. 2, 5).

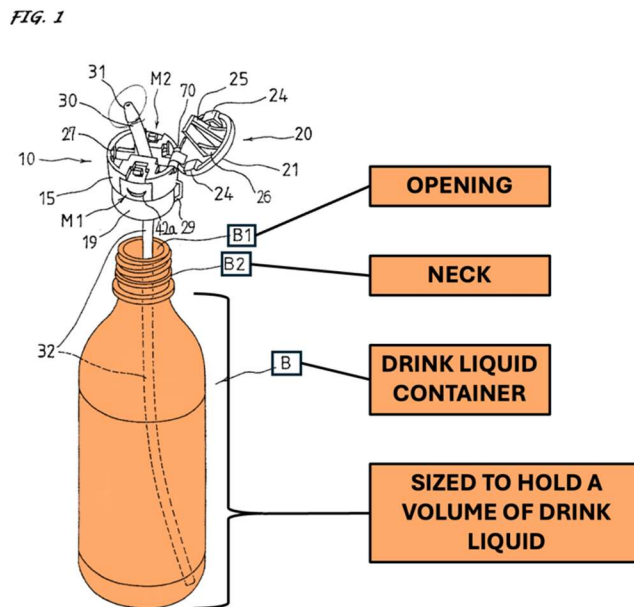
B. Claim 1

As described below, Kiyota discloses a drink container having all the limitations recited in claim 1 and therefore renders the claim obvious. (Ex. 1003, ¶¶57-91).

1. Preamble and Limitation 1[A]: “liquid container”

The preamble and limitation 1[A] recite “[a] drink container, comprising: a liquid container having a neck with an opening and having an internal compartment sized to hold a volume of potable drink fluid.” Kiyota discloses a drink container having limitation 1[A]. (Ex. 1003, ¶¶58-61).

As depicted below, Kiyota’s beverage container B includes a neck (male screw portion B2) with an opening (mouth portion B1). (Ex. 1004, 4:59-62).



(*Id.*, Fig. 1).

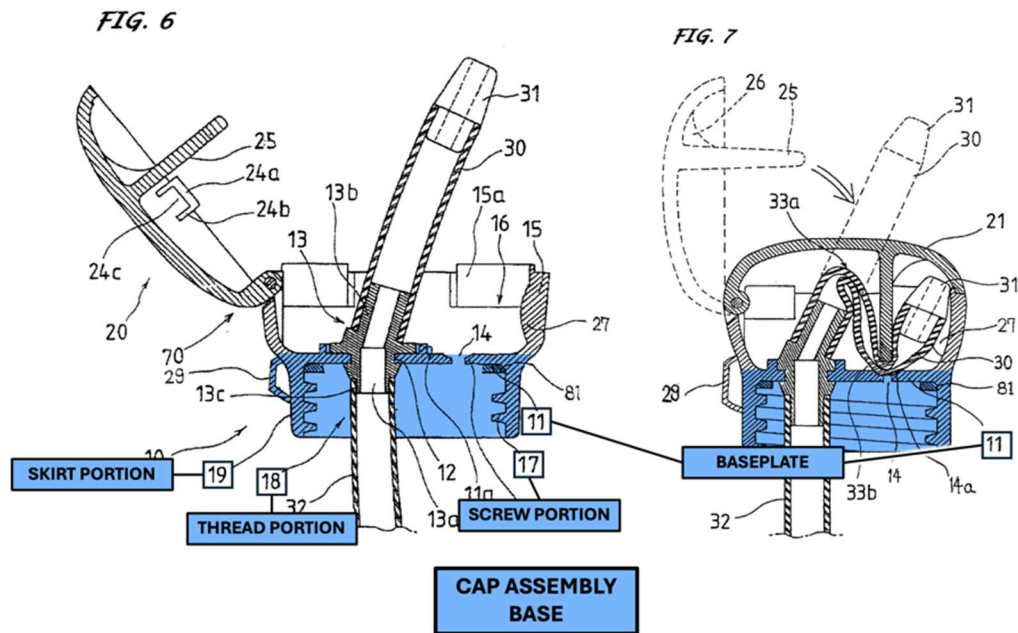
2. 1[B] Cap Assembly

Limitation 1[B] recites: “a cap assembly removably coupled to the liquid container.” Kiyota discloses this limitation. (Ex. 1003, ¶¶62-63). Kiyota’s cap assembly (lid body 10) is “detachably mounted on the mouth portion of a beverage container.” (Ex. 1004, 1:4-5)

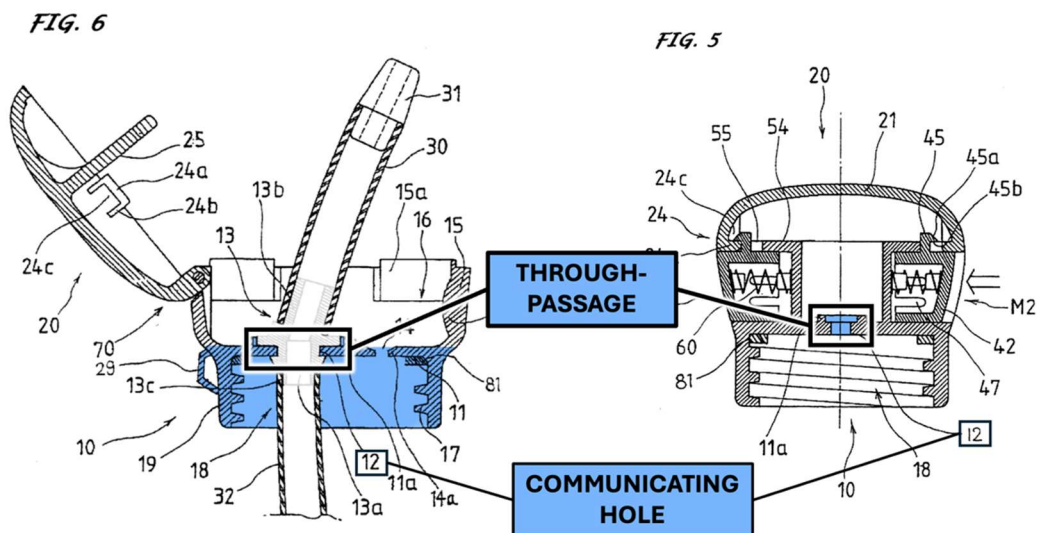
a. 1[B][1] Base

Limitation 1[B][1] recites that the cap assembly comprises “a base removably coupled to the neck of the liquid container and including a through-passage.” Kiyota discloses the claimed base. (Ex. 1003, ¶¶64-66). The base of Kiyota comprises baseplate 11 and thread portion 18 (with skirt portion 19 and

screw portion 17 for coupling with the neck of the container). (Ex. 1004, 4:66-5:12).



(*Id.*, Figs. 6, 7). Kiyota's base also includes a through-passage (communicating hole 12), (*id.* at 5:21-23), as shown in figures 5 and 6:

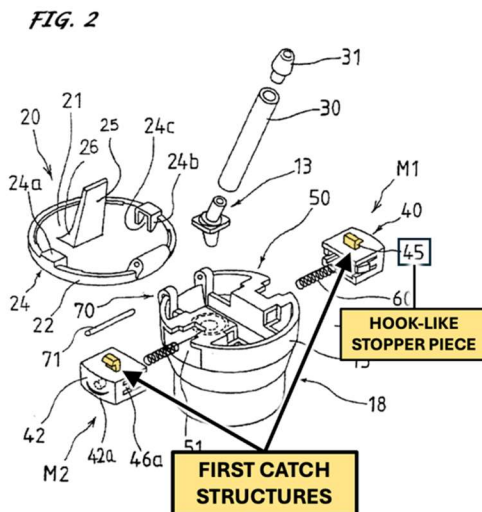
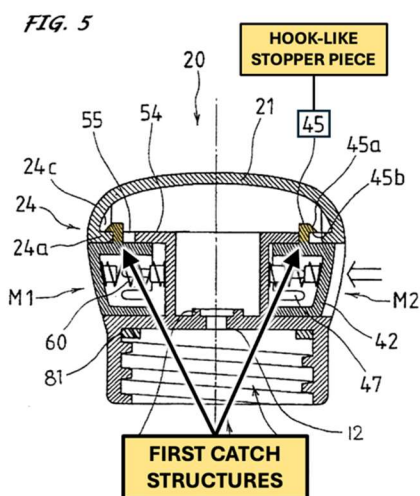


(*Id.*, Figs. 5, 6).

b. 1[B][2] First Catch Structure

Limitation 1[B][2] recites that the cap assembly comprises: “a first catch structure.” Kiyota discloses this limitation. (Ex. 1003, ¶¶67-68).

Kiyota discloses a cap assembly with two lock release buttons 40, each of which have a first catch structure (hook-like stopper piece 45). (Ex. 1004, 6:28-37).

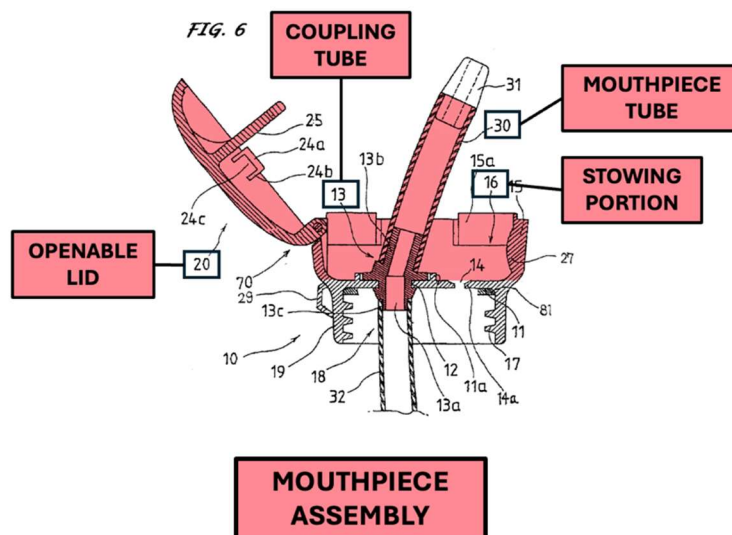


(*Id.*, Figs. 2, 5).

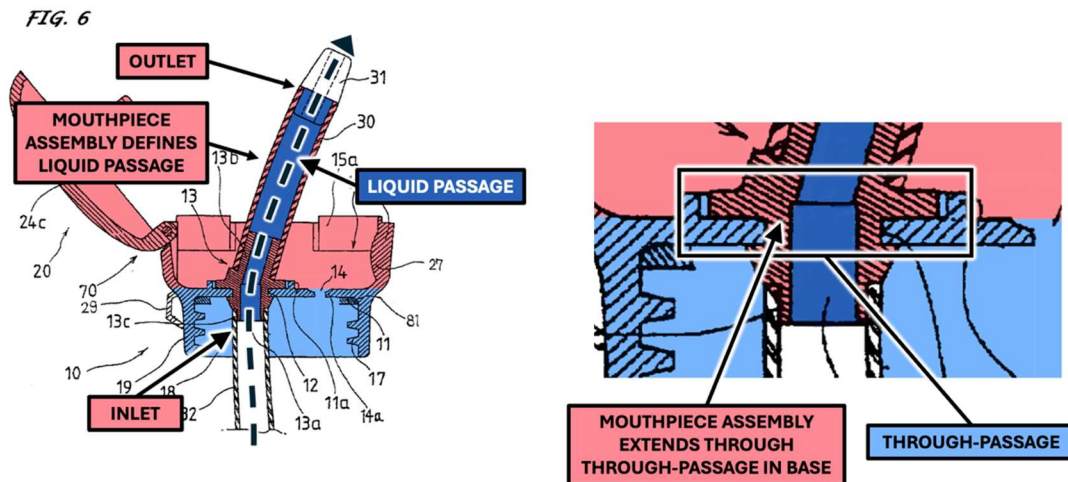
c. 1[B][3] Mouthpiece Assembly

Limitation 1[B][3] is directed to the mouthpiece assembly. The term “assembly” encompasses a number of parts assembled together. Kiyota discloses the mouthpiece assembly as recited. (Ex. 1003, ¶¶69-73).

Kiyota's mouthpiece assembly includes, *inter alia*, mouthpiece tube 30, coupling tube 13, openable lid 20, and stowing portion 16, which function together to provide a mouthpiece through which a user may drink the liquid of the drink container (dispensing configuration) and store the mouthpiece when it is closed (stowed configuration). (Ex. 1003, ¶70; Ex. 1004, 9:4-17; 9:34-46; 11:23-31). The mouthpiece assembly is highlighted below in Figure 6, which shows the mouthpiece in its dispensing configuration.

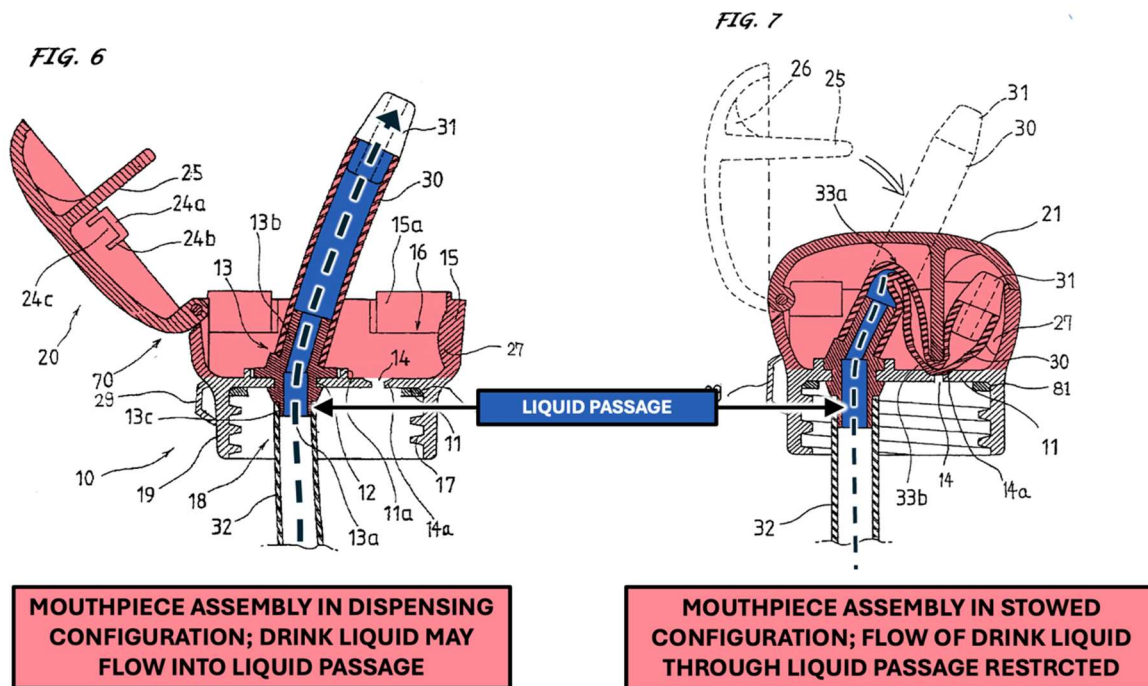


(Ex. 1004, Fig. 6). As shown in Figure 6 below, Kiyota's mouthpiece assembly extends through a through-passage of the base (communicating hole 12) and defines a liquid passage with an inlet and an outlet.



(Ex. 1004, Fig 6).

Drink liquid can selectively flow through Kiyota's liquid passage depending on the configuration of the mouthpiece assembly. In a dispensing configuration drink liquid can flow from the internal compartment of the liquid container. In the stowed configuration drink liquid is restricted from flowing through the liquid passage. (*Id.* 9:29-32; 10:17-23; 11:8-28;).

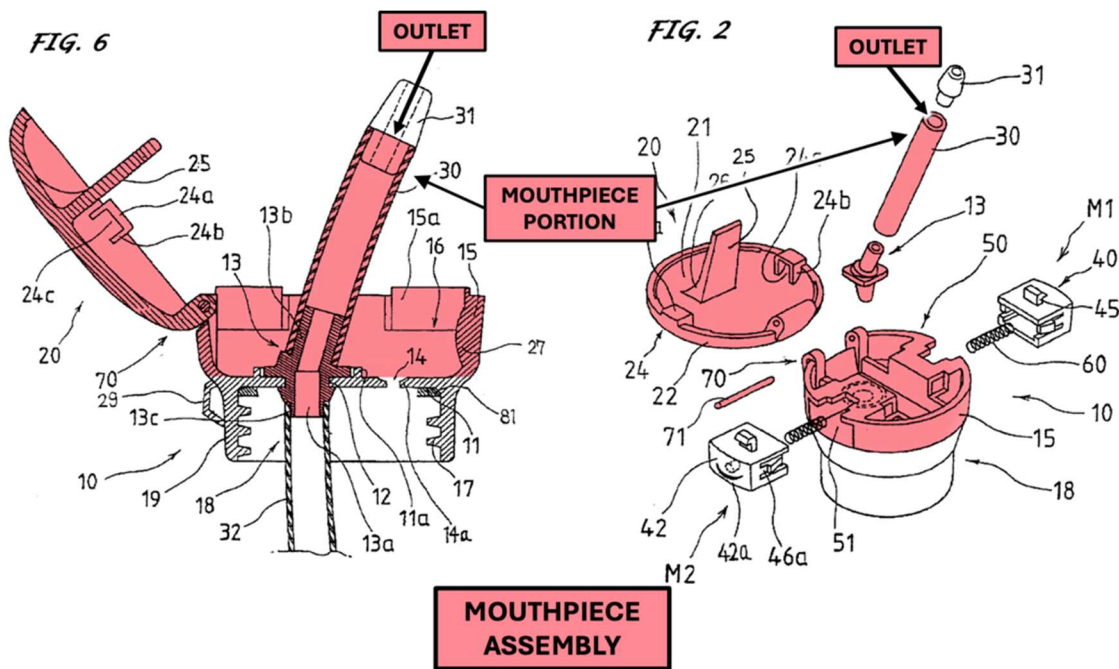


(*Id.*, Figs. 6, 7). Kiyota also discloses that its mouthpiece assembly is biased to its dispensing configuration: “as the mouthpiece tube 30 is raised by its elasticity with opening action of the openable lid 20, there is no need to push open the openable lid 20 by hands, and there is no need to pull out and raise the mouthpiece tube 30 from the storing portion by hands.” (*Id.* at 11:18-22).

i. 1[B][3][a] Mouthpiece Portion

Limitation 1[B][3][a] recites that the mouthpiece assembly comprises “a mouthpiece portion that includes the outlet.” Kiyota discloses this limitation. (Ex. 1003, ¶¶74-75).

