

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE, INC.,
Petitioner,

v.

UNILOC LUXEMBOURG, S.A.,
Patent Owner.

Case IPR2018-00395
Patent 6,622,018 B1

Before MIRIAM L. QUINN, CHARLES J. BOUDREAU, and
GARTH D. BAER, *Administrative Patent Judges*.

BAER, *Administrative Patent Judge*.

FINAL WRITTEN DECISION

35 U.S.C. § 318(a) and 37 C.F.R. § 42.73

I. INTRODUCTION

Petitioner Apple Inc., filed a Petition (Paper 2, “Pet.”) requesting *inter partes* review of claims 1–27 of U.S. Patent No. 6,622,018 B1 (Ex. 1001, “the ’018 patent”). Pursuant to 35 U.S.C. § 314(a), we determined Petitioner showed a reasonable likelihood that it would prevail in establishing the unpatentability of all challenged claims and instituted an *inter partes* review. Paper 7, 26–27. Patent Owner Uniloc Luxembourg, S.A. filed a Response (Paper 10, “Resp.”), and Petitioner filed a Reply to Patent Owner’s Response (Paper 13, “Reply”). An oral hearing was held before the Board. Paper 19.

We issue this Final Written Decision pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73. Having considered the record before us and as explained below, we determine Petitioner has shown by a preponderance of the evidence that claims 1–27 of the ’018 patent are unpatentable. See 35 U.S.C. § 316(e).

A. RELATED PROCEEDINGS

The parties assert that the ’018 patent is involved in *Uniloc USA, Inc. v. Logitech, Inc.*, 3:17-cv-06733-JSC (N.D. Cal. 2017); *Uniloc USA, Inc. v. Wink Labs Inc.*, 1:17-cv-01656-GMS (D. Del. 2017); *Uniloc USA, Inc. v. Motorola Mobility, LLC*, 1:17-cv-01657-GMS (D. Del. 2017); *Uniloc USA, Inc. v. Peel Technologies, Inc.*, 1:17-cv-01552-UNA (D. Del. 2017); *Uniloc USA, Inc. v. Huawei Device USA, Inc.*, 2:17-cv-00707-JRG (E.D. Tex. 2017); *Uniloc USA, Inc. v. HTC America, Inc.*, 2:17-cv-01558-JLR (W.D. Wash. 2017); *Uniloc USA, Inc. v. LG Electronics U.S.A., Inc.* 4:17-cv-00825-O (N.D. Tex. 2017); *Uniloc USA, Inc. v. Apple, Inc.*, 2:17-cv-00470-

JRG (E.D. Tex. 2017); and concurrently filed IPR2018-00395. Pet. 2–3; Paper 4, 2.

B. THE '018 PATENT

The '018 patent is titled “Portable Device Control Console with Wireless Connection” and describes a system for controlling a remote device over a wireless connection. Ex. 1001, Abstract, 1:27–28. The '018 patent teaches that a portable computer system can control a variety of remote devices, including newly introduced devices. *Id.* at 3:2–4. To discover new devices, the portable computer system transmits a broadcast message to discover compliant devices within range. *Id.* at 8:33–41. Compliant devices receiving the broadcast message then reply to the portable computer system with a response. *Id.* at 8:42–44. After one or more devices are discovered, the portable computer system can transmit a command to a selected remote device based on the type of device and its capabilities. *Id.* at 8:56–61. The '018 patent explains that a user can control a remote device by either touching a rendering on the computer system’s display or by using an input device such as a stroke or character recognition pad that can register stylus movements on the portable computer system. *Id.* at 6:20–22, 6:67–7:9, 9:25–50.

C. ILLUSTRATIVE CLAIM

Of the challenged claims, claims 1, 11, and 21 are independent. Independent claim 1 (reproduced below) is representative.

1. A method for controlling a remote devices over a wireless connection, said method comprising:
 - a) establishing said wireless connection between a transceiver and said remote device by:
 - broadcasting a message, said message for locating remote devices within range of said transceiver; and
 - receiving a response from said remote device;
 - b) manifesting said remote device on a display device;
 - c) registering a position where contact is made with a surface of an input device, wherein a particular position on said input device is translated into a particular command for controlling said remote device; and
 - d) transmitting a command to said remote device over said wireless connection.

Ex. 1001, 12:7–20.

D. ASSERTED GROUNDS OF UNPATENTABILITY

Petitioner asserts the following grounds of unpatentability:

References	Basis	Challenged Claim(s)
Leichiner ¹ and Idiot’s Guide ²	§ 103(a)	1–7 and 9
Leichiner, Idiot’s Guide, and Dara-Abrams ³	§ 103(a)	8
Leichiner, Idiot’s Guide, and Bell ⁴	§ 103(a)	10
Leichiner, Idiot’s Guide, and Osterhout ⁵	§ 103(a)	11–17, 19, 21, 22, 24, 25, and 27

¹ Japanese Pub. No. JPH06319177 (Nov. 15, 1994) (certified English translation) (Ex. 1027, “Leichiner”).

