

IPR2025-00140

Trove Brands v. CamelBak Products

Filed: December 9, 2025

Filed on behalf of: Petitioner Trove Brands, LLC

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

Dion M. Bregman (Reg. No. 45,645)

Alexander B. Stein (Reg. No. 71,367)

Jacob L. Peterson (Reg. No. 65,096)

Zachary B. Messick (Reg. No. 77,839)

MORGAN, LEWIS & BOCKIUS LLP

600 Anton Blvd., Ste. 1800

Costa Mesa, CA 92626

Telephone: (714) 830-0600

Email: MLB-Trove-IPR-250@morganlewis.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TROVE BRANDS, LLC,

Petitioner,

v.

CAMELBAK PRODUCTS, LLC,

Patent Owner.

Case No. IPR2025-00140

U.S. Patent No. 11,851,250

**PETITIONER'S REPLY IN SUPPORT OF PETITION FOR
INTER PARTES REVIEW OF U.S. PATENT NO. 11,851,250**

TABLE OF CONTENTS

	Page No.
I. INTRODUCTION	1
II. CLAIM CONSTRUCTION	2
A. “mouthpiece”	2
B. “two joints that define a pivotal axis for pivotal movement of the pivotal mount”	6
C. “a mouthpiece [coupled to the mount outlet of]/[disposed on] the pivotal mount for pivotal movement with the pivotal mount”	9
III. GROUND 1: NAKAJIMA IN VIEW OF THE KNOWLEDGE OF A POSITA RENDERS CLAIMS 1-2 AND 4-6 OBVIOUS	15
A. Claim 1	16
B. Claims 2 and 4-6.....	24
IV. GROUNDS 2-3: RIBARITS-BASED COMBINATIONS RENDER CLAIMS 1-18 OBVIOUS.....	24
A. Claims 1, 7, and 13.....	24
1. Ribarits Discloses the Claimed “Mouthpiece”	25
2. Ribarits Discloses the Claimed Relationships Between the Mouthpiece and Pivotal Mount.....	28
B. Claims 2-6, 8-12, and 14-18.....	33

TABLE OF AUTHORITIES

Page No(s).

Cases

<i>Am. Piledriving Equip., Inc. v. Geoquip, Inc.</i> , 637 F.3d 1324 (Fed. Cir. 2011)	5, 8, 12
<i>Aug. Tech. Corp. v. Camtek, Ltd.</i> , 655 F.3d 1278 (Fed. Cir. 2011)	3, 7, 11
<i>CVI/Beta Ventures, Inc. v. Tura LP</i> , 112 F.3d 1146	15
<i>Fenner Investments, Ltd. v. Cellco Partnership</i> , 778 F.3d 1320 (Fed. Cir. 2015)	15
<i>Gentry Gallery, Inc. v. Berkline Corp.</i> , 134 F.3d 1473 (Fed. Cir. 1998)	15
<i>K-2 Corp. v. Salomon S.A.</i> , 191 F.3d 1356 (Fed. Cir. 1999)	3, 9
<i>Parus Holdings, Inc. v. Google LLC</i> , 70 F.4th 1365 (Fed. Cir. 2023)	24, 33
<i>Phillips v. AWH Corp.</i> , 415 F.3d 1303 (Fed. Cir. 2005)	12
<i>SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.</i> , 242 F.3d 1337 (Fed. Cir. 2001)	5
<i>Sisvel Int’l v. Sierra Wireless, Inc.</i> , 81 F.4th 1231 (Fed. Cir. 2023)	12
<i>Thorner v. Sony Comput. Ent. Am. LLC</i> , 669 F.3d 1362 (Fed. Cir. 2012)	3, 7, 11
<i>Univ. of Massachusetts v. L’Oréal S.A.</i> , 36 F.4th 1374 (Fed. Cir. 2022)	14

LIST OF EXHIBITS

Exhibit No.	Description
1001	U.S. Patent No. 11,851,250 (“the ’250 patent”)
1002	Declaration of Glenn E. Vallee, Ph.D.
1003	Japanese Patent Publication No. 2002-211613
1004	Certified English Translation of Japanese Patent Publication No. 2002-211613 (“Nakajima”)
1005	International Publication No. WO 2004/063042
1006	Certified English Translation of International Publication No. WO 2004/063042 (“Ribarits”)
1007	U.S. Patent No. 4,485,963 (“Panicci”)
1008	U.S. Patent No. 6,523,711 (“Hughes”)
1009	Excerpts of the File History of the ’250 Patent
1010	U.S. Patent Application Publication 2005/0029271 (“McDonough”)
1011	CamelBak’s Amended Infringement Contentions for the ’250 patent dated May 5, 2024, in <i>Trove Brands, LLC v. CamelBak Products, LLC, et al.</i> , No. 5:23-cv-04267-PCP
1012	Order Setting Case Schedule in <i>Trove Brands, LLC v. CamelBak Products, LLC, et al.</i> , No. 5:23-cv-04267-PCP
1013	11-25-2025 Deposition Transcript of Michael Jobin in IPR2025-00140
1014	U.S. Patent No. 6,032,831 (“Gardner”)
1015	Second Declaration of Glenn E. Vallee, Ph.D.
1016	U.S. Patent No. 6,305,043 (“Rosnak”)
1017	U.S. Patent Appl. Publ. No. 2017/0208952 (“Simon”)

Exhibit No.	Description
1018	U.S. Patent No. 5,426,990 (“Francart”)
1019	07-10-2025 Deposition Transcript of Michael Jobin in IPR2024-01137
1020	Merriam-Webster Collegiate Dictionary – “on”

I. INTRODUCTION

In its Patent Owner Response (“POR”), CamelBak first seeks to rewrite the challenged claims of the ’250 patent through claim construction and then argues that these claims are patentable over the prior art. CamelBak’s arguments lack merit.

The challenged claims are unpatentable under Grounds 1-3. CamelBak’s arguments concerning the independent claims fail to overcome the compelling evidence of unpatentability. Instead, CamelBak advances novel claim constructions that are inconsistent with both the intrinsic record and extrinsic evidence.

Under Ground 1, CamelBak argues that Nakajima’s mouthpiece is not pivotal about a specific axis, asserting that the mouthpiece does not “maintain a constant distance/radius” from the pivotal mount or “mirror[]” the pivotal mount’s pivotal movements. These arguments improperly read limitations into the claims that are not there. The Board already rejected these arguments at institution and should do so again.

Regarding Grounds 2-3, CamelBak contends that Ribarits’ mouthpiece does not permit a user’s mouth to contact it. But neither the claim language nor a proper claim construction requires this. The mouthpiece is simply the user-facing portion of the fluid outlet—the component that approaches the user’s mouth during drinking. Even under CamelBak’s own construction, Ribarits’ mouthpiece satisfies this limitation because it is positioned such that the user’s lips can contact it while

drinking. CamelBak’s additional arguments that Ribarits’ mouthpiece is not “coupled to” or “disposed on” the pivotal mount likewise fail, as they ignore Ribarits’ express disclosures and rely on rhetorical distinctions that do not reflect how a POSITA would understand these terms in mechanical systems.

The Board should reject CamelBak’s arguments and find the challenged claims unpatentable.

II. CLAIM CONSTRUCTION

A. “mouthpiece”

CamelBak proposes construing “mouthpiece” to be “a part designed for a user to put his or her **mouth on** to draw liquid from the container.” POR, 28 (emphasis added).

As an initial matter, Trove does not dispute the plain meaning encompasses “a part designed for a user to put his or her mouth on to draw liquid from the container.” But there is no basis for requiring that a user’s mouth must contact a particular external surface for the structure to qualify as a “mouthpiece.”

Trove’s expert, Dr. Vallee, confirms that a POSITA would understand “mouthpiece” in the ’250 patent to carry its broad, ordinary meaning. Ex.1015, ¶¶44-50. As Dr. Vallee explains, skilled artisans refer to outlet structures as “mouthpieces” even when a user’s mouth does not engage all exterior surfaces—for example, when surrounding housings, shoulders, or protective rims partially encase

the outlet region. *Id.*, ¶50. A POSITA would identify an outlet-defining component as the “mouthpiece” because it is the component configured to serve as the terminal delivery structure for fluid intake. *Id.*, ¶¶47-49. CamelBak’s own expert, Mr. Jobin, similarly testified that a POSITA would regard a mouthpiece as “a piece that’s inserted into the mouth.” Ex.1013, 27:6-20.

