

Filed: November 5, 2024

On behalf of **Trove Brands, LLC**

By: Ali S. Razai (Reg. No. 60,771)
Joseph F. Jennings (Reg. No. 40,664)
Cheryl Burgess (Reg. No. 55,030)
KNOBBE, MARTENS, OLSON & BEAR, LLP
2040 Main Street, 14th Floor
Irvine, CA 92614
Ph: 949-760-0404
Email: BoxTrove4@knobbe.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TROVE BRANDS, LLC
Petitioner
v.

CAMELBAK PRODUCTS, LLC
Patent Owner

IPR2025-00146
Patent 10,165,879

**PETITION FOR *INTER PARTES* REVIEW OF
U.S. PATENT NO. 10,165,879**

TABLE OF CONTENTS

	Page No.
I. MANDATORY NOTICES	1
A. Real Party-In-Interest (37 C.F.R. §42.8(b)(1))	1
B. Related Matters (37 C.F.R. §42.8(b)(2)).....	1
C. Lead and Backup Counsel (37 C.F.R. §42.8(b)(3))	1
D. Service Information (37 C.F.R. §42.8(b)(4))	2
E. Payment of Fees (37 C.F.R. §42.103).....	2
F. Grounds for Standing (37 C.F.R. §42.104).....	2
II. INTRODUCTION.....	3
III. BACKGROUND	5
IV. THE '879 PATENT	12
A. Overview	12
B. The Challenged Claims	16
V. STATEMENT OF RELIEF REQUESTED.....	18
A. IPR Grounds	18
B. The '879 Patent Is Subject to the pre-AIA Prior Art Provisions of the Patent Statute.....	19
C. The Asserted References Are Prior Art	19
VI. LEVEL OF ORDINARY SKILL	20
VII. CLAIM CONSTRUCTION	20

TABLE OF CONTENTS
(cont'd)

	Page No.
VIII. GROUND 1: CLAIMS 1, 3, 5-8, AND 10-19 WOULD HAVE BEEN OBVIOUS IN VIEW OF KIYOTA, CHOI, AND RIBARITS	24
A. Overview of Kiyota	24
B. Overview of Choi	28
C. Claim 1	31
1. Preamble and Limitation 1[A]: “liquid container”	31
2. 1[B] Cap Assembly	32
a. 1[B][1] Base	32
b. 1[B][2] First Catch Structure	33
c. 1[B][3] Mouthpiece Assembly	34
i. 1[B][3][a] Tube portion	37
ii. 1[B][3][b] Pivotal Rigid Collar	39
iii. 1[B][3][c] Second Catch Structure	44
d. 1[B][4] User Release Mechanism	44
3. 1[C] Stowing Region	46
4. 1[D] Sliding Member	46
D. Claim 3	48
E. Claim 5	49

TABLE OF CONTENTS

(*cont'd*)

	Page No.
F. Claim 6	50
G. Claim 7	52
H. Claim 8	53
I. Claim 10	54
J. Claim 11	60
K. Claim 12	60
L. Claim 13	61
M. Claim 14	62
N. Claim 15	64
O. Claim 16	65
P. Claim 17	66
Q. Claim 18	66
R. Claim 19	68
IX. GROUND 2: CLAIMS 1, 3, 5-8, AND 10-13, AND 15-19 WOULD HAVE BEEN OBVIOUS IN VIEW OF PARK AND RIBARITS	70
A. Overview of Park.....	70
B. Claim 1	72
1. Motivation to Combine Park and Ribarits	74

TABLE OF CONTENTS

(cont'd)

	Page No.
2. Preamble and Limitation 1[A]: “liquid container”	78
3. 1[B] Cap Assembly.....	79
a. 1[B][1] Base.....	80
b. 1[B][2] First Catch Structure.....	82
c. 1[B][3] Mouthpiece Assembly	84
i. 1[B][3][a] Tube Portion	89
ii. 1[B][3][b] Rigid Collar Member.....	90
iii. 1[B][3][c] Second Catch Structure.....	93
d. 1[B][4] User Release Mechanism	95
4. 1[C] Stowing Region	96
5. 1[D] Sliding Member.....	97
C. Claim 3	100
D. Claim 5	100
E. Claim 6	103
F. Claim 7	104
G. Claim 8	105
H. Claim 10	107
I. Claim 11	108

TABLE OF CONTENTS
(cont'd)

	Page No.
J. Claim 12	109
K. Claim 13	110
L. Claim 15	111
M. Claim 16	113
N. Claim 17	114
O. Claim 18	115
P. Claim 19	117
X. GROUND 3: CLAIM 14 IS OBVIOUS IN VIEW OF PARK, RIBARITS AND KIYOTA	119
A. Claim 14 is Obvious over Park, in view of Ribarits	119
XI. SECONDARY CONSIDERATIONS	121
XII. DISCRETIONARY DENIAL UNDER §314(A) IS NOT APPROPRIATE	122
A. Factor 1: Potential Stay	122
B. Factor 2: Proximity of Trial to FWD	122
C. Factor 3: Investment in Parallel Proceeding	123
D. Factor 4: Overlapping Issues.....	123
E. Factor 5: The Parties.....	123
F. Factor 6: Other Circumstances.....	124

TABLE OF CONTENTS
(cont'd)

	Page No.
XIII. DISCRETIONARY DENIAL UNDER §325(D) IS NOT APPROPRIATE	124
A. Factors (a), (b), and (d).....	125
B. Factors (c), (e), and (f)	125
XIV. CONCLUSION.....	126

TABLE OF AUTHORITIES

	Page No(s).
<i>Advanced Bionics, LLC v. Med-EL Elektromedizinische Geräte GmbH,</i> IPR2019-01469, Paper 6 (P.T.A.B. Feb. 13, 2020).....	124, 125
<i>Altiris, Inc. v. Symantec Corp.,</i> 318 F.3d 1363 (Fed. Cir. 2003)	21
<i>Apple v. Fintiv,</i> IPR2020-00019, Paper 11 (P.T.A.B. Mar. 20, 2020).....	122, 124
<i>Becton, Dickinson & Co. v. B. Braun Melsungen AG,</i> IPR2017-01586, Paper 8 (P.T.A.B. Dec. 15, 2017)	124
<i>Fusion Orthopedics, LLC v. Extremity Med., LLC,</i> IPR2023-00894, Paper 15 (P.T.A.B. Nov. 17, 2023).....	126
<i>In re GPAC Inc.,</i> 57 F.3d 1573 (Fed. Cir. 1995)	20
<i>Huawei Techs. Co. v. WSOU Invs., LLC,</i> IPR2021-00226, Paper 10 (P.T.A.B. June 10, 2021)	123
<i>In re Larson,</i> 340 F.2d 965 (CCPA 1965)	58, 76
<i>Leapfrog Enters. v. Fisher-Price, Inc.,</i> 485 F.3d 1157 (Fed. Cir. 2007)	122
<i>Media Rights Techs., Inc. v. Capital One Fin. Corp.,</i> 800 F.3d 1366 (Fed. Cir. 2015)	21
<i>NanoCollect Biomedical, Inc. v. Cytonome/ST, LLC,</i> IPR2020-00551, Paper 19 (P.T.A.B. Aug. 27, 2020).....	123
<i>Newell Cos., Inc. v. Kenney Mfg. Co.,</i> 864 F.2d 757 (Fed. Cir. 1988)	121

TABLE OF AUTHORITIES (*cont'd*)

	Page No(s).
<i>Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co. Ltd. Matal</i> , 868 F.3d 1013 (Fed. Cir. 2017)	23
<i>Samsung Elecs. Am. Inc. v. Snik LLC</i> , IPR2020-01428, Paper 10 (P.T.A.B. Mar. 9, 2021)	123
<i>Samsung Elecs. Co., Ltd. v. Collect, LLC</i> , IPR2020-00471, Paper 15 (P.T.A.B. Aug. 18, 2020)	125
<i>Samsung Electronics Co., Ltd. v. Dynamics, Inc.</i> , IPR2020-00502, Paper 34 (P.T.A.B. Aug. 12, 2020)	124
<i>Toro Co. v. Deere & Co.</i> , 355 F.3d 1313 (Fed. Cir. 2004)	21
<i>Trove Brands, LLC v. CamelBak Products, LLC et al.</i> , No. 5:23-cv-04267 (N.D. Cal.)	1
<i>VMware, Inc. v. Intellectual Ventures I LLC</i> , No. IPR2020-00470, Paper 13 (P.T.A.B. Aug. 18, 2020)	124
<i>Welker Bearing Co. v. PHD, Inc.</i> , 550 F.3d 1090 (Fed. Cir. 2008)	21
<i>Williamson v. Citrix Online, LLC</i> , 792 F.3d 1339 (Fed. Cir. 2015)	20

OTHER AUTHORITIES

35 U.S.C. § 102	19
35 U.S.C. §314	122
35 U.S.C. §325	124, 125, 126

TABLE OF AUTHORITIES
(*cont'd*)

	Page No(s).
35 U.S.C. §112.....	20, 21, 23, 46
37 C.F.R. §42.8	1, 2
37 C.F.R. §42.103	2
37 C.F.R. §42.104	2

TABLE OF EXHIBITS

Exhibit No.	Description
1001	U.S. Patent No. 10,165,879 (“the ’879 patent”)
1002	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)
1003	Declaration of Glenn E. Vallee, Ph.D.
1004	United States Patent No. 6,279,773 to Kiyota (“Kiyota”)
1005	United States Patent Application Publication No. 2007/0039959 to Choi, et al. (“Choi”)
1006	Certified English Translation of Korean Patent Publication No. KR 200282506 Y1 (“Park”)
1007	Translation Certificate for Korean Patent Publication No. KR 200282506 Y1 to Park
1008	Korean Patent Publication No. KR 200282506 Y1 to Park
1009	Certified English Translation of International Publication No. WO 2004/063042 to Ribarits (“Ribarits”)
1010	Translation Certificate for International Publication No. WO 2004/063042 to Ribarits
1011	International Publication No. WO 2004/063042 to Ribarits

Petitioner Trove Brands, LLC (“Petitioner”) requests *inter partes* review of claims 1, 3, 5, 6-8, and 10-19 (“challenged Claims”) of U.S. Patent No. 10,165,879 (“the ’879 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 ’879 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 ’879 patent.

Petitioner has filed an IPR challenging related U.S. Patent No. 9,782,028 (IPR2024-01501). The petition was filed September 30, 2024.

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)	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	<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 BoxTrove4@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 '879 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 '879 patent.

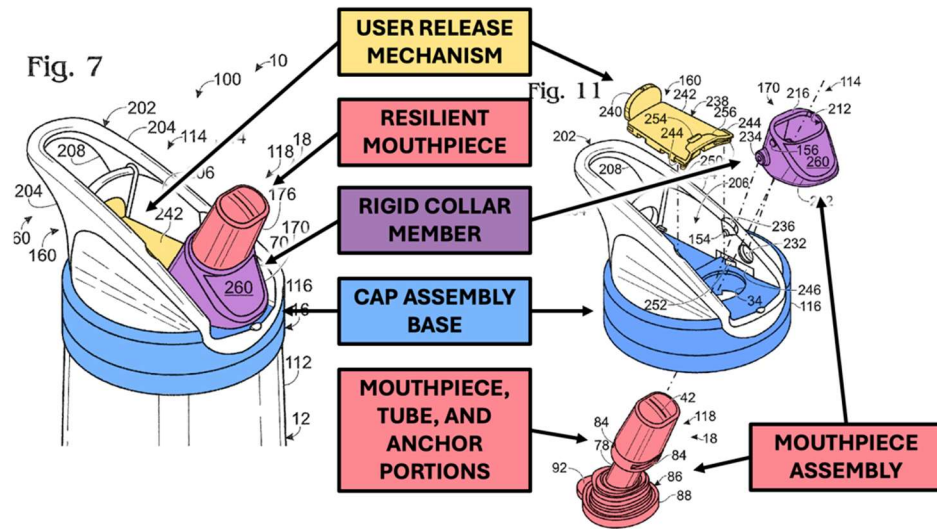
II. INTRODUCTION

The '879 patent discloses and claims drink containers having a removable cap assembly that generally includes three elements:

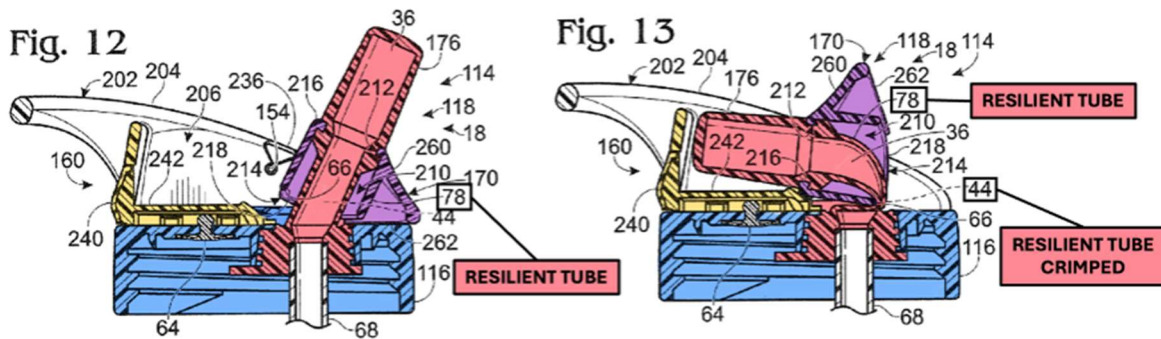
- (1) **a base** for coupling the cap assembly to a container;
- (2) **a mouthpiece assembly** for dispensing liquid, which is configured to move between a stowed (closed) position and a dispensing (open) position;
- (3) **a user release mechanism** for disengaging catch structures that retain the mouthpiece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

The mouthpiece assembly includes a resilient tube with one end that extends through the cap assembly base into the drink container, and another end with a mouthpiece portion that includes an outlet. The mouthpiece assembly also includes a rigid collar pivotally coupled to the base and through which the tube passes. In the stowed position, the tube can be crimped to prevent passage of liquid.

An embodiment of the '879 patent is depicted below in Figure 11, which provides an exploded view of the cap assembly.



(Ex 1001, Figs. 7, 11)¹. 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.

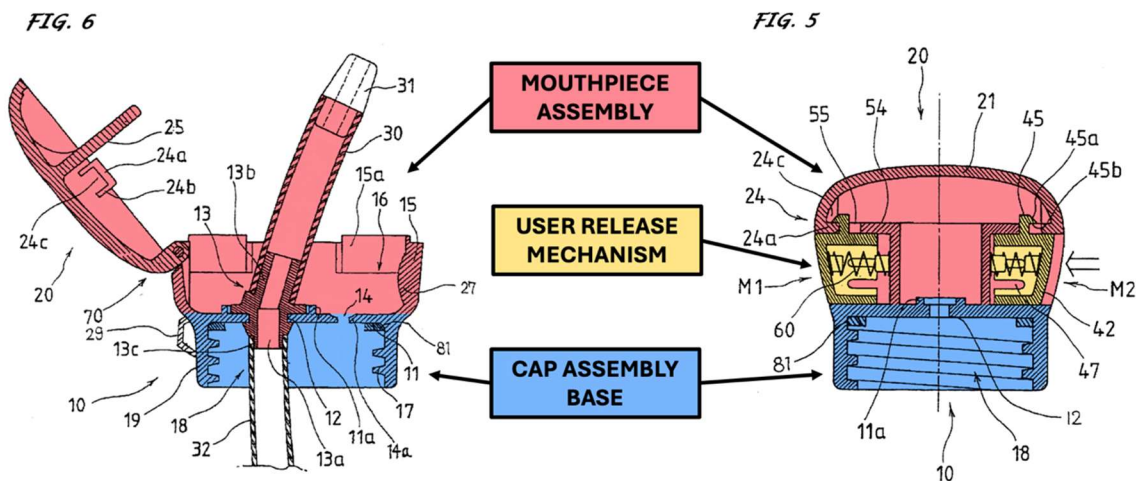


¹ Although part of the mouthpiece assembly, the rigid collar member is shaded purple to show its relationship to adjacent elements.

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

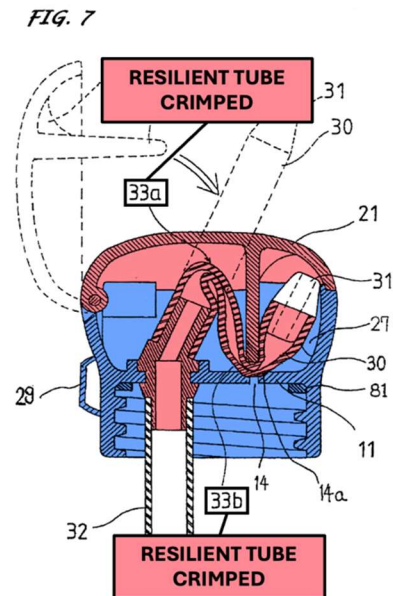
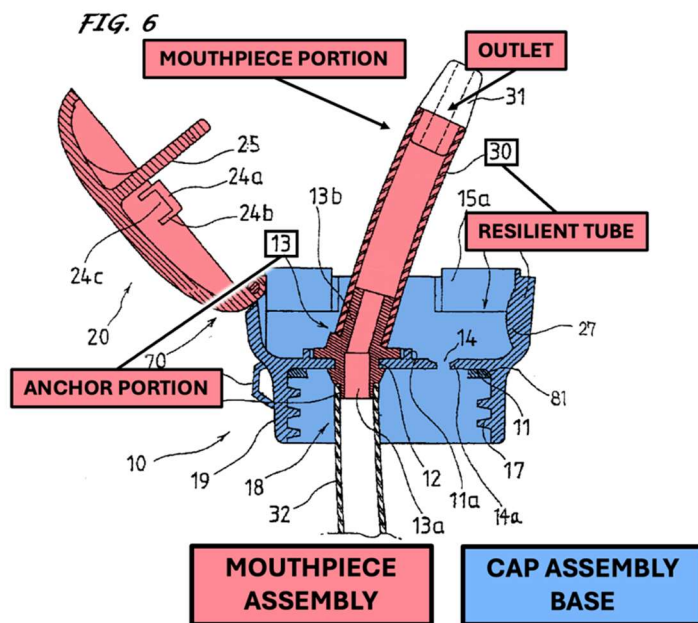
III. BACKGROUND

Drink containers with cap assemblies having the features claimed in the '879 patent have been known since well before the '879 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.² The cap assembly is shown below. Figure 6 is cross-section in the open configuration and Figure 5 is another cross-section in the closed configuration.



² Kiyota was listed among the cited references on the face of the '879 patent, but it was never applied by the Examiner.

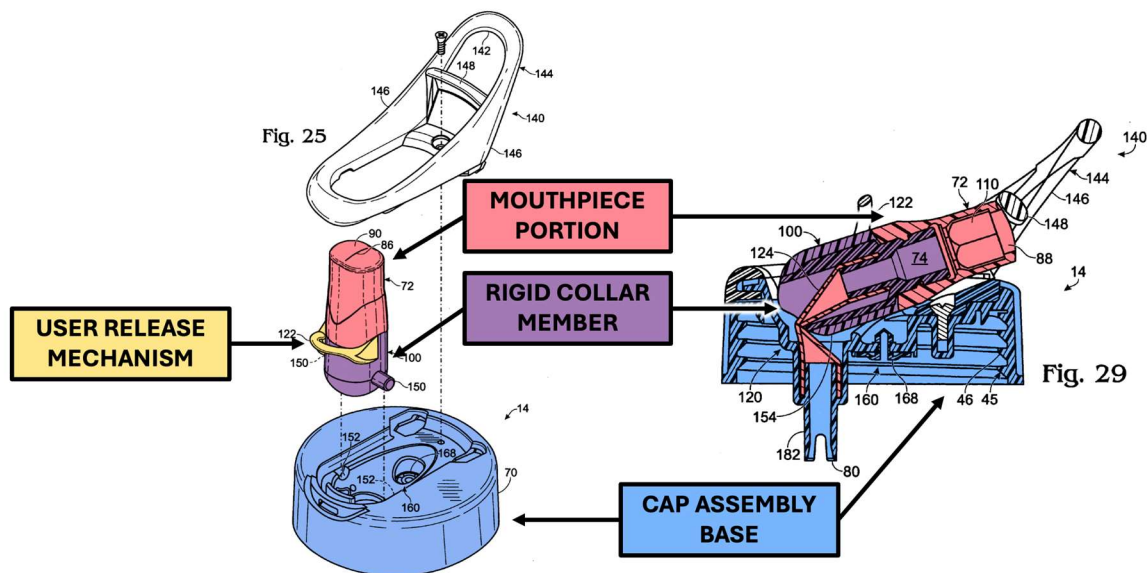
(*Id.*, Figs. 5, 6). The mouthpiece assembly includes a mouthpiece portion with an outlet, a resilient tube, which is crimped to prevent passage of liquid when the mouthpiece assembly is stowed, and an anchor portion that holds the assembly in place.



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

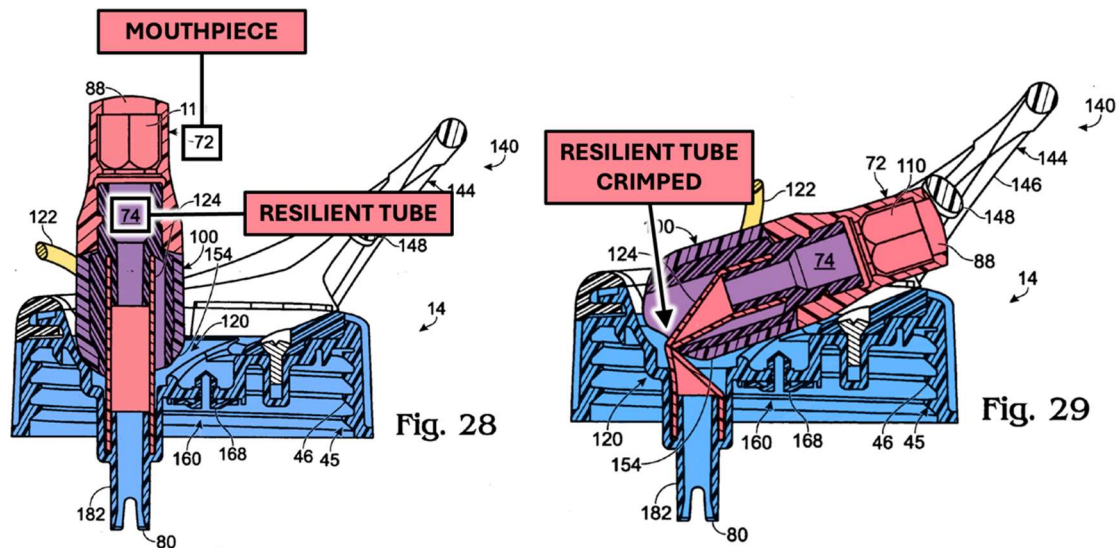
Choi (Ex. 1005), which published in 2007, disclosed a drink container with a removeable cap assembly including a base, a mouthpiece assembly, a rigid collar member, and a user release mechanism.³

³ Choi was listed among the cited references on the face of the '879 Patent, but it was never applied by the Examiner.



(Ex. 1005, Figs. 25, 29).

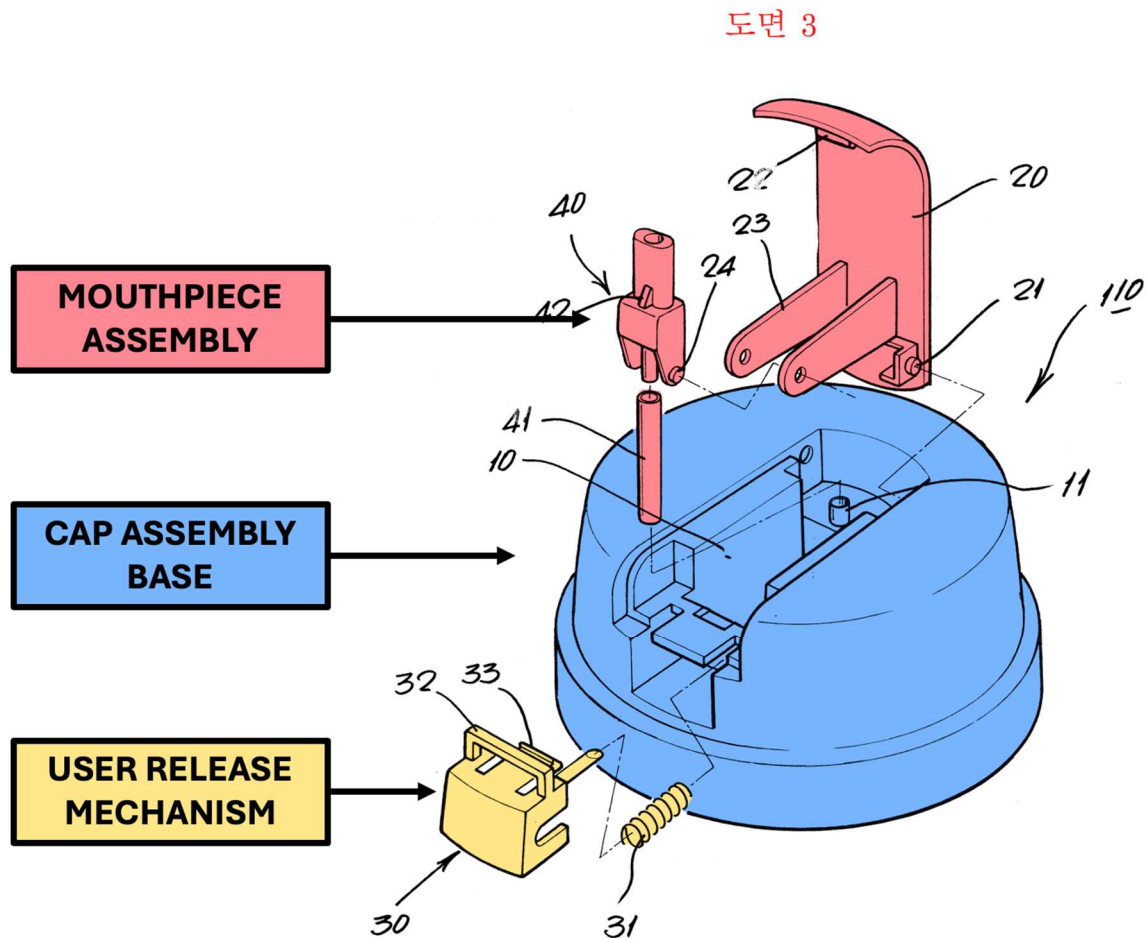
Choi's mouthpiece includes a tube extending into, and a mouthpiece portion extending out of, a pivoting rigid collar that both controls the position of the mouthpiece portion and crimps the tube to prevent passage of liquid when the mouthpiece is stowed. Choi's mouthpiece assembly also includes a user release mechanism—a flange the user can press to move the mouthpiece assembly to its open configuration.



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

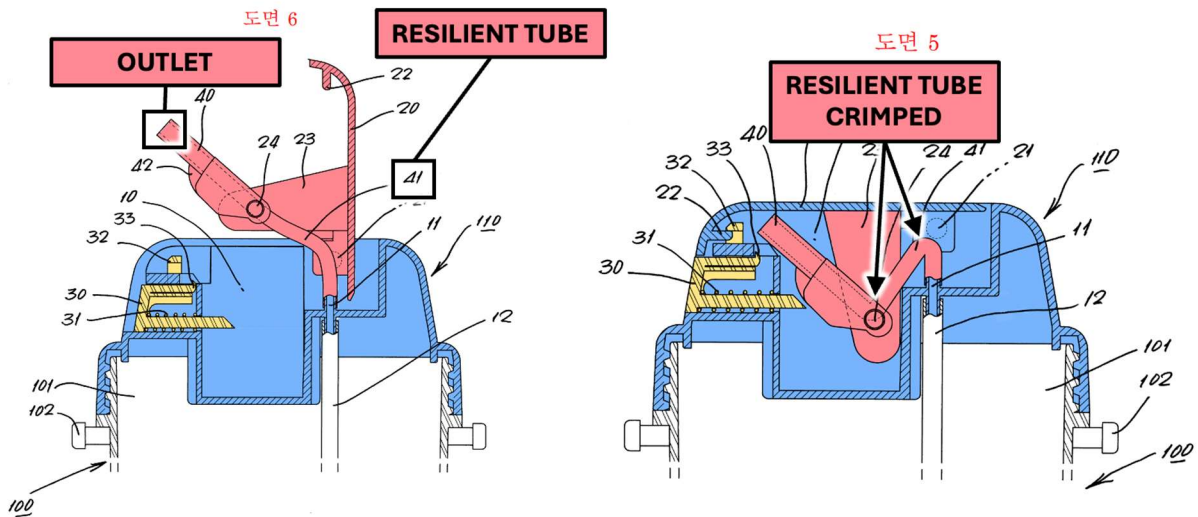
Park (Ex. 1006), which published in 2002, discloses a water bottle with a removeable cap assembly that includes a mouthpiece assembly and a user release mechanism.⁴ Below is an exploded view of Park’s cap assembly (“lid 110”):

⁴ Park was never cited during examination of the ’879 Patent.



(Ex. 1006, Fig. 3).

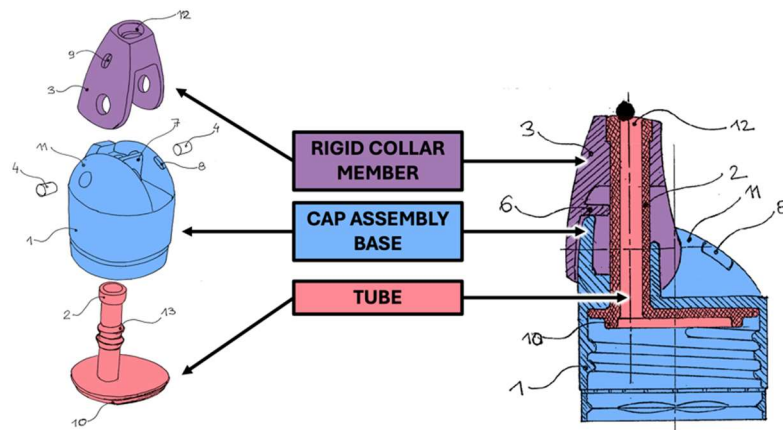
Park's cap assembly includes a mouthpiece assembly and user release mechanism. The mouthpiece assembly pivots between stowed and dispensing configurations:



(*Id.*, Figs. 5-6). When stowed, the mouthpiece assembly tube is crimped to prevent fluid flow.

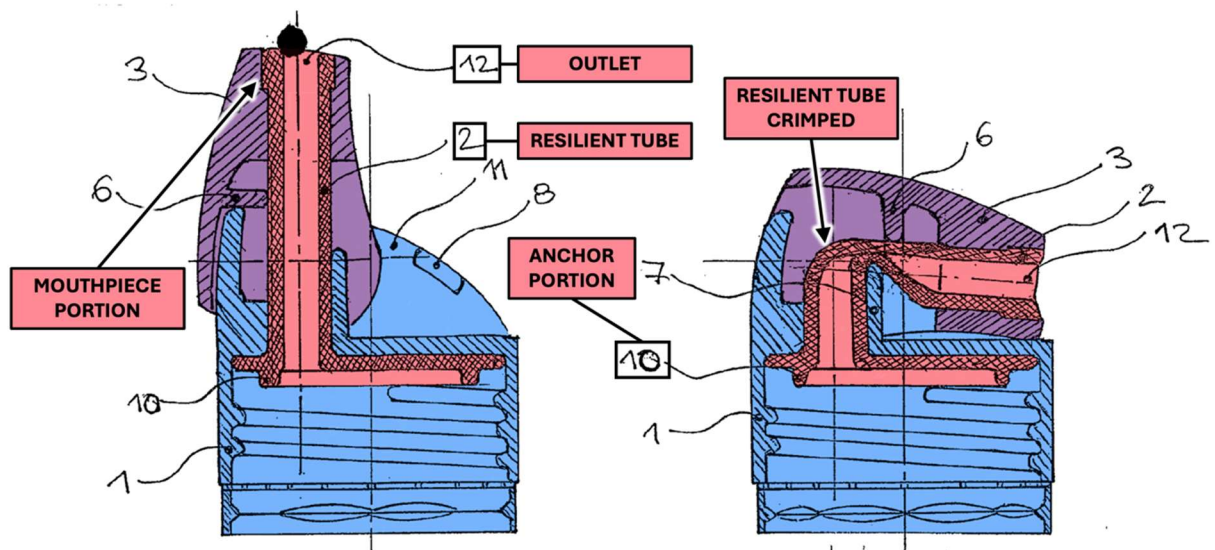
Ribarits (Ex. 1009), which published in 2004, disclosed a drink container with a removeable cap assembly including a base and a mouthpiece assembly with a rigid collar member.⁵

⁵ Ribarits was never cited during examination of the '879 patent.



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

The Ribarits mouthpiece assembly includes an outlet, a resilient tube, which is crimped when it is stowed, and a rigid collar member through which the mouthpiece tube extends.

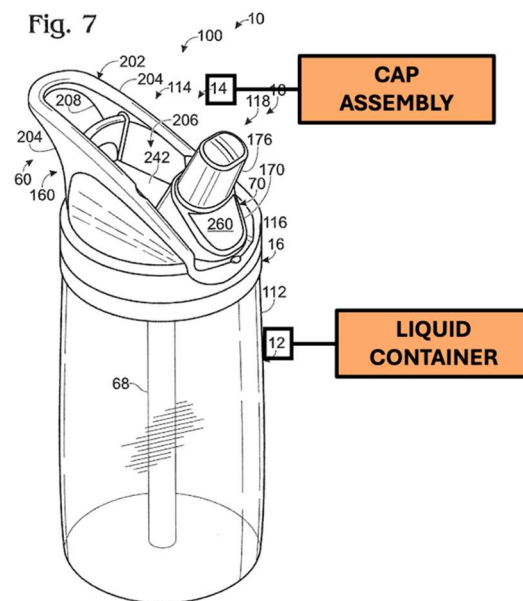


(*Id.*, Fig. 3).

