

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CAMELBAK PRODUCTS, LLC,
Petitioner,

v.

IGNITE USA, LLC,
Patent Owner.

Case IPR2015-01034
Patent 8,863,979 B2

Before SALLY C. MEDLEY, KEN B. BARRETT, and
AMANDA F. WIEKER, *Administrative Patent Judges*.

WIEKER, *Administrative Patent Judge*.

FINAL WRITTEN DECISION
Inter Partes Review
35 U.S.C. § 318(a) and 37 C.F.R. § 42.73

I. INTRODUCTION

Petitioner, CamelBak Products, LLC, filed a Petition requesting an *inter partes* review of claims 1, 3, 6, 7, and 10–15 of U.S. Patent No. 8,863,979 B2 (Ex. 1001, “the ’979 patent”) under 35 U.S.C. §§ 311–319. Paper 1 (“Pet.”). Patent Owner, Ignite USA, LLC, filed a Preliminary Response. Paper 10 (“Prelim. Resp.”). Upon consideration of the Petition and Preliminary Response, on August 26, 2015, we instituted an *inter partes* review of claims 1, 3, 6, 7, and 10–15 on two grounds of unpatentability, pursuant to 35 U.S.C. § 314. Paper 15 (“Dec.”).

Subsequent to institution, Patent Owner filed a Patent Owner Response and Petitioner filed a Reply. Paper 19 (“PO Resp.”); Paper 22 (“Pet. Reply”).

Patent Owner filed a Motion for Observation on Cross-Examination Testimony on the second deposition of Dr. Alexander H. Slocum, Ph.D., Petitioner’s declarant. Paper 29 (“PO Mot. for Observation”). Petitioner filed an Opposition to the Motion for Observation. Paper 33 (“Pet. Observation Opp.”).

Patent Owner filed a Motion to Exclude Exhibits 1004–1007, Exhibits 1010–1012, testimonial evidence provided during the second deposition of Dr. Slocum, and the opinions and conclusions of Dr. Slocum. Paper 30 (“PO Mot. to Exclude”). Petitioner filed an Opposition to the Motion to Exclude and Patent Owner filed a Reply. Paper 34 (“Pet. Exclude Opp.”); Paper 35 (“PO Exclude Reply”).

An oral hearing was held on May 9, 2016, and a transcript of the hearing is included in the record. (Paper 36 (“Tr.”)).

The Board has jurisdiction under 35 U.S.C. § 6(c). This Final Written Decision is issued pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73.

For the reasons that follow, we determine that Petitioner has shown by a preponderance of the evidence that claims 1, 3, 6, 7, and 10–15 of the '979 patent are unpatentable.

A. Related Matter

According to Petitioner, the '979 patent is involved in the following lawsuit: *Ignite USA, LLC v. CamelBak Prods., LLC*, No. 14-cv-09210 (N.D. Ill.). Pet. 1.

B. The '979 Patent

The '979 patent relates to “a lid for a beverage container having a drop-down seal assembly for easy cleaning of the seal assembly and the associated drink apertures.” Ex. 1001, 1:47–49. The seal assembly is movable between a first, operable position and a second, cleaning position. *Id.* at 1:55–57.

C. Illustrative Claims

Claims 1, 10, and 13 are the only independent claims. Claims 3, 6, 7, 11, 12, 14, and 15 depend directly or indirectly from independent claim 1, 10, or 13.

Claim 1, reproduced below, is illustrative:

1. A lid assembly for a beverage container, comprising:

a lid housing having a drink aperture;

a seal arm connected to the lid housing and movable between a first position, wherein the seal arm is adjacent the drink aperture, and a second position, wherein the seal arm is distal the drink aperture, the seal arm being connected to the lid housing in the first position and the second position, the first

position being an operable position for assisting in opening and closing the drink aperture, and the second position being a cleaning position wherein the drink aperture is open for cleaning the lid assembly and wherein the seal arm is not capable of assisting in closing the drink aperture in the second position;

a drink seal connected to one of the drink aperture and the seal arm to assist in sealing the drink aperture; and,

a trigger member connected to the lid housing, wherein the trigger member is capable of operating the seal arm in the first position, and wherein the seal arm cannot be operated by the trigger member in the second position.

Ex. 1001, 11:36–55.

D. Grounds of Unpatentability

We instituted an *inter partes* review of claims 1, 3, 6, and 10–15 on the ground of anticipation by Oosterling¹ under 35 U.S.C. § 102(b), and we instituted an *inter partes* review of claim 7 on the ground of obviousness over Oosterling under 35 U.S.C. § 103(a).

II. ANALYSIS

A. Level of Skill of Person in the Art

Petitioner and Patent Owner dispute the appropriate level of ordinary skill in the art. *Compare* Pet. 11, *with* PO Resp. 19.

We find that the level of ordinary skill in the art is reflected by the prior art of record, and the dispute between Petitioner and Patent Owner is not determinative of any issue in this proceeding. *See In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995); *see also Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001).

¹ WO Publication 2005/115204 A1, published Dec. 8, 2005. Ex. 1003 (“Oosterling”).

B. Claim Interpretation

In an *inter partes* review, claim terms in an unexpired patent are given their broadest reasonable construction in light of the specification of the patent in which they appear. 37 C.F.R. § 42.100(b); *see also In re Cuozzo Speed Techs., LLC*, 793 F.3d 1268, 1278–79 (Fed. Cir. 2015), *cert. granted sub nom. Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 890 (mem.) (2016). Under the broadest reasonable construction standard, claim terms are given their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in the context of the entire disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). Also, we must be careful not to read a particular embodiment appearing in the written description into the claim if the claim language is broader than the embodiment. *See In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993). However, an inventor may provide a meaning for a term that is different from its ordinary meaning by defining the term in the specification with reasonable clarity, deliberateness, and precision. *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994).

1. “connected” (all challenged claims)

Independent claims 1, 10, and 13 recite that a seal arm is “connected to the lid housing” in the first and second positions. Ex. 1001, 11:41–43, 12:39–40, 12:64–65. Additionally, independent claim 1 and dependent claims 12 and 14 recite that a trigger member or actuator is “connected to the lid housing.” *Id.* at 11:52, 12:53, 13:10.

In its Preliminary Response, Patent Owner contends that the term “connected” requires a “permanent, secure, [and] non-removable” connection. Prelim. Resp. 11–12; *see also id.* at 13–14, 17 (discussing the

lack of “permanent” connections in asserted prior art). Moreover, in its Patent Owner Response, Patent Owner contends that the Board’s preliminary construction of “connected” as including non-permanent connections, *see* Dec. 7, “misconstrue[s] Patent Owner’s use of the term [permanent].” PO Resp. 14 n.2. Patent Owner contends that “connected” should be construed instead as “a connection that prevents the component from being misplaced or disassociated from the lid assembly in both the operable and cleaning positions.” *Id.* at 17–18. By contrast, Petitioner contends implicitly that this term also includes non-permanent connections. *See* Pet. 19–20, 23–24, 27–28, 31–32, 34, 37, 39–41, 45, and 48 (applying prior art with a broader construction of “connected”); *see also* Pet. Reply 1.

Patent Owner’s Response does not explain how the construction offered therein varies from that proposed in the Preliminary Response. At the oral hearing, Patent Owner admitted that the two proposed constructions present a “difference without a distinction,” with respect to the prior art. Tr. 17:22–18:2. Indeed, a “permanent” connection “prevents the component from being misplaced or disassociated.” *Id.* at 17:4–10. Therefore, we consider these constructions together.

In support of its construction, Patent Owner directs us to the ’979 patent Specification, which purportedly uses the term “connected” to describe “a purposeful connection that prevents [components] from being removed from the lid assembly.” PO Resp. 11–12 (citing Ex. 1001, 1:33–51, 4:35–45).

