

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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SONY CORPORATION,  
Petitioner,

v.

IMATION CORPORATION,  
Patent Owner.

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Case IPR2015-01557  
Patent 6,890,188 B1

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Before KEVIN F. TURNER, STACEY G. WHITE, and KERRY BEGLEY,  
*Administrative Patent Judges.*

BEGLEY, *Administrative Patent Judge.*

DECISION  
Institution of *Inter Partes* Review  
37 C.F.R. § 42.108

Sony Corporation (“Petitioner”) filed a Petition requesting *inter partes* review of claims 10 and 14 of U.S. Patent No. 6,890,188 B1 (Ex. 1001, “the ’188 patent”). Paper 1 (“Pet.”). Imation Corporation (“Patent Owner”) filed a Preliminary Response to the Petition. Paper 6 (“Prelim. Resp.”).

Having considered the Petition and Preliminary Response, we determine that “there is a reasonable likelihood that . . . [P]etitioner would prevail” in establishing that claims 10 and 14 of the ’188 patent are unpatentable. 35 U.S.C. § 314(a). We institute *inter partes* review of these claims on certain asserted grounds of unpatentability.

## I. BACKGROUND

### A. RELATED PROCEEDINGS

The parties represent that Patent Owner has asserted the ’188 patent against Sony Electronics, Inc., a wholly owned subsidiary of Petitioner, in the U.S. District Court for the District of Minnesota (Civil Action No. 14-00628). Pet. 2; Paper 4, 2. Patent Owner also has asserted the patent against Kingston Technology Company, Inc. (“Kingston”) in the same district court (Civil Action No. 14-01385). Pet. 3. In addition, the ’188 patent is the subject of IPR2015-00066, filed by Kingston, which is pending before the Board. *Id.*; Ex. 1010 (*Kingston Tech. Co. v. Imation Corp.*, Case IPR2015-00066 (PTAB Mar. 26, 2015) (Paper 6)).

### B. THE ’188 PATENT

The ’188 patent is directed to a memory card that includes both a device connector, conforming to a device connection standard, and a host connector, conforming to a host connection standard. Ex. 1001, [57], 1:61–2:6, 3:58–61. For example, the device connector may conform to a Memory Stick (“MS”) standard, the MultiMediaCard (“MMC”) standard, or the Secure Digital (“SD”) standard, whereas the host connector may conform to a Universal Serial Bus (“USB”) standard, such as a “USB tab without a conventional electrical shield.” *Id.* at 2:6–10, 3:61–4:9, 12:18–21.

The dimensions of the memory card, including height, width, and thickness, “may substantially conform” to dimensions defined by a memory

card standard. *Id.* at 2:11–12, 4:30–32. The memory card, however, may include “irregularities” in its shape “that are not consistent with the form factor of the memory card standard.” *Id.* at 2:12–18, 4:32–40.

The memory card may “include a cover to fit over the host connector.” *Id.* at 2:19–20, 4:10–23. With the cover over the host connector, the form factor of the memory card conforms to a “form factor of the memory card standard.” *Id.* at 2:20–22. This “allows for compatibility with memory card accessories, such as storage case[s], or other accessories that are affected by the form factor of the memory card.” *Id.* at 4:23–29; *see id.* at 4:40–42. The cover may be removable or secured to the housing of the memory card with a hinge. *Id.* at 6:24–27, 6:63–64; *see id.* at 6:65–7:46, Fig. 4A (depicting hinge 37), Fig. 5A (depicting hinges 47A, 47B).

Figure 2 of the ’188 patent is reproduced below.

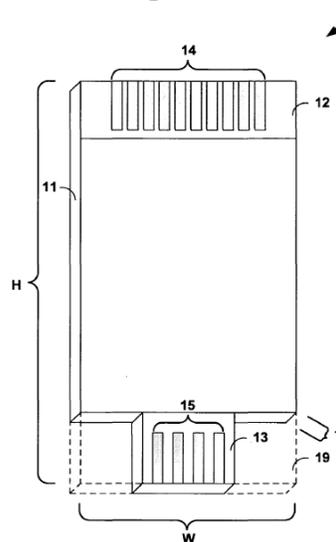


FIG. 2

Figure 2 depicts memory card 10 with housing 11, device connector 12, shieldless tab 13, and cover 19. *See id.* at 3:38–40, 4:43–46, 6:18–23.

### C. ILLUSTRATIVE CLAIM

Claim 10, the only independent claim of the ’188 patent challenged in the Petition, is illustrative of the claimed subject matter:

10. A memory card comprising:
  - a housing;
  - a memory in the housing;
  - a device connector accessible through the housing, the device connector conforming to the device connection standard and allowing access to the memory by a device compatible with the device connection standard;
  - a host connector protruding from the housing, the host connector conforming to a host connection standard and allowing access to the memory upon insertion of the host connector into a computer interface compatible with the host connection standard; and
  - a cover to cover the host connector, wherein the housing and the cover collectively define a form factor of the memory card that substantially conforms to a form factor of the memory card standard.

*Id.* at 13:39–14:6.

#### D. ASSERTED PRIOR ART

The Petition relies upon the following prior art references, as well as the supporting Declaration of Brian A. Berg (Ex. 1002):

U.S. Patent No. 6,744,634 B2 (filed Jan. 30, 2002) (issued June 1, 2004) (Ex. 1003, “Yen”);

U.S. Patent Application Publication No. 2002/0177362 A1 (filed Mar. 4, 2002) (published Nov. 28, 2002) (Ex. 1006, “Chang”);

U.S. Patent No. 6,763,410 B2 (filed Mar. 10, 2003) (issued July 13, 2004) (Ex. 1004, “Yu”);

U.S. Patent Application Publication No. 2004/0033727 A1 (filed Nov. 13, 2002) (published Feb. 19, 2004) (Ex. 1005, “Kao”);

MMCA TECHNICAL COMMITTEE, THE MULTIMEDIA CARD SYSTEM SPECIFICATION, VERSION 1.4 (1998) (Ex. 1008, “MMC Specification”); and

SD GROUP, SD MEMORY CARD SPECIFICATIONS – SIMPLIFIED VERSION OF: PART 1 PHYSICAL LAYER SPECIFICATION VERSION 1.01 (2001) (Ex. 1007, “SD Specification”).

E. ASSERTED GROUNDS OF UNPATENTABILITY

Petitioner asserts the following grounds of unpatentability. Pet. 4–5.

Challenged Claim	Basis	Reference[s]
10	§ 102	Yen
14	§ 103	Yen and Yu
10	§ 103	Yen and either Kao or Chang
14	§ 103	Yen, either Kao or Chang, and Yu
10	§ 103	Kao and Yen
14	§ 103	Kao, Yen, and Yu
10	§ 103	Chang, Yen, and either the SD Specification or MMC Specification <sup>1</sup>
14	§ 103	Chang, Yen, either the SD Specification or MMC Specification, and Yu

II. ANALYSIS

A. CLAIM CONSTRUCTION

We begin our analysis by addressing the meaning of the claims. The Board interprets claims in an unexpired patent using the “broadest reasonable construction in light of the specification of the patent in which [they] appear[.]” 37 C.F.R. § 42.100(b); *see In re Cuozzo Speed Techs., LLC*, 793 F.3d 1268, 1275–79 (Fed. Cir. 2015) (holding that “Congress implicitly approved the broadest reasonable interpretation standard in enacting the” Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112–29 (2011), and that “the standard was properly adopted by PTO regulation”).