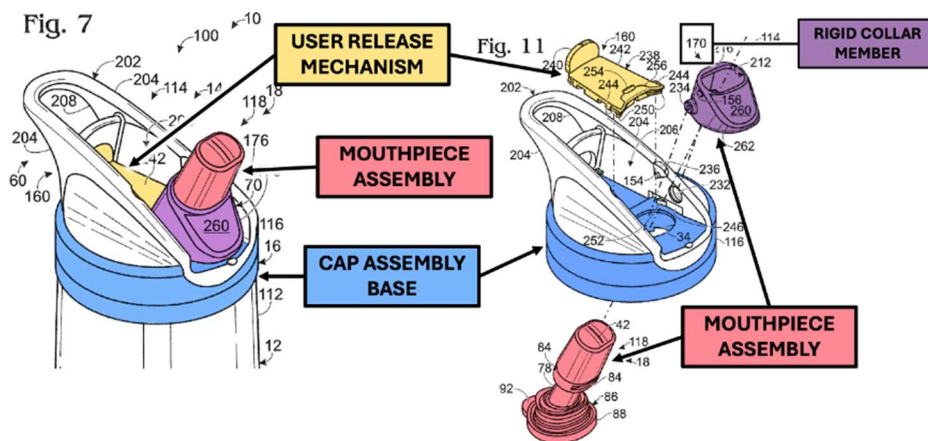
IV. THE '879 PATENT

A. Overview

The '879 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 container and cap assembly.

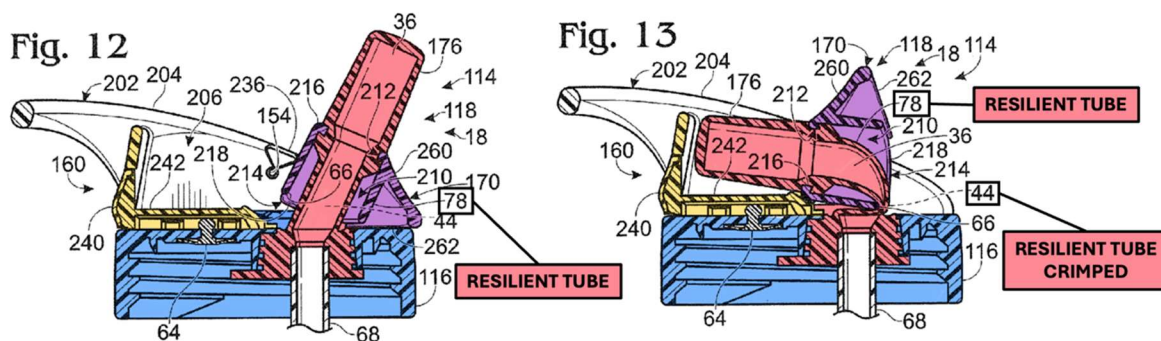


(*Id.*, Fig. 7). The cap assembly includes a base, a mouthpiece assembly, a rigid collar member, and a user release mechanism, shown below in Figures 7 and 11.



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

As shown below in Figures 12 (mouthpiece assembly open) and 13 (mouthpiece assembly closed), the mouthpiece assembly includes a tube 78 that passes through rigid collar member 170. When stowed, the tube is crimped to restrict the flow of liquid.

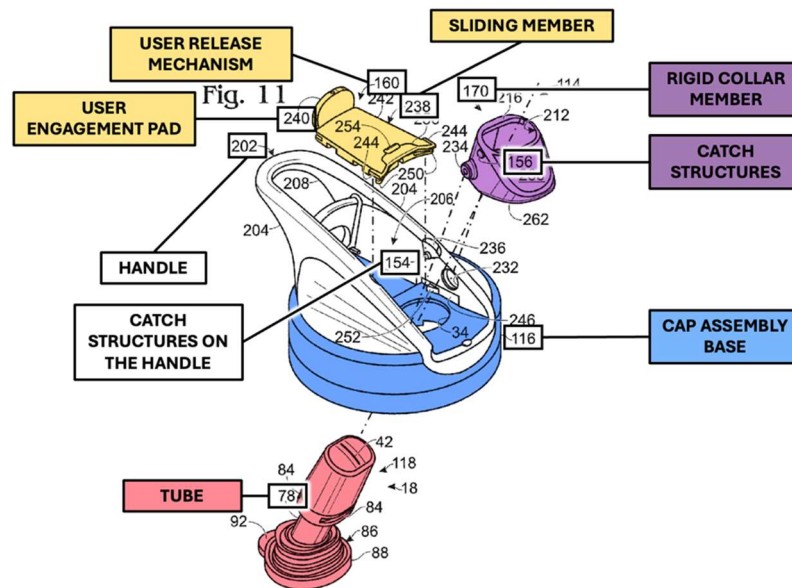


(*Id.*, Figs 12, 13).

The '879 Patent discloses two embodiments of a user release mechanism, one of which corresponds to the claims of the '879 Patent. This user release

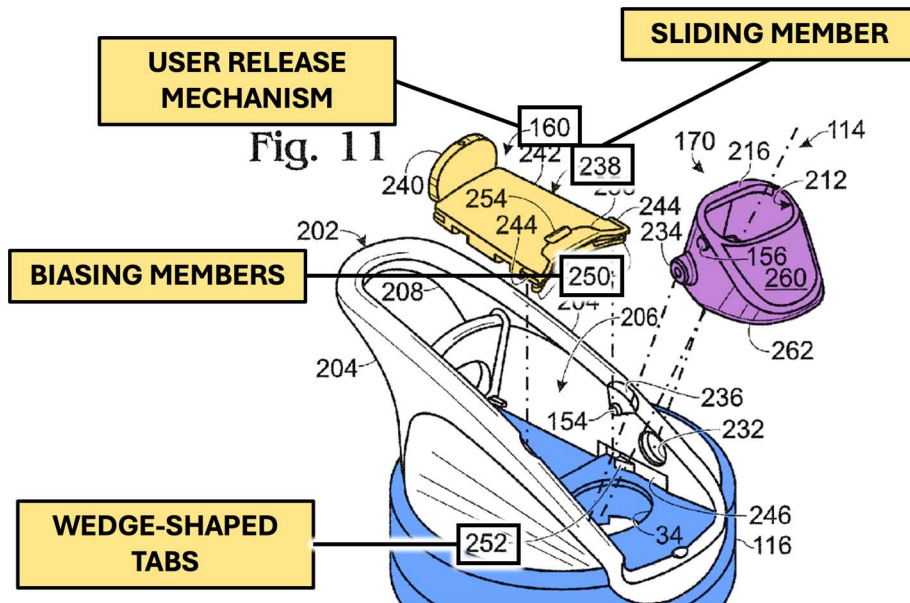
mechanism 160 is highlighted below.⁶ (Ex. 1003, ¶95). The mouthpiece is held in its closed configuration by catch structures (protrusions 156) on rigid collar member 170 which engage with catch structures (depressions 154) on handle 202. (Ex. 1001, 12:22-37). Pressing engagement pad 240 on sliding member 238 forces the sliding member to wedge between base 116 and rigid collar member 170. The collar moves upward to disengage catch structures 154, 156. (*Id.*, 13:15-25). The mouthpiece then pivots to its dispensing configuration due to the bias of tube 78. (*Id.*, 12:50 – 13:39).

⁶ In the second embodiment, a user can press the mouthpiece assembly directly at engagement portion 260 on collar 170 to disengage the catch structures. This embodiment does not include a sliding member as recited in the claims and hence also does not perform the claimed function of biasing the sliding member away from engaging the catch structures. (Ex. 1003, ¶35).



(*Id.*, Fig. 11).

Sliding member 238 includes biasing members 250 which bias sliding member 238 away from the position where it disengages the first and second catch structures. Biasing members 250 “may be described as springs or leaf springs,” (*id.* at 13:11), and create bias by being compressed against wedge-shaped tabs. (*Id.* at 13:8-21).



(*Id.*, Fig. 11).

B. The Challenged Claims

The '879 Patent issued with 20 claims. Only claim 1 is independent, which is set forth below with limitations labeled for reference and the main elements 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;

Claim 1	
1[B][2]	a first catch structure coupled to the base;
1[B][3]	a mouthpiece assembly extending through the through-passage of the base and defining a liquid passage through which drink liquid from the liquid container may selectively flow, and further defining an inlet through which drink liquid in the internal compartment may enter the liquid passage and an outlet through which drink liquid from the internal compartment of the liquid container is selectively dispensed; wherein the mouthpiece assembly is configured to be selectively configured between a dispensing configuration, in which the liquid passage permits drink liquid to flow from the internal compartment at least into the liquid passage, and a stowed configuration, in which drink liquid is restricted from being dispensed from the liquid container through the liquid passage; wherein the mouthpiece assembly is biased to the dispensing configuration; and wherein the mouthpiece assembly comprises:
1[B][3][a]	a tube portion that defines at least a portion of the liquid passage for drink liquid to flow from the internal compartment to the outlet of the mouthpiece assembly; wherein the tube portion includes a crimping region constructed of a resiliently deformable material and adapted to prevent the flow of drink liquid through the liquid passage when the mouthpiece assembly is in the stowed configuration; wherein the crimping region includes opposing walls that are in contact with each other to seal the liquid passage within the crimping region when the mouthpiece assembly is in the stowed configuration;

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

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, 3, 5-8, and 10-19	103	Kiyota + Choi + Ribarits
2	1, 3, 5-8, 10-13, and 15-19	103	Park + Ribarits
3	14	103	Park + Ribarits + Kiyota

B. The '879 Patent Is Subject to the pre-AIA Prior Art Provisions of the Patent Statute.

The '879 Patent claims priority to Application No. 12/357,114, filed on January 21, 2009, which is the earliest effective filing date for the challenged claims. 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	Choi	Published: Feb. 22, 2007	§ 102(b)
1006	Park	Published: July 22, 2002	§ 102(b)
1009	Ribarits	Published: July 29, 2004	§ 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 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.*, ¶30).

VII. CLAIM CONSTRUCTION

Claim 1[B][4] recites that the cap assembly comprises “a user release mechanism” This term is governed by 35 U.S.C. §112, paragraph 6 because it recites a nonce “mechanism” for performing claimed functions without reciting sufficient structure for performing those functions. *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 functions. (Ex. 1003, ¶39).

“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 “user release mechanism” here does not recite sufficient structure for performing the claimed functions. (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.

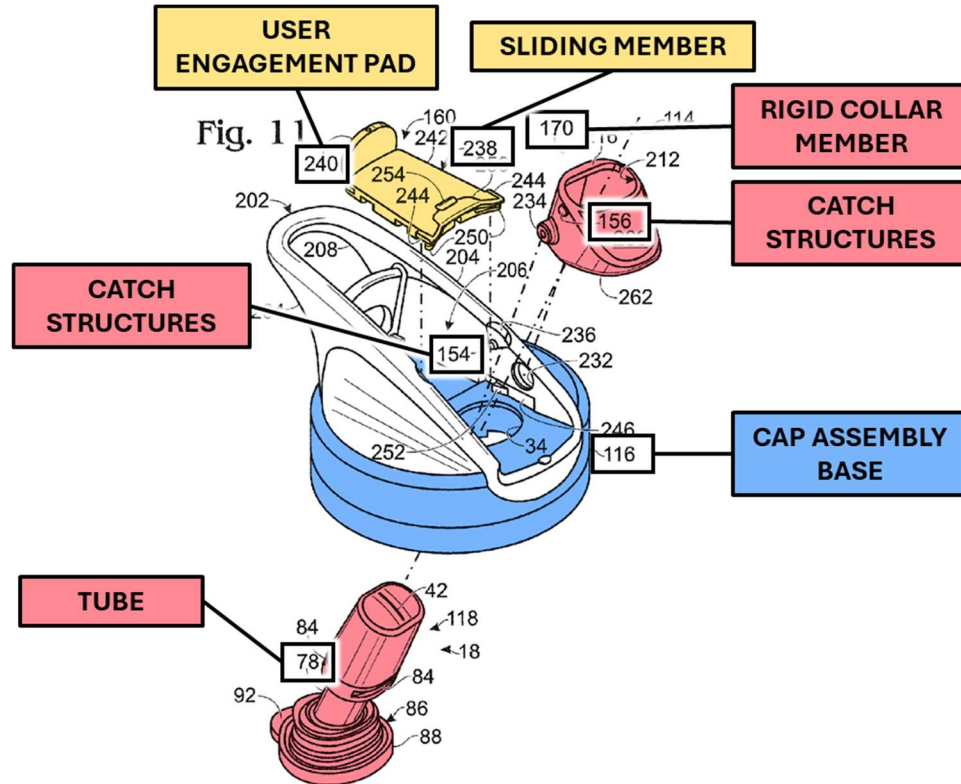
Means-plus-function claims are construed using a two-step process. First, the “function” is identified. *Altiris, Inc. v. Symantec Corp.*, 318 F.3d 1363, 1375 (Fed. Cir. 2003). Next, the patent specification structure corresponding to the recited function is identified. *Id.*

The recited functions of the “user release mechanism” are (i) to “automatically disengage the first and second catch structures upon actuation of the user release mechanism and thereby release the mouthpiece assembly to move via its bias from the stowed configuration to the dispensing configuration” and (ii) being “biased to urge the sliding member away from a position where the sliding

member disengages the first and second catch structures.” (Ex. 1001, 22:5-10, 22:17-20).

The disclosed structure for performing these functions includes sliding member 238 (and its component parts), as shown below. 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. A user can press engagement pad 240 to force the sliding member 238 to wedge between base 116 and rigid collar member 170, which disengages catch structures 154 and 156. (*Id.*, 12:50-13:25). The mouthpiece then pivots to its dispensing configuration due to the bias of the tube 78. (*Id.*, 13:29-33).

The user release mechanism structure that urges the sliding member away from the position where it disengages the first and second catch structures is biasing member 250 (springs or leaf springs), which is compressed against wedge-shaped tabs 250 when the user release mechanism is activated. (*Id.* at 13:8-21).



(*Id.*, Fig. 11).

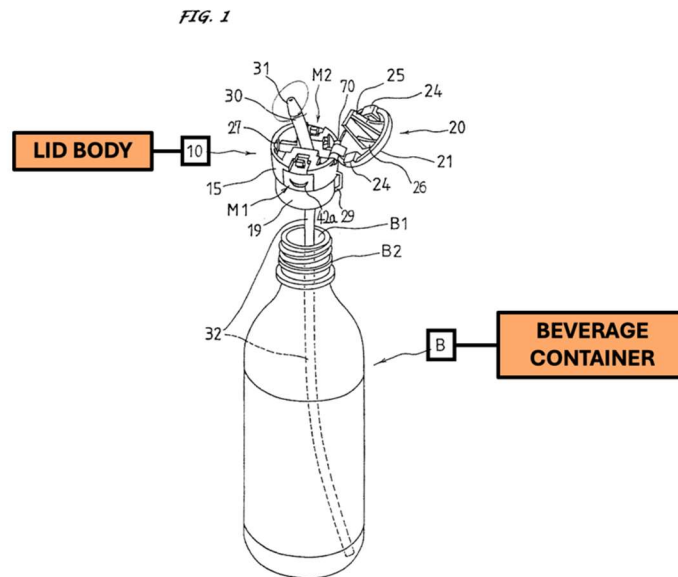
In the district court action Patent Owner contends “user release mechanism is not governed by §112, paragraph 6, and instead covers all structures for performing the recited functions. Either way, the claims are invalid as described herein.

No other claim term requires 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).

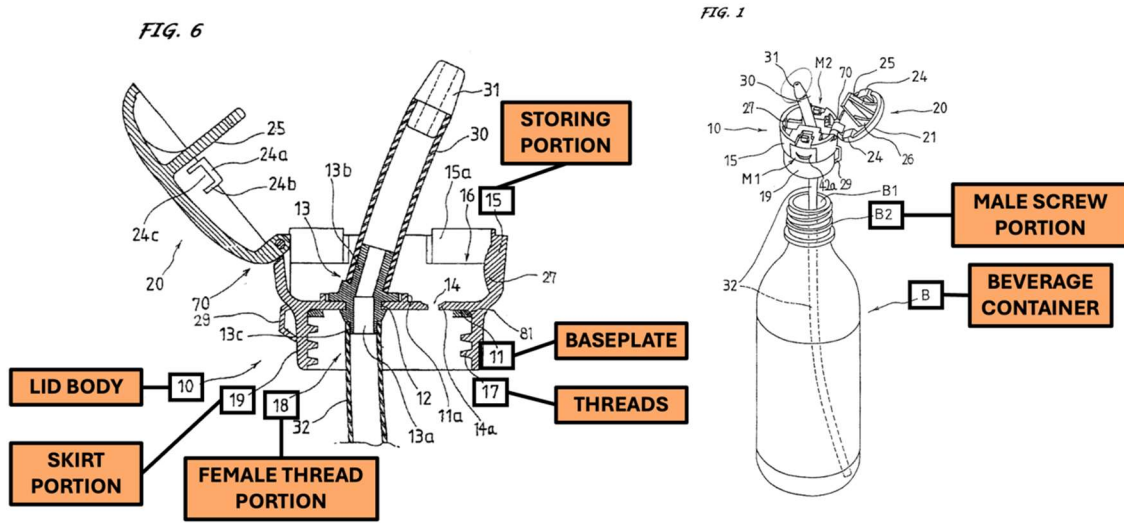
VIII. GROUND 1: CLAIMS 1, 3, 5-8, AND 10-19 WOULD HAVE BEEN OBVIOUS IN VIEW OF KIYOTA, CHOI, AND RIBARITS

A. Overview of Kiyota

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

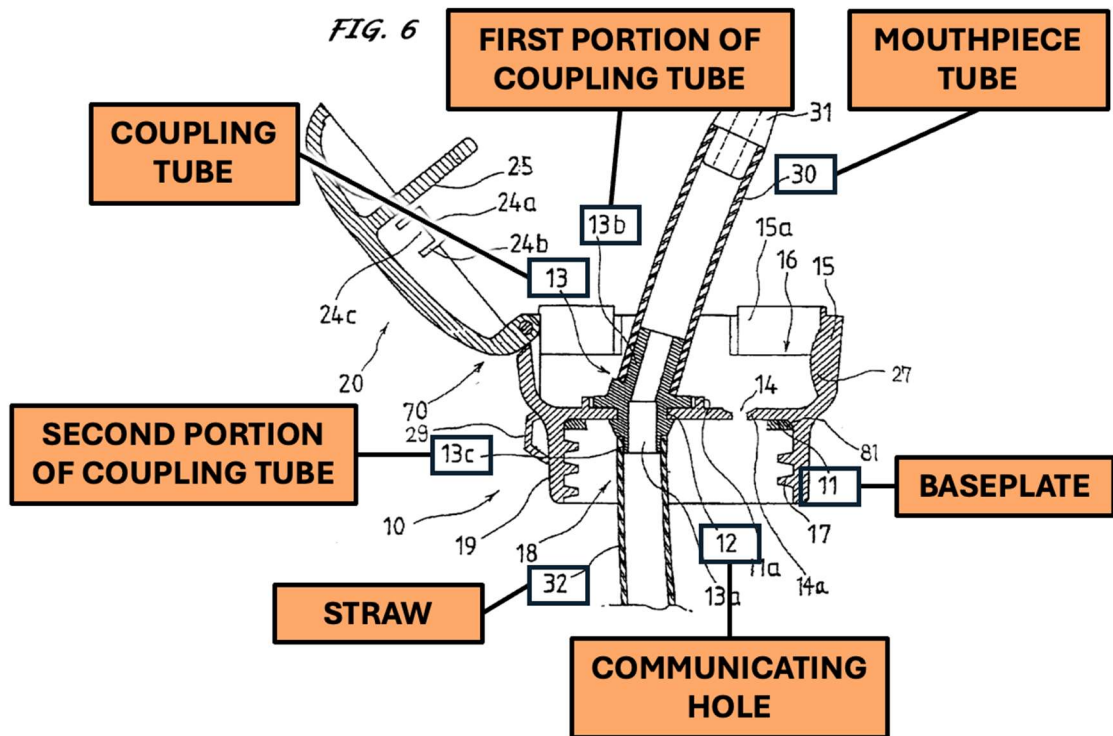


(Ex. 1004, Fig. 1). The lid includes main body 10, which is divided by baseplate 11 into storing portion 16 (above baseplate 11), and thread portion 18 (below). (*Id.*, 4:66-5:1). A skirt portion 19 extends from the periphery of the baseplate 11. The skirt portion 19 includes threads for mating with beverage container B. (*Id.*, 8:58-64).



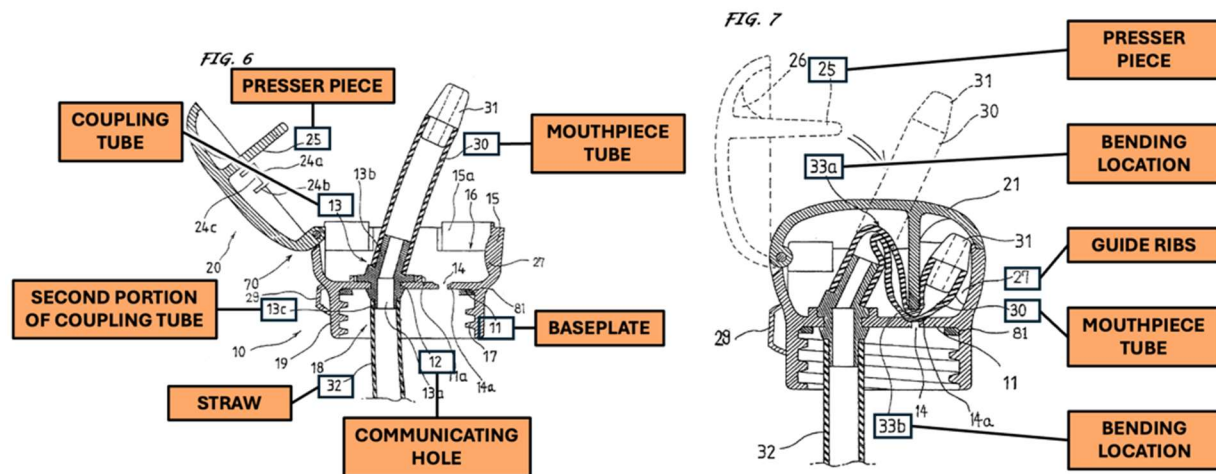
(*Id.*, Figs 1, 6).

The lid permits a user to drink from the beverage container and stores the mouthpiece when it is closed. More specifically, the lid includes a coupling tube 13 that extends through baseplate 11 both upwardly, into storing portion 16, and downwardly, into thread portion 18. 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 and a second coupling portion 13c for connecting to a straw or suction tube 32 extending into the beverage container. (*Id.*, 5:29-44).



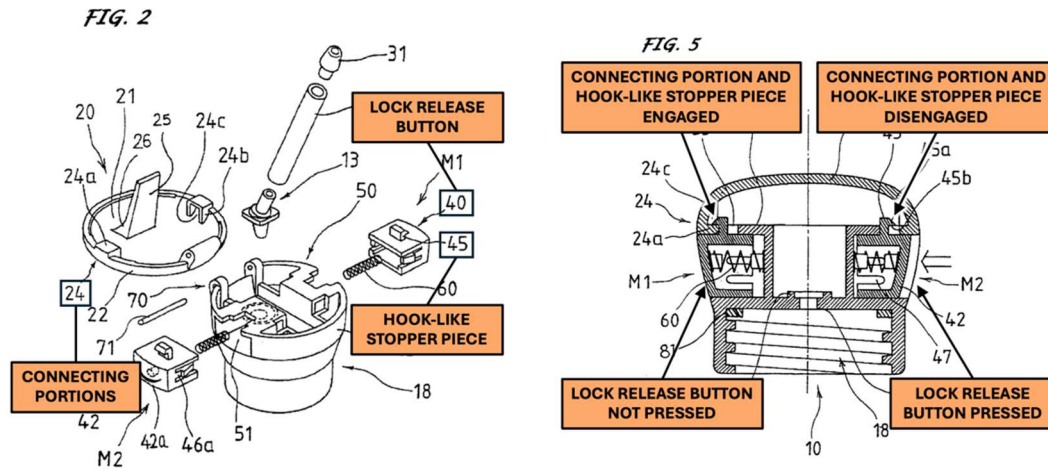
(*Id.*, Fig. 6)

The lid includes presser piece 25 that works with the mouthpiece tube 30 to close the tube for storage. As depicted in Figures 6 and 7 below, presser piece 25 presses mouthpiece tube 30 downwardly 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.*, 10:6-13). Guide ribs 27 guide the mouthpiece tube into its stored. (*Id.*, 8:6-8)



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

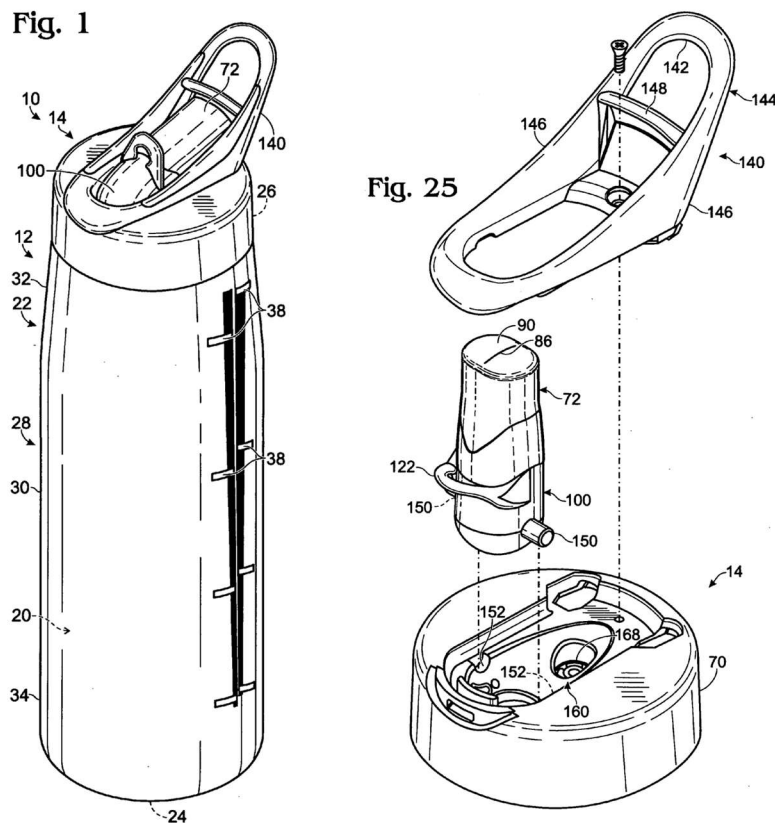
The lid includes catch structures (connecting portions 24) to maintain the lid and mouthpiece tube in a closed, stored position. Specifically, when the lid is closed the connecting portions 24 catch on hook-like stopper pieces 45 (shown below in Figure 2). The hook-like stopper pieces 45 are on the upper surface of lock release buttons 40. (*Id.* at 9:51-57; 10:33-38). When a user presses the 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 dispensing position. (*Id.*, 7:60-8:2; 9:4-13). The buttons are biased away from disengaging the catch structures by springs 60. (*Id.*, 7:3-4).



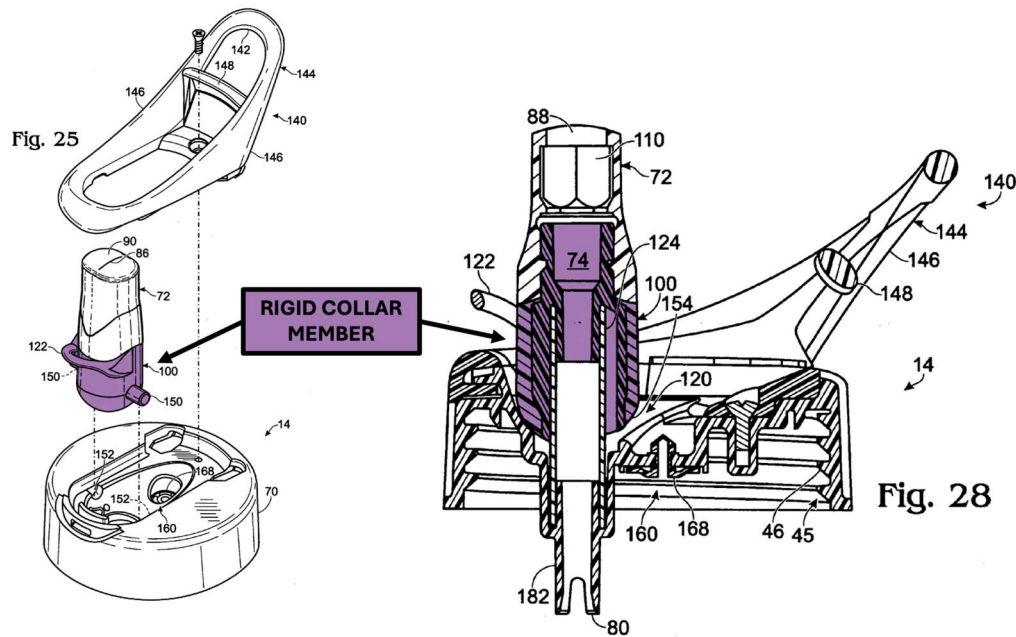
(*Id.*, Figs. 2, 5).

B. Overview of Choi

Choi (Ex. 1005) discloses a drink cap assembly with a bite-activated mouthpiece extending from a rigid collar that pivots between a dispensing and a stowed position. (*Id.*, 0062).

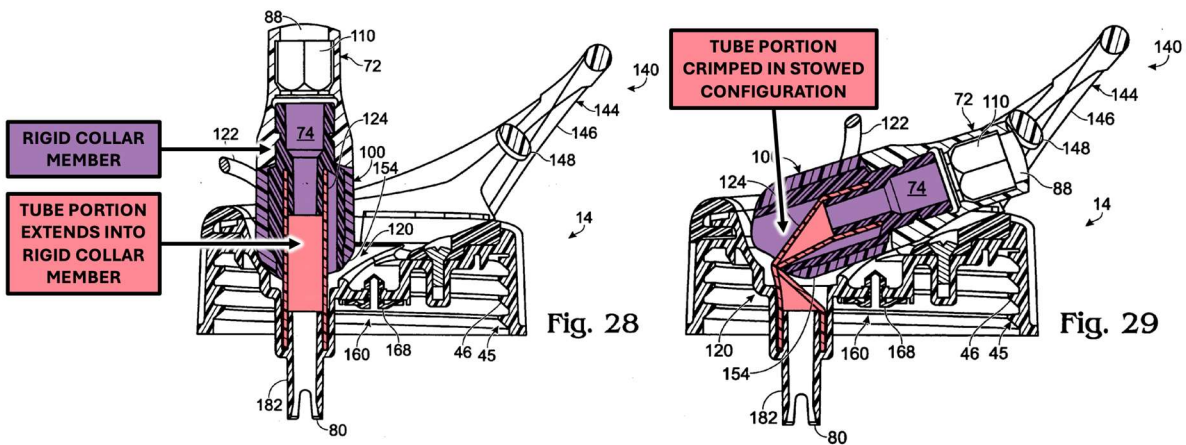


(*Id.*, Figs. 1, 25). Like the '187 Patent, Choi discloses a pivoting mouthpiece assembly including a rigid collar member (mount 100) which “may be pivotally moved relative to the base...” (Ex. 1005, ¶0047).



(*Id.*, Figs. 25, 29).

Choi further discloses a flexible tube 124 that extends into the rigid collar. “[T]he on/off valve includes a flexible tube, or conduit 124 [that] fluidly interconnects the inlet 80 of the fluid conduit with the internal chamber 110 of the mouthpiece.” (*Id.*, ¶0085). When the rigid collar member is in its stowed configuration, tube 124 is crimped, sealing the valve.



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

C. Claim 1

As described below, Kiyota in combination with Choi, discloses a drink container having all the limitations recited in Claim 1 and therefore renders the claim obvious. (Ex. 1003, ¶62).

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

Kiyota discloses a drink container according to the preamble and limitation 1[A], namely “[a] drink container, comprising: a liquid container having a neck with an opening and having an internal compartment sized to hold a volume of potable drink liquid.” (Ex. 1003, ¶¶63, 65).

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



(*Id.*, Fig. 1).

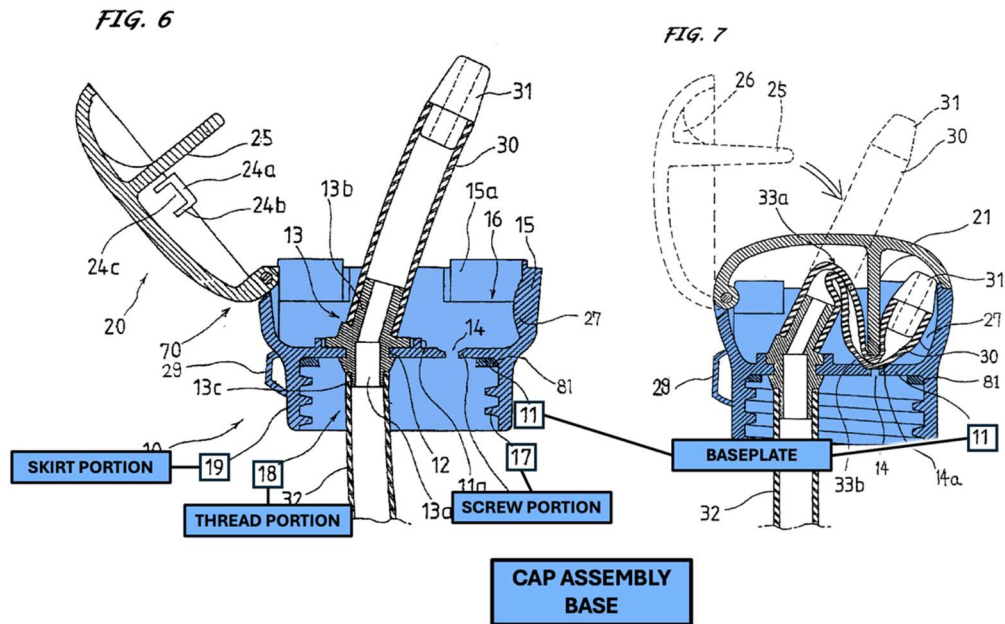
2. 1[B] Cap Assembly

Limitation 1[B] recites: “a cap assembly removably coupled to the liquid container.” Kiyota discloses this limitation. (Ex. 1003, ¶67; Ex. 1004, 1:4-5)

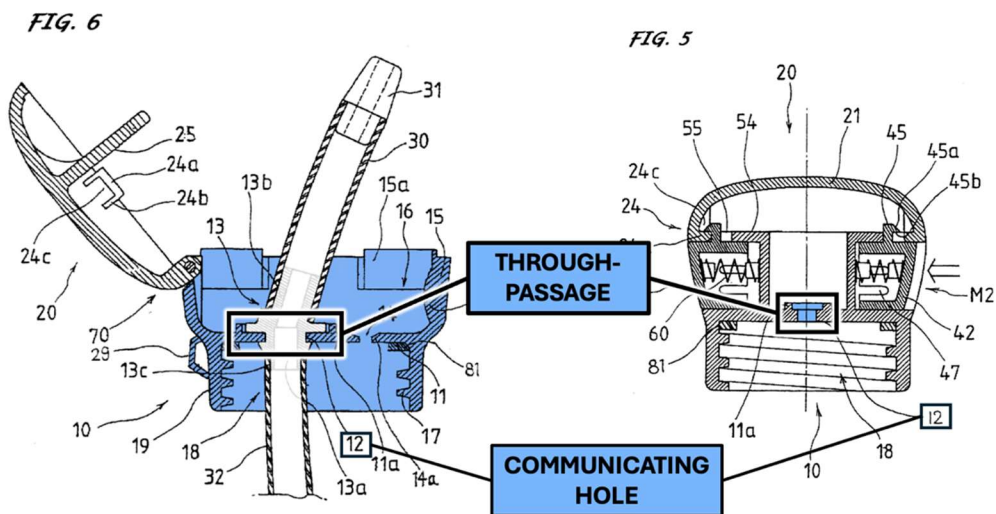
a. 1[B][1] Base

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 this limitation. (Ex. 1003, ¶69).

