

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,
Petitioner,

v.

UNILOC 2017 LLC,¹
Patent Owner.

IPR2018-01092
Patent 6,961,561 B2

Before SALLY C. MEDLEY, GARTH D. BAER, and
SEAN P. O'HANLON, *Administrative Patent Judges*.

O'HANLON, *Administrative Patent Judge*.

JUDGMENT
Final Written Decision
Determining All Challenged Claims Unpatentable
Granting in Part Patent Owner's Motion to Amend
35 U.S.C. § 318(a)

¹ At the time the Petition was filed, Uniloc Luxembourg S.A. was the patent owner.

I. INTRODUCTION

A. Background

Apple Inc. (“Petitioner”) filed a Petition for *inter partes* review of claims 1–10, 13–26, and 28–33 (“the challenged claims”) of U.S. Patent No. 6,961,561 B2 (Ex. 1001, “the ’561 patent”). Paper 1 (“Pet.”), 1. Uniloc 2017 LLC (“Patent Owner”) filed a Preliminary Response. Paper 8. On January 4, 2019, we instituted an *inter partes* review of the challenged claims on all grounds raised in the Petition. Paper 9 (“Institution Decision” or “Inst. Dec.”), 25–26.

Subsequent to institution, Patent Owner filed a Patent Owner Response (Paper 13, “PO Resp.”) and a Contingent Motion to Amend (Paper 12, “PO MTA”). Thereafter, Petitioner filed a Reply to the Patent Owner Response (Paper 14, “Pet. Reply”) and an Opposition to Motion to Amend (Paper 15, “Pet. Opp. to MTA”). Patent Owner then filed a Sur-Reply to Petitioner’s Reply (Paper 16, “PO Sur-Reply”) and a Reply to Opposition to Motion to Amend (Paper 17, “PO Reply to Opp. to MTA”). Petitioner subsequently filed a Sur-Reply to Opposition to Patent Owner’s Motion to Amend (Paper 19, “Pet. Sur-Reply to Opp. to MTA”). An oral hearing was held on October 22, 2019. A transcript of the hearing has been entered into the record. Paper 24 (“Tr.”).

In our Scheduling Order, we notified the parties that “any arguments for patentability not raised in the [Patent Owner R]esponse will be deemed waived.” *See* Paper 10, 5; *see also* Patent Trial and Appeal Board Consolidated Trial Practice Guide 66 (Nov. 2019), *available at* <https://www.uspto.gov/sites/default/files/documents/tpgnov.pdf> (“The patent

owner response . . . should identify all the involved claims that are believed to be patentable and state the basis for that belief.”).

For the reasons that follow, we conclude that Petitioner has proven by a preponderance of the evidence that the challenged claims are unpatentable. Patent Owner’s Motion to Amend is granted in part.

B. Related Matters

The parties indicate that the ’561 patent is not subject to any district court litigation or any other Board proceeding. Pet. 5; Paper 7, 2.

C. Real Parties-in-Interest

The statute governing *inter partes* review proceedings sets forth certain requirements for a petition for *inter partes* review, including that “the petition identif[y] all real parties in interest.” 35 U.S.C. § 312(a)(2); *see also* 37 C.F.R. § 42.8(b)(1) (requiring identification of real parties-in-interest in mandatory notices). The Petition identifies Apple Inc. as the sole real party-in-interest. Pet. 5. Patent Owner states that its real parties-in-interest are Uniloc 2017 LLC, Uniloc USA, Inc., and Uniloc Licensing USA LLC. Paper 7, 1–2.

D. The Challenged Patent

The ’561 patent “relates to methods for enhancing and/or limiting the use of mobile electronic devices in a certain environment or location.” Ex. 1001, 1:8–10. The ’561 patent recognizes that the prevalence of mobile electronic devices, such as cellular telephones, has led to their widespread use, including in locations where such use is inappropriate or dangerous. *Id.*

at 1:12–26. Prior methods to control the use of mobile electronic devices in such locations led to user frustration because such methods impose constraints without providing alternatives to maximize the features of the mobile electronic device. *Id.* at 1:26–57.

The '561 patent sought to improve on prior control systems by providing access to enhancements when disabling one or more features of the electronic device. Ex. 1001, 2:7–19. A central control computer periodically transmits a discovery signal at preset time intervals. *Id.* at 7:28–37, Fig. 7. “Preferably, the discovery signal . . . contains an identification request or otherwise prompts for any mobile electronic device that receives the signal to identify itself to the central control computer, to provide addresses for features contained within the mobile electronic device, and to provide an address for the mobile electronic device itself.” *Id.* at 7:37–43; *see also id.* at 2:48–53 (providing a substantially similar description of “control message”). The electronic device monitors for the discovery signal, and, upon detection thereof, transmits a message to the central control computer identifying itself and providing the addresses for itself and its features. *Id.* at 7:54–66. The central control computer receives the identification message and takes control of the device. *Id.* at 8:38–55.

Once having control of the device, the central control computer deactivates certain features of the device that would be inappropriate for use in the environment. Ex. 1001, 9:14–53. The central control computer also provides substitute functions to the device in place of the disabled features, thereby enhancing the device utility. *Id.* at 9:53–59. The '561 patent provides examples of controlling a mobile phone in a concert hall or theater in which the phone's speaker, microphone, and keypad are disabled and a

seat back display is enabled (*id.* at 11:31–13:23), controlling a digital camera in a museum in which the camera’s electronic flash is deactivated and preexisting pictures and maps may be downloaded to the camera (*id.* at 13:24–14:20), and controlling a laptop computer in an aircraft in which the laptop’s display, speaker, joystick, and keypad are disabled during takeoff and landing and seat back keypads, displays, and headphones are enabled (*id.* at 14:21–15:10).

E. The Challenged Claims

Petitioner challenges claims 1–10, 13–26, and 28–33 of the ’561 patent. Pet. 1. Claims 1 and 18 are independent. Claim 1 is illustrative of the challenged claims and is reproduced below:

1. A method for controlling and enhancing the use of mobile electronic devices within a given environment, comprising:
 - [1A] transmitting a wireless control message within the given environment from a central control computer;
 - [1B] establishing a wireless communication link between the control computer and a mobile electronic device upon the mobile electronic device entering the environment and receiving the control message;
 - [1C] communicating instructions from the central control computer to the mobile electronic device to disable one or more of features within the mobile electronic device; and
 - [1D] communicating instructions from the central control computer to the mobile electronic device to provide the mobile electronic device with access to one or more features associated with the central control computer.

Ex. 1001, 15:19–36 (alphanumeric characters provided in brackets for reference in this Decision).

F. Instituted Grounds of Unpatentability

The Petition relies on the following prior art references:

Reference	Date	Exhibit
US 6,970,189 B1 (“Bernstein”)	filed May 31, 2000 issued Nov. 29, 2005	1004
US 7,164,885 B2 (“Jonsson”)	filed Dec. 18, 2000 issued Jan. 16, 2007	1005
US 2002/0085111 A1 (“Heiman”)	filed Jan. 3, 2001 published July 4, 2002	1006
US 6,396,537 B1 (“Squilla”)	filed Nov. 24, 1997 issued May 28, 2002	1007

Petitioner submits a declaration of Dr. Sayfe Kiaei (Ex. 1003, “Kiaei Declaration”) in support of its contentions.

