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Paper 38
Entered: February 8, 2017

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TCL CORPORATION, TCL COMMUNICATION TECHNOLOGY HOLDINGS, LTD., TCT MOBILE LIMITED, TCT MOBILE INC., and TCT MOBILE (US) INC.,
Petitioner,

v.

TELEFONAKTIEBOLAGET LM ERICSSON,
Patent Owner.

Case IPR2015-01637
Patent RE43,931 E

Before PATRICK R. SCANLON, BARBARA A. BENOIT, and STACY B. MARGOLIES, *Administrative Patent Judges.*

SCANLON, *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, TCL Corporation, TCL Communication Technology Holdings, Ltd., TCT Mobile Limited, TCT Mobile Inc., and TCT Mobile (US) Inc. (collectively, "Petitioner") challenge the patentability of claims 30, 31, 37–41, and 45–57 of U.S. Patent No. RE43,931 E (Ex. 1001, "the '931 patent"), owned by Telefonaktiebolaget LM Ericsson ("Patent Owner").

We have jurisdiction under 35 U.S.C. § 6. This Final Written Decision is issued pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73. This Final Written Decision is issued concurrently with a Final Written Decision for IPR2015-01676, which also challenges the patentability of claims 30, 31, 37–41, and 45–57 of the '931 patent. For the reasons that follow, we determine that Petitioner has shown by a preponderance of the evidence that claims 30, 31, 37–41, and 45–57 of the '931 patent are unpatentable.

II. BACKGROUND

A. Procedural History

Petitioner filed a Petition (Paper 2, "Pet.") requesting an *inter partes* review of claims 30, 31, 37–41, and 45–57 of the '931 patent pursuant to 35 U.S.C. §§ 311–319. Patent Owner filed a Preliminary Response (Paper 6, "Prelim. Resp."). On February 10, 2016, we instituted an *inter partes* review as to all challenged claims on certain asserted grounds of unpatentability (Paper 7, "Inst. Dec.").

After institution, Patent Owner filed a Corrected Patent Owner Response (Paper 26, "PO Resp."), and Petitioner filed a Reply (Paper 28,

"Reply"). Petitioner relies on the Declaration of Andrew Wolfe, Ph.D. (Ex. 1202) in support of its contentions, and Patent Owner relies on the Declaration of Jean Renard Ward (Ex. 2004) in support of its contentions.

An oral hearing was held on October 27, 2016. A transcript (Paper 37, "Tr.") of the hearing is included in the record.

B. Related Matters

The parties indicate that the '931 patent is at issue in *Ericsson Inc. v. TCL Commc'n Tech. Holdings, Ltd.*, No. 2:15-cv-11 (E.D. Tex.). Pet. 1–2; Paper 5, 2. In addition, the parties identify the district court proceedings *Ericsson Inc. v. TCL Commc'n Tech. Holdings, Ltd.*, No. 2:14-cv-667 (E.D. Tex.) and *Ericsson Inc. v. Apple Inc.*, No. 2:15-cv-289 (E.D. Tex.) as related matters. Pet. 1–2; Paper 5, 2.

Claims of the '931 patent also are subject to *inter partes* review in IPR2015-01602, IPR2015-01641, IPR2015-01646, IPR2015-01674, IPR2015-01676, IPR2015-01761, and IPR2015-01806.

Petitioner relies on U.S. Patent No. 6,009,338 ("Iwata") and U.S. Patent No. 5,748,185 ("Stephan") in IPR2015-01602, IPR2015-01637, IPR2015-01641, and IPR2015-01646. Paper 15 ("Consolidation Order"). Subsequent to institution of these *inter partes* reviews, and after conferring with the parties, neither of whom opposed consolidation, we ordered an identical, consolidated patent owner response under 37 C.F.R. § 42.120 be filed in the record of these *inter partes* reviews involving assertions that various claims of the '931 were unpatentable over Iwata and Stephan. *Id.* Similarly, we ordered Petitioner's reply, if any, to be an identical, consolidated reply filed in each *inter partes* review. *Id.* We also expanded the permitted length to two-and-a-half times the length limit provided in 37

C.F.R. § 42.24(b)(1) for both the patent owner response and petitioner's reply. *Id.* In addition, we held a consolidated hearing for these four *inter partes* reviews. Tr. at 3:3–4.

C. The '931 Patent

The '931 patent is a reissue of U.S. Patent No. 6,278,888. Ex. 1001, [64]. The '931 patent relates to radiotelephones "in which control of a radiotelephone's display and/or radiotelephone communications transceiver is effected using a contact-sensitive transducer such as a resistive or capacitive touch strip mounted on the radiotelephone." *Id.* at 2:9–13. Figures 1 and 2 of the '931 patent are reproduced below:

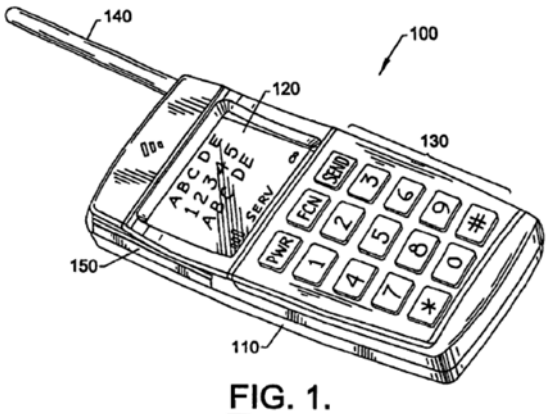


FIG. 1.

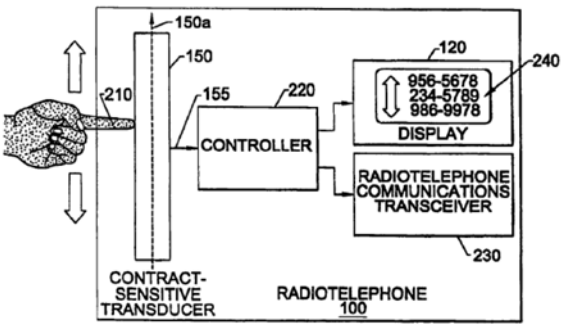


FIG. 2.

Figure 1 illustrates radiotelephone 100, and Figure 2 is a block diagram of the radiotelephone. *Id*. at 4:15–18. Radiotelephone 100 comprises housing 110 supporting display 120 and keys 130. *Id*. at 5:1–3. Mounted on a side surface of housing 110 is contact-sensitive transducer 150. *Id*. at 5:10–11. Alternatively, the contact-sensitive transducer can be mounted to the front face of the radiotelephone housing. *Id.* at 9:61–65, Fig. 11.

As shown in Figure 2, "the contact-sensitive transducer **150** produces an output signal **155** that characterizes contact of an object, such as a user's finger **210**, along an axis **150a** of the transducer **150**." *Id.* at 5:22–25. Controller 220 selectively displays an image, such as one or more rows 240 of alphanumeric characters, on display 120 in response to output signal 155. *Id.* at 5:28–30. Controller 220 also controls radiotelephone communications transceiver 230 according to output signal 155. *Id.* at 5:31–33.

In addition, "the controller has a first mode wherein the controller is responsive to contact with the contact-sensitive transducer and a second mode wherein the controller is unresponsive to contact with the contact-sensitive transducer." *Id.* at 3:34–38. The controller is placed into the first or second mode in response to an input from a user. *Id.* at 3:38–41.

D. Illustrative Claim

Of the challenged claims in the '931 patent, claim 30 is the sole independent claim and is reproduced below. Italicized text indicates language that was added to the claims during prosecution of the reissue application. Bracketed text indicates language that was removed.

30. An apparatus, comprising:

a housing *having a front surface, a rear surface and first and second side surfaces adjoining respective opposite sides of the front surface and extending from the respective opposite sides of the front surface to respective opposite sides of the rear surface, the housing configured to be held in a user's hand such that the rear surface confronts the user's palm*;

a display, supported by the housing, that displays an image at a front surface of the housing;

a contact-sensitive transducer, supported by the housing, which produces an output signal **[**that characterizes**]** *in response to moving*

> contact of an object along the contact-sensitive surface of the contact-sensitive transducer; and
>
> a controller, responsive to the output signal and operatively associated with the display, which scrolls displayed rows along an axis of the display based on the output signal of the contact-sensitive transducer, *the controller having a first mode wherein the controller is responsive to contact with the contact-sensitive transducer and a second mode wherein the controller is unresponsive to contact with the contact-sensitive transducer, the second mode being entered in response to an input from a user*.