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<sup>1</sup> The Petition often refers to this and the following asserted ground as relying on the SD Specification, rather than either the SD or MMC Specification. *See id.* at 5, 21, 48. Nonetheless, as Patent Owner acknowledges, the substance of the discussion of the grounds in the Petition relies on the SD or MMC Specification. *Id.* at 53–58; Ex. 1002 ¶¶ 117–23; Prelim. Resp. 48, 50. Thus, for purposes of this Decision, we treat these asserted grounds as relying on either the SD or MMC Specification.

Under this standard, we presume a claim term carries its “ordinary and customary meaning,” which “is the meaning that the term would have to a person of ordinary skill in the art in question” at the time of the invention. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007) (citation and quotations omitted). This presumption is rebutted when the patentee acts as a lexicographer by giving the term a particular meaning in the specification with “reasonable clarity, deliberateness, and precision.” *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994).

Petitioner and Patent Owner proffer constructions of several claim terms. *See* Pet. 13–18; Prelim. Resp. 20–22. For purposes of this Decision, we must address only the claim terms and scope addressed below to resolve the issues currently presented by the patentability challenges. *See Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) (holding that only claim terms that “are in controversy” need to be construed and “only to the extent necessary to resolve the controversy”).

1. “*host connector protruding from the housing*”

The parties dispute the scope of “host connector protruding from the housing,” as recited in claim 10.<sup>2</sup> *See* Pet. 27–28; Prelim. Resp. 20–21, 40–42. According to Petitioner, the term is broad enough to encompass a host connector that is “integrally formed” or “integrally manufactured” with the housing. Pet. 27. Patent Owner, however, takes the position that the ’188 patent “compels” an interpretation requiring that “the host connector

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<sup>2</sup> We note that Petitioner proffers a construction of “host connector.” Pet. 15–16. Patent Owner responds that the plain and ordinary meaning is sufficient and alternatively, proposes a construction. Prelim. Resp. 21. Because resolving the disputed issue of the scope of “host connector protruding from the housing” is sufficient to resolve the issues currently presented, we need not construe “host connector” in this Decision.

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must extend beyond the housing, or jut out from the housing, *with a clear boundary line between the housing and the host connector that extends beyond it.*” Prelim. Resp. 41 (emphasis added). In other words, Patent Owner argues that the claim language requires the recited host connector and housing to be physically “distinct,” and does not encompass “integral,” “continuous,” or “joined” pieces. *See id.* at 21, 29–30, 36–42.

Beginning with the claims, independent claims 1 and 10 each recite “a host connector protruding from the housing.” Ex. 1001, 12:64, 13:46.

Patent Owner points out that MERRIAM-WEBSTER’S COLLEGIATE DICTIONARY (11th ed. 2003) defines “protrude” as “to jut out from the surrounding surface or context.” Ex. 2007, 1000; *see* Prelim. Resp. 40. We are not persuaded, however, that the “protruding from” claim language requires the “host connector” to be physically distinct or separately molded from the “housing.” *See NTP, Inc. v. Research in Motion, Ltd.*, 418 F.3d 1282, 1309–11 (Fed. Cir. 2005) (holding that the recited “RF receiver” and “destination processor” were not required to be “distinct” and “physically separate” because the claim language, including “transfer,” “connected to,” and “coupled to,” did not support such a narrow interpretation). On this record, we are persuaded that one part can protrude, or jut out, from another even if the two parts form an integral structure or are otherwise attached, connected, joined, or molded to one another.

Claim 8, which depends from claim 1, is informative. Claim 1 recites “[a] memory card comprising: a housing” and “a host connector protruding from the housing.” Ex. 1001, 12:55–64. Claim 8 adds a requirement that “the host connector protrudes from an edge of the memory card.” *Id.* at 13:28–33. Under this express claim language, the recited “host connector” is part of the “memory card,” yet “protrudes” from it. In other

words, the “host connector” need not be physically separate from a part or structure in order to protrude from it.

Turning to the written description, despite Patent Owner’s arguments to the contrary, the written description supports an interpretation of “protruding from the housing” that is broad enough to encompass the host connector and the housing as different parts of an integral structure. Patent Owner, citing Figures 1 and 2 of the ’188 patent, argues that the ’188 patent requires a “clear boundary between the housing and the host connector,” because “[i]n every case, the housing . . . ends and a host connector protrudes from the end of the housing.” Prelim. Resp. 41–42. We disagree.

Both Figures 1 and 2 are merely “exemplary,” and Patent Owner does not show that they limit the claim language. Ex. 1001, 3:34–40, 3:58, 4:43. Patent Owner does not direct us to, and we see nothing, in the specification regarding the manufacturing of the host connector and the housing or otherwise that would limit the host connector and the housing to be physically distinct structures. *See Retractable Techs., Inc. v. Becton Dickinson & Co.*, 653 F.3d 1296, 1306 (Fed. Cir. 2011) (“To disavow claim scope, the specification must contain expressions of manifest exclusion or restriction, representing a clear disavowal of claim scope.”) (citations and quotations omitted); Ex. 1002 ¶¶ 62–63; Pet. 28.

Far from requiring a boundary or division between the host connector and the housing, as Patent Owner posits, the specification includes Figures 7–10, which lack any visible boundary or division between the housing and the host connector, namely the USB tab. *See* Ex. 1001, Figs. 7–10. Moreover, the specification expressly states that the host connector in one of these figures, Figure 7, “protrud[es] from the housing.” *Id.* at 8:53–57. Figures 2 and 7 of the ’188 patent are reproduced below.

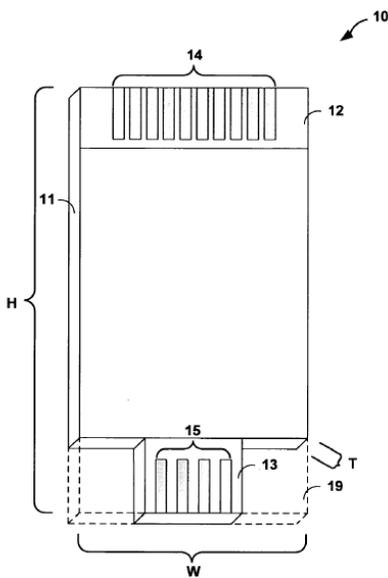


FIG. 2

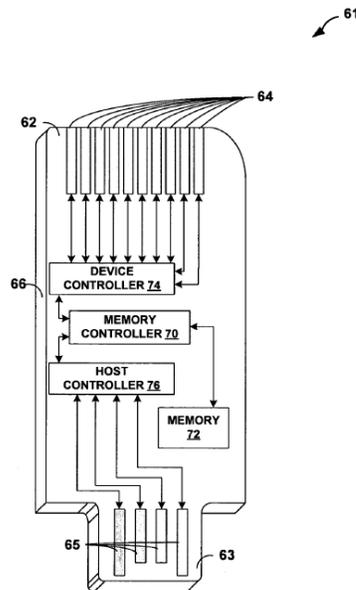


FIG. 7

Figure 2 depicts memory card 10 with “shieldless tab 13 protruding from . . . housing” 11. *Id.* at 4:43–46. Figure 7, in turn, depicts memory card 61 with “shieldless . . . USB[] tab 63 protruding from . . . housing” 66. *Id.* at 8:53–77. Although Figure 2 features a line between housing 11 and shieldless tab 13, Figure 7 does not feature a line or other boundary between shieldless USB tab 63 and housing 66. Rather, in Figure 7, shieldless USB tab 63 and housing 66 appear to be part of an integral structure. *See* Ex. 1002 ¶ 63. Thus, the ’188 patent’s characterization of a host connector as protruding from the housing does not depend on whether there is a boundary or division between the host connector and the housing.