We instituted trial based on all asserted claims and grounds of unpatentability as follows:

Claims Challenged	35 U.S.C. §	References
1, 3–10, 13–16, 18, 20–26, 28–32	103(a) ²	Bernstein, Jonsson
2, 19	103(a)	Bernstein, Jonsson, Heiman
17, 33	103(a)	Bernstein, Jonsson, Squilla

Inst. Dec. 25–26; Pet. 7 (identifying Petitioner’s challenges).

² The ’561 patent was filed on January 16, 2002, prior to the date when the Leahy-Smith America Invents Act (“AIA”) took effect. Thus, we refer to the pre-AIA version of section 103.

II. ANALYSIS

A. Principles of Law

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

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 of the invention to a person having ordinary skill in the art. *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 ordinary skill in the art; and (4) when in evidence, objective evidence of nonobviousness. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

B. Level of Ordinary Skill in the Art

Petitioner argues that a person having ordinary skill in the art (“PHOSITA”) “would have had a bachelor’s degree in computer science, computer engineering, electrical engineering, or a similar field with two to three years of experience in wireless device communication and control,” and “would readily be familiar with the Bluetooth and IrDA communication standards and implementation of wireless communication using such

standards.” Pet. 3 (citing Ex. 1003 ¶¶ 37–39). Patent Owner does not refute Petitioner’s definition or offer a competing definition. PO Resp. 4.

We find Petitioner’s description to be consistent with the problems and solutions disclosed in the ’561 patent and prior art of record, and adopt it as our own for purposes of this Decision. *See, e.g., In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995).

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.³ 37 C.F.R. § 42.100(b) (2017); *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2144–46 (2016) (upholding the use of the broadest reasonable interpretation standard). Consistent with the broadest reasonable construction, claim terms are presumed to have their ordinary and customary meaning as understood by a person of ordinary skill in the art in the context of the entire patent disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). The presumption may be overcome by providing a definition of the term in the specification with reasonable clarity, deliberateness, and precision. *See In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994). In the absence of such a definition, limitations are not to be read

³ This Petition was filed before the effective date of the amendment to 37 C.F.R. § 42.100 that changed the claim construction standard applied in *inter partes* reviews. Changes to the Claim Construction Standard for Interpreting Claims in Trial Proceedings Before the Patent Trial and Appeal Board, 83 Fed. Reg. 51,340 (Oct. 11, 2018) (amending 37 C.F.R. § 42.100(b) effective Nov. 13, 2018). Thus, we use the broadest reasonable interpretation claim construction standard for this proceeding.

from the specification into the claims. *See In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993). Only those terms that are in controversy need be construed, and only to the extent necessary to resolve the controversy. *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999); *see also Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (applying *Vivid Techs.* in the context of an *inter partes* review).

Petitioner contends that the terms of the ’561 patent claims “should be given their plain and ordinary meaning in light of the specification,” and proposes an express construction for “control message” to mean “a message that requests or otherwise prompts a receiving device to perform a task.” Pet. 3–5 (citing Ex. 1003 ¶¶ 40–44). Patent Owner does not refute Petitioner’s proposed interpretations or submit its own construction for any term. *See* PO Resp. 5.

In our Institution Decision, we determined that no claim term requires express construction. *See* Inst. Dec. 8. Neither party disputes that determination. *See* PO. Resp. 5; Pet. Reply 1–15. Accordingly, we maintain our decision declining to expressly construe the term “control message.”

D. Overview of the Prior Art

1. Bernstein

Bernstein discloses “a method and system for automatically configuring a hand-held camera using wireless communication.” Ex. 1004, 1:10–12. The system includes a database storing predefined camera setting parameter values for one or more photo opportunity (“photo op”) sites. *Id.* at 3:10–17. The parameters are optimized to enhance the image quality of a

picture taken at the location. *Id.* at 3:14–15. When a portable camera makes contact with the system, such as via Bluetooth, the server retrieves setting parameter values from the database and relays the parameters to the photo opportunity site. *Id.* at 3:23–27, 4:25–30. The parameter values are then transmitted to the camera to dynamically configure the camera’s capture settings. *Id.* at 3:33–37. Thus, the user does not have to rely on unreliable built-in camera heuristics to determine how to configure the camera for a particular subject. *Id.* at 4:16–18. The system may also push additional content, such as category tags, image files, text files, and audio files, to the camera. *Id.* at 4:35–51, 5:53–6:9.

2. *Jonsson*

Jonsson discloses a system and method for connecting a device to one of a plurality of available Bluetooth devices. Ex. 1005, 1:6–11, 1:64–2:12. Typically, when establishing a Bluetooth connection, a device (known as the initiator) seeking to connect to another device sends an INQUIRY message. *Id.* at 4:43–52, 5:16–24. Neighboring Bluetooth devices respond to the INQUIRY message by sending an INQUIRY RESPONSE message. *Id.* at 5:32–36. The initiator then sends a PAGE message to the responding device chosen for the connection to begin the connection procedure. *Id.* at 5:60–6:16.

Jonsson provides an improvement by categorizing the neighboring devices available for connection based on how well the attributes of the devices match the initiator’s service profile. Ex. 1005, 6:62–66. The device with the highest ranking is chosen for connection. *Id.* at 7:41–42.

3. Heiman

Heiman discloses a method for providing travel information, which includes displaying travel information on a display of a digital camera. Ex. 1006 ¶ 7. The digital camera is in communication, such as via Bluetooth, with a portal. *Id.* ¶¶ 33, 37. The portal has stored thereon travel information, including maps. *Id.* ¶ 34. The travel information is downloaded to the camera upon request by the user or automatically. *Id.* ¶ 36.

4. Squilla

Squilla discloses a photographic system including a camera that is capable of interactive data communication with sources of digital data associated with one or more scenes. Ex. 1007, 1:7–11. The system includes an image spot, which is a location such as a theme park where a picture is likely to be taken. *Id.* at 3:49–54. A camera communicates wirelessly with the image spot via transceivers. *Id.* at 4:8–25. When the camera takes a photograph and is within range of the image spot, the camera transmits information descriptive of the camera user (“personality data”) to the image spot. *Id.* at 4:54–62. The image spot then collects relevant information (such as graphics, photographs, video/audio clips, or reference material) based on the personality data and transfers the information to the camera. *Id.* at 4:62–5:1. The information and/or a list indicative of the information can then be viewed on the camera’s screen. *Id.* at 5:2–5.

E. Challenge Based on Bernstein and Jonsson (Ground 1)

Petitioner argues that claims 1, 3–10, 13–16, 18, 20–26, and 28–32 would have been obvious over Bernstein and Jonsson. Pet. 8–55. In support

of its showing, Petitioner relies upon the Kiaei Declaration. *Id.* (citing Ex. 1003). We have reviewed the Petition, Patent Owner Response, Petitioner Reply, Patent Owner Sur-Reply, and evidence of record and determine that, for the reasons explained below, Petitioner has shown, by a preponderance of the evidence, that claims 1, 3–10, 13–16, 18, 20–26, and 28–32 would have been obvious in view of Bernstein and Jonsson and that Petitioner has set forth reasoning with rational underpinnings why it would have been obvious to combine the teachings of Bernstein and Jonsson.