² Preston Gralla, THE COMPLETE IDIOT’S GUIDE TO PALMPILOT AND PALM III (1999) (Ex. 1008, “Idiot’s Guide”).

³ U.S. Patent No. 6,456,892 B1 (Sept. 24, 2002) (Ex. 1010, “Dara-Abrams”).

⁴ U.S. Patent No. 7,894, 474 B1 (Feb. 22, 2011) (Ex. 1029, “Bell”).

⁵ U.S. Patent No. 7,149,506 B2 (Dec. 12, 2006) (Ex. 1011, “Osterhout”).

References	Basis	Challenged Claim(s)
Leichiner, Idiot’s Guide, Osterhout, and Dara-Abrams	§ 103(a)	18 and 26
Leichiner, Idiot’s Guide, Osterhout, and Bell	§ 103(a)	20 and 23

Pet. 12.

II. ANALYSIS

A. CLAIM CONSTRUCTION

The ’018 patent has not expired, and the Petition was filed before November 13, 2018. Therefore, we interpret terms of the challenged claims according to their broadest reasonable interpretation in light of the specification. *See* 37 C.F.R. § 42.100(b) (2017).⁶ Unless the record shows otherwise, 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).

Petitioner asserts that “[t]he plain and ordinary meaning of ‘broadcasting a message’ . . . is transmitting the message to all recipients in range.” Reply 2–3 (citing Ex. 1030, 51). Patent Owner does not set forth a different construction and appears to adopt the same general understanding for “broadcasting.” *See* Resp. 9 (asserting that “[a] ‘broadcast message’ as required by the claims is a singular message sent to every device at once”).

⁶ *See also* Changes to the Claim Construction Standard for Interpreting Claims in Trial Proceedings Before the Patent Trial and Appeal Board, 83 Fed. Reg. 51,340, 51,344 (Oct. 11, 2018) (“The Office will continue to apply the BRI standard for construing unexpired patent claims . . . in AIA proceedings where a petition was filed before the [November 13, 2018] effective date of the rule.”).

We agree with Petitioner that in the context of the '018 patent, “broadcasting a message” means transmitting a message to all recipients in range.

B. OBVIOUSNESS OF CLAIMS 1–7 AND 9 BASED ON LEICHINER AND
IDIOT’S GUIDE

As outlined below, we conclude that Petitioner has shown by a preponderance of evidence that claims 1–7 and 9 would have been obvious over Leichiner and Idiot’s Guide.

1. Overview of Leichiner

Leichiner is a Japanese patent publication titled “Adaptive Remote Control System.” It teaches “an adaptive intelligent controller similar to a handheld remote controller for interacting with a responding controlled device.” Ex. 1027, Abstract. Leichiner teaches “[t]he controlled device, which is positioned close to the controller, is polled by the controller with regards to availability.” *Id.* Then, “[t]he controlled device responds to the controller” and “the controller provides appropriate user interface . . . based on information received from the controlled device.” *Id.*

2. Overview of Idiot’s Guide

Idiot’s Guide describes the features and functionality of a PalmPilot PDA. Ex. 1008, 2. According to Idiot’s Guide, the PalmPilot can be used as a “universal remote-control device” to “control your TV, your CD player, and other items in your home.” *Id.* at 81. In addition, Idiot’s Guide teaches the PalmPilot includes a touch-sensitive display area called the “Graffiti area,” in which a user can enter information using a stylus. *Id.* at 32.

3. “broadcasting a message” in Leichiner

Independent claims 1 and 11 recite “broadcasting a message, said message for locating remote devices within range of said transceiver.” Independent claim 21 similarly requires a transceiver “adapted to broadcast

a message for locating remote devices within range of said transceiver.”

Petitioner asserts that Leichiner teaches these broadcasting limitations because it “teaches that the controller ‘generates polling messages to all of the controlled devices in the immediate vicinity,’ making it ‘possible to conduct polling to a number of the controlled devices at the same time.’”

Pet. 26 (quoting Ex. 1027 ¶¶ 12, 22, 65). Petitioner explains, with support from its expert, Dr. Houh, that “[a] POSITA would understand that Leichiner’s adaptive remote controller broadcasts the polling message because the message is not transmitted to any one particular recipient—it is transmitted to all devices in the vicinity for the purpose of detecting their presence.” *Id.* (citing Ex. 1030, 51). We agree.

Leichiner describes its polling signal as follows:

In operation, controller 10 generates polling messages to all of the controlled devices in the immediate vicinity thereof. The polling message is generated periodically upon request of the user, or in response to an external signal received from the controller environment. The controlled device available in the vicinity of the controller is capable of recognizing the polling message, and is capable of responding with the information regarding the identification thereof. In response to a further request message from the controller, or by itself, the controlled device supplies additional information to the controller.

Ex. 1027 ¶ 22.