CamelBak does not—and cannot—identify lexicography or disavowal supporting its narrowing construction. POR, 28-31; *see Aug. Tech. Corp. v. Camtek, Ltd.*, 655 F.3d 1278, 1286 (Fed. Cir. 2011) (“Absent a clear disavowal or contrary definition in the specification or the prosecution history, the patentee is entitled to the full scope of its claim language.”); *see also Thorner v. Sony Comput. Ent. Am. LLC*, 669 F.3d 1362, 1366 (Fed. Cir. 2012). As courts have consistently held, “[c]ourts do not rewrite claims; instead, [they] give effect to the terms chosen by the patentee.” *K-2 Corp. v. Salomon S.A.*, 191 F.3d 1356, 1364–65 (Fed. Cir. 1999). Having found no basis for redefinition or disclaimer, CamelBak now seeks to achieve narrowing indirectly—by recasting the “plain meaning,” misreading the specification, and disregarding the extrinsic record.

CamelBak first argues “[t]he plain language of the claims supports [its] construction.” POR, 28. It does not. Independent claim 1 specifies only what the mouthpiece must do: it must “define[] a portion of the fluid conduit, including the dispensing outlet,” and it must be “coupled to the mount outlet of the pivotal mount

for pivotal movement with the pivotal mount relative to the cap assembly base.” Ex.1001, claim 1; *see also id.*, claims 7 and 13 (reciting similar limitations). Nothing in these requirements suggests—let alone compels—that the user’s lips or teeth contact the mouthpiece. Ex.1015, ¶¶44-50. Indeed, CamelBak’s own formulation—deriving “mouthpiece” from its constituent terms “mouth” and “piece” and asserting that it refers to a “piece (or part) that goes *in the mouth*” (POR, 28 (emphasis added))—underscores that the claims do not contain, and do not support, CamelBak’s additional “mouth-on” limitation.

CamelBak next contends that the specification supports its narrowing construction. POR, 29-31. But nothing in the patent states that a “mouthpiece” is limited to the surface being bitten or by direct lip contact. To the contrary, the specification identifies portions of the mouthpiece that come into contact with the mouth: “The sidewalls, or wall structure, 92 of the mouthpiece may be described as including one or more bite regions 112, which refer to opposed regions upon which a user may bite or otherwise apply compressive forces to urge the mouthpiece from its closed configuration to a dispensing configuration.” Ex.1001, 8:27-32; *see also id.*, 9:59-60, 8:58-64; Institution Decision (“ID”), 12 (“the independent claims do not require bite-actuation”). Moreover, the ’250 patent makes clear the mouthpiece includes internal components that do not contact the user’s mouth—for example, an “internal chamber 110 of the mouthpiece.” Ex.1001, 9:36-39; *see also* Ex.1015,

¶¶47-48 (explaining that the '250 patent incorporates Gardner (Ex.1014), which identifies its dispensing face as part of the mouthpiece). Claim construction, however, is not an invitation to “redefine claim recitations or to read limitations into the claims to obviate factual questions of infringement and validity but rather to give meaning to the limitations actually contained in the claims” *Am. Piledriving Equip., Inc. v. Geoquip, Inc.*, 637 F.3d 1324, 1331 (Fed. Cir. 2011); *see also SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1340 (Fed. Cir. 2001) (characterizing importing limitations from the specification into the claims as “one of the cardinal sins of patent law”).

CamelBak’s own cited dictionary, Merriam-Webster, defines “mouthpiece” as “a part (as of an instrument) that goes *in the mouth* or to which the mouth is applied.” *See* POR, 31 (citing Ex.2005) (emphasis added). Nothing in that definition reflects any settled usage limiting “mouthpiece” to a “mouth-on” configuration. If anything, the extrinsic record confirms the opposite: “mouthpiece” is used broadly to describe outlet structures that dispense fluid to a user. *See e.g.*, 1015, ¶¶45-46.

The Board’s preliminary construction at institution also reinforces that “mouthpiece” should not be narrowed as CamelBak proposes. ID, 12. In adopting the Merriam-Webster definition—“a part...that goes in the mouth or to which the mouth is applied”—the Board appropriately recognized the term’s ordinary, broader

meaning, which encompasses components configured for use at the drinking interface and not only a “mouth-on” configuration. *Id.*

B. “two joints that define a pivotal axis for pivotal movement of the pivotal mount”

CamelBak urges that “pivotal movement” in this phrase be limited to “rotational motion” that “*requires a rigid body that maintains a constant distance/radius to the axis of rotation*” such that it moves in a circular path about the axis.” *Id.* (emphasis added).

As an initial matter, Trove does not dispute that “pivotal movement” can encompass “rotational motion.” But nothing in the claims—or anywhere else—requires pivotal movement to be a rigid body tracing a constant-radius arc around a single, fixed axis. Ex.1015, ¶¶7-14, 18.

Dr. Vallee confirms that a POSITA would understand “pivotal movement,” in the context of the ’250 patent, to refer broadly to motion produced by a hinge or pivot joint. *Id.*, ¶8 (citing Exs.2007-2011). The independent claims recite “two joints [that]...define a pivotal axis for pivotal movement of the pivotal mount relative to the cap assembly base,” and require only that the mouthpiece participate in that pivot-driven motion by being coupled to the pivotal mount. Ex.1001, claims 1, 7, 13. Nothing in these recitations requires the mouthpiece to maintain a constant radius or behave as a rigid body. As Dr. Vallee explains, real-world mechanical linkages often involve multiple joints or compound linkages, where distal

components undergo local rotations that differ from those at a proximal joint, yet still participate in the overall pivot-driven displacement about that proximal joint. *Id.*, ¶¶8-11 (including discussion of compound-linkage examples in Exs.1016-1018); *see also* Ex.1013, 101:11-15; Ex.2018, 63:5-64:18 (describing a device whose rotation radius varies during its motion). Accordingly, a POSITA would understand “for pivotal movement with the pivotal mount” to mean that the mouthpiece participates in the pivot-driven movement of the pivotal mount relative to the cap assembly base—not that it must exhibit any particular local rotational behavior about another joint or axis. Ex.1015, ¶12.

CamelBak itself concedes that no clear and unmistakable disclaimer exists here. POR, 49-50. Thus, absent lexicography or disavowal, CamelBak “is entitled to the full scope of its claim language.” *Aug. Tech.*, 655 F.3d at 1286; *see also Thorner*, 669 F.3d at 1366-67.

Having found no basis for redefinition or disclaimer, CamelBak now seeks to narrow the limitation to rigid-body, single-axis behavior based solely on what it characterizes as “basic principles of physics.” POR, 35. But importing idealized physics concepts is improper where—as here—nothing in the patent, claims, or understanding of a POSITA requires the mouthpiece to behave as a rigid body

tracing a constant-radius arc.¹ Ex.1015, ¶¶12-14; *see also* Ex.1019, 22:20-23:6 (Mr. Jobin explaining “a resilient mouthpiece that’s designed to compress is very distinct from a structure which is made from a rigid material that is designed to resist deformation”). Dr. Vallee confirms that a POSITA would not impose such rigid-body assumptions; instead, a POSITA would understand “pivotal movement” in the ’250 patent to refer to pivot-driven motion, which in real mechanical systems routinely include compound linkages and local rotations. Ex.1015, ¶8.

CamelBak’s specification and plain-language arguments regarding this limitation amount to the unremarkable observation that “pivotal” or “pivot” may involve rotation. *See* POR, 32-35. But none suggests—let alone requires—the far more restrictive constant-radius rotational behavior. The specification itself explains that its hinge projections “function as rotatable supports[] or axles,” enabling the pivotal mount and “any attached mouthpiece” to pivot relative to the cap assembly base. *See* Ex.1001, 16:54-60.

Courts consistently warn that claim construction cannot be used to rewrite claims by “redefin[ing] claim recitations” to avoid prior art. *Am. Piledriving Equip.*,

¹ To the extent CamelBak relies on the embodiment of Figure 5 for its proposed narrowing (POR, 36), Mr. Jobin confirmed that this embodiment is outside the scope of the claims (Ex.1013, 52:8-53:15).

637 F.3d at 1331; *see also K-2 Corp.*, 191 F.3d at 1364-65 (“Courts do not rewrite claims; instead, [they] give effect to the terms chosen by the patentee.”).