As shown below, Kiyota's mouthpiece assembly includes a mouthpiece portion that has an outlet through which drink liquid is dispensed (the end of mouthpiece tube 30).³



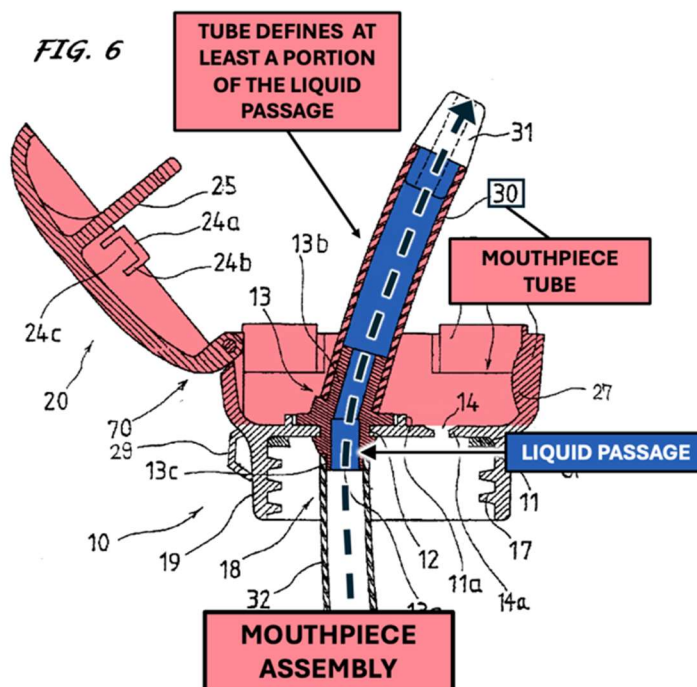
(Ex. 1004, Figs. 2 (cropped), 6).

³ Kiyota also discloses an additional optional tapered portion 31, (Ex. 1004, 5:44-46), which is not necessary for the analysis because the claims are obvious over the disclosure without the optional element. (Ex. 1003, ¶75).

ii. 1[B][3][b] Tube

Limitation 1[B][3][b] is directed to features of the tube of the mouthpiece assembly. Kiyota discloses the tube as recited in limitation 1[B][3][b]. (Ex. 1003, ¶¶76-79).

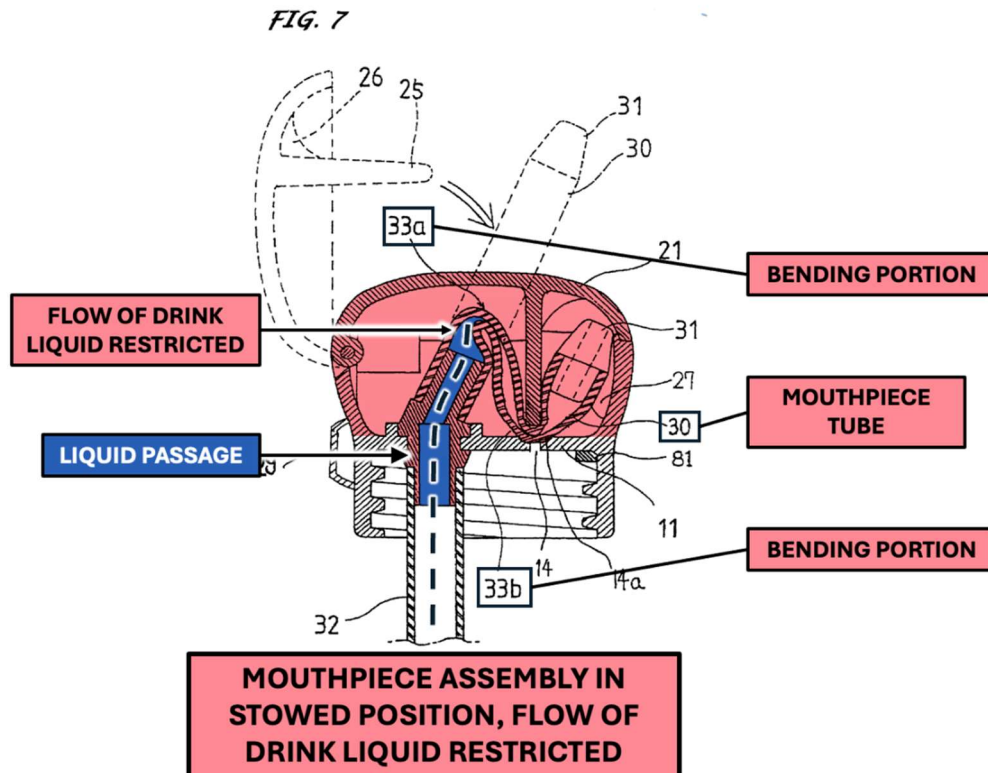
As shown below, Kiyota's mouthpiece tube 30 defines at least a portion of the liquid passage for drink liquid to flow from the internal compartment to a mouthpiece portion, i.e. the outlet of the mouthpiece tube.



(Ex. 1004, Fig. 6).

Kiyota's mouthpiece tube is constructed of a resilient material: "mouthpiece tube 30, for example, is a tubular member made of elastic and flexible synthetic

resin material such as polyurethane, silicon resin and the like,” (*Id.* at 9:66-10:1). As shown below, when Kiyota’s mouthpiece assembly is in its stowed configuration, the tube is crimped at two regions (bending portions 33a, 33b). In that configuration, the flow of drink liquid is restricted because the interior walls of mouthpiece tube 30 press against each other “so that the mouthpiece tube 30 is under the closed condition at each bending portion 33a, 33b.” (*Id.* at 10:22-24)



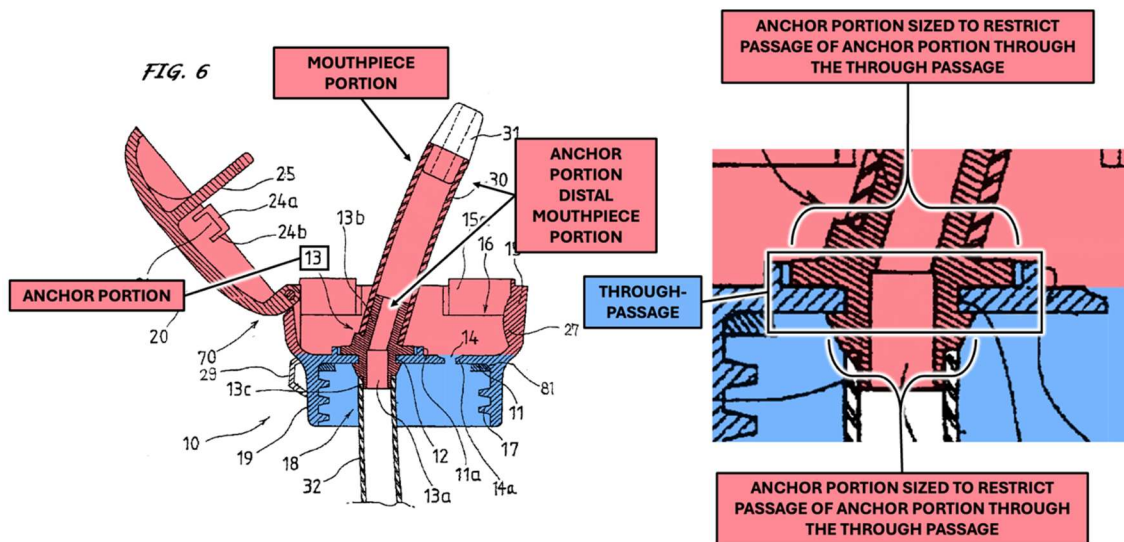
(*Id.*, Fig. 7)

iii. 1[B][3][c] Anchor Portion

Limitation 1[B][3][c] recites that the mouthpiece assembly comprises “an anchor portion extending from the tube distal the mouthpiece portion, wherein the

anchor portion is sized to restrict passage of the anchor portion through the through-passage of the base of the cap assembly.” Kiyota discloses this limitation. (Ex. 1003, ¶¶80-82).

As shown below, Kiyota discloses an anchor portion (coupling tube 13) extending through the through-passage (communication hole 12). Kiyota’s anchor portion is sized to restrict passage of the anchor portion through the through-passage (communication hole 12).



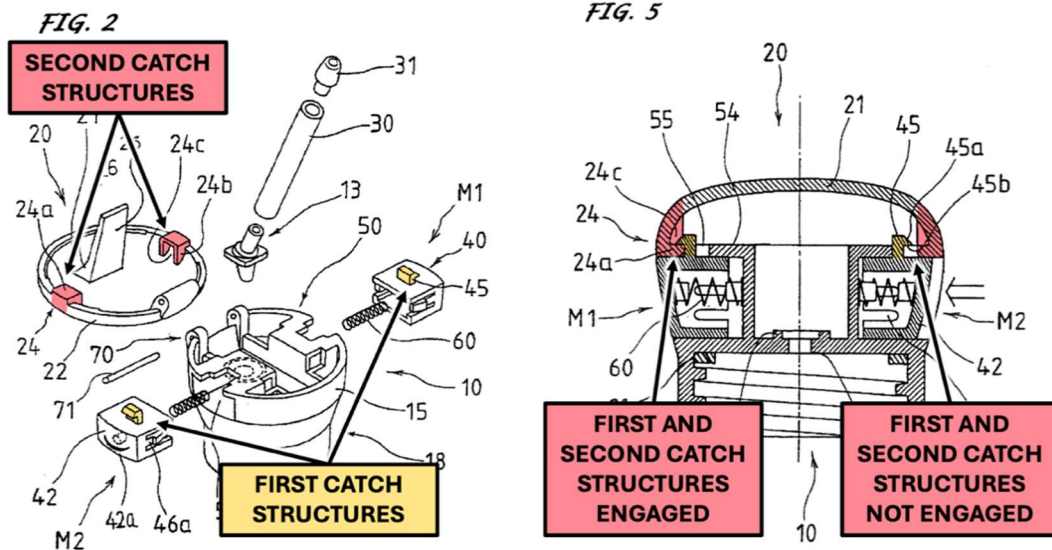
(Ex. 1004, Fig. 6).

iv. 1[B][3][d] Second Catch Structure

Limitation 1[B][3][d] recites that the mouthpiece assembly comprises “a second catch structure adapted to be selectively engaged with the first catch

structure to retain the mouthpiece assembly in the stowed configuration.” Kiyota discloses this limitation. (Ex. 1003, ¶¶83-84).

As shown below, Kiyota discloses second catch structures (connecting portions 24) that selectively engage with the first catch structures (hook-like stopper pieces 45) to retain the mouthpiece assembly in its stowed configuration. “Further, since the mouthpiece tube 30 is stored within the storing portion 16 in the pushed and folded condition against its elasticity by the presser piece 25, upward force acts on the presser piece 25, thereby coupling receiving pieces 24a[] of each connecting portion 24 with lower edge portions 45a[] of each stopper piece 45.” (Ex. 1004, 10:33-38)



(*Id.*, Figs. 2 (cropped), 5).

3. 1[B][4] User Release Mechanism

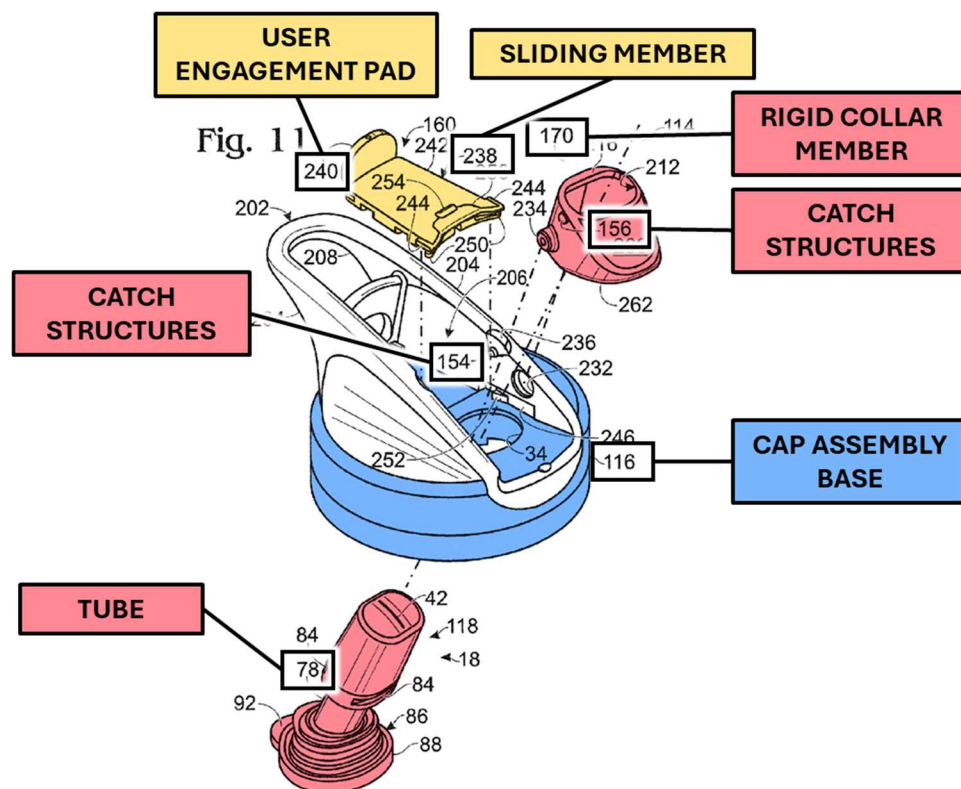
Limitation 1[B][4] recites that the cap assembly comprises “a user release mechanism adapted to automatically disengage the first and second catch structures upon actuation of the user release mechanism and thereby release the mouthpiece assembly to move via its bias from the stowed configuration to the dispensing configuration.”

As described above, this claim limitation is governed by §112, paragraph 6. It is construed by a two-step process. First, the “function” is identified. *Altiris, Inc. v. Symantec Corp.*, 318 F.3d 1363, 1375 (Fed. Cir. 2003). Next, the structure in the patent specification that corresponds to the recited function is identified. *Id.*

The recited function of this clause is 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.” (Ex. 1001, 5:35-39).

The specification discloses two embodiments of the user release mechanism. In the first embodiment, the user release mechanism is sliding member 238 (and its component parts), as shown below. In this embodiment, the mouthpiece is held in its closed configuration by catch structures 156 on rigid collar member 170 which engage with catch structures 154 on handle 202. Activating the user release

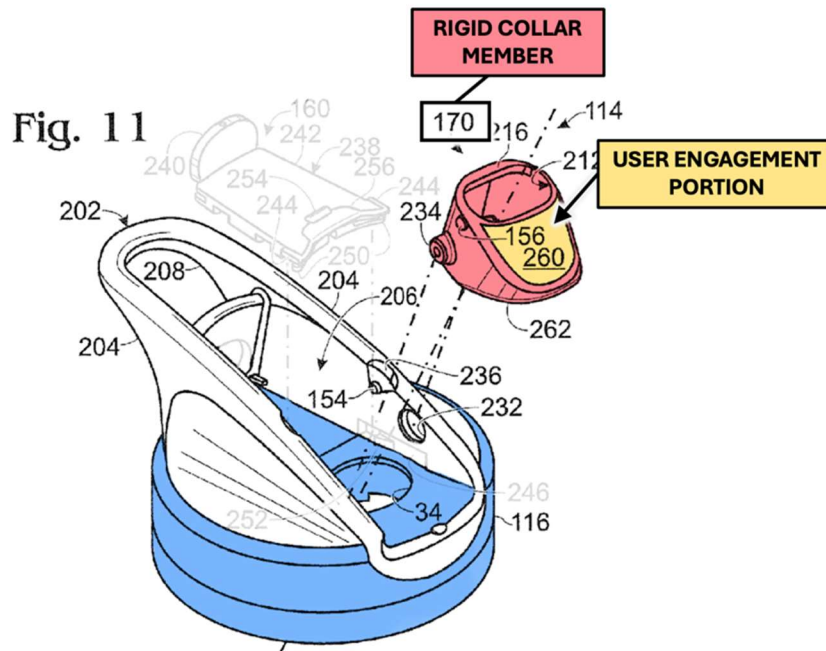
mechanism by pressing user engagement pad 240 forces the sliding member 238 between base 116 and rigid collar member 170, pressing the collar upwards with enough force to disengage catch structures 154 and 156. (*Id.* at 12:50-13:25). With the catch structures disengaged, the mouthpiece pivots into its dispensing configuration due to the bias created by the bend in tube 78. (*Id.* at 13:29-33)



(*Id.*, Fig. 11).