Leichiner’s teaching that “[t]he polling message is generated periodically upon request of the user,” *id.* (emphasis added), and that the controller “conduct[s] polling to a number of the controlled devices *at the same time*,” *id.* ¶ 9 (emphasis added), supports Petitioner’s assertion that Leichiner’s polling involves transmitting the same message to all recipients in range. In addition, just like the broadcast message in the ’018 patent,

Leichiner uses its polling signal to “detect the presence of a new device.” Ex. 1027, ¶ 65; see Ex. 1001, 8:39–40 (describing “transmit[ting] broadcast message 640 for the purpose of discovering compliant devices in the room”). That Leichiner’s polling signal is broadcast makes sense—both Leichiner’s polling message and the ’018 patent’s broadcast message avoid individual, targeted transmissions for discovering devices, which would require transmitting multiple unique messages, one for each possible undiscovered device. Based on Petitioner’s contentions and supporting evidence, we agree that Leichiner teaches the independent claims’ broadcasting limitation.

Patent Owner, citing support from its expert, Mr. Easttom, argues that “[t]he polling in Leichiner is distinct from ‘broadcasting a message’ because . . . ‘polling’ in the context of Leichiner involves individually communicating a targeted message with each ‘controlled device.’” Resp. 9 (citing Ex. 2001 ¶¶ 48–52). As support, Patent Owner notes two passages in Leichiner—one describing that the controller “generates polling messages [*in the plural*] to all of the controlled devices in the immediate vicinity,” Resp. 8 (alteration Patent Owner’s) (quoting Ex. 1027 ¶ 22) (brackets in original), and another describing a “remote control system which *conducts polling to each of the controlled devices* located in the immediate vicinity,” *id.* at 9 (emphases Patent Owner’s) (quoting Ex. 1027 ¶ 11). We disagree with Patent Owner that Leichiner’s polling is a targeted, one-to-one transmission.

Leichiner’s description of plural “polling messages” and “polling to each of the controlled devices” (Ex. 1027 ¶¶ 11, 22) does not undermine that its polling message is broadcast to multiple devices. Rather, as Petitioner explains, “when a singular message is broadcast, each receiving device gets

a copy—i.e., multiple messages are received as a result of the broadcast.” Reply 6 (citing Ex. 1042 ¶ 5). As Petitioner further notes, and we agree, this concept is illustrated in Figure 6 of the ’018 patent, which depicts three remote devices each receiving a copy of a *single* broadcast message.

4. Combining Leichiner and Idiot’s Guide

Petitioner relies on Leichiner for disclosing the adaptive remote controller limitations recited by the challenged independent claims, and Idiot’s Guide for disclosing “registering a position where contact is made with a surface of an input device, wherein a particular position on said input device is translated into a particular command for controlling said remote device.” See Pet. 24–39. Specifically, Petitioner asserts that it would have been obvious to one skilled in the art to modify Leichiner’s adaptive remote controller to include the Graffiti writing area input device, as disclosed in Idiot’s Guide, so that “a user could remotely control appliances with stylus command strokes.” Pet. 20 (citing Ex. 1030 ¶¶ 67–76). Petitioner goes on to explain that “by giving the user the choice of inputting commands into Leichiner’s adaptive remote controller via the touchscreen or Graffiti writing area, the user can select the more efficient option in order to ‘save time.’” *Id.* at 22–23 (quoting Ex. 1008, 78).

Based on its assertions, we conclude Petitioner has articulated sufficient reasoning with some rational underpinning to support the legal conclusion that its proffered combination of Leichiner and Idiot’s Guide would have been obvious to one of ordinary skill in the art. See *KSR Int’l Co. v. Teleflex, Inc.*, 550 U.S. 398, 418 (2007). In particular, we agree with Petitioner that its proffered combination “amounts to combining prior art elements according to known methods to yield the predictable and beneficial

result of Leichiner’s adaptive remote controller having an input device through which a user could remotely control appliances with stylus command strokes.” Pet. 23; *see KSR*, 550 U.S. at 416 (“The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.”).

We also agree with Petitioner that one skilled in the art would have the technical skills to successfully combine Leichiner’s adaptive remote controller to include the PalmPilot’s Graffiti writing area. *See* Pet. 23 (citing Ex. 1030 ¶ 75). As Petitioner explains, “[t]he Idiot’s Guide and PalmPilot for Dummies . . . provide ample evidence that POSITAs . . . could ‘customize the PalmPilot in about a zillion different ways,’ for example, to ‘add features or to make your PalmPilot behave differently than a normal PalmPilot.’” Reply 18 (quoting Ex. 1008, 96; Ex. 1009, 19–20); *see* Pet. 23 (citing Ex. 1030 ¶ 75 (explaining that “[t]o the extent any modifications would have been needed to the teachings of Leichiner in order to accommodate the teachings of the Idiot’s Guide regarding the PalmPilot’s Graffiti writing area, such modifications would have been within the level of ordinary skill in the art”)).