Kiyota discloses a base (main body portion 10). (Ex. 1004, 4:66-5:12).



(*Id.*, Figs. 6, 7). Kiyota’s base includes a through-passage (communicating hole 12), (*Id.*, 5:21-23), as shown below.



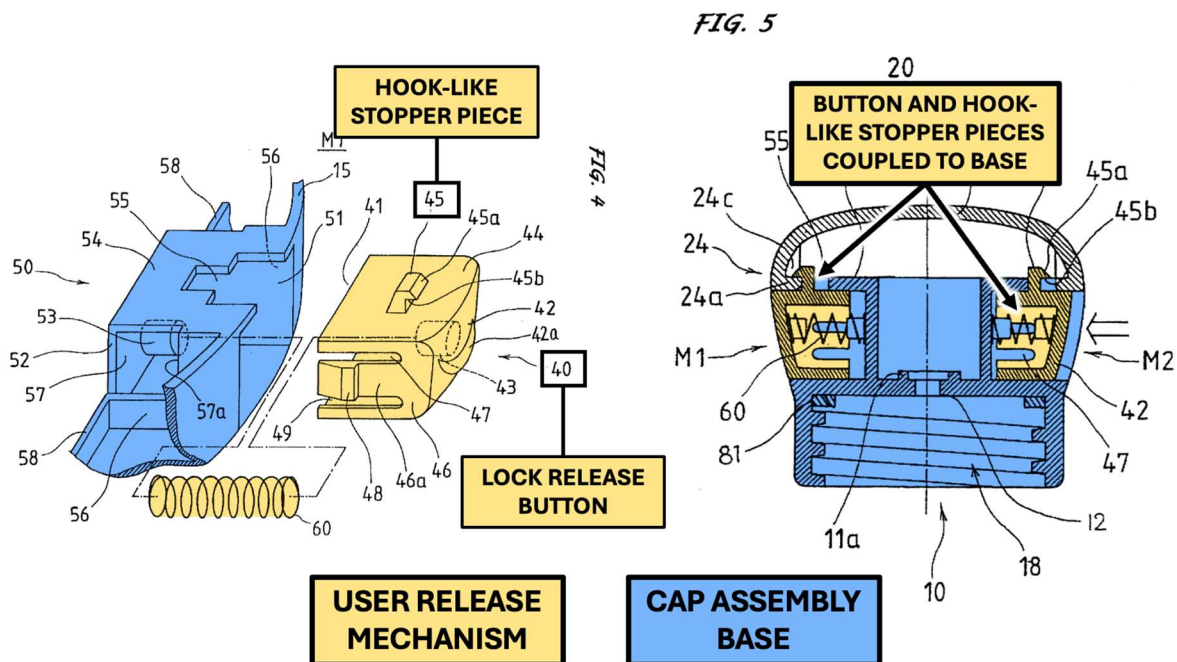
(*Id.*, Figs. 5, 6).

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

Limitation 1[B][2] recites that the cap assembly comprises “a first catch

structure coupled to the base.” Kiyota discloses this limitation. (Ex. 1003, ¶72).

Kiyota discloses two lock release buttons 40, each of which have a first catch structure (hook-like stopper piece 45). (Ex. Ex. 1004, 6:28-37). As shown below, spring 60 mates with protrusions 53 on the buttons and protrusions 43 on the base to couple buttons 40 to the base. (Ex. 1004, 6:20-56). Additionally, stopper protrusions 48 couple buttons 40 to the base by engaging notched windows 57. (Id., at 6:1-19)).



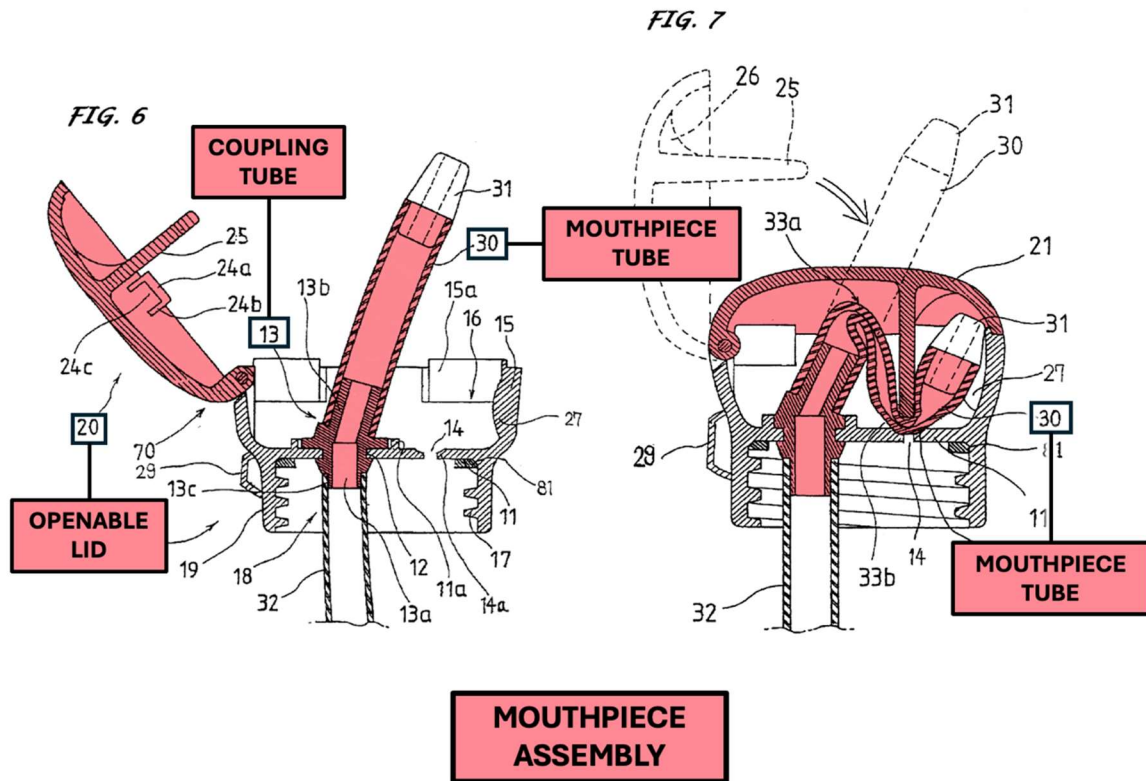
(Id., Figs. 2, 5).

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, ¶74).

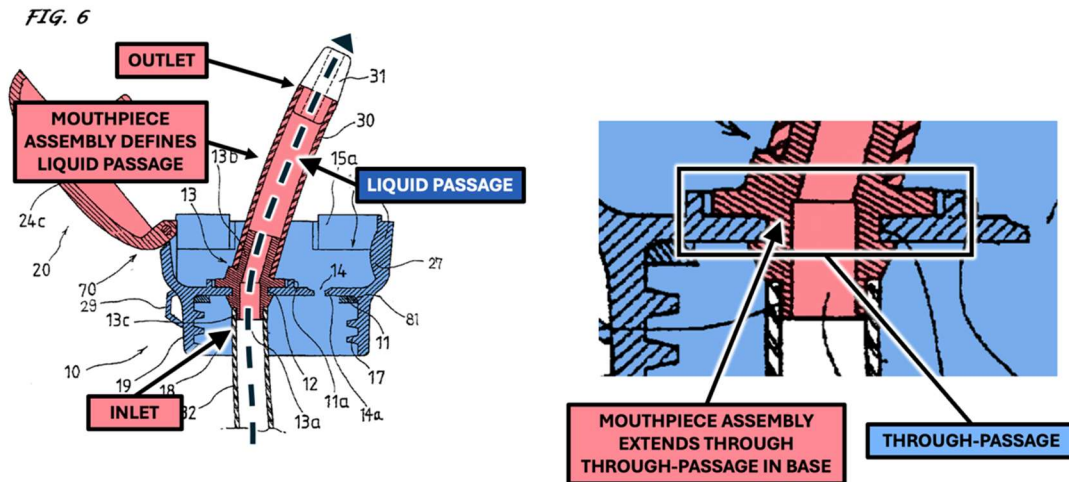
Kiyota's mouthpiece assembly includes, *inter alia*, mouthpiece tube 30, coupling tube 13, and openable lid 20, which function together to allow a user to drink liquid from the drink container (dispensing configuration) and seal the mouthpiece assembly (stowed configuration). (Ex. 1003, ¶75; Ex. 1004, 9:4-17; 9:34-46; 11:23-31).



(Ex. 1004, Fig. 6).

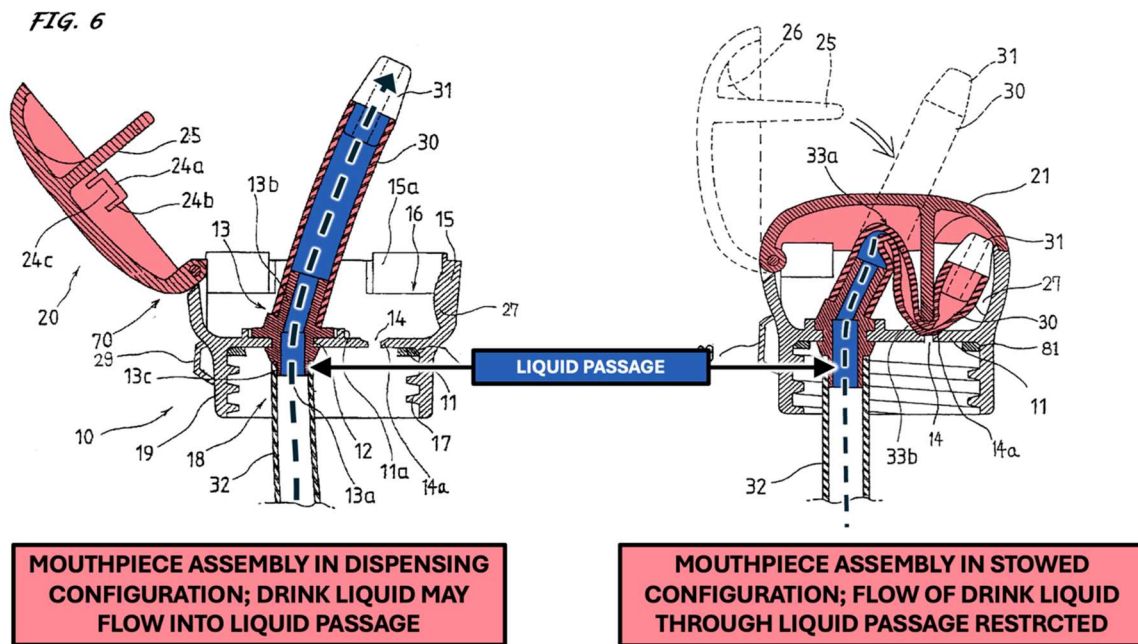
As shown below, Kiyota's mouthpiece assembly extends through a through-passage (communicating hole 12) and defines a liquid passage with an inlet and an

outlet.



(*Id.*, Fig 6).

In the dispensing configuration the liquid passage permits drink liquid to flow from the internal compartment at least into the liquid passage. In the stowed configuration drink liquid is restricted from being dispensed from the liquid container through the liquid passage. (*Id.*, 9:29-32; 10:17-23; 11:8-28;).



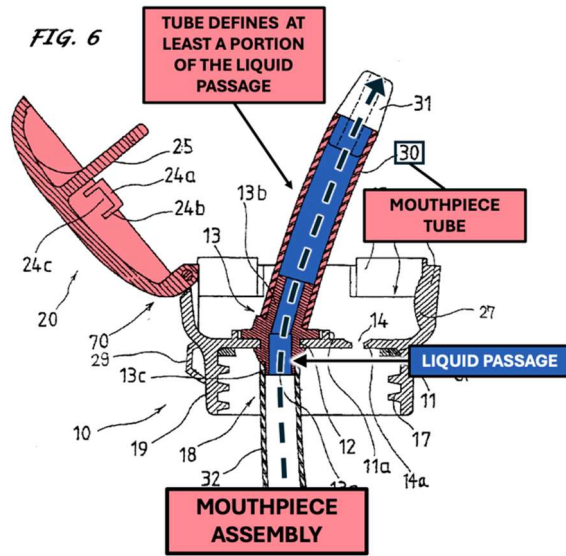
(*Id.*, Figs. 6, 7).

Kiyota's mouthpiece assembly is biased to its dispensing configuration by its elasticity. (*Id.*, 11:18-22).

i. 1[B][3][a] Tube portion

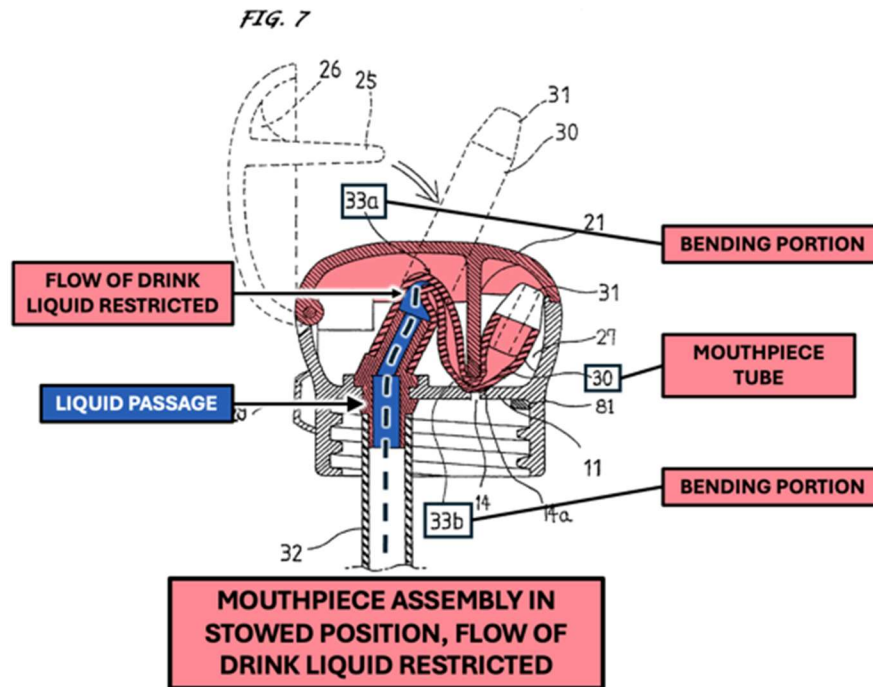
Limitation 1[B][3] is directed to the tube portion. Kiyota discloses the tube portion as recited. (Ex. 1003, ¶79).

As shown below, Kiyota's mouthpiece tube 30 defines at least a portion of the liquid passage.



(Ex. 1004, Fig. 6).

Kiyota's tube is constructed of a resiliently deformable material. (*Id.*, 9:66-67). The tube includes two crimping regions (bending portions 33a, 33b). In the stowed configuration, the interior walls of mouthpiece tube 30 press against each other, preventing the flow of drink liquid through the liquid passage. (*Id.*, 10:22-24).

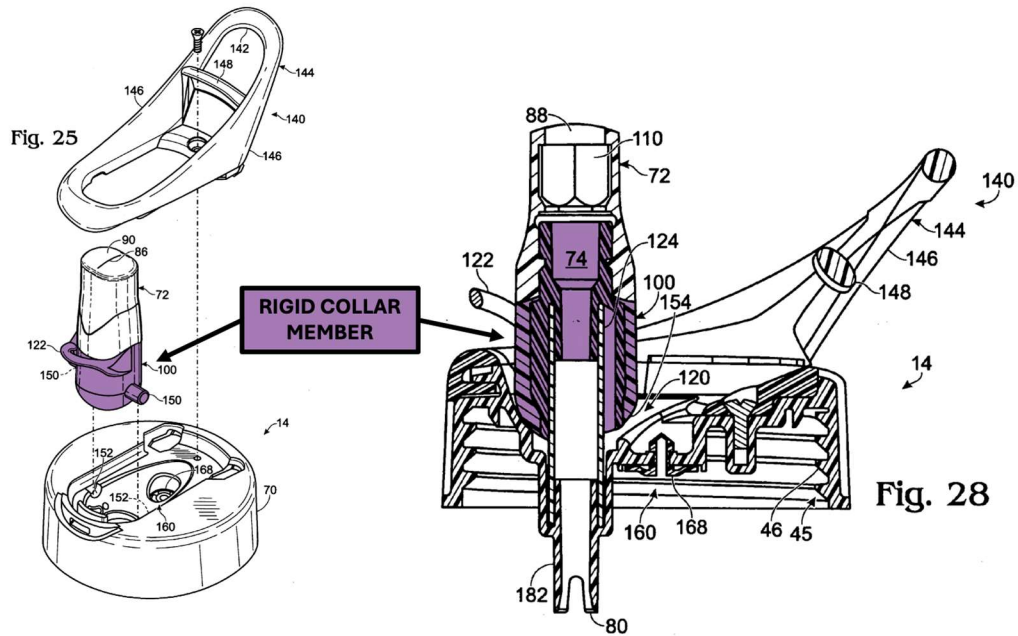


(*Id.*, Fig. 7)

ii. 1[B][3][b] Pivotal Rigid Collar

Limitation 1[B][3][b] recites that the mouthpiece assembly comprises “a rigid collar member that is pivotally coupled to a portion of the cap assembly and through which the tube portion at least partially extends.” This limitation is obvious over Kiyota and Choi. (Ex. 1003, ¶83).

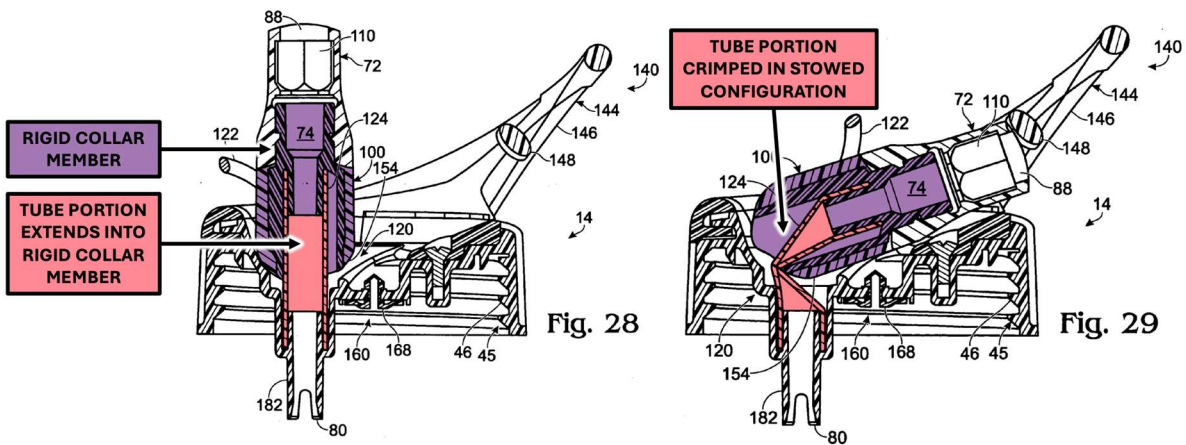
Choi discloses a rigid collar member (mount 100) which “may be pivotally moved relative to the base...” (Ex. 1005, ¶0047).



(*Id.*, Figs. 25, 29).

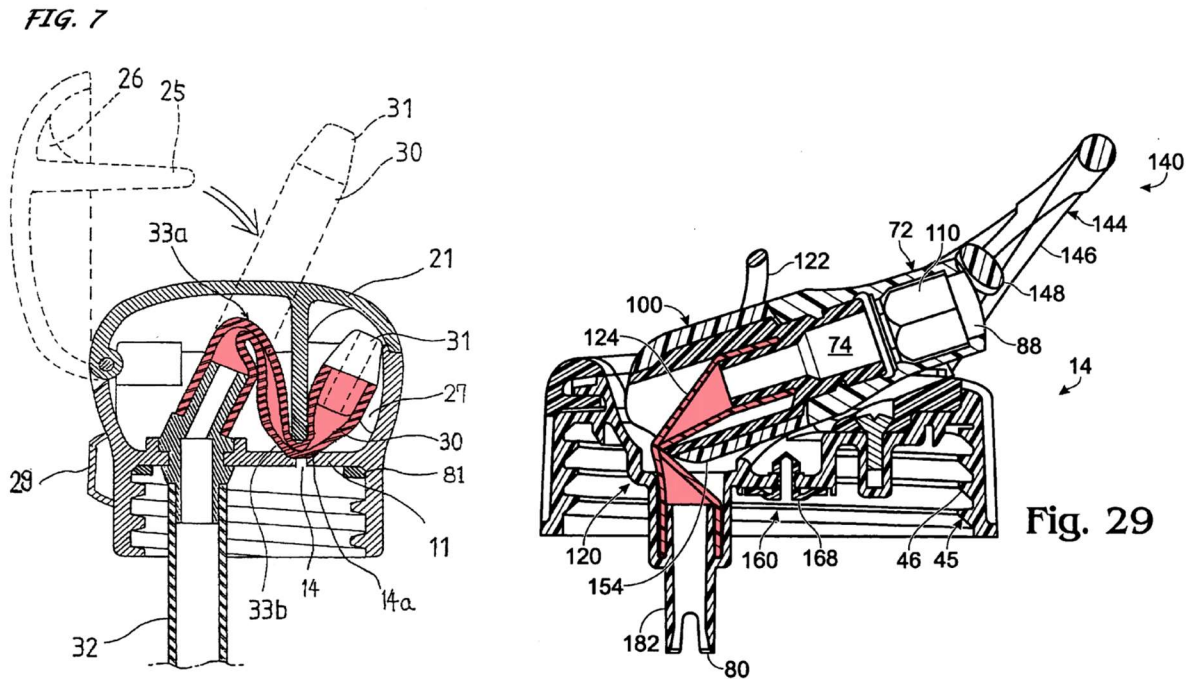
Choi further discloses a flexible tube 124 that extends into the rigid collar.

“[T]he on/off valve includes a flexible tube, or conduit 124 [that] fluidly interconnects the inlet 80 of the fluid conduit with the internal chamber 110 of the mouthpiece.” (Ex. 1005, ¶0085).



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

Kiyota and Choi are closely related and disclose drink containers of substantially the same functionality. (Ex. 1003, ¶84). Specifically, both disclose drink containers having mouthpiece assemblies that pivot from a stowed to a dispensing configuration. (*Id.*).



(Ex. 1004, Fig. 5; Ex. 1006, Fig. 29).

Each mouthpiece assembly comprises a resilient mouthpiece portion presented to a user at an orientation convenient for drinking. A POSITA would have understood that various methods of positioning the mouthpiece could be used with the Kiyota mouthpiece assembly, including the pivoting rigid collar disclosed in Choi. (Ex. 1003 ¶89).

A POSITA would further understand that combining Choi's pivotal rigid collar member would provide the advantage of a bite-actuated mouthpiece. (*Id.*, ¶83). A POSITA would have been motivated to substitute Choi's mouthpiece and mount for Kiyota's mouthpiece for several reasons. (*Id.*, ¶89). The combined cap

assembly would offer improved leak protection and mouthpiece orientation control compared to Kiyota alone, along with Kiyota's easy cleanability and superior protection for the mouthpiece when stowed. (*Id.*, ¶91).

Additionally, combining Kiyota and Choi is no more than the simple substitution of one known element (Choi's mouthpiece assembly) for another known element (Kiyota's mouthpiece assembly) to obtain predictable results. (*Id.*, ¶90). The combination also represents the use of known techniques (using a pivoting rigid collar to control the orientation of a mouthpiece, and using a bite-actuated mouthpiece to prevent leaks) to modify or improve a similar device, namely Kiyota's mouthpiece assembly. (*Id.*, ¶¶90, 91).

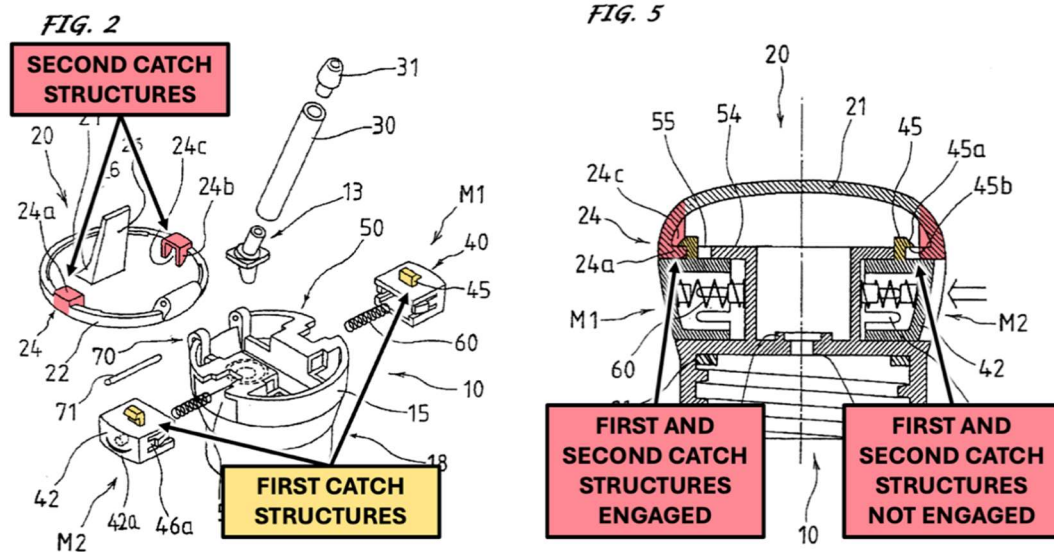
Third, bite-actuated mouthpieces and pivoting rigid collars were well known, leading a POSITA to reasonably expect success in the combination. (*Id.*, ¶90).

Finally, the combination applies known techniques (using a pivoting rigid collar to control the orientation of a mouthpiece and using a bite-actuated mouthpiece to prevent leaks) to a known device (Kiyota's mouthpiece assembly) that is ready for improvement and yields predictable results, namely fewer leaks and more precise control over the orientation of Kiyota's mouthpiece portion. (*Id.*).

iii. **1[B][3][c] Second Catch Structure**

Limitation 1[B][3][c] 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, ¶92).

Kiyota discloses second catch structures (connecting portions 24) that selectively engage the first catch structures (hook-like stopper pieces 45) to retain the mouthpiece assembly in its stowed configuration. (Ex. 1004, 10:33-38)



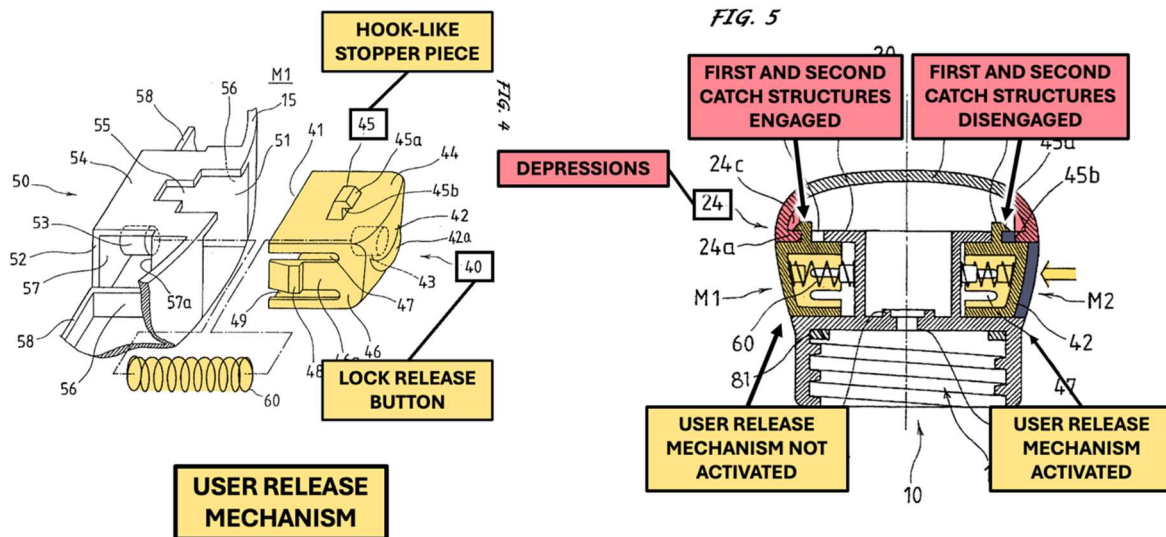
(*Id.*, Figs. 2, 5).

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

As discussed above, limitation 1[B][4] is a means-plus-function limitation. Kiyota discloses a user release mechanism that performs the recited function, and

which is equivalent to the '879 patent structure. (Ex. 1003, ¶95).

Specifically, lock release buttons 40, automatically disengage the first and second catch structures (hook-like stopper pieces 45 and connecting portions 24) when pressed. (Ex. 1004, 8:66-9:13). Disengaging the catch structures allows the mouthpiece assembly to move to its dispensing configuration via its bias. (*Id.*, 9:7-13).



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

The structures in Kiyota that perform the claimed user release mechanism function are equivalent to the structures of the '879 patent. (Ex. 1003, ¶98). They perform the claimed function in the same way to achieve the same result. (*Id.*, ¶98). In one embodiment of the user release mechanism of the '879 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 where a user presses buttons 40, which slide to automatically disengage the first and second catch structures. (*Id.*).

Further, to the extent “user release mechanism” is not governed by §112, ¶6, Kiyota certainly discloses *a* structure that performs the recited function. (*Id.*, ¶99).

3. 1[C] Stowing Region

Limitation 1[C] recites that the cap assembly defines “a stowing region sized to receive at least a portion of the mouthpiece assembly when the mouthpiece assembly is in the stowed configuration.” Kiyota discloses this limitation. (Ex. 1003, ¶100).

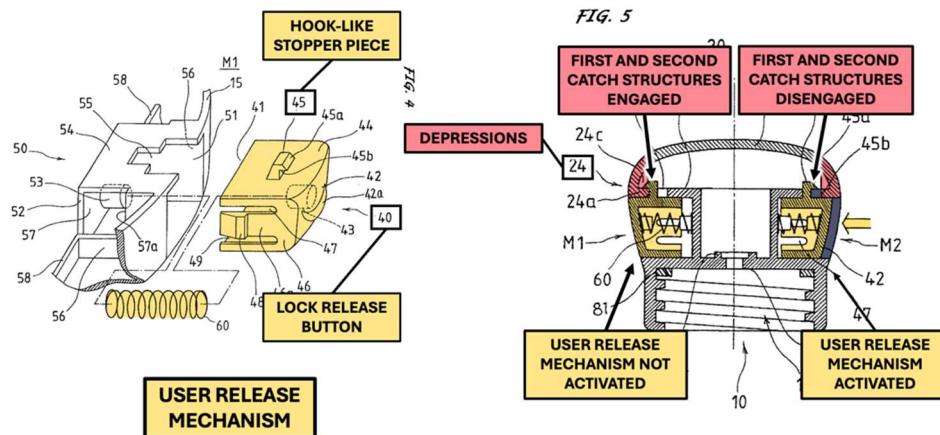
Kiyota’s “main body portion 10 is divided into a storing portion 16 positioned upward from a baseplate 11....” (Ex. 1004, 4:66-67). Kiyota further discloses that “when the openable lid 20 is closed, the mouthpiece tube 30 is... stored within the storing portion 16.” (*Id.*, 10:13-16).

4. 1[D] Sliding Member

Limitation 1[D] recites that the user release mechanism includes “a sliding member with a user engagement pad; wherein the user release mechanism is biased to urge the sliding member away from a position where the sliding member disengages the first and second catch structures; and wherein the sliding member

is configured to slide relative to the base of the cap assembly to selectively disengage the first and the second catch structures.” Kiyota discloses this limitation. (Ex. 1003, ¶103).

Kiyota’s user release mechanism includes sliding members (lock release buttons 40) are “movably fixed within... socket 50.” (Ex. 1004, 6:1-3). When pressed, lock release buttons 40 “are moved in the inside direction of the sockets 50” and “the lower edge portions 45b[] of each stopper piece 45[] are separated from depressions 24c[] of each connecting portion 24[].” (*Id.*, 7:60-64). Lock release buttons 40 slide within, and relative to, sockets 50, which are part of Kiyota’s cap assembly base.



(Ex. 1004, Figs. 4, 5).

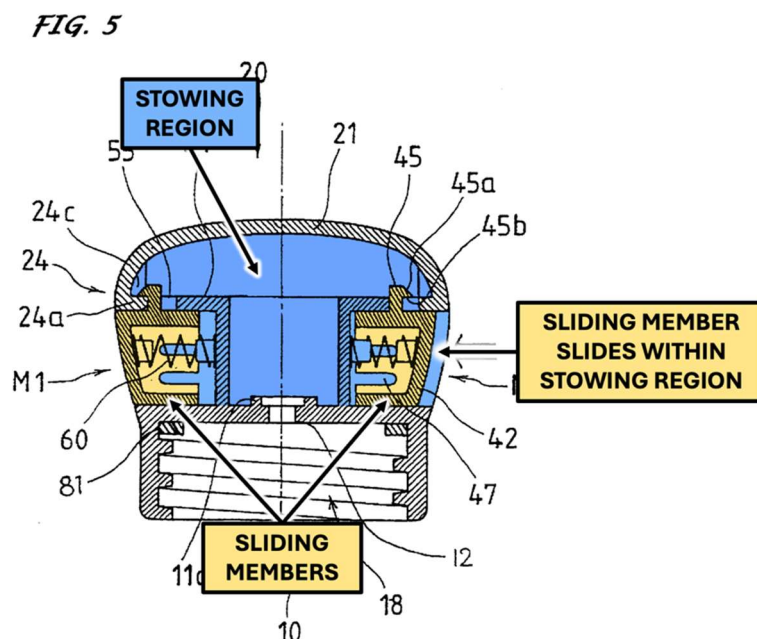
Additionally, Kiyota’s sliding members (lock release buttons 40) are biased away from a position where the sliding member disengages the first and second

catch structures by spring 60. (*Id.*, 7:3-4). These springs are equivalent to the springs of the '879 patent that perform the same function. (Ex. 1003, ¶105).