Therefore, on this record, we are not persuaded by Patent Owner’s assertions that the claims and written description of the ’188 patent<sup>3</sup> support narrowly interpreting the “host connector protruding from the housing” to require physically distinct or separately molded parts or structures, with a

<sup>3</sup> Neither party directs us to any relevant portion of the prosecution history.

boundary between them. *See Retractable Techs.*, 653 F.3d at 1303–04 (holding that the claims, specification, and prosecution history indicated that the claimed “retainer member” and “needle holder” need not be “separately molded pieces” and instead could cover “distinct portions of a single structure”). For purposes of this Decision, we determine that the “host connector protruding from the housing” encompasses the host connector and the housing as different parts of a single integral structure, i.e., attached, connected, joined, or molded to one another.

## 2. “form factor”

Petitioner proffers the term “form factor,” recited in claim 10, for construction. Pet. 16–17. In IPR2015-00066, we concluded that the ’188 patent uses “form factor” according to its ordinary and customary meaning and construed the term to mean “exterior size and shape.” Ex. 1010, 6–8. Petitioner argues that “the precise meaning of [‘form factor’] is not explained” in the ’188 patent and “maintains that the ‘form factor’ claim limitations are indefinite under 35 U.S.C. § 112,” paragraph two.<sup>4</sup> Pet. 16. Yet because “indefiniteness is unavailable in” an *inter partes* review, which is limited to grounds of unpatentability under §§ 102 and 103, Petitioner and Mr. Berg “use[]” our construction of “form factor” from IPR2015-00066. *Id.*; *see* Ex. 1002 ¶ 47; 35 U.S.C. § 311(b). On this record, we disagree with Petitioner’s suggestion that “form factor” is indefinite and maintain our construction of the term from IPR2015-00066.

The ’188 patent features the term “form factor” in claims 9 and 10. Independent claim 10 includes the limitation: “the housing and the cover

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<sup>4</sup> The AIA revised 35 U.S.C. §§ 102–103 and 112. Because the ’188 patent has a filing date before the effective date of the relevant sections of the AIA, we refer to the pre-AIA versions of §§ 102–103 and 112 in this Decision.

collectively define a form factor of the memory card that substantially conforms to a form factor of the memory card standard.” Ex. 1001, 14:3–6. Claim 9 depends from claim 1, which requires that the “housing and the host connector protruding from the housing define memory card dimensions which substantially conform to dimensions of a memory card standard.” *Id.* at 13:1–4. Claim 9 adds a limitation nearly identical to the “form factor” limitation in claim 10. *Id.* at 13:34–38.

Similarly, the written description of the ’188 patent explains that the *dimensions* (e.g., “height[,], width[,], and thickness”) of the memory card, without a cover, “may substantially conform to *dimensions* of a memory card standard.” *Id.* at 2:11–15 (emphasis added); *see id.* at 4:30–32. Yet “the *shape* of the memory card” may include “irregularities” (e.g., voids) “that are not consistent with the form factor of the memory card standard.” *Id.* at 2:16–18 (emphasis added); *see id.* at 4:33–40. By adding a “cover over the host connector,” the memory card “conforms to the form factor of the memory card standard.” *Id.* at 2:19–22; *see id.* at 4:40–42; 7:7–17. More specifically, the specification states, with respect to a particular embodiment, that “[t]he *exteriors* of covers 29A, 29B may be *shaped* to conform memory card 20 to the form factor of the memory card standard when the covers are fitted over device connector 22 and shieldless USB tab 23, respectively.” *Id.* at 6:53–56 (emphases added). We are persuaded that these statements in the specification explain that both the exterior dimensions and shape of the memory card, with a cover, comply with the relevant memory card standard and, thus, show that the ’188 patent uses “form factor” to refer to exterior size and shape.

The specification provides further evidence of this meaning of “form factor” in explaining the benefits of having the form factor of the memory

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card, with a cover, conform to the memory card standard. Specifically, it “improves the aesthetics of the memory card and also allows for compatibility with memory card accessories, such as storage case[s], or other accessories that are affected by the form factor of the memory card.” *Id.* at 4:23–29; *see id.* at 3:9–14, 7:14–17. The fit of a storage case, of course, depends on exterior size and shape.

Turning to external evidence, the MICROSOFT COMPUTER DICTIONARY (5th ed. 2002), a technical dictionary published no more than two years before the ’188 patent was filed, defines “form factor” as “[t]he size, shape, and configuration of a piece of computer hardware.” Ex. 3001, 222; *see* Ex. 1001, [22]. This definition is consistent with the usage of the term in the ’188 patent. In suggesting that “form factor” is indefinite, Petitioner fails to address this definition of “form factor,” which we cited in our institution decision in IPR2015-00066, or any other extrinsic evidence of the meaning of “form factor” in the art at the relevant time. *See* Pet. 16–17; Ex. 1010, 8.

In light of the above analysis, we are persuaded that the ’188 patent uses “form factor” according to its ordinary and customary meaning and does not give the term a special meaning. We also are persuaded that a person of ordinary skill, upon reading the ’188 patent, would have “reasonable certainty” that “form factor” in claim 10 means “exterior size and shape” and that this is the only plausible construction of the claim language. *See Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014) (“[A] patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention.”); *Ex parte Miyazaki*, 89 U.S.P.Q.2d 1207

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(BPAI 2008) (precedential) (holding that a claim is properly rejected as indefinite if it “is amenable to two or more plausible claim constructions”).

Accordingly, for purposes of this Decision, we construe “form factor” to mean “exterior size and shape.”

### 3. “hinge”

Petitioner proposes that the broadest reasonable interpretation of “hinge,” as recited in claim 14, is “a jointed device or flexible piece on which the cover rotates, turns, or swings,” as we concluded in IPR2015-00066. Pet. 17–18; Ex. 1010, 8–10. Patent Owner does not respond to or otherwise address the proper construction of the term. We remain persuaded that the construction of “hinge” adopted in IPR2015-00066 is the broadest reasonable interpretation consistent with the specification of the ’188 patent.

The term “hinge” is recited in claim 14: “the cover is connected to the housing via a hinge.” Ex. 1001, 14:27–28. Claim 15 recites “hinged,” a verb form of “hinge,” in a similar context: “the cover comprises a plurality of cover sections, each cover section being hinged to the housing.” *Id.* at 14:29–31. This claim language shows only that a “hinge” serves to attach the recited cover, or cover section, to the housing.

Figure 4A of the ’188 patent depicts hinge 37 and Figure 5A shows hinges 47A and 47B. *Id.* at 3:44–49, 6:64–7:1, 7:26–28, Figs. 4A, 5A. These hinges connect a cover, or a section of a cover, to the housing of the memory card. *See id.* The specification explains that the cover “rotates about” the hinge. *Id.* at 6:67–7:1; *see id.* at 7:26–28. Similarly, the cover “can be rotated relative to [the] housing [] via a hinge,” *id.* at 6:25–27, and may be positioned by “rotating the cover via a hinge,” *id.* at 9:7–9, 12:42–44. These statements and figures in the ’188 patent show that a hinge, in addition to connecting the cover to the housing, allows the cover to rotate.

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Based on the specification of the '188 patent, we are persuaded, on the present record, that the patent does not give “hinge” any special meaning, and instead uses the term according to its ordinary and customary meaning.