1. Independent Claim 1

a. Petitioner’s Contentions

Petitioner relies on Bernstein and Jonsson to teach or suggest all of the limitations of claim 1, and the Petition provides a mapping of claim 1 to these references. Pet. 11–27. Regarding the preamble, Petitioner relies on Bernstein’s disclosure of disabling the flash of a camera and providing additional content, such as category tags, additional images, text files, and audio files, to the camera when the camera is within a photo opportunity site. *Id.* at 11–14 (citing Ex. 1004, Abstract, 1:9–12, 2:61–3:9, 3:28–42, 3:49–4:51, 4:65–5:6, 5:53–6:9, 7:52–55, Figs. 1–4). Patent Owner does not challenge this aspect of the Petition. We find that the cited portions of Bernstein support Petitioner’s contentions.

Regarding limitation 1A, Petitioner argues that Bernstein’s server 12 corresponds to the recited central control computer. Pet. 14. Petitioner relies on Bernstein’s disclosure of the Bluetooth wireless data transmission standard, and argues that “[w]hen using Bluetooth wireless communication, as contemplated by Bernstein, transmission of a discovery-type signal from the control computer by means of the photo op transceiver is a wireless

control message within the meaning of the '561 Patent.” *Id.* at 14–15 (citing Ex. 1004, 2:63–3:2, 4:22–30, Figs. 1, 2, 5; Ex. 1003 ¶¶ 79–83, 93).

Petitioner relies on Jonsson to “describe[] the Bluetooth standard procedure for discovery and identification of new wireless electronic devices in the vicinity of an initiator device,” specifically, the INQUIRY and INQUIRY RESPONSE messages. *Id.* at 15–17 (citing Ex. 1005, 1:28–52, 4:30–33, 4:43–6:16, Figs. 5–6; Ex. 1003 ¶¶ 79–85). Petitioner argues that a person having ordinary skill in the art would have recognized that “the standard Bluetooth INQUIRY message constitutes a ‘control message.’” *Id.* at 17 (citing Ex. 1003 ¶¶ 88–89). Petitioner argues that a person having ordinary skill in the art “would have been motivated to combine Bernstein and Jonsson to implement the Bernstein system in compliance with the Bluetooth standard.” *Id.* (citing Ex. 1003 ¶¶ 91–92). Patent Owner does not challenge this aspect of the Petition. We find that the cited portions of Bernstein and Jonsson support Petitioner’s contentions, and we determine that Petitioner sets forth reasoning with a rational underpinning as to why a person having ordinary skill in the art would have implemented Jonsson’s Bluetooth discovery and connection procedure with Bernstein’s system. *See* section II.E.1.b below (regarding the recited control message).

Regarding limitation 1B, Petitioner argues that Bernstein’s Bluetooth connection is made upon the camera entering the photo op site and receiving the Bluetooth discovery signal. Pet. 18–19 (citing Ex. 1004, 2:63–3:2, 4:22–30, 4:65–5:6, Fig. 2). Petitioner notes that Bernstein discloses using the Bluetooth communication standard, and relies on Jonsson to provide details regarding the standard. *Id.* at 18–20. Specifically, Petitioner relies on Jonsson’s discussion of the INQUIRY, INQUIRY RESPONSE, and PAGE

messages used in the Bluetooth discovery and connection procedure. *Id.* at 19–20 (citing Ex. 1005, 1:37–42, 5:32–36, 5:60–6:16, Fig. 5; Ex. 1003 ¶¶ 77, 85, 87–88). For the reasons set forth in section II.E.1.b below, we find that Bernstein and Jonsson support Petitioner’s contentions.

Regarding limitation 1C, Petitioner relies on Bernstein’s disclosure of disabling the camera’s flash, arguing that the server communicates instructions to the camera through the photo op transceiver. Pet. 21–24 (citing Ex. 1004, 1:52–62, 3:23–4:3, 4:12–21, 5:8–52, 6:15–48, 7:31–43, 8:51–59, 10:21–53, 11:25–49, Figs. 1, 2, 4, 9A, 10; Ex. 1003 ¶¶ 95–99). Patent Owner does not challenge this aspect of the Petition. We find that the cited portions of Bernstein support Petitioner’s contentions. For example, Bernstein discloses an example of using the camera in a museum in which the photo op transmitter transmits camera setting parameters including an “off” setting for the strobe or flash. Ex. 1004, 3:45–63.

Regarding limitation 1D, Petitioner relies on Bernstein’s discussion of providing “additional content relating to the photo op subject to the camera” and communicating “camera setting parameter instructions to the camera.” Pet. 24–27 (citing Ex. 1004, 2:61–3:58, 3:64–4:11, 4:22–43, 5:53–6:13, 6:13–14, 6:48–7:21, Figs. 1–3; Ex. 1003 ¶¶ 101–104). For the reasons set forth in section II.E.1.b below, we find that Bernstein supports Petitioner’s contentions.

b. Patent Owner’s Contentions

Patent Owner interprets the Petition as relying on Jonsson’s INQUIRY message to correspond to the recited “control message,” and argues that the INQUIRY message does not meet the requirements of claim 1. PO Resp. 5–6. Patent Owner argues that Jonsson’s mobile device

does not receive the INQUIRY message because the mobile device sends the INQUIRY message to discover other Bluetooth devices. *Id.* at 6–7.

According to Patent Owner, Jonsson teaches away from the mobile device receiving the control message. *Id.* Patent Owner criticizes the Institution Decision as failing to provide “evidence or support” for our application of the teachings of Jonsson to Bernstein’s system. *Id.* at 8–9.

Petitioner replies by arguing that Patent Owner improperly focuses on Jonsson’s example of a hand-held device sending the control message to the exclusion of the entirety of Jonsson’s teachings. Pet. Reply 2–3 (citing Ex. 1005, 1:28–42). Petitioner notes that Jonsson discloses an example in which a Bluetooth-enabled mobile phone receives the INQUIRY message, and argues that such a setup aligns with the Bluetooth standard at the time. *Id.* at 3–4 (citing Ex. 1005, 7:66–8:21, Fig. 8(a); Ex. 1011, 41, 108).⁴

Petitioner disputes Patent Owner’s contention that the Petition relies solely on Jonsson to disclose a mobile device receiving a control message, arguing that the Petition relies on Bernstein’s teaching of a server making contact with a camera that comes within range of the server’s photo op transceiver. *Id.* at 4–8 (citing Pet. 14–21; Ex. 1004, 3:45–63, 4:65–5:4).

Patent Owner replies by characterizing Petitioner’s Reply as containing improper new mappings not set forth in the Petition and arguing that “the Reply should be disregarded in its entirety.” PO Sur-Reply 4–5 (citing Pet. Reply 2–3).

Regarding Patent Owner’s contention that our analysis “provide[d] absolutely nothing in terms of evidence or support for what amounts to

⁴ We note that, when referencing Exhibit 1011, Petitioner cites to the continued pagination from Exhibit 1010.

speculation” (PO Resp. 8), we direct Patent Owner to page 15 of the Institution Decision, where we explained our reasoning. As we there noted, Jonsson teaches that a Bluetooth device, which “wants to identify other Bluetooth devices that are in the vicinity . . . sends an inquiry message.” Ex. 1005, 1:37–41; *see also* Pet. 15 (“Jonsson describes the Bluetooth standard procedure for discovery and identification of new wireless electronic devices in the vicinity of an initiator device.”). Jonsson sets forth an *example* in which the initiator device is a hand-held device. Ex. 1005, 1:38 (“e.g., a hand-held device”). Jonsson’s teaching, however, is not limited to this specific example as Patent Owner suggests. Rather, Jonsson discloses Bluetooth devices generally. *See, e.g., id.* at 2:62–64 (“[I]t will be apparent to one skilled in the art that the present invention may be practiced in other embodiments that depart from these specific details.”). For example, Jonsson explains, “[a] Bluetooth unit 1 wishing to discover neighboring Bluetooth units broadcasts an INQUIRY message. A Bluetooth unit issuing an INQUIRY message is referred to herein as the ‘initiator’. The initiator then waits and listens for INQUIRY RESPONSE messages.” *Id.* at 5:21–25.

