

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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MOBILE TECH, INC.,

Petitioner,

v.

SENNCO SOLUTIONS, INC.,

Patent Owner.

Case IPR2017-02199

Patent 7,154,039 B1

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Before MELISSA A. HAAPALA, *Acting Vice Chief Administrative Patent Judge*, DAVID C. McKONE and KIMBERLY McGRAW, *Administrative Patent Judges*.

McGRAW, *Administrative Patent Judge*.

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

## I. INTRODUCTION

In this *inter partes* review, instituted pursuant to 35 U.S.C. § 314, Mobile Tech, Inc., challenges the patentability of claims 1–3, 5, 6, 13–17, 19, and 20 of U.S. Patent No. 7,154,039 B1 (Ex. 1001, “the ’039 patent”) owned by Sennco Solutions, Inc.

We have jurisdiction under 35 U.S.C. § 6. This Final Written Decision, issued pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73, addresses issues and arguments raised during trial. For the reasons discussed below, we determine that Petitioner has shown by a preponderance of the evidence that claims 1–3, 5, 6, 13–17, 19, and 20 of the ’039 patent are unpatentable.

### A. Procedural History

Mobile Tech, Inc. (“Petitioner” or “MTI”) filed a Petition requesting an *inter partes* review of claims 1–3, 5, 6, 13–17, 19, and 20 of the ’039 patent (Paper 1, “Pet. Sennco Solutions, Inc. (“Patent Owner” or “Sennco”) filed a Preliminary Response. Paper 6. Following authorization, Petitioner filed a Reply to Patent Owner’s Real Party-in-Interest Arguments. Paper 8.

Upon consideration of the Petition, the Preliminary Response, the Reply to Patent Owner’s Real Party-in-Interest Arguments, and the evidence cited therein, we determined, for the purposes of institution, Petitioner properly identified the real parties-in-interest to the proceeding and that the statutory bar of 35 U.S.C. § 315(b) did not apply. Paper 9, 7–9. (“Dec. on Inst.”). We also determined that Petitioner had not demonstrated a reasonable likelihood that it would prevail with respect to its arguments that claims 1, 3, 5, and 6 of the ’039 patent are unpatentable under § 103 over Koshimizu but did demonstrate by a reasonable likelihood that it would

prevail with respect to the remaining asserted grounds. *Id.* at 18, 21, 24–26, 28.

On April 24, 2018, the Supreme Court held that a final written decision under 35 U.S.C. § 318(a) must decide the patentability of all claims challenged in the petition. *SAS Inst., Inc. v. Iancu*, 138 S. Ct. 1348, 1355 (2018). Pursuant to the holding in *SAS*, we issued a Supplemental Order modifying our Decision on Institution to institute *inter partes* review on all claims challenged and all grounds presented in the Petition. Paper 11, 2.

Following institution of trial, Patent Owner filed a Patent Owner Response (Paper 16, “PO Resp.”) and Petitioner filed a Reply (Paper 18, “Reply”). In support of their respective positions, Petitioner relies on the testimony of Kimberly Cameron, Ph.D. (Ex. 1007) and Chris Remy (Ex. 1010) and Patent Owner relies on the testimony of Christopher Marszalek (Exs. 2001, 2008).

A hearing was held on December 17, 2018. A transcript of the hearing has been entered into the record. Paper 22 (“Tr.”).

### *B. Related Proceedings*

The parties state that Patent Owner sued Petitioner in the Northern District of Illinois (Case No. 1:16-cv-9668), alleging infringement of the ’039 patent and two other patents unrelated to the ’039 patent (U.S. Patent Nos. 9,303,809 and 9,664,336). Pet. 1; Paper 4, 2. The case has since been dismissed without prejudice. Paper 8, 6; Ex. 1012, 1.

C. The '039 Patent (Ex. 1001)

The '039 patent relates to a security system and method “for securing and/or for aligning a portable electronic device,” such as a camera, camcorder, or cellular telephone. Ex. 1001, 1:6–14.

Figure 3 of the '039 patent is reproduced below:

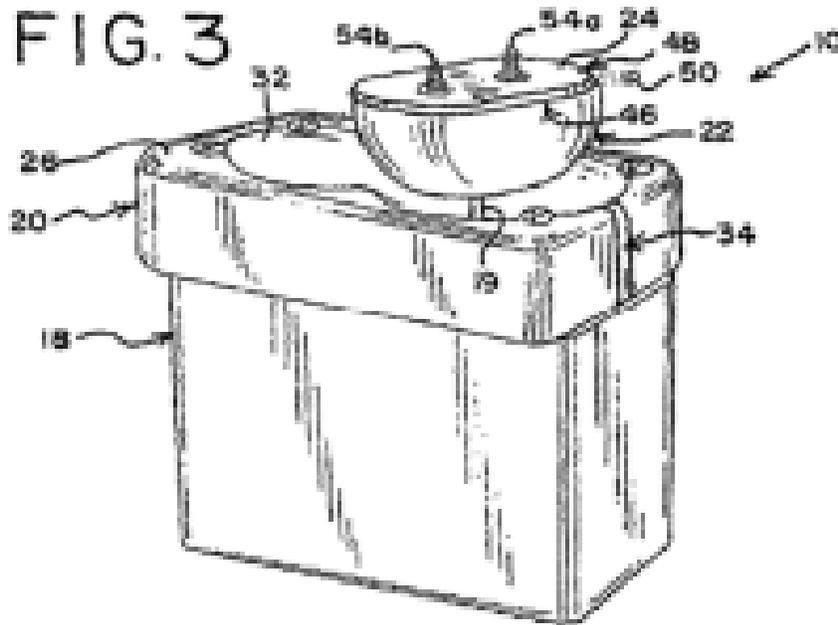


Figure 3, shown above, illustrates system 10 that includes housing 20, connector 22, and retractable reel 18 having cable 19. *Id.* at 6:41–48. Housing 20 may have recession 32, which “may be sized to receive . . . connector 22 for displaying . . . device 12.” *Id.* at 7:37–41; *see also id.* at 1:28–30 (stating the “housing may have a recession which may be sized to receive the connector for aligning the device with respect to the housing. As a result, the connector and/or the device may be centered with respect to the housing.”). Connector 22 “may be centered and/or may be aligned with respect to the recession 32, the housing 20 and/or the retractable reel 18 via the cable 19 and/or the opening 36 of the housing 20.” *Id.* at 10:42–45.

*D. Illustrative Claims*

Of the challenged claims, only claims 1 and 13 are independent and are reproduced below.<sup>1</sup>

1. A system for securing a device to a fixture, the system comprising:
  - [a] a housing having a first side and a second side wherein the first side is opposite to the second side wherein the first side of the housing has a recession extending inward with respect to the second side of the housing and further wherein the housing has an opening extending from the recession through the housing to the second side of the housing;
  - [b] a cable having a length defined between a first end and a second end wherein the cable extends through the opening of the housing;
  - [c] a retractable reel connected to the second end of the cable wherein the retractable reel is adjacent to the second side of the housing wherein the first end of the cable extends from the first side of the housing; and
  - [d] a connector having a first side and a second side wherein the first side is opposite to the second side wherein the connector has walls defining an exterior surface wherein the first end of the cable is connected to the connector wherein the device connects to the first side of the connector wherein the recession is sized to receive the connector wherein the first end of the cable moves inward with respect to the housing and further wherein the opening in the housing aligns the connector with respect to the recession.
  
13. A method for securing a device to an exterior surface of a fixture, the method comprising the steps of:

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<sup>1</sup> Bracketed letters and formatting have been added for ease of reference and for consistency with nomenclature used by Petitioner.

- [a] forming an opening in a housing wherein the housing has a first side and a second side wherein the first side is opposite to the second side wherein the first side of the housing has a recession extending inward with respect to the second side wherein the opening extends from the recession through the housing to the second side of the housing;
- [b] inserting a cable into the opening of the housing wherein the cable has a length defined between a first end and a second end wherein the first end of the cable is connectable to the fixture and the second end extends from the first side of the housing;
- [c] connecting the first end of the cable to a connector having walls defining an exterior surface wherein the recession of the housing is sized to receive the exterior surface of the connector; and
- [d] aligning the connector with respect to the recession via the cable and the opening in the housing wherein the first end of the cable and the connector move inward with respect to the first side of the housing wherein the connector is insertable into the recession of the housing.

*E. Instituted Grounds*

We instituted trial to determine whether claims 1–3, 5, 6, 13–17, 19, and 20 of the '039 patent are unpatentable based on the following grounds. Dec. on Inst. 29; Paper 11, 2.

<b>Reference(s)</b>	<b>Basis</b>	<b>Challenged Claims</b>
Koshimizu <sup>2</sup>	§ 102(b) <sup>3</sup>	1, 3, 5, 6, 13, 14, 16, 17, 19, and 20
Koshimizu	§ 103	1, 3, 5, 6, 13, 14, 16, 17, 19, and 20
Koshimizu and Decoteau <sup>4</sup>	§ 103	2 and 15
Fort <sup>5</sup>	§ 102(b)	1–3, 5, 6, 13–17, 19, and 20
Fort	§ 103	1–3, 5, 6, 13–17, 19, and 20
Fort and Decoteau	§ 103	2 and 15

## II. ANALYSIS

### A. Real Party-in-Interest

In its Petition, Petitioner identifies itself, “Mobile Tech, Inc., d/b/a Mobile Technologies Inc. and MTI” as the real party-in-interest in this proceeding. Pet. 1. Prior to institution, Patent Owner raised the issue of whether Petitioner properly identified all real parties-in-interest. In particular, Patent Owner asserted that we should decline to institute the Petition because the Petition failed to name “at least Vestar Capital Partners (‘Vestar’) and/or MTI Holdings, LLC as a real party-in-interest.” Prelim. Resp. 10. Relying on the declaration testimony of Mr. Marszalek, Patent

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<sup>2</sup> Japanese Patent Application Publication No. U3100287, (pub. May 13, 2004) (Ex. 1002, “Koshimizu”). Citations to this reference are to its English translation (Ex. 1003).