We consider extrinsic evidence to inform the ordinary and customary meaning of “hinge.” The definition of “hinge” from RANDOM HOUSE WEBSTER’S COLLEGE DICTIONARY, which Petitioner filed as Exhibit 1011, “a jointed device or flexible piece on which a door, gate, lid, or other attached part turns, swings, or moves,” is very similar to definitions in other dictionaries. Ex. 1011, 623. THE MERRIAM-WEBSTER DICTIONARY defines “hinge” as “a jointed device on which a swinging part (as a door, gate, or lid) turns.” Ex. 3002, 340. Similarly, THE AMERICAN HERITAGE DICTIONARY provides the following definition: “[a] jointed device that allows the turning of a part, such as a door, on a frame.” Ex. 3003, 403.

Therefore, on this record, we construe “hinge” in claim 14 as “a jointed device or flexible piece on which the cover rotates, turns, or swings.”

#### B. SECTION 325(D) – DISCRETION TO DECLINE TO INSTITUTE

In IPR2015-00066, we instituted review of claims 10–13 and 20 of the '188 patent on the ground of anticipation by European Patent Application EP 1333531 A1 (“Yen EP”) and claim 14 on the ground of obviousness over Yen EP and Yu. Ex. 1010. Patent Owner urges us to exercise our discretion, under 35 U.S.C. § 325(d), to decline to institute the Petition because the Board has considered the “same or substantially the same prior art or arguments” in IPR2015-00066. Prelim. Resp. 3–15. Patent Owner argues that Yen—which is asserted in this Petition—has the same disclosure as Yen EP—which is asserted in IPR2015-00066. *Id.* at 4, 10. Patent Owner, therefore, contends that the asserted grounds relying on Yen as well as Yen and Yu in this Petition are identical to those on which we instituted

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review in IPR2015-00066. *Id.* at 10–11. Further, Patent Owner points out that Petitioner relies on Yen for every asserted ground. *Id.* at 4, 12–13.

Patent Owner argues that the asserted grounds based on combinations of Kao, Chang, and either the SD or MMC Specification “add nothing substantively different to the grounds on which [IPR2015-00066] has already been instituted” and, instead, repeat substantially the same art and arguments. *Id.* at 12–14.

Section 325(d) provides: “[i]n determining whether to institute or order a proceeding . . . , the Director may take into account whether, and reject the petition or request because, the same or substantially the same prior art or arguments previously were presented to the Office.” 35 U.S.C. § 325(d). Here, we determine that the asserted grounds relying on Kao and Yen; Kao, Yen, and Yu; Chang, Yen, and either the SD or MMC Specification; and Chang, Yen, either the SD or the MMC Specification, and Yu do not present the “same or substantially the same prior art or arguments” as IPR2015-00066 and, thus, do not meet the requirement for exercise of discretion under § 325(d). Neither Kao, Chang, the SD Specification, nor the MMC Specification was asserted or is involved in IPR2015-00066. Ex. 1010. In these asserted grounds, Petitioner relies on the teachings of Kao or Chang for nearly all claim limitations, and cites to Yen and Yu—which are asserted in IPR2015-00066—only for a small number of limitations. *See* Pet. 39–59, Prelim. Resp. 13 (recognizing that Petitioner “offers Kao and Chang as primary references” for these grounds); *id.* at 48 (“[Petitioner] relies on Chang to disclose most of the elements of claim 10 except for a cover . . . and the form factor requirements”). Based on our review of the references and the Petition, Kao and Chang, and the memory cards disclosed therein, are appreciably different from Yen.

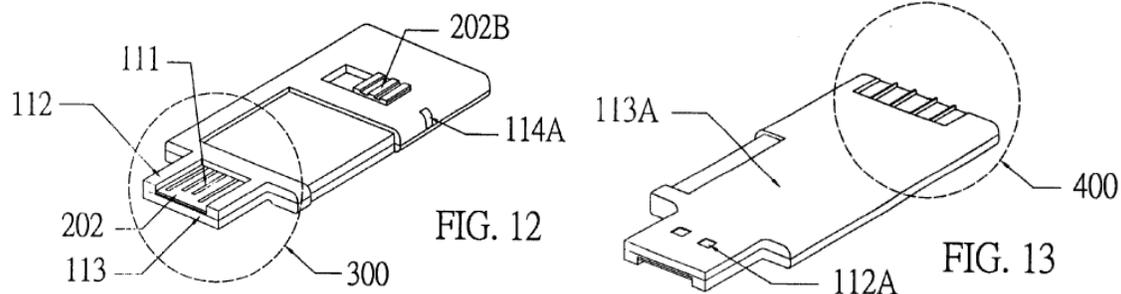
For the asserted grounds relying on Yen; Yen and Yu; Yen and either Kao or Chang; and Yen, either Kao or Chang, and Yu, we decline to exercise our discretion to deny institution under 35 U.S.C. § 325(d). An oral hearing has not been held and a final written decision has not issued in IPR2015-00066. Petitioner is a distinct entity from Kingston, the petitioner in IPR2015-00066. Petitioner also relies on testimony from a different declarant than IPR2015-00066. Under the circumstances of this case, we will consider these asserted grounds on their merits.

### C. ANTICIPATION BY YEN (CLAIM 10)

We turn to the asserted grounds. Petitioner argues claim 10 of the '188 patent is anticipated by Yen. Pet. 21–34.

#### 1. Yen

Yen discloses a “dual interface memory” card, Ex. 1003, [57], 2:13–29, with “two different interface ends, a USB interface end and an application interface end,” *id.* at 5:24–32. Figures 12 and 13 of Yen are reproduced below.



Figures 12 and 13 depict an embodiment of the disclosed dual interface memory card, with Figure 12 showing the top of the memory card and Figure 13 showing the bottom of the memory card. *Id.* at 2:22–26, 5:67–6:7. USB interface contact 300, shown at the left end of the memory card in Figure 12, acts as an interface for connecting the memory card with a host,

such as a computer. *Id.* at 5:19–39, 5:67–6:7. When inserted into a USB slot socket in a computer, USB interface contact 300 can send data to the computer. *Id.* at 5:19–39; *see id.* at 3:23–31, Fig. 9. Application interface 400, shown at the right end of the memory card in Figure 13, includes “different specifications depending on different memory cards.” *Id.* at 5:22–32, 5:67–6:7. For example, application interface 400 may feature the interface for a MS card, a MMC, or a SD card. *Id.* at 5:5–9, 5:14–32. Application interface 400 “connect[s] signal between the device and the application system.” *Id.* at 5:29–32; *see id.* at 3:20–24, 5:19–23, Fig. 9.

The memory card features casings 113A, 114, which enclose printed circuit board 202; fool proof jut piece 112; and base 113. *Id.* at 4:23–27, 5:40–43, 5:56–57. Gold contacts 111 are arranged on printed circuit board 202. *Id.* at 5:43–45; *see id.* at 4:27–29.

In addition, the memory card may include cover guard 301 to protect USB interface contact 300. *Id.* at 6:7–11, Fig. 14; *see id.* at 3:35–40, Figs. 4–5. Cover guard 301 “may be detachable or fixedly attached” to USB interface contact 300. *Id.* at 6:9–11.