Petitioner relies on Bernstein’s disclosure of a photo op site disabling the flash of a camera. Pet. 18–19 (citing Ex. 1004, 2:63–3:2, 4:22–30, 4:65–5:6, Fig. 2). Here, it is the photo op site that seeks to find (and control) mobile Bluetooth devices within range of the photo op sites. *See, e.g.,* Ex. 1004, 5:1–4 (explaining that the photo op transceiver process “begins by establishing wireless communication between the photo opportunity site and the camera”), Fig. 2 (explaining that the photo op server “[e]stablish[es] wireless communication with the camera”). Thus, applying Jonsson’s

teachings that the device seeking to contact other devices sends the inquiry message, Bernstein's server (as the initiator device) would send the INQUIRY message and the cameras would respond by sending INQUIRY RESPONSE messages.

Patent Owner next argues that during prosecution of the patent application resulting in the '561 patent, the Applicant "disavowed downloading a game or software as being a feature *associated* with the central computer." PO Resp. 11 (citing Ex. 1002, 20–21). Patent Owner argues that "[m]erely downloading data is also not a feature *associated* with the central computer." *Id.* Patent Owner characterizes transferring additional content or camera setting parameters as merely transferring data, not as providing access to features. *Id.* at 12–14.

Petitioner replies by arguing that the prosecution history does not disavow any claim scope because the statement relied upon by Patent Owner is conclusory and ambiguous, that it is unclear whether the statement had any bearing on the Examiner's allowance of the claims, that the doctrine of claim differentiation suggests that providing access to features associated with the central control computer would include providing access to software to be downloaded, and that there is no basis on which to broaden the cited statement to apply to all data. Pet. Reply 9–13. Petitioner argues that the Petition's mapping of Bernstein's additional content related to the photo op subject and camera setting parameter instructions aligns with the Applicant's express admission of what the recited features can include. *Id.* at 14–15 (citing Pet. 24–27; Ex. 1002, 21; Ex. 1003 ¶ 133).

Patent Owner replies by reiterating its position regarding the asserted disavowal of claim scope. PO Sur-Reply 5–10. Notably, Patent Owner

expands its definition of the asserted disavowal, arguing that “[g]iven such definitive statements during prosecution that ‘merely downloading’ Anttila’s⁵ game did not make it a feature ‘associated’ with the central computer, the interested public was entitled to conclude that features ‘associated’ with the central computer do not include anything ‘merely downloaded’ to the mobile device.” *Id.* at 9.

Disavowal of a claim term “can be effectuated by language in the specification or the prosecution history.” *Poly-America, L.P. v. API Indus., Inc.*, 839 F.3d 1131, 1136 (Fed. Cir. 2016). “In either case, the standard for disavowal is exacting, requiring clear and unequivocal evidence that the claimed invention includes or does not include a particular feature.” *Id.* (citing *Openwave Sys., Inc. v. Apple Inc.*, 808 F.3d 509, 513–14 (Fed. Cir. 2015); *Omega Eng’g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323–26 (Fed. Cir. 2003)).

Although disavowal must be clear and unequivocal, it need not be explicit. *Trs. of Columbia Univ. v. Symantec Corp.*, 811 F.3d 1359, 1363–64 (Fed. Cir. 2016). For example, an inventor may disavow claim scope lacking a particular feature when the specification describes “the present invention” as having that feature. *See, e.g., Luminara Worldwide, LLC v. Liown Elecs. Co.*, 814 F.3d 1343, 1353 (Fed. Cir. 2016). Similarly, an inventor may disavow claim scope lacking a particular feature when the specification distinguishes or disparages prior art based on the absence of that feature. *See Openwave*, 808 F.3d at 513–14; *SightSound Techs., LLC v. Apple Inc.*, 809 F.3d 1307, 1317 (Fed. Cir. 2015).

⁵ US 6,721,542 B1 (filed May 28, 1999, issued Apr. 13, 2004).

The Applicant's language from the March 8, 2005, Response to Office Action cited by Patent Owner reads as follows:

While Anttila discloses that the mobile device may have features disabled, or may download games to the mobile phone, Applicant has been unable to find any disclosure within Anttila that the mobile device is provided with instructions to allow the mobile device to access one or more features associated with the central computer that is not merely downloading software to the mobile phone for use by the mobile phone. For example, a game merely downloaded onto the mobile device would not be a feature *associated* with the central computer.

Ex. 1002, 20–21.

This statement is conclusory in nature and fails to explain why a game downloaded onto a mobile device would not be a feature associated with the central control computer. The statement and Patent Owner's assertion that "features 'associated' with the central computer do not include *anything* 'merely downloaded' to the mobile device" (PO Sur-Reply 9 (emphasis added)) are contradicted by the '561 patent, which explains that "[t]he one or more features associated with the central control computer . . . may be selected from . . . databases, spreadsheets, computer games, video games, . . . word processing, maps, directions or combinations thereof." Ex. 1001, 2:7–15; *see also id.* at 4:31–36 ("Examples of these enhancements may be . . . databases, spreadsheets, computer games, . . . maps, directions and word processing.").

We note that the '561 patent explains that "[t]he one or more features associated with the central control computer may also include enhancements to the mobile electronic device." *Id.* at 2:15–19. We note additionally that the '561 patent also expressly discloses providing access to the features by downloading the features to the mobile device. *See, e.g., id.* at 6:8–14

(“[T]he central control computer may download directions on how to get to a particular restaurant or download pictures or audio from the performance directly into a mobile computer, telephone or other suitable mobile electronic device.”), 13:52–55 (“One enhancement may be that the central control computer downloads to the digital camera electronic pictures of selected works contained in the museum whenever the user takes or requests a picture.”), 14:11–14 (“The present invention provides another example of an enhancement by downloading a map with directions to particular works in the museum or to a section of the museum.”). Furthermore, Patent Owner does not explain adequately why Applicant’s statement regarding a *game* or *software* downloaded from the central control computer should be expanded to encompass any *data* downloaded from the central control computer to the mobile electronic device. As noted above, the ’561 patent identifies data, such as maps, directions, and pictures, as being features associated with the central computer. *See id.* at 2:7–19, 4:31–36.

Thus, the record does not reflect a clear and unequivocal disavowal as argued by Patent Owner. To the contrary, as explained above, the ’561 patent explicitly identifies software, games, and data, such as maps, directions, and pictures, as being features associated with the central computer, and explains that access to such features can be provided by downloading the features to the mobile electronic device. By failing to address in any meaningful way the contradicting disclosure of the ’561 patent, Patent Owner has not supported adequately its assertion that one conclusory statement from the prosecution history constitutes a disavowal of claim scope that precludes the downloading of data as one way of providing access to the features associated with the central control computer.

c. Conclusion

For the foregoing reasons, we are persuaded by Petitioner's showing, which we adopt, that claim 1 would have been obvious in view of Bernstein and Jonsson.