In the second embodiment, the user release mechanism is user engagement portion 260 on rigid collar member 170. The user presses the user engagement

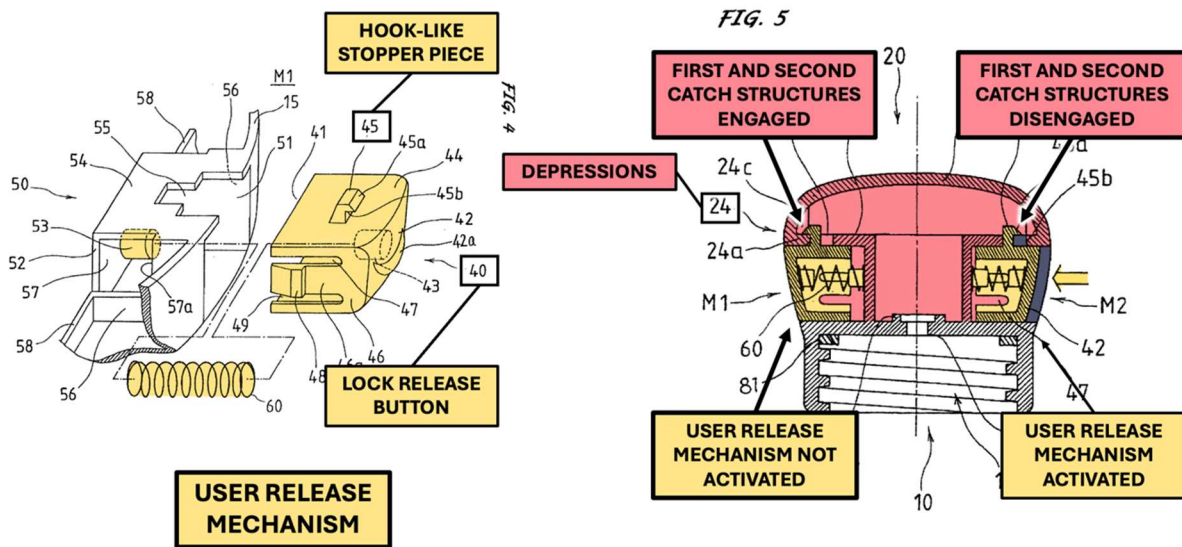
portion to disengage catch structures 154 and 156 and pivot the mouthpiece to the dispensing configuration. (*Id.* at 13:40-54).



(*Id.*, Fig. 11).

Kiyota discloses a user release mechanism that performs the recited function and which is equivalent to the '028 patent structure. (Ex. 1003, ¶¶85-91). Specifically, lock release buttons 40 are adapted to automatically disengage the first and second catch structures (hook-like stopper pieces 45 and connecting portions 24) when a user presses the buttons: “lock release buttons 40[] are simultaneously depressed in the radial direction . . . each stopper piece 45[] are slipped away from the depressions 24[]. (Ex. 1004, 8:66-9:13).

Kiyota describes how disengagement of the catch structures allows the mouthpiece assembly to move to its dispensing configuration via its bias: “Because the mouthpiece tube 30 is stored within the storing portion 16 under the forced and folded condition [it] pushes the top board 21 by its elastic force, automatically opens the openable lid 20 with pressure and stands by outwardly projecting from the storing portion 16.” (*Id.*).



(*Id.*, Figs. 4, 5).

The structures in Kiyota that perform the claimed user release mechanism function are equivalent to the structures of the '028 patent. (Ex. 1003, ¶89). They perform the claimed function in the same way to achieve the same result. (*Id.*) In the first embodiment of the user release mechanism of the '028 patent, for example,

a user pushes a sliding element forward, towards the mouthpiece assembly, to disengage the catch structures. This is substantially the same in Kiyota, wherein a user presses on the release buttons 40, which slide towards the mouthpiece assembly to automatically disengage the first and second catch structures. (*Id.*)

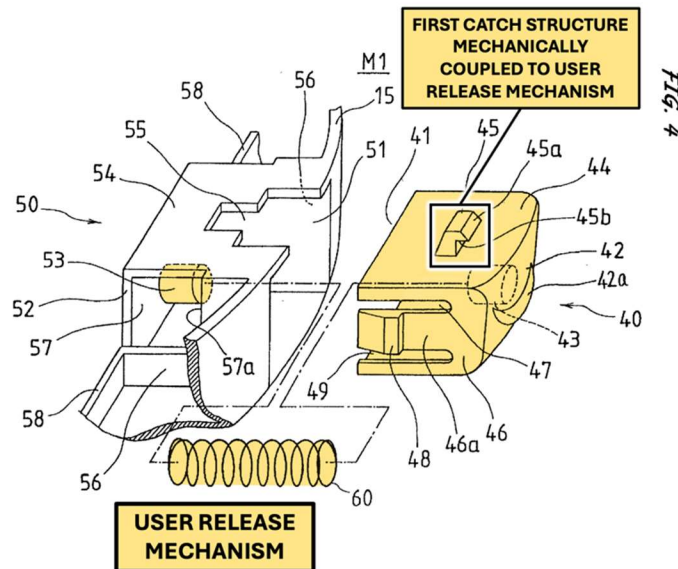
Further, to the extent “user release mechanism” is not governed by §112, para 6, as PO contends, Kiyota certainly discloses *a* structure that performs the recited function. (*Id.*, ¶90).

Because Kiyota discloses each element of claim 1, the claimed invention would have been obvious in view of Kiyota. (Ex. 1003, ¶91); *see also In re Baxter Travenol Labs*, 952 F.2d 388, 391 (Fed. Cir. 1991) (“[S]ince anticipation is the ultimate of obviousness, the subject matter of these claims is necessarily obvious ...”); *Realtime Data v. Iancu*, 912 F.3d 1368, 1373 (Fed. Cir. 2019) (“anticipation is the epitome of obviousness.”).

C. Claim 2

Claim 2 depends from claim 1, and adds that “the user release mechanism is mechanically coupled to the first catch structure.” Kiyota discloses this added limitation. (Ex. 1003, ¶¶92-95). As discussed above, Kiyota discloses a user release mechanism that includes “hook-like stopper pieces 45” (i.e. first catch structures) on “lock release buttons 40.” As shown below, the hook-like stopper

piece 45 (i.e. first catch structure) is fixed to the “upper plate 44” of the release button, and is thus mechanically coupled to the user release mechanism.



(Ex. 1004, Fig. 4, 7:10-11).

Because Kiyota discloses the additional limitation of claim 2, it also would have been obvious to a POSITA in view of Kiyota. (Ex. 1003, ¶95)

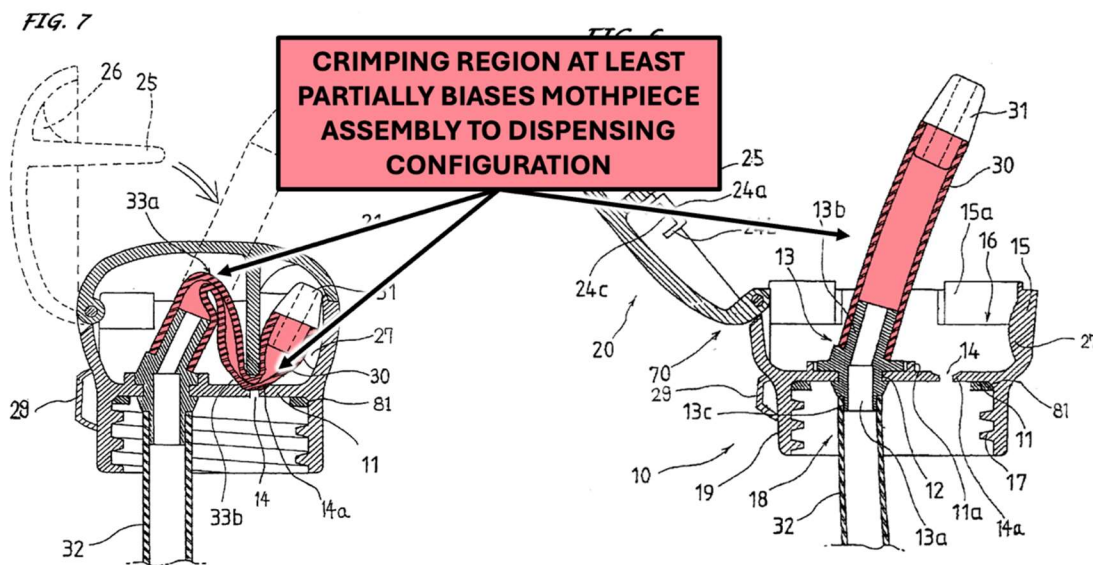
D. Claim 5

Claim 5 depends from claim 1, and adds “wherein the crimping region [of the mouthpiece assembly tube] at least partially biases the mouthpiece assembly to the dispensing configuration.” Kiyota discloses this additional limitation. (Ex. 1003, ¶¶96-99).

Kiyota teaches the “bending portions 33” (i.e. crimping regions) of “mouthpiece tube 30” bias Kiyota’s mouthpiece assembly to its dispensing configuration:

Because the mouthpiece tube 30 is stored within the storing portion 16 under the forced and folded condition [it] pushes the top board 21 by its elastic force, automatically opens the openable lid 20 with pressure and stands by outwardly projecting from the storing portion 16.

Ex. 1004, 9:7-13. This is shown in Figures 6 and 7 below:



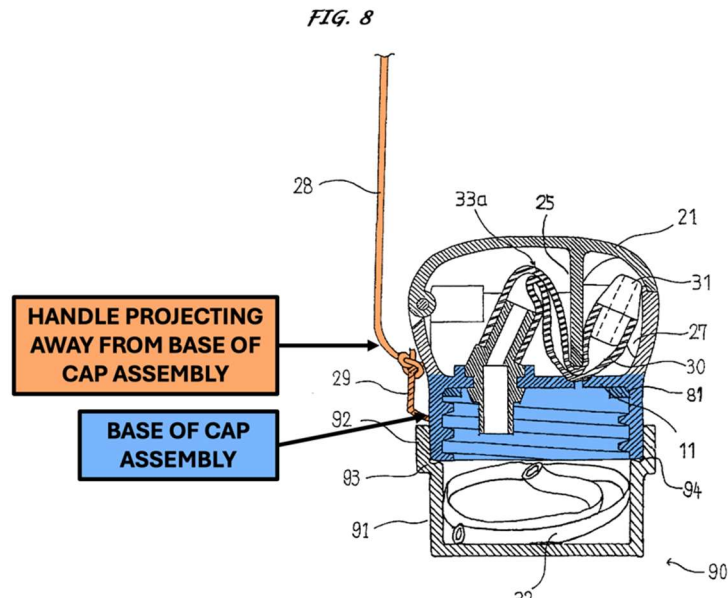
(*Id.*, Figs. 6, 7).

Because Kiyota discloses the additional limitation of claim 5, it also would have been obvious to a POSITA in view of Kiyota. (Ex. 1003, ¶99).

E. Claim 6

Claim 6 depends from claim 1, and adds “wherein the cap assembly further includes a handle that projects away from the base of the cap assembly and a pair of lateral guards that at least partially define a stowing region that receives at least a portion of the mouthpiece assembly between the pair of lateral guards when the mouthpiece assembly is in the stowed configuration.” Kiyota discloses this additional limitation. (Ex. 1003, ¶¶100-106).

Kiyota discloses a handle that projects away from the base of the cap assembly. Specifically, it includes hooking portion/stopper piece 29, which projects away from the cap assembly base. (Ex. 1004, 12:34-37). Further, it describes that a strap-like body 28 can be tied to the hooking portion, which would also project away from the cap assembly base. (*Id.* at 8:34-38).

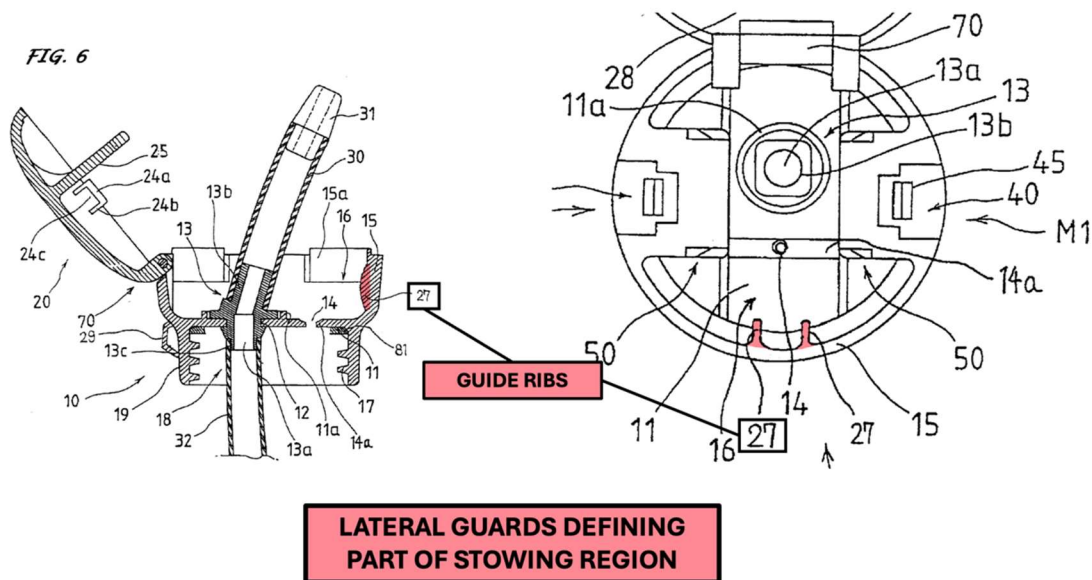


(*Id.* at Fig. 8). Both the hooking portion/stopper piece 29 individually and in combination with a strap-like body 28 would be a handle projecting away from the cap assembly base. (Ex. 1003, ¶¶102).

If one were to find that Kiyota did not sufficiently disclose or suggest a handle that projects away from the base of the cap assembly, e.g. based on the size of the hooking portion or flexibility of the strap, this limitation would have been obvious to a POSITA. Kiyota describes the known desirability of carrying the lid and beverage container. (Ex. 1004, 8:50-53). Modifying Kiyota’s “hooking portion” to form, for example, a larger handle to accommodate a user’s finger or hand would have been obvious over Kiyota, in view of the knowledge of a POSITA. (Ex. 1003, ¶¶103). For example, a POSITA would have understood that Kiyota’s “hooking portion” could be readily enlarged to accommodate a user’s

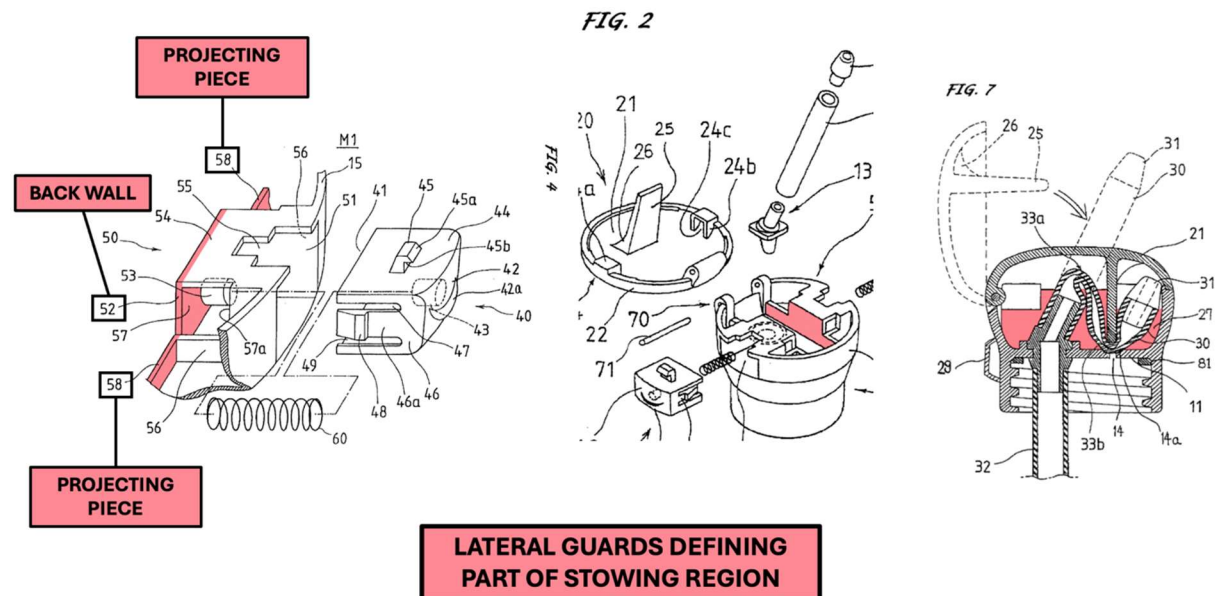
finger or hand, and thereby form a handle to grasp the device without the need for the strap. (*Id.*) A POSITA would have been motivated to make this change because it would not have altered the overall function or structure of the cap assembly and would have provided an alternative mechanism by which to carry the device, in addition to the hooking portion/strap disclosed in the Kiyota. (*Id.*)

Kiyota also discloses a pair of lateral guards as recited in claim 6. Specifically, “guide ribs 27” define part of “storing portion 16” (i.e. the stowing region) and receive at least a portion of “mouthpiece tube 30” (i.e. the mouthpiece portion) when the mouthpiece assembly is in the stowed configuration. When stowed, “mouthpiece tube 30 is stored within the storing portion 16,” (Ex. 1004, 9:7-8), and “held between a pair of guide ribs 27, 27 of the storing portion 16” (*Id.* at 10:8-9).



(*Id.*, Figs. 6, 7).

Kiyota also discloses a pair of walls (back plates 52 and projecting pieces 18) that define the sides of “storing portion 16,” (*id.* at 6:1-7; 6:20-24), which a POSITA would have understood constitute a separate pair of lateral guards (in addition to the “guide ribs” discussed above) that define part of the stowing region, (Ex. 1003, ¶105), as shown below:



(Ex. 1004, Figs. 2, 4, and 7).