Ex. 1001, 13:5–29.

E. Asserted Grounds of Unpatentabilty

We instituted an *inter partes* review of claims 30, 31, 37–41, and 45–57 of the '931 patent on the following grounds:[1]

References	Basis	Challenged Claim(s)
Iwata[2] and Stephan[3]	35 U.S.C. § 103	30, 31, 37–41, 45–52, and 54–57
Iwata, Stephan, and Capps[4]	35 U.S.C. § 103	53

Inst. Dec. 21.

[1] Section 3(c) of the Leahy-Smith America Invents Act ("AIA") amended 35 U.S.C. § 103. Pub. L. No. 112-29, 125 Stat. 284, 285–287 (2011). Because the '931 patent has a filing date before March 16, 2013 (effective date of § 3), the pre-AIA version of § 103 applies in this proceeding. *See id.* § 3(n)(1), 125 Stat. at 293.
[2] U.S. Patent No. 6,009,338, issued Dec. 28, 1999 (Ex. 1029, "Iwata").
[3] U.S. Patent No. 5,748,185, issued May 5, 1998 (Ex. 1036, "Stephan").
[4] U.S. Patent No. 5,710,844, issued Jan. 20, 1998 (Ex. 1037, "Capps").

III. ANALYSIS

A. Relevant Legal Principles

To prevail in challenging Patent Owner's claims, Petitioner must demonstrate by a preponderance of the evidence that the claims are unpatentable. 35 U.S.C. § 316(e); 37 C.F.R. § 42.1(d). "In an [*inter partes* review], the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable." *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3) (requiring *inter partes* review petitions to identify "with particularity . . . the evidence that supports the grounds for the challenge to each claim")). This burden never shifts to Patent Owner. *See Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015) (citing *Tech. Licensing Corp. v. Videotek, Inc.*, 545 F.3d 1316, 1326–27 (Fed. Cir. 2008)) (discussing the burden of proof in *inter partes* review). Furthermore, Petitioner cannot satisfy its burden of proving obviousness by employing "mere conclusory statements." *In re Magnum Oil Tools Int'l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016).

A claim is unpatentable under 35 U.S.C. § 103(a) if the differences between the claimed subject matter 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) where in evidence, so-called secondary

considerations, including commercial success, long-felt but unsolved needs, failure of others, and unexpected results. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

For an obviousness analysis, prior art references must be "considered together with the knowledge of one of ordinary skill in the pertinent art." *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994) (quoting *In re Samour*, 571 F.2d 559, 562 (CCPA 1978)). Moreover, "it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom." *In re Preda*, 401 F.2d 825, 826 (CCPA 1968). That is because an obviousness analysis "need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ." *KSR*, 550 U.S. at 418.

B. Level of Ordinary Skill

In determining whether an invention would have been obvious at the time it was made, 35 U.S.C. § 103 requires us to resolve the level of ordinary skill in the pertinent art at the time of the invention. *Graham*, 383 U.S. at 17. "The importance of resolving the level of ordinary skill in the art lies in the necessity of maintaining objectivity in the obviousness inquiry." *Ryko Mfg. Co. v. Nu-Star, Inc.*, 950 F.2d 714, 718 (Fed. Cir. 1991). The person of ordinary skill in the art is a hypothetical person who is presumed to have known the relevant art at the time of the invention. *In re GPAC, Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995). Factors that may be considered in determining the level of ordinary skill in the art include, but are not limited to, the types of problems encountered in the art, the sophistication of the

technology, and educational level of active workers in the field. *Id.* In a given case, one or more factors may predominate. *Id.* "A less sophisticated level of skill generally favors a determination of nonobviousness . . . while a higher level of skill favors the reverse." *Innovention Toys, LLC v. MGA Entm't, Inc*., 637 F.3d 1314, 1323 (Fed. Cir. 2011)).

Relying on the testimony of Dr. Wolfe, Petitioner submits that a person of ordinary skill in the art "is someone with a bachelor's degree in computer engineering, electrical engineering, or computer science, and two years of experience with touch-based user input systems or equivalent education and experience on December 30, 1997, the date to which the '931 patent claims priority." Pet. 8–9 (citing Ex. 1202 ¶ 58). Patent Owner argues that Petitioner's definition is erroneous because it lacks "any specified level of experience with respect to the art of ***radiotelephones or handheld devices***," which is the subject matter of claim 1. PO Resp. 26–29. Instead, relying on the testimony of Mr. Ward, Patent Owner submits that a person of ordinary skill in the art

> is someone with a bachelor's degree in computer engineering, electrical engineering, or computer science, and multiple years of hands-on experience working with hand held contact-sensitive user interface devices, graphic user interfaces, has direct knowledge of the types of contact-sensitive user interfaces used in mobile phones or handheld devices as of December 30, 1997, and understands the design and functional tradeoffs with regard to the physical constraints of a hand-held device.

Id. at 26 (citing Ex. 2004 ¶ 22). Petitioner disagrees, arguing that Patent Owner's reliance on the art of radiotelephones or handheld devices is not supported by the claim language and that Patent Owner's definition differs from the definition provided by its declarant. Reply 7–8.

We agree with Petitioner's second point. Mr. Ward actually opines that a person of ordinary skill in the art "would probably have had a bachelor's degree in electrical engineering or computer engineering, at least 2–3 years of hands-on experience working with hand held contact-sensitive user interface devices, and direct knowledge of the types of user interfaces used in mobile phones and handheld devices in 1997." Ex. 2004 ¶ 22. In reaching this conclusion, Mr. Ward indicates he "considered the '931 patent, the types of problems encountered in the art of handheld radio telephone devices and handheld devices, the prior art solutions to those problems, and the educational level of workers active in the field." *Id.* In contrast, Dr. Wolfe does not explain the basis for his opinion. 1202 ¶ 58.

We determine that the level of ordinary skill proposed by Mr. Ward is consistent with the challenged patent and the asserted prior art, and we therefore adopt this definition of the level of ordinary skill in the art for the purposes of the analysis below. Our analysis would not differ, however, if we adopted Dr. Wolfe's definition.

C. Claim Construction

In an *inter partes* review, "[a] claim in an unexpired patent shall be given its broadest reasonable construction in light of the specification of the patent in which it appears." 37 C.F.R. § 42.100(b); *see also Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2144–46 (2016) (upholding the use of the broadest reasonable interpretation standard). There is a presumption that a claim term carries its ordinary and customary meaning. *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002); *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007).

Prior to our Institution Decision, Petitioner proposed constructions for "contact-sensitive transducer . . . which produces an output signal." Pet. 10–12. Patent Owner did not propose any express constructions or challenge Petitioner's proposed construction. *See generally* Prelim. Resp. 2–27. In the Institution Decision, we determined that no claim term required express construction. Inst. Dec. 6.

In its Response, Patent Owner indicates that it "generally agrees that the constructions proposed by [Petitioner] are in keeping with how a [person of ordinary skill in the art] would have understood those terms." PO Resp. 29.

We determine, for purpose of this Final Written Decision, that no term in the challenged claims requires express construction. *See, e.g., Wellman, Inc. v. Eastman Chem. Co.*, 642 F.3d 1355, 1361 (Fed. Cir. 2011) ("[C]laim terms need only be construed 'to the extent necessary to resolve the controversy.'" (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999))).

D. Asserted Obviousness over Iwata and Stephan

Petitioner challenges claims 30, 31, 37–41, 45–52, and 54–57 of the '931 patent as obvious under 35 U.S.C. § 103(a) over Iwata and Stephan. Pet. 3, 12–50.