Patent Owner argues that Petitioner’s rationale is insufficient for several reasons. First, Patent Owner argues that the PalmRemote software illustrated in Exhibit 1020 does not support that a skilled artisan would have been motivated to modify Leichiner’s adaptive remote controller to include the Graffiti writing area. Resp. 13–16. According to Patent Owner a “mere illustration” of the PalmRemote software does not establish that the software actually existed or that a POSITA possessed the “technical ability and know-how” to make the proposed combination. *Id.* at 13–14. Petitioner, however,

does not rely on the PalmRemote screenshot to show a skilled artisan's technical ability. See Reply 14–15. Rather, Petitioner references PalmRemote software as implicit support for its reason to combine. Petitioner's evidence supports its contention that "artisans in the field had already contemplated (and most likely implemented) the very combination proposed in the Petition." *Id.* at 16 (citing *Nat'l Steel Car, Ltd. v. Can. Pac. Ry., Ltd.*, 357 F.3d 1319, 1338–39 (Fed. Cir. 2004) (holding that an engineer's drawing of a rail car, even if it was never built, can "be used to demonstrate a motivation to combine implicit in the knowledge of one of skill in the art"))).

Patent Owner also argues the Petition is deficient because it fails to disclose the necessary modifications to Leichiner to arrive at the proposed combination. Resp. 17. We disagree with Patent Owner's argument. "The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference," *In re Keller*, 642 F.2d 413, 425 (CCPA 1981), but whether "a skilled artisan would have been motivated to combine the teachings of the prior art references to achieve the claimed invention," *Pfizer, Inc. v. Apotex, Inc.*, 480 F.3d 1348, 1361 (Fed. Cir. 2007). Although an obviousness challenge needs to account for all claim limitations, we are not aware of any requirement (and Patent Owner cites to none) that a challenge must show all of the unclaimed implementation and design details for an asserted combination. Here, we are persuaded that Petitioner has shown sufficient detail regarding the asserted motivation to combine the teachings of Leichiner and the Idiot's Guide.

Finally, Patent Owner asserts “Petitioner’s declarant merely parrots the same conclusory statements as in the Petition, without providing the required ‘explanation as to how or why the references would be combined to produce the claimed invention.’” Resp. 12 (quoting *TriVascular, Inc. v. Samuels*, 812 F.3d 1056, 1066 (Fed. Cir. 2016)). Again, we disagree. Petitioner explains, with relevant support from its expert, the reasons one skilled in the art would have combined the asserted prior-art teachings—i.e., *why* the proffered combination would have been obvious. *See, e.g.*, Pet. 21 (asserting that “a POSITA would have found it predictable and advantageous to utilize the PalmPilot’s Graffiti writing area *to control the devices* as described in Leichiner”) (citing Ex. 1030 ¶ 70) (emphasis added); *id.* at 23 (asserting that “executing a command with the Command stroke in the Graffiti writing area can be ‘much faster’ than tapping on the touch screen”) (citing Ex. 1008, 68, 78; Ex. 1030 ¶ 74). We are persuaded that, here, Dr. Houh’s testimony on this issue is more than mere conclusory statements, and we credit it accordingly. *See KSR*, 550 U.S. 398, 418 (distinguishing between “mere conclusory statements” and “some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness”).

5. Undisputed Elements

As outlined below, Petitioner has shown by a preponderance of the evidence that the combination of Leichiner and Idiot’s Guide teaches the remaining limitations of claims 1–7 and 9. Beyond the arguments addressed above, Patent Owner does not contest Petitioner’s assertions in this regard.

a. Claim 1

Petitioner has shown that Leichiner teaches “[a] method for controlling a remote devices over a wireless connection,” as claim 1 requires. *See* Pet. 24 (citing Ex. 1027 ¶¶ 9, 10, 12, 17–19, 38, 41, 61; Ex. 1030, 42–46). Petitioner has shown that Leichiner teaches “establishing said wireless connection between a transceiver and said remote device,” as claim 1 requires. *See id.* at 24–25 (citing Ex. 1027 ¶¶ 10, 12, 18–19, 61–62, Fig. 10; Ex. 1030, 46–49). Petitioner has shown that Leichiner teaches “broadcasting a message, said message for locating remote devices within range of said transceiver,” as claim 1 requires. *See supra; id.* at 26 (citing Ex. 1027 ¶¶ 10, 12, 17–18, 22, 65; Ex. 1030, 49–52). Petitioner has shown that Leichiner teaches “receiving a response from said remote device,” as claim 1 requires. *See id.* at 26–27 (citing Ex. 1027 ¶¶ 11, 20–21, 23; Ex. 1030, 52–53). Petitioner has shown that Leichiner teaches “manifesting said remote device on a display device,” as claim 1 requires. *See id.* at 27(citing Ex. 1027 ¶¶ 11, 20–21, 23, 32–33, Fig.2; Ex. 1030, 53–56). Petitioner has shown that the combination of Leichiner and Idiot’s Guide teaches “registering a position where contact is made with a surface of an input device,” as claim 1 requires. *See id.* at 28–31 (citing Ex. 1027 ¶¶ 12, 45, 61, 65; Ex. 1008, 26, 32, 33, 64, 66; Ex. 1030, 56–61). Petitioner has shown that the combination of Leichiner and Idiot’s Guide teaches “wherein a particular position on said input device is translated into a particular command for controlling said remote device,” as claim 1 requires. *See id.* at 31–37 (citing Ex. 1027 ¶¶ 10, 12, 34, 45, 65, Fig. 3; Ex. 1008, 4, 32–33, 64, 68, 69, 78; Ex. 1030, 64–67. Petitioner has shown that Leichiner teaches “transmitting a command to said remote device over said wireless