Because Kiyota and Choi disclose each element of Claim 1, the claimed invention would have been obvious over Kiyota and Choi. (Ex. 1003, ¶106);

D. Claim 3

Claim 3 depends from claim 1, and adds “wherein the sliding member is configured to slide relative to the base of the cap assembly within the stowing region to selectively disengage the first and the second catch structures.” Kiyota discloses this additional limitation. (Ex. 1003, ¶107). Kiyota’s sliding members are lock release buttons 40, which slide within the stowing region when buttons 40 are pressed, as shown below. *See* (Ex. 1004, 7:60-64).



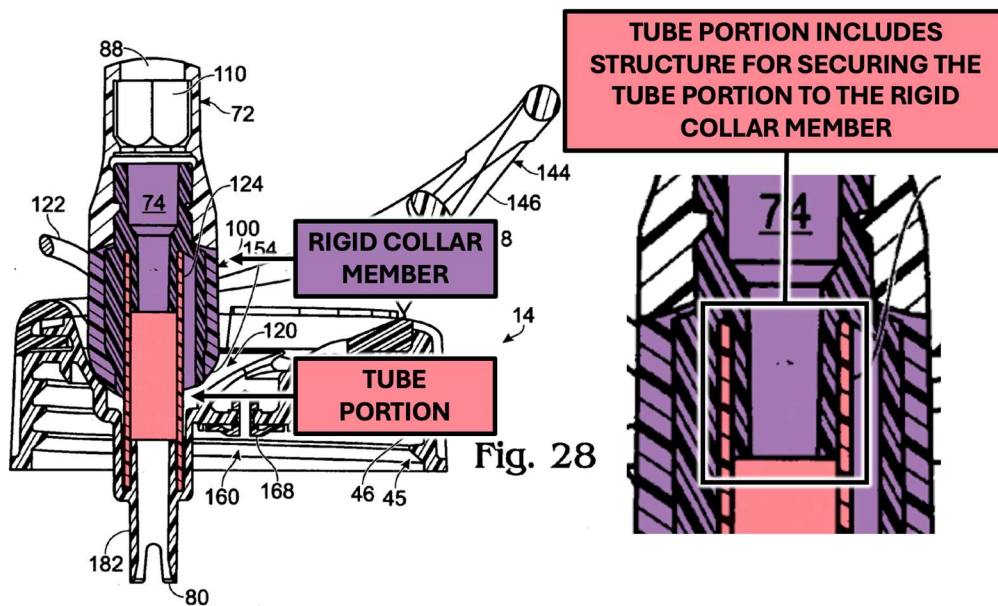
(*Id.*, Fig. 5).

Accordingly, claim 3 would have been obvious over Kiyota and Choi. (Ex. 1003, ¶110).

E. Claim 5

Claim 5 depends from claim 1, and adds “wherein the tube portion includes structure for securing the tube portion to the rigid collar member and restricting relative movement between the tube portion and the rigid collar member.” This limitation is obvious over Kiyota and Choi. (Ex. 1003, ¶111).

As discussed above, a POSITA would have been motivated to add Choi’s rigid collar member (mount 100) to Kiyota. Choi discloses “a flexible tube [that] fluidly interconnects the inlet 80 of the fluid conduit with the internal chamber 110 of the mouthpiece.” (Ex. 1005, ¶0085). As shown below, the tube includes structure for securing the tube to the body 154 of the rigid collar member (mount 100).



(Ex. 1005, Fig. 28). While the tube is secured to the rigid collar member, relative movement between the two components is restricted. (Ex. 1003, ¶113).

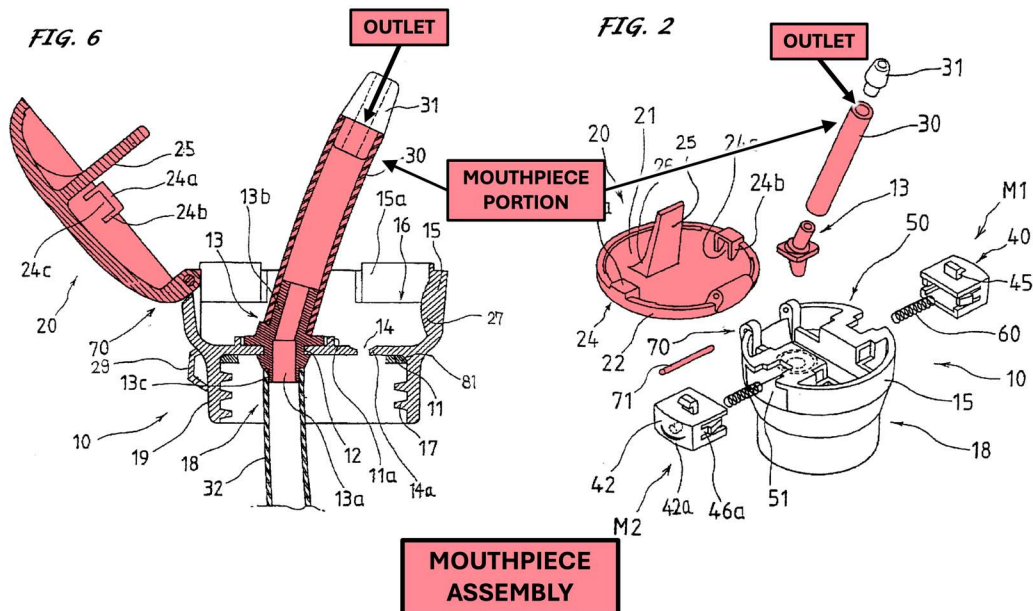
Accordingly, claim 5 would have been obvious over Kiyota and Choi. (Ex. 1003, ¶114).

F. Claim 6

Claim 6 depends from claim 1, and adds “wherein the mouthpiece assembly further includes a mouthpiece portion that includes the outlet and is constructed of the resiliently deformable material.” Kiyota and Choi disclose this additional limitation. (Ex. 1003, ¶115).

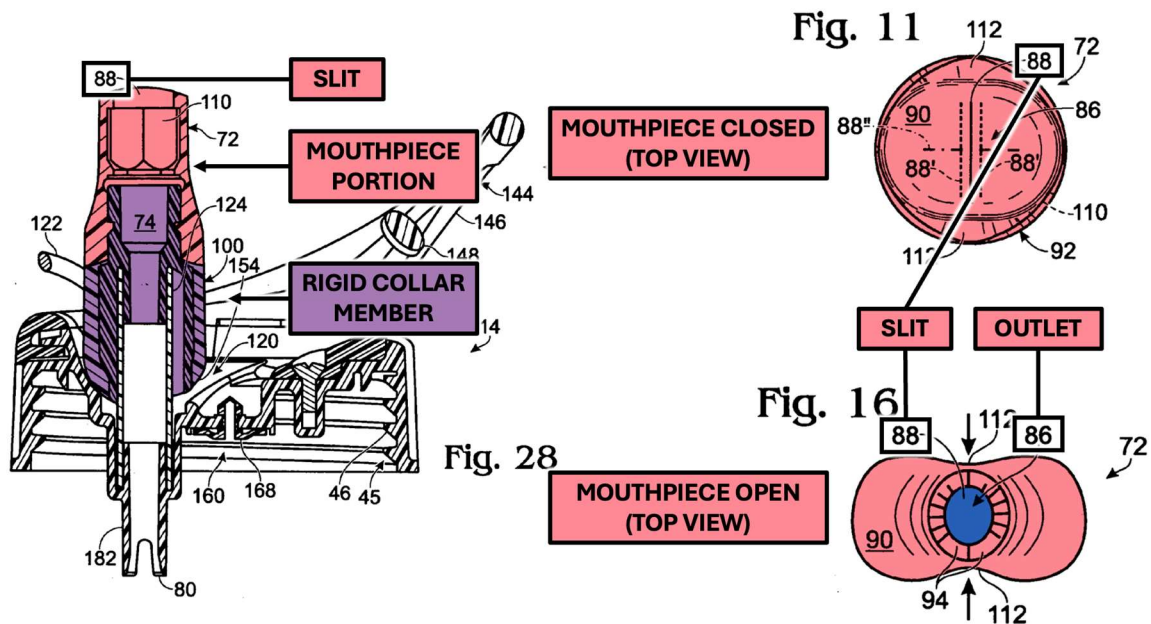
Kiyota discloses that its mouthpiece portion (the end of mouthpiece tube 30) is constructed of a resiliently deformable material “[M]outhpiece tube 30..., for

example, is a tubular member made of elastic and flexible synthetic resin” (Ex, 1004, 9:66-67).



(*Id.* Figs. 2, 6).

Choi also discloses this limitation. (Ex. 1003, ¶119). Choi’s bite-actuated mouthpiece 72 is resilient and deformable, (Ex. 1005, ¶¶0004, 0052), and includes an outlet. (*Id.*, 0081).



(Ex. 1005, Figs. 11, 16, 28).

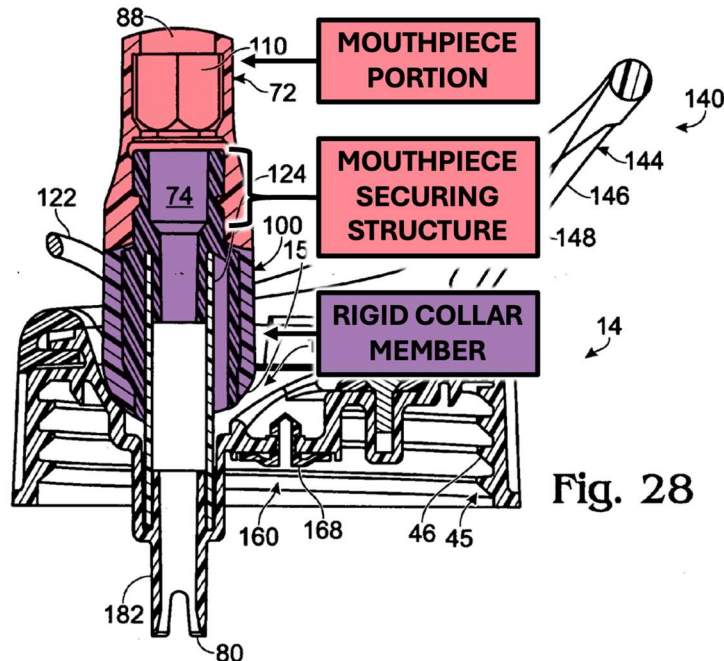
Accordingly, claim 6 would have been obvious over Kiyota and Choi. (Ex. 1003, ¶120).

G. Claim 7

Claim 7 depends from claim 6, and adds “wherein the mouthpiece assembly includes mouthpiece-securing structure that secures the mouthpiece portion to the rigid collar member and restricts relative movement between the mouthpiece portion and the rigid collar member.” This limitation is obvious over Kiyota and Choi. (Ex. 1003, ¶122).

As discussed above, a POSITA would have been motivated to add Choi’s rigid collar member (mount 100) and mouthpiece bite-actuated mouthpiece 72 to

Kiyota. Choi's mouthpiece securing structure is shown below:



(Ex. 1005, Fig. 28). While the mouthpiece is secured to the rigid collar member, relative movement between the two components is restricted. (Ex. 1003, ¶123).

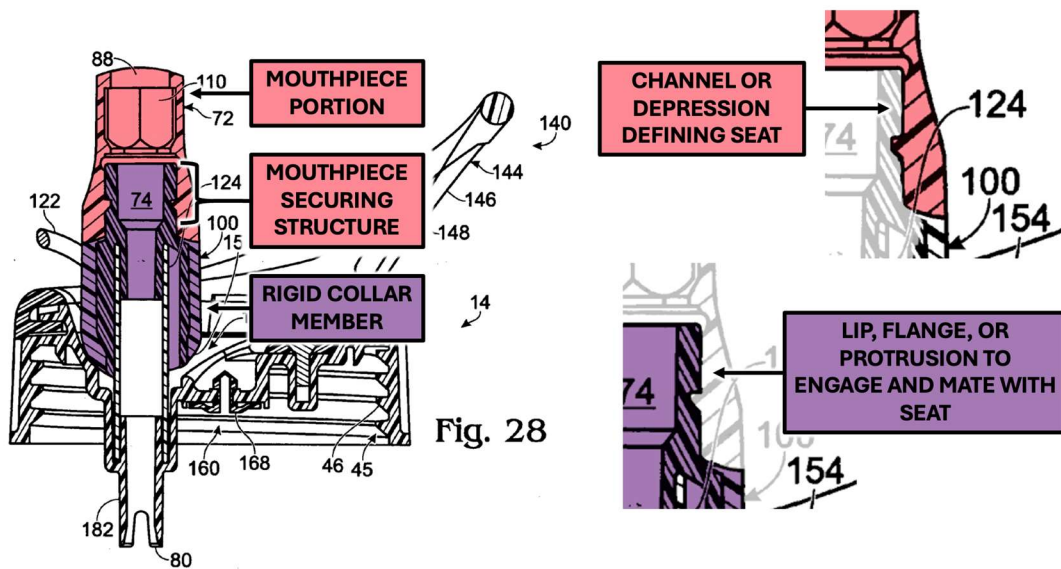
Accordingly, claim 7 would have been obvious over Kiyota and Choi. (Ex. 1003, ¶124).

H. Claim 8

Claim 8 depends from claim 7, and adds “wherein one of the mouthpiece portion and the tube portion includes the mouthpiece-securing structure; wherein the mouthpiece-securing structure includes one or more of a channel and a depression; wherein the rigid collar member includes one or more of a lip, a flange, and a protrusion; and wherein the one or more of the channel and the depression

defines a seat that engages and mates with the one or more of the lip, the flange, and the protrusion.” This limitation would have been obvious over Kiyota and Choi. (Ex. 1003, ¶126)

Choi’s mouthpiece 72 includes a channel or depression that defines a seat that engages and mates with a lip, flange, or protrusion of mount 100.



(Ex. 1005, Fig. 28)

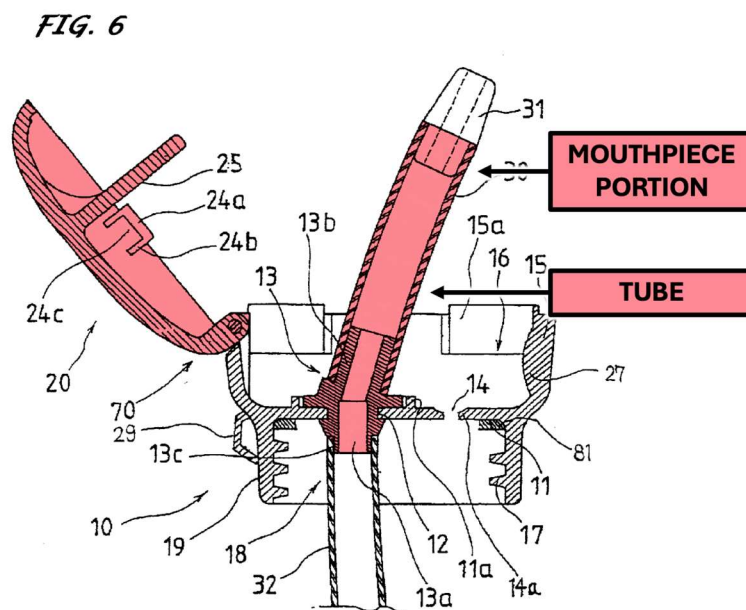
Accordingly, claim 8 would have been obvious over Kiyota and Choi. (Ex. 1003, ¶128).

I. Claim 10

Claim 10 depends from claim 6, and adds “wherein the mouthpiece portion and the tube portion are constructed as a unitary assembly of the resiliently

deformable material.” This limitation is obvious over Kiyota, Choi, and Ribarits. (Ex. 1003, ¶130).

Kiyota discloses a tube portion (mouthpiece tube 30) that includes a mouthpiece portion (the end of mouthpiece tube 30). Because the two portions are sections of a single tube, they are constructed as a unitary assembly.

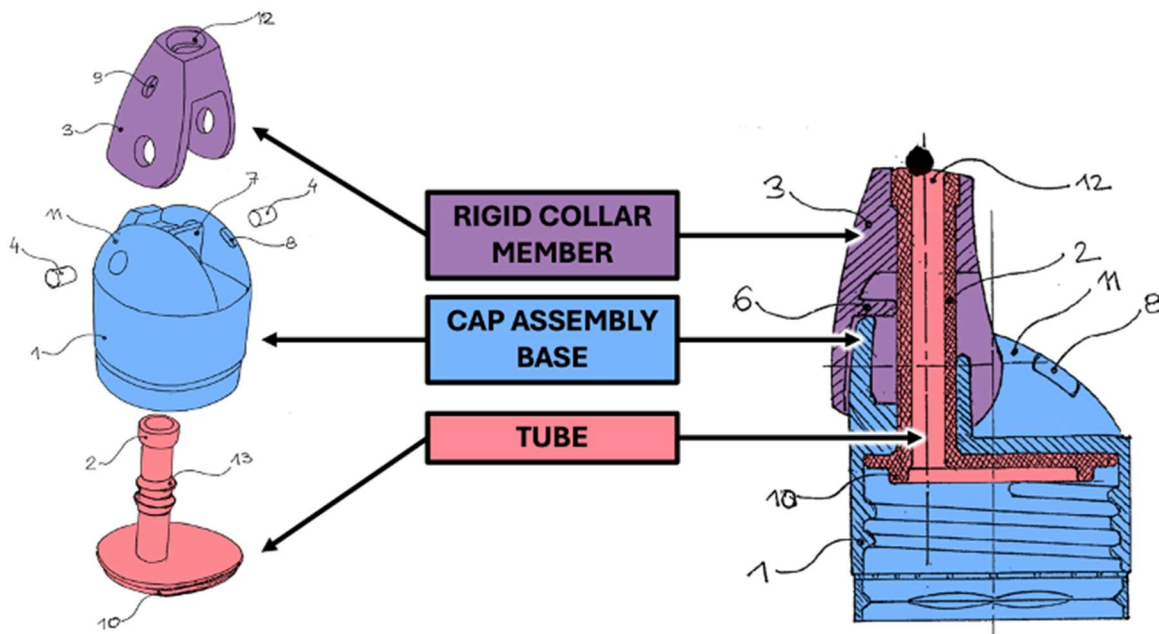


(Ex. 1004, Fig. 6).

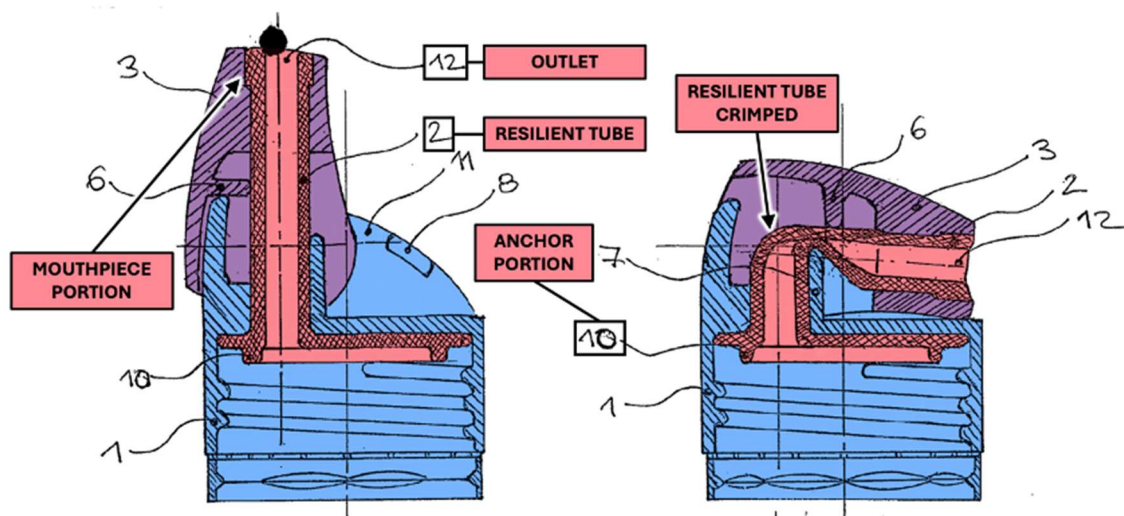
Choi's tube portion (flexible tube 124) and mouthpiece 72 are not constructed as a unitary assembly, but it would have been obvious to use a unitary assembly when combining with Kiyota. (Ex. 1003, ¶133). The use of a unitary tube in a mouthpiece assembly with a pivoting rigid collar was known and would

have been an obvious substitution to a POSITA. For example, Ribarits discloses such a tube in a pivoting mouthpiece assembly.

Ribarits (Ex. 1009) discloses a conventionally threaded drink cap assembly that includes “a drinking spout” (spout 3, i.e. a rigid collar member) that is “pivoted” between open and closed positions. (*Id.*, 2). Ribarits includes sealing tube element 2, a unitary assembly of resiliently deformable material (rubber or latex), that includes a tube, mouthpiece portion, and anchor portion. (*Id.*). Sealing tube element 2 extends through spout and provides fluid communication from the drink bottle, through the cap assembly, to the user’s mouth. (*Id.*).



(*Id.*, Figs. 2, 3). The tube seals when it is crimped by the drinking spout in its closed configuration.



(*Id.*, Fig.3).⁷

Ribarits is very closely related to Kiyota and Choi. All three have cap assemblies of substantially the same functionality, namely all include mouthpiece assemblies with open and closed configurations, resilient mouthpieces, and crimpable tubes. They all address the same problem of an easily sealable mouthpiece assembly for use in a drink container and do so in the same way, i.e. by crimping the tube. (*Id.*, ¶135). Kiyota and Ribarits both disclose a tube and mouthpiece that are constructed as a unitary assembly of a resiliently deformable material. (*Id.*, ¶136). Choi and Ribarits both disclose a rigid collar member. (*Id.*). A POSITA would recognize the configurations disclosed by Kiyota, Choi, and Ribarits are interchangeable. (*Id.*).

⁷ The black dot adjacent the outlet in Figure 3 appears to be a printing error in the original published patent figure.

A POSITA would have been motivated for multiple reasons to combine the unitary construction of resiliently deformable material disclosed in Kiyota with the rigid collar member disclosed in Ribarits and Choi. (*Id.*, ¶137). For example, it would have been obvious to a POSITA to make Choi's multiple pieces 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 incentivized to have fewer parts. A POSITA would recognize that Choi's separate tube and mouthpiece portions could be molded as a single piece of resiliently deformable material based on the disclosure in Kiyota and Ribarits and/or the knowledge of a POSITA. (Ex. 1003, ¶138). A POSITA would have recognized that not only would this save on the number of parts to be molded, but 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 mouthpiece 72 of Choi. (*Id.*). A POSITA would have recognized that a unitary assembly could be easily inserted through the rigid collar member, as in Ribarits. (*Id.*).

Additionally, the combination of Kiyota, Choi, and Ribarits involves the simple substitution of one known element for another—Choi's two-part assembly

for the unitary assembly of Kiyota and Ribarits. (*Id.*, ¶139). A POSITA would have recognized that a unitary assembly would provide comparable overall functionality and also improved safety. (*Id.*). A POSITA would have recognized a drink container with a mouthpiece portion and tube constructed as a unitary assembly as disclosed in Kiyota and Ribarits would yield predictable results. (*Id.*).

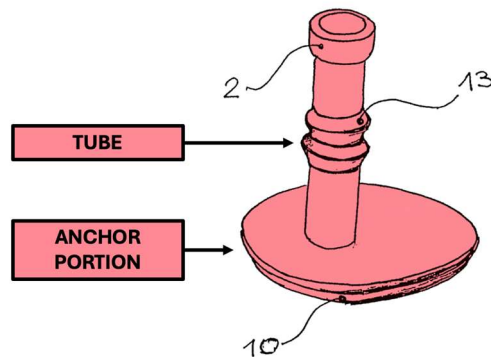
A POSITA also would have reasonably expected success in combining the unitary assembly of Kiyota and Ribarits with the rigid collar member of Choi and Ribarits. (*Id.*, ¶140). For example, a POSITA would have readily understood that Ribarits had already successfully achieved such a combination. (*Id.*). Additionally, a POSITA would have readily understood that Choi could accommodate the unitary assembly. (*Id.*). Thus, the combination would have involved no more than the routine substitution of one multi-part assembly (Choi) for another of unitary construction (Kiyota and Ribarits) to provide the same desired functionality, albeit with improved safety. (*Id.*).

Accordingly, claim 10 would have been obvious over Kiyota, Choi, and Ribarits. (*Id.*, ¶141).

J. Claim 11

Claim 11 depends from claim 1, and adds “wherein the mouthpiece assembly further includes an anchor portion that extends from the tube portion.” This limitation is obvious over Kiyota, Choi, and Ribarits. (Ex. 1003, ¶145).

Ribarits discloses an anchor portion that extends from the tube portion. “[T]he sealed tubular element (2) has... projecting sealing rings (10).” (Ex. 1009, 3).



(*Id.*, Fig. 2).

Accordingly, claim 11 would have been obvious over Kiyota, Choi, and Ribarits. (Ex. 1003, ¶145).

K. Claim 12

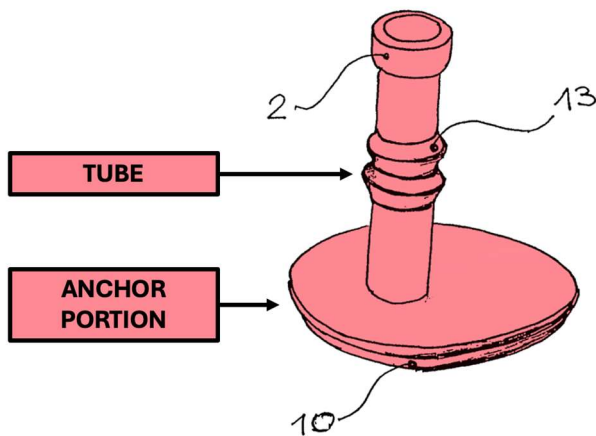
Claim 12 depends from claim 11, and adds “wherein the anchor portion has a greater exterior perimeter than the tube portion.” This limitation is obvious over Kiyota, Choi, and Ribarits. (Ex. 1003, ¶149).

As shown above, the anchor portion of Ribarits (sealing rings 10) has a greater exterior perimeter than its tube portion (sealing tube 2). Accordingly, claim 12 would have been obvious over Kiyota, Choi, and Ribarits. (*Id.*).

L. Claim 13

Claim 13 depends from claim 11, and adds “wherein the anchor portion and tube portion are constructed as a unitary assembly of the resiliently deformable material.” This limitation is obvious over Kiyota, Choi, and Ribarits. (Ex. 1003, ¶151).

As discussed above, a POSITA would have been motivated to combine Kiyota, Choi, and Ribarits and the tube and anchor portion of Ribarits are constructed as a unitary assembly of a resiliently deformable material.



(Ex. 1009. Fig. 2).

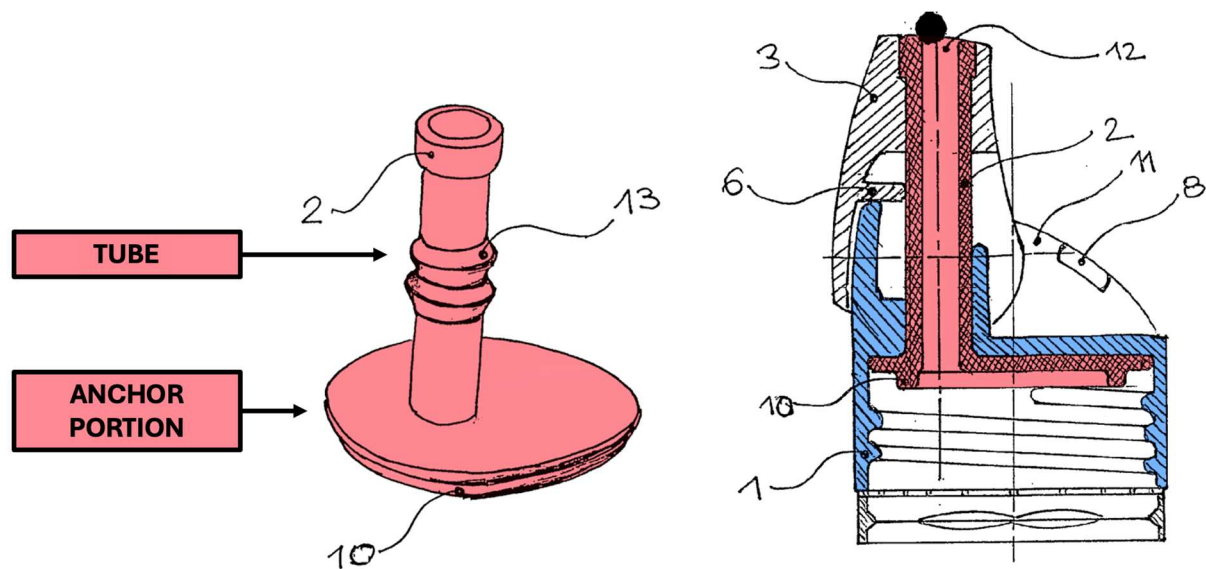
Accordingly, claim 13 would have been obvious over Kiyota, Choi, and

Ribarits. (Ex. 1003, ¶153).

M. Claim 14

Claim 14 depends from claim 11, and adds “wherein the anchor portion defines a recess that is sized and shaped to engage and mate with corresponding structure of the base of the cap assembly.” This limitation is obvious over Kiyota, Choi, and Ribarits. (Ex. 1003, ¶160).

As discussed above, a POSITA would have been motivated to combine the cap assemblies of Kiyota, Choi, and Ribarits. Ribarits discloses a tube with an anchor portion that, as shown below, is sized and shaped to engage and mate with the base of the cap assembly, but does not define a recess.

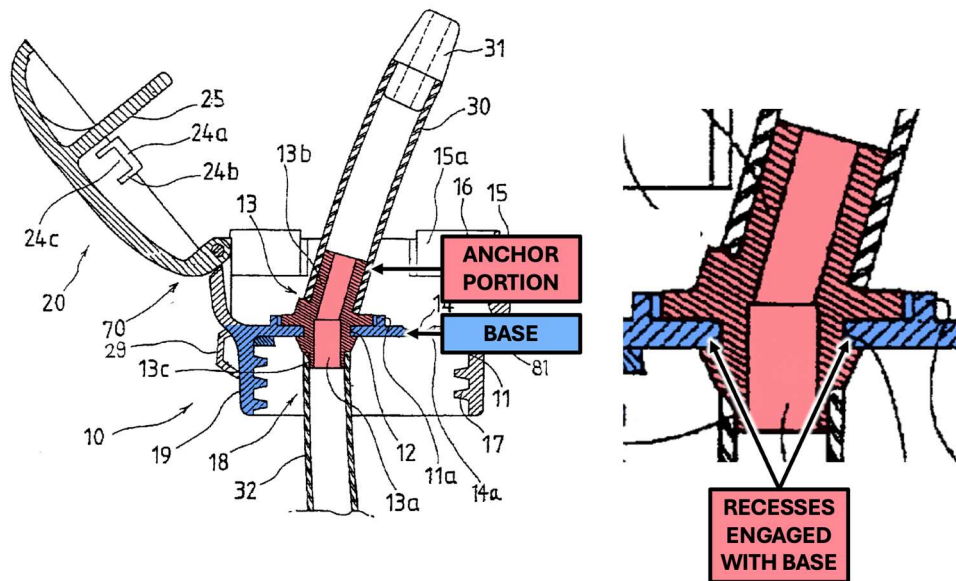


(Ex. 1009, Figs. 2, 3).

Kiyota discloses an anchor portion that, as shown below, defines a recess

created by flanges on either side of the through-passage. The recess is sized and shaped to engage and mate with the corresponding structure of the base of the cap assembly.

FIG. 6



(Ex. 1004, Fig. 6).

It would have been obvious to a POSITA to combine the recessed design of Kiyota's anchor portion with the unitary construction of Ribarits. Such a person would have been motivated to do so because of the additional protection against leaks that such a design would provide. First, a recess in the anchor around a corresponding structure in the base would improve the connection and seal between the tube and the base. (Ex. 1003, ¶158). Second, a recessed design would support the anchor portion from above and below the through-passage, preventing

the anchor portion from becoming mis-aligned during use, ensuring a tight, consistent seal. (*Id.*).

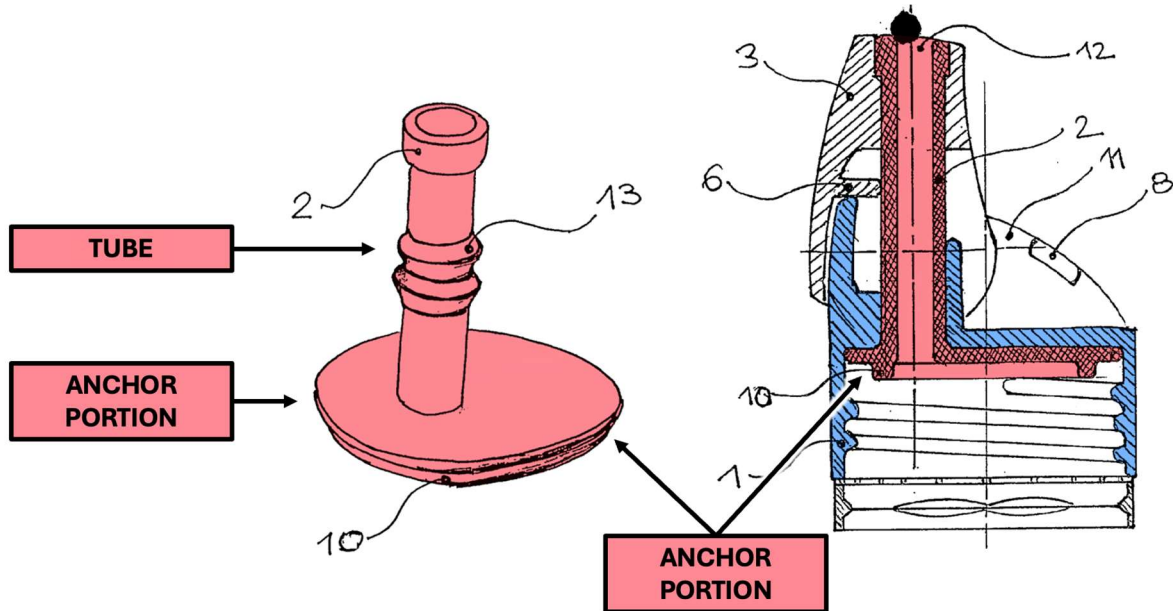
A POSITA also would have reasonably expected success in combining the recessed design of Kiyota's portion with the anchor portion of Ribarits. For example, a POSITA would have readily understood that Ribarits could accommodate a recessed design. (Ex. 1003, ¶159). Thus, the combination would have involved no more than the routine substitution of an anchor portion without recesses for another with recesses to provide the same desired functionality, albeit with an improved leak prevention. (*Id.*).