<sup>3</sup> The Leahy–Smith America Invents Act, Pub. L. No. 112–29, 125 Stat. 284 (2011) (“AIA”), amended 35 U.S.C. §§ 102 and 103. Because the ’039 patent has an effective filing date before the effective date of the applicable AIA amendments, we refer to the pre -AIA version of §§ 102 and 103.

<sup>4</sup> U.S. Patent No. 6,502,727 B1 (iss. Jan. 7, 2003) (Ex. 1005, “Decoteau”).

<sup>5</sup> U.S. Patent No. 6,761,579 B2 (iss. July 13, 2004) (Ex. 1004, “Fort”).

Owner asserted Vestar is a real-party-in-interest because (1) Vestar is Petitioner's sole owner and, therefore, "Vestar has the sole right to manage MTI's business," (2) the President and Chief Executive Officer of Petitioner takes direction and input from the board of Vestar, (3) MTI cannot make litigation decisions without the input of the Vestar Board, and (4) the Vestar board received regular updates about the dispute between the Patent Owner and the Petitioner throughout 2016 and 2017. *Id.* at 13; Ex. 2001 ¶¶ 23–25. Patent Owner also stated that Petitioner has "listed MTI Buyer, Inc.; MTI Intermediate, Inc.; and Mobile Tech Holdings, Inc. as parent companies having a possible pecuniary interest in [the] outcome" of "an unrelated patent infringement suit against a third party" and therefore may also be real parties-in-interest. *Id.* at 13.

A petition for *inter partes* review "may be considered only if . . . the petition identifies all real parties in interest." 35 U.S.C. § 312(a)(2). In our Institution Decision, we determined that, based on the evidence then before us, none of the entities identified by Patent Owner had been shown to be a real party-in-interest in this proceeding and that Petitioner has properly identified all real parties-in-interest. *See* Dec. on Inst. 8–10. Specifically, we found that the evidence then before us was insufficient to show that Vestar, as opposed to MTI, controls or funds the instant proceeding. *Id.* at 9–10. We noted that the existence of a parent-subsidary relationship, without more, is insufficient to establish that the parent is involved in the instant proceeding or makes decisions for the Petitioner; Patent Owner's general allegations that MTI takes direction or input from the Vestar board, or that MTI provides updates to its parent about the present proceeding, does not establish that Vestar controls or makes decisions for Petitioner in the

present proceeding. *Id.* at 9 (citing Prelim. Resp. 13; Ex. 2001 ¶¶ 20, 23–25). We also noted that Mr. Remy’s testimony that Vestar does not control or fund this proceeding was credible. *Id.* (citing Ex. 1010 ¶¶ 21–28). We stated that the fact Petitioner has identified other entities as real parties-in-interest in other unrelated proceedings is insufficient to establish that those entities are real parties-in-interest in the present proceeding and that Mr. Remy testified that these entities merely own shares in Petitioner or no longer have any ownership interest in Petitioner. *Id.* at 10 (citing Prelim. Resp. 14; Ex. 1010 ¶¶ 8–9, 13–19).

In its Patent Owner Response, Patent Owner states that it “has elected to dedicate efforts to the lack of merit of Petitioner’s invalidity arguments and not the real-party-in-interest issue.” PO Resp. 9. Patent Owner also admits that there is “extensive declaration and deposition testimony” that Mr. Remy, CEO of Petitioner, and not a board composed of Vestar directors, is directing the IPR filings, but submitted evidence to show that statements made in Mr. Marszalek’s declaration were accurate. *Id.* at 9–10 (citing Ex. 2005, Ex. 2006, 20:18-22, 23:17-24:16, 28:19-22; Ex. 2008 ¶¶ 3–7).

Based on the complete record now before us, we see no reason to change our previous determination; we are not persuaded that Petitioner failed to properly identify all real parties-in-interest in this proceeding.

#### *B. Level of Ordinary Skill in the Art*

Neither party has proposed an articulation for a person of ordinary skill in the art (“POSITA”). We determine that no express finding is necessary and that the level of ordinary skill in the art, in this case, is reflected by the prior art of record. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001).

### C. Claim Construction

In an *inter partes* review filed before November 13, 2018, we construe claim terms in an unexpired patent according to their broadest reasonable construction in light of the specification of the patent in which they appear. 37 C.F.R. § 42.100(b) (2017);<sup>6</sup> *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2144–46 (2016) (upholding the use of the broadest reasonable interpretation standard as the claim interpretation standard to be applied in *inter partes* reviews).

Prior to Institution, the parties proposed construction for a number of terms.<sup>7</sup> In our Decision on Institution, we determined that only the term “sized to receive” required interpretation and only to the extent necessary to determine whether this term excludes the recessions of Koshimizu and Fort as argued by Patent Owner. In its Response, Patent Owner requests that we reconsider the construction of “sized to receive” and further proposes constructions for the terms “recession” and “device.” PO Resp. 11–25.

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<sup>6</sup> A recent amendment to this rule does not apply here because the Petition was filed before November 13, 2018. *See* Changes to the Claim Construction Standard for Interpreting Claims in Trial Proceedings Before the Patent Trial and Appeal Board, 83 Fed. Reg. 51,340 (Oct. 11, 2018) (amending 37 C.F.R. § 42.100(b) effective November 13, 2018).

<sup>7</sup> Petitioner proposed constructions for the terms “adjacent to” (claim 1), “sized to receive” (claims 1, 13), and “the first end of the cable is connectable to the fixture” (claim 13). Pet. 6–9. Patent Owner responded that the terms “adjacent to” and “the first end of the cable is connectable to the fixture” should be construed according to their “plain and ordinary meaning” and further proposed a construction for the terms “sized to receive” and “device.” Prelim Resp. 16–21.

1. “device”

The term “device” is recited in challenged claims 1, 2, 6, 13, 16, and 19 of the ’039 patent, including in the preamble of independent claims 1 and 13. Patent Owner asserts the ’039 patent defines “device” to mean “a portable electronic device.” PO Resp. 25 (citing Ex. 1001, 1:7–14). Petitioner replies the specification does not clearly redefine “device” but rather merely uses the term “device” as shorthand when describing portable electronic devices. Reply 1–2. Petitioner further asserts that, other than claim 16, the term “device” is not part of an affirmative limitation. *Id.* at 9.

For the reasons that follow, we do not construe the term “device” as used in the ’039 patent to mean a “portable electronic device.”

Consistent with the broadest reasonable construction, claim terms are presumed to have their ordinary and customary meaning as understood by a person of ordinary skill in the art in the context of the entire patent disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). The presumption that a term is given its ordinary and customary meaning may be rebutted if the specification clearly sets forth a different definition of the term in the specification. *See In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997); *see also In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994) (holding that an inventor may define specific terms used to describe invention, but must do so “with reasonable clarity, deliberateness, and precision” and, if done, must “‘set out his uncommon definition in some manner within the patent disclosure’ so as to give one of ordinary skill in the art notice of the change” in meaning).

The plain and ordinary meaning of “device” is not limited to portable electronic devices. Therefore we look to the specification to determine

whether the '039 patent clearly set forth a definition of “device” that is different from its ordinary and customary meaning. The '039 patent states:

The present invention generally relates to a system and a method for securing and/or for aligning a device. More specifically, the present invention relates to a system and a method for securing and/or for aligning *a portable electronic device (hereinafter “the device”)*, such as for example a camera, a camcorder, a digital camera, a digital music player, a video game, a digital video player, a digital video recorder, a personal data assistant (hereinafter “a PDA”), a cellular telephone and/or the like.

Ex. 1001, 1:6–14 (emphasis added).

Patent Owner asserts the second sentence of the above paragraph defines “device” to mean a “portable electronic device.” PO Resp. 24 (citing Ex. 1001, 1:7–14). We disagree that this sentence defines “device” with sufficient clarity to evince an intent to redefine “device” from its plain and ordinary meaning. When describing a “device” within the context of the preferred embodiments of the invention, the '039 patent states that portable electronic devices are merely examples of the devices with which the invention could be used. Ex. 1001, 6:51–56 (“The device 12 *may be* an electronic device, such as, for example, a camera, a camcorder, a digital camera, a digital music player, a video game, a digital video player, a digital video recorder, a personal data assistant (hereinafter ‘a PDA’), a cellular telephone and/or the like.”) (emphasis added). Here, the permissive use of “may be” indicates that “the device” might not be an electronic device. If the term “device” had been defined to mean “portable electronic device,” there would be no need to state the portable electronic device may be an electronic device. Furthermore, the '039 patent does not clearly express an intent to apply the “hereinafter” to the claims, as opposed to merely

shorthand in the written description. Thus, the specification does not set forth with sufficient clarity, deliberateness, and precision an intent to redefine “device” as set forth in the “hereinafter” clause.

2. “*recession . . . sized to receive*” a connector

Claim 1 requires the first side of the housing to have “a recession extending inward . . . [and] an opening extending from the recession through the housing to the second side of the housing . . . wherein the recession is sized to receive the connector.” Ex. 1001, 11:25–43. Claim 13 similarly recites “wherein the recession of the housing is sized to receive the exterior surface of the connector.” *Id.* at 12:59–61.