connection,” as claim 1 requires. *See id.* at 37–39 (citing Ex. 1027 ¶¶ 9, 10, 34, 36, 63, Fig. 11; Ex. 1030, 67–71).

b. Claim 2

Petitioner has shown that the combination of Leichiner and Idiot’s Guide teaches the additional limitation in dependent claim 2: “wherein said step c) comprises the step of: registering a position where a stylus element makes contact with said surface of said input device.” *See id.* at 39 (citing Ex. 1008, 64–65; Ex. 1030, 71–72).

c. Claim 3

Petitioner has shown that Idiot’s Guide teaches “wherein said step c) further comprises the step of: recognizing a movement of said stylus element over said surface of said input device,” as dependent claim 3 requires. *See id.* at 39 (citing Ex. 1008, 25, 32, 64–65; Ex. 1030, 71–73). Petitioner has shown that the combination of Leichiner and Idiot’s Guide also teaches “wherein a particular movement of said stylus element is translated into a particular command for controlling said remote device,” as claim 3 requires. *See id.* at 40–41 (citing Ex. 1008, 25, 64, 66, 68; Ex. 1027 ¶¶ 12, 34, 65; Ex. 1030, 67–76).

d. Claim 4

Petitioner has shown that the combination of Leichiner and Idiot’s Guide teaches “registering a position where said stylus element makes contact with a screen of said display device,” as dependent claim 4 requires. *See id.* at 41–42 (citing Ex. 1027 ¶¶ 12, 21, 38, 45; Ex. 1008, 16, 27, 42–43; Ex. 1030, 75–78). Petitioner has shown that the combination of Leichiner and Idiot’s Guide also teaches “wherein a particular position on said screen is translated into a particular command for controlling said remote device,”

as claim 4 requires. *See id.* at 42–44 (citing Ex. 1027 ¶¶ 10, 12, 34, 45, 65, Fig. 3; Ex. 1008, 42, 51, 74–75, 77; Ex. 1030, 78–82).

e. Claim 5

Petitioner has shown that Leichiner teaches “receiving responses from a plurality of remote devices,” as dependent claim 5 requires. *See id.* at 44 (citing Ex. 1027 ¶¶ 10–12, 17, 65; Ex. 1030, 82–86). Petitioner has shown that the combination of Leichiner and Idiot’s Guide also teaches “manifesting each of said plurality of remote devices on said display device” and “selecting one of said plurality of remote devices” as claim 5 requires. *See id.* at 45–46 (citing Ex. 1027 ¶¶ 33, 41–42, Fig. 2; Ex. 1030, 86–87, 88–89).

f. Claim 6

Petitioner has shown that Leichiner teaches the additional limitation in dependent claim 6: “displaying on said display device a rendering of a mechanism for controlling said remote device.” *See id.* at 46–47 (citing Ex. 1027 ¶¶ 21, 34, 65, Fig. 3; Ex. 1030, 89–91).

g. Claim 7

Petitioner has shown that the combination of Leichiner and Idiot’s Guide teaches the additional limitation in dependent claim 7: “contacting a particular position in said rendering, wherein said contacting is translated into a particular command corresponding to said particular position.” *See id.* at 47–50 (citing Ex. 1027 ¶¶ 12, 21, 27, 34, 65, Abstract, Fig. 3; Ex. 1008, 74, 75, 76–77; Ex. 1030, 91–96).

h. Claim 9

Petitioner has shown that the combination of Leichiner and Idiot’s Guide teaches the additional limitations in dependent claim 9: “displaying on said display device a menu of commands for controlling said remote

device” and “contacting a particular position in said menu, wherein said contacting is translated into a particular command corresponding to said particular position.” *See id.* at 50–53 (citing Ex. 1027 ¶¶ 25–28, 34, 42–43; Ex. 1008, 42, 68, 76–77; Ex. 1030, 96–102).

C. OBVIOUSNESS OF CLAIM 8 BASED ON LEICHINER, IDIOT’S GUIDE, AND DARA-ABRAMS

As outlined below, we conclude that Petitioner has shown by a preponderance of evidence that claim 8 would have been obvious over Leichiner, Idiot’s Guide, and Dara-Abrams.