C. “a mouthpiece [coupled to the mount outlet of]/[disposed on] the pivotal mount for pivotal movement with the pivotal mount”

CamelBak urges that this phrase be construed as “a mouthpiece [coupled to the mount outlet of]/[disposed on] the pivotal mount that moves with rotational motion about the same axis of rotation defined by the two joints as the pivotal mount in the same direction as the pivotal mount such that a constant distance/radius from the mouthpiece to the axis is maintained.” POR, 38. CamelBak further asserts that “the mouthpiece must engage in rotational motion in the same direction as (***not away from***) the pivotal mount” and must “***mirror[]*** the pivotal movement of the pivotal mount.” *Id.*, 40-42 (emphasis added).

As an initial matter, Trove does not dispute that the phrase encompasses the mouthpiece and pivotal mount engaging in “rotational motion about the same axis of rotation...in the same direction.” But nothing in the claims—or anywhere else—requires that the mouthpiece “mirror[]” the pivotal mount’s pivotal movement or that it “not [be] away from” that movement. Ex.1015, ¶¶12-18.

Dr. Vallee explains that a POSITA would understand “coupled to the mount outlet of the pivotal mount for pivotal movement with the pivotal mount”² to address whether the mouthpiece participates in the pivotal mount’s hinge-driven motion relative to the cap assembly base. *Id.*, ¶18. In his view, the claim language describes the pivotal mount’s linkage and motion and then specifies that the mouthpiece is coupled so that, when the pivotal mount pivots relative to the cap assembly base, the mouthpiece moves with that pivot-driven movement. *Id.*, ¶¶12, 17-18; *see also* Ex.1013, 35:15-36:15 (Mr. Jobin explaining “with” requires that the mouthpiece must “accompan[y]” the pivotal mount). The term “with” in this context is understood in its ordinary, engineering sense, not as a requirement that the mouthpiece rotate in precisely the same local direction about every axis as the pivotal mount. Ex.1015, ¶¶12-13, 17-18.

Dr. Vallee further explains that compound-linkage mechanisms commonly present situations in which a distal component undergoes local rotation about its own axis—including rotation in a direction opposite the hinge-driven rotation—while still moving “with” the pivoting structure in terms of overall displacement. *Id.*, ¶¶15-16, 8-13 (including discussion of compound-linkage examples in Exs.1016-1018).

² The same analysis applies to the parallel phrase “disposed on the pivotal mount for pivotal movement with the pivotal mount.”

CamelBak’s own expert, Mr. Jobin, acknowledged that, in a hypothetical scenario where an object is constrained to move in a circular path about one axis, the object could also rotate about its own center of mass at the same time (Ex.1013, 108:22-109:8), indicating that such concurrent motions are possible.

CamelBak concedes that no clear and unmistakable disclaimer exists here. POR, 49-50. Absent lexicography or disavowal, CamelBak “is entitled to the full scope of its claim language,” *Aug. Tech.*, 655 F.3d at 1286; *see also Thorner*, 669 F.3d at 1366-67. Having found no basis for redefinition or disclaimer, CamelBak now seeks to accomplish narrowing by misinterpreting the claim language, disregarding portions of the extrinsic record, attempting to import embodiments from the specification, and relying on uninformative prosecution statements.

CamelBak first argues that the claim language supports its narrowing (POR, 40), but the fact that the claims identify the one pivotal axis does not mean that all local motion of the mouthpiece must occur about that same axis—much less in the same direction. Ex.1015, ¶13. Identifying a single pivotal axis establishes the axis that drives the pivotal mount’s hinge-based motion; it does not limit the local movements of components carried by that pivotal mount. *Id.*, ¶13. And CamelBak itself acknowledges that “[n]o other pivotal axis for pivotal movement is described in the claims.” *See* POR, 40.

CamelBak next argues that its proposed construction is “further supported by the dictionary definition of ‘with.’” POR, 40. But CamelBak selectively quotes a single definition stating that “with” can mean “in the direction of” and “to indicate a participant in an action, transaction, or arrangement.” POR, 40 (citing Ex.2017). Nothing in that definition requires mirrored motion, nor does it exclude movement that includes some local component not strictly “in the direction of.” Indeed, the additional dictionary definitions CamelBak submitted—but chose not to rely on—reflect a broader understanding of “with,” including its use as “a function word to indicate a participant in an action, transaction, or arrangement” or “a function word to indicate combination, accompaniment, presence, or addition.” See Ex.2017.

CamelBak also contends that “‘250 [patent’s] specification further supports [its] proposed construction.” POR, 42. This argument fails as a matter of law. Claim construction is not an exercise to “redefine claim recitations or to read limitations into the claims to obviate factual questions of infringement and validity but rather to give meaning to the limitations actually contained in the claims....” *Am. Piledriving*, 637 F.3d at 1331. Moreover, “although the specification often describes very specific embodiments of the invention, [courts] have repeatedly warned against confining the claims to those embodiments.” See *Sisvel Int’l v. Sierra Wireless, Inc.*, 81 F.4th 1231, 1236 (Fed. Cir. 2023) (quoting *Phillips v. AWH Corp.*, 415 F.3d 1303, 1323 (Fed. Cir. 2005)). Consistent with this principle, the

'250 patent even expressly provides that its disclosed embodiments “are not to be considered in a limiting sense as numerous variations are possible.” Ex.1001, 18:42-46.

CamelBak’s reliance on annotations and statements made during the ’255 patent reexamination (POR, 44-50) likewise does not support its narrowing construction. *See* Ex.1015, ¶14. The ’250 patent is a continuation of the ’255 patent, and yet when the applicant addressed the same prior art (McDonough) during prosecution of the ’250 patent, the applicant never argued that “pivotal movement” required rigid-body rotation, a constant radius, “mirror[ing]” the pivotal mount’s pivotal movement, or any “not away from” directional constraint. Instead, the applicant distinguished McDonough because it lacked a mouthpiece coupled to the pivotal mount’s mount outlet.³ Ex.1009, 22-25. If CamelBak were correct that the ’255 patent’s prosecution statements imposed the additional requirements it now asserts, those requirements would have been raised during the ’250 patent’s

³ In the ’255 patent reexamination, the applicant distinguished McDonough because its dispensing element is not coupled to the pivotal mount and therefore would not pivot. *See* Ex.2002, 634-639; Ex.1015, ¶14. The applicant consistently relied on that structural deficiency. Ex.1015, ¶14.

prosecution. Their absence confirms that no such requirements was understood to govern the claim language.

The Board's Institution Decision observed that the patentee's statements in the '255 patent reexamination reflected multiple, alternative arguments, making it "difficult to draw definitive conclusions from this prosecution history because Patent Owner does not argue for a prosecution history disclaimer." ID, 15. Even were one to credit those statements, they merely repeat claim language while annotating prior-art figures; they do not impose nor demand CamelBak's proposed narrowing.

CamelBak also contends that its prosecution statements "inform" the meaning of the phrase even if they do not amount to an unmistakable disavowal, relying on *L'Oréal* for that proposition. POR, 49 (quoting *Univ. of Massachusetts v. L'Oréal S.A.*, 36 F.4th 1374, 1379 (Fed. Cir. 2022)) (emphasis removed); *see also id.*, 51. But *L'Oréal* is inapposite. There, the court declined to apply the traditional disavowal analysis only because the claim language at issue was ambiguous. *L'Oréal S.A.*, 36 F.4th at 1383 (explaining that "[w]e need not decide whether [the disavowal] standard is met here[b]ecause the meaning of the relevant claim language is not plain, but rather ambiguous"). CamelBak does not argue that any term is ambiguous here.

CamelBak's other authorities (POR, 49, 51-52) likewise underscore that only unequivocal and unmistakable statements in the prosecution history can compel a

narrowing construction. *See Fenner Investments, Ltd. v. Cellco Partnership*, 778 F.3d 1320, 1325 (Fed. Cir. 2015) (upholding a narrow construction where the patentee expressly distinguished and excluded device-centric PINS during prosecution); *CVI/Beta Ventures, Inc. v. Tura LP*, 112 F.3d 1146, 1159 (finding that a prosecution distinction “could hardly be clearer” and therefore compelled a narrow construction of “elasticity”); *Gentry Gallery, Inc. v. Berkline Corp.*, 134 F.3d 1473, 1477 (Fed. Cir. 1998) (holding that the patentee’s explanatory distinction “unambiguously indicates” that “consoles” do not include tray tables). CamelBak has identified no such unequivocal statements here.