2. Dependent Claims 3–10 and 13–16

We have reviewed the Petition, Patent Owner Response, Petitioner Reply, Patent Owner Sur-Reply, and evidence of record and determine that, for the reasons set forth below, Petitioner has shown, by a preponderance of the evidence, that dependent claims 3–10 and 13–16 would have been obvious in view of Bernstein and Jonsson. Patent Owner does not make any arguments with respect to these claims apart from arguments directed to independent claim 1 from which they depend, and which we have addressed above. *See* PO Resp. 14.

a. Claim 3

Claim 3 depends from claim 1 and further recites “wherein the one or more features associated with the central control computer are substitutes for the one or more disabled features within the mobile electronic device.” Ex. 1001, 15:46–49. Petitioner argues that, as used in the '561 patent, “a substitute is not necessarily a one-to-one replacement but something that takes the place of the original and that serves a similar purpose.” Pet. 28 (citing Ex. 1001, 11:31–62, Fig. 9; Ex. 1020, 4). Petitioner relies on Bernstein's disclosure of transmitting settings to the camera to compensate for the flash having been set to the “off” position. *Id.* at 29 (citing Ex. 1004, 2:61–3:58, 3:64–4:3). According to Petitioner, a person having ordinary skill in the art “would understand that a faster shutter speed, larger aperture,

and increased gain control can serve as a substitute for a flash when the flash is not available.” *Id.* (citing Ex. 1003 ¶ 133). In the example cited by Petitioner, Bernstein explains that when the camera’s flash is set to “off,” camera setting parameters are transmitted to the camera, one such parameter being that “gain control would be increased to compensate for a potentially under exposed image.” Ex. 1004, 3:51–58. Thus, we find that Bernstein supports Petitioner’s contentions.

b. Claim 4

Claim 4 depends from claim 1 and further recites “wherein the one or more features associated with the central control computer are enhancements to the mobile electronic device, wherein the enhancements provide one or more features not possessed by the mobile electronic device.” Ex. 1001, 15:50–54. Petitioner relies on Bernstein’s discussion of providing additional content relating to the photo op subject to the camera. Pet. 29. Petitioner argues that the additional contents are enhancements to the camera and provide features not possessed by the camera. *Id.* at 29–30 (citing Ex. 1004, 4:35–51). Bernstein explains that the additional content, such as images, text, and sound relating to the photo op subject, is contained within database 14. Ex. 1004, 4:35–38. The server obtains data within the database and relays the data to the camera via transceiver 20. *Id.* at 3:23–37. Thus, we find that Bernstein supports Petitioner’s contentions.

c. Claim 5

Claim 5 depends from claim 1 and further recites “wherein the features within the mobile electronic device are selected from keypad, keyboard, display, speaker, microphone, transceiver, joystick, memory,

transmitter, receiver, electronic flash, drivers for peripheral devices, printer, scanner or combinations thereof.” Ex. 1001, 15:55–60. Referencing its showing regarding limitation 1C, Petitioner relies on Bernstein’s disclosure of disabling the camera’s flash. Pet. 30. For the reasons set forth in section II.E.1.a above, we find that Bernstein supports Petitioner’s contentions.

d. Claim 6

Claim 6 depends from claim 1 and further recites “wherein the features within the mobile electronic device are selected from user input devices, user output devices, transmitter, receiver, memory, transceiver, I/O controller, drivers for peripheral devices or combinations thereof.” Ex. 1001, 15:61–65. Petitioner argues that “[t]he ’561 Patent discloses that the elements of Claim 6 are ‘on a broader scale’ than, and therefore are a superset of, the elements of Claim 5.” Pet. 30 (citing Ex. 1001, 2:20–28, 15:55–60 (claim 5)). According to Petitioner, “[t]he electronic camera flash constitutes a user output device.” *Id.* at 30–31 (citing Ex. 1003 ¶¶ 105–106). The ’561 patent explains the mobile electronic device features as follows:

The features within the mobile electronic device are selected from keypad, keyboard, display, speaker, microphone, transceiver, joystick, memory, transmitter, receiver, electronic flash, drivers for peripheral devices, printer, scanner or combinations thereof. The features within the mobile electronic device, on a broader scale, are selected from user input devices, user output devices, transmitter, receiver, memory, transceiver, I/O controller, drivers for peripheral devices or combinations thereof.

Ex. 1001, 2:20–28. The first quoted sentence provides a list of mobile electronic device features (including an electronic flash), and the second quoted sentence defines broad categories for the listed features. We agree

with Petitioner that the most likely category for “electronic flash” would be “user output devices.” Thus, we find that Bernstein supports Petitioner’s contentions.

e. Claim 7

Claim 7 depends from claim 1 and further recites

wherein the mobile electronic device is selected from a mobile telephone, a handheld personal computer, a personal organizer, a palmtop computer, a computerized notepad, a global positioning system (GPS), an electronic video game player, a video player, an MP3 audio player, a personal digital assistant, digital camera, video recorders, audio recorders or combinations thereof.

Ex. 1001, 15:66–16:6. Petitioner relies on Bernstein’s disclosure that its camera can be a digital camera. Pet. 31 (citing Ex. 1004, 5:22–24). We find that the cited portions of Bernstein support Petitioner’s contentions.

f. Claim 8

Claim 8 depends from claim 1 and further recites “wherein the mobile electronic device has a wireless transceiver for transmitting and receiving wireless signals selected from radio frequency and infrared.” Ex. 1001, 16:7–10. Petitioner relies on Bernstein’s disclosure of using Bluetooth transmission, which Petitioner asserts is within the radio frequency range. Pet. 31–32 (citing Ex. 1003 ¶¶ 51, 81–82; Ex. 1004, 4:22–34, 7:52–60; Ex. 1005, 3:22–35). As noted above, Bernstein discloses the photo op transceivers communicating with a portable camera via the Bluetooth wireless data transmission standard. Ex. 1004, 4:25–30. As correctly noted by Petitioner, Jonsson discloses that “Bluetooth is a universal radio interface in the 2.45 GHz frequency band that enables portable electronic devices to

connect and communicate wirelessly via short-range, ad hoc networks.”
Ex. 1005, 3:26–29. Thus, we find that Bernstein and Jonsson support
Petitioner’s contentions.

g. Claim 9

Claim 9 depends from claim 1 and further recites “wherein the given
environment is selected from aircraft, hospital, automobile, museum, library,
movie theater, concert hall, stage theater, amusement park, taxi, train,
restaurant, sports arena, shopping mall and office building.” Ex. 1001,
16:11–15. Petitioner relies on Bernstein’s disclosure of its photo op being
located within a museum. Pet. 32 (citing Ex. 1004, 2:61–3:9, 3:47–51).
Bernstein discloses “[a]n example of a primary site 16 is a tourist
destination, such as a national park or museum that includes several scenic
locations and/or attractions for visitors to take pictures of with their cameras
22.” Ex. 1004, 3:2–5. Thus, we find that Bernstein supports Petitioner’s
contentions.

h. Claim 10

Claim 10 depends from claim 1 and further recites “wherein the given
environment is defined as the area in which the wireless control message
transmission can be received by the mobile electronic device.” Ex. 1001,
16:16–19. Petitioner argues that the given environment of Bernstein’s photo
op site is defined by the range of its wireless transceiver. Pet. 32 (citing
Ex. 1003 ¶¶ 81, 88; Ex. 1004, 4:25–30, 4:65–5:4, 7:52–55, Fig. 2).
Bernstein discloses,

At each photo op site 18, the transceiver 20 is located in
proximity to where a user would capture an image of the
subject with the camera 22. . . . When a user brings the camera

22 within range of the transceiver 20 at a photo op site 18, the transceiver 20 transmits the camera setting parameter values 26 to the camera 22 corresponding to the photo op site 18 to dynamically configure the camera's capture settings.