## 2. Discussion

Based on our review of the arguments and evidence of record, Petitioner has made a sufficient showing that Yen’s dual interface memory card anticipates claim 10 of the ’188 patent. *Id.* at [57], 2:13–29; 4:65–6:11; Pet. 21–34; Ex. 1002 ¶¶ 54–70. In particular, on this record, we are persuaded that casings 113A, 114 correspond to the recited “housing” (*see* Ex. 1003, 5:40–43, 5:54–58, Figs. 10–13; Ex. 1002 ¶ 55) and that the card’s memory, e.g., memory array 507, corresponds to the recited “memory in the housing” (*see* Ex. 1003, 5:5–14, 5:39–43, Figs. 9–14; Ex. 1002 ¶ 56). In addition, Petitioner has made a sufficient showing that application

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interface 400 discloses the “device connector” limitation (*see* Ex. 1003, 5:18–32, 5:67–6:3, Figs. 9–10, 13; Ex. 1002 ¶¶ 57, 59–60; *see also* Ex. 1003, 3:20–24, 5:43–45), and that USB interface contact 300, comprising gold contacts 111, fool proof jut piece 112, and base 113, discloses the “host connector” limitation (*see* Ex. 1003, 1:35–43, 4:19–29, 5:20–45, 5:67–6:7, Figs. 9–12; Ex. 1002 ¶¶ 58, 61–67; *see also* Ex. 1003, 3:23–30). Moreover, we are persuaded that cover guard 301 discloses the recited “cover,” and the exterior size and shape of casings 113A, 114, together with cover guard 301, substantially conform to that of existing memory card standards, such as a MS card, a MMC, or a SD card. *See* Ex. 1003, 4:65–5:4, 5:14–20, 5:46–57, 6:7–11, Fig. 14; *see also id.* at 3:34–40, Fig. 4; Ex. 1002 ¶¶ 68–69.

Patent Owner disputes Petitioner’s assertion that Yen discloses a “host connector protruding from the housing.” Prelim. Resp. 34–44. Petitioner argues that Yen’s USB interface contact 300—comprising gold contacts 111 on printed circuit board 202, fool proof jut piece 112, and base 113—is a “separate and distinct connector” that corresponds to the recited “host connector.” Pet. 26–27, 33; Ex. 1002 ¶¶ 61–64. Petitioner contends that USB interface contact 300 is “integrally formed with the housing,” but is not part of the housing, which Petitioner identifies as casings 113A, 114. Pet. 26–27, 33; Ex. 1002 ¶¶ 61–64. According to Petitioner, USB interface contact 300 protrudes from casings 113A, 114. Pet. 27–28, 33; Ex. 1002 ¶¶ 61–64. Patent Owner responds with a two-prong argument. First, Patent Owner asserts that fool proof jut piece 112 and base 113 “comprise housing,” and that in arguing otherwise, Petitioner seeks to dissect “unambiguously continuous housing pieces.” Prelim. Resp. 36–38, 40. Patent Owner argues that Yen’s disclosures support understanding jut

piece 112 and base 113 to be part of casings 113A, 114. *Id.* at 30–34 (citing Ex. 1003, 4:19–40, 5:33–45). Further, Patent Owner contends that Yen’s Figures 4, 5, and 10–13 depict the top and bottom of the memory card’s housing as a “continuous piece,” without any boundary line to indicate that separate pieces have been joined or attached to one another. *Id.* at 38–39. Second, Patent Owner argues that because jut piece 112 and base 113 are housing, Yen’s USB contact elements are “surrounded, contained, covered, . . . protected,” and “encased” by, or “exposed through[,] the housing[—] they do not protrude from it.” *Id.* at 35, 37–40, 43 (emphasis omitted).

On the present record, we are persuaded by Petitioner’s showing that Yen discloses “a host connector protruding from the housing.” First, at this stage of the proceeding, we agree with Petitioner that Yen’s USB interface contact 300 (“host connector”) comprises gold contacts 111, fool proof jut piece 112, and base 113, and that jut piece 112 and base 113 are distinct from casings 113A, 114 (“housing”). *See* Pet. 26–27, 33.

In describing its first embodiment, a USB low height connector, Yen expressly states that “USB low height connector 100 . . . comprises a metal terminal 101, two jut pieces 102, and a connector part 103.” Ex. 1003, 2:45–47; Prelim. Resp. 27 (citing Ex. 1003, 2:45–3:3). Figure 2, reproduced below, shows low-height connector 100, with sub-components 101, 102, and 103, as a separate part. *See* Ex. 1003, Fig. 2.

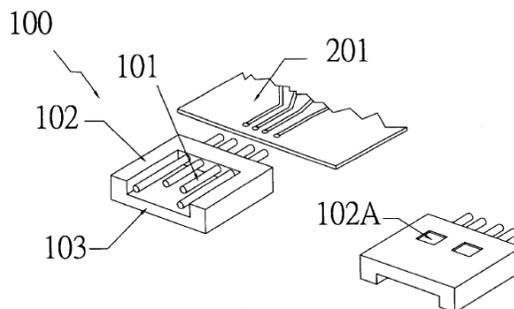


FIG. 2

Figure 2 depicts “low height USB connector 100.” *Id.* at 1:60–61, 2:45–47.

As Patent Owner acknowledges, Yen explains that the USB contact in its second embodiment differs from the USB connector in its first embodiment in that metal connective pieces, or gold contacts, 111 “replace the metal terminal 101 shown in [Figure] 2.” *Id.* at 4:18–30, 5:43; Prelim. Resp. 30 (quoting Ex. 1003, 4:19–40) (“Yen explains that the difference between the USB interface described and shown in Figures 6-14 and the USB interface shown in Figures 2-5 is that the ‘metal connective pieces 111 laid out on the printed circuit board 202 are utilized to replace the metal terminal 101 shown in Fig. 2.’”); Ex. 1002 ¶ 61. Fool proof jut piece 112 in the second embodiment corresponds to jut pieces 102 in the first embodiment; base 113 in the second embodiment corresponds to connector part 103 in the first embodiment. *See* Ex. 1003, 2:45–60, 4:18–40, Figs. 2, 6, 8, 12. Accordingly, on this record, we are persuaded that Yen’s USB interface contact 300 in its second embodiment is a distinct part, comprising gold contacts 111, fool proof jut piece 112, and base 113. *See* Pet. 27; Ex. 1002 ¶ 61.

Other disclosures of Yen reinforce that Yen’s USB interface contact 300 is a distinct part. *See* Pet. 27; Ex. 1002 ¶¶ 62, 64. Yen refers to the USB interface contact being “mounted to various currently used memory storage apparatus,” Ex. 1003, 4:66–5:4, and “arranged on the memory card,” *id.* at 5:67–6:7.

In addition, on this record, we disagree with Patent Owner that Yen indicates that fool proof jut piece 112 and base 113 are part of casings 113A, 114 (“housing”)—rather than USB interface contact 300 (“host connector”). *See* Prelim. Resp. 30–44. As Patent Owner points out, Yen states that the “entire height of the” USB interface contact in its second embodiment “can be received in the USB slot socket of the main unit after a printed circuit

board 202 being associated with a base 113 and the fool proof jut piece 112 *is integral* with the casing 114 and disposed at two opposite lateral sides of the printed circuit board 202.” Ex. 1003, 4:18–27 (emphasis added); Prelim. Resp. 30–31. Even accepting, for purposes of this Decision, Patent Owner’s assertion that this passage refers to both jut piece 112 and base 113 as “integral with” casing 114, the passage indicates that Yen contemplates jut piece 112 and base 113 as distinct parts that become “integral” with, i.e., are joined, connected, attached, or otherwise molded to, casing 114. See Pet. 27–28; Ex. 1002 ¶ 64.