1. Combining Dara-Abrams with Leichiner/Idiot’s Guide

Petitioner relies on Dara-Abrams for teaching dependent claim 8’s user-interactive GUI element. *See* Pet. 59–61. Petitioner explains, with support from the prior art references, that “like Leichiner, Dara-Abrams is concerned with developing a ‘mechanism for interfacing with electronic devices that is flexible and can adapt to new devices and device types within the consumer electronics market.’” Pet. 55 (quoting Ex. 1010, 4:8–11 and citing Ex. 1027 ¶ 65). We agree with Petitioner that including Dara-Abrams’ animated GUI control elements in Leichiner’s GUI “would advance Leichiner’s stated goal of ‘provid[ing] to the user a single hand-held remote controller which constitutes a suitable user interface relative to each of the available devices’ in order to ‘control a number of devices located in the vicinity thereof, which are possibly very different from each other, at the same time.’” Pet. 55 (quoting Ex. 1027 ¶¶ 9–10; Ex. 1030 ¶ 85). Patent Owner does not challenge Petitioner’s assertion in this regard. We conclude Petitioner has articulated sufficient reasoning with some rational underpinning to support the legal conclusion that its proffered combination

of Dara-Abrams with Leichiner and Idiot's Guide would have been obvious to one of ordinary skill in the art.

2. Claim Elements

As noted above, Petitioner has shown that the combination of Leichiner and Idiot's Guide teaches each limitation in claim 6. Petitioner also has shown that Dara-Abrams accounts for the additional limitation in claim 8, which depends from claim 6 and further requires "imparting motion to said rendering in response to movement of a stylus element over said surface of said input device." *See id.* at 59–61 (citing Ex. 1010, Abstract, 5:2–19, 9:30–36, 10:3–14, 19:5–6, 19:53–67, 20:1–12, 20:23–43; Ex. 1030, 111–115). Patent Owner does not contest Petitioner's assertion in this regard.

D. OBVIOUSNESS OF CLAIM 10 BASED ON LEICHINER, IDIOT'S GUIDE,
AND BELL

As outlined below, we conclude that Petitioner has shown by a preponderance of evidence that claim 10 would have been obvious over Leichiner, Idiot's Guide, and Bell.

1. Combining Bell with Leichiner/Idiot's Guide

Petitioner relies on Bell for teaching dependent claim 10's requirement for Bluetooth-enabled-devices. *See* Pet. 64–66. Petitioner explains, with support from its expert and the prior art references, that "a POSITA would have found it advantageous for Leichiner's controller to utilize Bluetooth radio transmissions to control the devices in its vicinity because doing so would advance Leichiner's stated goal of controlling 'a number of devices . . . which are possibly very different from each other.'" *Id.* at 63 (citing Ex. 1027 ¶ 9; Ex. 1030 ¶ 100). Petitioner goes on to explain "a POSITA would be motivated to select Bluetooth over other RF protocols

because Bluetooth ‘features low energy consumption for use in battery operated devices,’ and it was well known that the ‘batteries don’t last very long on a PalmPilot.’” *Id.* (citing Ex. 1013, 3; Ex. 1008, 41; Ex. 1030 ¶ 100). Patent Owner does not challenge Petitioner’s assertion in this regard. We conclude Petitioner has articulated sufficient reasoning with some rational underpinning to support the legal conclusion that its proffered combination of Bell with Leichiner and Idiot’s Guide would have been obvious to one of ordinary skill in the art.

E. OBVIOUSNESS OF CLAIMS 11–17, 19, 21, 22, 24, 25, AND 27 BASED ON
LEICHINER, IDIOT’S GUIDE, AND OSTERHOUT

As outlined below, we conclude that Petitioner has shown by a preponderance of evidence that claims 11–17, 19, 21, 22, 24, 25, and 27 would have been obvious over Leichiner, Idiot’s Guide, and Osterhout.

1. Combining Osterhout with Leichiner/Idiot’s Guide

Petitioner relies on Osterhout for teaching internal structural elements of a PDA, including the screen, pen-type input, wireless transceiver, and processor, each coupled together via bus. *See* Pet. 67–69. Petitioner explains, with support from the prior art references and its expert, that although Idiot’s Guide “teaches that its PalmPilot includes standard components such as a ‘microprocessor,’ ‘touch-screen,’ and ‘Graffiti writing area,’” it “does not, however, provide explicit details with respect to how the PalmPilot components are coupled together.” *Id.* at 68 (citing Ex. 1008, 25, 27; Ex. 1030 ¶ 108). We agree with Petitioner that one skilled in the art “would have been motivated to look to the teachings of Osterhout because it describes the internal structural elements of a typical ‘PDA’ such as a ‘Palm VII, a product of 3Com Corporation.’” *Id.* (citing Ex. 1011, 8:6–10; Ex. 1030 ¶ 108). Patent Owner does not challenge Petitioner’s assertion in

this regard. We conclude Petitioner has articulated sufficient reasoning with some rational underpinning to support the legal conclusion that its proffered combination of Osterhout with Leichiner and Idiot’s Guide would have been obvious to one of ordinary skill in the art.