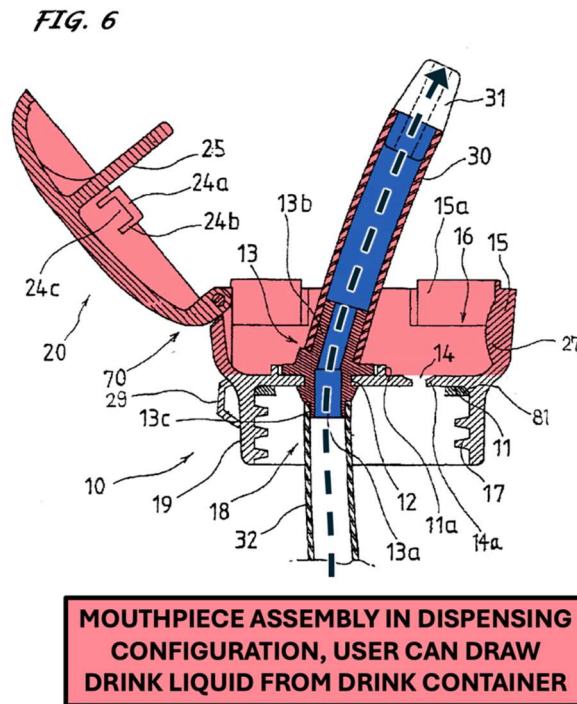
Because Kiyota discloses the additional limitations of claim 6, it also would have been obvious to a POSITA in view of Kiyota. (Ex. 1003, ¶106).

F. Claim 8

Claim 8 depends from claim 1, and adds “wherein the mouthpiece portion permits a user to draw drink liquid from the drink container when the mouthpiece assembly is in the dispensing configuration.” Kiyota discloses claim 8’s additional limitation. (Ex. 1003, ¶¶107-110).

Kiyota discloses that, when the mouthpiece assembly is in the dispensing configuration, the user can draw drink liquid through its mouthpiece portion

(mouthpiece tube 30). A user “can open the openable lid 20” and “drink[] a beverage from the mouthpiece tube 30” (Ex. 1004, 11:27-29).



(*Id.*, Fig. 6).

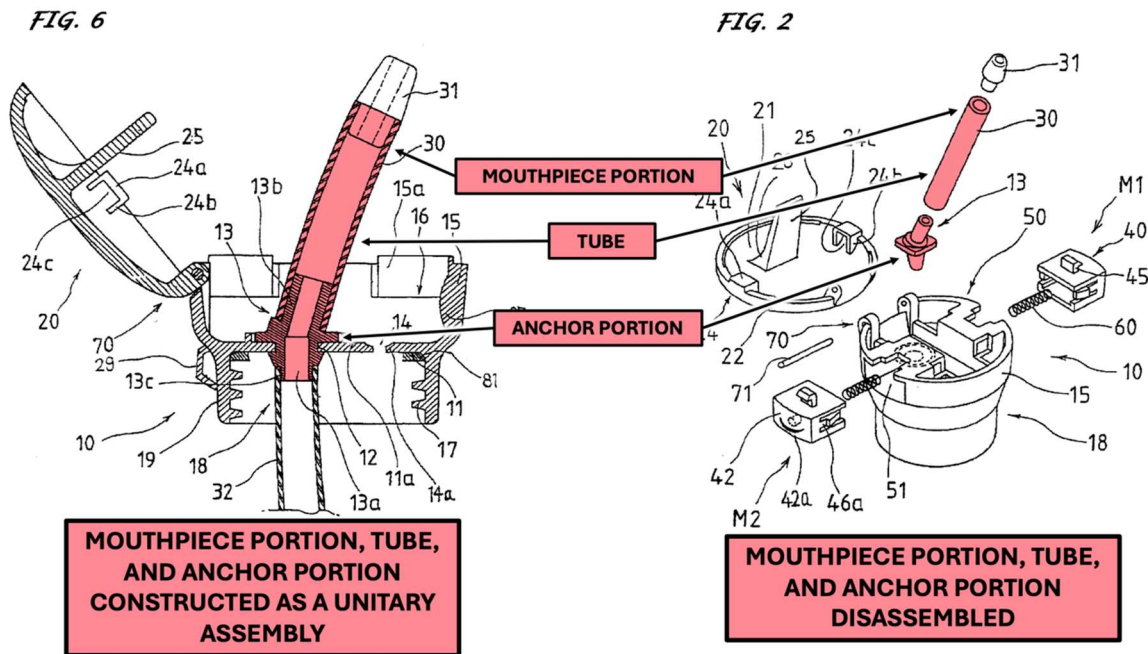
Because Kiyota discloses the additional limitation of claim 8, it would have been obvious to a POSITA in view of Kiyota. (Ex. 1003, ¶110).

G. Claim 9

Claim 9 depends from claim 1, and adds “wherein the mouthpiece portion, the tube, and the anchor portion are constructed as a unitary assembly of the

resiliently deformable material.” Kiyota discloses claim 9’s additional limitation. (Ex. 1003, ¶¶111-118).

Kiyota discloses that the mouthpiece tube 30 (the claimed mouthpiece portion and tube) and the coupling tube 13 (the claimed anchor portion) are assembled into a single assembly. (Ex. 1004, 5:40-41 (“To the first coupling tube 13b is detachably fixed the base end portion of a mouthpiece tube 30.”)).



(*Id.*, Figs. 2, 6). Kiyota further discloses that mouthpiece tube 30 is constructed of a resiliently deformable material. “[M]outhpiece tube 30. . . , for example, is a tubular member made of elastic and flexible synthetic resin” (*Id.* at 9:66-67).

Kiyota does not disclose that “mouthpiece tube 30” and “coupling tube 13” are “constructed as a unitary of the resiliently deformable material.” However, it

would have been obvious to a POSITA to construct the “mouthpiece tube 30” and “coupling tube 13” as a unitary assembly, and to use the resiliently deformable material for both the “mouthpiece tube 30” and the “coupling tube 13.” (Ex. 1003, ¶114).

Although not explicitly stated in Kiyota, a POSITA would have understood the coupling tube was resilient to enable it to be inserted and removed and also to provide a seal in the through-hole. (Ex. 1003, ¶115). Further, a POSITA would have been motivated to use a resilient material for “coupling tube 13” because such materials would ensure a tight seal between the coupling tube and “communicating hole 12” during use of the device, thereby preventing fluid from leaking out of the beverage container through the hole in the cap assembly base. (*Id.*, ¶115). A POSITA also would have recognized that the use of resilient materials, as compared to rigid materials, would have enabled the coupling tube to be inserted into the through-hole and removed from the cap assembly for cleaning and maintenance. (*Id.*)

A POSITA also would have been motivated to construct the “mouthpiece tube 30” and “coupling tube 13” as a unitary assembly for several reasons. (Ex. 1003, ¶¶116-117). First, a person of ordinary skill would have recognized the desirability of reducing the number of parts required to assemble Kiyota’s lid body.

(*Id.*, ¶116). This would have the added benefit of eliminating the possibility of unintended disconnection between the “mouthpiece tube 30” and “coupling tube 13” during use. (*Id.*) In addition, when stowed, mouthpiece tube 30 is “bent just above the first coupling tube 13b at an acute angle.” (Ex. 1004, 10:4). A POSITA would have understood this configuration to create significant lateral stresses on the connection between the coupling tube and the mouthpiece, which would create a risk that the “mouthpiece tube 30” might separate from the “coupling tube 13” during routine use. (Ex. 1003, ¶117). To mitigate this risk, a POSITA would have been motivated to construct the “mouthpiece tube 30” and “coupling tube 13” as a unitary assembly of the same resilient material. (Ex. 1003, ¶117).

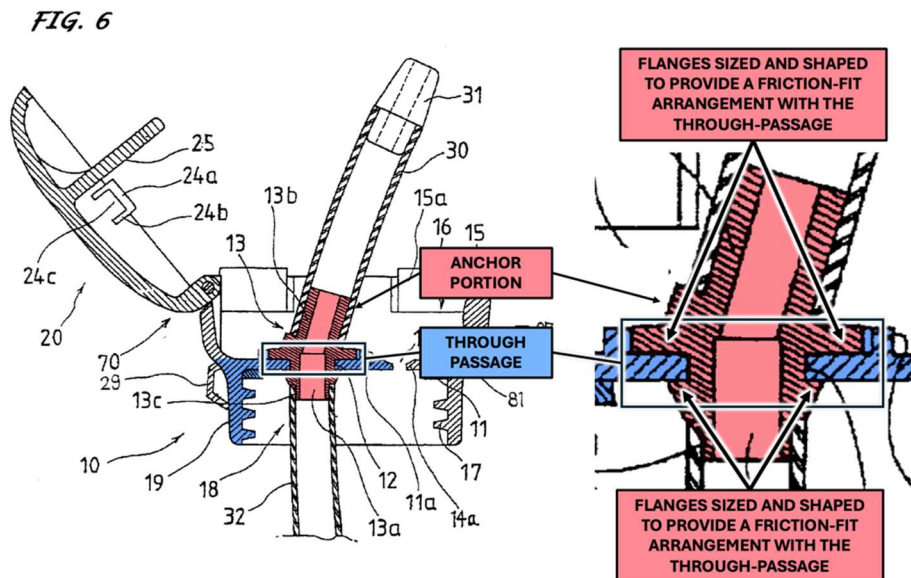
Accordingly, Claim 9 would have been obvious over Kiyota in view of Kiyota. (*Id.* at ¶118).

H. Claim 15

Claim 15 depends from claim 1, and adds “wherein the anchor portion includes a plurality of flanges that are sized and shaped to provide a friction-fit arrangement with the through-passage.” Kiyota discloses claim 15’s additional limitation. (Ex. 1003, ¶¶119-122).

As discussed above, Kiyota discloses coupling tube 13 which extends through communicating hole 12. Coupling tube 13 includes two flanges extending

immediately above and below baseplate 11 that are sized and shaped to provide a friction-fit arrangement with the through-passage.



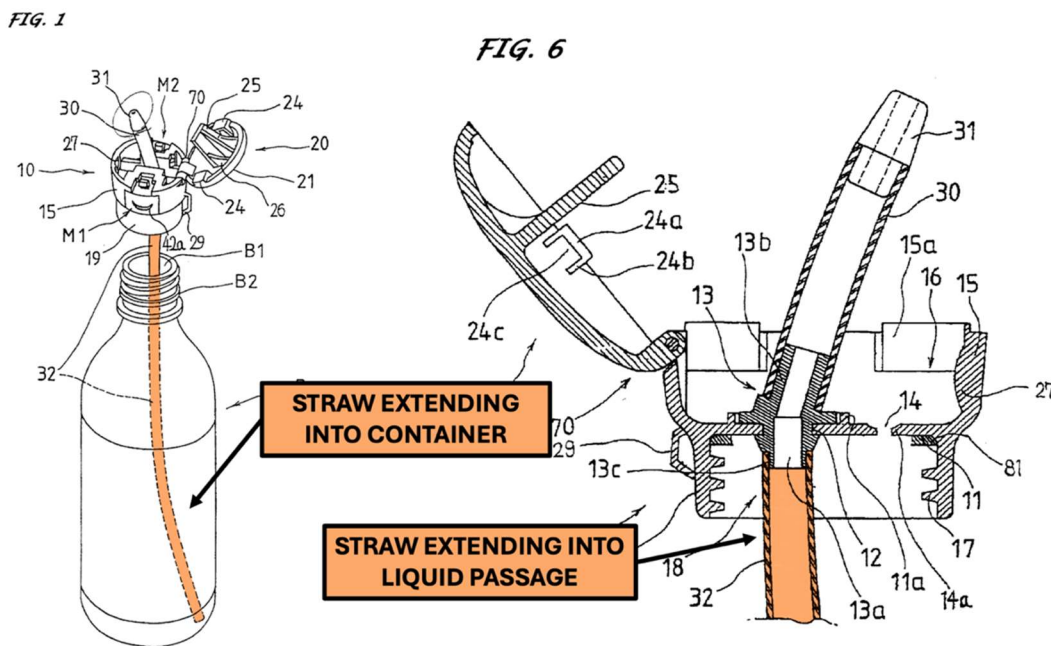
(Ex. 1004, Fig. 6).

Because Kiyota discloses the additional limitation of claim 15, it would have been obvious to a POSITA in view of Kiyota. (Ex. 1003, ¶122).

I. Claim 16

Claim 16 depends from claim 1, and adds “wherein the drink container includes a straw with a first end that extends into the liquid container and a second end that extends into the liquid passage and is retained therein by the friction-fit arrangement.” This additional limitation is obvious over Kiyota in view of the knowledge of a POSITA. (Ex. 1003, ¶¶123-127).

As shown below, Kiyota discloses a straw (suction tube 32) with a first end that extends into the liquid container and a second end that engages the outer surface of the coupling tube 13. (Ex. 1004, 5:42-45).



(*Id.*, Figs. 1, 6). The straw is retained on the outer surface of the coupling tube by a friction fit arrangement. (Ex. 1003, ¶126).

If the Board were to find that Kiyota does not disclose a straw with a second end that extends “into the liquid passage,” because it engages the outer surface of the coupling tube, it would have been obvious to insert the straw into the coupling tube. For example, a POSITA would have recognized only two possible friction-fit arrangements between the suction tube and the coupling tube: one in which the

suction tube is fitted around the coupling tube (as in Figure 6, above), and a second in which the suction tube is fitted within the coupling tube. (*Id.*) A POSITA would have understood the choice between an internal friction fit or an external friction-fit to be a simple choice between two identified, predictable solutions, each of which would have a reasonable expectation of success. *See KSR Int’l Co. v. Teleflex, Inc.*, 550 U.S. 398, 417 (2007)

Because Kiyota discloses the additional limitation of claim 16 and/or because it would have been obvious to a POSITA based thereon, claim 16 would have been obvious to a POSITA in view of Kiyota. (*Id.*, ¶127).

J. Claim 21

Independent claim 21 recites many of the same limitations as claim 1 and its dependent claims. Claim 21 provides as follows (with reference numbers added):

Claim 21	
Preamble	A drink container, comprising:
1[A]	a liquid container ; and
1[B][1]	a base that defines a through-passage;
1[B][2]	a mouthpiece assembly that extends through the through-passage of the base and defines a liquid passage, wherein the mouthpiece assembly has a dispensing configuration and a stowed configuration, wherein the mouthpiece assembly is biased to the dispensing configuration, and wherein the mouthpiece assembly comprises:

Claim 21	
1[B][2][a]	a resilient mouthpiece portion that permits a user to draw drink liquid from the drink container when the mouthpiece assembly is in the dispensing configuration;
1[B][2][b]	a resilient tube connected to the mouthpiece portion and including a crimping region that is adapted to restrict flow of drink liquid through the mouthpiece assembly when the mouthpiece assembly is in the stowed configuration; and
1[B][2][c]	a resilient anchor portion extending from the resilient tube opposite the resilient mouthpiece portion, wherein the anchor portion is sized to restrict passage of the resilient anchor portion through the through-passage and thus restrict removal of the mouthpiece assembly via a top side of the , and wherein the resilient mouthpiece portion, the resilient tube, and the resilient anchor portion are constructed as a unitary assembly; and
1[B][3]	a user release mechanism adapted to automatically release the mouthpiece assembly from the stowed configuration to the dispensing configuration via the bias of the mouthpiece assembly.

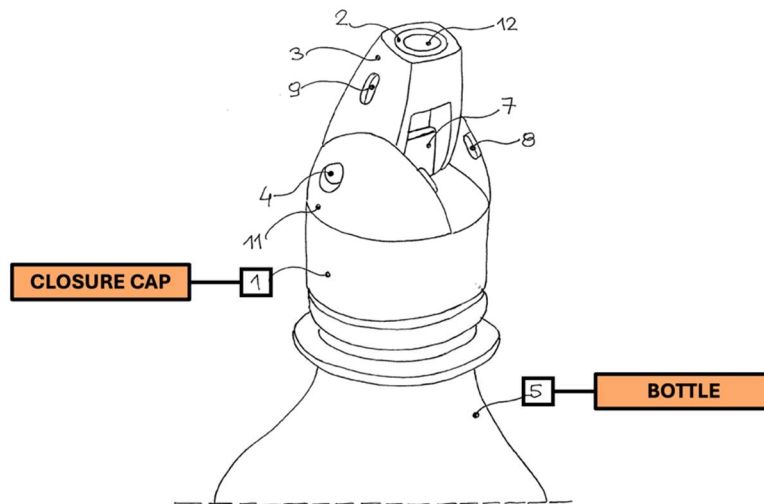
Kiyota renders claim 21 obvious for the same reasons addressed above. (Ex. 1003, ¶¶128-155); supra §§VIII(B), (D), and (I). Below is a table correlating the limitations of claim 21 with the claims discussed above.

Claim 21	Claim 1
Claim 21[preamble]	<i>See</i> claim 1[preamble]
Claim 21[A]	<i>See</i> claim 1[A]
Claim 21[B]	<i>See</i> claim 1[B]
Claim 21[B][1]	<i>See</i> claim 1[B][1]
Claim 21[B][2]	<i>See</i> claim 1[B][2]
Claim 21[B][2][a]	<i>See</i> claims 1[B][3], 1[B][3][b]
Claim 21[B][2][b]	<i>See</i> claim 1[B][2][b]
Claim 21[B][2][c]	<i>See</i> claims 1[B][2][c], 16
Claim 21[C]	<i>See</i> claims 1[B][4], 5

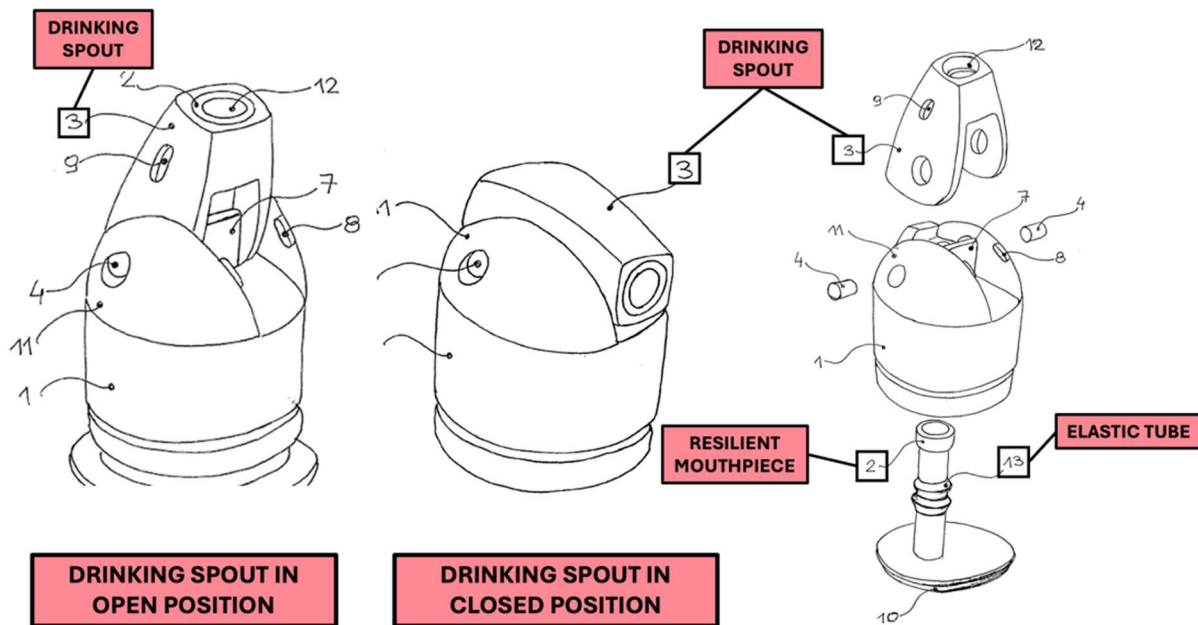
**IX. GROUND 2: CLAIMS 1, 2, 5, 6, 8, 9, 15, 16, AND 21 ARE
OBVIOUS IN VIEW OF RIBARITS**

A. Overview of Ribarits

Ribarits (Ex. 1005) is titled “Drinking Device.” The drinking device includes a closing cap 1 that can be removably connected to a drink bottle. The cap includes a drinking spout 3 that can be pivoted between an open position and a closed position. (Ex. 1005, 2). The cap in its open position is depicted below.