Both parties agree that a recession can mean “a cavity.” PO Resp. 14; Reply 12 (“a recession is a cavity within a structure”). However, the parties dispute, *inter alia*, (1) whether the claimed “recession . . . sized to receive a connector” must maintain at least a portion of the connector, and (2) whether a “recession” can read upon a tubular holder having consistent diameter and no apparent bottom surface, such as that disclosed in Fort.<sup>8</sup>

With respect to the “sized to receive” limitations, Petitioner states a “recession . . . sized to receive” a connector, as recited in claims 1 and 13, requires “the recession be capable of admitting at least part of the

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<sup>8</sup> The parties initially disputed whether the claimed recession required a sloped surface. *See* PO Resp. 24 (stating that a recession sized to receive a connector “requires a receding or sloped surface that holds, supports, or otherwise maintains, the connector”); Reply 4–7 (arguing, *inter alia*, that requiring the recession to have sloped walls is inconsistent with the specification of the ’039 patent as well as other Sennco patents and applications). During oral argument, however, Patent Owner agreed with Petitioner that a recession need not have sloping sides. *See* Tr. 43:22–44:1.

connector. It does not require the recession be capable of both admitting and *maintaining* the entire connector.” Pet. 8. In its Preliminary Response, Patent Owner argued that “‘sized to receive’ means more than a mere pass through opening, in that the connector is held and supported on the recession ‘sized to receive’ the connector.” Prelim. Resp. 19. We disagreed with Patent Owner’s proposed construction of “sized to receive” in our Decision to Institute, noting a construction of a recession “sized to receive” that would require to hold or maintain the connector, would be inconsistent with how the term “sized to receive” is used throughout the specification of the ’039 patent. Dec. on Inst. at 12–13. For example, the ’039 patent describes opening 36 as “sized to receive” cable 19, yet opening 36 does not “hold or support” cable 19. *Id.* (citing Ex. 1001, 7:46–54).

In its Response, Patent Owner altered its proposed definition of “sized to receive” to state that while “perhaps not requiring maintaining the ‘entire connector,’ the claim term requires maintaining at least a portion of the connector. Otherwise, the invention of the ’039 Patent would not have any need for the recession structure.” PO Resp. 18; *see also id.* at 19–20 (arguing the specification of the ’039 patent “make[s] it plain that the recession is used to receive/maintain, and is more than just a pass through opening”) (citing Ex. 1001, 2:59–64, 7:39–41, Fig. 2. Ex. 2001 ¶¶ 60–62; Ex. 2008 ¶¶ 8–12). Patent Owner contends the “purpose of the receding, sloped recession surface is to receive/maintain the connector, such as for purposes of alignment.” PO Resp. 20 (citing Ex. 2008 ¶¶ 8–16; Ex. 1001, 1:28–30); *see also id.* at 24 (stating under the broadest reasonable interpretation standard, “a recession sized to receive the connector, or an

exterior surface thereof, requires a receding or sloped surface that holds, supports, or otherwise maintains, the connector”) (citing Ex. 2008 ¶ 13).

Based upon our review of the full record, we determine that a “recession . . . sized to receive” a connector does not require that the recession hold or maintain at least a portion of the connector. The plain and ordinary meaning of the phrase “recession . . . sized to receive” a connector does not require the recession to hold or maintain either the entire connector or at least a part of the connector. Nor does the specification of the ’039 patent require such an interpretation. Patent Owner asserts that the embodiments of the ’039 patent “make it plain that the recession is used to receive/maintain, and is more than just a pass through opening.” PO Resp. 19 (citing Ex. 1001, 7:39–41, 2:59–64, Fig. 2; Ex. 2001 ¶¶ 60–62; Ex. 2008 ¶¶ 8–12). This argument is not persuasive because it is improper to read limitations from preferred embodiments described in the specification into the claims absent a clear indication in the intrinsic record that the patentee intended the claims to be so limited. *See In re Van Geuns*, 988 F.2d 1184, 1184 (Fed. Cir. 1993); *see also Superguide Corp. v. DirectTV Enterprises, Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004) (stating “a particular embodiment appearing in the written description may not be read into a claim when the claim language is broader than the embodiment”). Patent Owner does not identify, nor do we see, any language in the specification that expresses an intention to limit the scope of the claims to the disclosed embodiments.

Moreover, we determine Patent Owner’s proposed construction of a recession “sized to receive” a connector as requiring the recession to hold at least a part of the connector is inconsistent with how the term “sized to receive” is used throughout the specification and the claims of the ’039

patent. For example, claim 7 recites a “slit [that] is sized to receive the cable.” Ex. 1001, 12:8–9. However, slit 34 is a pass-through and does not need to hold or maintain at least a part of the cable. Dr. Marszalek admits that slit 34 shown in Figure 4 of the ’039 patent “is a pass-through for the cable 19” and that slit 34 does not hold or support cable 19. Ex. 1019, 25:5–23; *see also* Ex. 1001, 7:46–49 (stating “slit 34 . . . may be sized to receive . . . cable 19”); Fig. 4 (showing no part of cable 19 in slit 4).

Patent Owner argues that the term “sized to receive” should be interpreted with respect to the element to which it refers, namely a recession versus an opening. PO Resp. 20. We disagree. We see no reason to interpret the phrase “sized to receive” differently when considering a slit that is sized to receive a cable as opposed to a recession that is sized to receive a connector. *See In re Varma*, 816 F.3d 1352 (Fed. Cir. 2016) (stating “the principle that the same phrase in different claims of the same patent should have the same meaning is a strong one, overcome only if ‘it is clear’ that the same phrase has different meanings in different claims”). Patent Owner has not pointed to, and we do not see, anything in the language of claims 1 and 13, or the specification, that provides the required basis for interpreting the phrase “sized to receive” differently in claims 1 and 13 and in claim 7.

Patent Owner also cites to the Oxford English Dictionary definitions of “receive” including “to hold or contain conveniently” and “to become the support or take the weight of.” PO Resp. 22 (citing Ex. 1006, definitions 13c and 14b). However, these alternative dictionary definitions do not compel an interpretation inconsistent with how the term is used in the ’039 patent.

We next turn to whether the claimed “recession” can read upon a structure having no bottom surface, such as a tubular (cylindrical) hollow tube having a constant inner diameter and no bottom. Patent Owner contends a tubular holder having a single hollow through hole and no bottom surface is not a recession. *See id.* at 51 (stating it is improper to presume the “entire tubular holder through hole is or inherently has a recession” and “Petitioner incorrectly equates ‘tubular’ with ‘recession,’ and provides no basis for this equivalency”), 61 (stating the “tubular holder of Fort neither is nor has a recession”); *see also* Tr. 48:15–21 (counsel for Patent Owner stating the claimed recession “requires a bottom surface that [is] receded, sloped, depressed, sunken, or indented, which differentiates the recession from the opening below”); *see also* PO Resp. 14 (stating the recession of Claims 1 and 13 requires a receding surface sloped backward/inward from the first side of the housing in a direction toward the second side of the housing).

Petitioner agrees that “recession” as recited in claims 1 and 13 can mean a “cavity,” “depression,” or “recess” but contends that a recess need not have a bottom surface. *See Tr.* 12:3–7 (counsel for Petitioner stating “[w]e believe the dictionary definition that Sennco provided is a cavity or depression or recess, and we believe those would all be consistent with the broadest reasonable interpretation”); *id.* at 13:1–13:3 (stating “we don’t believe that a recession would [have to have a bottom surface], based upon a cavity is a hollow place or an empty space within a solid body”); *see also* Reply 6–7 (stating a cavity is “simply a ‘hollow place; a void or empty space within a solid body’”) (quoting Ex. 1013, 1).

We agree with the parties that the term “recession” can mean a “depression”, “recess” or “cavity” and that (1) a definition for “depression” is a “depressed or sunken formation on a surface; a hollow, a low place or part,” (2) a definition for “recess” is a “small depression or indentation,” and (3) a definition for “cavity” is a “hollow place; a void or empty space within a solid body.” Reply 5 (citing Ex. 1013, 1, 4, 15). Each of these definitions, however, require a formation or structure having a bottom surface.

Petitioner states “we don’t believe that a recession would [have to have a bottom surface], based upon a cavity is a hollow place or an empty space within a solid body.” Tr.12:25–26:3; *see also* Reply 6–7 (stating a cavity is “simply a ‘hollow place; a void or empty space within a solid body’”) (quoting Ex. 1013, 1). We disagree. A hollow place, a void or empty space within a solid body still requires the solid body to have some sort of bottom surface.

Our construction is consistent with the specification of the ’039 patent which depicts the recession having a bottom surface. *See* Ex. 1001, Fig. 1. Indeed, Petitioner describes the opening 36 and recession 32 of Figure 1 of the ’039 patent by stating the “*opening* refers to the opening within the surface (*e.g.*, of the bottom surface), which leads into/out of the recession.” Reply 7.

For the foregoing reasons, we do not construe a “recession . . . sized to receive a connector” as requiring that recession be sized to hold or maintain either the entire connector or at least a portion of the connector. We further construe the term “recession” as a depression, recess, or cavity and that a “recession” must have a bottom surface. A tubular (cylindrical) hollow tube having a constant inner diameter and no bottom is not a recession.

### 3. Other Claim Terms

We determine that no further claim construction is required to resolve the issues in dispute. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co. Ltd.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (noting that “we need only construe terms ‘that are in controversy, and only to the extent necessary to resolve the controversy’”) (citing *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)).