III. GROUND 1: NAKAJIMA IN VIEW OF THE KNOWLEDGE OF A POSITA RENDERS CLAIMS 1-2 AND 4-6 OBVIOUS

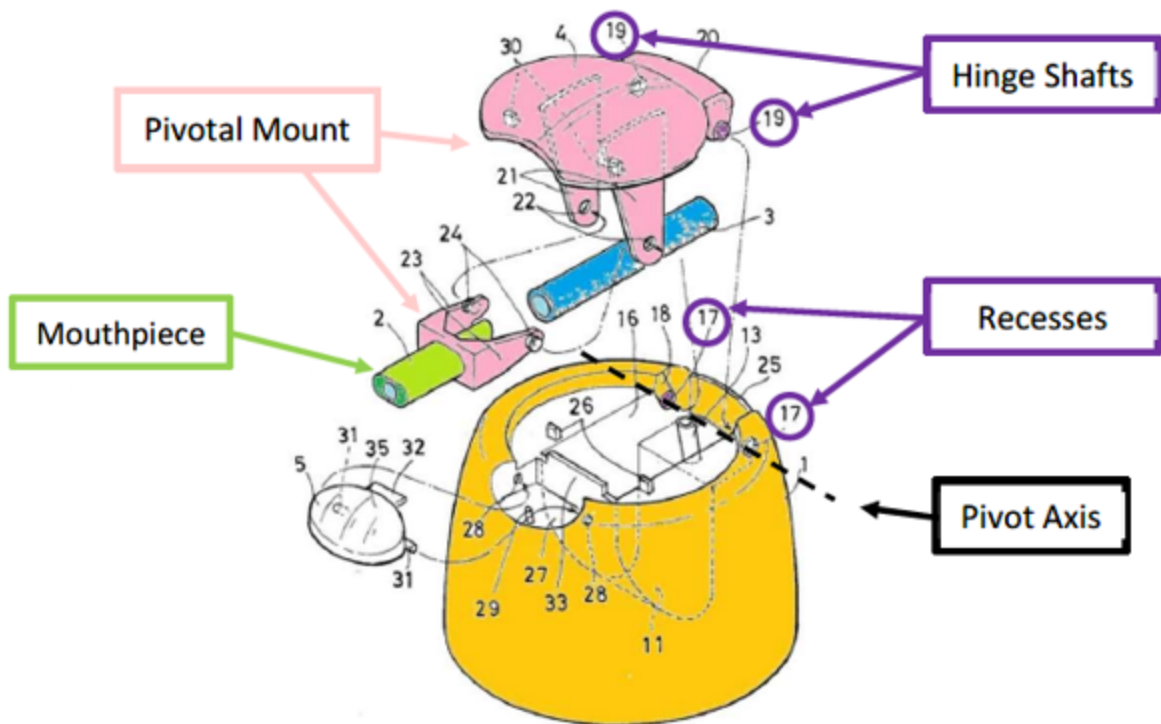
CamelBak does not dispute that Ground 1 renders claim 1 unpatentable with respect to all limitations except those related to the mouthpiece. POR, ii-iii. Specifically, CamelBak asserts that Nakajima’s mouthpiece does not: “i) move with rotational motion about the same axis of rotation as the pivotal mount because it does not maintain a constant distance/radius to that alleged axis (hinge shaft 19), nor does it ii) move with rotational motion in the same direction as the pivotal mount.” *Id.*, 56.

The Board should reject CamelBak’s arguments, as it did at institution (ID, 22-29), and find claim 1 and its challenged dependents unpatentable for the reasons set forth in the Petition (Pet., 16-38).

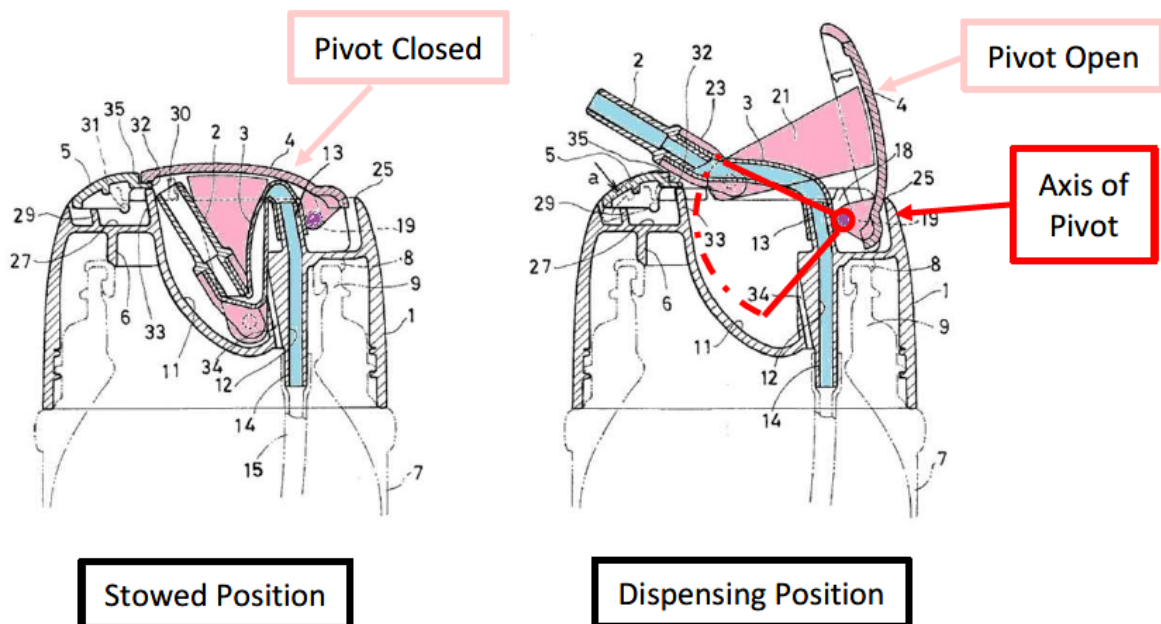
A. Claim 1

CamelBak argues that Nakajima does not disclose the claimed mouthpiece based on novel constructions requiring the mouthpiece to be “a rigid structural component that maintains [its] shape sufficiently to allow it to be deemed a ‘rigid body’ such that the definition of rotational motion from physics applies,” and to “move[] with rotational motion about the same axis of rotation defined by the two joints as the pivotal mount in the same direction as the pivotal mount such that a constant distance/radius from the mouthpiece to the axis is maintained.” POR, 32, 53. But as discussed, CamelBak’s proposed constructions are inconsistent with the claim language’s plain and ordinary meaning and find no support in the intrinsic and extrinsic record. *Supra* §§II.B-C.

As explained in the Petition, Nakajima discloses its mouthpiece is pivotal about the axis defined by a pair of projections. Pet., 21-26. The mouthpiece (green) is coupled to a pivotal mount (pink), which includes (i) lid 4 with leg pieces 21, and (ii) mouthpiece bracket arms 23. *Id.*, 21. Lid 4 incorporate hinge shafts 19 that project laterally and define a pivot axis. *Id.*, 22.