We have reviewed the passages to which Patent Owner directs our attention and we are not persuaded that the ’979 patent Specification provides a special definition. In particular, the Specification does not define

“connected” with clarity, deliberateness, and precision. *See In re Paulsen*, 30 F.3d at 1480. Although the Specification discloses an embodiment in which components “are at all times connected to the lid assembly . . . [and] are not removed and therefore cannot be misplaced or disassociated from the lid assembly,” (*see* Ex. 1001, 4:35–45), it does not redefine explicitly the term “connected” to require that all connections are permanent and prevent disassociation of components. Specifically, these passages contain no indication that they provide a *definition* for “connected” rather than an *example* of what a connection may entail. *See In re Paulson*, 30 F.3d at 1480. As such, Patent Owner’s proposed construction goes beyond the plain and ordinary meaning of the term by adding elements from the Specification into the term. *See Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004) (“Even when the specification describes only a single embodiment, the claims of the patent will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using ‘words or expressions of manifest exclusion or restriction.’”) (quoting *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1327 (Fed. Cir. 2002)).

Patent Owner argues that *In re Paulson* is distinguishable because the ’979 patent Specification “expressly includes the word ‘importantly’ before declaring that the trigger member and seal arm are connected ‘at all times’ and in such a way that they ‘cannot be misplaced or disassociated from the lid assembly.’” PO Resp. 15. Patent Owner contrasts this disclosure with that in *Paulson*, which did not clearly redefine the term “computer,” but “‘describe[d] in a general fashion certain features and capabilities desirable in a portable computer.’” *Id.* at 14–15 (quoting *Paulson*, 30 F.3d at 1480).

We are not persuaded. Although the term “[i]mportantly” is used in relation to the cited embodiment, the ’979 patent Specification as a whole suggests that this disclosure is merely a description of “certain features or capabilities desirable in a [‘connection’],” as in *Paulson*, rather than a redefinition of the term. For example, the Specification states that “the present disclosure is to be considered as an exemplification . . . and is not intended to limit the broad aspect of the invention to the embodiments illustrated.” Ex. 1001, 4:9–13. Furthermore, the Specification uses the terms “connection” and “connected” in reference to other non-permanent connections that permit disassociation of the connected components. For example, the Specification discloses a “connection between the container body 12 and the lid assembly 14” that is non-permanent and permits disassociation. Ex. 1001, 4:63–67, Figs. 1–2; *see also id.* at 7:7–11, 7:49–54, Fig. 5. This usage of the term suggests that the inventors did not redefine “connected” to include only permanent connections.

Patent Owner also argues that the term “connected” is “subject to varying meanings” and, therefore, the Specification should guide its interpretation. PO Resp. 15–17 (citing *Kaneka Corp. v. Xiamen Kingdomway Grp. Co.*, 790 F.3d 1298 (Fed. Cir. 2015)). This argument is not persuasive, however, because Patent Owner has not shown persuasively that the Board’s preliminary construction of “connected” is inconsistent with the broad usage of this term within the Specification. Indeed, the construction adopted preliminarily by the Board encompasses fully all embodiments disclosed in the ’979 patent. *See id.* at 16 n.3; Ex. 1001, 4:9–12, 4:35–45.

Patent Owner directs our attention to the Declaration of Jeff Steininger. PO Resp. 12 (citing Ex. 2002 ¶ 44) (the “Steininger Declaration”). We have reviewed the cited portions; however, we afford this testimony little if any weight. Mr. Steininger’s opinion on claim construction is supported only by the embodiment disclosed at column 4, lines 35–45 of the ’979 patent. As discussed above, this portion of the Specification discloses one embodiment of a connection but other passages of the Specification employ more broadly the term “connected.” *See, e.g.*, Ex. 1001, 4:9–12, 4:63–67.

Patent Owner also directs our attention to deposition testimony of Dr. Slocum, Petitioner’s declarant. PO Resp. 12–13 (citing Ex. 2004, 92:5–100:18). We have reviewed the cited portions; however, we afford this testimony little if any weight because this testimony also concerns only the embodiment disclosed at column 4, lines 35–45 of the ’979 patent. Furthermore, we are unpersuaded by Patent Owner’s argument that Dr. Slocum’s agreement that “the claim is consistent with, and does not contradict or vice versa, the text in Column 4,” (Ex. 2004, 96:18–22), supports Patent Owner’s narrow construction. That the claim may be *consistent* with the embodiment disclosed at column 4, lines 35–45 of the ’979 patent does not *restrict* the term to that embodiment.

Finally, Patent Owner argues that the ’979 patent solved the problem of lid component separation. PO Resp. 11–12 (citing Ex. 1001, 1:36–39; Ex. 2002 ¶ 35), 36. However, the cited portion of the Specification is directed to a slightly different problem, e.g., that “components of the seal mechanism are difficult to properly clean.” Furthermore, Patent Owner’s cited evidence does not establish that either of these problems was solved by

a permanent connection, rather than the disclosed second cleaning position. *See, e.g.*, Ex. 1001, 1:55–60 (describing a second cleaning position in which “the first drink aperture is open for cleaning the lid assembly in the cleaning position”). Finally, we have reviewed the cited portion of the Steininger Declaration in support of this argument, but we afford it little if any weight because Mr. Steininger does not provide an adequate factual basis, including citation to the ’979 patent Specification, to support his testimony that the ’979 patent “prevented the components from being disassociated.” Ex. 2002 ¶ 35; *see* 37 C.F.R. § 42.65(a).

In sum, we find that a person of ordinary skill in the art would have understood the term “connected,” as used in the ’979 patent, to include non-permanent connections. Patent Owner urges a construction that is too narrow, by focusing on the preferred embodiment while disregarding the more expansive disclosure of the patent. We must be careful not to read a particular embodiment appearing in the written description into the claim if the claim language is broader than the embodiment. *See Van Geuns*, 988 F.2d at 1184. Here, Patent Owner chose to claim its invention broadly, and we are provided insufficient evidence before us to construe the claim more narrowly.

For the reasons discussed above, “connected” does not require a permanent connection and does not require that the connection “prevent the component from being misplaced or disassociated from the lid assembly in both the operable and cleaning positions,” as Patent Owner urges. PO Resp. 17–18. Rather, “connected” includes non-permanent connections.

2. “lid assembly” (all challenged claims)

The preambles of the challenged claims recite a “lid assembly.” Ex. 1001, 11:36, 11:60, 12:16, 12:20, 12:32, 12:49, 12:52, 12:57, 13:9, 13:12. Additionally, “the lid assembly” is referred to in the body of claims 1, 10, and 13. *Id.* at 11:46–47, 12:45–46, 13:4.

Patent Owner contends that this preamble phrase should be construed as “a component separate and apart from the body or vessel of the beverage container.” PO Resp. 18.

“In general, a preamble limits the invention if it recites essential structure or steps, or if it is ‘necessary to give life, meaning, and vitality’ to the claim,” but does not limit the invention “where a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention.” *Catalina Mktg. Int’l, Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801, 808 (Fed. Cir. 2002) (citations omitted).

The preambles of the challenged claims do not recite essential structure and are not necessary to give life, meaning, or vitality to the claims. For example, the body of claim 1 recites a lid housing, a seal arm, a drink seal, and a trigger member, which together present a structurally complete invention that has meaning independent of the preamble. Ex. 1001, 11:37–55. The preamble indicates merely how these components are intended to be used, i.e., as a “lid assembly for a beverage container.” *Id.* at 11:36. Nothing in the portions of the Specification cited by Patent Owner compels a different conclusion. *See id.* at 4:13–15.

Therefore, we conclude that the preamble phrase “lid assembly” is not limiting and does not require construction as advocated by Patent Owner.

C. Anticipation by Oosterling

Petitioner contends that claims 1, 3, 6, and 10–15 are anticipated under 35 U.S.C. § 102(b) by Oosterling. Pet. 11, 18–39. In its Petition, Petitioner explains how Oosterling discloses each and every element of the challenged claims. *Id.* at 18–39.