1. Overview of Iwata

Iwata relates to "mobile information terminal equipment . . . , such as a mobile telephone, furnished with functions including electronic note, data communication, word processor, personal computer, and so on." Ex. 1029, 1:6–11. Figures 1 and 2, reproduced below, depict mobile information

terminal equipment 1 having touch screen 20 attached on liquid crystal display 4 and "on which the coordinate can be input with a pen . . . or by touching it with a finger" so as to constitute an input/output device used for display and input operation. *Id.* at 12:30–38.

Fig.1

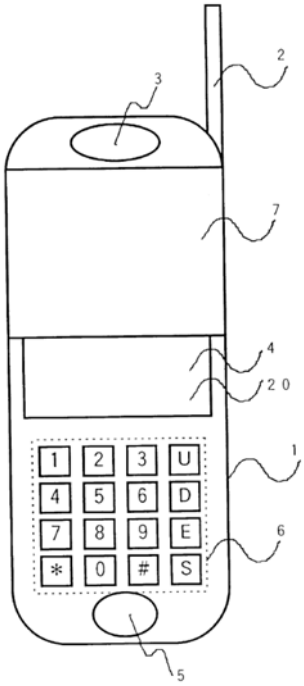
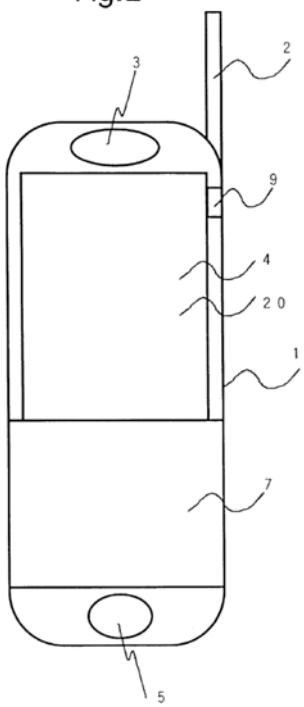


Fig.2



As shown above in Figures 1 and 2, the device also includes cover 7 that can slide between a position near the top of the device (Fig. 1), defining a cover closed status, and a position near the bottom of the device (Fig. 2), defining a "cover opened status." *Id*. at 12:38–47. The location of cover 7 is detected by cover switch 9, which thereby determines whether cover 7 is in its closed or opened status. *Id*. at 12:48–53.

The device has additional components, including processor 21 and radio transmission unit 23. *Id*. at 13:9–10, Fig. 3. "Processor **21** handles the digital data and implements functions of the electronic note, word processor, personal computer, etc. and controls liquid crystal display **4** [and] touch

screen **20**." *Id*. at 13:14–17. "Radio transmission unit **23** conducts processing related to the radio, such as the high-frequency modulation and demodulation of the mobile telephone." *Id*. at 13:27–29.

During operation in cover opened status, display 4 can display four major areas: content area 27, tag area 28, scroll area 29, and menu area 30. *Id*. at 14:17–19, Fig. 6. Content area 27 displays various information, such as a name list from an address book. *Id*. at 14:19–24. "Scroll area **29** is used to see the data in the neighborhood of the data displayed in content area **27**." *Id*. at 14:43–44. That is, when all data cannot be displayed at once in content area 27, touching the scroll buttons at the top and bottom of scroll area 29 allows hidden information to be displayed. *Id*. at 14:44–48.

2. Overview of Stephan

Stephan discloses "a touchpad designed to improve a user's ability to interact with a graphical user interface (GUI) on a computer." Ex. 1036, 3:5–7. In one embodiment, touchpad 50 is connected to computer 60 via cable 62. *Id.* at 5:14, Fig. 2. Touchpad 50 is divided into three regions: cursor control region 54, scroll control region 56, and pan control region 58. *Id*. at 14:22–26, 63–65, 15:16–17, Fig. 2. In other embodiments, the touchpad can be incorporated into a portable computer. *Id*. at 12:25–43, Figs. 12, 13.

3. Independent claim 30

a) Petitioner's Assertions

i. Preamble

Petitioner argues that Iwata discloses "'a mobile telephone,' which is an apparatus." Pet. 21 (citing Ex. 1202 ¶ 171, quoting Ex. 1029, 1:5–11).

ii. Housing

Petitioner argues that "Iwata describes that a 'portable electronic apparatus' has a 'body' with 'a front face' that enables '[h]olding the portable electronic apparatus body with one hand.'" *Id.* at 22 (quoting Ex. 1029, 32:3–18). Relying on the testimony of Dr. Wolfe, Petitioner asserts that one of ordinary skill in the art would have recognized Iwata's portable electronic apparatus body to be a housing. *Id.* at 22 (citing Ex. 1202 ¶ 173). Petitioner adds that the body of Iwata's apparatus, as shown in Figure 49A, is a housing that is "configured to be held in a user's hand such that the rear surface confronts the user's palm." *Id.* at 23 (citing Ex. 1202 ¶ 176; Ex. 1029, Fig. 49A). Petitioner notes that, regarding the apparatus of Figure 49A, Iwata states "the 'width of portable electronic apparatus body 301 is shortened as much as possible,' such that 'it becomes easier to hold the body with one hand.'" *Id.* at 22 (citing Ex. 1029, 32:38–40).

iii. Display

Petitioner argues that Iwata discloses "the 'mobile information terminal equipment may comprise a display unit for displaying an application screen,'" and Iwata shows display screen 303 is supported by the front surface of the housing. *Id.* at 23 (citing Ex. 1202 ¶ 178; Ex. 1029, 5:52–6:9, 32:3–9, Fig. 48). According to Petitioner, Iwata discloses displaying images on the display. *Id.* at 24 (citing Ex. 1202 ¶ 176; Ex. 1029, 14:26–39, Fig. 6).

iv. Contact-Sensitive Transducer

Petitioner argues that Iwata in combination with Stephan renders obvious the claim 30 limitation "a contact-sensitive transducer, supported by the housing, which produces an output signal in response to moving contact

of an object along the contact-sensitive surface of the contact-sensitive transducer." *Id.* at 24–25 (citing Ex. 1202 ¶ 180). Specifically, Petitioner argues that "Iwata describes that '[t]ouch screen 20 is attached on liquid crystal display 4, and constitute[s] an input/output device . . . for display and input operation.'" *Id.* at 25 (quoting Ex. 1029, 12:29–47). According to Petitioner, Iwata's touchscreen 20 outputs an electrical signal and is supported by the housing. *Id.* at 25–26 (citing Ex. 1202 ¶¶ 182, 184).

Petitioner does not assert that Iwata discloses a transducer that responds to *moving* contact as recited in claim 30; rather, Petitioner relies on Stephan to teach this limitation. In particular, Petitioner asserts that Stephan describes "a touchpad having a scroll region with which a user may interact via moving contact of a finger or other object in order to effect scrolling, or other functionality, in a GUI." *Id.* at 13 (citing Ex. 1036, 3:5–29; Ex. 1202 ¶ 141). Thus, according to Petitioner,

> the mobile telephone of Iwata modified in view of Stephan as illustrated in either First Demonstrative Figs. 6 and 12 (incorporating a scroll control touchscreen member) or Second Demonstrative Figs. 6 and 12 (incorporating a scroll control touchpad member), both discussed *supra* in Section VII.A.3 [of the Petition], discloses each and every feature of the claim.

Id. at 25 (citing Ex. 1202 ¶ 180).

Petitioner asserts four reasons supporting why one of ordinary skill in the art would have been led to make the proposed modification. *Id.* at 14–21. First, Petitioner argues that both Iwata and Stephan "are directed to touch-sensitive methods of user input that can be implemented in order to improve operability of a device," and "known work in one field of endeavor may prompt predictable variations of the work for use in either the same

field based on design incentives or other market forces." *Id.* at 15 (citing Ex. 1202 ¶ 144; *KSR*, 550 U.S. at 417).

Second, Petitioner argues that, because Iwata and Stephan disclose alternative methods for effectuating scrolling functionality, "it would have been obvious for a [person having ordinary skill in the art] to have modified the tap-based scrolling functionality disclosed in Iwata with the moving contact-based scrolling functionality disclosed in Stephan as one is merely a known and predictable variation of the other." *Id.* at 15–16 (citing Ex. 1202 ¶ 145).