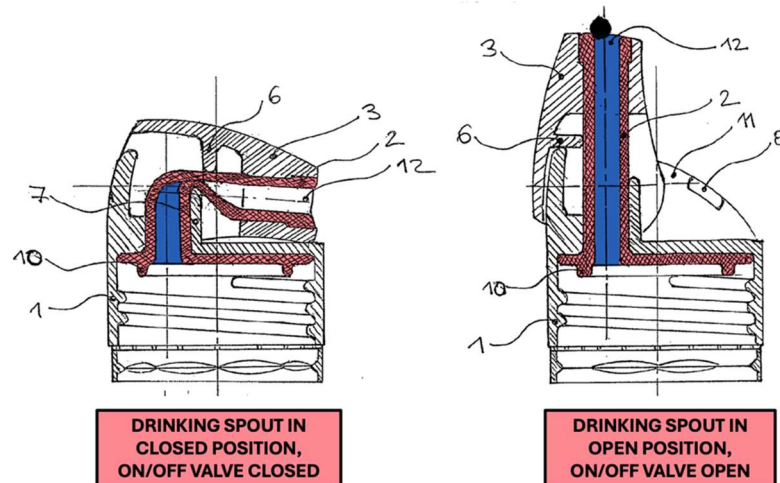


(*Id.*, Fig. 1). The drinking spout 3 includes a sealed tubular element 2 that has a drinking outlet. (*Id.* at 3 (Claim 7)).



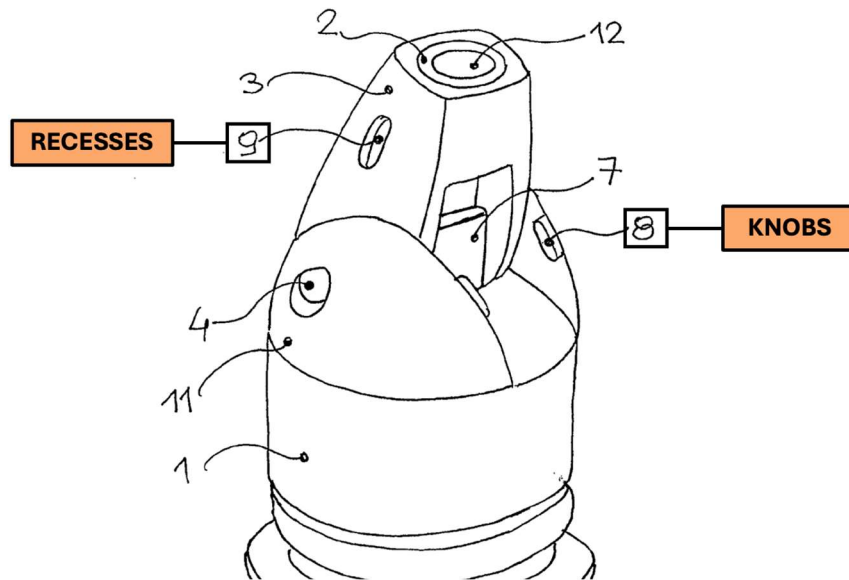
(*Id.*, Figs. 1 (cropped), 2).

The sealed tubular element functions as an on/off valve that opens and closes based on the pivoting of the drinking spout. The pivoting of the spout causes the tubular element to crimp in the closed position, (*id.* at 2), as shown below:



(*Id.*, Fig. 3).⁴ The sealed tubular element includes a sealing ring 10. (*Id.* at 3 (Claim 1)). The cap includes a securing mechanism to maintain the spout in the closed position and avoid accidental opening.

⁴ The black dot adjacent the dispensing outlet in Figure 3 appears to be a printing error in the original published patent figure.



(Ex. 1005, Fig 1 (cropped)). Specifically, the spout includes two recesses and the closing cap includes two knobs. (*Id.* at 2) (“Two recesses laterally attached in the lateral parts into which the knobs attached to the drinking spout snap in to prevent an accidental opening of the drinking spout.”). In the closed position, knobs 8 engage recesses 9 on the lateral parts of the drinking spout to maintain the spout in the closed configuration. (*Id.* at 3 (Claim 1)). A user can disengage the knobs from the recesses to allow the spout to pivot to its opening position. (*Id.* at 2).

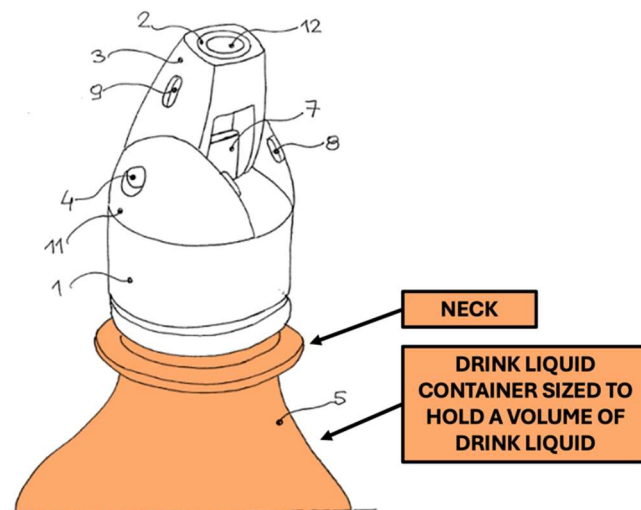
B. Claim 1 is Obvious in View of Ribarits

As described below, Ribarits discloses a drink container having all the limitations recited in claim 1 and therefore renders the claim obvious. (Ex. 1003, ¶¶157-193).

1. Preamble and Limitation 1[A]: “liquid container”

The preamble and limitation 1[A] recite “[a] drink container, comprising: a liquid container having a neck with an opening and having an internal compartment sized to hold a volume of potable drink fluid.” Ribarits discloses a drink container having limitation 1[A]. (Ex. 1003, ¶¶157-160).

As depicted below, Ribarits discloses “a drinking device” that includes a liquid container having a neck with an opening. (Ex. 1005, 1-2). The liquid container and neck are shown below. A POSA would have understood that the neck portion of the container would have an opening that attaches to the threaded cap of Ribartis. (Ex. 1003, ¶160).

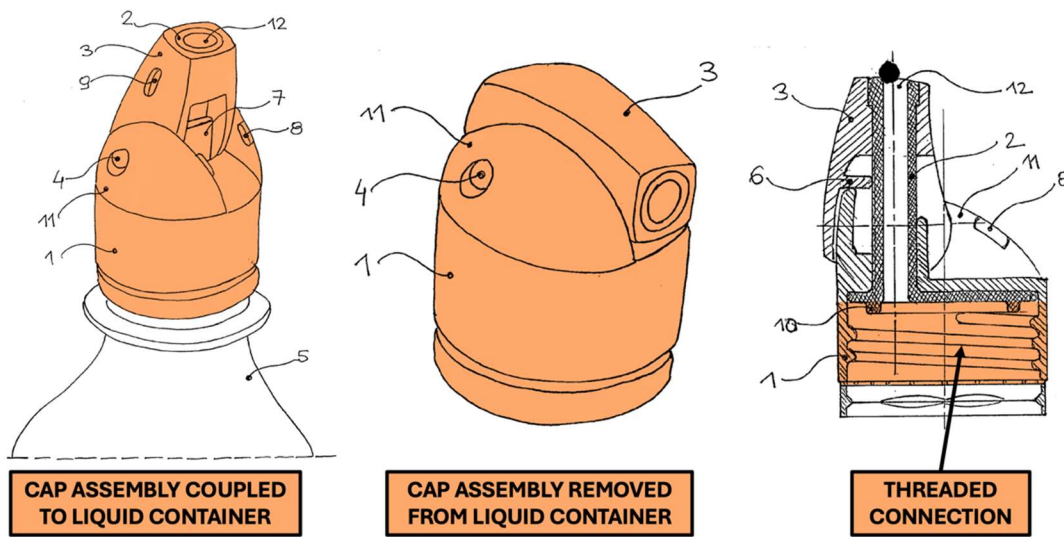


(Ex. 1005, Fig. 1).

2. 1[B]: Cap Assembly

Limitation 1[B] recites “a cap assembly removably coupled to the liquid container.” Ribarits discloses this limitation. (Ex. 1003, ¶¶161-163). Specifically, Ribarits discloses a closing cap 1 removably coupled to a bottle 5.

Ribarits’ “closing cap” is removably coupled to the liquid container via a threaded connection. (Ex. 1005, 3 (Claim 1)).

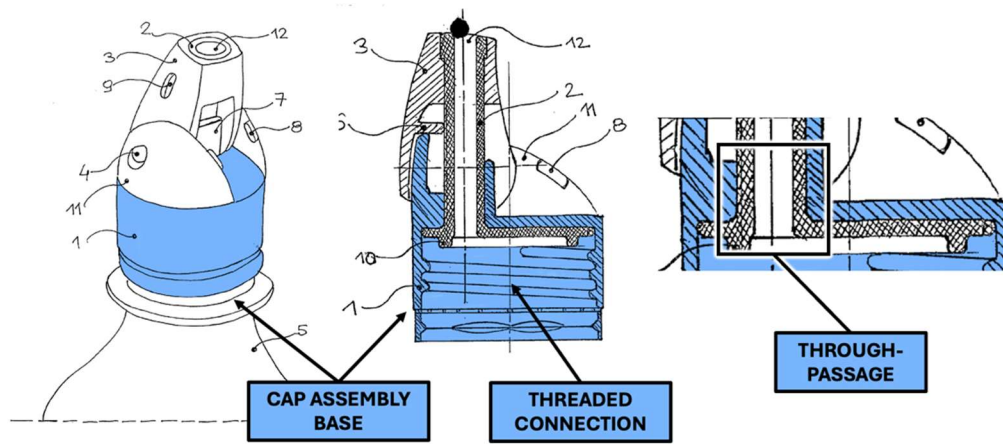


(*Id.*, Figs. 1, 3).

a. 1[B][1]: Base

Limitation 1[B][1] recites that the cap assembly comprises “a base removably coupled to the neck of the liquid container and including a through-passage.” Ribarits discloses the claimed base. (Ex. 1003, ¶¶164-165). The base of Ribarits comprises closing cap 1 and lateral parts 11.

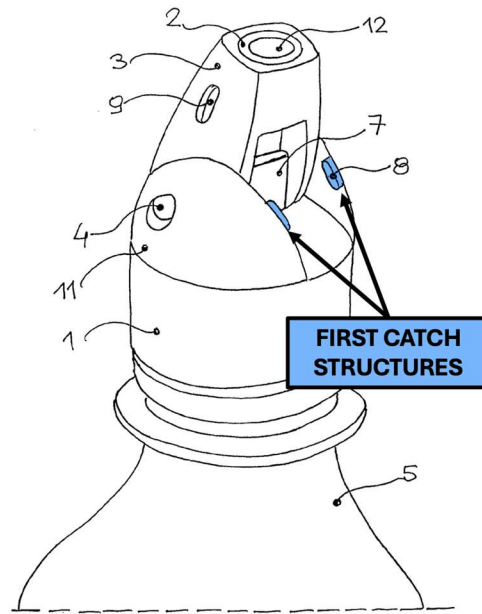
As discussed above and shown below, Ribarits’ “closing cap” is removably coupled to the neck of the liquid container via a threaded connection. (Ex. 1005, 3 (Claim 1)). As shown below, Ribarits discloses a cap assembly base that includes a through-passage.



(*Id.*, Figs. 1, 3).

b. 1[B][2]: First Catch Structure

Limitation 1[B][2] recites that the cap assembly comprises “a first catch structure.” Ribarits discloses this limitation. (Ex. 1003, ¶¶166-168). Specifically, Ribarits discloses a “securing mechanism” (Ex. 1005, 2) that includes catch structures (knobs 8) on the cap assembly, as shown below:

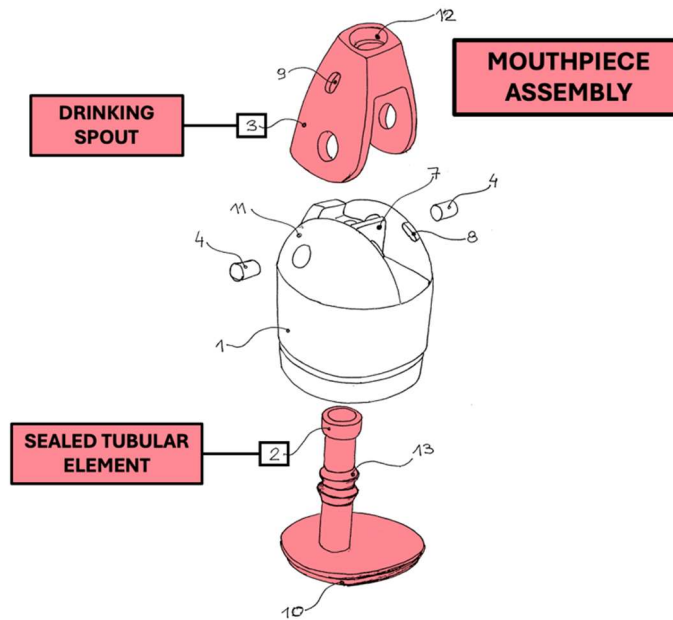


(*Id.*, Fig. 1).

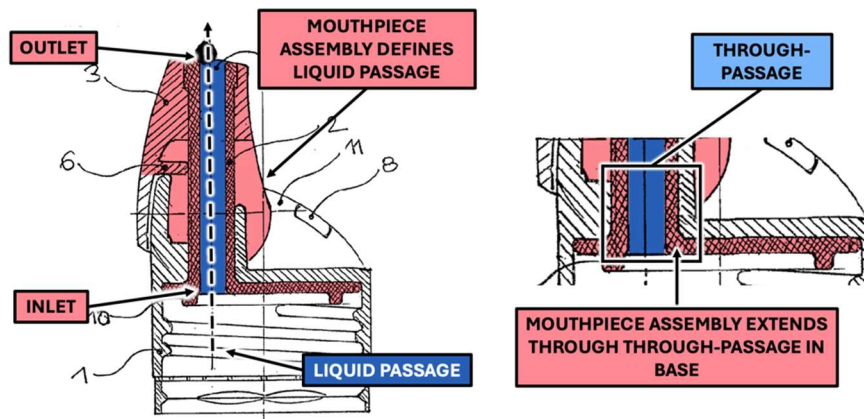
c. **1[B][3]: Mouthpiece Assembly**

Limitation 1[B][3] is directed to the mouthpiece assembly. Ribarits discloses the mouthpiece assembly as recited. (Ex. 1003, ¶¶169-172).

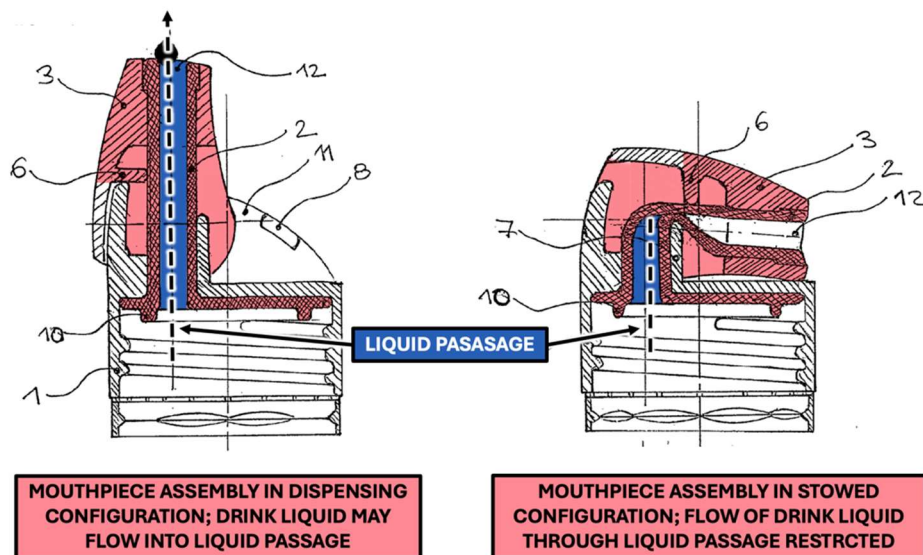
The Ribarits mouthpiece assembly includes, *inter alia*, a “drinking spout (3)” and a “sealed tubular element (2),” as shown below:



(Ex. 1005, Fig. 2). The sealed tubular element is a flexible tube made from an elastic “rubber or latex” material, which extends through the through-passage to define a liquid passage from the container to the user. (*Id.* at 2). As shown below, the flexible tube includes an inlet at its base and an outlet at its opposite end, which fits within the drinking spout.