We also are persuaded that Yen’s figures support Petitioner’s position that jut piece 112 and base 113 are different parts than casings 113A, 114. Pet. 27. On this record, we do not agree with Patent Owner that the lack of a boundary line between jut piece 112 and casing 114 and between base 113 and casing 113A in Yen’s figures renders jut piece 112 and base 113 housing. Prelim. Resp. 38–39. Figures 10 and 11 are reproduced below.

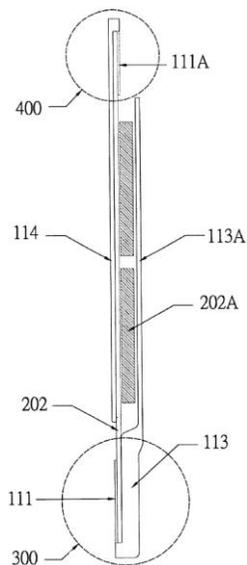


FIG. 10

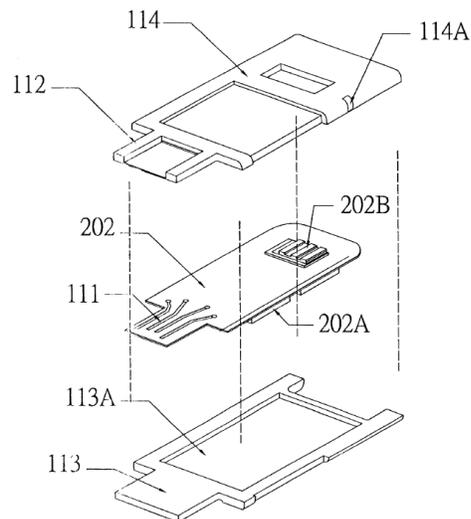


FIG. 11

Figure 10 provides a “lateral sectional view” and Figure 11 provides a “disassembled perspective view” of Yen’s dual-interface memory card.

Ex. 1003, 2:15–22, 5:54–57. The figures separately identify jut piece 112 and casing 114, as well as base 113 and casing 113A, even though these elements are on the same side of the memory card. Figure 12, reproduced above, also features separate labels for jut piece 112 and base 113. *See id.* at Fig. 12. Thus, we agree with Petitioner that, consistent with Yen’s disclosures, these figures show that jut piece 112 and base 113 are different parts than casings 113A, 114.

Second, on this record, we agree with Petitioner that USB interface contact 300 (“host connector”), with sub-parts gold contacts 111, jut piece 112, and base 113, protrudes from casings 113A, 114 (“housing”). *See* Pet. 27–28. As we explain *supra* in § II.A.1, the host connector and the housing can meet the language of claim 10, “host connector protruding from the housing,” even if they are different parts of a single integral structure, i.e., attached, connected, joined, or molded to one another. At this stage of the proceeding, we agree with Petitioner and Mr. Berg that Figures 11–13 of Yen show USB interface contact 300, comprising gold pieces 111, jut piece 112, and base 113, protruding, or jutting out, from casings 113A, 114. *See* Ex. 1003, Figs. 11–13; Pet. 26–27; Ex. 1002 ¶¶ 61, 64. On this record, we see no meaningful difference in the relationship between the host connector and the housing in these figures and that in Figure 7 of the ’188 patent, which the ’188 patent characterizes as the host connector protruding from housing. *Compare* Ex. 1001, 8:53–57, Fig. 7, *with* Ex. 1003, Figs. 11–13.

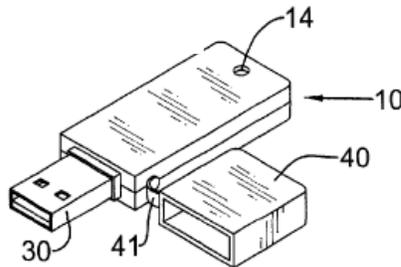
In sum, the Petition shows a reasonable likelihood that Petitioner would prevail in establishing that claim 10 is anticipated by Yen.

#### D. OBVIOUSNESS OVER YEN AND YU (CLAIM 14)

Petitioner contends Yen and Yu render claim 14 obvious. Pet. 36–38.

*1. Yu*

Yu discloses a portable memory device, with housing 10, USB plug 30, and dustproof cap 40 to cover USB plug 30. Ex. 1004, 2:63–67. Dustproof cap 40 is connected to housing 10 by flexible strap hinge 41. *Id.* at 3:1–2. Figure 3 of Yu is reproduced below.



**FIG.3**

Figure 3 depicts an embodiment of the memory device disclosed in Yu. As shown in Figure 3, when dustproof cap 40 is open, flexible strap hinge 41 allows the cap to remain connected to housing 10 of the device so that “dustproof cap (40) is not lost.” *Id.* at 3:3–5.

*2. Discussion*

Petitioner has shown sufficiently that Yu’s disclosure of flexible hinge strap 41, which connects dustproof cap 40 to housing 10, teaches the hinge recited in claim 14. *See id.* at 2:63–3:5, Figs. 2–3; Pet. 37–38. We also are persuaded that a person of ordinary skill in the art would have had sound reason, with “rational underpinning,” to combine Yu’s hinge with the memory card disclosed in Yen. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007) (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)). As Mr. Berg testifies, both Yen and Yu are directed to a portable memory device with a cover for a USB connector. *See* Ex. 1003, 3:34–40, 6:7–10, Fig. 14; Ex. 1004, 2:63–3:5, Figs. 2–3; Ex. 1002 ¶¶ 76–77. Additionally, Yu discloses that using a hinge to connect the cover to the housing of the device has the benefit of preventing loss of the cover. Ex. 1004, 3:3–5; *see id.*

at 1:65–67. On this record, we credit Mr. Berg’s testimony that a person of ordinary skill would have improved Yen’s cover by incorporating the hinge disclosed in Yu “to have the protection of a cover for the USB connector without the risk of losing the cover.” Ex. 1002 ¶ 77.

Patent Owner contests the combination of Yen and Yu, arguing that Yu discloses a standard USB connector, but Yen teaches away from using a standard USB connector. Prelim. Resp. 45–47. According to Patent Owner, a person of ordinary skill would not know how to combine the USB connectors of Yen and Yu, and combining Yu’s standard USB connector with Yen’s memory card would render Yen’s card inoperable for its intended purpose. *Id.* at 47. Patent Owner’s arguments are misplaced. Petitioner’s proposed combination relies on Yu only for its teaching of a hinged cover. Pet. 36–38. On this record, we are not persuaded that a person of ordinary skill, upon reading Yen and Yu, would have been “discouraged” from adding a hinge to Yen’s cover “or . . . led in a direction divergent from the path” taken by the inventors of the ’188 patent. *In re Mouttet*, 686 F.3d 1322, 1333–34 (Fed. Cir. 2012) (quotations omitted).

Therefore, the Petition shows a reasonable likelihood that Petitioner would prevail in establishing that claim 14 is unpatentable over Yen and Yu.