Third, Petitioner argues that Stephan explicitly suggests the proposed modification by disclosing

> that it would have been desirable to "eliminate[] the need for scroll and pan bars," e.g., by using a scroll region defined on the touchscreen instead of a permanently displayed scroll bar (per Iwata) to avoid "detract[ing] from the overall workspace that is visible and therefore accessible by the user."

Id. at 20 (citing Ex. 1202 ¶ 151; Ex. 1036, 2:46–50). According to Petitioner, Stephan discloses a technique that has been used to improve one device, and a skilled artisan would have recognized that the technique would improve similar devices in the same way. *Id.* at 20–21 (citing Ex. 1202 ¶ 152; *KSR*, 550 U.S. at 417).

Fourth, Petitioner argues that the proposed modification improves user experience. *Id.* at 21 (citing Ex. 1202 ¶ 153).

v. Controller

Petitioner argues that Iwata discloses that processor 21 "controls liquid crystal display 4, touch screen 20, and the input/output of telephone keyboard 6," and one of ordinary skill in the art would have understood that

processor 21 is responsive to an output signal received from touchscreen 20. *Id.* at 27–28 (quoting Ex. 1029, 13:17; citing Ex. 1202 ¶ 188). Petitioner also argues that Iwata discloses that processor 21 controls liquid crystal display 4 and, accordingly, discloses that processor 21 is "operatively associated" with the display. *Id.* at 28 (citing Ex. 1202 ¶ 189; Ex. 1029, 13:17). Thus, Petitioner concludes that Iwata in combination with Stephan discloses and renders obvious the claim 30 limitation "a controller, responsive to the output signal and operatively associated with the display." *Id.* (citing Ex. 1202 ¶ 190).

Petitioner also asserts that Iwata in combination with Stephan renders obvious the claim 30 limitation that the controller "scrolls displayed rows along an axis of the display based upon the output signal of the contact-sensitive transducer." *Id.* (citing Ex. 1202 ¶ 191). Specifically, Petitioner argues that Iwata describes that touching a scroll button on touchscreen 20 sequentially scrolls the display. *Id.* (citing Ex. 1029, 14:26–42, Fig. 6). According to Petitioner, "[g]iven that '[p]rocessor 21 handles and implements functions of . . . touch screen 20,' the scrolling functions described above are performed under the control of the processor 21 and based on the output signal of the touchscreen of Iwata." *Id.* at 29 (citing Ex. 1202 ¶ 192, Ex. 1029, 13:14–25). Petitioner also argues that Stephan "discloses scrolling in the context of, e.g., an EXCEL spreadsheet having rows of cells that can be scrolled through." *Id.* (citing Ex. 1202 ¶ 193; Ex. 1036, 1:50–56).

Regarding the claim 30 limitation of the controller having a first mode in which it is responsive to contact with the contact-sensitive transducer and a second mode in which it is unresponsive to such contact, Petitioner asserts

that Iwata's controller has "a first mode wherein the controller is responsive to contact with the contact-sensitive transducer" for the reasons discussed above. *Id.* at 30 (citing Ex. 1202 ¶ 195). Petitioner also asserts that "Iwata describes that the mobile phone has a cover that 'covers [the] liquid crystal display,' and that may be closed by a user to cause the touchscreen to enter 'a sleeping status [in which the touchscreen] ***does not respond*** to a touch made with a pen or a finger,'" and this "sleeping status" is a mode of operation in which the controller is unresponsive to contact with the touchscreen. *Id.* (quoting Ex. 1029, 13:45–63; citing Ex. 1202 ¶¶ 195–196).

Lastly, Petitioner argues that Iwata discloses the claim 30 limitation of "the second mode being entered in response to an input from a user" because Iwata's unresponsive mode (i.e., the sleeping status) is entered in response to the cover being closed and "[c]losing the cover is performed by a user, and is thus a form of user input." *Id.* at 30–31 (citing Ex. 1202 ¶ 197; Ex. 1029, 13:45–63).

b) Discussion

We agree with Petitioner's analysis described above and adopt it as our own. Patent Owner presents several arguments contending that one of ordinary skill in the art would not have been motivated to combine Iwata and Stephan in the manner proposed. PO. Resp. 29–68.

First, Patent Owner argues that, contrary to Petitioner's assertion, implementing a scrolling region on the small screen of a mobile phone would not have been predictable. *Id.* at 31. According to Patent Owner, the proposed modification would not have been predictable because "***the type of scrolling region described in Stephan is not suitable for small touchscreens***." *Id.* (citing Ex. 2004 ¶ 74). That is, "[i]f the scrolling region

is too small (less than about 10mm), the Iwata phone will not be able to accurately identify whether a user's touch was intended for the scroll region or a selectable object adjacent to the scroll region." *Id.* (citing Ex. 2004 ¶ 75).

Noting that "Iwata does not provide dimensions for its touchscreen," Patent Owner makes various assumptions in an effort to illustrate that a scrolling region on Iwata's screen would be too small. *Id.* at 32–33. Relying on the testimony of Mr. Ward, Patent Owner begins by "conservatively" assuming that "the Iwata touchscreen (with the cover closed) is intended to be the same size as the screen of the Palm Pilot 1000: approximately 57 mm (2.25 inches) by 57 mm." *Id.* at 32 (citing Ex. 2004 ¶ 77, Ex. 2026). Patent Owner then assumes that the touchscreen shown in Figure 13 of Stephan is a 9-inch screen and concludes that Stephan's touchscreen is on the order of three times the size of Iwata's touchscreen. *Id.* (citing Ex. 2004 ¶ 78). Next, Patent Owner assumes that Stephan's scrolling region 288 is approximately 10 mm, "which a standard assumption for finger size in the art of touch screen devices." *Id.* (citing Ex. 2004 ¶ 79). According to Patent Owner, when this scrolling region is scaled down proportionally to the size of Iwata's screen, the scrolling region in Iwata "would be about 3.3 millimeters and thus ***potentially smaller than a user's finger***." *Id.* at 32–33 (citing Ex. 2004 ¶ 79).

The only support provided for asserting that 10 millimeters is "a standard assumption for finger size in the art of touch screen devices" is the testimony of Mr. Ward. *Id.* at 32 (citing Ex. 2004 ¶ 79). Mr. Ward's testimony, however, merely repeats this statement from the Patent Owner Response without providing any supporting evidence or reasoning. Ex.

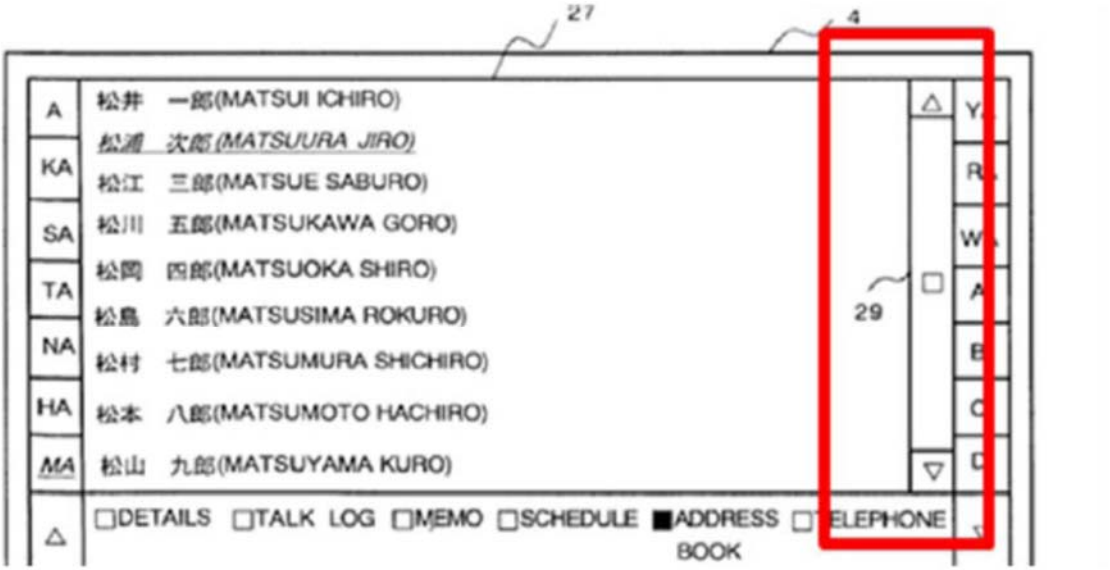
2004 ¶ 79. Accordingly, we give this testimony little weight. *See* 37 C.F.R. § 42.65(a) ("Expert testimony that does not disclose the underlying facts or data on which the opinion is based is entitled to little to no weight."). Rather, we agree with Petitioner that the evidence of record does not support the conclusion that, when combining Iwata and Stephan in the manner proposed, a skilled artisan "would have modified Iwata to *necessarily* have a scroll region width of 3.3 millimeters." *See* Reply 28–29 (emphasis added).