Ex. 1004, 3:28–37. Bernstein further discloses,

FIG. 2 is a flow chart illustrating in more detail the photo op transceiver process for automatically configuring capture settings of a hand-held camera 22 in accordance with the present invention. The process begins by establishing wireless communication between the photo opportunity site and the camera 22 once the camera 22 comes within range of the photo op transceiver 20 in step 30.

Id. at 4:65–5:4. Thus, we find that Bernstein supports Petitioner's contentions.

i. Claim 13

Claim 13 depends from claim 1 and further recites,

wherein the step of establishing a wireless communication link further comprises:

receiving the wireless control message by the mobile electronic device;

interpreting the control message to be an identification request from the central control computer; and

transmitting a wireless identification message to the central control computer, wherein the wireless identification message contains information describing the mobile electronic device, an address for the mobile electronic device, and an address for each of the features within the electronic device.

Ex. 1001, 16:31–42. Referencing its showing regarding limitations 1A and 1B, Petitioner relies on Jonsson's INQUIRY RESPONSE message, arguing that the mobile electronic device receives and interprets the INQUIRY message as an identification request because the "INQUIRY RESPONSE message . . . includes identification data such as the Bluetooth Device

Address (BD_ADDR) and the class of the device.” Pet. 33. Petitioner notes that “[w]hen the Bernstein camera comes within range of the photo op transceiver, the server issues the *GetCameraCapabilities* command to the camera.” *Id.* at 36 (citing Ex. 1004, 7:52–55). Petitioner argues that the camera responds to this command by transmitting a reply message, which Petitioner maps to the recited “identification message,” that contains a “PName field,” which Petitioner argues contains an address for an associated feature of the camera. *Id.* at 36–38 (citing Ex. 1004, 5:42–47, 11:35–42, 11:50–12:5). Petitioner argues that Jonsson teaches that “any reply to such a [Bluetooth] query would contain an address for the mobile electronic device, such as the Bluetooth active member address (AM_ADDR) assigned to the camera.” *Id.* at 39 (citing Ex. 1005, 4:33–42, 4:53–5:15, Fig. 4).

Jonsson discloses that its INQUIRY RESPONSE message includes the Bluetooth address of the device sending the message. Ex. 1005, 4:30–33, 5:32–48. Thus, we find that Jonsson supports Petitioner’s contentions that the INQUIRY message is interpreted as an identification request. Bernstein discloses that, in response to receiving a *GetCameraCapabilities* command, the camera’s CPU accesses and transfers the camera’s capability data to the photo op transceiver. Ex. 1004, 7:58–67. Bernstein discloses that this capability data can include the number of non-core parameters (*id.* at 8:22–26) and value sets for all non-core parameters (*id.* at 8:17–30, 11:52–12:5), and that such parameter value sets include an abbreviated name field (the “Pname” field) for each parameter (*id.* at 8:8–9, 9:50–10:20). Bernstein further discloses that the *GetCameraCapabilities* command and its response are transmitted wirelessly via the Bluetooth wireless data

transmission standard. *Id.* at 7:55–58, Fig. 5. Thus, we find that Bernstein and Jonsson support Petitioner’s contentions.

j. Claim 14

Claim 14 depends from claim 1 through claim 13 and further recites, wherein the step of establishing a wireless communication link further comprises:

storing the address for the mobile electronic device, and the address for each of the features within the mobile electronic device;

monitoring by the mobile electronic device for messages to the assigned address for the mobile electronic device; and

monitoring by the central control computer for messages from the assigned address for the mobile electronic device.

Ex. 1001, 16:43–54. Petitioner argues that Jonsson’s Bluetooth communication procedure includes the initiator device storing information regarding each responding device, such as the devices’ hardware addresses, in a device list. Pet. 40–42 (citing Ex. 1005, 6:35–7:7, 7:29–34). Petitioner argues that it would have been obvious to a person having ordinary skill in the art to store “discovered attributes and their values” in the device list because it “would reduce unnecessary signaling by avoiding the server having to send *GetCameraCapa[b]ilities* requests for the complete set of camera features to the same devices multiple times.” *Id.* at 42–43 (citing Ex. 1003 ¶ 122; Ex. 1005, 8:64–66). Petitioner argues that Jonsson discloses use of an initiator-assigned Active Member Address (“AM_ADDR”) as the addressing mechanism used by the initiator device to send messages to a responding device and to determine from which of the responding devices a message is received. *Id.* at 42–44 (citing Ex. 1005, 4:33–42, 4:53–5:15, Fig. 4).

Jonsson discloses that “the initiator regularly performs an INQUIRY procedure with the class of device field in the INQUIRY message having a value that is set to the appropriate class for the service desired by the initiator,” and that “[t]his procedure results in a list of all Bluetooth devices of the relevant class within range of the initiator.” Ex. 1005, 6:35–40. Petitioner sets forth reasoning with a rational underpinning as to why a person having ordinary skill in the art would have included additional information, such as the addresses for the features of the Bluetooth devices, in the list. Pet. 42–43. Jonsson discloses,

[T]he master unit of a piconet assigns a local active member address (AM_ADDR) to each active member of the piconet. . . . The master uses the AM_ADDR when polling a slave in a piconet. However, when the slave, triggered by a packet from the master addressed with the slave’s AM_ADDR, transmits a packet to the master, it includes its own AM_ADDR (not the master’s) in the packet header.

Ex. 1005, 4:33–42. Thus, we find that Jonsson supports Petitioner’s contentions.

k. Claim 15

Claim 15 depends from claim 1 through claims 13 and 14, and further recites,

wherein each of the messages to and from the assigned address for the mobile electronic device comprises the address for the mobile electronic device, the address for the one or more features of the mobile electronic device, and instructions for the one or more features of the mobile electronic device to perform.

Ex. 1001, 16:55–60. Petitioner relies on Bernstein and Jonsson as discussed regarding claim 14 to teach messages to and from the camera include the camera’s assigned address. Pet. 44–45. Petitioner asserts that Bernstein

discloses that the camera's reply to the GetCameraCapabilities message includes instructions and addresses for the one or more features of the camera. *Id.* at 45. Petitioner maps the "PName fields" of the reply to the recited features addresses and the "current capture settings" to the recited instructions. *Id.* For the reasons set forth above regarding claim 13, we agree with Petitioner's contentions regarding messages communicated from the camera. Petitioner argues that Bernstein discloses messages sent to the camera instructing it to disable one or more features include instructions and addresses for the features being disabled. *Id.* at 45–46 (citing Ex. 1004, 2:63–4:3). Bernstein discloses,

As a user approaches with a compatible camera 22, the photo op transmitter 20 would transmit camera setting parameters to the camera 22. For example, the strobe or flash setting would be set to "off", a wide aperture and fast shutter speed would be chosen to reduce blurring since it is known the camera 22 will be hand-held, and gain control would be increased to compensate for a potentially under exposed image. . . . [T]he photo op site 18 would set the camera's focal distance to 1.8 meters, for instance.