2. Undisputed Elements

As outlined below, Petitioner has shown by a preponderance of the evidence that the combination of Leichiner, Idiot’s Guide, and Osterhout teaches the limitations of claims 11–17, 19, 21, 22, 24, 25, and 27. Beyond the arguments addressed above, Patent Owner does not contest Petitioner’s assertions in this regard.

a. Claim 11

Petitioner has shown that the combination of Leichiner, Idiot’s Guide, and Osterhout teaches “[a] computer system comprising: a bus,” “a processor coupled to said bus,” “a transceiver coupled to said bus,” and “a display device coupled to said bus,” as claim 11 requires. *See* Pet. 69–76 (citing Ex. 1027 ¶¶ 9–10, 41, 61, Fig. 10; Ex. 1008, 25–27, 38, Fig. 10; Ex. 1011, 8:3–25, Fig. 3; Ex. 1030, 129–142). Petitioner has shown that the combination of Leichiner, Idiot’s Guide, and Osterhout teaches “an input device coupled to said bus,” as claim 11 requires. *See id.* at 76–78 (citing Ex. 1008, 25, 26, 32, 64); Ex. 1011, 8:3–25, Fig. 3; Ex. 1030, 142–145). Petitioner has shown that the combination of Leichiner and Idiot’s Guide teaches “said processor for performing a method for controlling a remote device over a wireless connection, said method comprising the computer-implemented steps of:” as claim 11 requires. *See id.* at 78–79 (citing Ex. 1027 ¶¶ 9–10, 12, 18–19; Ex. 1008, 25; Ex. 1030, 145–148). Petitioner has shown that the combination of Leichiner, Idiot’s Guide, and Osterhout

teaches “a) establishing said wireless connection between said transceiver and said remote device by: broadcasting a message, said message for locating remote devices within range of said transceiver; and receiving a response from said remote device; b) manifesting said remote device on a display device; c) registering a position where contact is made with a surface of an input device, wherein a particular position on said input device is translated into a particular command for controlling said remote device; and d) transmitting a command to said remote device over said wireless connection,” as claim 11 requires. *See id.* at 79–80 (referring to parallel limitations in claim 1 and citing Ex. 1030, 148–149).

b. Claims 12–17 and 19

As Petitioner notes, dependent claims 12–17 and 19 parallel claims 2–7 and 9. *Id.* at 80. Thus, based on the analysis noted above for claims 2–7 and 9, Petitioner has shown that the combination of Leichiner, Idiot’s Guide, and Osterhout teaches the additional limitations in dependent claims 12–17 and 19. *See id.* at 80 (citing Ex. 1030, 149–153).

c. Claim 21

Petitioner has shown that Leichiner teaches “[a] hand-held computer system for controlling a remote device over a radio connection,” as claim 21 requires. *See id.* 80 (citing Ex. 1027 ¶¶ 9, 10, 18–19, 61; Ex. 1030, 154–155). Petitioner has shown that the combination of Leichiner, Idiot’s Guide, and Osterhout teaches “a bus,” “a processor coupled to said bus,” and “a transceiver coupled to said bus,” as claim 21 requires. *See id.* at 80–81 (referring to parallel limitations in claim 11 and citing Ex. 1030, 155). Petitioner has shown that the combination of Leichiner, Idiot’s Guide, and Osterhout teaches “said transceiver for transmitting commands for

controlling said remote device over said radio connection,” as claim 21 requires. *See id.* at 81 (referring to parallel limitations in claim 1 and citing Ex. 1027 ¶¶ 10, 19, 61–62; Ex. 1030, 155–159). Petitioner has shown that the combination of Leichiner, Idiot’s Guide, and Osterhout teaches “wherein said transceiver is adapted to broadcast a message for locating remote devices within range of said transceiver,” as claim 21 requires. *See id.* at 81–82 (referring to parallel limitations in claim 1 and citing Ex. 1027 ¶¶ 10, 61–62; Ex. 1030, 159–162). Petitioner has shown that Leichiner teaches “wherein each remote device responding to said message is indicated on said display device,” as claim 21 requires. *See id.* at 82 (citing Ex. 1027 ¶¶ 11, 20–21, 23, 32, 33, Fig. 2; Ex. 1030, 162–165). Petitioner has shown that the combination of Leichiner, Idiot’s Guide, and Osterhout teaches “a display device coupled to said bus,” as claim 21 requires. *See id.* at 83 (referring to parallel limitations in claim 11 and citing Ex. 1030, 165). Petitioner has shown that the combination of Leichiner, Idiot’s Guide, and Osterhout teaches “said display device adapted to register a position where a stylus element makes contact with a screen of said display device,” as claim 21 requires. *See id.* at 83 (referring to parallel limitations in claim 4 and citing Ex. 1008, 27, 42–43; Ex. 1030, 165–167). Petitioner has shown that the combination of Leichiner, Idiot’s Guide, and Osterhout teaches “wherein a particular position on said screen is translated into a particular command for controlling said remote device” and “an input device coupled to said bus,” as claim 21 requires. *See id.* at 83 (referring to parallel limitations in claims 4 and 11 and citing Ex. 1030, 167–168). Petitioner has shown that the combination of Leichiner, Idiot’s Guide, and Osterhout teaches “said input device adapted to register a position where a stylus