(*Id.*, Fig. 3). As shown below, the drinking spout is pivotable between a dispensing configuration and a stowed configuration:



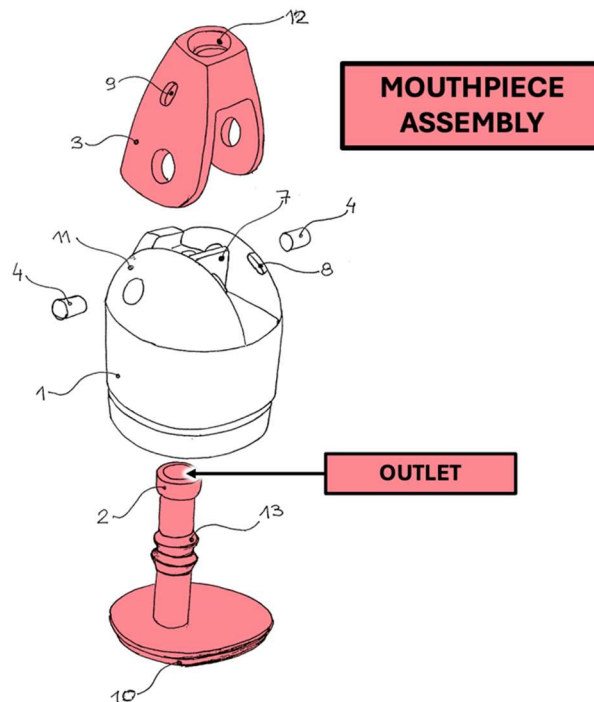
(*Id.*, Fig. 3). In the dispensing configuration, liquid may flow from the container, through the flexible tube of the mouthpiece assembly, and to the user. (*Id.* at 2). In the stowed configuration, the flexible tube is crimped, thereby restricting the flow of liquid from the container and through the mouthpiece assembly. (*Id.*). Because the flexible tube is comprised of an elastic rubber or latex material, a

POSA would have understood the tube, and thus the mouthpiece assembly, to be biased in favor of the dispensing configuration. (Ex. 1003, ¶172).

i. 1[B][3][a]: Mouthpiece Portion

Limitation 1[B][3][a] recites that the mouthpiece assembly comprises “a mouthpiece portion that includes an outlet.” Ribarits discloses this limitation. (Ex. 1003, ¶¶173-174).

As discussed above and shown below, the mouthpiece assembly includes a flexible tube that defines a liquid passage from the container to the user. The flexible tube includes an outlet at the end opposite the container:



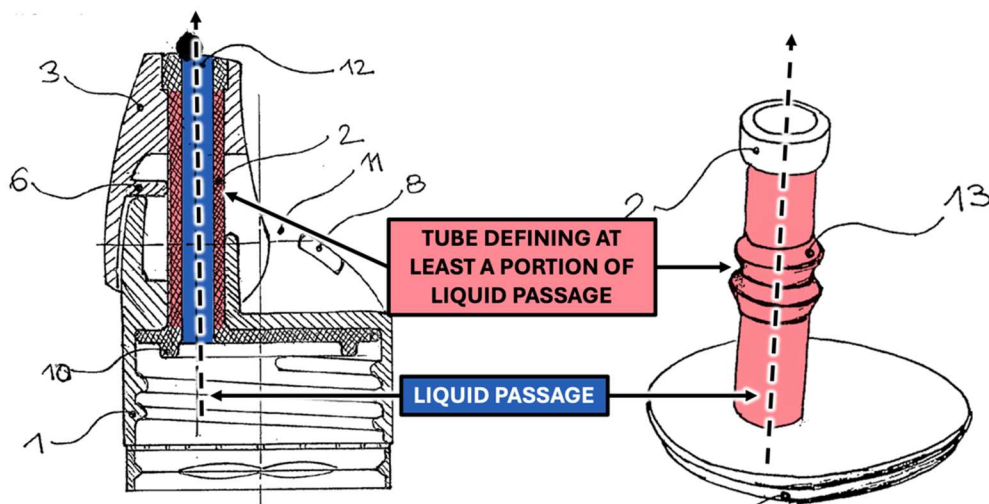
(Ex. 1005, Fig. 2). Because the outlet end of the flexible tube and drinking spout assembly is the portion of Ribarits device from which fluid flows directly to the

user's mouth, a POSA would have understood the outlet of the flexible tube to comprise the “mouthpiece portion” of the mouthpiece assembly. (Ex. 1003, ¶174)

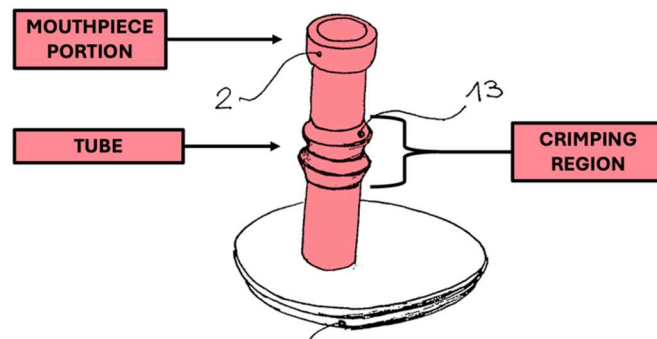
ii. **1[B][3][b]: Tube**

Limitation 1[B][3][b] is directed to features of the tube of the mouthpiece assembly. Ribarits discloses the tube as recited in limitation 1[B][3][b]. (Ex. 1003, ¶¶175-179).

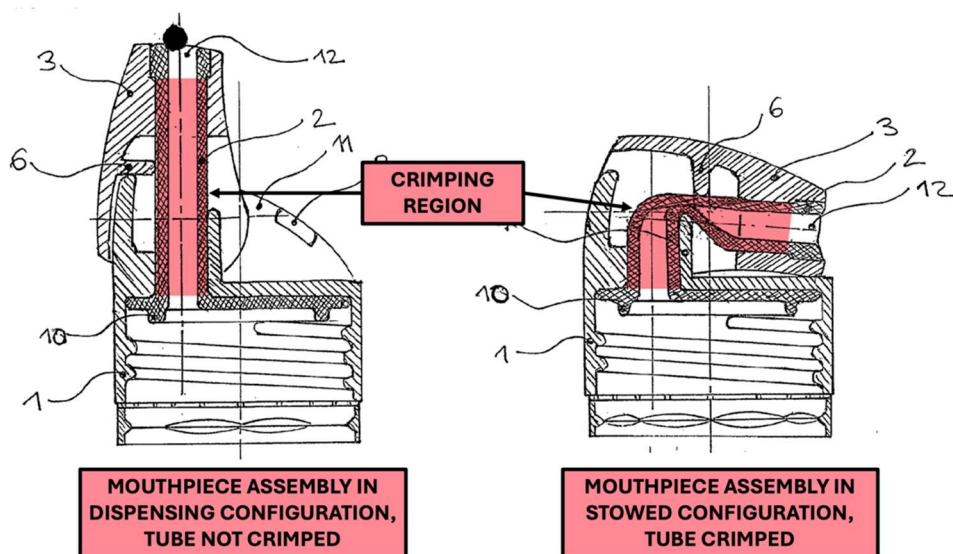
As shown below, Ribarits discloses a tube (sealed tubular element 2) that defines a portion of the liquid passage from the container to the outlet:



(Ex. 1005, Figs. 2 (cropped), 3). The tube is made from a resilient elastic material, such as “rubber or latex,” (*Id.* at 2), and is constructed as a unitary assembly with the mouthpiece portion.



(*Id.*, Fig. 2 (cropped)). The tube includes a crimping region, which collapses to restrict fluid flow when in the stowed configuration, as shown below:



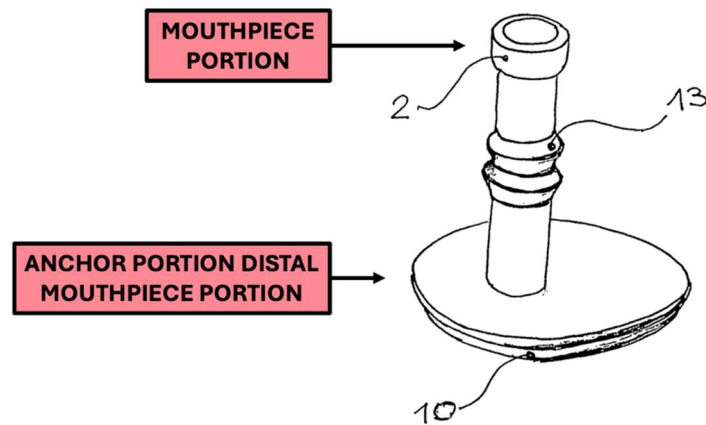
(*Id.*, Fig. 3).

iii. **1[B][3][c]: Anchor Portion**

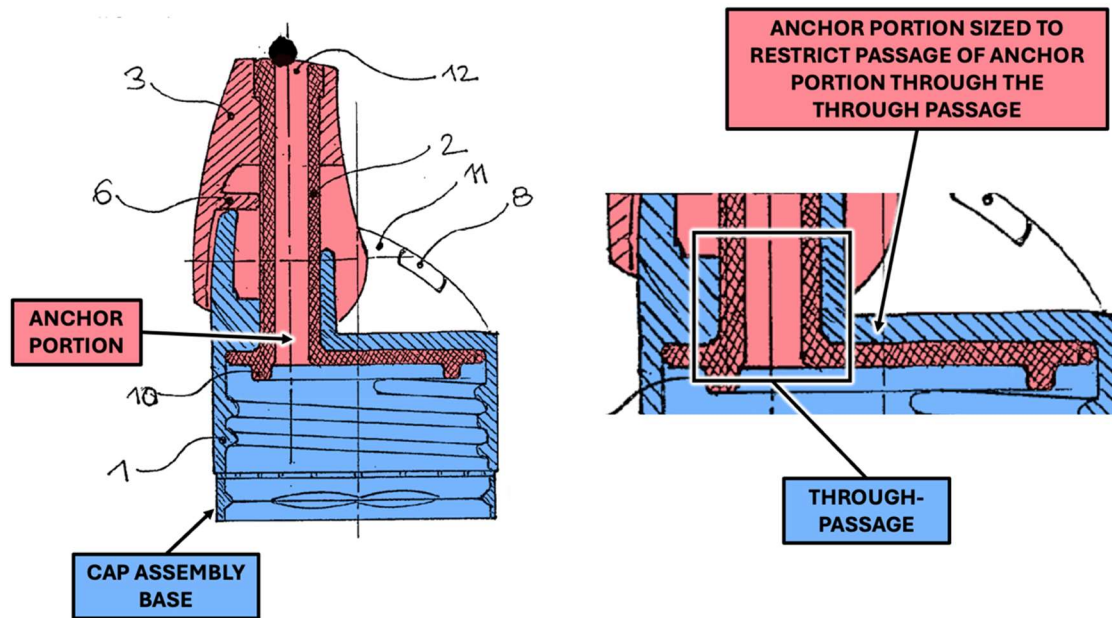
Limitation 1[B][3][c] recites that the mouthpiece assembly comprises “an anchor portion extending from the tube distal the mouthpiece portion, wherein the anchor portion is sized to restrict passage of the anchor portion through the

through-passage of the base of the cap assembly.” Ribarits discloses this limitation. (Ex. 1003, ¶¶180-182).

As shown below, the flexible tube includes an anchor portion (sealing ring 10) that constitutes an anchor portion opposite the mouthpiece (i.e. distal to the mouthpiece portion):



(Ex. 1005, Fig. 2 (cropped)). As shown below, the anchor portion extends outward to prevent the anchor portion from passing through the through-passage at the base of the cap assembly.

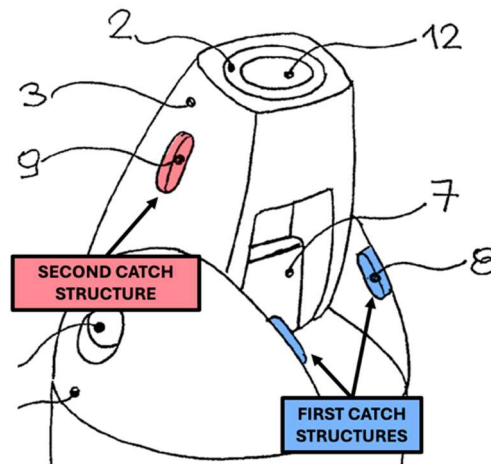


(*Id.*, Fig. 3).

iv. 1[B][3][d]: Second Catch Structure

Limitation 1[B][3][d] recites that the mouthpiece assembly comprises “a second catch structure adapted to be selectively engaged with the first catch structure to retain the mouthpiece assembly in the stowed configuration.” Ribarits discloses this limitation. (Ex. 1003, ¶¶183-185).

As discussed above, Ribarits discloses a “securing mechanism” (Ex. 1005, 2) comprised of corresponding catch structures on the base and drinking spout of the cap assembly, as shown below:



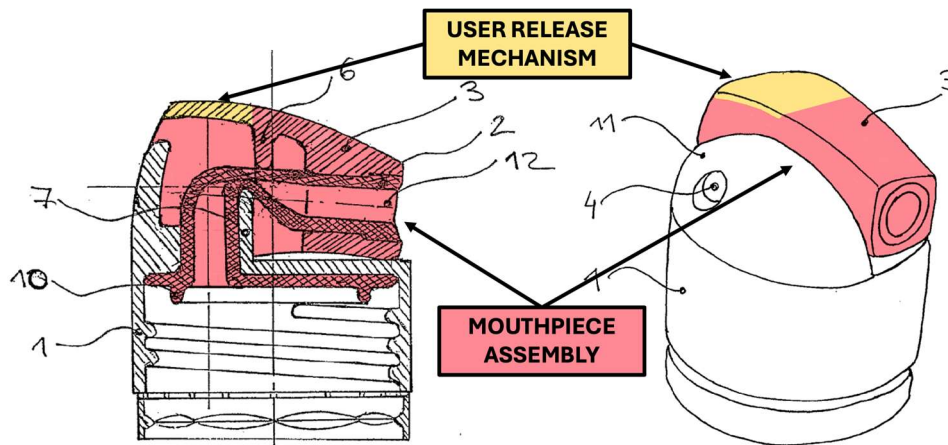
(*Id.*, Fig. 1 (cropped)). As shown above, the first catch structure comprises a pair of “recesses laterally attached in the lateral parts” of the cap (item 9 in Figure 1). The second catch structure comprises a pair of corresponding “knobs” (item 8 in Figure 1) on the “drinking spout” portion of the mouthpiece assembly. When the drinking spout is pivoted to the stowed configuration, the “knobs” snap into the “recesses” to “prevent an accidental opening of the drinking spout.” (*Id.* at 2). Ribarits teaches that the “knobs” and “recesses” are interchangeable between the cap and the drinking spout. *Compare* (Ex. 1005 at 3 (Claim 1) (“knobs (8)” on “lateral parts” of cap and “recesses (9) on the drinking spout”)) *with* (Ex. 1005 at 3 (Claim 5) (“recess (9)” on “lateral parts” of cap and “knobs (8) are located on the drinking spout”)).

d. 1[B][4]: User Release Mechanism

Limitation 1[B][4] recites that the cap assembly comprises a “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.” As described above, this claim limitation is governed by §112, paragraph 6. *Supra*, §VIII.B.3.

As recited in this claim limitation, the function of the “user release mechanism” is “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.” Ex. 1001, Claim 1. Ribarits discloses a user release mechanism that performs the recited function and which is equivalent to the ’028 patent structure. (Ex. 1003, ¶¶186-193).

Ribarits discloses that an object of its invention is to provide a cap assembly that can pivoted between the dispensing and stowed configurations with one hand. (Ex. 1005, 2). To accomplish this, the Ribarits “drinking spout” includes a lever arm that can be engaged by the user’s finger to open and close the spout, as shown below:



(Ex. 1005, Figs. 1, 3;). When the drinking spout is in the stowed configuration, the user may apply a force to the drinking spout to facilitate disengagement of the snap-fit connection between the catch structures, i.e. the “knobs” and “recesses.” (See *id.* at 2 (describing one-handed operation of Ribarits’ cap). Because the flexible tube within the drinking spout is comprised of an elastic “rubber or latex” material, it is inherently biased toward the dispensing configuration. (Ex. 1003, ¶190). That is, when in the collapsed, stowed position, the resilient elastic material of the tube wants to revert to its open configuration. This inherent bias further facilitates the automatic disengagement of the first and second catch structures (i.e. the “knobs” and “recesses”) and causes the mouthpiece assembly to move from the stowed configuration to the dispensing configuration in conjunction with the movement of the lever arm. (*Id.* , ¶190).