Patent Owner further argues that the small screen of a mobile phone leads to unpredictable inaccuracy because of the so-called "fat finger" problem. PO Resp. 34–45. Patent Owner defines the fat finger problem as follows:

> When the object making contact with the touchscreen is a user's finger and the input area or button is smaller than the user's finger, a known problem exists in which the user may intend to provide contact to one input area but is unsuccessful or may even provide accidental contact to another input area or button adjacent to the intended area or button.

Id. at 34 (citing Ex. 2004 ¶ 82). According to Patent Owner, the fat finger problem "is a well-documented problem and a challenge present well after 1997." *Id.* at 36 (citing Ex. 2004 ¶ 84). Patent Owner, and its declarant, Mr. Ward, cite several documents intended to show that the fat finger problem is well-documented. *Id.* at 36–41 (citing Ex. 2031, col. 1; Ex. 2032, 717; Ex. 2033, 2, 4; Ex. 2043 §§ 1.1, 2.2, Fig. 1; Ex. 2052, 2; Ex. 2045; Ex. 2048, 3, 5; Ex. 2050, 2); Ex. 2004 ¶ 85–93 (citing the same exhibits). Patent Owner concludes that, "as common sense would indicate, [the fat finger] problem ***does*** exist for scroll regions used in modern smartphone devices." PO Resp. 43 (citing Ex. 2004 ¶¶ 100, 102).

Patent Owner adds that Iwata would suffer from the fat finger problem if modified as proposed by Petitioner. *Id.* at 43–45. Iwata's Figure 6, as annotated by Petitioner is reproduced below.



(Annotated Fig. 6 (Iwata).)

Id. at 43 (citing Pet. 14). Annotated Figure 6, above, shows scroll area 29 adjacent to a column of tags or input buttons. Patent Owner argues that replacing Iwata's scroll bar with a scroll region, as purportedly proposed by Petitioner, would result in the scroll region being directly adjacent the input buttons, which "inevitably presents the same 'fat finger' issue for any of the other displayed buttons on the screen." *Id.* at 44 (citing Ex. 2004 ¶ 99). According to Patent Owner, "[i]f a user intends to provide an input to one of the input buttons adjacent to region 29, the contact may inadvertently be sensed in the scrolling region, and vice versa," and "the border of the scrolling region is adjacent to multiple buttons, so the 'fat finger' problem is exacerbated." *Id.* (citing Ex. 2004 ¶ 100).

Petitioner disputes that the fat finger problem would dissuade a skilled artisan from making the proposed modification. Reply 43–51. In particular,

Petitioner argues that the modification of Iwata in view of Stephan "would not have *created* the alleged fat-finger problem in Iwata" because the problem "would have already existed in Iwata assuming *arguendo* that it existed at all." *Id.* at 43. Petitioner asserts that, prior to any modification of Iwata, "the contact-sensitive arrows of Iwata's scroll area 29 were *already* directly adjacent to the tags of tag area 28, and both the arrows and the tags were selectable." *Id.* at 44 (citing Ex. 1029, 14:25–28). Furthermore, Petitioner argues that Dr. Wolfe testified that it would have been within the skill of one of ordinary skill in the art to move the tag area 28 elsewhere, such as the other side of the screen. *Id.* at 45 (citing Ex. 2003, 58:13–25).

In addition, Petitioner argues that Patent Owner "has mischaracterized what was known in the art at the time of the alleged invention related to the alleged 'fat finger' problem" because all but one of the documents cited by Patent Owner to show that the fat finger problem is well-documented were published well after the 1997 invention date of the '931 patent. *Id.* at 47. Petitioner contends that the only one of these documents that predates the invention date, Exhibit 2032, "merely states that larger tactual fields lead[] to high accuracy rates, and vice versa." *Id.* at 47 n.9; *see also id.* at 39 (arguing that Exhibit 2032 "details a study designed to test finger touch accuracy on touch sensitive displays at a ***seated work station computer***," which, at best, "indicates that the supposed fat finger problem would have already existed on computer screens and would not have been created by incorporating features of computers into mobile devices" (citing Ex. 2032, 711)).

Petitioner argues further that Patent Owner's arguments based on the fat finger problem should be dismissed because they rely on an inaccurate

interpretation that the challenged claims require a finger to provide the moving contact. *Id.* at 48. Petitioner contends that the claims "***allow for input*** in the moving contact region(s) from any inputting source, including those other than a finger such as a stylus." *Id.* at 49.

We find Petitioner's arguments persuasive. The proposed modification would not make Iwata's screen or scroll region any smaller. Therefore, the fat finger problem would not impact Iwata's device modified to have a moving contact-based scroll region any more than it would the unmodified device having the tap-based scroll bar. In other words, to the extent that the fat finger problem exists in Iwata's device, modifying the device in the manner proposed would not worsen the problem, and, thus, the fat finger problem would not dissuade a skilled artisan from making the proposed modification.

Moreover, Petitioner is correct that Exhibits 2031, 2033, 2043, 2045, 2048, 2050, and 2052 are all exhibits dated well after 1997. *See* Ex. 2031; Ex. 2033; Ex. 2043; Ex. 2045; Ex. 2048 Ex. 2050; Ex. 2052. Thus, Patent Owner's documentary evidence is ineffective in establishing the fat finger problem was well recognized *at the time of invention*. Thus, we do not agree that the fat finger problem was sufficiently known at the time of invention to have led one of ordinary skill in the art away from the proposed modification.

Claim 30 recites that the contact-sensitive transducer produces an output signal in response to moving contact of an *object* along the surface thereof. Ex. 1001, 13:16–20. We agree with Petitioner that this claim language does not require the object to be a finger, and the use of other objects, such as a stylus, would avoid the fat finger problem. *See* Reply 48–

49. Patent Owner argues that using a stylus to overcome the fat finger problem would introduce other problems, such as requiring more time and a second hand and pen occlusion and parallax. PO Resp. 39–40 (citing Ex. 2043 § 2.2; Ex. 2052, 2; Ex. 2004 ¶ 91); *see also* Tr. 48:3–49:13 (discussing problems experienced with using a stylus, including scratching). Nevertheless, we determine that using a stylus or other object other than a finger would overcome the fat finger problem.

For the above reasons, we do not agree with Patent Owner's argument that the fat finger problem would prevent one of ordinary skill in the art from making the proposed modification to Iwata.

Patent Owner also argues that the mobile telephone industry considered and rejected the concept of scrolling regions. PO Resp. 45–50 (citing Ex. 2004 ¶¶ 101–103, 107, 109; Ex. 2034, 2; Ex. 2035; Ex. 2036, Fig. 1; Ex. 2037, 15:6–28; Ex. 2038, 189; Ex. 2039).[5] Particularly, Patent Owner argues that "Stephan's solution of having a region overlapping the display dedicated to the scrolling operation has been wholly rejected by the industry." *Id.* at 48 (citing Ex. 2004 ¶ 107). Exhibits 2034–2039 are all dated after 1997. Patent Owner's argument, therefore, is not relevant to the issue before us. Industry rejection of overlapping scrolling regions *after* the time of invention does not inform us to whether the concept was obvious to one of ordinary skill in the art *at the time of the invention*.

[5] On page 49 of the Patent Owner Response, Patent Owner cites "Ex. 2037 at 189" in connection with a paper by Stephen Brewster. This citation, however, appears to be a typographical error, and we assume that Patent Owner intended to cite Exhibit 2038.