Patent Owner argues that Oosterling does not disclose “a lid assembly” comprising a “first position” (claims 1, 10, 13); “a seal arm [] connected to the lid housing” (claims 1, 10, 13); “a first position, wherein the seal arm is adjacent the drink aperture” (claims 1, 10, 13); “a trigger member [or ‘actuator’] connected to the lid housing” (claims 1, 12, 14); a “seal arm [that] pivots away from a drink surface of the lid housing” (claim 3); or a “trigger member [that] is pivotally connected to the lid housing” (claim 6). PO Resp. 23–41.

1. Oosterling

Oosterling relates generally to a closable drinking beaker. Ex. 1003, Abstract. Oosterling's Figure 8a is reproduced below.

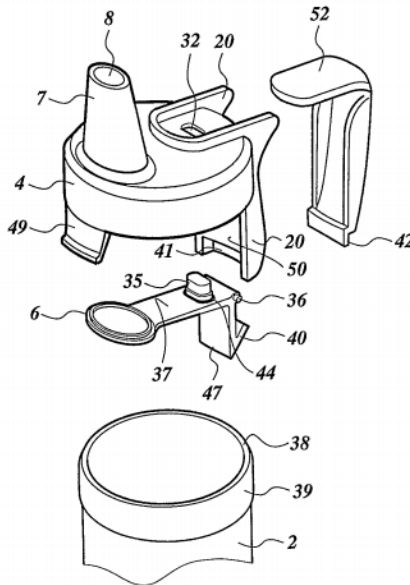


Fig. 8a

Figure 8a depicts drinking beaker 2, to which lid 4 may be attached. *Id.* at 3:12–13, 8:5–9. As shown in Figure 8a, lid 4 includes drinking nozzle 7 with drinking aperture 8. *Id.* at 8:24–25. Drinking nozzle 7 may be closed by valve 6, which is located on, and moved by, lever 37. *Id.* at 8:29–31. “[L]ever 37 is hingedly connected to the inside of the lid 4 by a hinge coupling . . . formed by shaft supports 33 into which shaft journals 36 can be fitted.” *Id.* at 8:31–34. As shown in Figure 8a, lever 37 also includes spring element 40 at its end and projection 35 extending from the top of the lever. *Id.* at 8:16–19, 8:34–38.

Oosterling's Figure 8d is reproduced below.

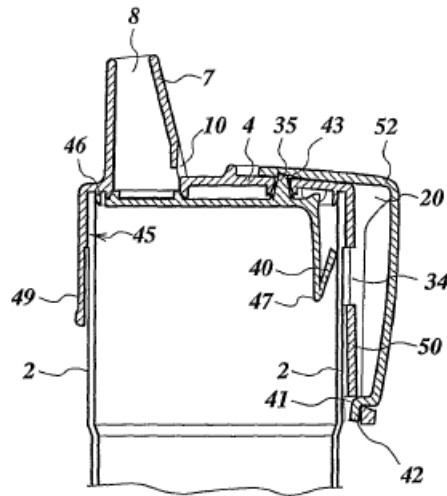


Fig. 8d

Figure 8d depicts lid 4 attached to beaker 2. As shown in the figure, when lid 4 is placed on beaker 2, spring element 40 “presses against the inside of the beaker” and “ensures that the valve 6 seals the drinking nozzle 7.” *Id.* at 8:34–38. From this position, valve 6 may be opened by pressing operating arm 52 toward the side of beaker 2, causing operating arm’s pressure surface 43 to “press the projection 35 downward . . . as a result of which the lever 37 moves down and the valve 6 opens,” to permit liquid to flow out of the beaker’s nozzle. *Id.* at 9:7–12; *see also id.* at 8:16–19, 9:26–32.

Oosterling's Figure 9 is reproduced below.

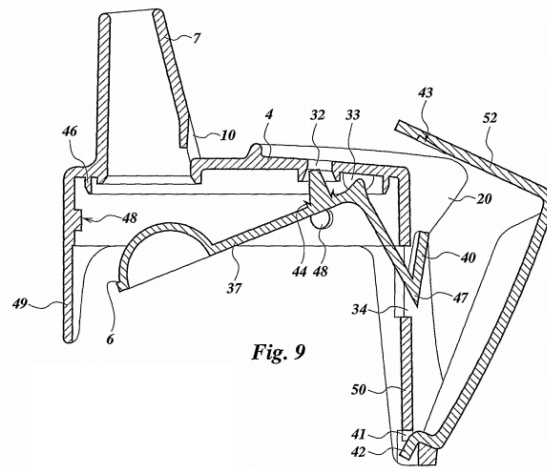


Figure 9 depicts lid 4 removed from beaker 2. As shown in Figure 9, the lid's sidewall includes opening 34 through which spring element 40 may extend, when the lid is removed from the beaker. *Id.* at 9:13–19. Oosterling discloses that this arrangement permits lever 37 to rotate downward such that “the top of the valve 6 is readily accessible for cleaning when the lid 4 with the lever 37 is placed in a dishwasher.” *Id.*²

2. Analysis

Petitioner provides detailed analysis showing where Oosterling discloses each limitation of the challenged claims. Pet. 18–39.

a. Independent Claims 1, 10, and 13

For independent claim 1, Petitioner contends that Oosterling discloses a lid housing (i.e., lid 4) having a drink aperture (i.e., drinking aperture 8, having inlet and outlet). *Id.* at 18–19 (citing Ex. 1003, 3:23–25, 8:24–25, 9:30–32). Petitioner contends that Oosterling discloses a seal arm (i.e.,

² Although Figure 9 depicts an alternate embodiment, having convex valve 6 and guide cams 48, the downward rotation of lever 37 depicted in Figure 9 appears identical to the operation disclosed with respect to the embodiment shown in Figures 8a–8d. *Compare* Ex. 1003, 9:13–19, with *id.* at Fig. 9, 10:39–11:12.

lever 37) that is movable between a first position (i.e., when lid 4 is attached to beaker 2; Fig. 8d) and a second position wherein the seal arm is distal the drink aperture (i.e., when lid 4 is not attached to beaker 2; Fig. 9). *Id.* at 19–23 (citing Ex. 1003, 8:31–9:3, 9:15–17, Figs. 8a–8b, Fig. 9). Petitioner contends that Oosterling discloses that the first position is an operable position for assisting in opening and closing the drink aperture, (*id.* at 24–25 (citing Ex. 1003, 8:34–9:3, 9:26–33, Fig. 8d)), and the second position is a cleaning position wherein the drink aperture is open for cleaning the lid assembly. *Id.* at 25 (citing Ex. 1003, 9:15–19, Fig. 8c, Fig. 9). Petitioner contends that Oosterling discloses that the seal arm is not capable of assisting in closing the drink aperture in the second position. *Id.* at 25–27 (citing Ex. 1003, 8:34–9:3, 9:26–33, Fig. 8d, Fig. 9). Petitioner contends that Oosterling discloses a drink seal (i.e., seal ring) connected to the seal arm to assist in sealing the drink aperture. *Id.* at 27 (citing Ex. 1003, 4:8–10, 10:14–15). Petitioner contends that Oosterling discloses a trigger member (i.e., operating arm 52), wherein the trigger member is capable of operating the seal arm in the first position and wherein the seal arm cannot be operated by the trigger member in the second position. *Id.* at 27–29 (citing Ex. 1003, 8:20–21, 8:34–9:3, 9:26–33, 12:34–36, Fig. 8d, Fig. 9).

Independent claim 10 contains substantially similar limitations as claim 1, and Petitioner provides substantially similar contentions. *See* Ex. 1001, 12:32–48; Pet. 31–34. Claim 10 varies from claim 1, however, in that it specifies that the first position includes an “open position” and “closed position,” and that “the [second] cleaning position of the seal arm [is] different from the open position and the closed position” of the first

position.³ Ex. 1001, 12:40–48. Petitioner contends that Oosterling discloses that the second cleaning position of the seal arm is different from open and closed positions of the first position. Pet. 32–34 (citing Ex. 1003, 8:34–39, 9:13–33, Fig. 8d, Fig. 9).