Accordingly, claim 10 would have been obvious over Kiyota, Choi, and Ribarits. (Ex. 1003, ¶160).

N. Claim 15

Claim 15 depends from claim 11, and adds “wherein the anchor portion includes a projecting flange that provides a friction-fit arrangement with the through-passage of the base.” This limitation is obvious over Kiyota, Choi, and Ribarits. (Ex. 1003, ¶164).

Ribarits discloses that its anchor portion is a projecting flange (sealing ring 10) that provides a friction-fit arrangement with the through-passage of the base. (Ex. 1003, ¶163).



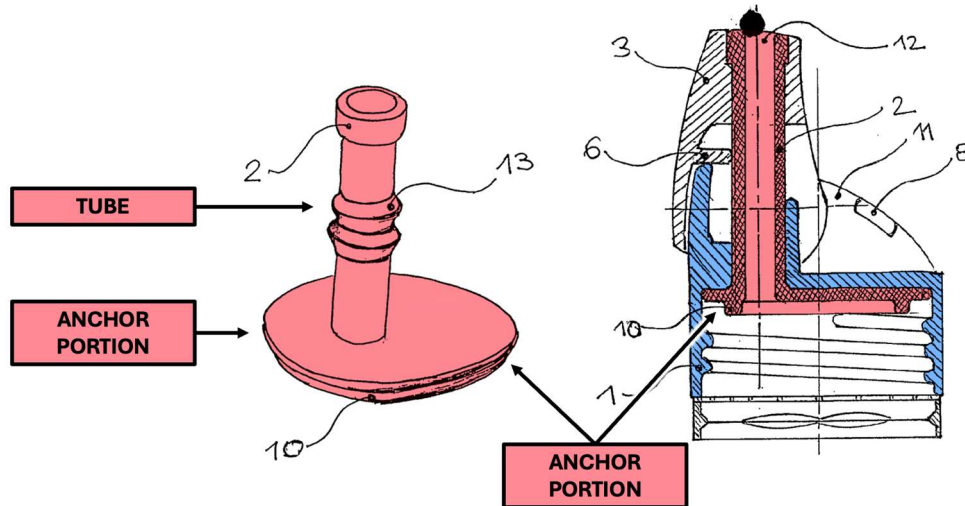
(Ex. 1009, Figs. 2, 3).

Accordingly, claim 15 would have been obvious over Kiyota, Choi, and Ribarits. (Ex. 1003, ¶164).

O. Claim 16

Claim 16 depends from claim 11, and adds “wherein the anchor portion is sized to restrict passage of the anchor portion through the through-passage and thus restrict removal of the mouthpiece assembly via a top side of the cap assembly.” This limitation is obvious over Kiyota, Choi, and Ribarits. (Ex. 1003, ¶168).

Ribarits discloses an anchor portion that is sized to restrict passage of the anchor portion through the through-passage and prevents the mouthpiece assembly from being removed through the top side of the cap assembly. (Ex. 1003, ¶167).



(Ex. 1009, Figs. 2, 3).

Accordingly, claim 16 would have been obvious over Kiyota, Choi, and Ribarits. (Ex. 1003, ¶168).

P. Claim 17

Claim 17 depends from claim 1, and adds “wherein the crimping region at least partially biases the mouthpiece assembly to the dispensing configuration.” Kiyota, Choi, and Ribarits all disclose this additional limitation. (Ex. 1003, ¶¶170, 173). Accordingly, claim 17, would have been obvious over Kiyota, Choi, and Ribarits. (*Id.*, ¶174).

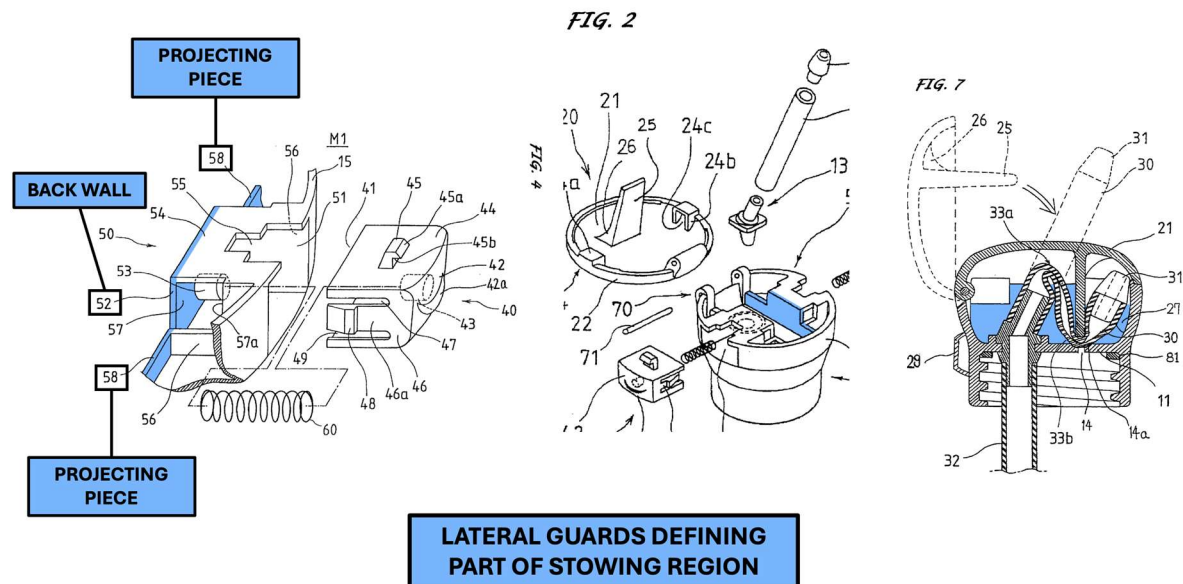
Q. Claim 18

Claim 18 depends from claim 1, and adds “wherein the cap assembly further includes a pair of lateral guards that at least partially define the stowing region, and

wherein at least a portion of the mouthpiece assembly is received between the pair of lateral guards when the mouthpiece assembly is in the stowed configuration.”

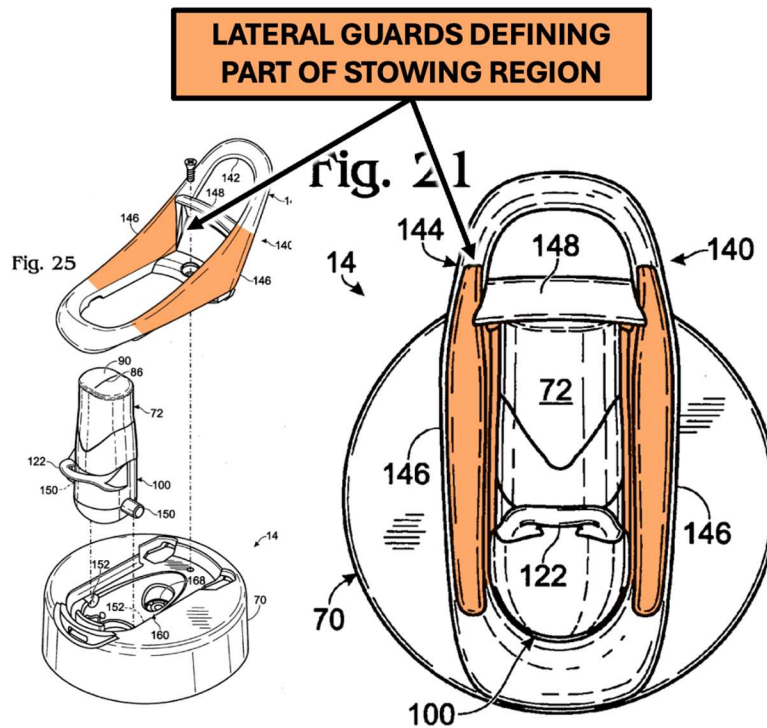
This limitation is obvious over Kiyota and Choi. (Ex. 1003, ¶¶175).

Kiyota discloses a pair of lateral guards (back plates 52 and projecting pieces 18) that partially define the sides of the stowing region (stowing portion 16).



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

Choi also discloses lateral guards 144 that partially define the sides of the stowing region.



(Ex. 1005, Figs. 21, 25).

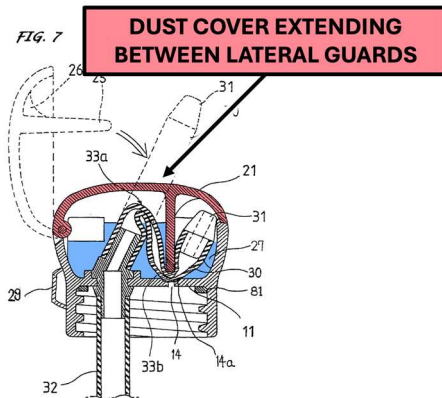
Accordingly, claim 18 would have been obvious over Kiyota and Choi. (Ex. 1003, ¶179).

R. Claim 19

Claim 19 depends from claim 18, and adds “wherein the cap assembly further includes a dust cover portion that extends between the lateral guards and which extends across the outlet when the mouthpiece assembly is in the stowed configuration.” Kiyota discloses this additional limitation. (Ex. 1003, ¶180).

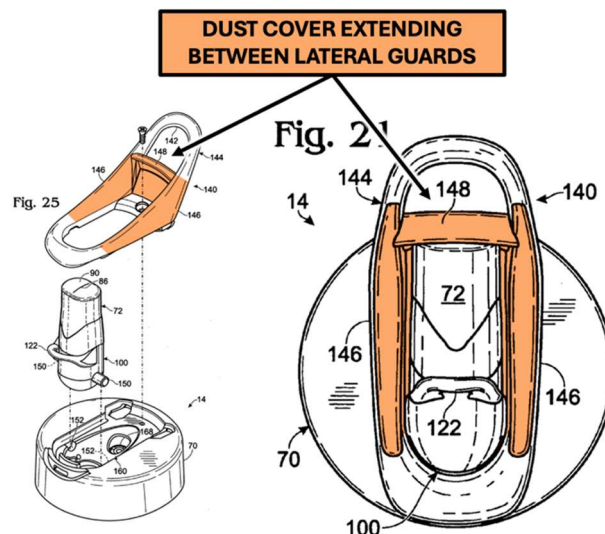
Kiyota discloses a dust cover (openable lid 11) that comprises presser piece 25 which extends between Kiyota’s lateral guards (back plates 52 and projecting

pieces 18) when the mouthpiece assembly is in the stowed configuration.



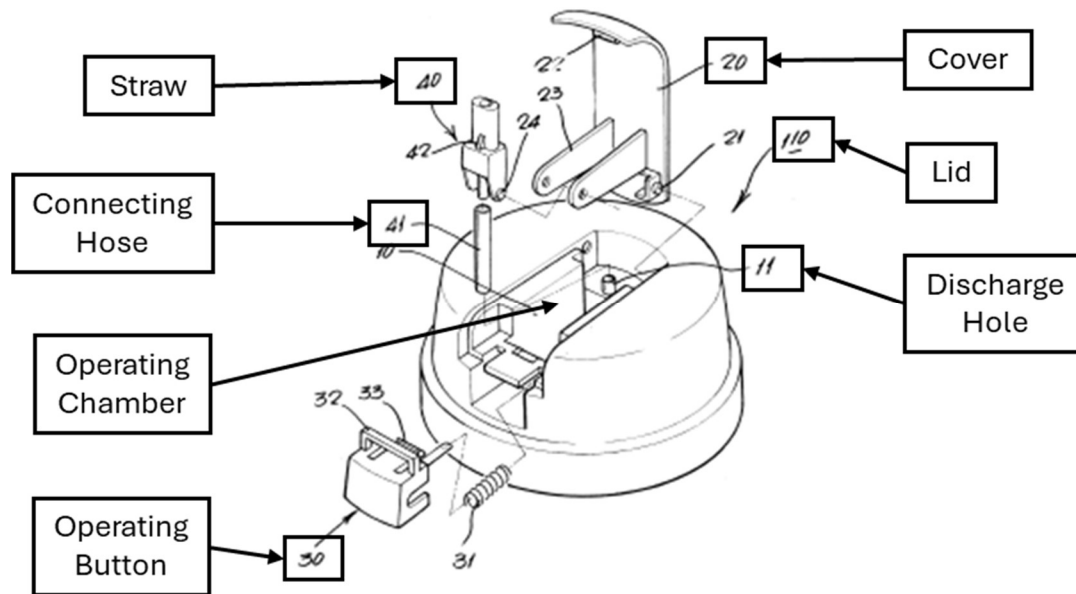
(Ex. 1004, Fig. 7).

Choi also discloses a dust cover (guard 148) that extends between the lateral guards.



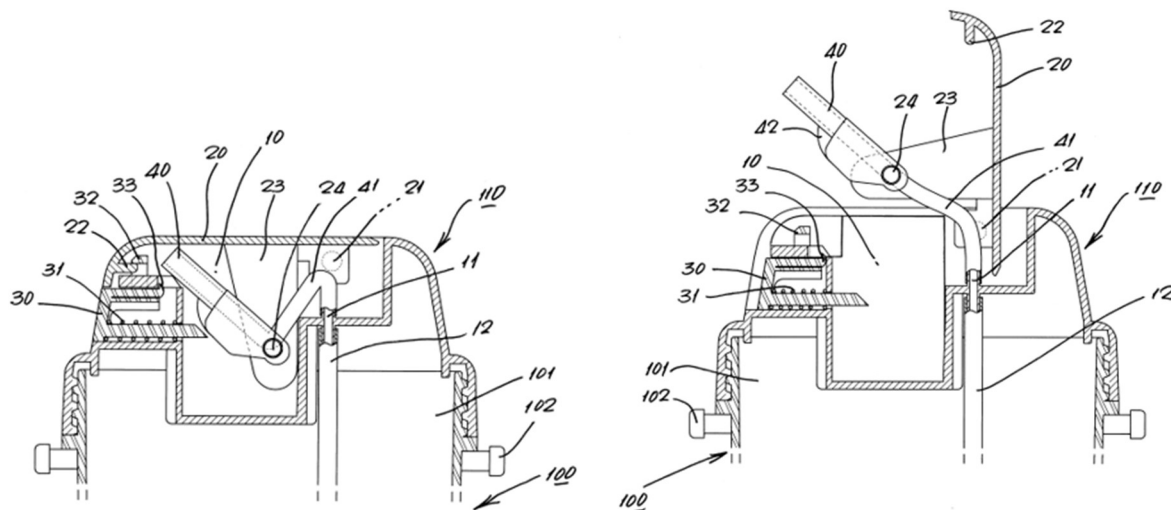
(Ex. 1005, Figs. 21, 25).

Accordingly, claim 19 would have been obvious over Kiyota and Choi. (Ex.



Id., Fig. 3.

The lid is configured to be stowed and opened into a dispensing configuration. When stowed (below, left), “operating chamber 10” receives “straw 40” and “connecting hose 41.”



(*Id.*, Figs. 5-6). When opened (above, right), a user may drink through the straw.

(*Id.*, 5). The lid's "locking means" comprises "operating button 30," which includes "hook 32" that engages "protrusion 22" to hold the lid in the closed position. (*Id.*, 4). To open the lid, a user presses "operating button 30," which slides within "operating chamber 10" to disengage "hook 32" from "protrusion 22" and automatically release "cover 20." (*Id.*). Connecting hose 41 is elastic causing it "unfold vertically, and when the lid 20 is opened." (*Id.*).

To close the lid, the user presses "cover 20," which causing "straw 40" to pivot into "operating chamber 10." (*Id.*, 5). In this position, the connecting hose 41 is bent and closed at two locations. (*Id.*, 5, Fig. 5).

B. Claim 1

As described below, Park discloses nearly all limitations of claim 1. Park discloses a liquid container (i.e. "water bottle 100") having a removable cap assembly (i.e. "lid 110") with a through-passage (i.e. "discharge hole 11") in its base. (Ex. 1003, ¶186). Park's cap assembly includes a stowing region (i.e. "operating chamber 10") that receives part of a mouthpiece assembly, (i.e. "straw 40," "connecting hose 41," and "cover 20") in the stowed configuration. (*Id.*).

Park's mouthpiece assembly includes a tube (i.e. "connecting hose 41") that is constructed of a resiliently deformable material and is biased to the dispensing configuration. Park's mouthpiece assembly includes crimping regions that prevent

the flow of liquid when in the stowed position. (*Id.*, ¶187).

Park also discloses a user release mechanism (i.e. “locking means”) that includes first and second catch structures (i.e. “hook 32” and “protrusion 22”) that engage to retain the mouthpiece assembly in the stowed configuration. (*Id.*, ¶188). Park’s user release mechanism includes a sliding member (i.e. “operating button 30”) that slides relative to the base of Park’s cap assembly and which is biased via “spring 31” away from the engaging “hook 32” and “protrusion 22.” (*Id.*).

Park does not disclose two limitations in claim 1. Park’s mouthpiece assembly does not “extend[] through the through-passage of the base” of Park’s cap assembly, per limitation 1[B][3]. Second, Park does not disclose “a rigid collar member that is pivotally coupled to a portion of the cap assembly and through which the tube portion at least partially extends,” per limitation 1[B][3][b]. However, Ribarits discloses each of these limitations. (*Id.*, ¶189).

As discussed below, a POSITA would have been motivated to combine the teachings of Park and Ribarits and modify Park to incorporate Ribarits’ “drinking spout” (i.e. rigid collar member) and “tubular element” (i.e. tube portion). (*Id.*, ¶190). Accordingly, for the reasons discussed below, claim 1 would have been obvious over Park and Ribarits. (*Id.*).

1. Motivation to Combine Park and Ribarits

A POSITA would have been motivated to modify Park to incorporate the mouthpiece assembly of Ribarits, including a rigid collar member pivotally coupled to Park’s “lid 110” (i.e. cap assembly) and a tube portion that extends through both the “discharge hole 11” (i.e. through-passage) and the rigid collar member to define a liquid passage from the container to the user. (Ex. 1003, ¶¶191-204).

As an initial matter, a POSITA would have looked to the teachings of Ribarits to modify and improve Park’s design. (*Id.*, ¶191). Among other reasons, Park and Ribarits are directed to similar subject matter and have the same goals. Park “provide[s] a portable water bottle with a straw” that improves useability by being operated “in a one-touch manner” and that is “also highly hygienic because it is easy to drink water without holding a straw by hand.” (Ex. 1006, 3). Likewise, Ribarits “relates to a drinking device which enables a drink to be drunk in a pleasant, hygienic manner, and can be both opened and closed with one hand.” (Ex. 1009, Abstract).

Park and Ribarits achieve these similar goals with cap assemblies of substantially the same functionality. (Ex. 1003, ¶192). They disclose cap assemblies having mouthpieces that can be opened and closed into dispensing and

stowed configurations. (*Id.*, ¶¶52-60). Their mouthpiece assemblies include elastic tube elements with crimping regions that collapse when stowed to prevent leakage when not in use. (*Id.*).

Park provides a mouthpiece assembly with a tube constructed of flexible elastic material (i.e. “connecting hose 41”), and a mouthpiece portion constructed of a rigid material (i.e. “straw 40”) are assembled from separate components and attached to a through-passage in the base of the cap assembly (i.e. “lid 110”). (*Id.*, ¶193).

Ribarits, on the other hand, provides a mouthpiece assembly wherein the tube portion and mouthpiece portion are constructed as a unitary assembly of flexible elastic material, which extends through a through-passage in the base of the cap assembly and “drinking spout 3” (i.e. rigid collar member). (*Id.*, ¶194).

A POSITA would have been motivated to replace the “straw” and “connecting hose” of Park’s mouthpiece assembly with the “drinking spout” and “sealed tubular element” of Ribarits for multiple reasons. (*Id.*, ¶195).

First, a POSITA would have been motivated to construct Park’s straw and connecting hose as a unitary assembly of resiliently deformable material, as in Ribarits. (*Id.*, ¶196). A POSITA would have recognized Ribarits’ one-piece construction, as opposed to Park’s multi-component construction, to be routine

engineering choice. *In re Larson*, 340 F.2d 965, 968 (CCPA 1965). For example, a POSITA would have recognized that Park’s straw and connecting hose could be molded as a single piece of elastic material using common manufacturing techniques. (Ex. 1003, ¶196). A POSITA would have been motivated to do so because it would have resulted in fewer parts, thereby improving efficiency and reducing manufacturing costs. (*Id.*)

In addition, a POSITA would have recognized that a single piece would eliminate the connection point between Park’s straw and hose, thereby eliminating the risk of inadvertent detachment of the straw and connecting hose during use. (*Id.*, ¶197). By replacing Park’s straw and hose with Ribarits’ single-piece construction, a POSITA would have recognized that the mouthpiece assembly could be designed to fit through, and provide a tight seal with, Park’s “discharge hole 11.” (*Id.*, ¶198). A POSITA would have recognized the desirability of making this change, because it would eliminate the connection point between the “connecting hose 41” and the upper part of “discharge hole 11” in Park’s design, and thus eliminate the risk of inadvertent detachment of the connecting hose during use of the device. (*Id.*).

In addition to using Ribarits’ single-piece construction of the tube and mouthpiece, a POSITA also would have been motivated to add Ribarits’ “drinking

spout” (i.e. rigid collar member) to the single-piece construction of the mouthpiece and tube portions of the mouthpiece assembly. (*Id.*, ¶199). A POSITA would have recognized several benefits. First, a POSITA would have recognized that such a rigid collar member could be molded with the same shape as portion of Park’s “straw 40” that is coupled to “cover 20.” (*Id.*, ¶200). In this way, the rigid collar would preserve the overall functionality of Park’s cap assembly, without requiring any further modification. (*Id.*). Second, as in Ribarits, the use of a rigid collar would provided support for the more flexible mouthpiece and tube portions of the mouthpiece assembly. (*Id.*, ¶201). Third, as in Ribarits, the flexible mouthpiece and tube portions of the mouthpiece assembly could be inserted through and removed from the rigid collar. (*Id.*, ¶202). A POSITA would have recognized the design because it would have facilitated removal of the single-piece construction for cleaning, maintenance, or replacement. (*Id.*).

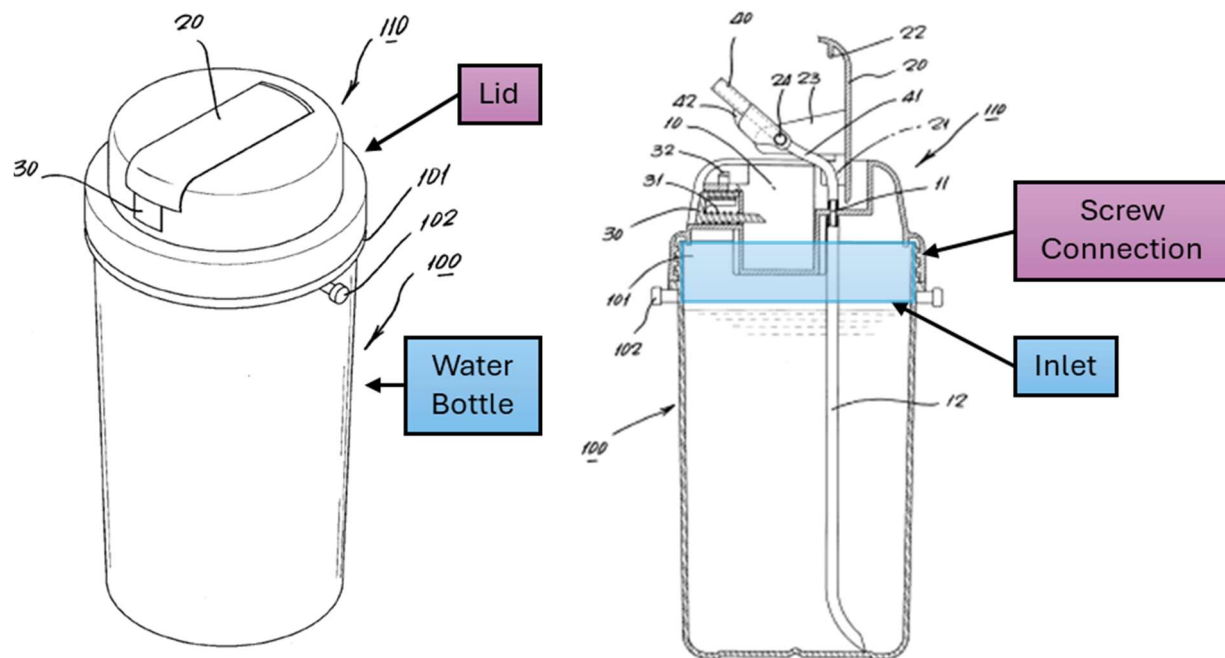
A POSITA also would have reasonably expected success in replacing Park’s straw and hose with Ribarits’ “drinking spout 3” and “sealed tubular member 2.” (*Id.*, ¶203). A POSITA would have readily understood that Park would accommodate a single-piece construction. (*Id.*) A POSITA would have expected success in using Ribarits’ single-piece construction of a tubular member combined with a rigid collar. (*Id.*) Thus, the combination would have involved no more than

the routine substitution of one mouthpiece assembly with another to provide the same overall functionality with reduced risk of inadvertent leakage, improved manufacturing efficiency, reduced manufacturing costs, and improved maintenance characteristics. (*Id.*)

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

Each of Park and Ribarits discloses a drink container having limitation 1[A]. (Ex. 1003, ¶¶206-211).

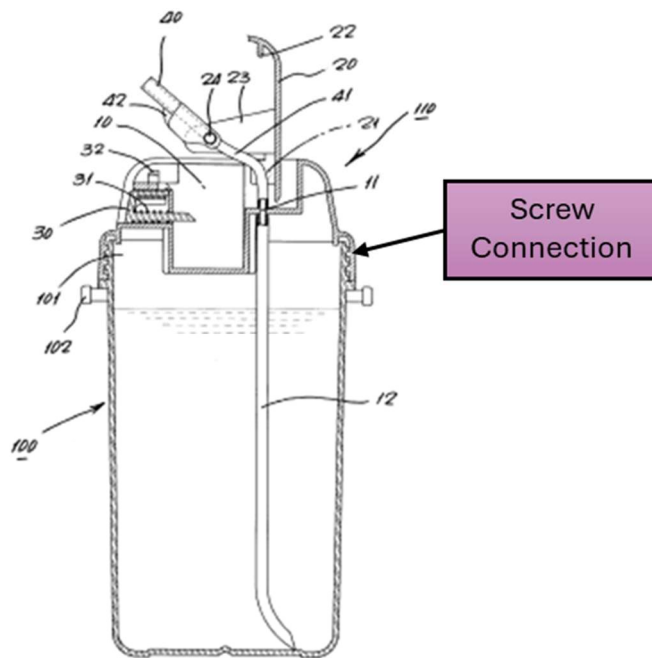
Park “relates to a portable water container with a built-in straw.” (Ex. 1006, Abstract). Park discloses “water bottle 100” and “lid 110”:



(Ex. 1006 at 4, Figs. 1, 4). As shown above, Park’s “inlet 101” constitutes the neck of the “water container 100.” (Ex. 1003, ¶210).

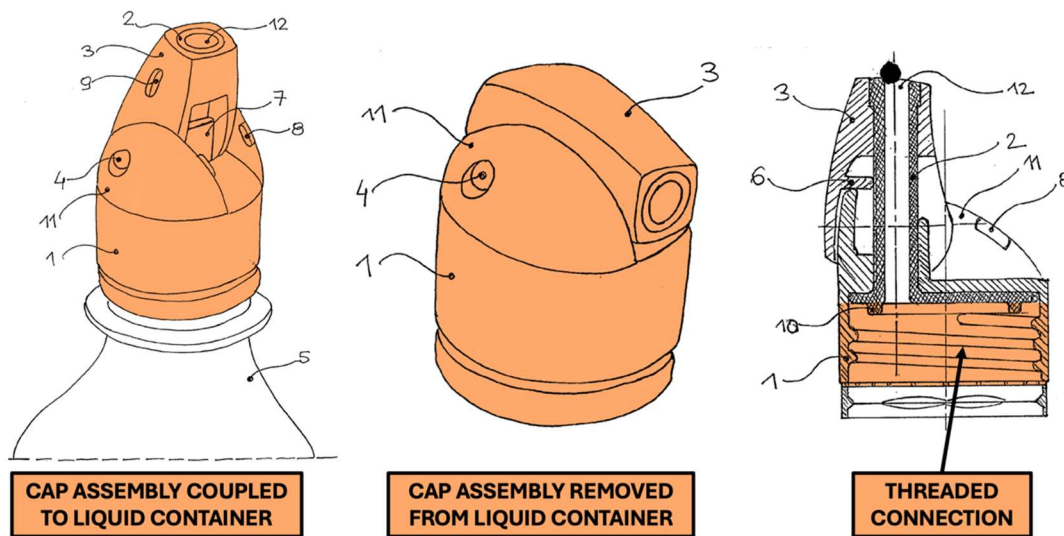
3. 1[B] Cap Assembly

Each of Park and Ribarits discloses a cap assembly removably coupled to a container per limitation 1[B]. (Ex. 1003, ¶¶212-215). Park’s “lid 110 is screwed to the inlet 101 of the water bottle 100 to open and close” the water bottle, as shown in Figure 4, below:



(Ex. 1006 at 4, Fig. 4).

Ribarits discloses “a common closing cap provided with a thread” that “is screwed onto the bottle (5).” (Ex. 1009, 2-3).

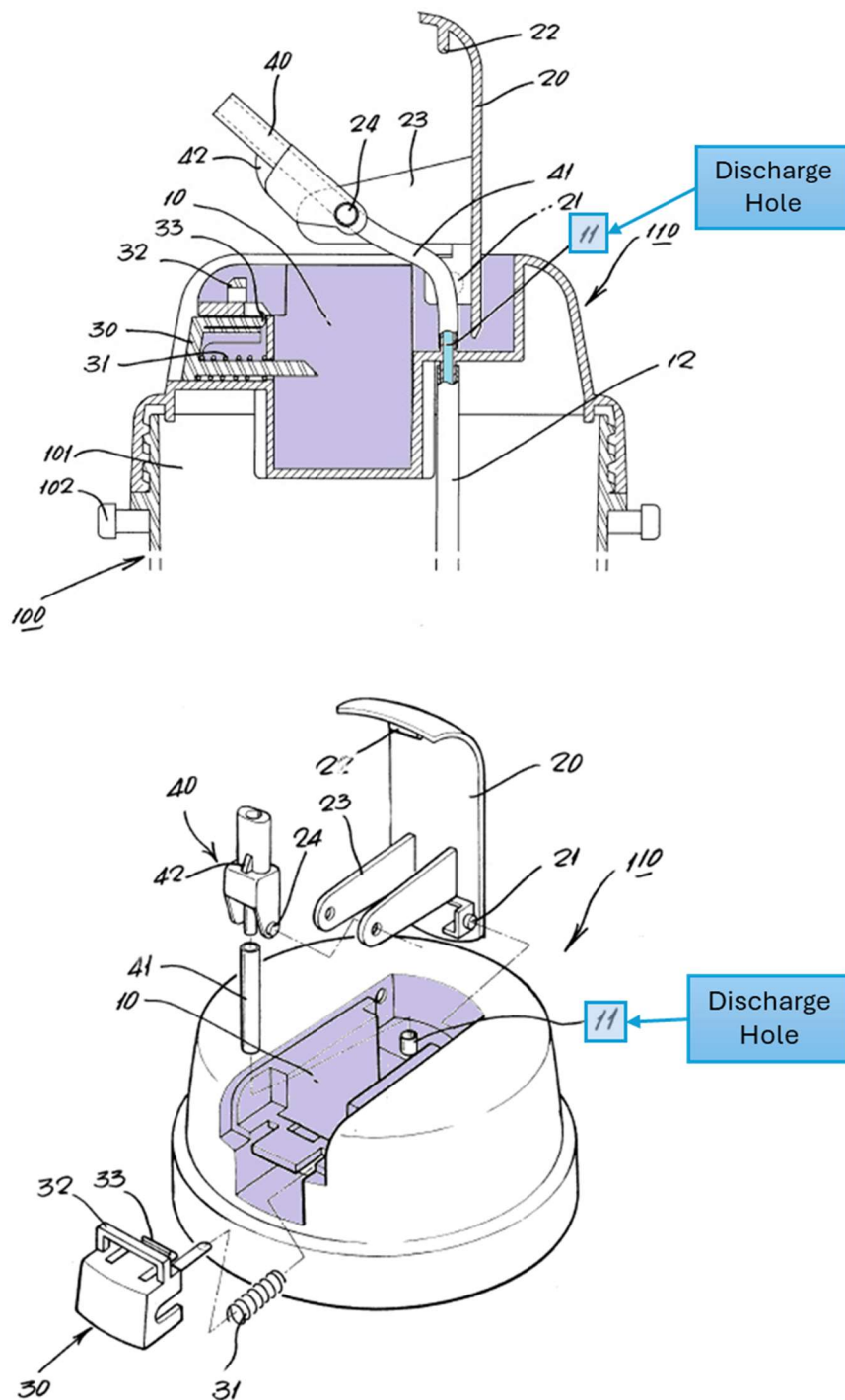


(Ex. 1009, Figs. 1, 3).

a. **1[B][1] Base**

Each of Park and Ribarits discloses a cap assembly comprising “a base removably coupled to the neck of the liquid container and including a through-passage,” as claimed. (Ex. 1003, ¶¶216-218).