The structure performing the user release mechanism in Ribarits is equivalent to the structures of the '028 patent. (*Id.*, ¶191). They perform the claimed function in the same way to achieve the same result. (*Id.*) In the second embodiment of the user release mechanism of the '028 patent, for example, a user may press on the collar to force the catch structures to disengage. This is substantially the same in Ribarits: a user may press on the drinking spout to automatically disengage the first and second catch structures. (*Id.*)

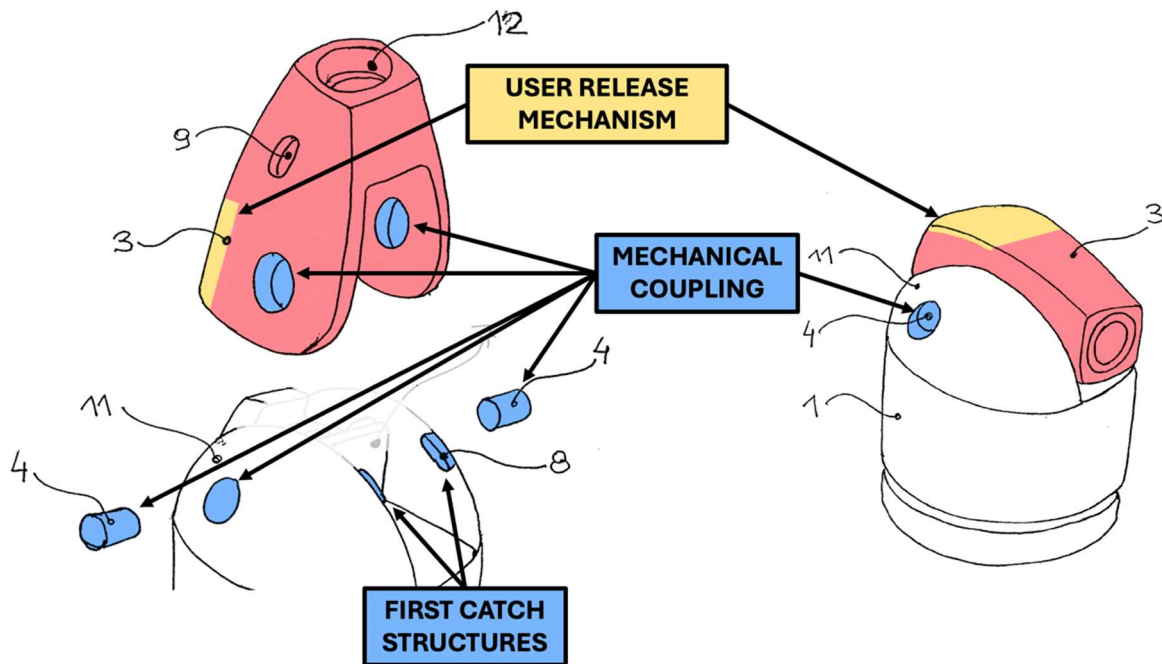
Further, to the extent “user release mechanism” is not governed by §112, para 6, as PO contends, Ribarits certainly discloses *a* structure that performs the recited function. (*Id.*, ¶192). Accordingly, Ribarits discloses each limitation of claim 1, and claim 1 is also obvious in view of Ribarits. (*Id.* at ¶193).

C. Claim 2

Claim 2 depends from claim 1, and adds that “the user release mechanism is mechanically coupled to the first catch structure.” Ribarits discloses the additional limitation of claim 2. (Ex. 1003, ¶¶194-197).

Ribarits’ user release mechanism, the “drinking spout,” is mechanically coupled to the first catch structure, the “knobs” on the cap assembly base, by virtue of a pair of axle pins that connect the drinking spout to the cap assembly base and

allow for it to pivot between the dispensing and stowed configurations, as shown below.



(Ex. 1005, 2, Fig. 1 & 2).

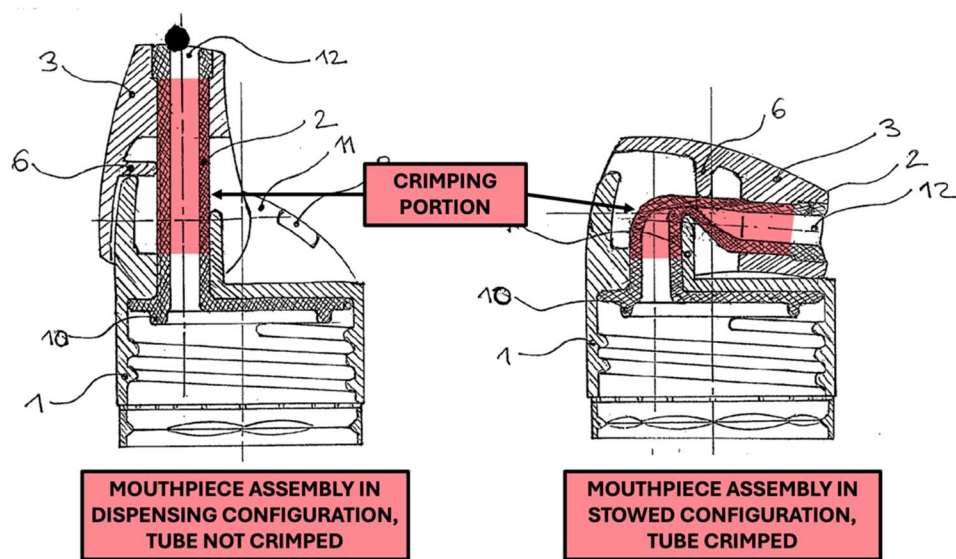
Because Ribarits discloses the additional limitation of claim 2, it would have been obvious to a POSITA in view of Ribarits. (Ex. 1003, ¶197).

D. Claim 5

Claim 5 depends from claim 1, and adds “wherein the crimping region at least partially biases the mouthpiece assembly to the dispensing configuration.” Ribarits discloses the additional limitation of claim 5. (Ex. 1003, ¶¶198-201).

As discussed above in connection with claim 1, Ribarits’ flexible tube includes a crimping region that collapses to restrict fluid flow through the tube

when in the stowed configuration. (Section IX(B)(2)(c)(ii), *supra*). Because Ribarits' flexible tube is comprised of an elastic rubber or latex material, a POSITA would have understood the tube—and thus the crimping region—to be biased to the dispensing configuration. (Ex. 1003, ¶200).



(Ex. 1005, Fig. 3)

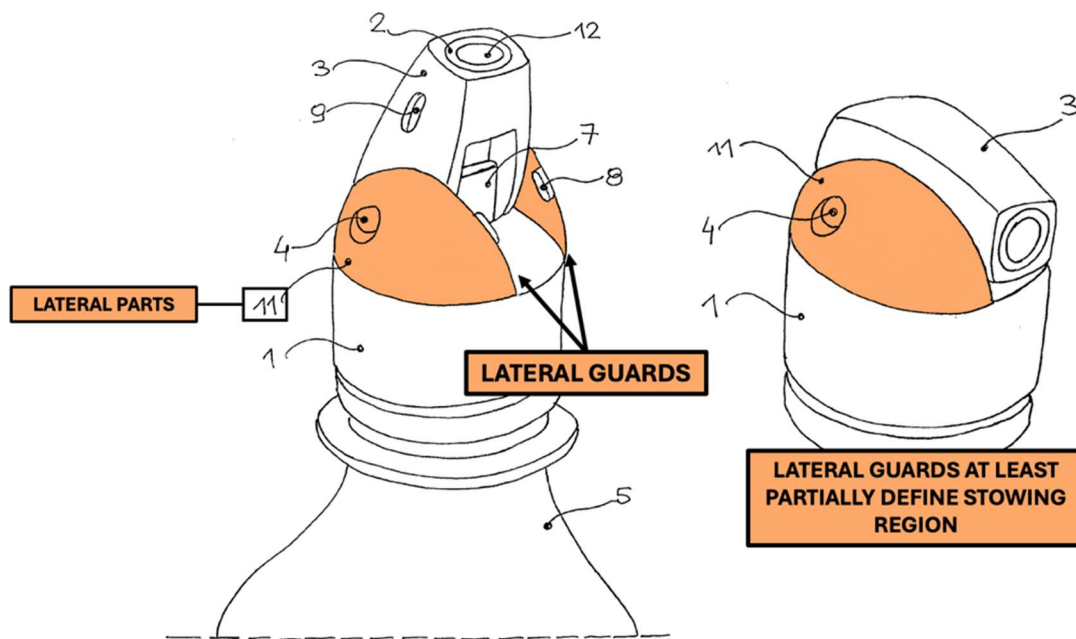
Because Ribarits discloses the additional limitation of claim 5, it would have been obvious to a POSITA in view of Ribarits. (Ex. 1003, ¶201).

E. Claim 6

Claim 6 depends from claim 1, and adds “wherein the cap assembly further includes a handle that projects away from the base of the cap assembly and a pair of lateral guards that at least partially define a stowing region that receives at least a portion of the mouthpiece assembly between the pair of lateral guards when the

mouthpiece assembly is in the stowed configuration.” This limitation would have been obvious over Ribarits, in view of the knowledge of a POSITA. (Ex. 1003, ¶¶202-208).

Ribarits discloses a pair of lateral guards. (Ex. 1003, ¶207). The Ribarits lateral guards are lateral parts 11, which define a stowing region that receives at least a portion of the mouthpiece assembly (i.e. the drinking spout) between the pair of lateral guards when the mouthpiece assembly is in the stowed configuration.



(Ex. 1005, Fig. 1).

Ribarits does not disclose a “handle that projects away from the base of the cap assembly.” However, this limitation would have been obvious over Ribarits, in view of the knowledge of a POSITA. (Ex. 1003, ¶¶204-206). The use of

carrying handles for fluid containers was commonplace at the time of the invention. (*Id.*, ¶204). Basic reusable water bottles routinely included handles to facilitate carrying. (*Id.*) Accordingly, a person of ordinary skill in the art would have recognized the desirability of adding a handle to the Ribarits cap assembly, and doing so would have constituted nothing more than a routine design choice for a POSITA. (*Id.*)

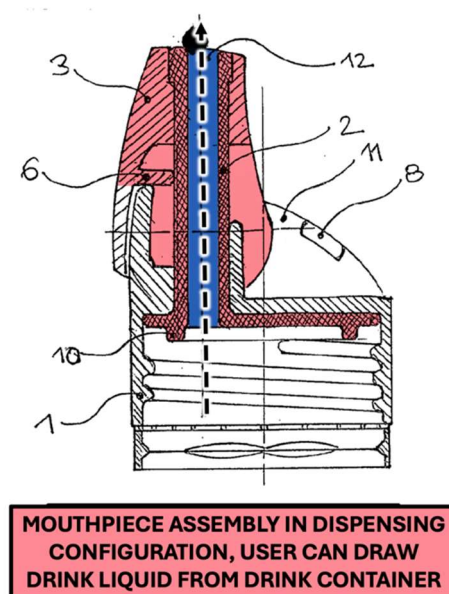
A POSITA would have been motivated to add a handle to Ribarits at least because handles were well-known at the time of the invention and was equally well-known that for liquid containers intended to hold cold beverages, the use of a handle would minimize the transfer of heat from the user's hand, and thereby ensure the contents of the container remained colder for longer. (*Id.*, ¶205). Moreover, a POSITA would have had a reasonable expectation of success in modifying Ribarits to include a handle because it could be accomplished by attaching the handle via the sockets in Ribarits' cap assembly base and would not require any other change to the Ribarits design. (*Id.*, ¶206).

Accordingly, claim 6 would have been obvious to a POSITA in view of Ribarits. (*Id.*, ¶208).

F. Claim 8

Claim 8 depends from claim 1, and adds “wherein the mouthpiece portion permits a user to draw drink liquid from the drink container when the mouthpiece assembly is in the dispensing configuration.” Ribarits discloses the additional limitation of claim 8. (Ex. 1003, ¶¶209-212).

As discussed above in connection with claim 1, the mouthpiece portion of Ribarits’ mouthpiece assembly is the outlet at the end of Ribarits’ flexible tube. This end of the flexible tube is the portion of Ribarits’ mouthpiece assembly from which a user may draw drink liquid from the drink container when the mouthpiece assembly is in the dispensing configuration. (Ex. 1005, 2).



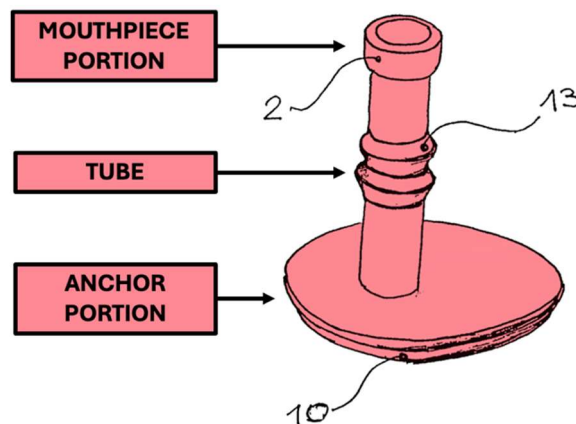
(*Id.*, Fig. 3).

Because Ribarits discloses the additional limitation of claim 8, it would have been obvious to a POSITA in view of Ribarits. (Ex. 1003, ¶212).

G. Claim 9

Claim 9 depends from claim 1, and adds “wherein the mouthpiece portion, the tube, and the anchor portion are constructed as a unitary assembly of the resiliently deformable material.” Ribarits discloses the additional limitation of claim 9. (Ex. 1003, ¶¶213-216).

As discussed above in connection with claim 1, Ribarits’ flexible tube includes a mouthpiece portion, a tube portion, and an anchor portion:



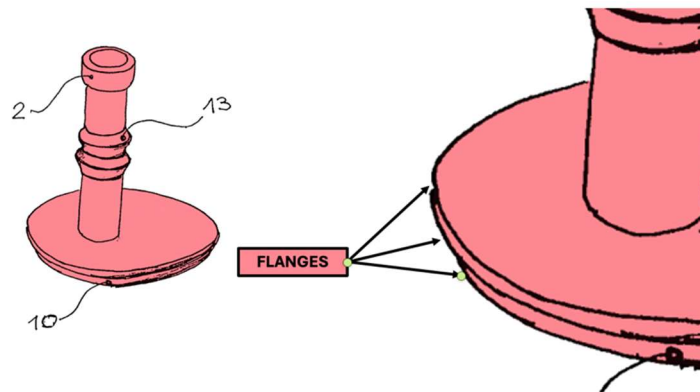
(Ex. 1005, 2, Fig. 2). The flexible tube is made from a resilient elastic material, such as “rubber or latex,” and is constructed as a unitary assembly with the mouthpiece portion, as shown above. (*Id.* at 2).

Because Ribarits discloses the additional limitation of claim 9, it would have been obvious to a POSITA in view of Ribarits. (Ex. 1003, ¶216).

H. Claim 15

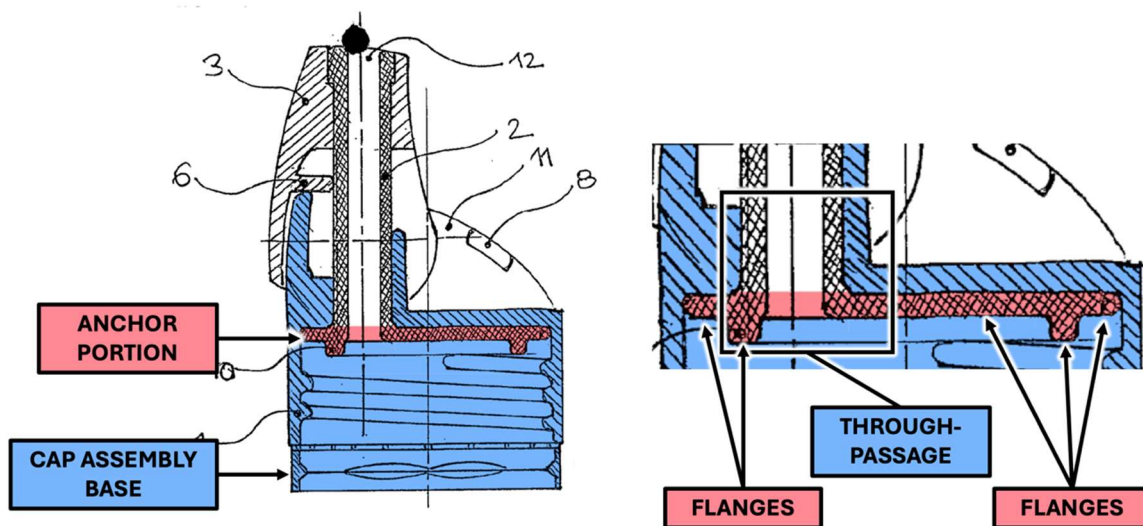
Claim 15 depends from claim 1, and adds “wherein the anchor portion includes a plurality of flanges that are sized and shaped to provide a friction-fit arrangement with the through-passage.” Ribarits discloses the additional limitation of claim 15. (Ex. 1003, ¶¶217-221).

The anchor portion of Ribarits’ mouthpiece assembly includes “one or several projecting sealing rings (10),” (Ex. 1005, 3 (Claim 2)) as shown below:



(Ex. 1005, Fig. 2). A POSA would have understood the “sealing rings” to constitute “flanges,” as claimed. (Ex. 1003, ¶219).

The flanges of the anchor portion provide a friction-fit arrangement with the through-passage of the cap assembly base, as shown below:



(Ex. 1005, Fig. 3). By screwing the cap assembly base onto the neck of the container, a tight connection is formed with the “sealing rings,” thereby ensuring a tight seal between the container and the cap assembly. (*See id.* at 3).

Because Ribarits discloses the additional limitation of claim 15, it would have been obvious to a POSITA in view of Ribarits. (Ex. 1003, ¶221).

I. Claim 21

Independent claim 21 recites many of the same limitations as claim 1 and its dependents. Accordingly, Ribarits renders claim 21 obvious for the same reasons addressed above. (Ex. 1003, ¶¶222-235); *supra* §§IX(B), (D), and (I). Below is a table correlating the limitations of claim 21 with the claims discussed above.