Independent claim 13 contains substantially similar limitations as claim 1, and Petitioner provides substantially similar contentions. *See* Ex. 1001, 12:57–13:8; Pet. 35–37. Claim 13 varies from claim 1, however, in that it specifies that the seal arm is “actuated.” Ex. 1001, 12:59. Petitioner contends that Oosterling discloses an actuated seal arm (i.e., lever 37). Pet. 35 (citing Ex. 1003, 9:1–3, 26–33).

We are persuaded by Petitioner’s showing, and adopt it as our own, that Oosterling discloses these elements of independent claims 1, 10, and 13. Patent Owner does not contend that any of these limitations are not met by Oosterling.

Patent Owner disputes whether Oosterling discloses the following limitations of independent claims 1, 10, and 13: (1) “a lid assembly” that comprises “a first position”; (2) a “seal arm connected to the lid housing . . . in the first position and the second position”; (3) “a first position, wherein the seal arm is adjacent the drink aperture.” PO Resp. 34–41. Patent Owner also disputes whether Oosterling discloses the following limitation of independent claim 1: “a trigger member connected to the lid housing.” *Id.* at 23–33.

³ Claim 1 does not recite an “open position” or a “closed position,” or that they are different from the cleaning position. *See* Ex. 1001, 11:36–55.

(1) “a lid assembly” and “a first position” (Claims 1, 10, and 13)

To meet the limitation requiring “a lid assembly” and “a first position,” the Petition provides that “[i]f the preamble is determined to be limiting, Oosterling discloses a lid (lid assembly) for a beaker (beverage container).” Pet. 18 (citing Ex. 1003, 3:23–25). The Petition also provides that Oosterling discloses a “lever 37 (seal arm) . . . [that is] in the first position whenever the lid 4 is attached to the beaker 2.” *Id.* at 19–21 (citing Ex. 1003, 8:31–9:3, Figs. 8a–8b, Fig. 8d).

Patent Owner argues that Oosterling’s “lid assembly comprises a first (operable) position only when the lid is attached to the beaker” and, therefore, fails to comprise a first position “independent of the [beaker].” PO Resp. 38–39 (emphasis omitted) (citing Ex. 2002 ¶¶ 56, 58, 65, 67–68, 72, 75; Ex. 1008 ¶¶ 24.g, 27.b).

Patent Owner’s argument is based on a construction of the preamble as limiting and as requiring that the “lid assembly” is a “component separate and apart from the body or vessel of the beverage container.” As explained in the Claim Interpretation section of this Decision, (*see* Section II(B)), we do not construe the preamble to be limiting and we do not construe “lid assembly” as Patent Owner urges. Patent Owner makes no other arguments regarding this limitation of claims 1, 10, and 13. For the reasons above, we are persuaded by Petitioner’s showing, and adopt it as our own, that Oosterling discloses a lid assembly and a first position as claimed. Ex. 1003, 3:23–25, 8:31–9:3, Figs. 8a–8b, Fig. 8d.

(2) “a seal arm [] connected to the lid housing . . . in the first position and the second position” (Claims 1, 10, and 13)

To meet the limitation requiring “a seal arm [] connected to the lid housing . . . in the first position and the second position,” the Petition provides that Oosterling discloses:

a lever 37 (seal arm) that is . . . “hingedly connected to the inside of the lid 4 by a hinge coupling, which in this embodiment is formed by shaft supports 33 into which shaft journals 36 can be fitted.” These journals, or pins, and the corresponding shaft supports 33, connect the lever 37 to the lid 4, allowing the seal arm to rotate to open and close the drink aperture.

Pet. 19–20 (citation omitted; citing Ex. 1003, 8:31–34, Fig. 8a– 8b). The Petition also provides that Oosterling’s lever 37 is connected in the first and second positions. *Id.* at 23–24 (citing Ex. 1003, 8:31–34, 10:33–39, 11:13–14, 11:23–24, Figs. 8a–8d, Fig. 9).

Patent Owner argues that Oosterling’s “loose hinge is not a connection” because it “can and will be removed under minimal forces.” PO Resp. 35–37 (citing Ex. 2002 ¶¶ 18, 79; Ex. [2004], 156:12–25).

Patent Owner’s arguments are based on a narrow construction of the term “connected” to require a permanent connection, e.g., a connection that prevents disassociation of the connected component. As explained in the Claim Interpretation section of this Decision, (*see* Section II(B)), we do not construe “connected” so narrowly. Patent Owner makes no other arguments regarding this limitation of claims 1, 10, and 13. For the reasons above, we are persuaded by Petitioner’s showing, and adopt it as our own, that Oosterling discloses a seal arm connected to the lid housing in the first and

second positions. Ex. 1003, 8:31–34, 10:33–39, 11:13–14, 11:23–24, Figs. 8a–8d, Fig. 9.

Nonetheless, even under Patent Owner’s proposed construction, we are persuaded by Petitioner’s showing that Oosterling discloses “a seal arm [] connected to the lid housing” in the first and second positions. Petitioner has shown that Oosterling’s seal arm (i.e., lever 37) is “hingedly connected” to the lid housing through the fitting of shaft journals 36 into shaft supports 33, and remains so connected in both the first and second positions. Pet. 19–20, 23–24. Oosterling need not state specifically that this hinged connection will not unintentionally disconnect, (*see* PO Resp. 36), because Oosterling shows explicitly shaft journals 36 retained within shaft supports 33 in a secure manner.⁴ *See* Ex. 1003, Fig. 8b (showing shaft journal 36 retained within hole 53 of support 33); *see also id.* at 12:21–26 (claiming a pin and hole connection), 11:14–23 (disclosing an alternative lever 37 that is removable for separate cleaning).

Patent Owner provides no persuasive evidence to rebut this showing, or to support its contention that the connection “can and will be removed under minimal forces.” PO Resp. 35–36. Patent Owner’s reliance on the Steininger Declaration is unfounded. Mr. Steininger testifies:

While I agree that the lever 37 shown in Oosterling is connected by the shaft and supports shown in Fig. 8b, I also understand this to be a very “loose” connection Because of

⁴ We are not persuaded by Patent Owner’s suggestion that Dr. Slocum provides an unsupported opinion on obviousness through his testimony that it is “implicit” that Oosterling’s coupling would not disconnect. PO Resp. 36–37 (citing Ex. 2004, 157:1–158:24, 160:7–16). Dr. Slocum identifies specifically Oosterling’s disclosure that the seal arm is connected by “shaft journal 36 in the hole 53” and is “properly constrained,” providing an opinion on anticipation. Ex. 2004, 157:25–158:24.

this loose hinge connection, it is more possible, versus a more permanent hinge connection design, that the lever could become disassociated (e.g., blown off) of the Oosterling lid assembly during a dish washing cycle.

Ex. 2002 ¶ 79 (emphases added). This testimony is afforded little if any weight because it presents only speculation that the admittedly connected seal arm could possibly become disassociated. *See also* Ex. 1013, 118:11–15, 122:2–18. Similarly, Patent Owner’s reliance on Dr. Slocum’s deposition testimony that the connection is “not tight fitting” is also unfounded. PO Resp. 36 (citing Ex. 2004, 156:12–25).⁵ It is not necessary for a connection to be “tight fitting,” even to satisfy Patent Owner’s construction of “connected.”

For the reasons above, we are persuaded by Petitioner’s showing, and adopt it as our own, that Oosterling discloses “a seal arm [] connected to the lid housing . . . in the first position and the second position,” even under Patent Owner’s construction of “connected.” Ex. 1003, 8:31–34, 10:33–39, 11:13–14, 11:23–24, Figs. 8a–8d, Fig. 9.

*(3) “a first position, wherein the seal arm is adjacent the drink aperture”
(Claims 1, 10, and 13)*

To meet the limitation requiring “a first position, wherein the seal arm is adjacent the drink aperture,” the Petition provides that:

[T]he drinking aperture 8 of Oosterling’s lid 4 provides an inlet in the underside of the lid 4 that is selectively opened and closed by the lever 37 to respectively permit and obstruct liquid from flowing through the drinking aperture 8 to the drink aperture’s outlet, where the liquid is dispensed.