Ex. 1004, 3:51–63. Thus, we find that Bernstein supports Petitioner's contentions regarding messages communicated to the camera.

1. Claim 16

Claim 16 depends from claim 1 through claims 13 and 14, and further recites,

wherein the step of providing the mobile electronic device with access to one or more features associated with the central control computer further comprises:

- receiving a message from the mobile electronic device;
- comparing the address for the feature of the mobile electronic device contained in the message with a list of

addresses for the features of the mobile electronic device included in the wireless identification message; and
instructing a substitute feature of the central control computer to perform the instruction contained in the message.

Ex. 1001, 16:61–17:6. Petitioner argues that Bernstein discloses transmitting additional GetCameraCapabilities commands to the camera after the camera has been automatically configured to determine if any features, such as zoom, have been changed, and maps the camera’s replies to the subsequent GetCameraCapabilities messages to the recited message from the mobile electronic device. Pet. 46–47 (citing Ex. 1004, 6:15–48, Fig. 4). Petitioner argues that, upon receiving such replies, a person having ordinary skill in the art would recognize that storing the updated zoom setting would involve comparing the zoom address with the list of previously received parameters, and that it would have been obvious to store the newly received zoom setting in order to maintain an updated device list. *Id.* at 48–49. Petitioner argues that, after receiving the newly received zoom setting, the server determines whether a new set of optimized parameter values are required, and maps the message providing such newly optimized parameter values to the recited instructing step. *Id.* at 49.

Bernstein discloses automatically configuring the camera’s settings after receiving setting parameter values and optional content from the camera. Ex. 1004, 6:24–34. The server then periodically queries the camera to determine if the user subsequently alters a setting, such as zoom, so that the parameter values pushed to the camera can be updated accordingly. *Id.* at 6:35–45. Thus, we find that Bernstein supports Petitioner’s contentions.

m. Conclusion

For the foregoing reasons, we are persuaded by Petitioner's showing, which we adopt, that claims 3–10 and 13–16 would have been obvious in view of Bernstein and Jonsson.

3. Independent Claim 18

Independent claim 18 recites a computer program product including instructions for carrying out steps similar to those recited in claim 1. Ex. 1001, 17:16–37. The Petition addresses claim 18 in the same manner as claim 1 (Pet. 50), and Patent Owner addresses claim 18 in the same manner as claim 1 (PO Resp. 10, 14). Thus, for the same reasons as discussed above regarding claim 1, we are persuaded by Petitioner's showing, which we adopt, that claim 18 would have been obvious in view of Bernstein and Jonsson.

4. Dependent Claims 20–26 and 28–32

a. Claims 20–26 and 29–32

Dependent claims 20–26 and 29–32 contain recitations that are similar to those recited in claims 3–7, 9, 10, and 13–16, respectively. *Compare* Ex. 1001, 17:48–18:17, 18:28–19:8, *with id.* at 15:46–16:6, 16:11–19, 16:31–17:6. The Petition addresses claims 20–26 and 29–32 in the same manner as claims 3–7, 9, 10, and 13–16, respectively. Pet. 50–55. Patent Owner does not make any arguments with respect to these claims apart from arguments directed to independent claim 18 from which they depend, and which we have addressed above. *See* PO Resp. 14. Thus, for the same reasons as discussed above regarding claims 3–7, 9, 10, and 13–16, we are

persuaded by Petitioner’s showing, which we adopt, that claims 20–26 and 29–32 would have been obvious in view of Bernstein and Jonsson.

b. Claim 28

Claim 28 depends from claim 18 and further recites “wherein the address for the mobile electronic device is selected from a pre-assigned address or an address randomly generated by the mobile electronic device at the time the wireless control message is received by the mobile electronic device.” Ex. 1001, 18:23–27. Petitioner relies on Jonsson’s INQUIRY RESPONSE message, arguing that the message includes a pre-assigned Bluetooth Device Address (BD_ADDR). Pet. 52 (citing Ex. 1005, 4:30–33). As correctly noted by Petitioner, Jonsson discloses, “[e]ach Bluetooth device has a globally unique 48 bit IEEE 802 address. This address, called the Bluetooth Device Address (BD_ADDR) is assigned when the Bluetooth device is manufactured.” Ex. 1005, 4:30–33. Thus, we find that Jonsson supports Petitioner’s contentions.

c. Conclusion

For the foregoing reasons, we are persuaded by Petitioner’s showing, which we adopt, that claims 20–26 and 28–32 would have been obvious in view of Bernstein and Jonsson.

F. Challenge Based on Bernstein, Jonsson, and Heiman (Ground 2)

Petitioner argues that claims 2 and 19 would have been obvious over Bernstein, Jonsson, and Heiman. Pet. 55–58. In support of its showing, Petitioner relies upon the Kiaei Declaration. *Id.* (citing Ex. 1003). We have reviewed the Petition, Patent Owner Response, Petitioner Reply, Patent

Owner Sur-Reply, and evidence of record and determine that, for the reasons explained below, Petitioner has shown, by a preponderance of the evidence, that claims 2 and 19 would have been obvious in view of Bernstein, Jonsson, and Heiman and that Petitioner has set forth reasoning with rational underpinnings why it would have been obvious to combine the teachings of Bernstein, Jonsson, and Heiman.

Claim 2 depends from claim 1 and further requires:

wherein the one or more features associated with the central control computer are selected from a wireless transceiver, a global positioning system, antenna, speaker, microphone, printer, display screen, keyboard, voice response, databases, spreadsheets, computer games, video games, processing power, word processing, maps, directions or combinations thereof and wherein the one or more features are not software downloaded to the mobile electronic device.

Ex. 1001, 15:37–45. Claim 19 depends from claim 18 and contains similar recitations as claim 2. *Id.* at 17:38–46. Our analysis focuses on claim 2 but applies equally to claim 19.

Petitioner relies on Bernstein to disclose “downloading additional content to the camera, such as image, text, and audio files that is not software, which additional content is stored in a database associated with and accessible to server.” Pet. 56 (referring to contentions made regarding limitation 1D). Petitioner relies on Heiman to teach downloading a map, which Petitioner argues is not software, via Bluetooth to a mobile electronic device. *Id.* at 57 (citing Ex. 1006 ¶¶ 20, 37). Petitioner argues that it would have been obvious to a person having ordinary skill in the art “to implement the Bernstein system to additionally allow for downloading of maps, as taught by Heiman . . . to further Bernstein’s stated purpose of transforming

the digital camera into a tour aid device.” *Id.* at 57–58 (citing Ex. 1003 ¶¶ 152–155; Ex. 1004, 4:40–43; Ex. 1006 ¶ 4). Petitioner relies on the same arguments in asserting the unpatentability of claim 19. *Id.* at 58.

Bernstein discloses downloading “additional content corresponding to each photo op, such as images, text and sound relating to the subject” for display on the user’s camera, transforming the camera into “a tour aid device.” Ex. 1004, 4:35–43. Heiman discloses a method for providing travel information, which includes displaying travel information on a display of a digital camera. Ex. 1006 ¶ 7. The digital camera is in communication, such as via Bluetooth, with a portal. *Id.* ¶¶ 33, 37. The portal has stored thereon travel information, including maps. *Id.* ¶ 34. The travel information is downloaded to the camera upon request by the user or automatically. *Id.* ¶ 36. Thus, we find that Bernstein and Heiman support Petitioner’s contentions and we determine that Petitioner sets forth reasoning with a rational underpinning as to why a person having ordinary skill in the art would have included maps in Bernstein’s additional content. Pet. 57–58.