#### D. Principles of Law

To prevail in challenging Patent Owner’s claims, Petitioner has the burden of demonstrating by a preponderance of the evidence that the claims are unpatentable. 35 U.S.C. § 316(e); 37 C.F.R. § 42.1(d). That burden never shifts to the Patent Owner. *Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015).

A claim is anticipated under 35 U.S.C. § 102 only if “each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co.*, 814 F.2d 628, 631 (Fed. Cir. 1987). A claim is unpatentable under 35 U.S.C. § 103 if “the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations, including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of skill in the art; and

(4) objective evidence of nonobviousness, i.e., secondary considerations.<sup>9</sup>  
*See Graham v. John Deere Co*, 383 U.S. 1, 17–18 (1966).

Additionally, the obviousness inquiry typically requires an analysis of “whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *KSR*, 550 U.S. at 418 (*citing In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2016) (requiring “articulated reasoning with some rational underpinning to support the legal conclusion of obviousness”). Furthermore, Petitioner does not satisfy its burden of proving obviousness by employing “mere conclusory statements,” but “must instead articulate specific reasoning, based on evidence of record, to support the legal conclusion of obviousness.” *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016).

We analyze the asserted grounds of unpatentability in accordance with the above-stated principles.

*E. Asserted Unpatentability of Claims 1, 3, 5, 6, 13, 14, 16, 17, 19, and 20 over Koshimizu under §§ 102, 103*

Petitioner contends that claims 1, 3, 5, 6, 13, 14, 16, 17, 19, and 20 are unpatentable under § 102 and §103 over Koshimizu. Pet. 10–37 (citing Ex. 1007).

*1. Scope and Content of Koshimizu*

Koshimizu is directed to a counter jewelry display container having a retractable cord that allows customers to try on small “jewelry such as rings, earrings, and bracelets” while preventing theft. Ex. 1003, [57], ¶¶ 1, 6–7.

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<sup>9</sup> The parties have not provided any evidence or argument directed to secondary considerations, and therefore, secondary considerations do not constitute part of our analysis.

Figure 2 of Koshimizu is reproduced below.

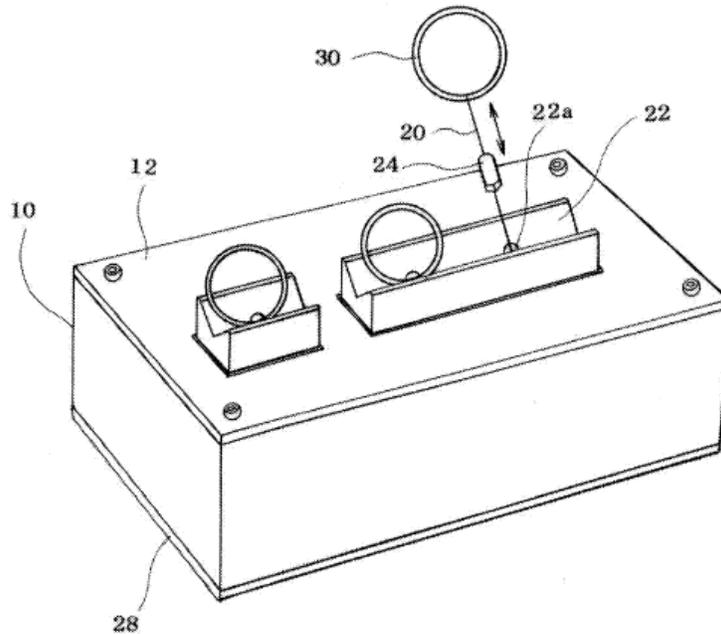


Figure 2 of Koshimizu above illustrates display case 10, having surface plate 12, horizontal V-shaped support 22, cord 20, and through-hole 22a.

Ex. 1003 ¶¶ 11, 13. In this embodiment, one end of the cord is attached to ring 30 via fastener 24 and the other end of the cord is connected to a “leaf spring for wire winding (not shown).” *Id.* ¶ 12. The cord is “pulled out via a through-hole formed in the surface plate and the v-shaped support.”

*Id.* ¶ 10. In this embodiment, ring 30 is attached to a ring shaped cord that is connected via fastener 24 to one end of cord 20. *Id.* ¶ 14. The other end of the cord is connected to a “leaf spring for wire winding” (not shown).

*Id.* ¶ 12. The cord is biased by the leaf spring for wire winding to be retracted into the case. *Id.* When a customer wants to try it on, ring 30 is easily pulled out. *Id.* ¶ 15. When released, the ring is returned to v-shaped support 22 by the leaf spring for wire winding. *Id.*

## 2. *Independent Claim 1*

### a. *Preamble*

The preamble recites a “system for securing a device to a fixture.” Petitioner asserts Koshimizu discloses a system (“jewelry display container 10”) for securing a device (e.g., “ring 30”) to a fixture (e.g., a “counter”). Pet. 11 (citing Ex. 1007, 22–23). Patent Owner responds that Koshimizu does not disclose or teach the preamble because Koshimizu is directed to a display for jewelry, not a portable electronic device as required by the ’039 patent. PO Resp. 34.

We agree with Petitioner that Koshimizu’s jewelry display container is a system for securing a device to a fixture. We disagree with Patent Owner’s argument because it is based upon a construction of “device” that we did not adopt.<sup>10</sup> *See supra* Section II.C.1. Accordingly, Patent Owner’s argument, that claim 1 is patentable because Koshimizu does not disclose the device recited in the preamble, is not persuasive.

### b. *Claim element 1[a]*

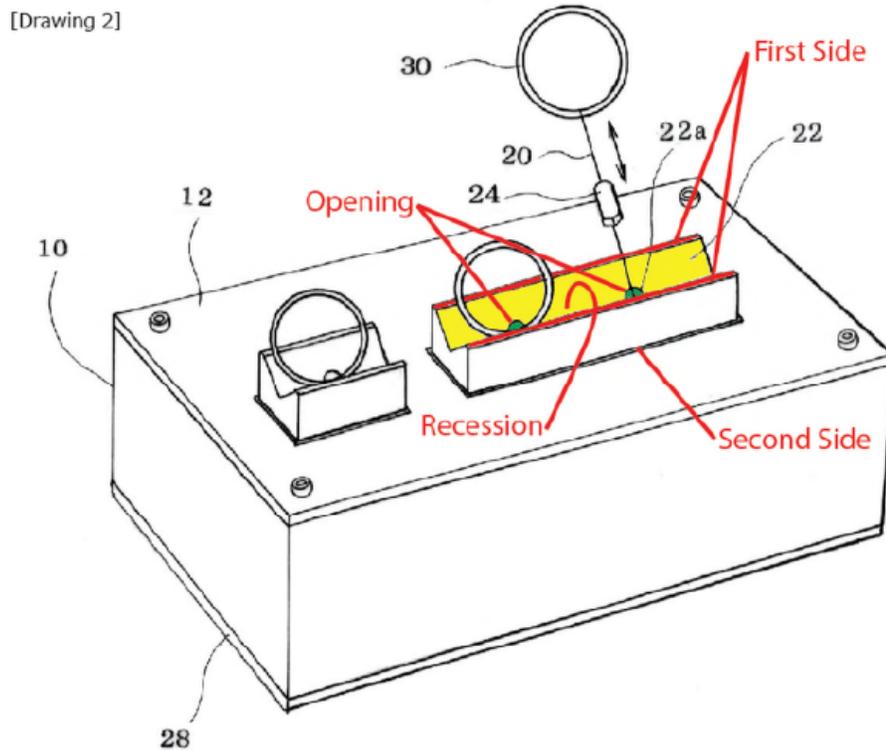
Claim element 1[a] recites:

a housing having a first side and a second side wherein the first side is opposite to the second side wherein the first side of the housing has a recession extending inward with respect to the second side of the housing and further wherein the housing has an opening extending from the recession through the housing to the second side of the housing.

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<sup>10</sup> Although we determine that device is not limited to “a portable electronic device,” we note that we agree with Petitioner that the “small jewelry” disclosed by Koshimizu implicitly includes portable electronic devices, such as electronic watches. *See Reply 10.*

Petitioner's annotation of Koshimizu's Figure 2, reproduced below, illustrates one of Petitioner's mappings of Koshimizu to claim element 1[a]. Pet. 11–15.



Petitioner argues, as shown by the annotations of Figure 2 of Koshimizu above, Koshimizu discloses a housing (v-shaped support 22) having opposite first and second sides, a recession (the v-shaped groove of housing 22, highlighted in yellow), and an opening (through-hole 22a, highlighted in green). *Id.*

We agree with and adopt Petitioner's analysis and find Koshimizu discloses the housing as required by claim element 1[a]. *See id.* Patent Owner has not raised arguments specifically against this limitation in its

Patent Owner Response;<sup>11</sup> therefore, any such arguments are waived. *See Novartis AG v. Torrent Pharm. Ltd.*, 853 F.3d 1316, 1330 (Fed. Cir. 2017); *In re Nuvasive*, 842 F.3d 1376, 1381 (Fed. Cir. 2016).<sup>12</sup>

*c. Claim element 1[b]*

Claim element 1[b] recites “a cable having a length defined between a first end and a second end wherein the cable extends through the opening of the housing.” For this element, Petitioner relies Koshimizu’s disclosure of cord 20, which can be “pulled out via a through-hole 22a formed in the surface plate and the V-shaped support.” Pet. 16 (citing Ex. 1003, 2, ¶ 13, Figs. 4–6).

We agree with Petitioner’s analysis of this limitation and find that Koshimizu discloses a cable (“cord 20”) that extends through the opening of a housing (through-hole 22a) as required by claim element 1[b]. Patent Owner has not raised arguments specifically against this limitation in its Patent Owner Response; therefore, any such arguments are waived.