Pet. 18–19 (citing Ex. 1003, 9:30–32). The Petition provides further:

⁵ The citation to Exhibit 2002 provided in Patent Owner’s Response appears to be a typographical error. *See* PO Resp. 36.

In [the] first position, the spring element 40 . . . biases the lever 37 into a closed position where the seal 6 of the lever engages the inlet of the drinking aperture 8 to close the drink aperture. . . . Because the seal 6 of the lever 37 (seal arm) engages the inlet of the drink aperture 8 to close the drink aperture, the lever is clearly adjacent the drink aperture and prevents any fluid from flowing from inside the beaker through the drink aperture.

Id. at 20–21 (citing Ex. 1003, 8:34–9:3, Fig. 8d).

Patent Owner argues that Oosterling’s “drinking aperture is the hole 8 at the top of the drinking nozzle 7,” such that “the lever 37 is not adjacent to the drinking aperture.” PO Resp. 40 (citing Ex. 2004, 165:2–167:9). Patent Owner also argues that the seal arm is not adjacent the drink aperture because the seal arm and drink aperture are “separated by vent 10.” *Id.* (citing Ex. 2002 ¶¶ 60, 66).

Patent Owner’s arguments are based on the view that Petitioner relies solely on Oosterling’s two-dimensional hole as the claimed “drink aperture.”⁶ However, the Petition discusses that Oosterling’s “drinking aperture 8 . . . provides an inlet in the underside of the lid 4 . . . [and an] outlet, where the liquid is dispensed.” Pet. 18–19; *see also* Ex. 1001, Fig. 10 (showing that the ’979 patent’s drink apertures 18a, 18b extend similarly from an outlet on the outside of lid 4 to an inlet on the inside of lid 4). Therefore, Patent Owner’s arguments do not address the totality of the structure identified as Oosterling’s drink aperture, or the Petition’s discussion that Oosterling’s seal arm “engages the inlet of the drink aperture

⁶ Patent Owner directs us to Dr. Slocum’s testimony, however, this testimony does not support Patent Owner’s position. PO Resp. 40; Ex. 2004, 165:21–23 (“Q. The aperture here is 8 in Figure 8? A. That’s the opening for the aperture, correct.”).

8 to close the drink aperture, [and] is clearly adjacent the drink aperture.” *Id.* at 20–21. Neither Patent Owner’s argument that “lever 37 is not adjacent to the drinking aperture” nor Mr. Steininger’s testimony about the location of vent 10 is responsive to the Petition. PO Resp. 40; Ex. 2002 ¶¶ 60, 66.

For the reasons above, we are persuaded by Petitioner’s showing, and adopt it as our own, that Oosterling discloses a first position, wherein the seal arm is adjacent the drink aperture. Ex. 1003, 8:34–9:3, Fig. 8d.

(4) “a trigger member connected to the lid housing” (Claim 1)

To meet the limitation requiring “a trigger member connected to the lid housing,” the Petition provides that “Oosterling discloses an operating arm 52 (trigger member) connected to the lid 4 (lid housing) . . . using a hook 42 fitted through the opening 41 in the sidewall of the lid.” Pet. 27–28 (citing Ex. 1003, 8:20–21, Fig. 8d, Fig. 9). The Petition also provides that the operating arm 52 may be “coupled to the lid (4) by a second hinge coupling (18; 41, 42).” *Id.* at 28 (citing Ex. 1003, 12:34–36).

Patent Owner argues that Oosterling “describes a simple hook and hole configuration . . . [that] does not prevent the operating arm 52 from being removed (i.e., misplaced or disassociated) from the lid assembly when the beaker is removed and the lever 37 [is] moved to the alleged cleaning position.”⁷ PO Resp. 23–25, 32 (emphasis omitted) (citing Ex. 2002 ¶¶ 4, 25–26, 71, 74, 77–78; Ex. 2004, 150:17–19).

Patent Owner’s arguments are based on a narrow construction of the term “connected” to require a permanent connection, e.g., a connection that prevents disassociation of the connected component. As explained in the

⁷ For purposes of this Decision, we accept Patent Owner’s argument that the “wherein” clause of claim 1 requires that the trigger be connected to the lid housing in both the first and second positions. PO Resp. 23–24.

Claim Interpretation section of this Decision, (*see* Section II(B)), we do not construe “connected” so narrowly. Patent Owner makes no other arguments regarding this limitation of claim 1. For the reasons above, we are persuaded by Petitioner’s showing, and adopt it as our own, that Oosterling discloses a trigger member connected to the lid housing. Ex. 1003, 8:20–21, 12:34–36, Fig. 8d, Fig. 9.

Nonetheless, even under Patent Owner’s proposed construction, we are persuaded by Petitioner’s showing that Oosterling discloses “a trigger member connected to the lid housing.” Petitioner has shown that Oosterling discloses a “hinge coupling” between the trigger member (i.e., operating arm 52) and lid housing (i.e., lid 4), in which hook 42 is fitted through opening 41. Pet. 27–28. Oosterling does not disclose that the trigger member is removable and, instead, shows explicitly that the trigger member is connected to the lid assembly in both the first position, (*see* Ex. 1003, Fig. 8d), and the second position (*see id.* at Fig. 9). Oosterling need not state explicitly that this “hinge coupling” will not unintentionally disconnect, (*see* PO Resp. 31–32), because Oosterling shows the trigger member connected to the lid housing even when the lid housing is removed from the container. Unlike Oosterling’s disclosure of an alternative embodiment of a removable seal arm, (*see* Ex. 1003, 11:14–23), Oosterling does not disclose any embodiment in which the trigger member is described as removable.

Patent Owner provides no persuasive argument or evidence to rebut this showing, or to support its contention that Oosterling’s connection “does not prevent the operating arm 52 from being removed (i.e., misplaced or disassociated) from the lid assembly.” PO Resp. 24 (emphasis omitted). At the oral hearing, Patent Owner directed attention to Figures 8a and 8b, which

purportedly depict the operating arm disassociated from the lid. Tr. 22:23–23:3. However, we agree with Petitioner that these figures depict an exploded view of Oosterling’s assembly. *See, e.g., id.* at 9:7–11, 22:23–23:13, 25:12–26:3, 36:7–11.

Further, Patent Owner’s reliance on Mr. Steininger’s opinion that “the trigger will fall off the lid when the lid is removed from the vessel,” (Ex. 2002 ¶¶ 25–26), is not persuasive because Mr. Steininger bases his opinion solely on the center of gravity and relative dimensions of Oosterling’s opening 41 and hook 42, as depicted in the figures. *Id.*; *see also id.* ¶¶ 71, 74, 77–78. However, Oosterling’s specification is silent as to these dimensions, and “it is well established that patent drawings do not define the precise proportions of the elements and may not be relied on to show particular sizes if the specification is completely silent on the issue.” *Hockerson-Halberstadt, Inc. v. Avia Grp. Int’l, Inc.*, 222 F.3d 951, 956 (Fed. Cir. 2000). Furthermore, this opinion does not account for Oosterling’s Figure 9, which shows explicitly the trigger member connected to the lid housing “when the lid is removed from the vessel,” the condition upon which Mr. Steininger based his opinion. Therefore, we afford this testimony little if any weight.

We are also unpersuaded by Patent Owner’s argument that “it is logical that [Oosterling] intended for the operating arm 52 to disconnect to ensure proper cleaning of the lid behind the hook 41 and around the opening 42” because this argument is speculative and ignores Oosterling’s clear depiction of the lid in a cleaning position in which the trigger member is attached. *See* PO Resp. 32 (citing Ex. 2002 ¶¶ 26–28); Ex. 1003, Fig. 9.