E. OBVIOUSNESS OVER YEN AND EITHER KAO OR CHANG (CLAIM 10) AND OVER YEN, EITHER KAO OR CHANG, AND YU (CLAIM 14)

Petitioner asserts additional grounds, which add Kao or Chang to the asserted grounds relying on Yen (claim 10) as well as Yen and Yu (claim 14), addressed above. Pet. 34–36, 39. Petitioner argues that “[t]o the extent . . . [P]atent Owner argues that the USB connector of Yen does not protrude from the housing, it would have been obvious to combine Yen with either Kao . . . or Chang . . . to result in a ‘host connector protruding from

the housing.” *Id.* at 34; Ex. 1002 ¶ 71. Petitioner and Mr. Berg assert that both Kao and Chang teach a USB connector protruding from the housing and that Yen “teaches combining a USB interface with memory storage devices, including ‘various currently used memory storage apparatus,’ to create a dual-connector memory card.” Pet. 35; Ex. 1002 ¶¶ 71–72. “Therefore,” according to Petitioner and Mr. Berg, “it would have been obvious to use known USB connecting devices, such as those taught in Kao and Chang,” with Yen’s memory card and “[t]he resulting card would have a USB connector protruding from the housing.” Pet. 36; Ex. 1002 ¶ 72.

Petitioner, however, has not explained sufficiently why a person of ordinary skill in the art would have modified Yen’s memory card to include Kao or Chang’s USB connector, according to Petitioner’s proposed combination. Yen discloses that the embodiments of its memory card include a low-height USB connector, with particular benefits over traditional USB connectors. *E.g.*, Ex. 1003, [57], 1:48–52, 2:45–59, 3:33–3:45, 4:18–34, 4:65–5:6. The asserted rationale for replacing Yen’s USB connector with either Kao or Chang’s USB connector in the Petition and Mr. Berg’s supporting testimony amounts to no more than an assertion that it would have been obvious to “use known USB connecting devices” in Yen’s memory card. This assertion does nothing to explain why a person of ordinary skill would have sought to modify Yen’s USB connector, much less to replace Yen’s USB connector with the particular USB connector from either Kao or Chang. Nor does it represent that either Kao’s or Chang’s USB connector was one of a “finite number of identified, predictable solutions” to a problem such that the proposed modification would have been obvious to try. *KSR*, 550 U.S. at 420. In sum, the vague and conclusory reasoning proffered in the Petition and Mr. Berg’s declaration is

insufficient to show that the proposed combination would have been a predictable variation or to provide “articulated reasoning with some rationale underpinning to support the legal conclusion of obviousness.” *Id.* at 418 (quoting *Kahn*, 441 F.3d at 988).

Thus, the Petition does not establish a reasonable likelihood Petitioner would prevail in showing that claim 10 is unpatentable over Yen and Kao or Chang, and that claim 14 is unpatentable over Yen, Kao or Chang, and Yu.

#### F. OBVIOUSNESS OVER CHANG, YEN, AND EITHER THE SD OR MMC SPECIFICATION (CLAIM 10)

Petitioner challenges claim 10 as obvious over Chang, Yen, and either the SD or MMC Specification. Pet. 48–57; *supra* 5 n.1.

##### 1. Chang

Chang discloses a “portable memory storage-retrieval device,” featuring base body 20 and a “memory . . . built in . . . base body 20,” with USB port connecting joint 21 at one end and connecting device 22 at the other end. Ex. 1006, [57], ¶¶ 6, 15. Figures 4 and 5 are reproduced below.

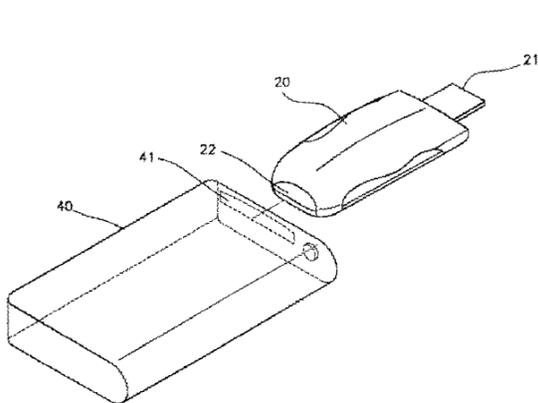


Figure 4

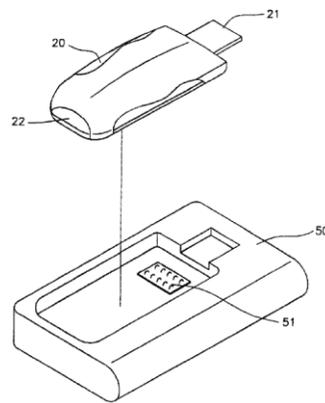


Figure 5

Figure 4 depicts base body 20 of the portable-memory storage retrieval device being “inserted into” receiving and inserting slot 41 of personal digital assistant (“PDA”) 40, such that connecting device 22 “forms an electronic connection with” PDA 40 to allow PDA 40 to receive signals and

data. *Id.* ¶ 16. Figure 5 depicts the device “assembled with . . . digital music player” 50. *Id.* ¶ 17. Base body 20 “can be inserted into various digital and electronic products,” such as the digital music player in Figure 5. *Id.*

## 2. SD Specification

The SD Specification explains the specifications of the SD memory card, including the “form factor.” Ex. 1007, 4, 15, 22, 24–26. The specification provides for a particular shape as well as dimensions of 24 mm x 32 mm x 2.1 mm. *Id.* at 15, 22, 24–26.

## 3. MMC Specification

The MMC Specification defines the MMC, including the card package and dimensions of 24 mm x 32 mm x 1.4 mm. Ex. 1008, 6, 87–89.

## 4. SD and MMC Specifications – Printed Publications

The record includes evidence sufficient to support a threshold showing, for purposes of institution, that both the SD Specification and the MMC Specification were printed publications before the filing date of the ’188 patent, February 27, 2004, and are, thus, eligible as a basis for *inter partes* review. *See* Pet. 20, 54–55; Ex. 1002 ¶¶ 119–20; 35 U.S.C. § 311(b) (“[I]nter partes review may [be] request[ed] . . . only on the basis of prior art consisting of patents or printed publications.”). The SD Specification bears a copyright date of 2001, Ex. 1007, 1–2, and the MMC Specification features a copyright and “[o]fficial [r]elease” date of February 1998, Ex. 1008, 2. In addition, the ’188 patent, Yen (filed January 30, 2002), and Chang (filed March 4, 2002) refer to both standards. Ex. 1001, 1:30–40, 12:14–21; Ex. 1003, 1:19–24, 5:6–10, 5:28–32; Ex. 1006 ¶ 4.

## 5. Discussion

On this record, we are persuaded that Chang’s “portable memory storage-retrieval device” teaches a “memory card,” as recited in claim 10, its

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base body 20 teaches the “housing,” its “memory . . . built in . . . base body 20” teaches the “memory in the housing,” connecting device 22 teaches the “device connector” limitation, and USB port connecting joint 21 teaches the “host connector” limitation. Ex. 1006, [57], ¶¶ 2, 4, 6–8, 15–17, Figs. 2–5; Pet. 48–57; Ex. 1002 ¶¶ 102–14.

Patent Owner contests that Chang teaches a “device connector accessible through the housing,” as recited in claim 10. Prelim. Resp. 48–49. Patent Owner argues that Chang lacks any “explanation or description . . . of the configuration of the device connector relative to the housing” and of the “external/mechanical structure of the device.” *Id.* Chang discloses that the “top end” of base body 20 is “disposed with a connecting device (22)” and that “after the base body (20) is inserted into a receiving and inserting slot (41) of PDA (40), the connecting device (22) at the top end of the said base body (20) forms an electronic connection with the said PDA (40) to make it receive digital signals and read data.” Ex. 1006 ¶¶ 15–16. At this stage of the proceeding, we are persuaded that these disclosures, combined with Figures 2–5 depicting connecting device 22 and base body 20 and Mr. Berg’s supporting testimony, make a sufficient showing that Chang’s connecting device 22 is “accessible through” base body 20. *See id.* ¶¶ 15–16, Figs. 2–5; Ex. 1002 ¶ 110.