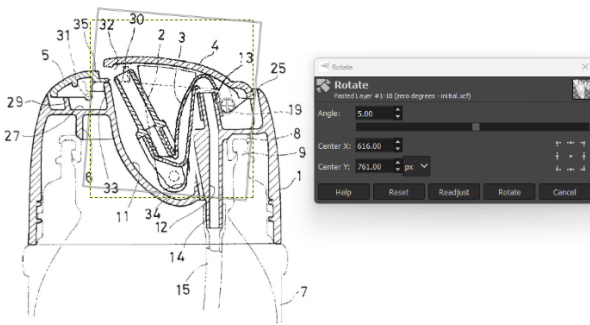
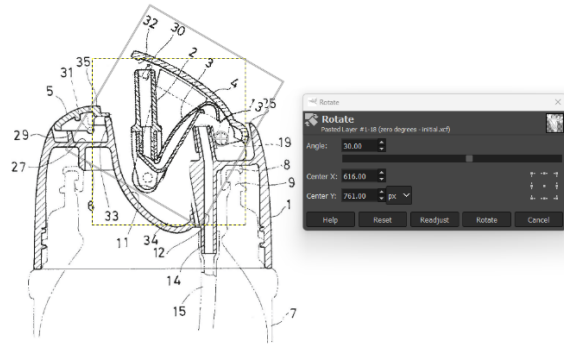
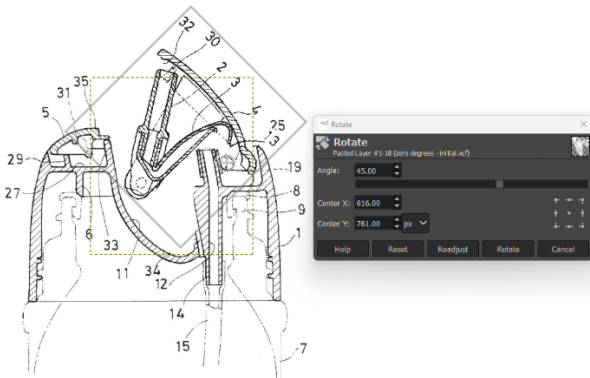
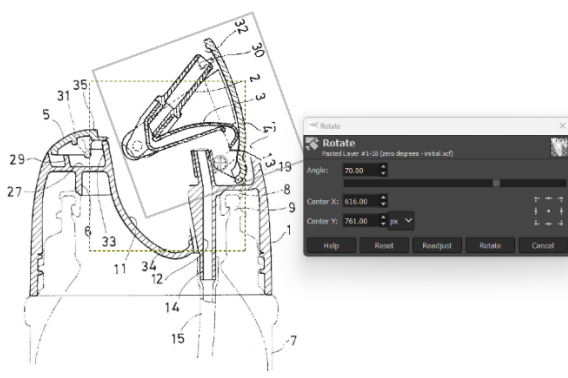
Id., 21-22 (annotating Ex.1003, Fig.1). Because of the “[mouthpiece’s] engagement with the pivotal mount,” the mouthpiece pivots about the pivot axis as the lid 4 opens and closes. *Id.*, 25-26 (citing Ex.1003, ¶81; Ex.1004, [0003], Figs.2-3).



Id., 26 (annotating Ex.1003, Figs.2-3).

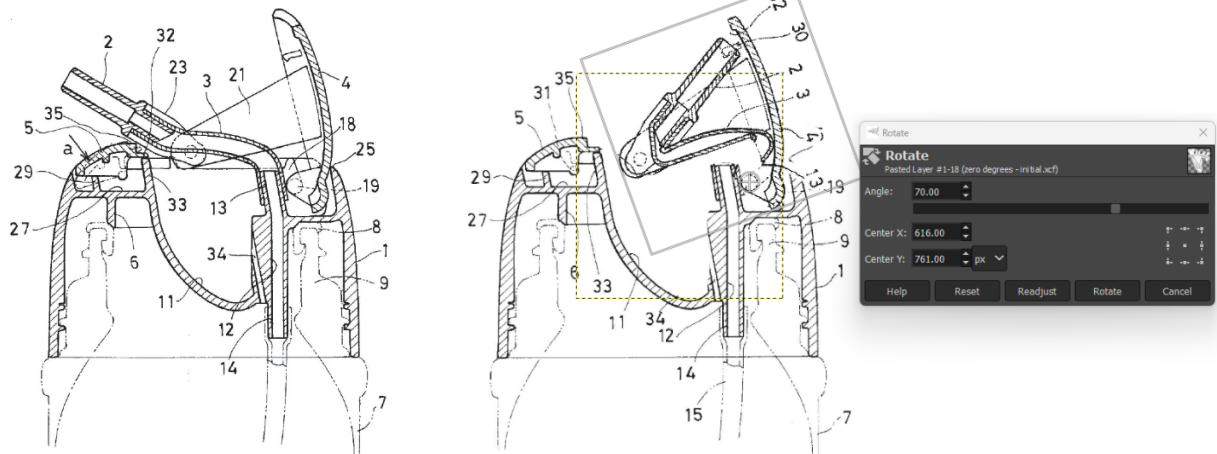
CamelBak argues that Nakajima's mouthpiece does not "move with rotational motion about the same axis of rotation defined by the two joints as the pivotal mount." POR, 56. But that assertion rests on Mr. Jobin's incorrect understanding of how Nakajima's mouthpiece moves. *See id.*, 57-58 (citing Ex.2016, ¶¶106-107). Specifically, Mr. Jobin contends the mouthpiece's movement is "not rotational movement about the hinge shaft 19." Ex.2016, ¶116. But Dr. Vallee confirms that this interpretation is flawed because it overlooks that Nakajima's mouthpiece undergoes compound motion with two rotational components. Ex.1015, ¶¶19-41.

Dr. Vallee first analyzes Nakajima's Figure 2 by isolating the lid, pivotal mount, and mouthpiece as an assembly and then applying rotation about hinge shafts 19 as the primary axis. Ex.1015, ¶22; *see also* Ex.1013, 73:11-75:2. Using image-manipulation tools, he rotates this assembly clockwise through a series of angles (1° to 70°) about hinge shafts 19. Ex.1015, ¶¶23-30.

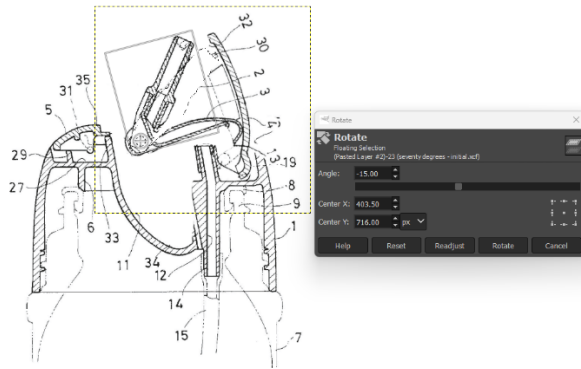
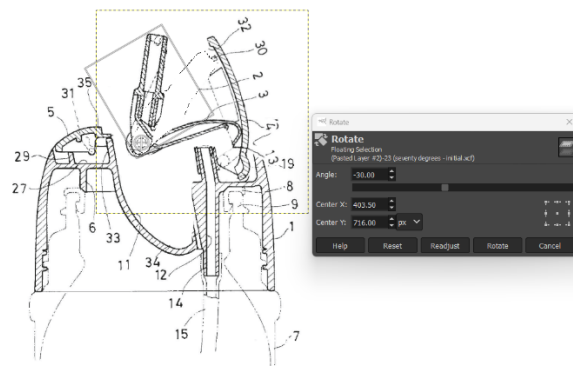
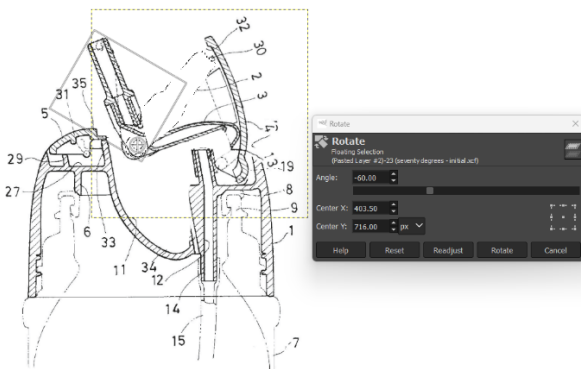
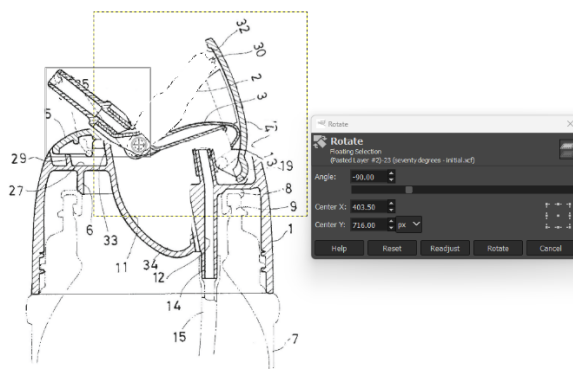
**5°-clockwise-rotation****30°-clockwise-rotation****45°-clockwise-rotation****70°-clockwise-rotation**

Id. Dr. Vallee next compares the 70°-clockwise-rotated configuration to Nakajima's dispensing illustration in Figure 3 and observes that the 70°-clockwise-rotated configuration closely matches the lid-position shown in Figure 3:

[Fig. 3]