*d. Claim element 1[c]*

Claim element 1[c] recites “a retractable reel connected to the second end of the cable wherein the retractable reel is adjacent to the second side of the housing wherein the first end of the cable extends from the first side of the housing.” Petitioner contends Koshimizu discloses a retractable reel

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<sup>11</sup> Patent Owner’s arguments that Koshimizu does not teach a “recession” or an “opening” meeting the limitations of claim element 1[d] are addressed below in Section II.E.2.e.

<sup>12</sup> As in *Nuvasive*, the Scheduling Order in this proceeding cautioned Patent Owner that “any arguments for patentability not raised in the response will be deemed waived.” Paper 10, 3.

(“leaf spring for wire winding 18”) that is connected to the second end of the cable (“cord 20”) and is adjacent to the second side of the housing (reel is located within “secondary case 16”). Pet. 17–19 (citing Ex. 1003 ¶¶ 12–13, Figs. 5, 9; Ex. 1007, 29–31). Petitioner further contends that when ring 30, attached to the first end of the cable (“cord 20”), is pulled away from the housing, the first end of the cable (“cord 20”) extends from the first side housing. *Id.* at 18–19 (citing Ex. 1003 ¶ 13, Figs. 4–6, 9; Ex. 1007, 30).

We agree with Petitioner’s analysis and find that the leaf spring disclosed in Koshimizu meets the limitations of claim element 1[c]. *See* Pet. 17–19; Ex. 1003 ¶¶ 12–13, Figs. 4–6, 9. Patent Owner has not raised arguments against this limitation in its Patent Owner Response; therefore, any such arguments are waived.

*e. Claim element 1[d]*

Claim element 1[d] recites:

a connector having a first side and a second side wherein the first side is opposite to the second side wherein the connector has walls defining an exterior surface wherein the first end of the cable is connected to the connector wherein the device connects to the first side of the connector wherein the recession is sized to receive the connector wherein the first end of the cable moves inward with respect to the housing and further wherein the opening in the housing aligns the connector with respect to the recession.

Petitioner contends, and we agree, that Koshimizu discloses a cylindrical shaped connector (fastener 24), having a first side, a second side opposite the first side, and walls defining an exterior surface, that is connected to the first end of the cable (cord 20). Pet. 19–20. Patent Owner

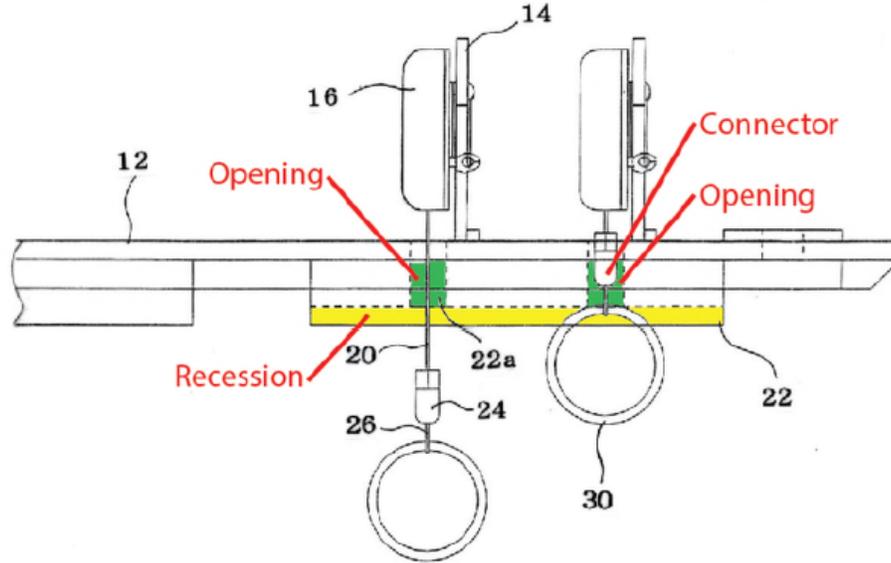
does not dispute Petitioner's assertion that Koshimizu discloses these limitations of claim element 1[d]; therefore, any such arguments are waived.

Petitioner also contends the first side of Koshimizu's connector (female portion of fastener 24) can connect to a device (e.g., small jewelry such as a ring) via "ring shaped cord 26" thus satisfying the "connector . . . wherein the device connects to the first side of the connector" limitation of claim element 1[d] (the "connector limitation"). Pet. 21 (citing Ex. 1003 ¶ 14, Figs. 4, 9, 10; Ex. 1007, 33–35). Patent Owner responds that Koshimizu cord "would not be readily apparent as being attachable to the portable electronic device." PO Resp. 34 (citing Ex. 2001 ¶ 65).

We disagree with Patent Owner's argument because it is based upon a construction of the term "device" that we did not adopt. We agree with and adopt Petitioner's analysis and find that Koshimizu's disclosure of fastener 24, which can connect to a device, such as small jewelry, satisfies the connector limitation of claim element 1[d].

Claim element 1[d] also requires a "recession [that] is sized to receive the connector . . . wherein the opening in the housing aligns the connector with respect to the recession. Petitioner provides multiple arguments as to how the various elements of Koshimizu's system map to these "opening" and "recession" limitations of claim element 1[d]. In its first mapping, illustrated by its annotations of Figure 4 of Koshimizu reproduced below, Petitioner asserts that the recession, highlighted in yellow, of horizontal V-shaped support 22, is "sized to receive the connector" (fastener 24) "but not sized to maintain the connector" when cord 20 is fully retracted. Pet. at 23 (emphasis omitted).

[Drawing 4]



As shown in Petitioner’s annotations of Koshimizu Figure 4, reproduced above, the jewelry display container of Figure 4, the “connector [fastener 24] enters the recession [v-shaped groove] as the cable (‘cord 20’) retracts. As the cable further retracts, a portion of the connector passes into the ‘through hole 22a.’” *Id.* at 21 (citing Ex. 1007, pp. 33–35) (emphasis omitted).

Petitioner also contends that the “position of the opening, formed by ‘through-hole 22a,’ aligns the connector (fastener 24) with respect to the recession.” *Id.* at 24. Specifically, Petitioner contends that opening 22a allows cable 20 “to be centered within the recession such that retracting the cable through the opening aligns the connector with respect to the recession.” *Id.* Petitioner explains that as the cable retracts, connector 24 is drawn towards the “through-hole 22a” and into alignment with the centerline of the recession, and that the connector is drawn into the alignment with the recession based on the position of the opening relative to the recession. *Id.* at 24–25; Ex. 1007 pp. 36–37.

Patent Owner responds that the recession is not sized to receive the connector as required by claim 1 because “the V-shaped support of Koshimizu admits the device (e.g., ring 30) itself [] and does not receive or align” the connector (fastener 24). PO Resp. 37–38 (citing Ex. 2001 ¶ 68); *see also id.* at 34–35 (stating Koshimizu places the jewelry itself and not a connector into the recession). Patent Owner contends that the fastener does not interact with the v-shaped support, but rather enters and remains in the through hole beneath the v-shaped groove. PO Resp. 37–38 (citing Ex. 2001 ¶ 68).

This argument is not persuasive. As stated above in Section II.C.2., we do not construe a “recession . . . sized to receive” a connector as requiring that the recession hold or maintain either the entire connector or at least a portion of the connector. We find Koshimizu’s connector (“fastener 24”) is received by the recession (“the v-shaped grove”) as required by claim element 1[d] when the fastener is drawn into the v-shaped groove by the retraction of the cable (cord 20).

Patent Owner also contends hole 22a (“opening”) of Koshimizu does not align fastener 24 (“connector”) with respect to the recession as required by claim element 1[d] because the fastener 24 can fit into hole 22a in any rotational position. Ex. 1007 ¶ 69. We disagree with Patent Owner’s arguments. The claims do not require rotational alignment of the connector. We agree with Petitioner’s contentions and find that as Koshimizu’s cable retracts through the opening (hole 22), the opening aligns the connector with the centerline of the recession and draws the connector into alignment with the recession relative to the length of the recession. Pet. 24–25.

*f. Conclusion*

For the foregoing reasons, we conclude Petitioner has demonstrated that Koshimizu discloses each limitation of claim 1 and therefore has shown by a preponderance of the evidence claim 1 is unpatentable under 35 U.S.C. § 102 as anticipated by Koshimizu. Because a disclosure that anticipates under 35 U.S.C. § 102 can also render the claim unpatentable under 35 U.S.C. § 103, we conclude that Petitioner also has demonstrated, by a preponderance of the evidence, claim 1 is unpatentable as obvious over Koshimizu. *See In re Fracalossi*, 681 F.2d 792, 794 (CCPA 1982) (stating anticipation is the epitome of obviousness).

*3. Independent Claim 13*

*a. Preamble*

The preamble of claim 13 recites a “method for securing a device to an exterior surface of a fixture, the method comprising the steps of.” Petitioner contends that the Koshimizu’s disclosure of a jewelry display 10 container for displaying jewelry over the counter so that customers can freely try on small jewelry teaches the preamble. Patent Owner responds that Koshimizu does not disclose or teach the preamble because Koshimizu is directed to a display for jewelry, not a portable electronic device as required by the ’039 patent. PO Resp. 34.

We agree with Petitioner that Koshimizu’s display container for over the counter use discloses the preamble of claim 13. We disagree with Patent Owner’s argument because it is based upon a construction of the term “device” that we did not adopt. *See supra* Section II.C.1. Accordingly,

Patent Owner's argument that Koshimizu does not disclose a portable electronic device is not persuasive.