Next, Patent Owner addresses Petitioner's asserted motivation to combine Iwata and Stephan based on Stephan's disclosure that it would have been desirable to eliminate the need for scroll and pan bars. PO Resp. 50–56. Patent Owner asserts that the motivation to eliminate scroll bars applies to Stephan's touchpad embodiment but "this motivation is not relevant to the Stephan laptop of Fig. 13 or the Iwata mobile phone because they would not enjoy that same benefit." *Id.* at 51 (citing Ex. 2004 ¶ 111). Instead, Patent Owner contends "[t]he scrolling regions in these implementations would directly overlap the display and the space in the scrolling region could not be used for any other purpose." *Id.* at 51–52 (citing Ex. 2004 ¶ 111). Furthermore, "if the Excel spreadsheet of Fig. 1 is displayed on the touchscreen 282 of the portable computer 280 shown in Fig. 13 of Stephan, the scroll control region 288, for example, will ***overlap*** a portion of the Excel spreadsheet, rendering some functions of the GUI inoperable." *Id.* at 53 (citing Ex. 2004 ¶ 115). Patent Owner further contends that this overlap would reduce the overall workspace on the touchscreen accessible by the user. *Id.* at 55. Regarding the Figure 13 embodiment of Stephan, Patent Owner asserts that "Dr. Wolfe admitted that one would have to first ***disable the scrolling function*** of the scroll control region 288" to access the user interface under the scroll control region. *Id.* at 55–56 (citing Ex. 2003, 36:11–37:7).

We do not agree with these arguments. As noted above, Patent Owner relies on the testimony of Mr. Ward to support its assertion that the portions of the user interface under the scrolling regions would be rendered inoperable. Mr. Ward, however, merely repeats the statements made in the Patent Owner Response but fails to provide any additional explanation as to

why these portions of the user interface would be rendered inoperable. Stephan states scroll regions "may be" designated with visual or tactile cues, but there is no indication the scroll regions necessarily would render interface functions inoperable. Ex. 1036, 12:40–41.

Patent Owner's reliance on Dr. Wolfe's testimony also is unavailing. We disagree that the passage of Dr. Wolfe's testimony cited by Patent Owner shows that Dr. Wolfe admits the scrolling function would have to be disabled. Instead, we agree with Petitioner that "Dr. Wolfe testified that it would not be necessary to disable the scroll area in order to make a selection in an underlying spreadsheet." *See* Reply 33 (citing Ex. 2003, 46:17–47:7). Specifically, when asked "would you have to disable that scrolling region to make that selection in the embodiment shown in Figure 13," Dr. Wolfe replied: "No. Not necessarily." Ex. 2003, 46:17–47:3.

In addition, Patent Owner argues that, contrary to Petitioner's assertion, one of ordinary skill in the art "would not be motivated to replace Iwata scroll buttons with the Stephan scrolling regions because doing so would result in an unacceptably inflexible user interface." PO Resp. 56 (citing Ex. 2004 ¶¶ 122–124). According to Patent Owner, touchscreens like the one used in Iwata have a touch-sensitive panel that receives user inputs and a display generally disposed behind the panel. *Id.* at 56–57 (citing Ex. 2004 ¶ 122). Such a design "allows phone designers to optimize the location of the scroll bars on each displayed screen." *Id.* at 57. In contrast, Stephan's "scroll regions are ***fixed and permanent in their location***, because they are allocated within the overlying touch panel and thus unusable in Iwata's flexible interface that uses different scroll regions or no scroll region at all for different displays." *Id.* at 58 (citing Ex. 2004 ¶ 124).

Petitioner disagrees, arguing that Patent Owner improperly "presupposes a combination where Stephan's disclosure is bodily incorporated into Iwata." Reply 34 (citing *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981)).

We find Petitioner's argument persuasive. The test for obviousness is not whether the features of a reference may be bodily incorporated into another reference to produce the claimed subject matter; rather, it is what the combination of references makes obvious to one of ordinary skill in the art. *See In re Mouttet*, 686 F.3d 1322, 1332 (Fed. Cir. 2012) ("It is well-established that a determination of obviousness based on teachings from multiple references does not require an actual, physical substitution of elements."). Furthermore, an obviousness analysis "need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ." *KSR*, 550 U.S. at 418; *see also id*. at 421 ("A person of ordinary skill is also a person of ordinary creativity, not an automaton."). In this case, we determine that a skilled artisan, using ordinary creativity, would not be dissuaded from combining Iwata and Stephan even if Stephan's scroll regions have fixed locations.

Additionally, Patent Owner argues that there are several negative attributes of Stephan that would have discouraged one of ordinary skill in the art from making the proposed combination. PO Resp. 59–67. For instance, Patent Owner asserts that "Stephan takes a significantly different approach towards scrolling compared to Iwata, because it uses ***dedicated regions in the touchpad or touch panel*** itself for scrolling, panning, and cursor control functionality." *Id*. at 61 (citing Ex. 2004 ¶ 128). Patent

Owner also asserts that Stephan's "scrolling region is essentially invisible and undetectable to the user on the transparent touch panel which overlays the display module." *Id*. at 62–63 (citing Ex. 2004 ¶ 131). Furthermore, Patent Owner argues "[t]here is absolutely no ***rational*** reason to create an undetectable scrolling region in a touchscreen because the drawbacks are immediately apparent: the user is strictly guessing where to touch on the touch panel to activate scrolling assuming that the user even knows that this functionality is available to them." *Id*. at 63 (citing Ex. 2004 ¶ 132). Patent Owner adds that "[a]dding visual markings to the touch panel in the Fig. 13 embodiment of Stephan is clearly detrimental to the user's ability to see all of the underlying display data." *Id*. at 66 (citing Ex. 2004 ¶ 137).

In response, Petitioner argues that Patent Owner's argument focuses on alleged drawbacks of Stephan individually rather than the combination of Iwata and Stephan. Reply 35–36. According to Petitioner, "it would have been intuitive to program the scroll functionality of scrolling in response to moving contact, as taught by Stephan, into the preexisting moveable Iwata scrollbar. *Id.* at 36 (citing Ex. 1201 ¶ 185).[6] Regarding Patent Owner's assertion that Iwata as modified would have an essentially invisible and undetectable scrolling region, Petitioner argues that new functionality of "the modified Iwata device would readily be communicated to a user through suitable documentation, like a user's manual." *Id.*

Petitioner's arguments are persuasive. We disagree with Patent Owner that the alleged drawbacks of Stephan alone would have dissuaded a

[6] Petitioner's consolidated Reply refers to Exhibit 1201, which is an exhibit in related proceeding IPR2015-01602. The corresponding citation in this proceeding appears to be Paragraph 186 of Exhibit 1202.

skilled artisan from making the proposed combination for the reasons explained by Petitioner. Reply 35–36; Ex. 1202 ¶ 186.

Last, Patent Owner argues Stephan discloses that "***[d]edicated hardware and software is required*** to interface the three regions of touchpad 50 with the computer's GUI," and one of ordinary skill in the art "would not be motivated to incorporate Stephan's dedicated hardware required to implement the scroll regions into the handheld Iwata device." PO Resp. 67 (quoting Ex. 1036, 6:48–49).

Petitioner argues, however, that Mr. Ward "admitted that Iwata already discloses scrolling and has all of the hardware necessary to recognize moving contact on a contact-sensitive transducer." Reply 37 (citing Ex. 1205, 155:17–157:10). Petitioner also argues that Patent Owner's reliance of Stephan disclosing dedicated hardware and software is misplaced because "[t]his description from Stephan is in reference to Figures 2 and 3, where the touchpad member 80 is connected to the computer over cable 62," and such hardware would not be necessary in Stephan's Figure 13 embodiment—alone or as combined with Iwata—where the touch pad is part of the same integrated device. *Id.* at 37–38.

We find Petitioner's arguments persuasive. Furthermore, even if Stephan requires dedicated hardware and software for the Figure 13 embodiment, we do not agree that this requirement would have prevented one of ordinary skill in the art from making the proposed modification.