In addition, we agree with Petitioner that Yen teaches the recited “cover to cover the host connector,” Ex. 1003, 3:35–39, 6:7–11, Figs. 4–5, 14, and that a person of ordinary skill would have had reason to add Yen’s cover to Chang’s device. Mr. Berg testifies that both Chang and Yen teach portable memory devices with USB connectors, and one of ordinary skill would have had the same incentives to protect Chang’s USB port connecting joint 21 as Yen’s USB connector. Ex. 1002 ¶ 115; Ex. 1003, 6:7–11.

Moreover, we are persuaded that the combination of Chang, Yen, and either the SD or MMC Specification teaches or suggests “wherein the housing and the cover collectively define a form factor of the memory card that substantially conforms to a form factor of the memory card standard.” Petitioner argues that a person of ordinary skill would have had reason to combine the teachings of Chang, Yen, and either the SD or MMC Specification such that Chang’s memory device, with Yen’s cover, substantially conforms to the form factor of the SD or MMC standard. Pet. 54–57; Ex. 1002 ¶¶ 117–20. Patent Owner, however, asserts that it would not have been obvious “how Chang could be altered in light of Yen, Yu, and/or the SD[] or MMC[ Specifications] to arrive at claim 10,” because Chang “provides *no disclosure or detail* related to the internal/electrical structure of the Chang device that would allow a device or host connector to conform to a device or host connection standard respectively that would allow access to the memory of the Chang device.” Prelim. Resp. 50.

On the present record, the teachings of Chang, Yen, and either the SD or MMC Specification, together with Mr. Berg’s testimony, provide sufficient evidence that a person of ordinary skill would have had reason and the knowledge to combine the references to reach the memory card recited in claim 10, with a reasonable expectation of success. Specifically, we are persuaded that both the SD and MMC Specifications teach the form factor of their respective memory card standards. *See* Ex. 1007, 15, 22, 24–26; Ex. 1008, 87–89; Ex. 1002 ¶¶ 119–20. As Petitioner points out, Chang expressly references the SD and MMC standards. *See* Ex. 1006 ¶ 4; Ex. 1002 ¶¶ 119–20; Pet. 53–55. Chang explains that MMC and SD cards are two types of common “inserted digital memory cards” and that “all of the various kinds of digital cameras, PDAs, digital music players and digital

video cameras available on the market use . . . built-in or inserted cards.”

Ex. 1006 ¶ 4. Chang further discloses that its device, with a connecting device and USB port connecting joint, “can be inserted to various digital and electronic products for use.” *Id.* ¶ 17; *see id.* at [57], ¶¶ 6–8, Figs. 4–5.

According to Mr. Berg, it was, therefore, a goal of Chang “to add a USB connector to available memory cards and still make them usable with existing portable devices.” Ex. 1002 ¶ 117 (citing Ex. 1006 ¶¶ 4, 6, 8, 17).

Similarly, Yen teaches that its dual-interface memory card, attached with a cover, “provides the same size as an ordinary memory card capable of being used in an applied system.” Ex. 1003, 3:35–39.

At this stage of the proceeding, we credit Mr. Berg’s testimony that a person of ordinary skill would have had reason “to utilize the size and shape of an existing memory card standard and to fashion the dimensions, including the housing, the USB connector and the cover, so as to preserve the overall dimensions and shape specified by the memory card standard,” in order to “allow the memory card to be fully inserted into, and used with, portable devices compatible with the memory card standard.” Ex. 1002 ¶¶ 118–20. Mr. Berg also testifies that Chang’s device was compatible with the standards in both the SD Specification and the MMC Specification. *Id.*

Accordingly, the Petition shows a reasonable likelihood that Petitioner would prevail in establishing that claim 10 of the ’188 patent is unpatentable as obvious over Chang, Yen, and either the SD or MMC Specification.

#### G. OBVIOUSNESS OVER CHANG, YEN, EITHER THE SD OR MMC SPECIFICATION, AND YU (CLAIM 14)

For claim 14, Petitioner adds Yu to the asserted ground challenging claim 10 as obvious over Chang, Yen, and either the SD or MMC Specification, addressed immediately above. Pet. 58. Patent Owner

disputes that the asserted references render claim 14 obvious for the same reasons it contests the asserted ground challenging claim 10 as obvious over Chang, Yen, and either the SD or MMC Specification. Prelim. Resp. 48–50. For the reasons given above in § II.F.5, we are not persuaded by Patent Owner’s arguments on this record.

Petitioner argues that Yu teaches the additional limitation of claim 14, a hinge connecting the cover for a USB connector to the housing of a memory card. Pet. 58. As we explained above in § II.D.2, we are persuaded that Yu teaches the additional limitation of claim 14. We also are persuaded that Petitioner has made a sufficient showing that a person of ordinary skill would have had reason to add Yu’s hinge to the combination of Chang, Yen, and either the SD or MMC Specification, addressed in § II.F.5 above, to minimize the risk of losing the cover. *See id.*; Ex. 1002 ¶ 123.

Therefore, Petitioner has shown a reasonable likelihood that it would prevail in establishing that claim 14 of the ’188 patent is unpatentable as obvious over Chang, Yen, either the SD or MMC Specification, and Yu.

#### H. OTHER ASSERTED GROUNDS

In addition to the asserted grounds analyzed above, Petitioner challenges claim 10 as obvious over Kao and Yen and claim 14 as obvious over Kao, Yen, and Yu. Pet. 39–48. We have discretion to institute *inter partes* review as to some asserted grounds and not others. 37 C.F.R. § 42.108(a); *see* 35 U.S.C. § 314(a) (authorizing institution of *inter partes* review under particular circumstances, but not requiring institution under any circumstances). This discretion is consistent with the requirement that the regulations for *inter partes* review take into account “the efficient administration of the Office” and “the ability of the Office to timely complete [instituted] proceedings,” 35 U.S.C. § 316(b), and are “construed

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to secure the just, speedy, and inexpensive resolution of every proceeding,”  
37 C.F.R. § 42.1(b).

Here, the Petition asserts four grounds of unpatentability for each of claims 10 and 14. *See generally* Pet. As addressed above, we have determined that two asserted grounds challenging claim 10 and claim 14 meet the requirements for institution of *inter partes* review. Given that we institute *inter partes* review of each of claims 10 and 14 on two grounds asserted in the Petition and that review of these claims already is pending before the Board in IPR2015-00066, we exercise our discretion not to institute review on the additional asserted grounds relying on Kao and Yen as well as Kao, Yen, and Yu for reasons of administrative necessity and to ensure timely completion of the instituted proceeding.

### III. ORDER

For the reasons given, it is:

ORDERED that pursuant to 35 U.S.C. § 314(a), an *inter partes* review of claims 10 and 14 of the '188 patent is instituted, commencing on the entry date of this Decision;

FURTHER ORDERED that pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial; and

FURTHER ORDERED that the trial is limited to the following grounds of unpatentability:

Claim 10 under 35 U.S.C. § 102 as anticipated by Yen;

Claim 14 under 35 U.S.C. § 103 as obvious over Yen and Yu;

Claim 10 under 35 U.S.C. § 103 as obvious over Chang, Yen, and either the SD Specification or the MMC Specification; and

Claim 14 under 35 U.S.C. § 103 as obvious over Chang, Yen, either the SD Specification or the MMC Specification, and Yu.

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