We also afford little weight to Dr. Slocum’s testimony that the trigger would not be connected “if the trigger member falls off when the lid assembly is removed from the container.” Ex. 2004, 89:25–90:10, 90:25–91:5; PO Resp. 24. This testimony relates to a circumstance not reflected in Oosterling, which shows the trigger member connected to the lid when the lid assembly is removed from the container. See Ex. 1003, Fig. 9.⁸

For the reasons above, we are persuaded by Petitioner’s showing, and adopt it as our own, that Oosterling discloses “a trigger member connected to the lid housing,” even under Patent Owner’s construction of “connected.” Ex. 1003, 8:20–21, 12:34–36, Fig. 8d, Fig. 9.

b. Dependent Claim 3

For dependent claim 3, the Petition provides that “Oosterling discloses a lever (seal arm [37]) that pivots away from the drink surface of the lid (lid housing [4]) when it moves to the second position.” Pet. 29. In other words, in moving to Oosterling’s second position, in which the lid is removed from the beaker, “the lever 37 (seal arm) pivots via the hinge assembly 33 away from the first position’s open and closed states and thus away from drinking aperture 8.” Pet. 29–30 (citing Ex. 1003, 8:31–32, 9:16–17). The Petition further provides that Oosterling’s “hinge coupling is the same thing as a pivot connection.” *Id.* at 30.

⁸ We are not persuaded by Patent Owner’s suggestion that Dr. Slocum provides an unsupported opinion on obviousness. PO Resp. 28, 30–31 (citing Ex. 2004 at 152:11–153:17). Dr. Slocum identifies specifically Oosterling’s disclosure that the trigger arm is connected by a hinge coupling, as specified in claim 5 and as shown in the figures, as support for anticipation of this limitation. Ex. 2004, 152:11–156:7 (contrasting Oosterling’s disclosure of an alternative removable seal arm).

Patent Owner contends that “drinking surface 7 is located on the outside of the lid and is . . . separated from the lever 37 by the vent 10,” such that “the lever 37 does not pivot away from the drink surface.” PO Resp. 40–41 (citing Ex. 2002 ¶¶ 61, 73; Ex. 2004, 165:2–167).

We afford little if any weight to Mr. Steininger’s conclusory opinion that “[t]he drink surface . . . is at the end of the nozzle so the seal arm cannot pivot away from the drink surface since it is not near or in direct contact with the drink surface.” Ex. 2002 ¶ 61; *see also id.* ¶ 73. Mr. Steininger’s testimony is not commensurate with the scope of claim 3, which does not recite that the seal arm is “near” or “in direct contact with” the claimed drink surface. Furthermore, neither Patent Owner nor Mr. Steininger explain how the presence of vent 10 in drink nozzle 7 precludes the claimed pivoting in a direction “away from” a drink surface, even if that surface is on the outside of the lid. *See* PO Resp. 40–41.

For the reasons above, we are persuaded by Petitioner’s showing, and adopt it as our own, that Oosterling discloses a seal arm that pivots away from a drink surface of the lid housing when it moves to the second position. Ex. 1003, 8:31–32, 9:16–17.

c. Dependent Claim 6

For dependent claim 6, the Petition provides that Oosterling’s “operating arm 52 is connected to the lid 4 using a hook 42 fitted through the opening 41[, which] allows the operating arm 52 to pivot at the opening in the sidewall of the lid 4.” Pet. 30 (citing Ex. 1003, 8:20–21, 12:34–36, Fig. 8d, Fig. 9). The Petition further provides that:

Figure 8d shows the operating arm 52 in the normal or use position . . . [and Figure 9 shows] operating arm 52 in the open (second, or cleaning) position, in which it remains connected to

the lid 4 but is pivoted away from the lid 4 for cleaning purposes.

Id. at 31.

Patent Owner contends that, as asserted with respect to claims 1, 12, and 14, Oosterling fails to disclose that the “operating arm is connected to the lid when the lid is placed in [the] cleaning position,” and, therefore, Oosterling also fails to disclose the limitations of claim 6. PO Resp. 33–34.

As discussed above with respect to claim 1, Patent Owner’s arguments are based on a narrow construction of the term “connected” to require a permanent connection, e.g., a connection that prevents disassociation of the connected component. As explained in the Claim Interpretation section of this Decision, (*see* Section II(B)), we do not construe “connected” so narrowly. Patent Owner makes no other arguments regarding this limitation of claim 6. For the reasons above, we are persuaded by Petitioner’s showing, and adopt it as our own, that Oosterling discloses a trigger member pivotally connected to the lid housing, such that it can be pivoted from a normal, use position to an open position for cleaning. Ex. 1003, 8:20–21, 12:34–36, Fig. 8d, Fig. 9.

Nonetheless, even under Patent Owner’s proposed construction, we are persuaded by Petitioner’s showing that Oosterling discloses a trigger member as required by claim 6. Petitioner has shown that Oosterling discloses a “hinge coupling” between the trigger member (i.e., operating arm 52) and lid housing (i.e., lid 4), in which hook 42 is fitted through opening 41. Pet. 30–31 (citing Ex. 1003, 8:20–21, 12:34–36, Fig. 8d, Fig. 9). Petitioner has shown that this hinge coupling pivots between a normal, use

position, (*see* Ex. 1003, Fig. 8d), and an open position for cleaning (*see id.* at Fig. 9).

For the reasons above, we are persuaded by Petitioner’s showing, and adopt it as our own, that Oosterling discloses a trigger member pivotally connected to the lid housing, such that it can be pivoted from a normal, use position to an open position for cleaning, even under Patent Owner’s construction of “connected.” Ex. 1003, 8:20–21, 12:34–36, Fig. 8d, Fig. 9.

d. Dependent Claim 11

Petitioner contends that Oosterling discloses a drink seal (i.e., seal ring) connected to the seal arm to assist in sealing the drink aperture. Pet. 27, 34 (citing Ex. 1003, 4:8–10, 10:14–15).

We are persuaded by Petitioner’s showing, and adopt it as our own, that Oosterling discloses this element of dependent claim 11. Patent Owner does not contend that this limitation is not met by Oosterling.

e. Dependent Claim 12

Petitioner contends that Oosterling discloses a trigger member (i.e., operating arm 52) connected to the lid housing, wherein the trigger member is capable of operating the seal arm in the first position, and wherein the seal arm cannot be operated by the trigger member in the second position. Pet. 27–29, 34–35 (citing Ex. 1003, 8:20–21, 9:26–32, 12:34–36, Fig. 8d, Fig. 9).

Patent Owner contends that Oosterling does not disclose a trigger member that is “connected” to the lid housing, as discussed with respect to claim 1. PO Resp. 23–33.

For the reasons discussed above with respect to claim 1, we are persuaded by Petitioner’s showing, and adopt it as our own, that Oosterling

discloses this element of dependent claim 12, under both the claim construction adopted by the Board and that proposed by Patent Owner.

f. Dependent Claim 14

Petitioner contends that Oosterling discloses an actuator (i.e., operating arm 52) operably connected to the lid housing to actuate the seal arm when the seal arm is in the first position. Pet. 37–38 (citing Ex. 1003, 8:20–21, 9:19–33, 12:34–36, Fig. 8b, Fig. 8d, Fig. 9).

Patent Owner contends that Oosterling does not disclose an actuator that is “connected” to the lid housing, as discussed with respect to claim 1. PO Resp. 23–33.

For the reasons discussed above, with respect to claim 1, we are persuaded by Petitioner’s showing, and adopt it as our own, that Oosterling discloses this element of dependent claim 14, under both the claim construction adopted by the Board and that proposed by Patent Owner.

g. Dependent Claim 15

Petitioner contends that Oosterling discloses that the actuator cannot actuate the seal arm when the seal arm is in the second position. Pet. 38–39 (citing Ex. 1003, 9:28–33, Fig. 8c, Fig. 9).

We are persuaded by Petitioner’s showing, and adopt it as our own, that Oosterling discloses this element of dependent claim 15. Patent Owner does not contend that this limitation is not met by Oosterling.

D. Obviousness based on Oosterling

Petitioner contends that claim 7 is unpatentable under 35 U.S.C. § 103(a) as obvious over Oosterling. Pet. 41–42. To support its contention, Petitioner provides a detailed explanation as to how Oosterling renders obvious the claimed subject matter. *Id.* at 42. Petitioner also relies upon the

Declaration of Dr. Alexander H. Slocum, Ph.D. (Ex. 1008 (the “Slocum Declaration”)) and the Supplemental Declaration of Dr. Alexander Slocum, Ph.D. (Ex. 1012 (the “Supplemental Slocum Declaration”)) to support its position. *Id.* at 41–42; Pet. Reply 22–25.