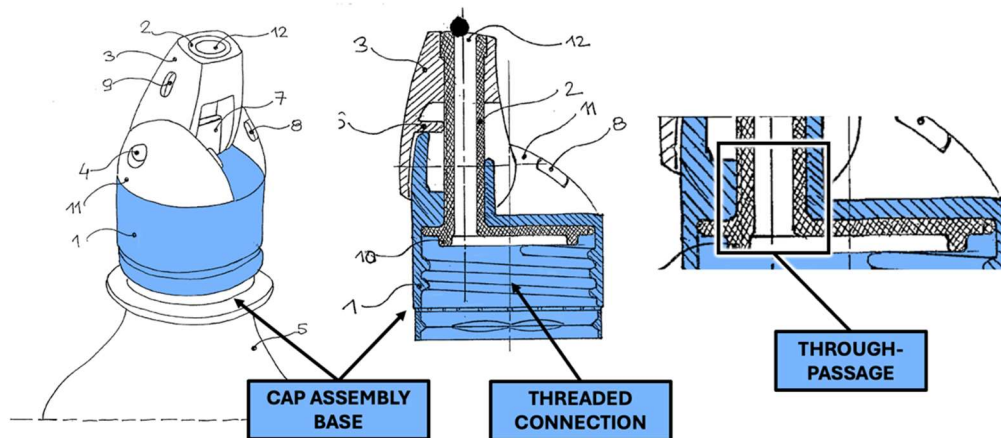
The base of Park’s lid is removably coupled to the neck of the water bottle via a threaded connection. (*Id.*, ¶217). Park’s lid includes “a discharge hole 11 that is connected upward and downward” to form a through-passage extending through the base of lid, as shown below:



(Ex. 1006, Figs. 3-4).

Ribarits' "closing cap" is removably coupled to the liquid container and

includes a through-passage:

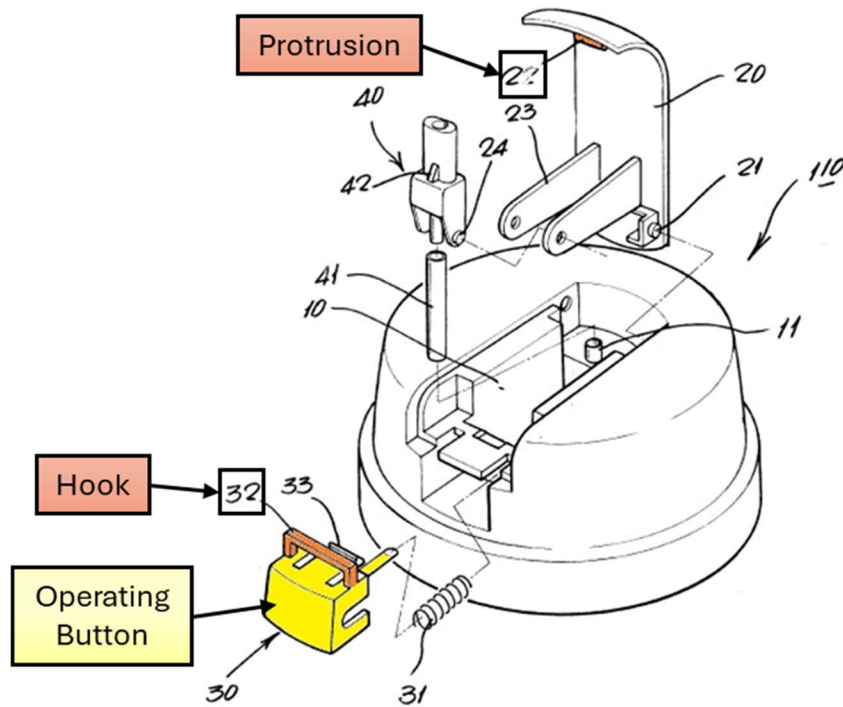


(Ex. 1009, Figs. 1, 3).

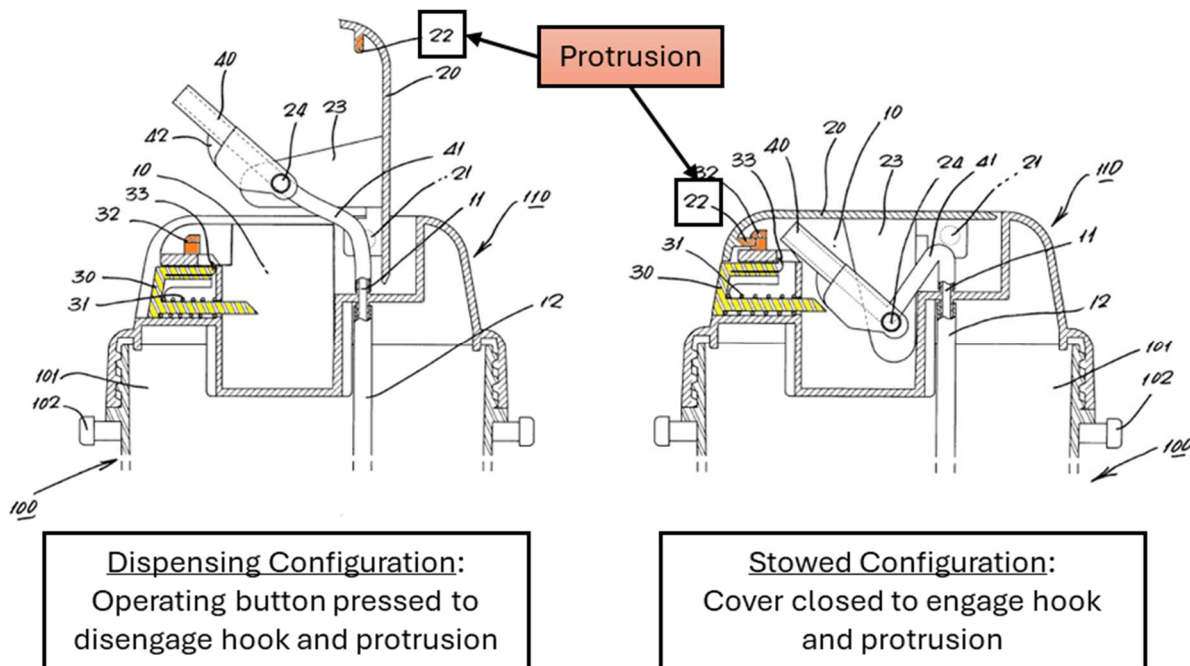
b. 1[B][2] First Catch Structure

Each of Park and Ribarits discloses “a first catch structure coupled to the base.” (Ex. 1003, ¶¶219-225).

Park’s cap assembly includes a set of corresponding catch structures that engage to maintain the assembly in a closed configuration. As shown in Figure 3, a first catch structure comprises “hook 32. (Ex. 1006, 4-5). The second catch structure comprises “protrusion 22.” (*Id.*)

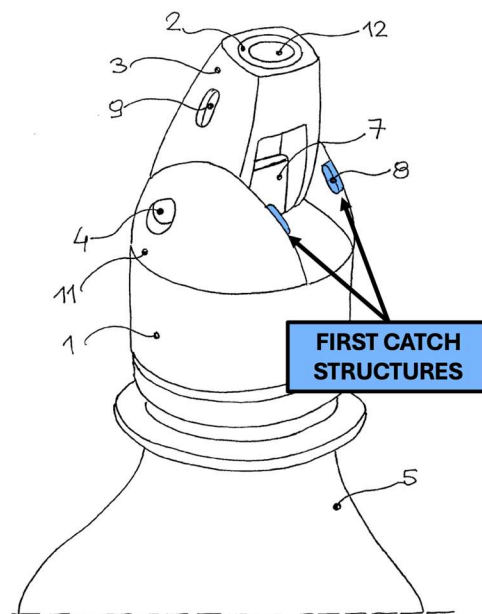


(Ex. 1006, Fig. 3). The catch structures engage in the stowed configuration (below, left) and disengage in the dispensing configuration (below, right):



(Ex. 1006, Figs. 5-6). The “operating button 30” is “fastened at the front surface of the operating chamber 10” and “elastically installed” on the base of the cap assembly “by a spring 31 at the front end of the operating chamber 10.” (*Id.*, 4). Thus, the “hook 32” (i.e. the first catch structure) is coupled to the base of “lid 110” (i.e. the cap assembly) via “spring 31.” (Ex. 1003, ¶223).

Ribarits also discloses a first catch structure, comprising a pair of “recesses” on the cap assembly:

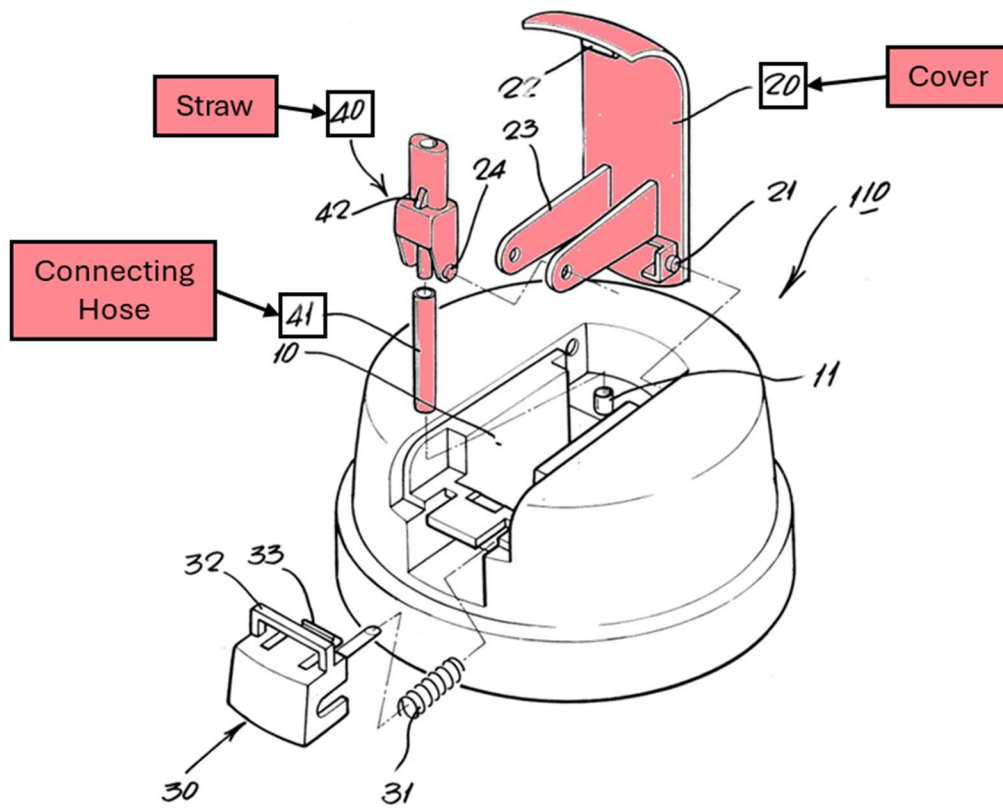


(Ex. 1009, Fig. 1; Ex. 1003, ¶224-225).

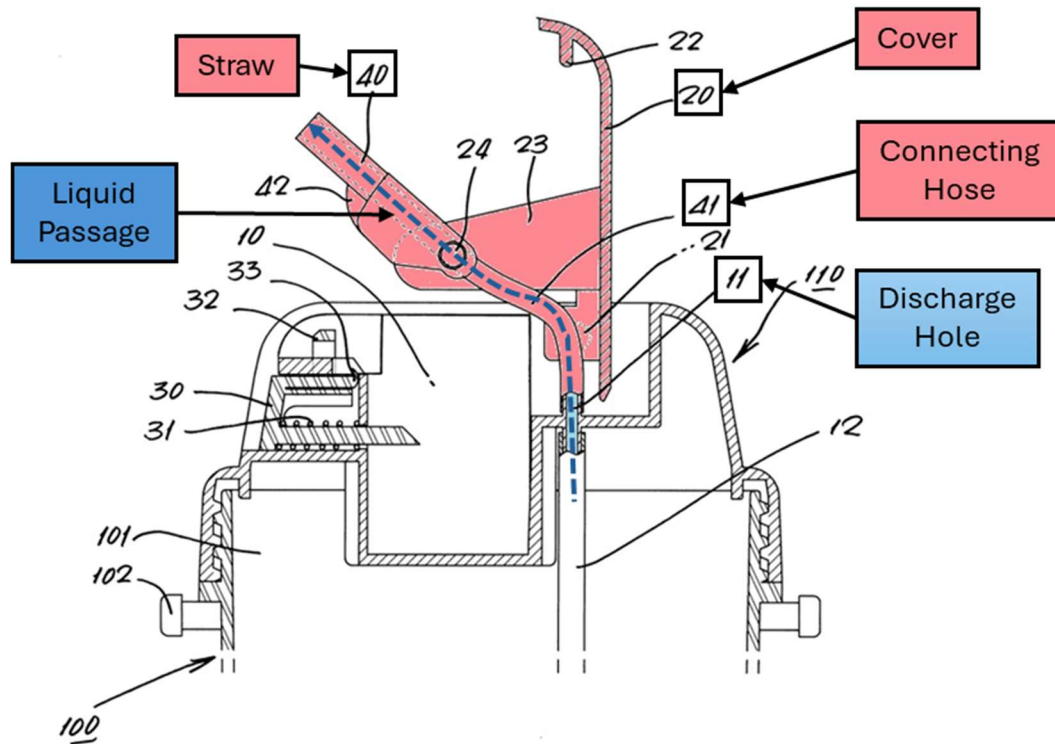
c. 1[B][3] Mouthpiece Assembly

Limitation 1[B][3] is directed to the mouthpiece assembly. This limitation is obvious over Park, in view of Ribarits. (Ex. 1003, ¶¶226-240).

First, limitation 1[B][3] recites: “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.” As discussed in limitation 1[B][1], Park discloses “discharge hole 11,” which is a through-passage through the base. Park further discloses a mouthpiece assembly, which comprises at least “straw 40,” “connecting hose 41,” and “cover 20,” as shown below:

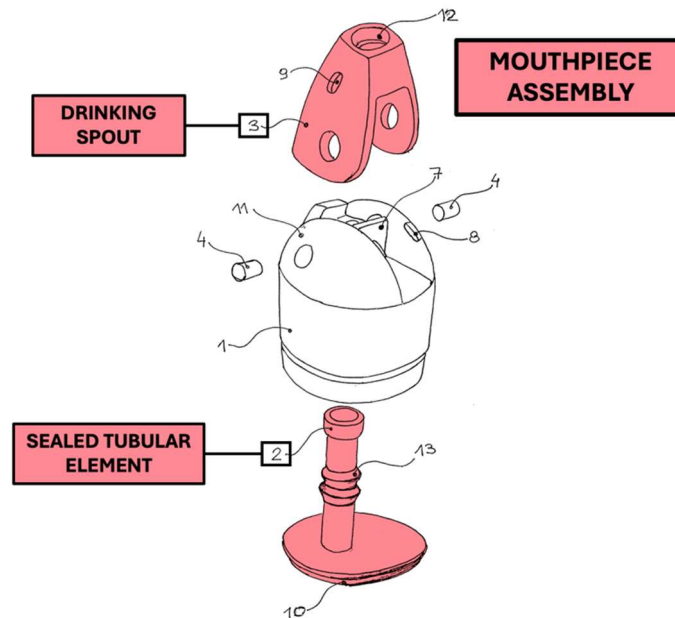


(Ex. 1006, Fig. 3). Park discloses “straw 40 ... is connected to the discharge hole 11 ... by a connecting hose 41 ...” (*Id.*, 4).

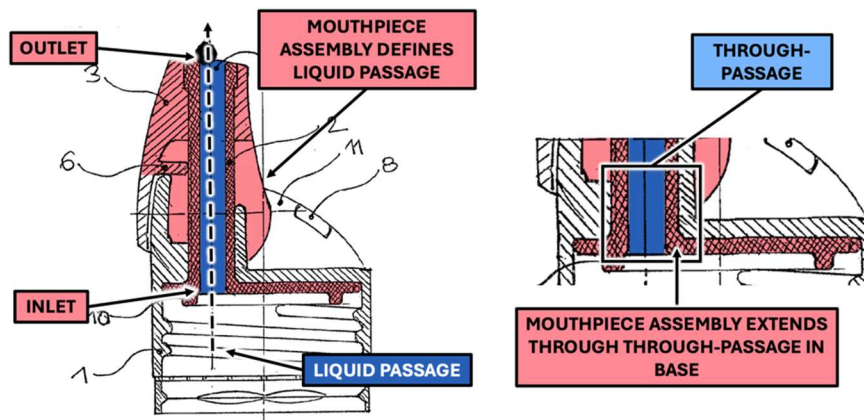


(*Id.*, Fig. 6). Thus, Park’s mouthpiece assembly defines a liquid passage. (Ex. 1003, ¶229).

Park’s mouthpiece assembly does not extend through the “discharge hole 11.” (*Id.*, ¶230). However, Ribarits discloses such a mouthpiece assembly. (*Id.*) As shown below, Ribarits’ mouthpiece assembly includes at least “drinking spout (3)” and “sealed tubular element (2)”:



(Ex. 1009, Fig. 2). Ribarits' sealed tubular element is a flexible tube extending through the through-passage to define a liquid passage from the container to the user. (*Id.*, 2).



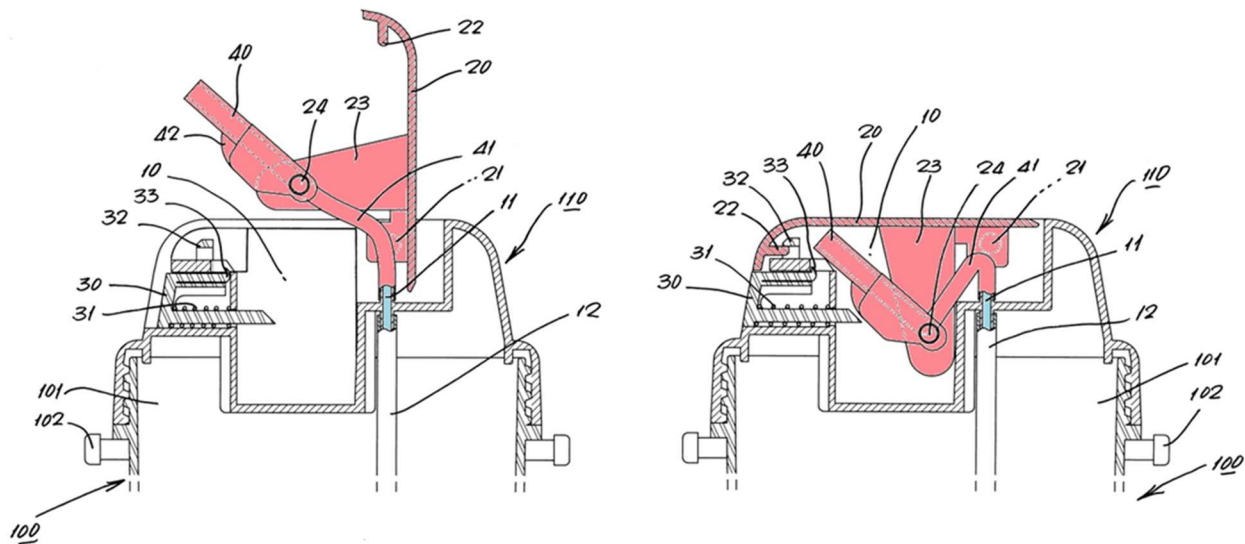
(*Id.*, Fig. 3).

It would have been obvious to a POSITA to modify Park to include a

mouthpiece assembly extending through the through-passage, such as that disclosed in Ribarits. (Section IX.B.1, *supra*; Ex. 1003, ¶¶191-204).

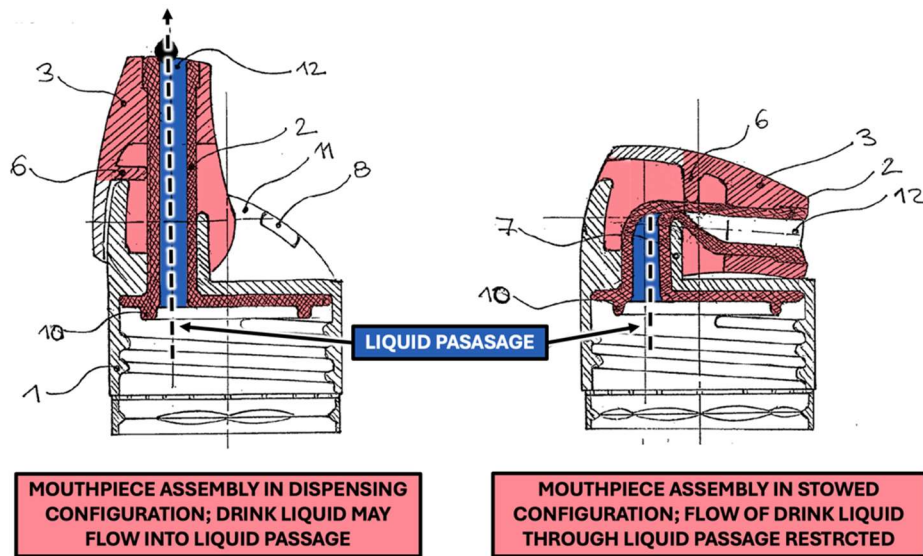
Next, limitation 1[B][3] recites: “wherein the mouthpiece assembly is configured to be selectively configured between a dispensing configuration ... and a stowed configuration” Each of Park and Ribarits discloses this limitation. (Ex. 1003, ¶¶234-237).

Park’s mouthpiece assembly can be opened into a dispensing configuration (below, left) or closed into a stowed configuration (below, right) wherein the hose is crimped:



(Ex. 1006, Figs. 5-6).

Ribarits’ mouthpiece assembly is also pivotable between a dispensing configuration and a stowed configuration:



(Ex. 1009, Fig. 3). In the dispensing configuration, liquid may flow. (*Id.*, 2). In the stowed configuration, the flexible tube is crimped, thereby restricting the flow of liquid. (*Id.*).

Finally, limitation 1[B][3] recites: “wherein the mouthpiece assembly is biased to the dispensing configuration.” Each of Park and Ribarits discloses this limitation. (Ex. 1006, 4-5; Ex. 1009, 2; Ex. 1003 ¶¶238-240).

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

Each of Park and Ribarits discloses “a tube portion,” of the mouthpiece assembly, as recited. (Ex. 1003, ¶¶241-249).

First, limitation 1[B][3][a] recites: “a tube portion that defines at least a portion of the liquid passage.” Each of Park and Ribarits discloses this limitation. (Ex. 1003, ¶¶242).

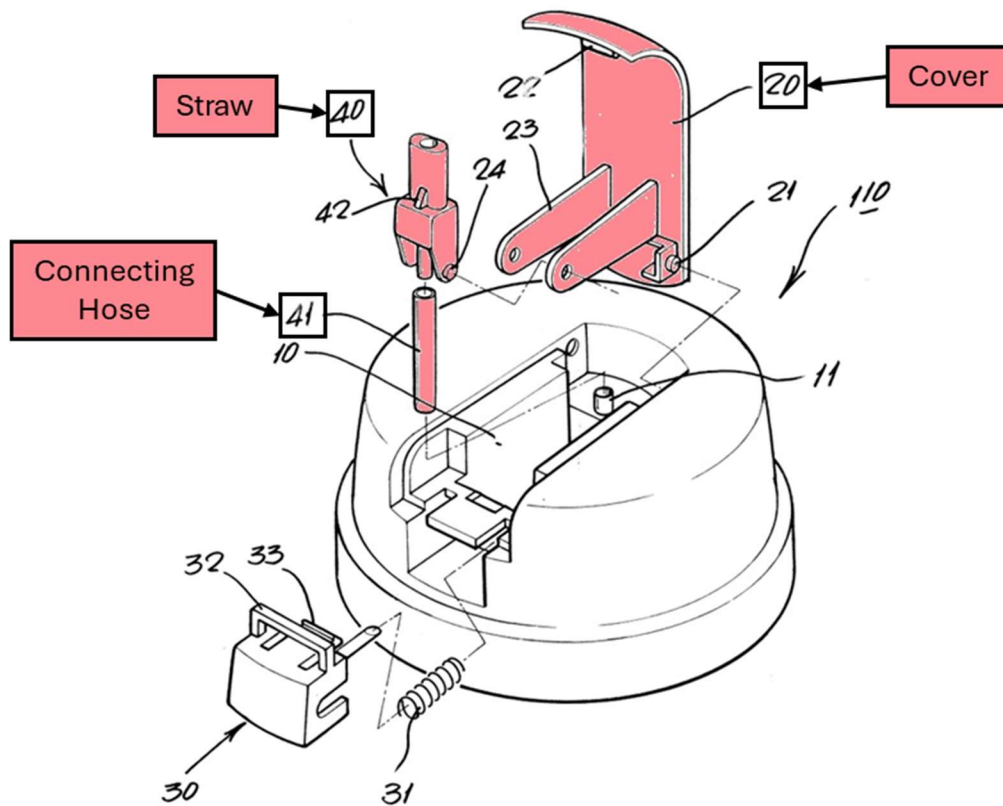
Next, limitation 1[B][3][a] recites: “wherein the tube portion includes a crimping region constructed of a resiliently deformable material and adapted to prevent the flow of drink liquid through the liquid passage when the mouthpiece assembly is in the stowed configuration.” Each of Park and Ribarits disclose this limitation. (Ex. 1003, ¶¶243-246).

Finally, limitation 1[B][3][a] recites: “wherein the crimping region includes opposing walls that are in contact with each other to seal the liquid passage within the crimping region when the mouthpiece assembly is in the stowed configuration.” Each of Park and Ribarits disclose this limitation. (Ex. 1003, ¶¶247-249).

ii. 1[B][3][b] Rigid Collar Member

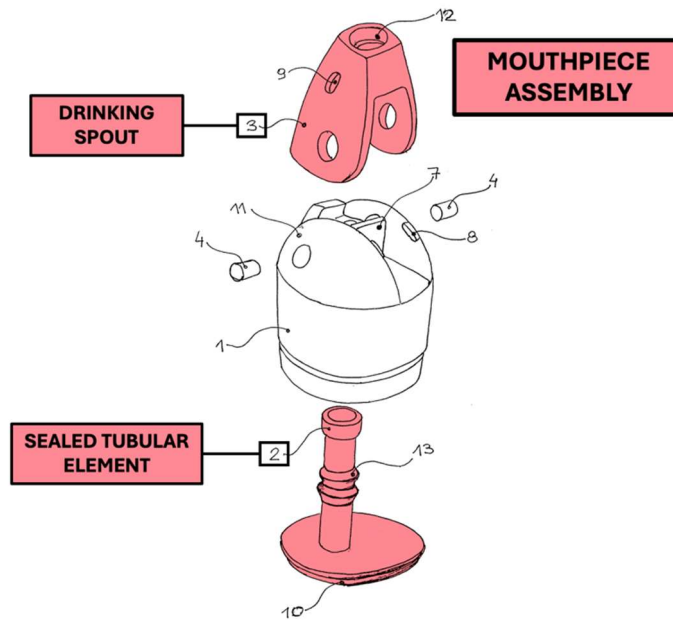
Limitation 1[B][3][b] recites: the mouthpiece assembly comprises “a rigid collar member that is pivotally coupled to a portion of the cap assembly and through which the tube portion at least partially extends.” This limitation is obvious over Park, in view of Ribarits. (Ex. 1003, ¶¶250-256).

Park’s mouthpiece assembly includes “straw 40,” which is “axially coupled to the bracket 23 of the cover 20 by hinge shaft 24,” and is “freely rotatable using the shaft as a supporting point,” as shown below:

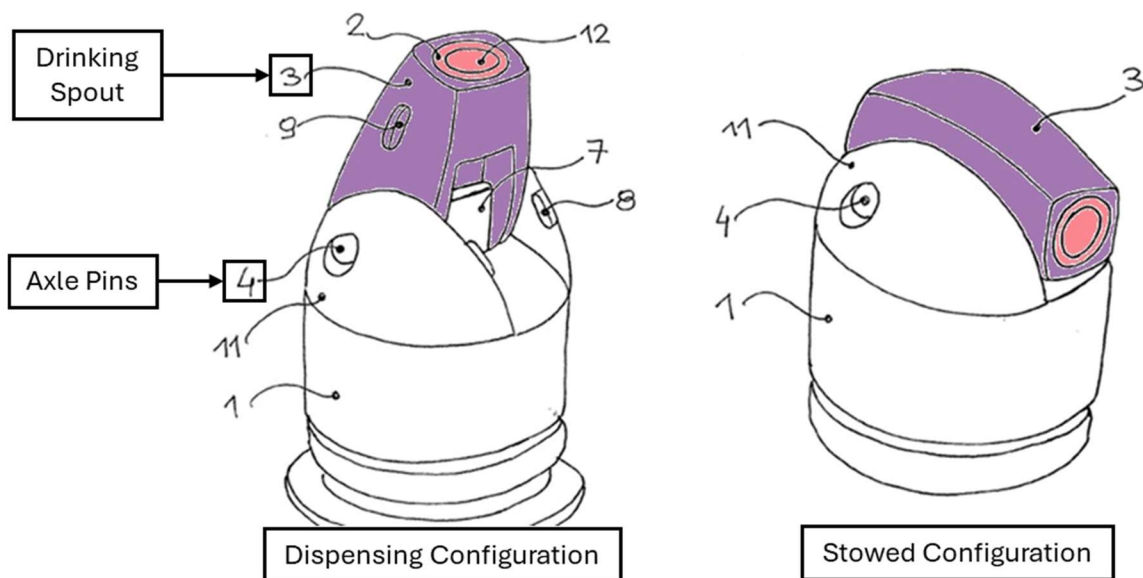


(Ex. 1006, Fig. 3). Because “straw 40” is connected to “cover 20” and freely rotates about “hinge shaft 24,” a POSITA would have understood the straw to be pivotally coupled to the cap assembly (which includes the claimed mouthpiece assembly). Park’s “connecting hose 41” (i.e. the tube portion of Park’s mouthpiece assembly) does not extend through straw. (Ex. 1003, ¶252).

However, Ribarits discloses the claimed rigid collar member with a tubular element extending therethrough. (*Id.*, ¶253). Ribarits’s mouthpiece assembly includes “drinking spout 3” and “sealed tubular element (2)”:

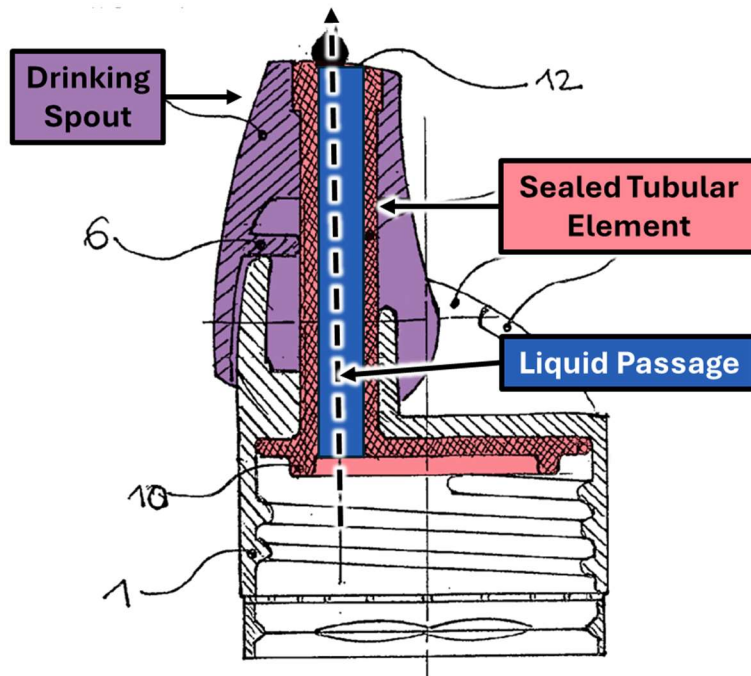


(Ex. 1009, Fig. 2). The drinking spout is coupled to “closure cap 1” via a pair of “axle pins 4,” which allows the drinking spout to pivot between a dispensing configuration and a stowed configuration, as shown below:



(*Id.*, Fig. 1). The tube extends through the drinking spout to define a liquid passage

through the spout:



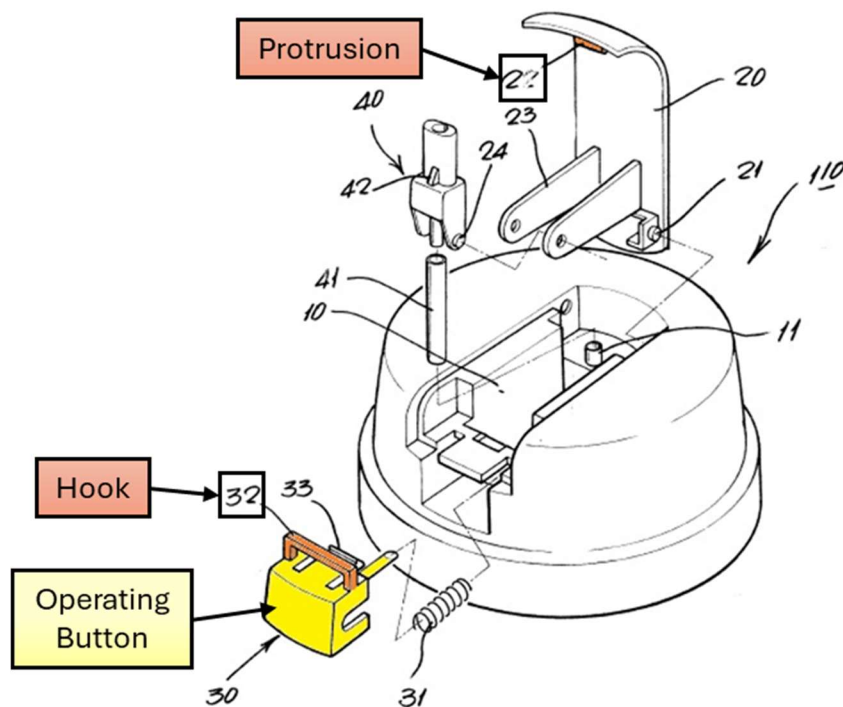
(*Id.*, Fig. 3). Accordingly, a POSITA would have understood Ribarits’ “drinking spout 3” to constitute the claimed rigid collar member. (Ex. 1003, ¶255).