*b. Claim element 13[a]*

Claim element 13[a] recites:

forming an opening in a housing wherein the housing has a first side and a second side wherein the first side is opposite to the second side wherein the first side of the housing has a recession extending inward with respect to the second side wherein the opening extends from the recession through the housing to the second side of the housing

Petitioner relies on its analysis of claim elements 1[a] and 1[b] for the corresponding limitations found in claim element 13[a]. Pet. 26–27.

Petitioner further asserts Koshimizu meets the “forming an opening” limitation of claim element 1[a] because the opening (through hole 22a) would necessarily have been created during the manufacturing of the housing or sometime thereafter. *Id.* at 26 (citing Ex. 1007, 38–39).

Petitioner further asserts that to the extent Koshimizu's does not explicitly disclose how to form through hole 22a, that a POSITA would have understood to form the housing using any variety of standard manufacturing techniques, including manufacturing the housing using a standard manufacturing technique and then forming an opening using a drill press or mill. *Id.* (citing Ex. 1007 ¶¶ 67–69).

We disagree with Patent Owner's arguments that Koshimizu does not teach a “recession” for the reasons set forth above in Section II.E.2.e. Patent Owner does not present any additional arguments directed specifically to claim element 13[a]; therefore, any such arguments are waived. We have reviewed and agree with Petitioner's contentions and adopt them as our own.

We find Koshimizu discloses forming an opening (through-hole 22a) in a housing (v-shaped support 22) as recited in claim element 13[a] because the opening disclosed by Koshimizu would necessarily have been formed during the manufacturing of the housing. Thus, for the foregoing reasons, we find Koshimizu discloses each of the limitations of claim element 13[a].

*c. Claim element 13[b]*

Claim element 13[b] recites:

inserting a cable into the opening of the housing wherein the cable has a length defined between a first end and a second end wherein the first end of the cable is connectable to the fixture and the second end extends from the first side of the housing;

Petitioner relies on its arguments regarding claim element 1[b] for the corresponding elements recited in claim element 13[b]. Pet. 27. Petitioner also contends Koshimizu's cable (cord 20) extends through the opening of the housing and, therefore, must have been inserted through the opening. *Id.* (citing Ex. 1003 ¶ 10, Fig. 4). Patent Owner does not dispute Petitioner's contentions; therefore, any such arguments are waived. We have reviewed and agree with Petitioner's contentions and adopt them as our own. We find Koshimizu discloses inserting a cable into the housing as recited in claim element 13[b].

*d. Claim element 13[c]*

Claim element 13[c] recites:

connecting the first end of the cable to a connector having walls defining an exterior surface wherein the recession of the housing is sized to receive the exterior surface of the connector;

Petitioner relies on its arguments regarding claim element 1[d] for the corresponding limitations of claim element 13[c]. Pet. 27–28. We disagree with Patent Owner’s arguments that Koshimizu does not teach a “recession . . . sized to receive” the exterior surface of a connector for the reasons set forth above in Section II.E.2.e. Patent Owner does not present any additional arguments directed to specifically claim element 13[c]; therefore, any such arguments are waived. We have reviewed and agree with Petitioner’s contentions and adopt them as our own. We agree with Petitioner’s analysis and find Koshimizu discloses connecting the first end of a cable (cord 20) to a connector (female part of fastener 24) and that the female part of fastener 24 has walls defining an exterior surface. Pet. 27–28. We further find Koshimizu discloses the recession (v-shaped groove) is sized to receive the exterior surface of the connector (fastener 24) for the reasons set forth above in Section II.E.2.e. Thus, for the foregoing reasons, we find Koshimizu discloses each of the limitations of claim element 13[c].

*e. Claim element 13[d]*

Claim element 13[d] recites

aligning the connector with respect to the recession via the cable and the opening in the housing wherein the first end of the cable and the connector move inward with respect to the first side of the housing wherein the connector is insertable into the recession of the housing.

Petitioner relies on its arguments regarding claim element 1[d] for the corresponding limitations of claim element 1[d]. Pet. 27–28. We disagree with Patent Owner’s arguments that Koshimizu does not teach a “aligning the connector with respect to the recession” for the reasons set forth above in Section II.E.2.e. Patent Owner does not present any additional arguments

directed to specifically claim element 13[d]; therefore, any such arguments are waived. We have reviewed and agree with Petitioner's contentions and adopt them as our own. For example, we find Koshimizu meets the aligning limitation of claim element 13[d] because Koshimizu discloses that when the cable (cord 20) retracts through the opening (hole 22), the opening aligns the connector with the centerline of the recession as well as with the recession relative to the length of the recession.

*f. Conclusion*

For the foregoing reasons, we conclude Petitioner has demonstrated that Koshimizu discloses each limitation of claim 13 and therefore has shown by a preponderance of the evidence claim 13 is unpatentable under 35 U.S.C. § 102 as anticipated by Koshimizu. Because a disclosure that anticipates under 35 U.S.C. § 102 can also render the claim unpatentable under 35 U.S.C. § 103, we conclude that Petitioner also has demonstrated, by a preponderance of the evidence, claim 13 is unpatentable as obvious over Koshimizu. *See In re Fracalossi*, 681 F.2d at 794 (stating anticipation is the epitome of obviousness).

4. *Dependent Claims 3, 5, 6, 14, 16, 17, 19, and 20*

Claim 3 depends from claim 1 and further requires a receptor connected to the connector wherein the receptor has an opening to receive the first end of the cable. Petitioner asserts that Koshimizu's Figure 10 discloses a receptor as set forth in claim 3. Pet. 28–29, *see also id.* at 29 (depicting an annotated version of Fig. 10 illustrating the receptor highlighted in blue). We agree with and adopt Petitioner's analysis and find Koshimizu discloses a receptor as recited in claim 3. For example, we agree with Petitioner that the receptor includes the interior surfaces of the connector (fastener 24) and has an opening to receive the first end of the cable (cord 20). *Id.* at 28 (citing Ex. 1007, 41). Patent Owner has not raised arguments directed specifically against claim 3 in its Patent Owner Response; therefore, any such arguments are waived.

Claim 5 depends from claim 1 and requires a fastener connected to the first end of the cable and that the fastener attaches the cable to the connector. Claim 17 depends from claim 13 and requires the step of connecting the first end of the cable to the connector. Petitioner asserts that the male portion of Koshimizu's fastener 24 is connected to the first end of the cable (cord 20) and attaches the cable (cord 20) to the connector (the female portion of fastener 24). *Id.* at 30–32 (citing Ex. 1007, 42–43, Ex. 1003 ¶ 14, Figs. 9, 10); *see also id.* at 30 (depicting an annotated version of Koshimizu's Figure 10 illustrating the fastener highlighted in orange). We agree with and adopt Petitioner's analysis and find Koshimizu discloses the limitations recited in claims 5 and 17. Patent Owner has not raised arguments directed specifically against claims 5 or 17 in its Patent Owner Response; therefore, any such arguments are waived.

Claim 6 depends from claim 1 and requires a fastener extending outward with respect to the exterior surface of the connector and the fastener attaches the devices to the connector. Petitioner asserts that Koshimizu's ring shaped cord 26 is a fastener that ends outward with respect to the exterior surface of the female portion of fastener 24 (connector) and can attach a device (e.g., ring 30) to fastener 24 (connector). Pet. 31 (citing Ex. 1003 ¶ 14, Fig. 10; Ex. 1007, 43–44). We agree with and adopt Petitioner's analysis and find Koshimizu disclosure of ring shaped cord 26 meets the fastener limitations recited in claim 6. Patent Owner has not raised arguments directed specifically against claim 6 in its Patent Owner Response; therefore, any such arguments are waived.

Claim 14 depends from claim 13 and requires the step of attaching the housing to the exterior surface of the fixture. Petitioner asserts that Koshimizu discloses this limitation by describing a “jewelry display container [that is] able to eliminate the fear of theft when displaying jewelry over the counter so that customers can freely try on small jewelry such as rings.” Pet. 32 (quoting Ex. 1003, 2 and citing Fig. 2). We agree with and adopt Petitioner's analysis and find that Koshimizu's disclosure of a jewelry display container for displaying jewelry over the counter discloses the step of attaching the housing of the jewelry display container to the exterior surface of the fixture. Patent Owner has not raised arguments directed specifically against claim 14 in its Patent Owner Response; therefore, any such arguments are waived.

Claim 16 depends from claim 13 and further requires the step of attaching the device to the connector. Petitioner contends that Koshimizu teaches attaching a “device (e.g., ‘a ring 30’) to the connector (female

portion of ‘fastener 24’).” Pet. 31–32 (citing Ex. 1007, 43–44; Ex. 1003 ¶ 14, Figs. 2, 4, 9, 10). Patent Owner responds that Koshimizu’s cord would not be attachable to a portable electronic device. PO Resp. 42, 45 (citing Ex. 2001 ¶ 65). We disagree with Patent Owner’s argument because it is based on a construction of the term “device” that we did not adopt. *See supra* Section II.C.1. Furthermore, we find that Koshimizu’s ring shaped cord (connector), which is shown connected to a ring, is also capable of connecting to a portable electronic device such as an electronic watch, a light-emitting electronic ring, or light-emitting earrings. Patent Owner has not raised any additional arguments directed specifically against claim 16 in its Patent Owner Response; therefore, any such arguments are waived.