As discussed above, Petitioner asserts four reasons supporting why one of ordinary skill in the art would have been led to make the proposed modification. *See supra* Section III.D.3.a.iv. After considering all evidence and arguments, we determine that Petitioner has provided a persuasive

articulated reason with rational underpinning to support its contention that a person of ordinary skill would have had a reason or motivation to combine Iwata and Stephan in the manner provided. We also determine that Petitioner has provided analysis explaining how the combination would have conveyed to one of ordinary skill in the art the claim limitations. *See supra* Section III.D.3.a.

c) Conclusion

In view of the above, we determine that Petitioner has demonstrated, by a preponderance of the evidence, that claim 30 is unpatentable under 35 U.S.C. § 103 as directed to subject matter that would have been obvious to a person of ordinary skill in the art in light of Iwata and Stephan.

4. Dependent claims 31, 37–41, 45–52, and 54–57

Each of claims 31, 37–41, 45–52, and 54–57 depends directly or indirectly from claim 30. Petitioner provides detailed explanations supported by the testimony of Dr. Wolfe and specific citations to Iwata and Stephan indicating where in the references the limitations of claims 31, 37–41, 45–52, and 54–57 are taught. Pet. 31–50 (citing Ex. 1202 ¶¶ 209–224, 226–230). For example, Petitioner argues that Iwata's radio transmission unit 23 meets the radiotelephone communications transceiver of claim 31. *Id.* at 31 (citing Ex. 1202 ¶ 200, Ex. 1029, 13:25–31). Petitioner adds that "Iwata in combination with Stephan discloses that 'the controller is operative to control the radiotelephone communications transceiver according to the output signal.'" *Id.* at 32 (citing Ex. 1202 ¶ 201).

In addition, claim 37, which depends from claim 30, recites "wherein the surface of the contact-sensitive transducer, when the housing is held

within the user's hand such that the rear surface confronts the user's palm, can be engaged by the thumb of the holding hand." Ex. 1001, 14:16–20. Petitioner argues that Fig. 49A of Iwata depicts that "a top surface of the touchscreen (i.e., the contact-sensitive surface) would confront a thumb of a user's holding hand, when holding the . . . apparatus" such that "the thumb can also ***engage*** the touchscreen or touchpad surface." Pet. 35 (citing Ex. 1202 ¶ 205).

Claim 40 recites that "the contact-sensitive transducer is an elongate strip." Ex. 1001, 14:30–31. Petitioner argues that "the scroll control touchpad member . . . of Stephan, as incorporated onto the surface of the housing of the mobile telephone of Iwata, [would be] slender rectangular (elongated) strips." Pet. 38 (citing Ex. 1202 ¶ 212).

Moreover, claim 47 recites a second contact-sensitive transducer that produces a second output signal that characterizes contact of an object with the second transducer, and a controller responsive to the second output signal. Ex. 1001, 14:53–61. Petitioner argues that, in the mobile telephone of Iwata as modified by Stephan, "the scroll control touchscreen member is a first contact-sensitive transducer, and the cursor-control touchscreen member is a second contact-sensitive transducer." Pet. 41 (citing Ex. 1202 ¶ 216). Petitioner also argues that Iwata in combination with Stephan discloses a second contact-sensitive transducer that produces a second output signal characterizing contact of an object along the contact-sensitive surface of the second transducer, such as "an output signal in response to touching or double touching items displayed on the screen." *Id.* (citing Ex. 1202 ¶ 217, Ex. 1029, 14:64–15:13). Petitioner asserts that one of ordinary skill in the art "would have known that the controller disclosed by Iwata and

Stephan . . . would also be responsive to the second output signal to control functions of the apparatus." *Id.* at 42 (citing Ex. 1202 ¶ 220).

Petitioner further argues that Iwata's disclosure of power source 26 meets the power supply limitation of claim 54. *Id.* at 47 (quoting Ex. 1029, 13:13, citing Ex. 1202 ¶ 233). Petitioner contends that the claim 55 limitation of the power supply comprising a battery is rendered obvious by Iwata because one of ordinary skill in the art "would have appreciated that a mobile telephone, such as the mobile terminal equipment described in Iwata, would incorporate a power supply such as a battery, in order to enable the mobile telephone to operate in a mobile fashion." *Id.* (citing Ex. 1202 ¶ 234).

Claim 56 calls for "a circuit which controls power transfer from the power supply too [sic] another circuit based on the output signal of the contact-sensitive transducer." Ex. 1001, 15:23–25. According to Petitioner, this limitation is met by Iwata's disclosure of sound signal switch unit 36, "which controls power transfer (i.e., 'in generating effect/warning sound stored in memory') from the power supply to another circuit (i.e., a speaker)." Pet. 48 (citing Ex. 1202 ¶ 236, Ex. 1029, 29:58–65, Fig. 42). Petitioner also contends that this power transfer is based on the output signal of the contact-sensitive transducer because one of ordinary skill in the art would have understood that sounds could be produced in response to scrolling rows (which scrolling is caused in response to the output signal). *Id.* (citing Ex. 1202 ¶ 237).

We agree with Petitioner's analyses of claims 31, 37–41, 45–52, and 54–57 and adopt them as our own. Although the burden remains on the Petitioner to demonstrate by a preponderance of the evidence that the claims

are unpatentable (35 U.S.C. § 326(e); 37 C.F.R. § 42.1(d)), we note that Patent Owner does not separately argue these dependent claims.

Based on the full record before us, we determine that Petitioner has demonstrated, by a preponderance of the evidence, that claims 31, 37–41, 45–52, and 54–57 are unpatentable under 35 U.S.C. § 103 as directed to subject matter that would have been obvious to a person of ordinary skill in the art in light of Iwata and Stephan.

E. Asserted Obviousness over Iwata, Stephan, and Capps

Petitioner challenges claim 53 of the ’931 patent as obvious under 35 U.S.C. § 103(a) over Iwata, Stephan, and Capps. Pet. 3, 50–58.

1. Overview of Capps

Capps relates to “methods for searching the memory of a pen-based computer system and displaying the results on a display screen.” Ex. 1037, 1:6–9. Figure 3, reproduced below, “shows the screen of a pen-based computer system showing a search string ‘electrician’ entered on the find-line **56**.” *Id.* at 4:52–54.

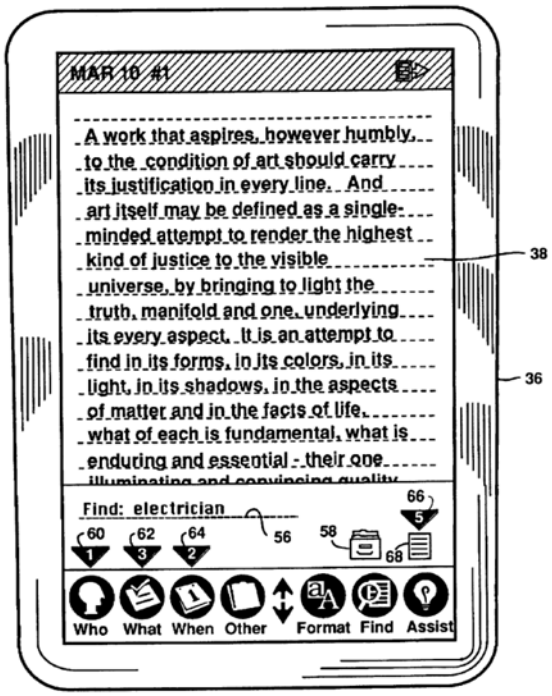


FIG. 3

The screen includes a number of dedicated function buttons, including a WHO button that is associated with a telephone book and a WHAT button that is associated with a to-do list. *Id.* at 4:43–44. Figure 5 is reproduced below.