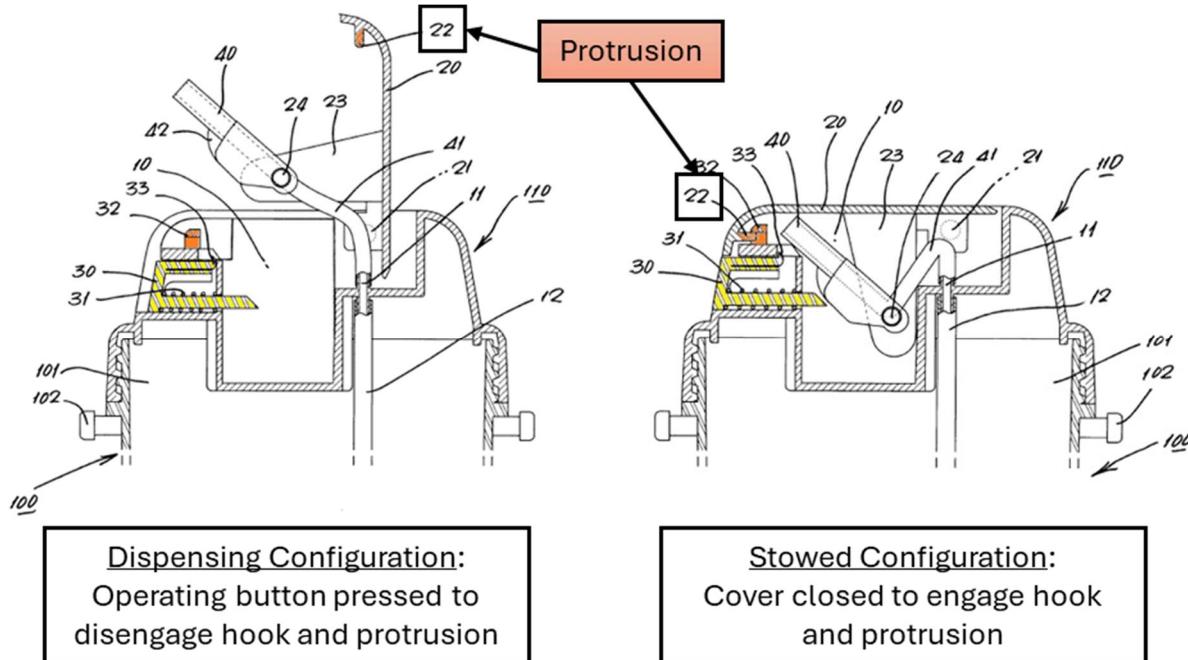
For the reasons discussed in detail above, in view of the teachings of Park and Ribarits, it would have been obvious to modify Park to include Ribarits’ rigid collar member, and a POSITA would have been motivated to do so. (Section IX.B.1, *supra*; Ex. 1003, ¶¶191-204).

iii. 1[B][3][c] Second Catch Structure

Each of Park and Ribarits discloses “a second catch structure adapted to be selectively engaged with the first catch structure to retain the mouthpiece assembly in the stowed configuration.” (Ex. 1003, ¶¶257-260).

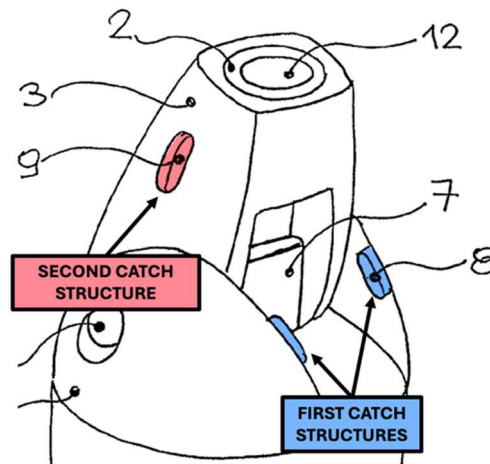
As discussed above in connection with limitation 1[B][2], Park discloses a set of corresponding catch structures that engage to maintain the assembly in a closed configuration. The second catch structure comprises “protrusion 22,” which is adapted to selectively engage “hook 32” (i.e. the first catch structure) to retain the mouthpiece assembly in the stowed configuration. (Ex. 1006, 4-5).





(Ex. 1006, Figs. 3, 5-6).

Ribarits discloses second catch structures on the drinking spout:



(Ex. 1009, Fig. 1).

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

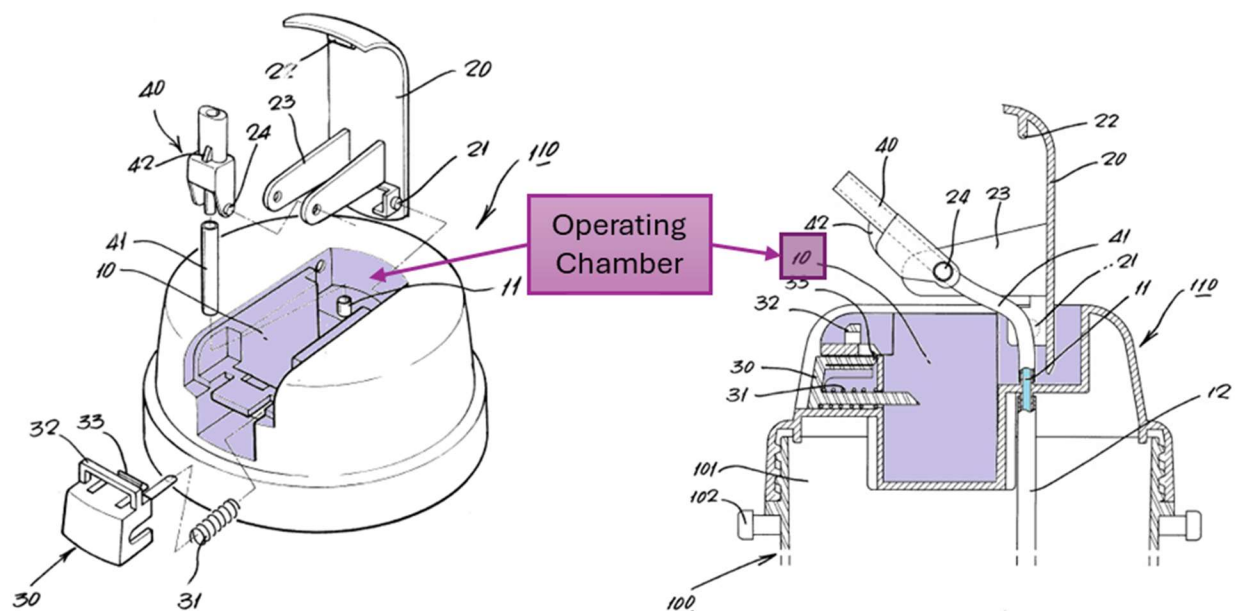
Limitation 1[B][4] is a means-plus-function limitation. Park discloses a user

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

4. 1[C] Stowing Region

Each of Park and Ribarits discloses “wherein the cap assembly defines a stowing region sized to receive at least a portion of the mouthpiece assembly when the mouthpiece assembly is in the stowed configuration.” (Ex. 1003, ¶267-270).

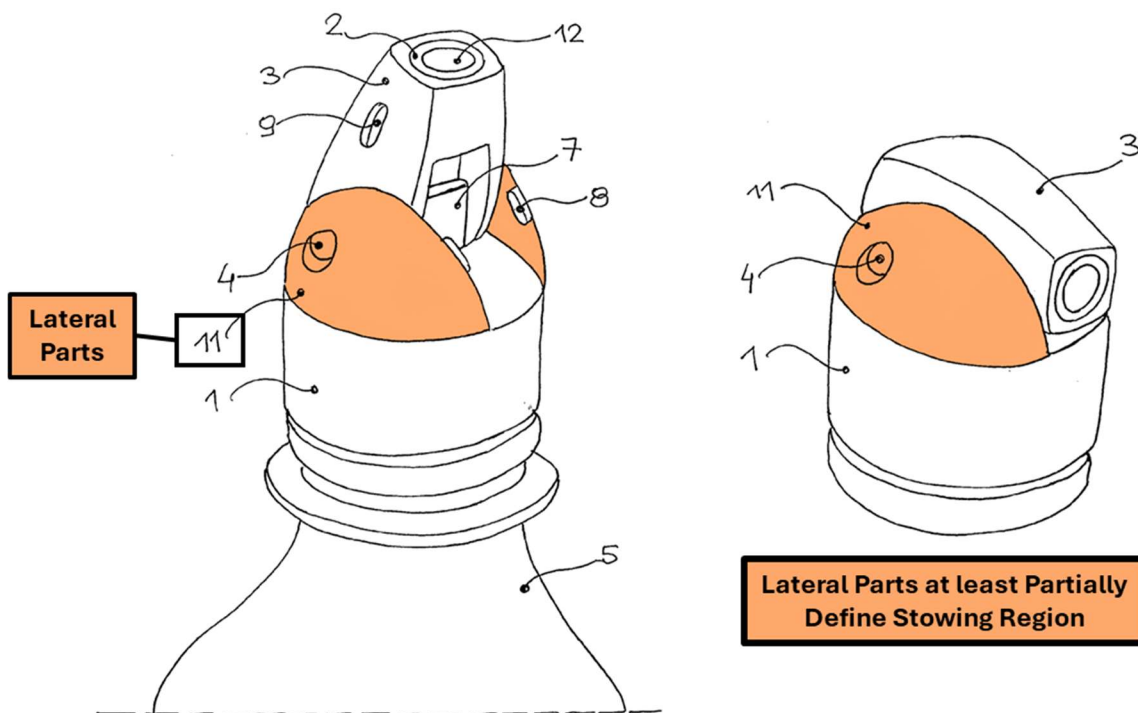
Park discloses “operating chamber 10”:



(Ex. 1006, Figs. 3, 5). According to Park, “[i]n the process of closing the cover 20

... the straw 40 ... is pivoted using the hinge shaft 24 ... and is securely accommodated into the operating chamber.” (*Id.*, 5). Thus, a POSITA would have understood “operating chamber 10” to constitute a stowing region, as claimed. (Ex. 1003, ¶269).

Ribarits discloses “lateral parts,” which a POSITA would have understood to constitute a stowing region, as claimed:



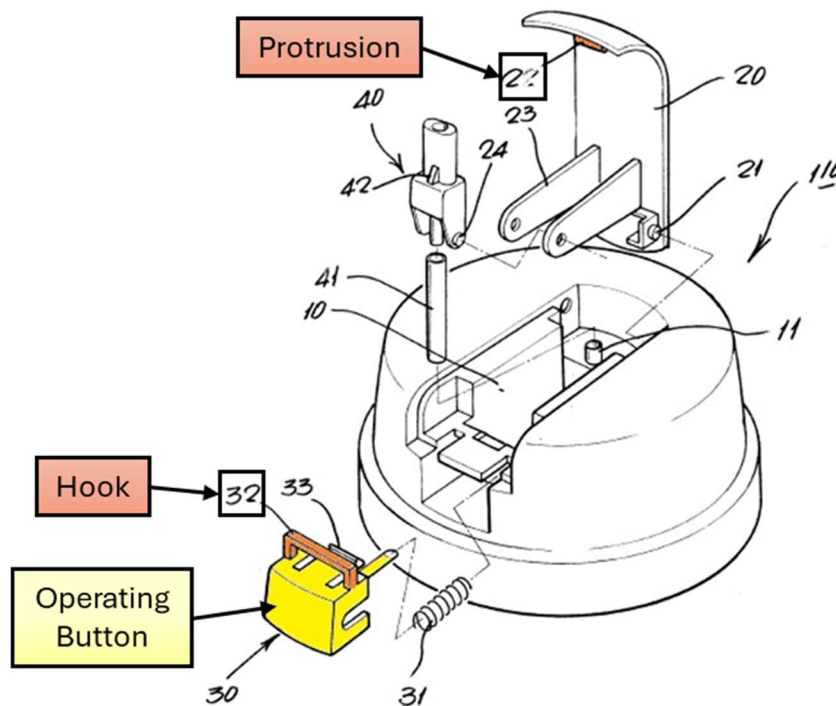
(Ex. 1009, Fig. 1; Ex. 1003, ¶270).

5. 1[D] Sliding Member

Park discloses “wherein the user release mechanism includes a sliding member with a user engagement pad; wherein the user release mechanism is biased

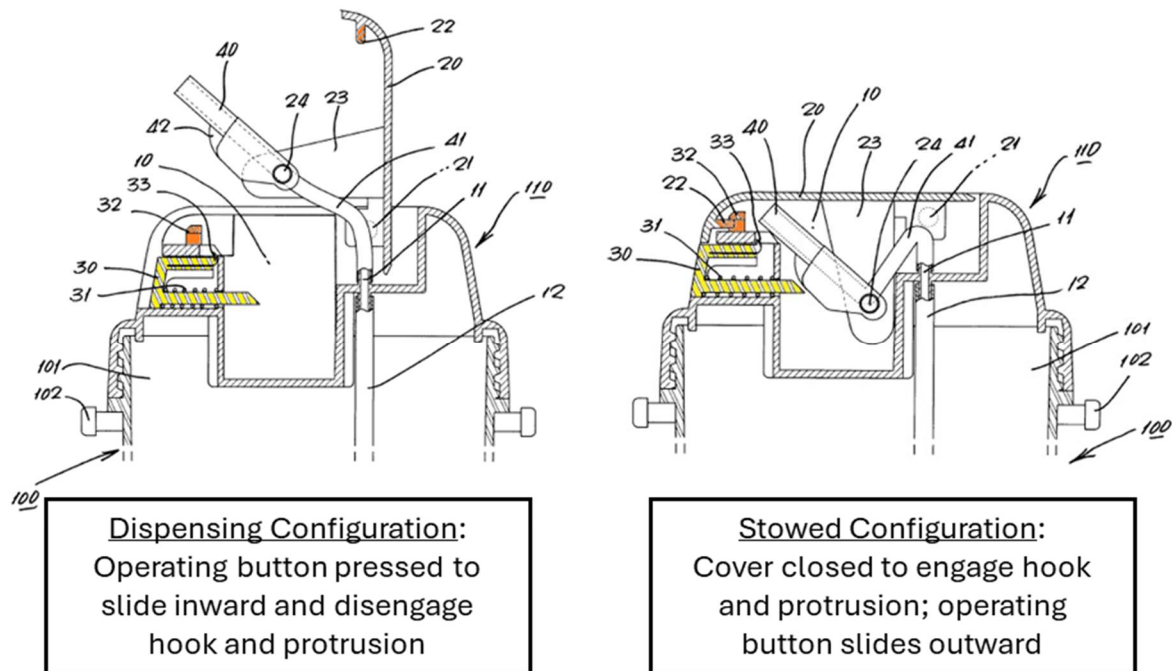
to urge the sliding member away from a position where the sliding member disengages the first and second catch structures; and wherein the sliding member is configured to slide relative to the base of the cap assembly to selectively disengage the first and the second catch structures.” (Ex. 1003, ¶¶271-275).

Park discloses a “locking means,” which includes operating button 30. (Ex. 1006, 4). The “operating button 30 is elastically installed by a spring 31 and is configured to be moved forward and backward” within the “operating chamber 10,” as shown below:



(Ex. 1006, Fig. 3). During operation, a user presses the exterior surface of the “operating button 30,” which causes the button to slide relative to the base of the

lid within the channel:



(Ex. 1006, Figs. 5-6). The sliding movement of “operating button 30” causes “hook 32” to disengage from “protrusion 22,” which causes “cover 20” to be “unfolded by the elastic force of the connecting hose 41” and “straw 40” to be opened into the dispensing configuration. (*Id.*, 5). The “spring 31” biases “operating button 30” away from the dispensing configuration, such that when “cover 20” is closed, “hook 32” engages “protrusion 22” on the underside of “cover 20” to retain the mouthpiece assembly in the stowed configuration.

Accordingly, claim 1 would have been obvious over Park and Ribarits. (Ex. 1003, ¶276).

C. Claim 3

Claim 3 depends from claim 1, and adds “wherein the sliding member is configured to slide relative to the base of the cap assembly within the stowing region to selectively disengage the first and the second catch structures.” Park discloses this additional limitation. (Ex. 1003, ¶¶277-280).

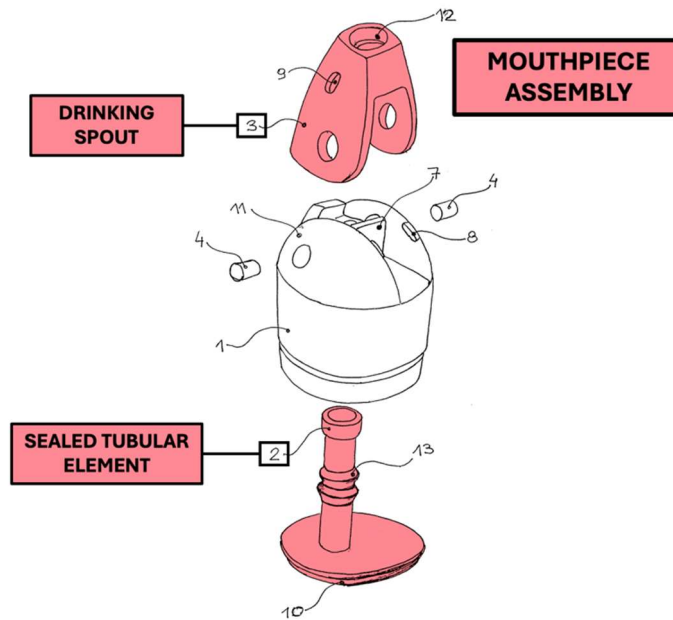
As discussed in connection with limitation 1[D] above, Park’s “operating button 30” constitutes a sliding member that is configured to slide relative to the base of Park’s “lid 110” (i.e. cap assembly) within the “operating chamber 10” (i.e. stowing region). (Ex. 1003, ¶279).

Because Park discloses the additional limitation of claim 3, it also would have been obvious to a POSITA over Park and Ribarits. (Ex. 1003, ¶280).

D. Claim 5

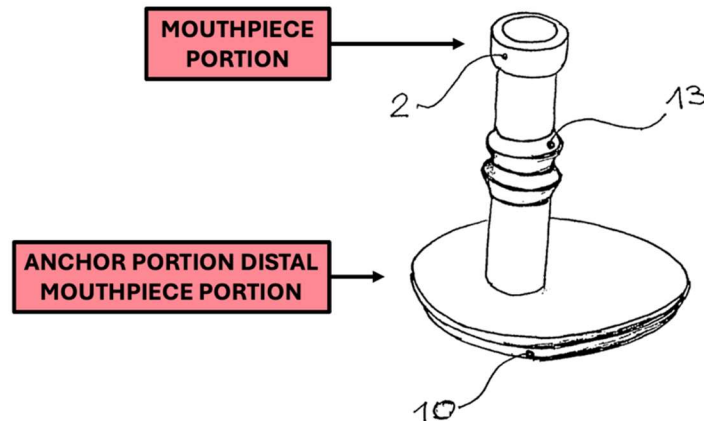
Claim 5 depends from claim 1, and adds “wherein the tube portion includes structure for securing the tube portion to the rigid collar member and restricting relative movement between the tube portion and the rigid collar member.” Ribarits discloses this additional limitation. (Ex. 1003, ¶¶281-288).

As shown below, Ribarits’ mouthpiece assembly comprises “drinking spout 3” and “sealed tubular element 2”:



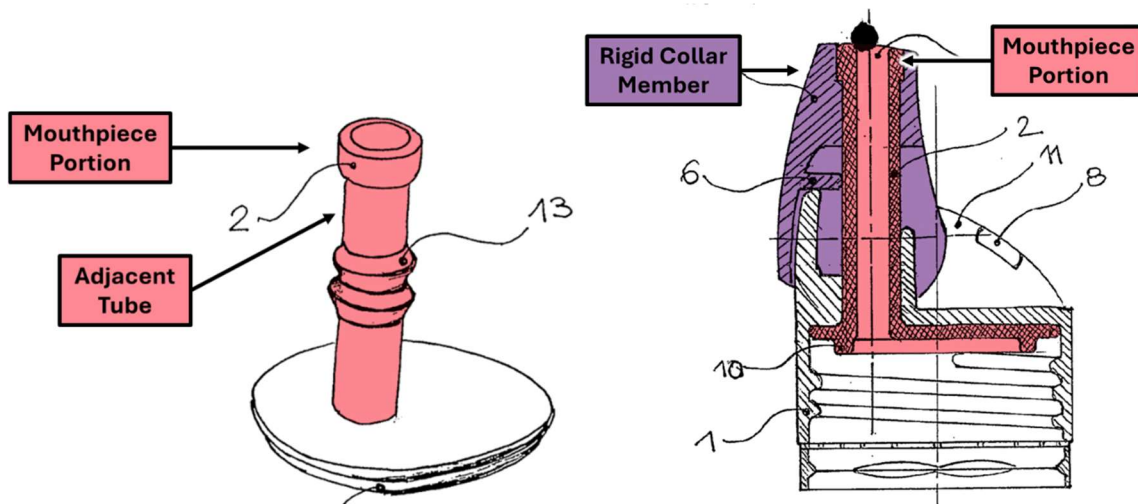
(Ex. 1009, Fig. 2).

The “sealed tubular element” of Ribarits includes a structure for securing the tube to the “drinking spout,” identified below as the mouthpiece portion of “sealed tubular element.”



(Ex. 1009, Fig. 2). As shown below, the mouthpiece portion has a larger diameter

than the adjacent portion of the tube, which structure fits within the outlet end of Ribarits’ “drinking spout.”



(Ex. 1009, Figs. 2-3). This structure secures the “sealed tubular element” within the rigid collar member and restricts relative movement between the tube and the collar during use. (Ex. 1003, ¶285).

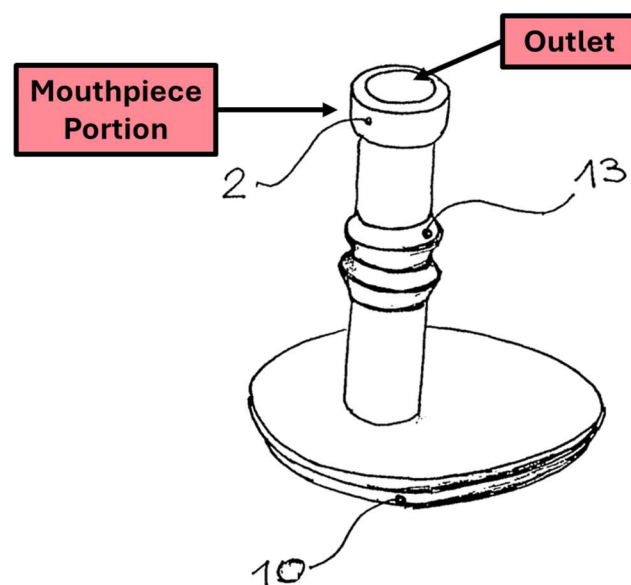
For the reasons discussed in claim 1 above, it would have been obvious to replace Park’s “straw” and “connection hose” with Ribarits’ “drinking spout” and “sealed tubular element.” (See Section IX.B.1, *supra*). In implementing that modification, a POSITA also would have recognized the desirability of implementing a structure for securing the tube portion of the mouthpiece assembly to the rigid collar member, similar to that disclosed in Ribarits. (Ex. 1003, ¶286). That is because, as in Ribarits, such structure ensures correct positioning of the tube portion within the rigid collar member, and prevents relative movement of the

components during use of the device. (*Id.*). Thus, a POSITA would have recognized that a securing structure would ensure the intended crimping functionality of the device when pivoted to the stowed configuration. (*Id.*, ¶287). Thus, claim 5 also would have been obvious over Park and Ribarits. (*Id.*, ¶288).

E. Claim 6

Claim 6 depends from claim 1, and adds “wherein the mouthpiece assembly further includes a mouthpiece portion that includes the outlet and is constructed of the resiliently deformable material.” Ribarits discloses this additional limitation. (Ex. 1003, ¶¶289-292).

As discussed in claim 5 above, the “sealed tubular element” includes a mouthpiece portion:



(Ex. 1009, Fig. 2). As shown above, the mouthpiece portion includes the outlet of

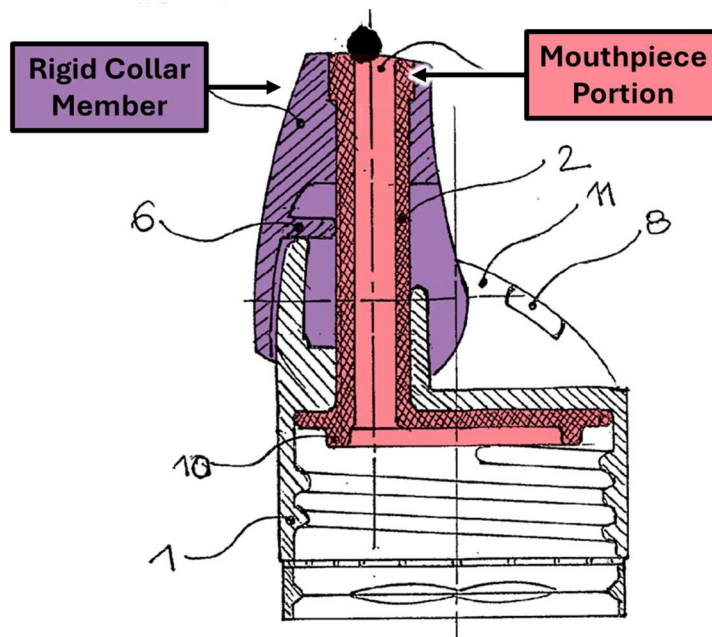
Ribarits' mouthpiece assembly and is constructed of the same "rubber or latex" as the rest of the "sealed tubular element."

Because Ribarits discloses the additional limitations of claim 6, it also would have been obvious over Park and Ribarits. (Ex. 1003, ¶292).

F. Claim 7

Claim 7 depends from claim 6, and adds "wherein the mouthpiece assembly includes mouthpiece-securing structure that secures the mouthpiece portion to the rigid collar member and restricts relative movement between the mouthpiece portion and the rigid collar member." Ribarits discloses this additional limitation. (Ex. 1003, ¶¶293-296).

As discussed above in claim 5, Ribarits' "sealed tubular element" includes a mouthpiece portion that comprises a structure for securing the tube to the "drinking spout":



(Ex. 1009, Fig. 3).

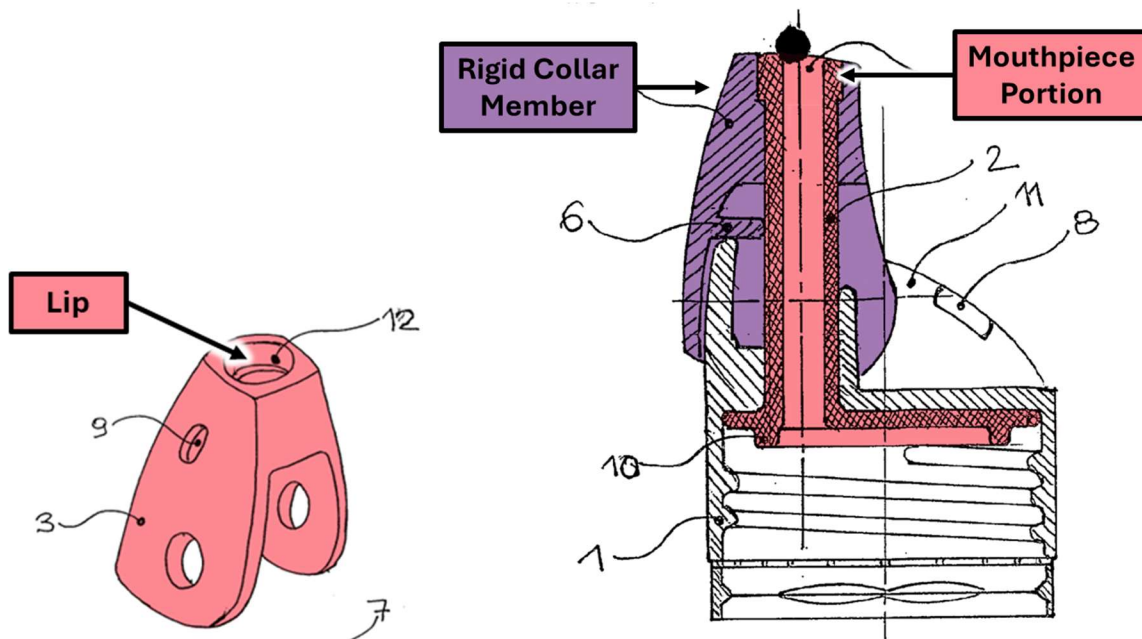
For the same reasons as discussed in claim 5 above, it would have been obvious to a POSITA to modify Park to include Ribarits' mouthpiece-securing structure. Accordingly, claim 7 would have been obvious over Park and Ribarits. (Ex. 1003, ¶296).

G. Claim 8

Claim 8 depends from claim 7, and adds “wherein one of the mouthpiece portion and the tube portion includes the mouthpiece-securing structure; wherein the mouthpiece-securing structure includes one or more of a channel and a depression; wherein the rigid collar member includes one or more of a lip, a flange, and a protrusion; and wherein the one or more of the channel and the depression

defines a seat that engages and mates with the one or more of the lip, the flange, and the protrusion.” Ribarits discloses this additional limitation. (Ex. 1003, ¶¶297-300).

As discussed in claim 7 above, the mouthpiece portion of Ribarits’ “sealed tubular element” includes the mouthpiece-securing structure. As shown below, that structure includes a circumferential depression which defines a seat that engages with a circumferential lip on Ribarits’ “drinking spout” (i.e. the rigid collar member):



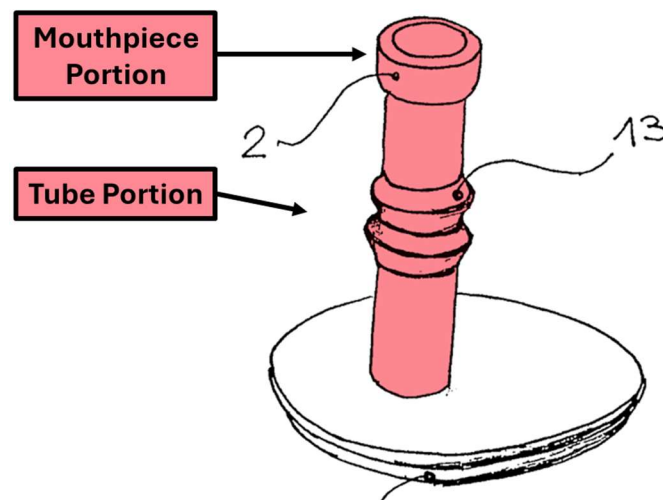
(Ex. 1009, Figs. 2-3). For the same reasons discussed in claim 5 above, it would have been obvious to a POSITA to include a securing structure of the claimed

design in the proposed modification of Park. (Ex. 1003, ¶300). Accordingly, claim 8 is also would have been obvious to a POSITA over Park and Ribarits. (*Id.*)

H. Claim 10

Claim 10 depends from claim 6, and adds “wherein the mouthpiece portion and the tube portion are constructed as a unitary assembly of the resiliently deformable material.” Ribarits discloses this additional limitation. (Ex. 1003, ¶301-304).

Ribarits’ “sealed tubular element” is made from a resilient elastic material and is constructed as a unitary assembly that includes both the mouthpiece portion and the tube portion, as shown below:

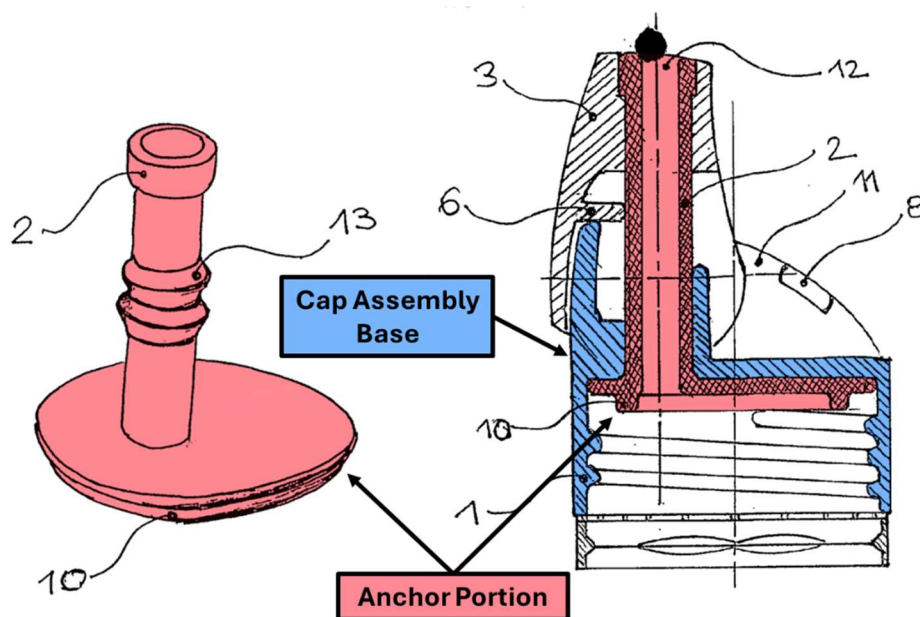


(Ex. 1009, 2, Fig. 2). Accordingly, claim 10 also would have been obvious to a POSITA over Park and Ribarits. (Ex. 1003, ¶304).

I. Claim 11

Claim 11 depends from claim 1, and adds “wherein the mouthpiece assembly further includes an anchor portion that extends from the tube portion.” Ribarits discloses this additional limitation. (Ex. 1003, ¶¶305-311).

Ribarits’ discloses “sealing rings 10” on its flexible tube, which comprise an anchor portion that extends from the tube portion of the flexible tube, as shown below:



(Ex. 1009, Figs. 2-3; Ex. 1003, ¶¶308-309).

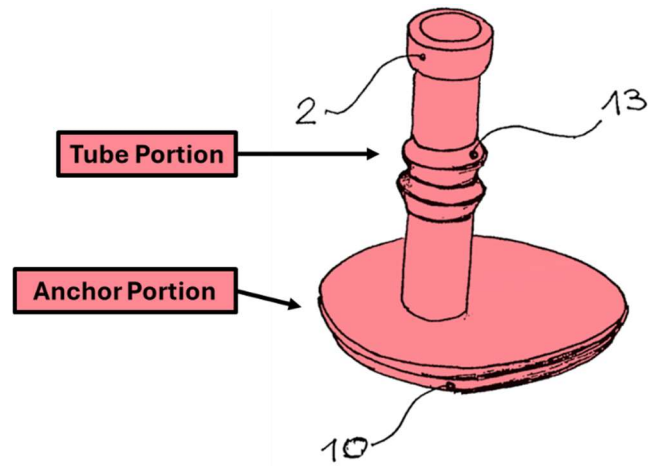
For the reasons discussed in claim 1 above, it would have been obvious to replace Park’s “straw” and “connection hose” with Ribarits’ “drinking spout” and “sealed tubular element.” (See Section IX.B.1, *supra*). In implementing that

modification, a POSITA also would have been motivated to include an anchor, such as that disclosed in Ribarits, to secure the tube portion of the mouthpiece assembly on the inlet side of the cap assembly. (Ex. 1003, ¶309). In view of the teachings of Ribarits, a POSITA would have recognized the benefit of a simple circumferential flange incorporated on either side of the through-passage to ensure a tight fit and maintain the position of the mouthpiece assembly within the through-passage. (Ex. 1003, ¶310). A POSITA also would have recognized that such a design could be readily inserted into or removed from the through-passage, providing the added benefit of facilitating cleaning, maintenance, or replacement of the mouthpiece assembly. (*Id.*)

Accordingly, claim 11 also would have been obvious to a POSITA over Park and Ribarits. (Ex. 1003, ¶311).