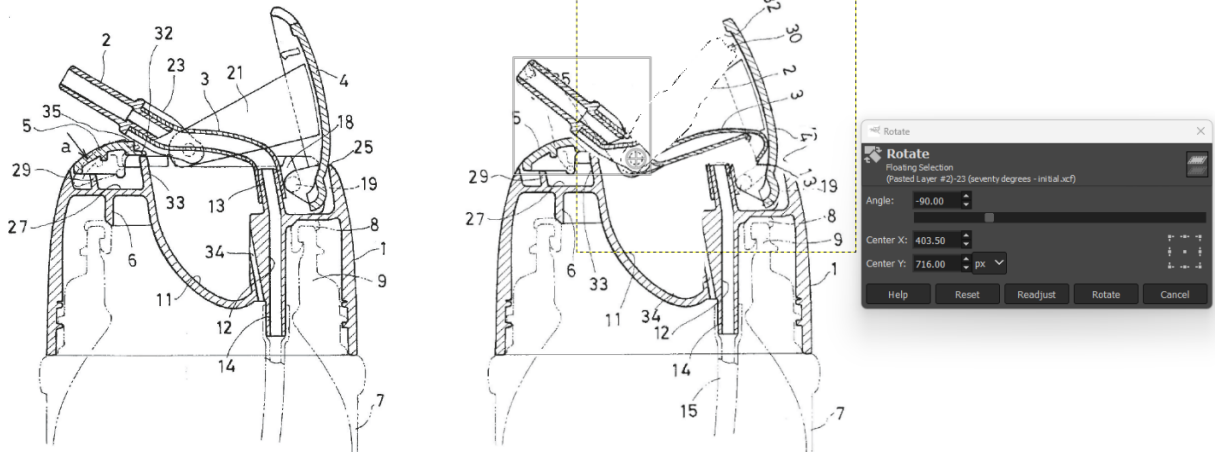
**Nakajima Fig. 3****70°-clockwise-rotation**

Id., ¶30. Dr. Valee then isolates the mouthpiece and arms 23 in the 70°-clockwise-rotated configuration and applies rotation about the secondary axis, corresponding to rotation of the arms 23 within holes 22. *Id.*, ¶31; *see also* Ex.1013, 78:11-79:11. He next rotates the mouthpiece counterclockwise through a series of angles (5° to 90°) about this secondary axis. Ex.1015, ¶¶32-38.

**15°-counterclockwise-rotation****30°-counterclockwise-rotation****60°-counterclockwise-rotation****90°-counterclockwise-rotation**

Id. Dr. Vallee then compares the final resulting configuration to Nakajima's dispensing illustration in Figure 3 and observes that it closely matches the lid-position and mouthpiece-position shown:

[Fig. 3]

**Nakajima Fig. 3****Final Resulting Configuration**

Id., ¶38.

Dr. Vallee’s analysis demonstrates that Nakajima’s mouthpiece rotates about hinge shafts 19 together with the pivotal mount (e.g., approximately 70° clockwise), which is precisely the rotational relationship encompassed by the claim. *Id.*, ¶¶40-42. Although Nakajima’s mouthpiece also undergoes a secondary local rotation as it is carried by the pivot mount, that secondary rotation does not negate the mouthpiece’s participation in rotation about the hinge shafts 19, as Dr. Vallee explains. *Id.*, ¶41. This conclusion is consistent with the Board’s sun-earth-moon analogy (ID, 27 n.11), which illustrates that secondary rotations do not defeat participation in a primary pivoting motion.

CamelBak also argues that “a POSITA would have understood that [Nakajima’s] mouthpiece is merely engaged in translational upward and downward motion relative to the hinge shafts 19.” POR, 58. But this contention is incorrect

for the reasons explained in the preceding paragraph. Moreover, the argument rests on CamelBak's and Mr. Jobin's misreading of Nakajima's statement that "[t]he mouthpiece moves up and down in conjunction with the opening and closing of the lid." POR, 58; Ex.2016, ¶¶94, 99; *see also* POR, 45, 47, 57. As Dr. Vallee explains, "[that] text is a non-technical description of the lid 4's general opening and closing motion, not a technical statement that the mouthpiece undergoes pure linear translation." Ex.1015, ¶20. Dr. Vallee confirms that "[a] POSITA reviewing Nakajima's description and figures together would understand the mouthpiece to follow an arcuate path as the lid 4 opens and closes, not a straight-line translation relative to the cap assembly base." *Id.*

CamelBak further contends that Nakajima's mouthpiece "**never** rotates in the same direction as the pivotal mount." POR, 62 (citing Ex.2016, ¶112). But Dr. Vallee demonstrates that the mouthpiece and pivotal mount rotate together clockwise about hinge shafts 19 throughout the opening motion. Ex.1015, ¶¶21-41. He further explains that the same-direction rotation is most pronounced at the early stages of opening, when the mouthpiece is "a near-rigid extension of the lid 4" and its motion is governed predominantly by rotation about hinge shafts 19. *Id.*, ¶25.

Even under CamelBak's narrow constructions, Nakajima's mouthpiece satisfies the claim limitations. Dr. Vallee explains that during the initial opening of Nakajima's lid 4, the mouthpiece behaves as "a near-rigid extension of the lid 4,"

with its motion governed predominantly by rotation about hinge shafts 19. *Id.*, ¶43. For small initial rotations, the resulting motion closely follows a circular arc centered on hinge shafts 19. *Id.*, ¶25. Dr. Vallee states that, “[t]o a POSITA, the path over this initial portion of the motion would be understood as constant-radius pivotal movements about the primary pivotal axis, even if a small amount of secondary-axis rotation were present.” *Id.*; *see also* Ex.2018, 64:4-7. This evidence confirms that Nakajima’s mouthpiece rotates with the pivotal mount about the same axis in the same direction, and along a constant-radius path—satisfying even the rigid-body, mirroring requirement CamelBak attempts to import.

B. Claims 2 and 4-6

CamelBak provides no additional arguments regarding these dependent claims, instead relying on its independent claim arguments. POR, 72-73. These arguments fail for the reasons described. *Supra* §III.A. CamelBak has waived all other challenges. *See Parus Holdings, Inc. v. Google LLC*, 70 F.4th 1365, 1373 (Fed. Cir. 2023) (arguments not raised in POR are deemed waived).

IV. GROUNDS 2-3: RIBARITS-BASED COMBINATIONS RENDER CLAIMS 1-18 OBVIOUS

A. Claims 1, 7, and 13

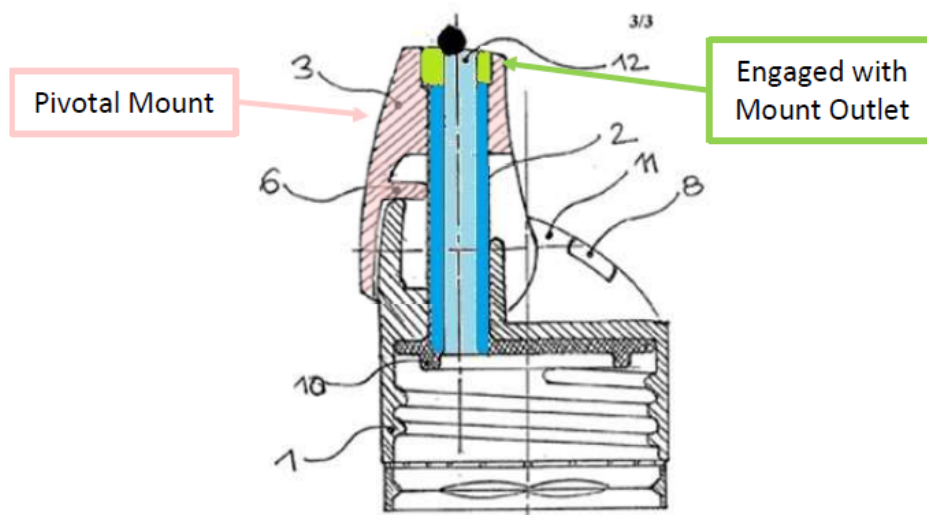
CamelBak does not dispute that Grounds 2-3 render independent claims 1, 7, and 13 unpatentable with respect to all limitations except those related to the mouthpiece. POR, iii. Specifically, CamelBak argues that: (i) “the structure in

Ribarits that allegedly defines the ‘dispensing outlet’ is not a ‘mouthpiece,’” and (ii) “Ribarits’s alleged ‘mouthpiece’ is neither ‘coupled to the mount outlet’ nor ‘disposed on the pivotal mount.’” *Id.*, 73.

1. Ribarits Discloses the Claimed “Mouthpiece”

CamelBak argues that Ribarits does not disclose this limitation because, under its proposed construction, the “mouthpiece” must be “a part designed for a user to put his or her **mouth on** to draw liquid from the container.” POR, 73-74 (emphasis added). CamelBak asserts that Ribarits’ “alleged ‘mouthpiece’...is entirely surrounded by Ribarits’s drinking spout 3 and does not extend beyond it, which prevents the user from putting their mouth on it.” *Id.*, 75-76.