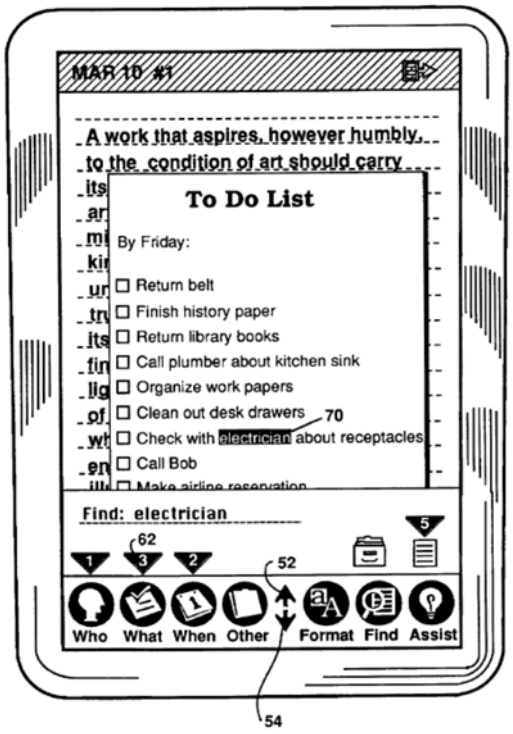


FIG. 5

Figure 5, shown above, shows the screen display when the WHAT button is selected and an entry including the search string is highlighted. *Id.* at 5:1–3. Additional files can be viewed by using up-down scroll buttons 52, 54 or indicator 62 to scroll through other search hits. *Id.* at 5:5–9.

2. Discussion

Claim 53, which depends from claim 50, recites that the "controller identifies successive ones of the rows displayed along the axis of said display by highlighting successive said rows." Ex. 1001, 15:14–17. According to Petitioner,

> [j]ust as Iwata describes methods for interacting with a touchscreen to locate and identify a contact within an ADDRESS BOOK (e.g., finding and selecting a name within the NAME LIST of Fig. 6 of Iwata), Capps also describes a method for searching and identifying, e.g., a name or information about a contact within corresponding records (e.g., an address book).

Pet. 52 (citing Ex. 1202 ¶ 159). Petitioner also argues that "Capps describes displaying and searching 'address book' information stored on the device, by entering a 'search string' into a 'Find' field to highlight search hits on a display and 'using the up-down scroll buttons 52, 54 to scroll through the other hits.'" *Id.* at 53 (citing Ex. 1037, 5:1–9, Fig. 5). Petitioner asserts several reasons that would have caused one of ordinary skill in the art to combine Iwata and Capps (*id.* at 53–56 (citing Ex. 1202 ¶¶ 162–165)) and concludes one of ordinary skill in the art "would have been motivated to modify the GUI of Iwata by incorporating the search and selection method described in Capps" (*id.* at 56 (citing Ex. 1202 ¶ 166)).

In such a combination of Iwata and Capps, one of ordinary skill in the art

> would have known that the controller identifies successive ones of the rows displayed along the axis of said display (i.e., the names of a displayed contacts in the NAME LIST on the ADDRESS BOOK screen) by highlighting successive said rows (i.e., highlighting the name in the search string as it appears within each displayed contact in the displayed NAME LIST).

Id. at 58 (citing Ex. 1202 ¶ 240). Accordingly, Petitioner contends that successive ones of the rows displayed along the axis of the display are identified via highlighting. *Id.* (citing Ex. 1202 ¶ 240). We agree with Petitioner's analysis of claim 53 and adopt it as our own.

Patent Owner argues that

> Similar to the deficiency of Iwata, Capps does not describe performing the scrolling by way of a ***moving contact*** of an object along the surface of the touch screen. Ex. 2004 at ¶ 142. Therefore, Capps does not disclose or suggest anything to remedy the deficiencies of combining Iwata and Stephan discussed above.

PO Resp. 69. This argument is based solely on the contention that the combination of Iwata and Stephan is deficient. For the reasons discussed above, however, we determine that there are no deficiencies in the combination of Iwata and Stephan. *See supra* Section III.D.3.b. Accordingly, we determine that Petitioner has demonstrated, by a preponderance of the evidence, that claim 53 is unpatentable under 35 U.S.C. § 103 as directed to subject matter that would have been obvious to a person of ordinary skill in the art in light of Iwata, Stephan, and Capps.

IV. MOTION TO EXCLUDE

Petitioner moves to exclude Exhibits 2005–2010, 2014–2035, 2038–2041, 2043–2045, and 2047–2054. Paper 30 ("Mot. to Exclude"), 1. Patent Owner filed an Opposition (Paper 32, "Opp.") to Petitioner's motion, and Petitioner filed a Reply (Paper 33, "Opp. Reply"). In *inter partes* reviews, documents are admitted into evidence subject to an opposing party asserting objections to the evidence and moving to exclude the evidence. 37 C.F.R. § 42.64. As movant, Patent Owner has the burden of showing that an Exhibit is not admissible. 37 C.F.R. § 42.20(c).

Of the objected-to exhibits, our Final Written Decision does not rely on Exhibits 2005–2010, 2014–2025, 2027–2030, 2040, 2041, 2044, 2047, 2049, 2051, 2053, and 2054. Accordingly, Petitioner's Motion to Exclude with respect to these exhibits is *dismissed* as moot.

Regarding the remaining exhibits, Petitioner argues that the contents of Exhibits 2026, 2031–2035, 2038, 2039, 2043, 2045, 2048, 2050, and 2052 "constitute inadmissible hearsay because that information is being offered to prove the truth of the matter being asserted." Mot. to Exclude 2.

Petitioner also asserts that Exhibits 2026, 2031, 2035, 2039, 2045, and 2050 are not reliable. *Id.* at 5.

Patent Owner argues that Petitioner's hearsay challenge is flawed because "[d]ocuments offered for what they ***describe***, and ***not*** to prove the truth of the matters asserted, are not hearsay," and the Board has denied motions to exclude in such instances. Opp. 2–3 (citing *EMC Corp. v. PersonalWeb Techs, LLC*, Case IPR2013-00087, slip op. at 42–43 (PTAB May 15, 2014) (Paper 69)). Patent Owner contends that "Exhibit 2026 is cited as descriptive support for the size estimate given for the Palm Pilot screen, not for the truth of any statement asserted in the document itself' (*id.* at 4 (citing PO Resp. 32)); "Exhibits 2031–2035, 2043, 2045, 2048, and 2052 are cited as sources for description of the fat-finger/stylus problem, not for the truth of the any statement asserted in the documents themselves" (*id.* at 5 (citing PO Resp. 36–37, 40, 46–47)); "Exhibit 2039 is cited as a source for description of the challenges in a touchscreen, not for the truth of the any statement asserted in the document itself" (*id.* (citing PO Resp. 49–50)); and "Exhibit 2050 is cited as a source for describing the problem with scroll-bars on a touchscreen, not for the truth of the any statement asserted in the document itself" (*id.* at 6 (citing PO Resp. 41)).

Petitioner responds by arguing that

> Patent Owner is relying on the Evidence to support its assertions that its patent is not obvious (*e.g.*, that the prior art did not use touchscreens) or to support the allegation that there is no motivation to combine the prior art (*e.g.*, that a supposed fat finger problem exists or there is alleged unpredictability of the combination of prior art).

Opp. Reply 1–2.

We are not persuaded by Petitioner's arguments that these exhibits constitute hearsay. Petitioner does not identify specifically the textual portions of the aforementioned exhibits that allegedly are being offered for the truth of the matter asserted, yet seeks to exclude the entirety of each exhibit. Furthermore, we agree with Patent Owner that these exhibits are offered for what they describe, and not for the truth of the matter asserted.

Regarding Petitioner's objection that Exhibits 2026, 2031, 2035, 2039, 2045, and 2050 are not reliable, Patent Owner argues that "[b]ecause this argument is not directed to any particular rule of evidence (and none are cited), it cannot support a motion to exclude." Opp. 7. We agree with Patent Owner that Petitioner has not set forth adequately a sufficient basis for excluding these exhibits. *See* 37 C.F.R. § 42.22 (providing that each motion must include detailed explanation including "the governing law, rules, and precedent").

For the above reasons, Petitioner's Motion to Exclude with respect to Exhibits 2026, 2031–2035, 2038, 2039, 2043, 2045, 2048, 2050, and 2052 exhibits is *denied*.

V. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that claims 30, 31, 37–41, and 45–57 of the '931 patent have been shown to be *unpatentable*;

FURTHER ORDERED that Petitioner's Motion to Exclude (Paper 30) is *dismissed-in-part* and *denied-in-part*;

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

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