1. Analysis

Petitioner contends that Oosterling teaches a first operable position and a second cleaning position, as well as rotation of the seal arm to transition between these positions. Pet. 41–42. Petitioner states that Oosterling does not disclose expressly that the seal arm rotates 90 degrees, but contends that it would have been obvious to a person of ordinary skill in the art “to modify the lid 4 of Oosterling to allow the lever 37 to pivot approximately 90 degrees when transitioning from the first position to the second position, as recited in Claim 7.” *Id.* at 42. Petitioner relies on Dr. Slocum’s opinion that such a modification would “allow increased cleaning access to the lever” and would “prevent the action of the dishwasher spray from inadvertently closing the lever.” Ex. 1008 ¶ 33d; *see* Pet. 42. Dr. Slocum also opines that such a modification could be “accomplished in a multitude of ways that would have been obvious design choices and well known to one of ordinary skill, including increasing the width of the opening (34) and changing the shape or size of the spring (40).” Ex. 1008 ¶ 33d; *see* Pet. 42.

Patent Owner contends that a person of ordinary skill in the art would not have been motivated to alter Oosterling’s lid as proposed by Petitioner because “the Oosterling design already accomplishes the goal of preventing accidental closure of the lever 37 during washing because of the intended

interference between the spring 40 and opening 34.” PO Resp. 46–47 (citing Ex. 2002 ¶¶ 21, 83, 85–86).

We are unpersuaded by this argument. Patent Owner has not established persuasively that any existing interference fit, which may assist in preventing accidental closure, eliminates the asserted motivation articulated by Petitioner. Specifically, Patent Owner has not established that increasing the pivot angle as proposed would be ineffective to further realize this benefit. For example, Mr. Steininger opines only that, due to the existing interference fit, “there is no need (and therefore no motivation) for the change suggested by Dr. Slocum.” Ex. 2002 ¶ 83. Mr. Steininger does not establish persuasively, however, that a person of ordinary skill in the art would not expect any further improvement to the ability to prevent accidental closure upon making the proposed modification. *See id.*

Additionally, in its Motion for Observation, Patent Owner argues that a person of ordinary skill in the art would not have been motivated to alter Oosterling for cleaning purposes, based on testimony provided by Dr. Slocum. PO Mot. for Observation 3.⁹ We have considered the cited testimony; however, we are not persuaded by Patent Owner’s contention. Dr. Slocum’s testimony demonstrates that the appropriate pivot angle for proper cleaning access depends on a variety of factors. *See, e.g.*, Ex. 2006, 248:22–249:7 (noting that a pivot of 30 degrees may be sufficient for many users, but “maybe some particularly demanding users end up with that’s not

⁹ We note that newly presented arguments are not permitted in a Motion for Observation. *See* Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,768 (Aug. 14, 2012) (“An observation . . . is not an opportunity to raise new issues, re-argue issues, or pursue objections.”); *see also* Paper 24, 2 (Conduct of the Proceeding Order).

enough”); Ex. 2004, 178:23–179:11 (noting that proper cleaning depends on proper dishwasher loading). We do not find Dr. Slocum’s testimony to discredit the motivations articulated in the Petition.

Regarding implementation of the proposed modification, Patent Owner contends that “Petitioner’s proposed modifications oversimplify the impact of altering the lid assembly of Oosterling and ignore key features required for Oosterling to properly function.” PO Resp. 41–42. For example, Patent Owner contends that “if the shape/size of the spring arm 40 is changed the lever 37 cannot get to a 90 degree pivot due to interference with the portion lever 37 extending between shaft support 33 and spring arm 40 impacting the size of the lid and/or opening 34.” *Id.* at 43 (citing Ex. [2002] ¶ 84).¹⁰

We are not persuaded by Patent Owner’s argument, or the cited testimony of Mr. Steininger. Patent Owner fails to explain cogently how the portion of the lever between shaft supports (33) and spring arm (40) is related in any way to either the size of the lid or the size of the opening, or how that structure creates “interference,” or how an “impact[.]” on the size of the lid and/or opening prohibits the claimed 90 degree pivot. It appears, perhaps, that Patent Owner may have intended to argue that this portion of the lever may impact “the [*side*] of the lid and/or opening.” *Id.* at 43 (alteration added). However, under either understanding, Patent Owner provides no technical reasoning to explain how a spring modified as

¹⁰ We note Patent Owner’s contention that changing the size of opening 34 would eliminate the interference fit between spring arm 40 and opening 34. PO Resp. 42–43. Because we find the Petition establishes the obviousness of a 90 degree pivot through a change to the size or shape of the spring, we need not consider this argument about an alternate modification.

proposed by Petitioner would be ineffective to pivot 90 degrees due to impact with the size, or the side, of the lid or opening.

Similarly, we are unpersuaded by Patent Owner's contention that the seal arm of a modified lid "would be prohibited from opening 90 degrees through its impact with the seal 46," as depicted in annotated Figures provided in Patent Owner's Response. PO Resp. 43–45. The annotated figures do not depict a spring that has been modified as proposed in the Petition. *See id.* (showing spring 40 as disclosed by Oosterling, without modification to size or shape, as proposed by Petitioner); Tr. 30:16–31:18. Therefore, Patent Owner's argument is not responsive to the Petition because it does not address the proposed modification.

Mr. Steininger's testimony is equally unpersuasive. *See* Ex. 2002 ¶ 84 ("[T]he lever cannot get to the required 90 degrees due to interference of the lever 37 hitting the opening 34"). Again, Mr. Steininger's testimony does not account for the proposed modification to the size or shape of the spring but, instead, considers the spring as disclosed by Oosterling. *Id.*

Finally, we are unpersuaded by Patent Owner's argument that the proposed modification "lacks any consideration of the significant redesign to the Oosterling lid that would actually be required." PO Resp. 45–46 (citing Ex. 2002 ¶ 85). Patent Owner has not provided persuasive evidence to establish that significant redesign would be necessary to permit a 90 degree pivot, as proposed by Petitioner. Mr. Steininger opines that "a step or notch in the lever 37 would be required" to avoid seal 46, and that the spring rate "must also be designed properly." Ex. 2002 ¶¶ 85–86. Mr. Steininger has not established, however, that such changes would have been beyond the

capability of a person of ordinary skill in the art.¹¹ “A person of ordinary skill is also a person of ordinary creativity, not an automaton.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 421 (2007). Patent Owner has not shown that the modification (i.e., allowing the seal arm to pivot 90 degrees) would have been uniquely challenging or difficult for an ordinary artisan, or would have represented an unobvious step over the prior art. *See Leapfrog Enters., Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1162 (Fed. Cir. 2007) (citing *KSR*, 550 U.S. at 418).

Petitioner explains how the proffered modification of Oosterling based on the knowledge of a person of ordinary skill in the art renders obvious the subject matter of claim 7, and presents rationales for such a modification. Patent Owner has not rebutted persuasively that showing. Therefore, for the reasons above, we are persuaded by Petitioner’s reasoning, and adopt it as our own, in concluding that it would have been obvious to a person of ordinary skill in the art to have modified Oosterling to provide a seal arm that can pivot approximately 90 degrees to transition from the first position to the second position.

E. Patent Owner’s Motion for Observation

Patent Owner filed a Motion for Observation on Cross-Examination Testimony of Petitioner’s reply witness, Dr. Slocum, who was cross-

¹¹ In its Reply, Petitioner provides the Supplemental Slocum Declaration (Ex. 1012), in response to Patent Owner’s argument that the proposed modification would be ineffective and would require significant redesign. Pet. Reply 22–25. In this Decision, we do not rely on the Supplemental Slocum Declaration, because we find the evidence submitted with the Petition is sufficient to satisfy Petitioner’s burden. In this case, we find that the technical details of how the proposed modification would be implemented are not necessary to determine whether the proposed modification itself would have been obvious to a person of ordinary skill.

examined for a second time after Petitioner filed its Reply. *See* PO Mot. for Observation. Petitioner, in turn, filed an Opposition to the Motion for Observation. *See* Pet. Observation Opp.