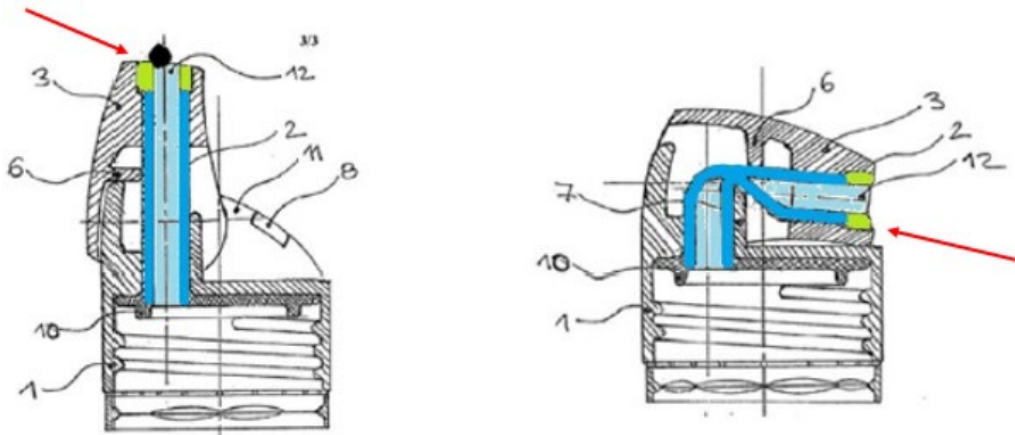
CamelBak’s arguments rest on an incorrect claim construction for the reasons discussed. *Supra* §II.A. Once the proper claim construction is applied, there is no dispute that Ribarits discloses this limitation. Indeed, CamelBak concedes that, in Ribarits’ design, “a user would put his or her mouth on the drinking spout 3” (POR, 76), which confirms that the end portion of Ribarits’ tubular element 2 enters the user’s mouth (Ex.1015, ¶53). *See also* Ex.1019, 34:23-35:8 (Mr. Jobin acknowledging Ribarits’ “drinking spout is engaged by both the teeth and the lips”).



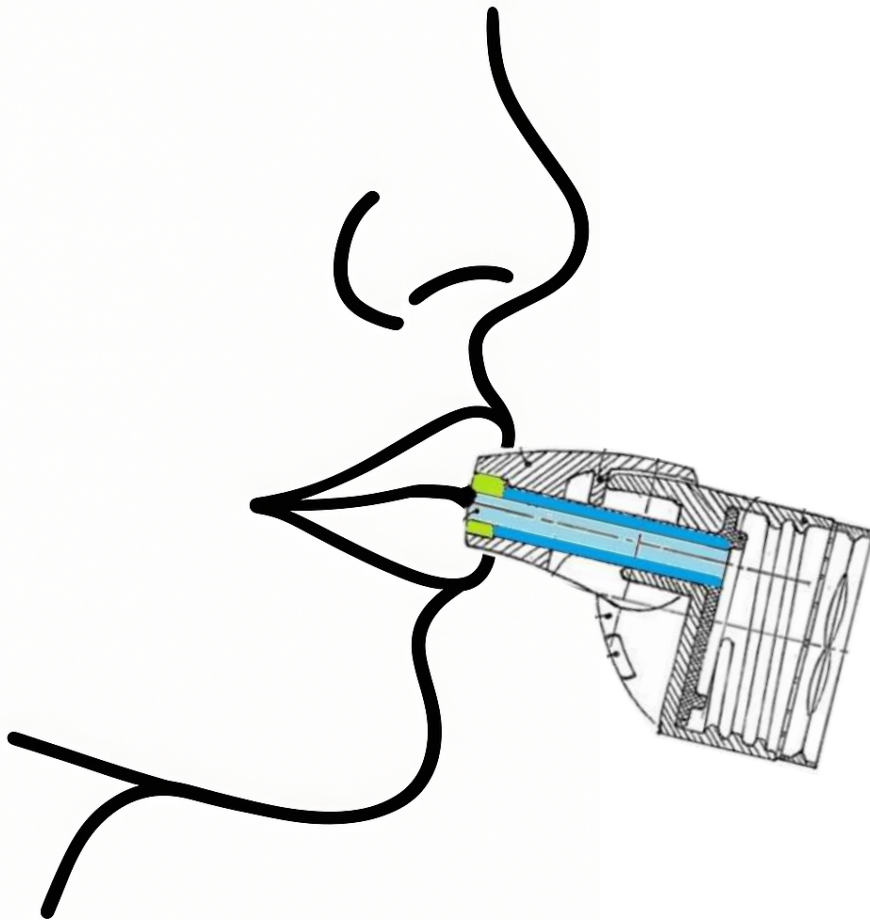
Pet., 47 (annotating Ex.1006, Fig.3). Dr. Vallee explains why a POSITA would understand the end portion (above in green) of Ribarits’ tubular element 2 to be a “mouthpiece” under the plain and ordinary meaning. Ex.1015, ¶¶51-53; *see also* Ex.1002, ¶¶124-129. This element forms the user-facing, dispensing outlet of the fluid path and is the structure that approaches the user’s mouth when used as intended. Ex.1015, ¶52. The Board should reject CamelBak’s arguments on this basis alone.

Even if CamelBak’s proposed construction were accepted, its arguments would still fail. Ex.1015, ¶54. CamelBak’s position rests on the flawed premise that Ribarits’ mouthpiece “([s]hown below in green) is **entirely surrounded** by Ribarits’s drinking spout 3..., which **prevents** the user from putting their mouth on it.” POR, 75-76 (emphasis added) (color removed); *see also* Ex.2016, ¶128 (Mr. Jobin asserting “[t]his portion of the tube element is **completely surrounded** by a different

component—the drinking spout 3—meaning it is ***inaccessible*** to the user’s mouth”) (emphasis added).



POR, 26 (annotating Ex.1006, Figs.1, 3). But as these figures show, the green-highlighted portion of tubular element 2 is not “surrounded” on the side from which the user drinks. Ex.1015, ¶54. That side of the mouthpiece is exposed. *Id.* This is significant because, during normal use, a user would position lips against this exposed side to drink (whether by pouring, sucking, or otherwise), as illustrated below. *Id.*

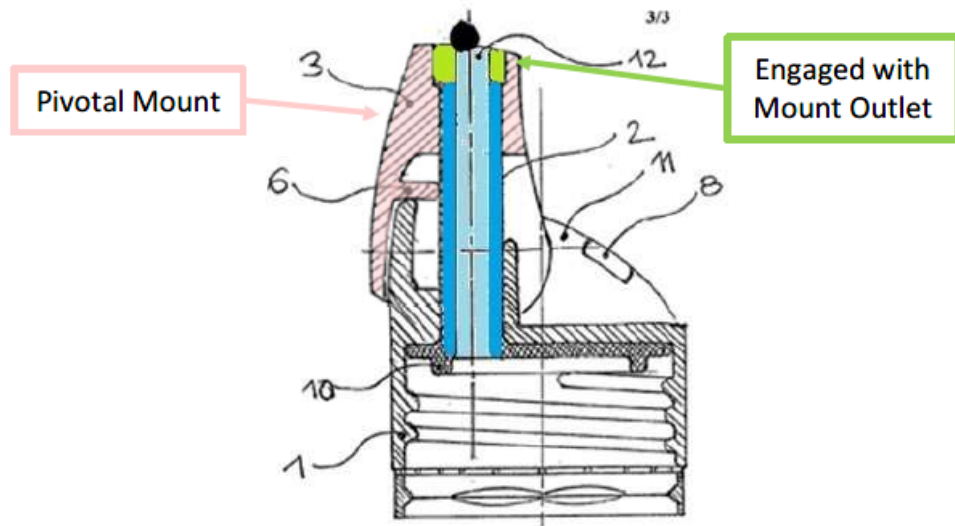


Id.