J. Claim 12

Claim 12 depends from claim 11, and adds “wherein the anchor portion has a greater exterior perimeter than the tube portion.” As shown below, Ribarits discloses this additional limitation. (Ex. 1003, ¶¶312-315).

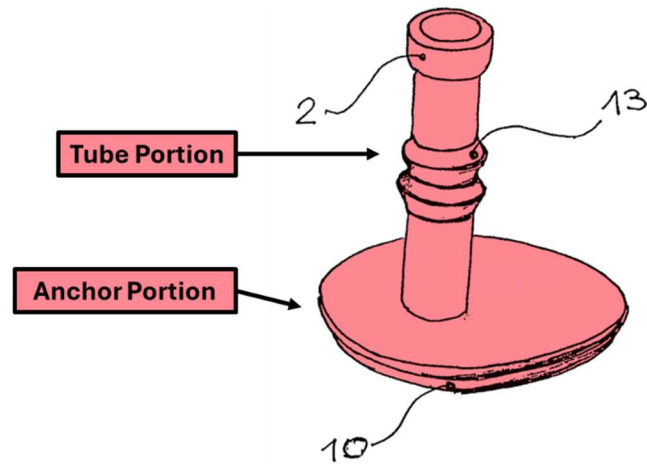


(Ex. 1009, Fig. 2). Accordingly, claim 12 also would have been obvious to a POSITA over Park and Ribarits. (Ex. 1003, ¶315).

K. Claim 13

Claim 13 depends from claim 11, and adds “wherein the anchor portion and tube portion are constructed as a unitary assembly of the resiliently deformable material.” Ribarits discloses this additional limitation. (Ex. 1003, ¶¶316-319).

Ribarits’ “sealed tubular element” is made from a resilient elastic material, such as “rubber or latex,” and is constructed as a unitary assembly that includes both the “sealing rings 10” (i.e. the anchor portion) and the tube portion, as shown below:

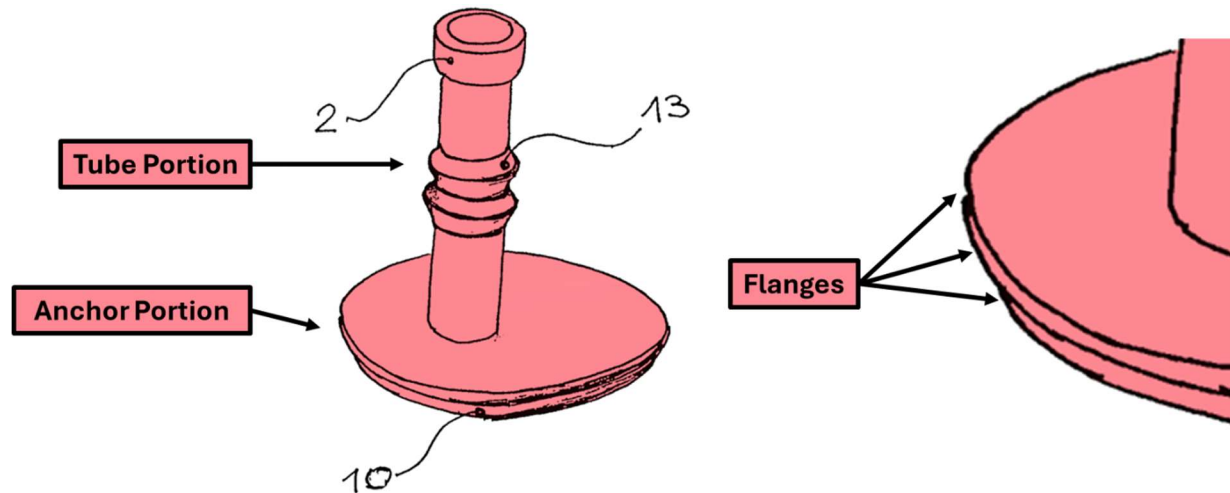


(Ex. 1009, 2, Fig. 2). Accordingly, claim 13 also would have been obvious to a POSITA over Park and Ribarits. (Ex. 1003, ¶319).

L. Claim 15

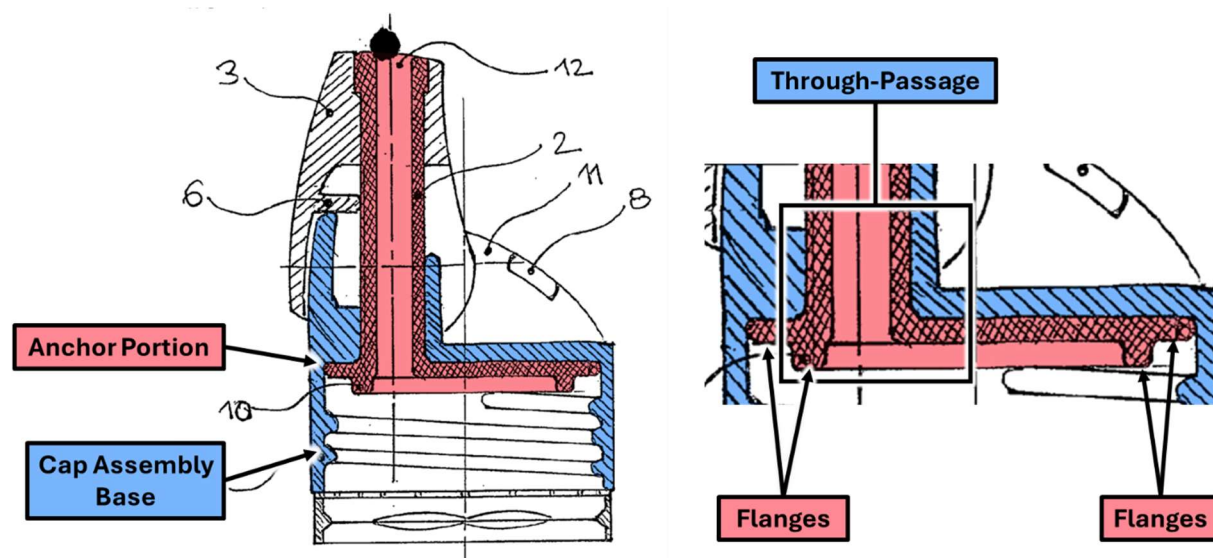
Claim 15 depends from claim 11, and adds “wherein the anchor portion includes a projecting flange that provides a friction-fit arrangement with the through-passage of the base.” Ribarits discloses this additional limitation. (Ex. 1003, ¶¶320-324).

The anchor portion of Ribarits’ mouthpiece assembly includes “one or several projecting sealing rings,” (Ex. 1009, 3 (Claim 2)), which a POSITA would have understood to be an “anchor portion”:



(Ex. 1009, Fig. 2).

The flange of Ribarits' anchor portion provides a friction-fit arrangement with the through-passage of the base of Ribarits' cap assembly, as shown below:

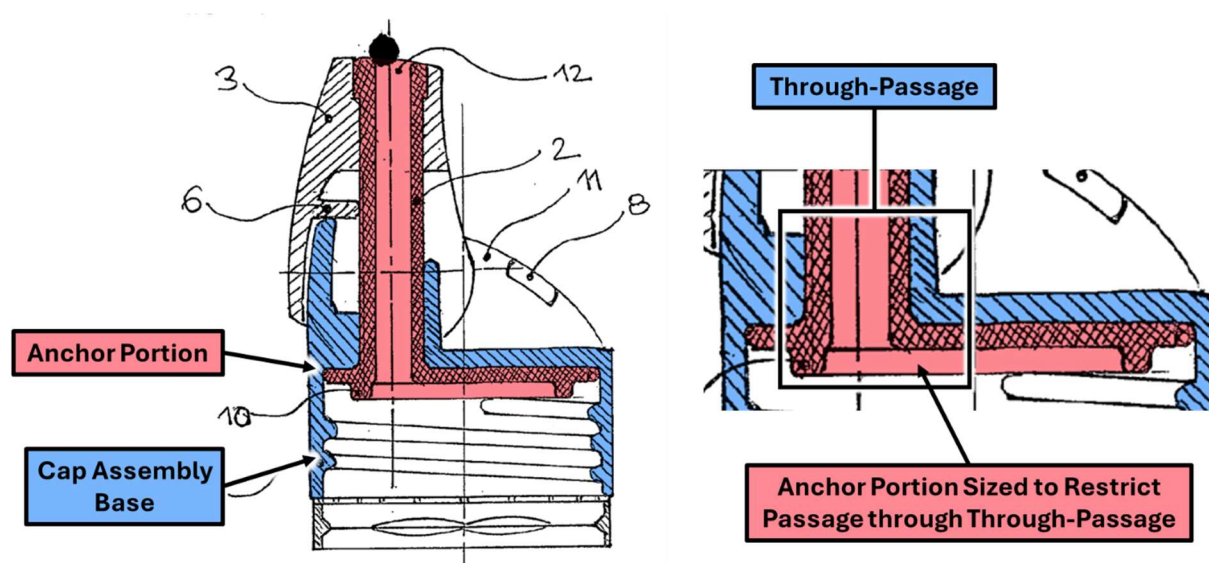


(Ex. 1009, Fig. 3; Ex. 1003, ¶323). Accordingly, claim 15 also would have been obvious over Park and Ribarits. (Ex. 1003, ¶324).

M. Claim 16

Claim 16 depends from claim 11, and adds “wherein the anchor portion is sized to restrict passage of the anchor portion through the through-passage and thus restrict removal of the mouthpiece assembly via a top side of the cap assembly.” Ribarits discloses this additional limitation. (Ex. 1003, ¶¶325-329).

Ribarits’ “sealing rings” (i.e. anchor portion) extend outward to prevent the anchor portion from passing through the through-passage at the base of the cap assembly, as shown below:



(*Id.*, Fig. 3; Ex. 1003, ¶¶327-328)

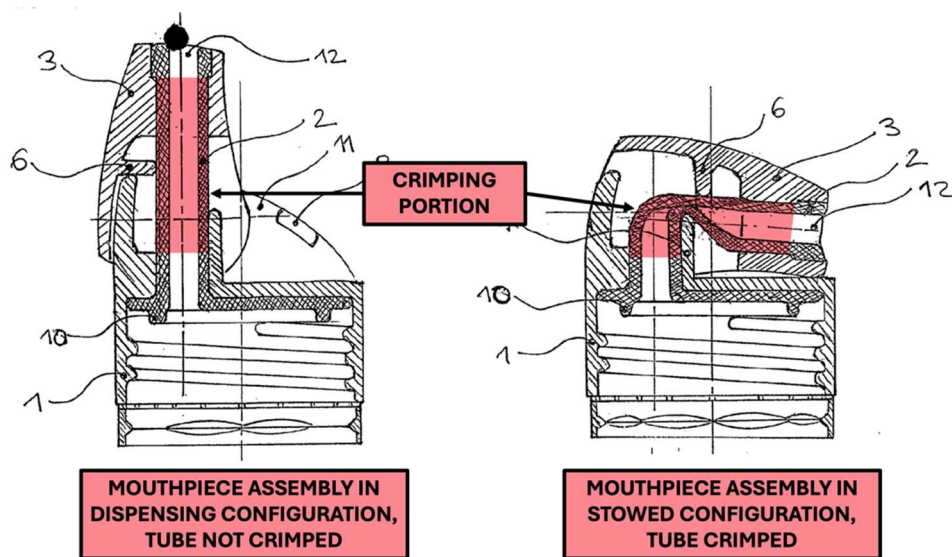
Accordingly, claim 16 also would have been obvious over Park and Ribarits. (Ex. 1003, ¶329).

N. **Claim 17**

Claim 17 depends from claim 1, and adds “wherein the crimping region at least partially biases the mouthpiece assembly to the dispensing configuration.” Each of Park and Ribarits discloses this additional limitation. (Ex. 1003, ¶¶300-335).

As discussed above in connection with limitation 1[B][3], Park’s “connection hose 41” includes a crimping region that biases the mouthpiece assembly to the dispensing configuration. (*Id.*, ¶¶332).

Like Park’s “connection hose,” Ribarits’ flexible tube includes a crimping region that collapses to restrict fluid flow through the tube when in the stowed configuration. (*Id.*, ¶¶333).



(Ex. 1009, Fig. 3). Ribarits’ flexible tube is also comprised of an elastic rubber or

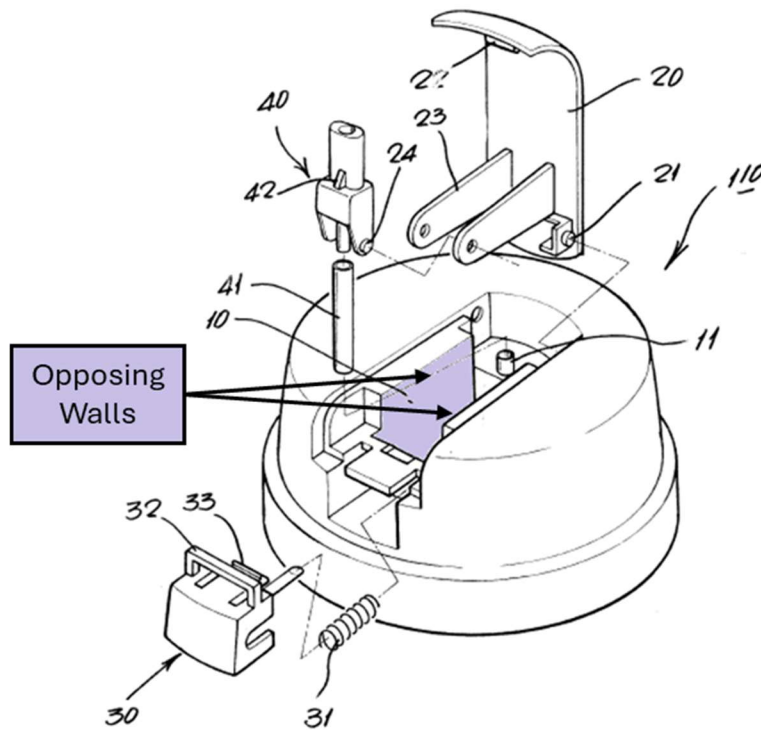
latex material. (Ex. 1009, 2). Thus, as in Park, a POSITA would have understood the tube—and thus the crimping region—to be biased to the dispensing configuration. (Ex. 1003, ¶334).

Because each of Park and Ribarits discloses the additional limitation of claim 17, it also would have been obvious over Park and Ribarits. (Ex. 1003, ¶335).

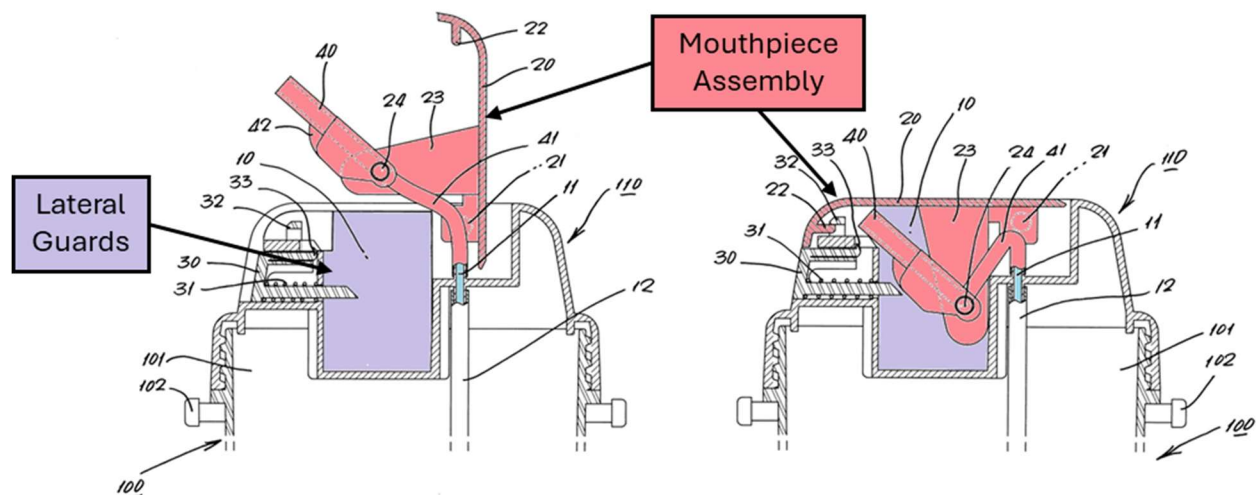
O. Claim 18

Claim 18 depends from claim 1, and adds “wherein the cap assembly further includes a pair of lateral guards that at least partially define the stowing region, and wherein at least a portion of the mouthpiece assembly is received between the pair of lateral guards when the mouthpiece assembly is in the stowed configuration.” Park discloses this additional limitation. (Ex. 1003, ¶¶336-341).

As discussed in claim 1, Park discloses “operating chamber 10,” which constitutes the stowing region of Park’s “lid 110.” As shown in Figure 3 below, a pair of opposing walls define the lateral boundary of the operating chamber:



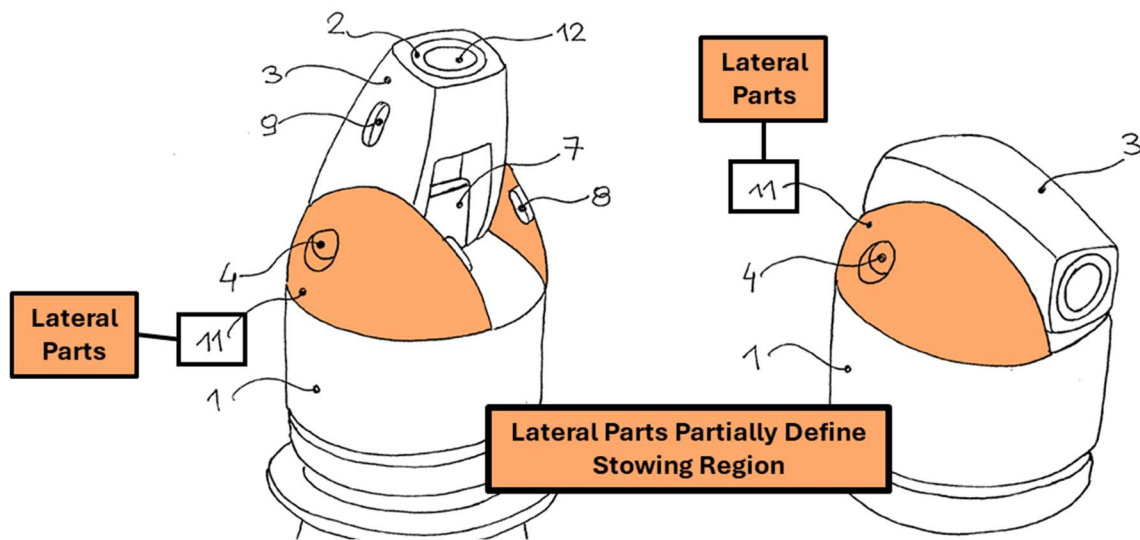
(Ex. 1006, Fig. 3; Ex. 1003, ¶338). As shown below, when the cover is closed, Park’s straw and connecting hose are “securely accommodated into the operating chamber 10.”:



(Ex. 1006, 5, Figs. 5-6). Thus, a POSITA would have understood at least a portion

of Park’s mouthpiece assembly, namely “straw 40,” to be received within stowing region of “lid 110” when in the stowed position. (Ex. 1003, ¶ 339).

Ribarits discloses a pair of “lateral parts” that define a stowing region, as shown below:



(Ex. 1009, Fig. 1). When pivoted to the stowed configuration, Ribarits’ “drinking spout” is received within the space between the lateral parts.

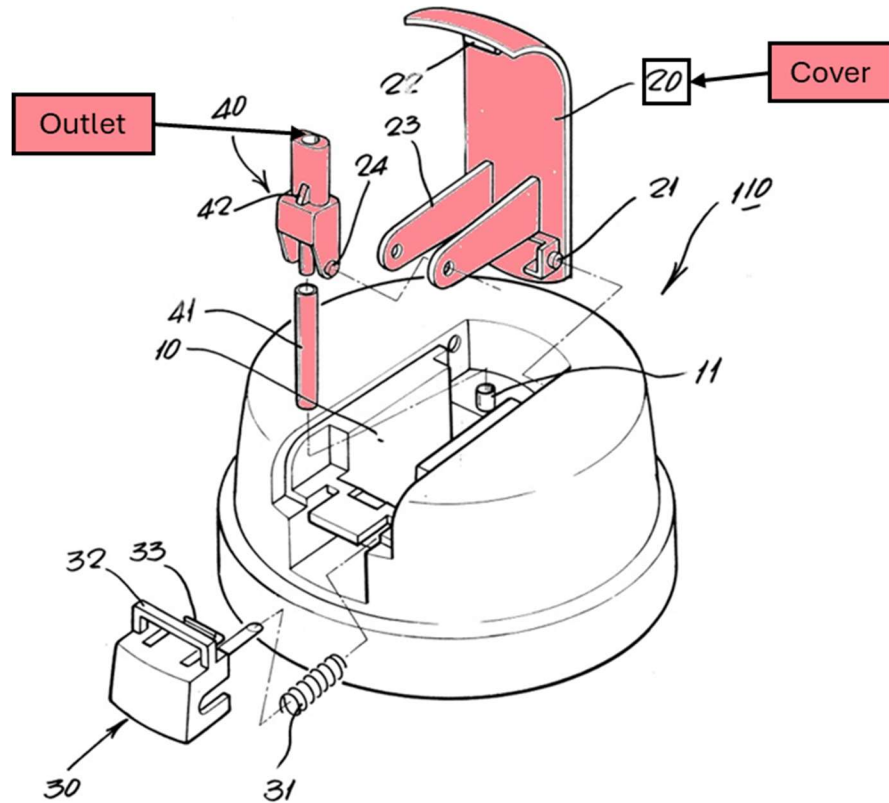
Because each of Park and Ribarits discloses the additional limitation of claim 18, it also would have been obvious over Park and Ribarits. (Ex. 1003, ¶339).

P. Claim 19

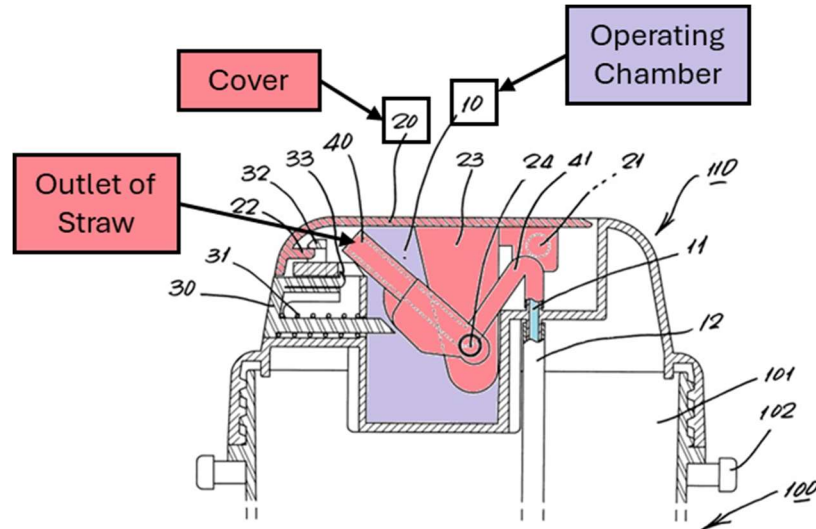
Claim 19 depends from claim 18, and adds “wherein the cap assembly further includes a dust cover portion that extends between the lateral guards and which extends across the outlet when the mouthpiece assembly is in the stowed

configuration.” Park discloses this additional limitation. (Ex. 1003, ¶¶342-346).

Park discloses “cover 20,” which is part of the mouthpiece assembly of Park’s “lid 110” (i.e. cap assembly), as shown below:



(Ex. 1006, Fig. 3). In the stowed configuration, “cover 20” is closed over the top of “operating chamber 10” to cover the outlet of “straw 40,” as shown below:



(Ex. 1006, Fig. 5). Accordingly, a POSITA would have understood Park’s “cover 20” to constitute a dust cover, as claimed. (Ex. 1003, ¶345).

Accordingly, claim 19 also would have been obvious to a POSITA over Park, in view of Ribarits. (*Id.*, ¶346).

X. GROUND 3: CLAIM 14 IS OBVIOUS IN VIEW OF PARK, RIBARITS AND KIYOTA

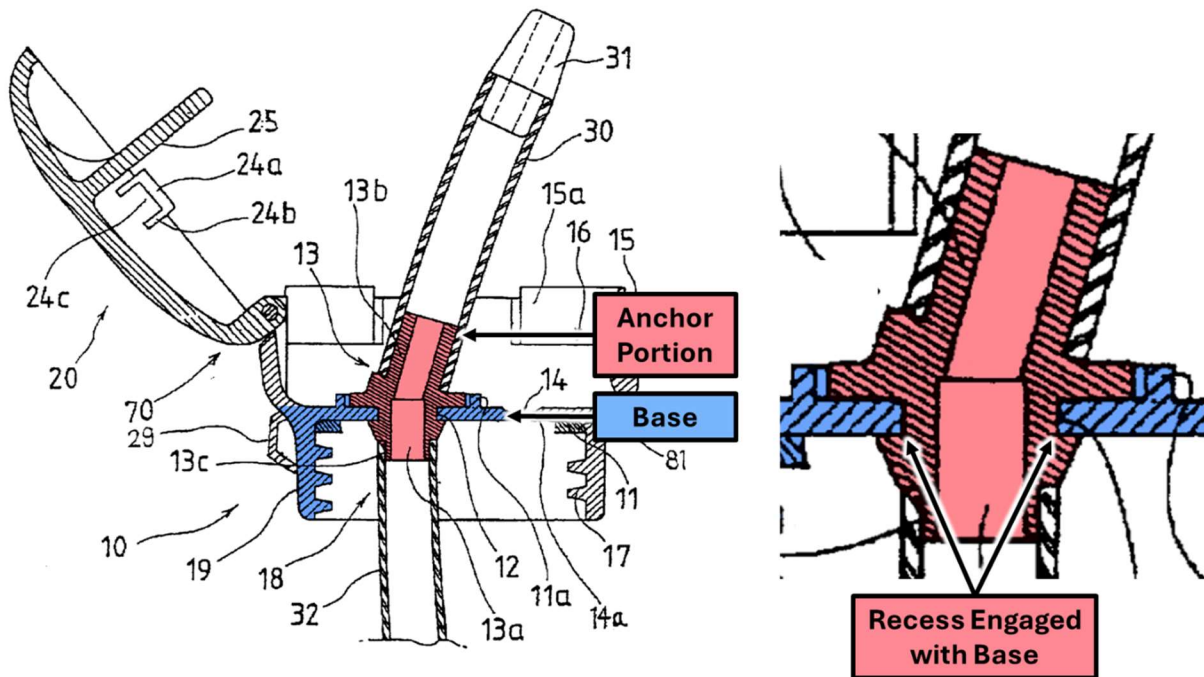
A. Claim 14 is Obvious over Park, in view of Ribarits

Claim 14 depends from Claim 11, and adds “wherein the anchor portion defines a recess that is sized and shaped to engage and mate with corresponding structure of the base of the cap assembly.” This additional limitation would have been obvious over Park and Ribarits, in further view of the Kiyota and the knowledge of a POSITA. (Ex. 1003, ¶¶347-353).

As discussed in connection with claim 14 in ground 1, above, Kiyota

discloses “coupling tube 13” (i.e. anchor portion), which defines a recess that is sized and shaped to engage and mate with corresponding structure of the base of the cap assembly:

FIG. 6



(Ex. 1004, Fig. 6).

As discussed above in ground 2, in view of Ribarits and the knowledge of a POSITA, it would have been obvious to replace Park’s “straw” and “connecting hose” with Ribarits’ “drinking spout” and “sealed tubular element.” (Section IX.B.1, *supra*).

A POSITA would have looked to the teachings of Kiyota to further modify and improve Park’s and/or Ribarits’ design. (Ex. 1003, ¶351). That is because

Kiyota is directed to similar subject matter to both Park and Ribarits. (*Id.*) For example, Kiyota discloses drink containers with cap assemblies of substantially the same functionality as both Park and Ribarits. (*Id.*) As explained above, Kiyota discloses cap assemblies having mouthpieces that can be opened and closed into dispensing and stowed configurations, and includes elastic tube elements with crimping regions that collapse in the stowed configuration to prevent leakage when the drink containers are not in use. (*Id.*)

In view of the teachings of Kiyota, a POSITA would have recognized the desirability of modifying the design of Ribarits' anchor portion to include a recess sized and shaped to engage and mate with the base of the cap assembly, as taught by Kiyota. (*Id.*, ¶352). That is because such a design would have ensured a tight seal between the anchor portion and the cap assembly base, and would have prevented slippage of the tube portion during use. (*Id.*)

Accordingly, claim 14 would have been obvious to a pe POSITA in view of Ribarits and Park, and in further view of Kiyota. (*Id.*, ¶353).

XI. SECONDARY CONSIDERATIONS

Secondary considerations should be considered but do not control the obviousness conclusion. *Newell Cos., Inc. v. Kenney Mfg. Co.*, 864 F.2d 757, 768 (Fed. Cir. 1988). Where, as here, a strong *prima facie* case of obviousness has

been made, even relevant secondary considerations supported by substantial evidence may not dislodge an obviousness conclusion. *Leapfrog Enters. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1162 (Fed. Cir. 2007). Petitioner is aware of no evidence supporting a claim for secondary considerations.

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

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

A. Factor 1: Potential Stay

When this IPR is instituted, Petitioner will move to stay the district court action, at least as to the patents in the family of the challenged ’879 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 (currently scheduled for September 2025). (Ex. 1002). Thus, this factor weighs against discretionary denial.

C. Factor 3: Investment in Parallel Proceeding

Fact discovery in the district court action is still pending. The district court has not yet construed claim terms. No expert reports have been served.

Fact discovery does not close until December 2024, and even after that, much work would still remain, including expert reports, expert discovery, dispositive motions, pretrial motions, and trial. (Ex. 1002). 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 stipulates that, if this IPR is instituted, it will not pursue in the district court proceeding the same grounds of invalidity raised in this Petition or any grounds that it could have reasonably been raised in this Petition. This factor weighs against discretionary denial.

E. Factor 5: The Parties

While the same parties are involved here as in the district court, this factor is not determinative. The Board repeatedly declines to exercise its discretion to deny institution under such circumstances. *See, e.g., NanoCollect Biomedical, Inc.*

v. Cytonome/ST, LLC, IPR2020-00551, Paper 19 at 2-25 (P.T.A.B. Aug. 27, 2020); *VMware, Inc. v. Intellectual Ventures I LLC*, No. IPR2020-00470, Paper 13 at 20, 22 (P.T.A.B. Aug. 18, 2020); *Samsung Electronics Co., Ltd. v. Dynamics, Inc.*, IPR2020-00502, Paper 34 at 13-14 (P.T.A.B. Aug. 12, 2020).

F. Factor 6: Other Circumstances

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

Accordingly, the *Fintiv* analysis favors institution.

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

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

In a §325(d) analysis, the Board considers several factors delineated in *Becton, Dickinson & Co. v. B. Braun Melsungen AG*, IPR2017-01586, Paper 8 (P.T.A.B. Dec. 15, 2017). Factors (a), (b), and (d) relate to whether the art or arguments are substantially the same as those previously presented, while factors (c), (e), and (f) relate to whether the petition has demonstrated a material error by the PTO during prior consideration. *Advanced Bionics, LLC v. Med-EL*

Elektromedizinische Geräte GmbH, IPR2019-01469, Paper 6 at 10 (P.T.A.B. Feb. 13, 2020). The Board considers the second set of factors only if the first set of factors weighs in favor of exercising discretion. (*Id.*, 8).

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

The two primary references relied on in this Petition were never applied during examination of the '879 patent. Choi and Kiyota were submitted in an IDS but never applied by the Examiner. *See* (Ex. 1001). Ribarits was not cited during examination. *See (id.)*. Thus, any arguments relating to these references likewise have not been considered by the PTO.

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).

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).

Accordingly, the Board should not exercise discretion under §325(d).

XIV. CONCLUSION

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

Dated: November 5, 2024 By: /Ali S. Razai/
Ali S. Razai (Reg. No. 60,771)
Joseph F. Jennings (Reg. No. 40,664)
Cheryl Burgess (Reg. No. 55,030)
KNOBBE MARTENS OLSON & BEAR, LLP

CERTIFICATE OF COMPLIANCE

Pursuant to 37 C.F.R. §42.24(d), the undersigned certifies that the foregoing **PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 10,165,879**, exclusive of the parts exempted as provided in 37 C.F.R. §42.24(a), contains 13,555 words and therefore complies with the type-volume limitations of 37 C.F.R. §42.24(a).

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

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

Joseph F. Jennings (Reg. No. 40,664)

Cheryl Burgess (Reg. No. 55,030)

KNOBBE MARTENS OLSON & BEAR, LLP

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on the date below a copy of this
PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 10,165,879
PETITIONER’S POWER OF ATTORNEY, AND EXHIBITS 1001 – 1011 were
served by Federal Express overnight mail on the Patent Owner at the correspondence
address of record for the subject patent as follows:

139868 - DASCENZO GATES Intellectual Property Law, P.C.
1000 SW Broadway, Suite 1555
Portland, OR 97205
UNITED STATES

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

SHOOK, HARDY & BACON LLP
Ryan J. Schletzbaum
Lauren Elizabeth Douville
Emily Sosolik
2555 Grand Blvd. Kansas City, MO 64108
Email: rschletzbaum@shb.com
ldouville@shb.com
esosolik@shb.com

SHOOK, HARDY & BACON LLP
Amelia E. Murray
Email: aemurray@shb.com
111 SWacker Dr., Ste. 4700
Chicago, IL 60606

SHOOK, HARDY & BACON LLP
Jason Richardson
Email: Jmrichardson@shb.com
555 Mission St, Suite 2300,
San Francisco, CA 4015

Dated: November 5, 2024 By: /Ali S. Razai/
Ali S. Razai (Reg. No. 60,771)
Joseph F. Jennings (Reg. No. 40,664)
Cheryl Burgess (Reg. No. 55,030)
KNOBBE MARTENS OLSON & BEAR, LLP