element makes contact with a surface of said input device” as claim 21 requires. *See id.* at 83–84 (referring to parallel limitations in claim 1 and citing Ex. 1008, 64–65; Ex. 1030, 168–170). Petitioner has shown that the combination of Leichiner, Idiot’s Guide, and Osterhout teaches “wherein a particular position on said input device is translated into a particular command for controlling Said remote device,” as claim 21 requires. *See id.* at 84 (referring to parallel limitations in claim 1 and citing Ex. 1030, 170–171).

d. Claims 22 and 24

As Petitioner notes, dependent claims 22 and 24 recite limitations that parallel those in claims 3 and 6. *Id.* at 84. Thus, based on the analysis noted above for claims 3 and 6, Petitioner has shown that the combination of Leichiner, Idiot’s Guide, and Osterhout teaches the additional limitations in dependent claims 22 and 24. *See id.* at 84 (citing Ex. 1030, 171–172).

e. Claim 25

Petitioner has shown that the combination of Leichiner and Idiot’s Guide teaches the additional limitations in dependent claim 25: “wherein said display device is adapted to register a position where said stylus element makes contact within said rendering,” and “wherein a particular position within said rendering is translated into a particular command for controlling said remote device.” *See id.* at 84–86 (citing Ex. 1027 ¶¶ 34, 65, Fig. 3; Ex. 1008, 74, 75–77; Ex. 1030, 172–176).

f. Claim 27

Petitioner has shown that the combination of Leichiner, Idiot’s Guide, and Osterhout teaches the additional limitation in dependent claim 27: “wherein said display device is adapted to display a menu of commands for

controlling said remote device.” *See id.* at 88 (referencing parallel limitation in claim 9 and citing Ex. 1030, 177).

F. OBVIOUSNESS OF CLAIMS 18 AND 26 BASED ON LEICHINER, IDIOT’S GUIDE, OSTERHOUT, AND DARA-ABRAMS

As noted above, Petitioner has shown that the combination of Leichiner, Idiot’s Guide, and Osterhout teaches each limitation in claims 16 and 24. Petitioner also has shown that Dara-Abrams accounts for the additional limitation in claims 18 and 26 which further depend, respectfully, from claims 16 and 24—i.e. imparting motion in response to stylus movement. *See id.* (referencing parallel limitation in claim 8 and citing Ex. 1030, 177–178). As noted above, Petitioner has also shown that one skilled in the art would have had reason to combine the relevant teachings of Osterhout and Dara-Abrams to those of Leichiner and Idiot’s Guide. Patent Owner does not challenge Petitioner’s assertions in these regards. Therefore, we conclude that Petitioner has shown by a preponderance of evidence that claims 18 and 26 would have been obvious over Leichiner, Idiot’s Guide, Osterhout, and Dara-Abrams.

G. OBVIOUSNESS OF CLAIMS 20 AND 23 BASED ON LEICHINER, IDIOT’S GUIDE, OSTERHOUT, AND BELL

As noted above, Petitioner has shown that the combination of Leichiner, Idiot’s Guide, and Osterhout teaches each limitation in claims 11 and 21. Petitioner also has shown that Bell accounts for the additional limitation in claims 20 and 23 which further depend, respectfully, from claims 11 and 21—i.e., the transceiver and remote device are Bluetooth-enabled. *See id.* (referencing parallel limitation in claim 10 and citing Ex. 1030, 179). As noted above, Petitioner has also shown that one skilled in the art would have had reason to combine the relevant teachings of Bell to

those of Leichiner, Idiot's Guide, and Osterhout. Patent Owner does not challenge Petitioner's assertions in these regards. Therefore, we conclude that Petitioner has shown by a preponderance of evidence that claims 20 and 23 would have been obvious over Leichiner, Idiot's Guide, Osterhout, and Bell.

III. CONCLUSION

Petitioner has shown by a preponderance of the evidence that claims 1–7 and 9 would have been obvious over Leichiner and Idiot's Guide; claim 8 would have been obvious over Leichiner, Idiot's Guide, and Dara-Abrams; claim 10 would have been obvious over Leichiner, Idiot's Guide, and Bell; claims 11–17, 19, 21, 22, 24, 25, and 27 would have been obvious over Leichiner, Idiot's Guide, and Osterhout; claims 18 and 26 would have been obvious over Leichiner, Idiot's Guide, Osterhout, and Dara-Abrams; and claims 20 and 23 would have been obvious over Leichiner, Idiot's Guide, Osterhout, and Bell.

IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that Petitioner has shown by a preponderance of the evidence that claims 1–27 of the '018 patent are unpatentable; and

FURTHER ORDERED that, because this is a Final Written Decision, the 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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