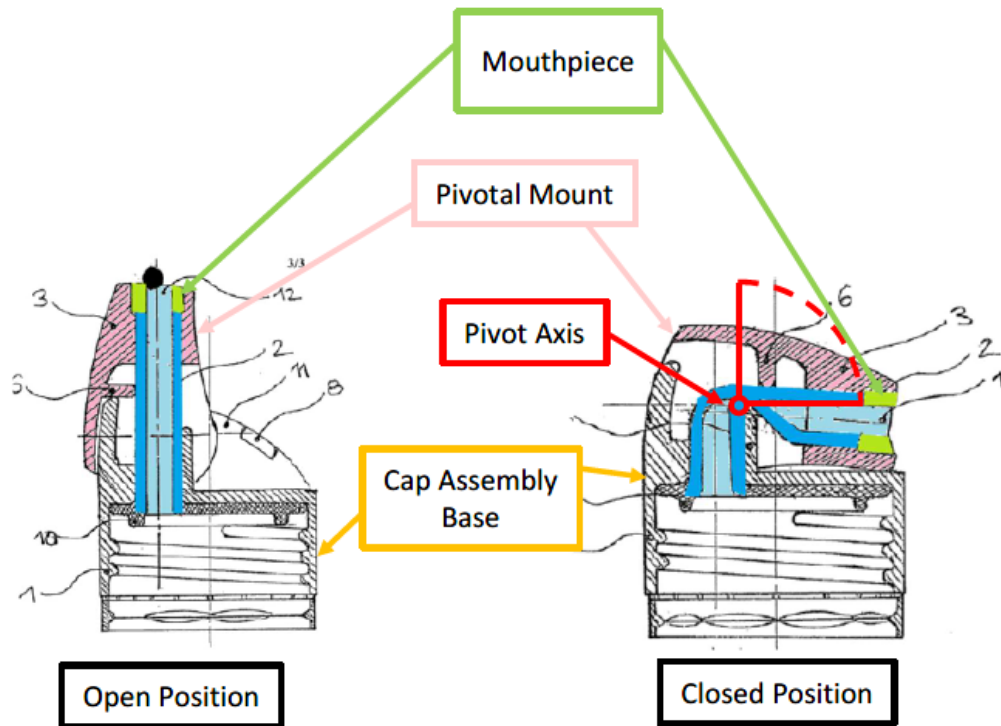
2. Ribarits Discloses the Claimed Relationships Between the Mouthpiece and Pivotal Mount

CamelBak asserts regarding claim 1 that “[t]he Petition contends, with no support whatsoever, that the green mouthpiece portion of tubular element 2 ‘couples with the mount outlet to hold the tubular element in place.’” POR, 77. But the Petition identifies where this disclosure appears, explaining “Ribarits’ tubular element is inserted through the cap assembly base and the mouthpiece portion couples with the mount outlet to hold the tubular element in place.” Pet., 46-47

(citing Ex.1006, 2, Figs. 2-3). The Petition reproduces and annotates Ribarits' Figure 3 to show this engagement, identifying the pivotal mount, mouthpiece, and the region of coupling to the mount outlet:



Id., 47 (annotating Ex.1006, Fig.3). The Petition further explains and illustrates that this coupling causes the mouthpiece and pivotal mount to move pivotally together:



Id. (annotating Ex.1006, Figs.2-3). The Petition also cites Dr. Vallee’s analysis describing Ribarits’ mouthpiece as “connected to and pivot[ing]” with the pivotal mount and explaining that “the wider tip of the sealed tubular element couples to the inside of the spout to maintain the tubular element in place as the spout is pivoted opened or closed.” *Id.*, 46 (citing Ex.1002, ¶¶125-127).

CamelBak further contends that “Ribarits does not describe any friction or other means at the points of contact between the alleged mouthpiece and mount outlet that holds it in place at those points of contact.” POR, 78. But that criticism ignores Ribarits’ express disclosure in claim 7, which states that “in the drinking spout (3), a broadening of the outlet opening (12) enables a snapping of the sealed tubular element (2).” Ex.1006, claim 7. As Dr. Vallee explains, a POSITA would

understand this disclosed “snapping” to describe a conventional snap-fit connection—i.e., a securing mechanism that provides frictional retention at the interface between the tubular element 2 and the broadening of the outlet opening 12, as illustrated by the engagement geometry in Ribarits’ Figure 3. Ex.1015, ¶55.

CamelBak next argues that Trove “provides no separate explanation” for how Ribarits satisfies the “disposed on” requirement of claims 7 and 13 apart from satisfying the “coupled to the mount outlet of the pivotal mount” limitation of claim 1. POR, 78. As the Petition indicates, the claim terms “coupled to” and “disposed on” describe the same underlying physical relationship from two complementary perspectives: the mouthpiece is connected to—and positioned on—the mount outlet in a manner that allows it to move pivotally with the pivotal mount. Pet., 60-62. Under the plain meaning of the terms, considering the intrinsic record, once that structural relationship is shown, both limitations are satisfied. Ex.1002, ¶¶176, 191, 125-127; Ex.1015, ¶¶56-57.

Indeed, nothing in the intrinsic record supports CamelBak’s attempt to impose separate, additional requirements for “disposed on.” *Id.*, ¶56. The ’250 patent’s specification never uses “disposed on” to describe engagement between the mouthpiece and pivotal mount—much less to distinguish between “coupled to” and “disposed on” or assign them different technical meanings. *See generally* Ex.1001. That “disposed on” appeared only when the ’250 patent’s continuation claims were

drafted reinforces that it carries its ordinary, straightforward meaning. Nor does CamelBak's reliance on instances of "attached on" in the specification advance its argument (POR, 79-80); those passages describe example embodiments and do not define "disposed on" or "attached to" to require an "attached on" configuration or to exclude arrangements where a mouthpiece is partially within the pivotal mount.

CamelBak further asserts that Ribarits' "tubular element (2) is disposed *in not on* the drinking spout (3)." POR, 79. But this assertion finds no support in the intrinsic record, particularly where "disposed on" is never even used in the specification. CamelBak's rhetorical distinction lacks any basis and is divorced from how a POSITA would understand component placement in mechanical systems. Ex.1015, ¶57. As Dr. Vallee explains, skilled artisans describe a component as "disposed on" a supporting structure when that structure provides the functional mounting interface—even if part of the components lies within a bore, recess, or opening of that structure, or when the structure itself contains such a bore, recess, or opening that serves as a mounting structure. *Id.*; *see also* Ex.1020, 3. Here, Ribarits' mouthpiece is supported by, snap-fit into, and presented at the outlet of drinking spout 3, and a POSITA would therefore regard it as disposed on the mount outlet of the drinking spout 3. Ex.1015, ¶56.

B. Claims 2-6, 8-12, and 14-18

CamelBak provides no additional arguments regarding these dependent claims, instead relying on its independent claim arguments. POR, 81-82. These arguments fail for the reasons described. *Supra* §IV.A. CamelBak has waived all other challenges. *See Parus Holdings*, 70 F.4th at 1373.

Dated: December 9, 2025

By: / Zachary B. Messick /

Zachary B. Messick (Reg. No. 77,839)

Counsel for Petitioner

Trove Brands, LLC

CERTIFICATE OF COMPLIANCE

Pursuant to 37 C.F.R. § 42.24(d), the undersigned certifies that this **PETITIONER’S REPLY IN SUPPORT OF PETITION FOR INTER PARTES REVIEW OF U.S. PATENT NO. 11,851,250** contains 5,586 words according to the word-processing program used to prepare this paper. The foregoing word count complies with the 5,600-word type-volume limit specified by 37 C.F.R. § 42.24(c)(1).

Dated: December 9, 2025

By: / Zachary B. Messick /
Zachary B. Messick (Reg. No. 77,839)
Counsel for Petitioner
Trove Brands, LLC

CERTIFICATE OF SERVICE

I hereby certify that on the date below, a true and correct copy of **PETITIONER'S REPLY IN SUPPORT OF PETITION FOR INTER PARTES REVIEW OF U.S. PATENT NO. 11,851,250 AND EXHIBITS 1013-1020** are being served via email pursuant to 37 C.F.R. § 42.6(e), to counsel for Patent Owner as addressed below:

Ryan Schletzbaum
Shook Hardy & Bacon LLP
2555 Grand Blvd
Kansas City, MO 64108
Tel: 816.474.6550
Fax: 816.421.5547
rschletzbaum@shb.com
CamelBak-IPR@shb.com

Jason Mudd
Shook Hardy & Bacon LLP
2555 Grand Blvd
Kansas City, MO 64108
Tel: 816.474.6550
Fax: 816.421.5547
jmudd@shb.com

Dated: December 9, 2025

By: / Zachary B. Messick /
Zachary B. Messick (Reg. No. 77,839)
Counsel for Petitioner
Trove Brands, LLC