Claim 19 depends from claim 13 and requires the step of displaying the device on the exterior surface of the fixture. Petitioner contends that Koshimizu discloses displaying a “device (e.g., ‘a ring 30’) on the exterior surface of the fixture (e.g., ‘counter’) using the system (‘jewelry display container 10’), which can be placed on a counter.” Pet. 33 (citing Ex. 1003, 2, Fig. 2; Ex. 1007, 45–46). Petitioner further asserts that displaying the device on the exterior surface of the fixture would have been obvious given Koshimizu’s disclosure that the purpose of the jewelry display containing is to securely display “jewelry over the counter.” Pet. 36 (quoting Ex. 1003, 2). Patent Owner responds that the claimed “device” must be a portable electronic device, which is not disclosed in Koshimizu. *See* PO Resp. 25–26, 34.

We disagree with Patent Owner’s argument because it is based on a construction of “device” that we did not adopt. *See supra* Section II.C.1. We agree with Petitioner’s contentions and find that Koshimizu’s disclosure

of a jewelry container on a counter for displaying “small jewelry” meets the limitations of claim 19.

Claim 20 depends from claim 13 and further requires “removing the cable from the opening of the housing.” Petitioner asserts that Figure 4 of Koshimizu discloses removing the cable (cord 20) from the opening (through-hole 22a) of the housing as the connector is pulled at least partially below the recession (v-shaped support 22). Pet. 33 (citing Ex. 1003, Fig. 4; Ex. 1007, 46–47). Petitioner also asserts that Figure 4 shows that the cable is retracted completely underneath “surface plate 12” and is therefore removed entirely from the housing. *Id.* In addition, relying on the undisputed testimony of Dr. Cameron, Petitioner contends it would have been obvious to remove and replace cord 20 if the cord were damaged or broken. Pet. 36 (citing Ex. 1007 ¶ 75). Patent Owner does not dispute Petitioner’s contentions. We agree with Petitioner’s contentions and find that it would have been obvious to remove and replace cord 20 of Koshimizu’s system if the cord were damaged or broken.

*g. Conclusion*

For the foregoing reasons, we conclude Petitioner has demonstrated that Koshimizu discloses each limitation of claims 3, 5, 6, 14, 16, 17, 19, and 20 and therefore has shown by a preponderance of the evidence that these claims are unpatentable under 35 U.S.C. § 102 as anticipated by Koshimizu. Because a disclosure that anticipates under 35 U.S.C. § 102 can also render the claim unpatentable under 35 U.S.C. § 103, we conclude that Petitioner also has demonstrated, by a preponderance of the evidence, claim 3, 5, 6, 14, 16, 17, 19, and 20 are unpatentable as obvious over Koshimizu. *See In re*

*Fracalossi*, 681 F.2d at 794 (stating anticipation is the epitome of obviousness).

*F. Asserted Obviousness of Claims 2 and 15 over Koshimizu and Decoteau*

Petitioner contends that claims 2 and 15 would have been obvious over Koshimizu and Decoteau. Pet. 38–40.

*1. Scope and Content of Decoteau*

Decoteau is directed to a “device and associated method for attaching an electronic device to a tether so that it cannot be stolen or inadvertently lost.” Ex. 1005, Abstract, 2:13–15. Figure 1 of Decoteau, reproduced below, illustrates an embodiment of the device shown in conjunction with a cellular telephone. *Id.* at 2:40–43.

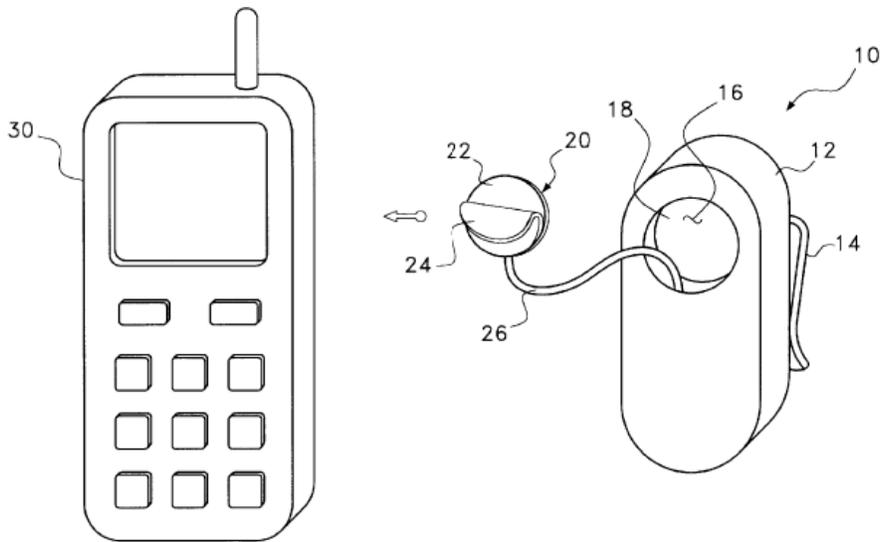


Fig. 1

Figure 1 of Decoteau, shown above, illustrates an embodiment of the invention (device 10) and a cellular telephone 30. *Id.* at 2:39–41, 2:57–59. In this embodiment, “double sided tape 22 is used to interconnect the

connector element 20 to the back of . . . electronic device 30.” *Id.* at 3:30–32. Decoteau also states that other connection means, such as glue or mechanical fasteners, may be used. *Id.* at 2:19–21, 3:21–37.

## 2. Claims 2 and 15

System claim 2, which depends from claim 1, further requires “a layer adhered to the first side of the connector wherein the layer attaches the device to the connector.” Method claim 15, which depends from claim 15, further requires the step of “adhering a layer to the exterior surface of the connector.”

Petitioner contends that it would have been obvious for a POSITA to use an adhesive layer, such as that disclosed in Decoteau, to attach jewelry or a device to the Koshimizu’s system, such as when a mechanical fastener would be difficult to use given the shape of the device or when the device does not include a loop or other structure through which the ring-shaped cord could pass. Pet. 38–39; Ex. 1007 ¶¶ 84–85. Petitioner further contends that such use of adhesives has been long known in the art. Pet. 38; Ex. 1007 ¶ 83 (citing Ex. 1008 ¶ 68; Ex. 1009, 8:36–38).

Patent Owner responds that Decoteau is not a security device for reducing retail theft and that the tape used in Decoteau is not intended to make detachment of the phone difficult. PO Resp. 48–49 (citing Ex. 1005, 1:6–23; Ex. 2001 ¶ 92). Patent Owner further argues that the cord of Koshimizu is not attachable to the portable electronic device of Decoteau and that the tape of Decoteau would be difficult to apply in place of Koshimizu’s cord 26. *Id.* at 49. Patent Owner also asserts that a POSITA would not have a reasonable basis to combine the jewelry display of Koshimizu with the cell phone belt tether of Decoteau, especially when

Decoteau's tape is not intended to make detachment difficult for the user.

*Id.*

We find Decoteau's teaching of double sided tape or glue to connect a connector element to an electronic device discloses the limitations of claims 2 and 15. Ex. 1005, 2:19–21, 3:21–37, Fig. 1. We also find that Petitioner has provided an articulated reasoning with rational underpinnings as to why a POSITA would have sought to modify the Koshimizu to include the adhesive tape of Decoteau and adopt Petitioner's analysis as our own.

For example, we agree with Petitioner that use of an adhesive layer to attach a device to the connector of a security system was long known in the art. Pet. 38; Ex. 1005, 3:22–29; Ex. 1007 ¶ 83. We also credit Dr. Cameron's testimony that a POSITA would have been motivated to modify Koshimizu to include an adhesive layer in instances where a mechanical fastener would be difficult to use given the shape of the device. Ex. 1007 ¶¶ 84–85. Dr. Cameron persuasively testifies that a POSITA would have been motivated to use adhesives to attach a device that does not include a loop or other structure through which Koshimizu's ring-shaped cord 26 could pass, and that a POSITA would have had a reasonable expectation of success of making such a modification. *Id.* at 85; *see also id.* at 84 (stating a POSITA would have used adhesive to attach an earring card (e.g., a type of small jewelry) to fastener 24 of Koshimizu).

We are unpersuaded by Patent Owner's argument that Decoteau is not directed to reducing retail theft and Decoteau's tape is not intended to make detaching the phone difficult, as the claims of the '039 patent do not require either reducing retail theft or that the adhesive make detaching the device difficult for the user. *See, e.g.*, Ex. 1001, 9:6–8 (stating that one purpose of

the adhesive layer is to “prevent damage of the device” when the device is attached to a connector via fasteners, such as screws or bolts).

For the foregoing reasons, we are persuaded Petitioner has shown sufficiently the combination of Koshimizu and Decoteau teaches or suggests the limitations of claims 2 and 15 and has provided articulated reasoning with rational underpinning for combining the references. Accordingly, we find Petitioner has shown by a preponderance of the evidence that claims 2 and 15 are unpatentable over Koshimizu and Decoteau.

*G. Asserted Anticipation or Obviousness  
of Claims 1–3, 5, 6, 13–17, 19, and 20 by Fort*

Petitioner contends that claims 1–3, 5, 6, 13–17, 19, and 20 are unpatentable under § 102 and §103 over Fort. Pet. 41–70.

*1. Fort (Ex. 1004)*

Fort is directed to “retail store security systems for electronic products such as video cameras and the like.” Ex. 1004, 1:12–13. An embodiment of Fort’s system is shown in Figure 1, reproduced below.