Claim 21	Claim 1
Claim 21[preamble]	<i>See</i> claim 1[preamble]
Claim 21[A]	<i>See</i> claim 1[A]
Claim 21[B]	<i>See</i> claim 1[B]
Claim 21[B][1]	<i>See</i> claim 1[B][1]
Claim 21[B][2]	<i>See</i> claim 1[B][2]
Claim 21[B][2][a]	<i>See</i> claims 1[B][3], 1[B][3][b]
Claim 21[B][2][b]	<i>See</i> claim 1[B][2][b]
Claim 21[B][2][c]	<i>See</i> claims 1[B][2][c], 16
Claim 21[C]	<i>See</i> claims 1[B][4], 5

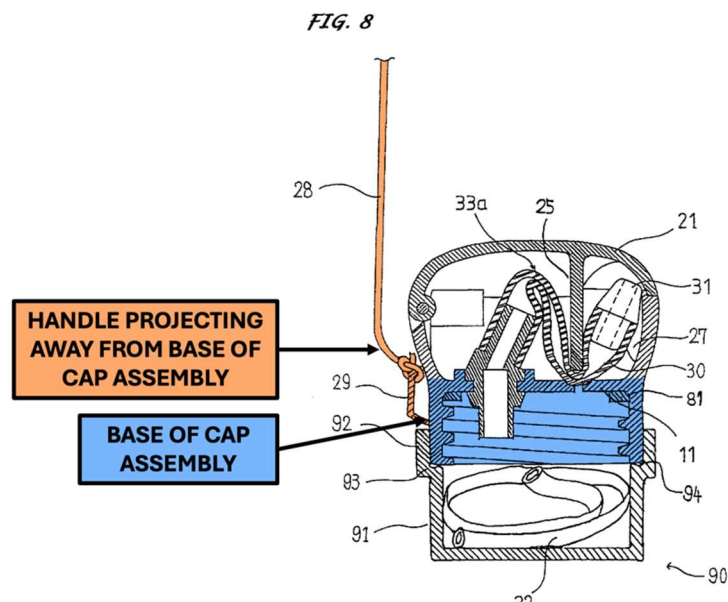
X. GROUND 3: CLAIMS 6, 9, AND 21 WOULD HAVE BEEN OBVIOUS IN VIEW OF KIYOTA AND RIBARITS

A. Claim 6

Claim 6 depends from claim 1, and adds “wherein the cap assembly further includes a handle that projects away from the base of the cap assembly and a pair of guards that at least partially define a stowing region that receives at least a portion of the mouthpiece assembly between the pair of lateral guards when the mouthpiece assembly is in the stowed configuration.” Ribarits discloses a pair of lateral guards but does not disclose a handle. (Ex. 1003, ¶253). However,

modifying Ribarits to include a handle would have been obvious in view of Kiyota.
(*Id.*)

Kiyota discloses a handle that projects away from the base of the cap assembly. Specifically, it includes hooking portion/stopper piece 29, which projects away from the cap assembly base. (Ex. 1004, 12:34-37). Further, it describes that a strap-like body 28 can be tied to the hooking portion, which would also project away from the cap assembly base.



(Ex. 1004, Fig. 8). Both the hooking portion/stopper piece 29 individually and in combination with a strap-like body 28 would be a handle projecting away from the cap assembly base. (Ex. 1003, ¶¶254).

Kiyota and Ribarits are very closely related and disclose drink containers of substantially the same functionality. (*Id.*, ¶255). Specifically, they both disclose

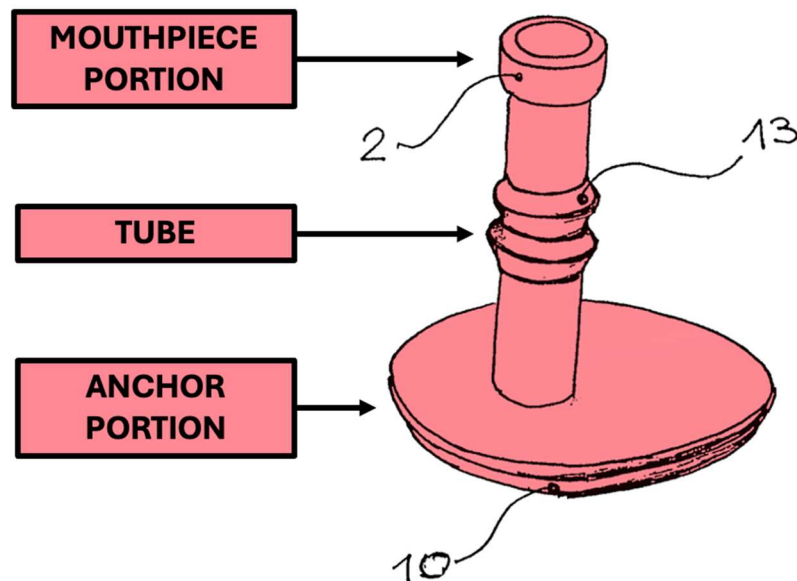
caps with mouthpieces for drink containers that can be switched between dispensing and stowed configurations. (*Id.*)

It would have been obvious to a POSITA to add a handle like the one in Kiyota to a cap like the one in Ribarits. (*Id.*, ¶256). Kiyota describes the known desirability of carrying the lid and beverage container. (Ex. 1004, 8:51-54). A POSITA would have been motivated to make this change because it would not have altered the overall function or structure of the cap assembly and would have provided an alternative mechanism by which to carry the device, in addition to the hooking portion/strap disclosed in the Kiyota. (*Id.*)

Thus, the additional limitations of Claim 6 would have been obvious over Ribarits, in view of Kiyota. (*Id.* at ¶257).

B. Claim 9

Kiyota discloses a drink container with every element of claim 1 as described above. (Ex. 1003, ¶258). Ribarits also discloses a drink container with a mouthpiece assembly including a a tube with a mouthpiece portion, and an anchor portion as recited in claim 1. (*Id.*, ¶260). In Ribarits these portions of the mouthpiece assembly are constructed as a unitary assembly of resiliently deformable material as recited in claim 9 of the '028 patent. (Ex. 1005, 2).



(*Id.*, Fig. 2). In view of Ribarits, it would have been obvious to make the mouthpiece assembly of Kiyota as a unitary assembly of resiliently deformable material as recited in claim 9. (Ex. 1003, ¶260).

Kiyota and Ribarits are very closely related and disclose drink containers of substantially the same functionality. (Ex. 1003, ¶261). Specifically, they both disclose drink containers having mouthpiece assemblies comprising a mouthpiece portion, a tube, and an anchor portion. (*Id.*) They both address the same problem of an easily closable mouthpiece assembly for use in a drink container and do so in the same way, i.e. by crimping the tube. (*Id.*) Kiyota provides an assembly wherein the tube with the mouthpiece portion and the anchor portion are assembled from separate components. Ribarits, on the other hand, provides an assembly

wherein the mouthpiece assembly are constructed as a unitary assembly. (*Id.*) A POSITA would recognize these are interchangeable. (*Id.*)

A POSITA would have been motivated for multiple reasons to make the tube and anchor portion as a unitary assembly of resiliently deformable material in Kiyota's drink container. (*Id.* at ¶262). For example, it would have been obvious to a POSITA to make the multiple pieces of Kiyota integral because use of one-piece construction has been recognized as merely a matter of obvious engineering choice. *In re Larson*, 340 F.2d 965, 968 (CCPA 1965).

Further, a POSITA would have been motivated by an incentive to have fewer parts. A POSITA would recognize that elements 30 and 13 of Kiyota could be molded as a single piece of resiliently deformable material based on the knowledge of a POSITA and certainly based on the disclosure of Ribarits. (Ex. 1003, ¶¶263). A POSITA would have recognized that not only would this save on the number of parts that needed to be molded, but it also would have provided improved safety for the drink container. (*Id.*) It has long been understood that it is best to avoid potentially small parts that could present a choking hazard if disassembled, such as potentially could occur with the coupling tube 13 of Kiyota. (*Id.*) A POSITA would have recognized that a unitary assembly could be easily inserted from the

underside of the storing portion 16 and through communicating opening 12. A flange on either side of the opening would easily hold the assembly in place.

Additionally, the combination of Kiyota and Ribarits involves the simple substitution of one known element for another—Kiyota’s two-part assembly for Ribarits’s unitary assembly. (*Id.*, ¶264). A POSITA would have recognized that a unitary assembly would provide comparable overall functionality and also improved safety as described above. (*Id.*) A POSITA would have recognized a drink container with a mouthpiece portion, tube, and anchor portion constructed as a unitary assembly of resiliently deformable material as disclosed in Ribarits would yield predictable results. (*Id.*) A POSITA would have readily substituted a unitary assembly for Kiyota’s multi-part assembly (tube and anchor portion). (*Id.*) A POSITA would have recognized the desirability of using a resiliently deformable material to allow for crimping as provided in each of the references and for permitting the assembly to be inserted through a through-hole as shown in Kiyota. (*Id.*)

A POSITA also would have reasonably expected success in combining a tube and anchor portion constructed as a unitary assembly of resiliently deformable material with the drink container of Kiyota. (*Id.*, ¶265). For example, a POSITA would have readily understood that Kiyota could accommodate the unitary

assembly. (*Id.*) A POSITA would have expected success in using a unitary assembly of resiliently deformable material to perform the same function when used in Kiyota's drink container. (*Id.*) Thus, the combination would have involved no more than the routine substitution of one multi-part assembly (Kiyota) for another of unitary construction (such as disclosed in Ribarits) to provide the same desired functionality, albeit with an improved safety profile. (*Id.*)

In sum, Claim 9 would have been obvious in view of Kiyota and Ribarits. (*Id.*, ¶¶260-265).

C. Claim 21

As discussed above, independent claim 21 recites many of the same limitations as claim. Unlike claim 1, however, claim 21 recites that the mouthpiece assembly comprises “a resilient anchor portion extending from the resilient tube opposite the resilient mouthpiece portion, wherein the anchor portion is sized to restrict passage of the resilient anchor portion through the through-passage and thus restrict removal of the mouthpiece assembly via a top side of the cap assembly, and wherein the resilient mouthpiece portion, the resilient tube, and the resilient anchor portion are constructed as a unitary assembly.” This claim limitation constitutes a combination of limitation 1[B][3][c] and the additional limitations of claim 9. Accordingly, Claim 21 would have been obvious over Kiyota, in view of

Ribarits, for the same reasons discussed above in connection the Claim 9. (Ex. 1003, ¶¶266-268).

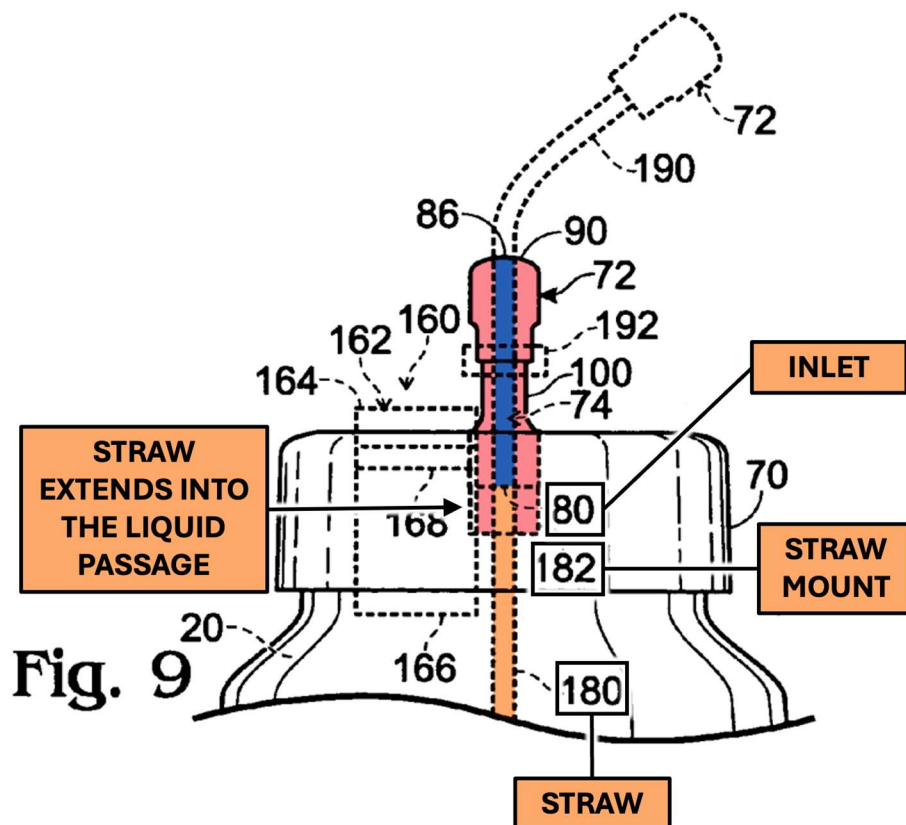
XI. GROUND 4: CLAIM 16 WOULD HAVE BEEN OBVIOUS OVER KİYOTA OR RIBARITS, IN VIEW OF CHOI

Claim 16 depends from claim 1, and adds “wherein the drink container includes a straw with a first end that extends into the liquid container and a second end that extends into the liquid passage and is retained therein by the friction-fit arrangement.” As discussed above, both Kiyota and Ribarits disclose a cap for a drink container with every element of claim 1. As discussed below, Claim 16 is obvious over either Kiyota or Ribarits, in further view of Choi. (Ex. 1003, ¶270).

A. Claim 16 Would Have Been Obvious Over Kiyota, in View of Choi

As discussed above, claim 16 would have been obvious over Kiyota in view of the knowledge of a POSITA. (See Ex. 1003, ¶¶123-127). However, to the extent claim 16 would not have been obvious over Kiyota alone, it nonetheless would have been obvious over Kiyota, in view of Choi. (Ex. 1003, ¶¶271-272).

Kiyota discloses an optional straw as described in claim 16 that attaches to the outside of a straw mount on the bottom of the cap and extends to the bottom of the drink container. Choi discloses a similar straw, but Choi’s straw is inserted inside of the straw mount, extending into Choi’s liquid passage, where it is retained by a friction-fit arrangement. (Ex. 1008, ¶0004).



(*Id.*, Fig. 9). In light of Choi, it would have been obvious to a POSITA make Kiyota's straw attach by extending into the liquid passage and retaining it there by a friction fit arrangement. (Ex. 1003, ¶¶271-278).

A POSITA would have recognized only two possible friction-fit arrangements between the suction tube and the coupling tube: one in which the suction tube is fitted around the coupling tube (as in Figure 6, above), and a second in which the suction tube is fitted within the coupling tube. (Ex. 1003, ¶276). A POSITA would have understood the choice between an internal friction fit or an external friction-fit to be a simple choice between two identified, predictable

solutions, each of which would have a reasonable expectation of success. (*Id.*); *see also KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398, 417 (2007).

A POSITA would have been motivated to would have been motivated to use an internal friction-fit arrangement because a POSITA would have recognized that an internal friction fit would facilitate the easy insertion of the straw into cap assembly and removal of the straw from the cap assembly. (Ex. 1003, ¶277). A POSITA would have recognized that inserting a straw into a mount would generally be easier than securing a straw around the exterior of a friction-fit mount, especially for young users or users with limited dexterity. (*Id.*).

B. Claim 16 Would Have Been Obvious Over Ribarits, in View of Choi

As discussed above, Ribarits discloses a cap for a liquid container. However, Ribarits does not disclose a straw that extends from the bottom of the cap into the liquid container. A POSITA would have been motivated to add a straw to Ribarits. (Ex. 1003, ¶¶279-282).

First, the use of straws was common in the design of drink bottles and cap assemblies, as exemplified in the Kiyota and Choi references discussed above. (Ex. 1003, ¶280). A POSITA would have recognized that desirability of using a straw in the Ribarits design to provide a means by which the user could access liquid from the bottom of the bottle without having to invert the bottle during use,

as taught by Choi: “Straw 180 enables a user to draw drink fluid from the drink container via mouthpiece 72 without having to tip the drink bottle so that drink fluid may flow into the fluid conduit 74.” (Ex. 1008 at ¶[0072]).

Second, a POSITA would have readily understood that a straw could be inserted into the inlet end of Ribarits’ “sealed tubular element.” (Ex. 1003, ¶281). In addition, because Ribarits’ discloses its “sealed tubular element” is made from “rubber or latex” (Ex. 1005, 2), a person of ordinary skill in the art would have understood that an appropriately sized straw could be retained within the “sealed tubular element” via friction between the straw and tubular element, and that such fit would have created a watertight seal. (*Id.*, ¶2815).

Accordingly, Claim 16 would have been obvious over Ribarits, in view of Choi. (*Id.*, ¶282).

XII. 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.

**XIII. 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, at least as to the patents in the family of the challenged ’028 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 almost one year away; it is currently scheduled for September 2025. (Ex. 1009). 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 the ’028 patent on November 8, 2023. Fact

discovery in the district court action is still pending. The district court has not yet construed claims 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. 1009). 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 challenged 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.

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.

**XIV. 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 were never applied during examination of the '028 patent. Kiyota was submitted in an IDS but never applied by the Examiner. *See* (Ex. 1001). Ribarits was not cited at all during examination. *See (id.)*. Choi was applied by the Examiner and was involved in an appeal during prosecution. *See (id.)*. However, Choi was not cited with respect to its straw mount configuration, which is the only aspect of Choi relevant to this Petition. Thus, any arguments relating to these references likewise have 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).

Petitioner also notes that the '028 Patent was the subject of IPR2022-00803, which the Board declined to institute. (*See* Ex. 1002). However, the invalidity grounds asserted in IPR2022-00803 relied on prior art not presented herein. In denying institution of that IPR, the Board found the two primary references relied

upon—Yamashita and Manganiello—lacked key features of the claims. For example, Yamashita did not disclose the claimed “user release mechanism” because the structure the petitioner relied upon did not release the mouthpiece assembly (straw) from its stowed configuration because a second action was required. (*Id.* at 12). The second primary reference, Manganiello, did not describe a locking mechanism for the sealing cap and the petitioner did not provide any reason for adding such feature. (*Id.* at 17). The references relied upon herein plainly disclose these claimed features.

Because each ground presented herein includes prior art and 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, because each ground includes prior art and arguments not previously considered by the PTO, there is not any significant 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).

XV. CONCLUSION

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

Dated: September 30, 2024 By: /Ali S. Razai/

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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. 10,676,255**, exclusive of the parts exempted as provided in 37 C.F.R. §42.24(a), contains 12, 656 words and therefore complies with the type-volume limitations of 37 C.F.R. §42.24(a).

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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. 10,676,255** **PETITIONER’S POWER OF ATTORNEY, AND EXHIBITS 1001 – 1014** were served by Federal Express overnight mail on the Patent Owner at the correspondence address of record for the subject patent as follows:

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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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