We have considered Patent Owner's observations and Petitioner's responses in rendering this Decision, and we have accorded Dr. Slocum's testimony appropriate weight where necessary. *See* PO Mot. for Observation 1–6; Pet. Observation Opp.

F. Patent Owner's Motion to Exclude

Patent Owner filed a Motion to Exclude. *See* PO Mot. to Exclude. Petitioner filed an Opposition to Patent Owner's Motion to Exclude (*see* Pet. Exclude Opp.), and Patent Owner filed a Reply (*see* PO Exclude Reply). For the following reasons, Patent Owner's Motion is *dismissed-in-part* and *denied-in-part*.

1. Exhibit 1013 and Petitioner's Reply

Patent Owner asserts that the Supplemental Slocum Declaration (Ex. 1013), and Petitioner's Reply arguments relying on that declaration, exceed the scope of a reply under 37 C.F.R. § 42.23(b). PO Mot. to Exclude 1–7. Patent Owner argues that these papers present a new obviousness rationale that could have been presented in the Petition. *Id.* at 3.

As an initial matter, a Motion to Exclude is not the proper vehicle for a party to raise the issue of arguments exceeding the scope of a reply. Whether a reply contains arguments or evidence that are outside of a proper reply under 37 C.F.R. § 42.23(b) is left to our determination. *See* Paper 24 (Conduct of the Proceeding Order).

Furthermore, because this Decision does not rely on Exhibit 1013, or the portions of the Reply relying upon Exhibit 1013, Patent Owner's Motion to Exclude Exhibit 1013 and Petitioner's Reply is *dismissed as moot*.

2. *Exhibits 1004, 1005, 1006, 1007, 1010, and 1011*

Patent Owner challenges the admissibility of Exhibits 1004, 1005, 1006, 1007, 1010, and 1011 under Federal Rules of Evidence ("FRE") 401 and 403. PO Mot. to Exclude 8–9.

Because this Decision does not rely on these exhibits, Patent Owner's Motion to Exclude these exhibits is *dismissed as moot*.

3. *Exhibit 2006, References to Consumer Perception*

Patent Owner asserts that certain deposition testimony of Dr. Slocum regarding "consumer perception" is "a new and unsupported obviousness rationale" that violates FRE 403 and exceeds impermissibly the scope of a reply under 37 C.F.R. § 42.23(b). PO Mot. Exclude 9–10 (citing Ex. 2006, 250:2–14, 251:22–252:3, 288:13–290:2).

Because neither Petitioner's papers nor this Decision rely on the cited testimony, which was introduced into the record by Patent Owner, Patent Owner's Motion to Exclude is *dismissed as moot*.

4. *Exhibits 1008 and 1013*

Patent Owner moves to exclude the opinions and conclusions of Dr. Slocum, Petitioner's declarant, under FRE 401, 403, and 702. PO Mot. to Exclude 10–12. Patent Owner contends that Dr. Slocum lacks knowledge in the relevant technical field, and bases his opinions on "the wrong person of ordinary skill in the art," e.g., one who "does not have knowledge relating to the design of lid assemblies for beverage containers . . . [and] need only be a mechanical engineer and have drunk from a beverage container." *Id.* at 10–

11. Therefore, Patent Owner asks that the Board act as “gatekeeper” and exclude Dr. Slocum’s opinions, as based on improper methodology. *Id.* at 11.

Petitioner responds that because this case presents “relatively straightforward and uncomplicated” problems, prior art solutions, and technology, it is sufficient for a person of ordinary skill in the art to have “bachelor’s degree level training in mechanical engineering and design principles and three years of experience working as a mechanical engineer,” which would provide experience in “general mechanical engineering principles, linkages and seals, mechanisms, fluids, and human factors,” as Dr. Slocum opined. Pet. Exclude Opp. 9–10 (citing Ex. 1008 ¶¶ 5, 12). Petitioner contends that “Dr. Slocum, a tenured professor at Massachusetts Institute of Technology . . . has extensive experience in all of these areas.” *Id.* at 10. Petitioner contends that Dr. Slocum did not testify that a person of ordinary skill in the art would not have experience with the design of lid assemblies for beverage containers, or that he does not have that experience. Instead, Petitioner contends that Dr. Slocum testified that such knowledge is not necessarily required, given the straightforward technology at issue. *Id.* at 10–11 (citing Ex. 2006, 309:2–309:5, 308:20–24; Ex. 1012 ¶ 5).

FRE 702 provides that a witness qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion if (a) the expert’s knowledge will help the trier of fact to understand the evidence or to determine a fact in issue, (b) the testimony is based upon sufficient facts or data, (c) the testimony is the product of reliable principles and methods, and (d) the witness has applied the principles and methods reliably to the facts of the case. Testimony on the issue of unpatentability

proffered by a witness who is not “qualified in the pertinent art” is not generally admissible under FRE 702. *Sundance, Inc. v. DeMonte Fabricating Ltd.*, 550 F.3d 1356, 1363–64 (Fed. Cir. 2008). In determining who is qualified in the pertinent art under FRE 702, we need not find a complete overlap between the witness’s technical qualifications and the problem confronting the inventor or the field of endeavor. *See SEB S.A. v. Montgomery Ward & Co., Inc.*, 594 F.3d 1360, 1372–73 (Fed. Cir. 2010) (upholding admission of the testimony of an expert who admittedly lacked expertise in the design of the patented invention, but had experience with materials selected for use in the invention); *Mytee Prods., Inc. v. Harris Research, Inc.*, 439 Fed. App’x 882, 886–87 (Fed. Cir. 2011) (non-precedential) (same).

Patent Owner’s arguments do not persuade us that Dr. Slocum’s opinions are irrelevant under FRE 401 or 402, or are based on an unreliable methodology under FRE 702. Here, the challenged claims relate to a lid assembly for a beverage container. Ex. 1003. Dr. Slocum testifies that he has Bachelor’s, Master’s, and Doctorate Degrees in Mechanical Engineering, each from the Massachusetts Institute of Technology, and has experience in mechanical engineering and mechanical design, including design related to snap-on lids for beverage containers. Ex. 1008 ¶¶ 3–4; Ex. 2004, 10:10–15:14. Dr. Slocum’s qualifications align sufficiently with the challenged subject matter such that he is “qualified in the pertinent art,” and his knowledge is helpful in understanding the evidence and determining facts in issue in this case. *Sundance*, 550 F.3d at 1363–64.

Consequently, Petitioner has not demonstrated that the Declarations of Dr. Slocum (Ex. 1008 and 1013) should be excluded. *See* 37 C.F.R. §§ 42.20(c), 42.22, 42.62(a), 42.64.

III. CONCLUSION

Based on the evidence and arguments, Petitioner has demonstrated by a preponderance of the evidence that claims 1, 3, 6, and 10–15 of the '979 patent are unpatentable under 35 U.S.C. § 102(b) as anticipated by Oosterling, and that claim 7 is unpatentable under 35 U.S.C. § 103(a) as obvious over Oosterling.

IV. ORDER

In consideration of the foregoing, it is:

ORDERED that claims 1, 3, 6, 7, and 10–15 of the '979 patent are held to be unpatentable;

FURTHER ORDERED that Patent Owner's Motion to Exclude is *dismissed-in-part* and *denied-in-part*; and

FURTHER ORDERED that because this is a Final Written Decision, parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

PETITIONER:

David D'Ascenzo
David@dascenzoiplaw.com

PATENT OWNER:

David Moreland
litdocketing@mcciplaw.com

Case IPR2015-01034
Patent 8,863,979 B2

Jessica Keesee
jkeesee@mcciplaw.com

Walter Levie, III
tlevie@mcciplaw.com