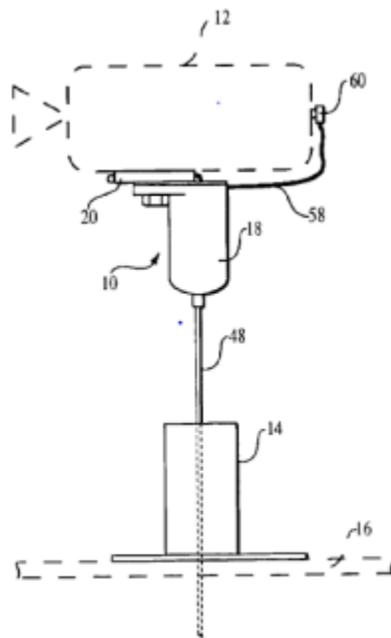


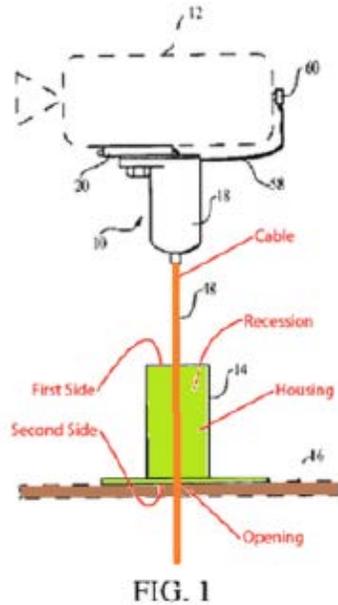
FIG. 1

Figure 1 of Fort, shown above, illustrates assembly 10, attached to “video camera 12, which has been lifted out of base unit comprising a tubular holder 14” that is attached to product display table 16. *Id.* at 3:45–50. Shroud 18 “has a lower pedestal portion 24.” *Id.* at 3:51–52. Preferably, the lower pedestal portion is “adapted to be received in a tubular holder bolted or otherwise fastened to the product display.” *Id.* at 3:9–11. Main cable 48 extends through holder 14 into shroud 18. *Id.* at 4:40–41. A “retractable cord reel [may be] mounted to the display for retractably retaining the main cable.” *Id.* at 3:15–17

## 2. Independent Claims 1 and 13

Independent claims 1 and 13 each require the housing to have a “recession” extending inward with respect to the second side of the housing and an “opening extending from the recession through the housing” to the second side of the housing.”

Petitioner provides two alternative mappings to meet these limitations. Pet. 42–46, 56–57. Figure 1 of Fort, with annotations by Petitioner to illustrate the first mapping, is reproduced below.



Petitioner argues, as depicted in annotated Figure 1 of Fort, above, Fort’s housing (holder 14) “is ‘tubular’ and thus has a ‘recession.’” *Id.* at 43 (citing Ex. 1007, 63–64), 56–57. Petitioner further asserts “the housing has an opening extending from the recession through the housing to the second side of the housing.” *Id.* at 44, 56–57.

In its second mapping, Petitioner asserts the housing includes the tubular holder 14 and the baseplate. Pet. 45–46, 56–57. Figure 1 of Fort, with annotations by Petitioner to illustrate this second mapping, is reproduced below.

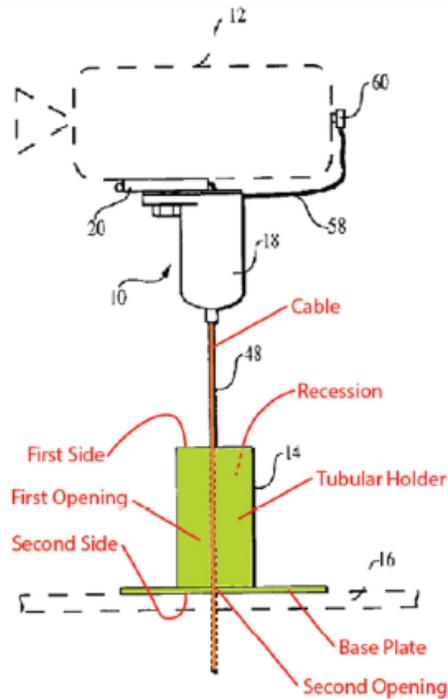


FIG. 1

Figure 1 of Fort, with Petitioner’s annotations depicting its second mapping, is reproduced above. Petitioner contends the housing has a first opening in the tubular holder, which defines the recession, and a second opening in the base plate, which is an “opening extending from the recession through the housing to the second side of the housing.” *Id.* at 45 (citing Ex. 1007, 65–66), 56–57.

Patent Owner responds Fort does not disclose the claimed “recession” and “opening” under either mapping. PO Resp. 51–62. Patent Owner argues, *inter alia*, that the hollow tube of Fort’s holder 14 is not a recession because the hollow tube, which has a constant inner diameter and no bottom, is not a recession. *See id.* at 56–57 (stating the hollow tube of holder 14, having a constant inner diameter through hole, does not define both a recession and an opening from a recession and that interpreting the claimed recession and opening structure as equivalent to the single cylindrical

passageway robs the terms “recession” and “opening” of any reasonable meaning), 61–63. Patent Owner further argues that Petitioner’s second mapping, which places the opening around a midpoint of the through hole of holder 14, still does not reasonably create a recession structure. *See id.* at 58.

We agree with Patent Owner that Fort’s tubular holder does not have a recession as recited in claims 1 or 13 because the tubular holder does not have a bottom surface. As explained in Section II.C.2 above, a recession does not read upon a tubular (cylindrical) hollow tube having a constant inner diameter and no bottom. Citing to Mr. Marszalek’s deposition testimony, Petitioner contends an opening may be large enough to take up the entire surface of the recession such that there is no bottom of the recession. *See Reply 7* (citing Ex. 1019, 64:12–66:9). We disagree with Petitioner. The “recession” and “opening” in claims 1 and 13 are distinct elements, with the opening extending from the recession through the housing to the second side of the housing. Contrary to Petitioner’s assertions, Mr. Marszalek’s did not state an opening may be large enough to take up the entire surface of the recession such that there is no bottom of the recession. Rather, Mr. Marszalek admitted the stated opening 36 shown in Figure 1 of the ’039 patent could be four times as big and would still be an opening.

Petitioner also argues that if the “opening” between the recession and the second side of the housing is interpreted to require a distinct and separate opening, a POSITA would have found it obvious to provide a separate opening in a baseplate of the housing of Fort. Pet. 70. Petitioner contends a POSITA would have been motivated to use that base plate to provide a surface to attach the housing fixture and to provide an opening for the cable

so as to maintain the function of the cable. Pet. 70 (citing Ex. 1007 ¶ 99). To the extent that Petitioner is arguing that it would have been obvious to modify Fort's baseplate so that the opening in the baseplate is smaller than the circumference of the tubular holder — resulting in the tubular holder having a bottom surface that has a hole through which the cable extends — we are not persuaded by this argument. The structure shown in Fort already had a base plate to provide a surface to attach the housing fixture and an opening so that the cable could pass through the base plate. As such, Petitioner has not articulated reasoning with some rational underpinning to support modifying Fort's baseplate in the manner asserted.

For the foregoing reasons, Petitioner has not persuasively shown that Fort teaches or suggests the “recession” of independent claims 1 and 13. Accordingly, Petitioner has not shown by a preponderance of the evidence that claims 1 and 13 are unpatentable under §§ 102 and 103 over Fort.

### *3. Dependent Claims 2, 3, 5, 6, 14–17, 19, and 20*

Each of the challenged dependent claims 2, 3, 5, 6, 14–17, 19, and 20 incorporate the “recession” limitations of the independent claim from which they depend. As Petitioner has not shown that Fort teaches or suggests the claimed “recession,” Petitioner has not shown by a preponderance of the evidence that claims 2, 3, 5, 6, 14–17, 19, or 20 are unpatentable under §§ 102(b) or 103 over Fort.

#### *H. Asserted Obviousness of Claims 2 and 15 over Fort and Decoteau*

Petitioner contends claims 2 and 15, which depend from claims 1 and 13, are obvious over the combined teachings of Fort and Decoteau. Pet. 71–72. As stated above in Section II.G.2, we determine Petitioner has not

shown by a preponderance of the evidence that Fort teaches the “recession” as required by independent claims 1 and 13. Petitioner does not rely on Decoteau to cure this deficiency. Pet. 71–72. Thus, Petitioner has not shown by a preponderance of the evidence that claims 2 and 15 are unpatentable over Fort and Decoteau.

### *III. CONCLUSION*

Based on the evidence and arguments, we determine that Petitioner has not established by a preponderance of the evidence that claims 1–3, 5, 6, 13–17, 19, and 20 are unpatentable under 35 U.S.C. §§ 102(b) and 103 over Fort or that claims 2 and 15 are unpatentable under § 103 over Fort and Decoteau. Petitioner has established by a preponderance of the evidence that claims 1, 3, 5, 6, 13, 14, 16, 17, 19, and 20 are unpatentable under 35 U.S.C. §§ 102(b) and 103 over Koshimizu and that claims 2 and 15 are unpatentable under § 103 over the combination of Koshimizu and Decoteau.

### *IV. ORDER*

Accordingly, it is

ORDERED that claims 1–3, 5, 6, 13–17, 19, and 20 of U.S. Patent No. 7,154,039 B1 are held to be unpatentable;

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

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Patent 7,154,039 B1

For PETITIONER:

Alan Norman  
[anorman@thompsoncoburn.com](mailto:anorman@thompsoncoburn.com)

Anthony Blum  
[ablum@thompsoncoburn.com](mailto:ablum@thompsoncoburn.com)

Clayton Zak  
[czak@thompsoncoburn.com](mailto:czak@thompsoncoburn.com)

For PATENT OWNER:

Kevin Erickson  
[kerickson@pauleyip.com](mailto:kerickson@pauleyip.com)

Mark Swanson  
[mswanson@pauleyip.com](mailto:mswanson@pauleyip.com)