For the foregoing reasons, we are persuaded by Petitioner’s showing, which we adopt, that claims 2 and 19 would have been obvious in view of Bernstein, Jonsson, and Heiman.

G. Challenge Based on Bernstein, Jonsson, and Squilla (Ground 3)

Petitioner argues that claims 17 and 33 would have been obvious over Bernstein, Jonsson, and Squilla. Pet. 58–63. In support of its showing, Petitioner relies upon the Kiaei Declaration. *Id.* (citing Ex. 1003). We have reviewed the Petition, Patent Owner Response, Petitioner Reply, Patent Owner Sur-Reply, and evidence of record and determine that, for the reasons

explained below, Petitioner has shown, by a preponderance of the evidence, that claims 17 and 33 would have been obvious in view of Bernstein, Jonsson, and Squilla and that Petitioner has set forth reasoning with rational underpinnings why it would have been obvious to combine the teachings of Bernstein, Jonsson, and Squilla.

Claim 17 depends from claim 1 through claims 13 and 14, and further recites,

wherein the step of providing the mobile electronic device with access to one or more features associated with the central control computer further comprises:

- displaying a menu of available features to the user;
- receiving a request to make available the feature to the user; and
- providing the requested feature to the user.

Ex. 1001, 17:7–15. Claim 33 depends from claim 18 through claims 29 and 30 and contains similar recitations as claim 17. *Id.* at 19:9–20:8. Our analysis focuses on claim 17 but applies equally to claim 33.

Petitioner relies on Bernstein to disclose a camera as set forth with respect to claim 1, and relies on Squilla to teach wireless transmission of additional content, including “graphics, photographs, video/audio clips or reference material associated with the particular attraction site,” to a camera. Pet. 59–60 (citing Ex. 1007, 4:15–22, 4:62–64). Petitioner argues that “Squilla further discloses that prior to downloading the additional content, the user previews descriptions or a list of the available additional content on the LCD of the camera,” and “[t]he user . . . selects what content to download.” *Id.* at 60–61 (citing Ex. 1007, 4:54–5:8, 8:39–49). Petitioner argues that it would have been obvious to a person having ordinary skill in the art “to implement selection of desired additional content via a displayed

menu, as taught by Squilla, into the Bernstein system” in order “to allow the user to preview additional content prior to transmission and to control what additional content is transmitted to the user’s digital camera.” *Id.* at 62 (citing Ex. 1003 ¶¶ 158–162). Petitioner relies on the same arguments in asserting the unpatentability of claim 33. *Id.* at 63.

Squilla discloses that a user’s camera communicates wirelessly with “image spots,” which are locations where a picture is likely to be taken. Ex. 1007, 3:49–54, 4:8–25. The image spot collects relevant information (such as graphics, photographs, video/audio clips, or reference material) based on the personality data within the camera and transfers the collected information to the camera. *Id.* at 4:62–5:1. The information and/or a list indicative of the information can then be viewed on the camera’s screen. *Id.* at 5:2–5, 8:45–47. The user can select which information to upload to the camera. *Id.* at 5:5–8, 8:45–49. Thus, we find that Bernstein and Squilla support Petitioner’s contentions and we determine that Petitioner sets forth reasoning with a rational underpinning as to why a person having ordinary skill in the art would have included Squilla’s teaching of using lists to allow the user to choose which information to upload in Bernstein’s system. Pet. 62–63.

For the foregoing reasons, we are persuaded by Petitioner’s showing, which we adopt, that claims 17 and 33 would have been obvious in view of Bernstein, Jonsson, and Squilla.

H. Patent Owner’s Constitutional Argument

Patent Owner notes that an argument made in an appeal pending at the U.S. Court of Appeals for the Federal Circuit asserts that “the Board’s

appointments of administrative patent judges violate the Appointments Clause of Article II” of the U.S. Constitution. PO Resp. 14–15. “Patent Owner . . . adopts this constitutional challenge . . . to ensure the issue is preserved pending the appeal.” *Id.* at 15.

Our rules preclude incorporation by reference of argument from other documents. 37 C.F.R. § 42.6(a)(3). Patent Owner merely refers to a pending appeal in the Federal Circuit, *Polaris Innovations Ltd. v. Kingston Technology Co.*, No. 18-01768. PO Resp. 14–15. In the absence of any presentation in the Patent Owner Response of argument and the basis therefore as to the alleged constitutional defect in this proceeding, the argument is not framed for our consideration.

Furthermore, any Appointments Clause concerns have been addressed by the Federal Circuit in *Arthrex, Inc. v. Smith & Nephew, Inc.*, 941 F.3d 1320 (Fed. Cir. 2019).

III. PATENT OWNER’S CONTINGENT MOTION TO AMEND

In the event that “the Board finds independent claims 1 and 18 unpatentable, [Patent Owner] moves to amend [the ’561 patent] by replacing the claims(s) deemed unpatentable with a corresponding one of the proposed substitute independent Claims 34 and 51.” PO MTA 3. As we find original claims 1 and 18 unpatentable, we address Patent Owner’s Motion to Amend. For the reasons set forth below, the Motion to Amend is granted in part.

A. The Proposed Substitute Claims

Patent Owner seeks to replace the two independent claims: claim 34 as a substitute for claim 1, and claim 51 as a substitute for claim 18. PO

MTA 4. Proposed substitute claim 34 is set forth below with additions to claim 1 underlined:

34. A method for controlling and enhancing the use of mobile electronic devices within a given environment, comprising:
- transmitting a wireless control message within the given environment from a central control computer;
 - establishing a wireless communication link between the control computer and a mobile electronic device upon the mobile electronic device entering the environment and receiving the control message;
 - wherein the wireless control message contains one or more requests directed to the mobile electronic device to provide one or more of, information describing the mobile electronic device, addresses for the features of the mobile electronic device, and an address for the mobile electronic device;
 - communicating instructions from the central control computer to the mobile electronic device to disable one or more of features within the mobile electronic device; and
 - communicating instructions from the central control computer to the mobile electronic device to provide the mobile electronic device with access to one or more features associated with the central control computer; and
 - wherein the one or more features associated with the central computer are not software or data downloaded to the mobile electronic device.

Id. at 7–8. For ease of discussion, we refer to the first added wherein clause as “amendment one” and the second added wherein clause as “amendment two.” Patent Owner proposes to add the same two amendments to claim 18 in substitute claim 51. *Id.* at 12–13; *see also id.* at 4 (“Patent Owner contingently proposes amendments affecting only challenged independent Claims 1 and 18.”). Patent Owner proposes to amend each dependent

claim—including non-challenged claims 11, 12, and 27—to depend from the substitute independent claims. *Id.* at 5, 8–12, 14–17.

B. Procedural Requirements

In an *inter partes* review, amended claims are not added to a patent as of right, but rather must be proposed as a part of a motion to amend. 35 U.S.C. § 316(d). In reviewing a motion to amend, we first consider whether the motion meets the statutory and regulatory requirements set forth in 35 U.S.C. § 316(d) and 37 C.F.R. § 42.121. *Lectrosonics, Inc. v. Zaxcom, Inc.*, IPR2018-01129, Paper 15 at 4 (PTAB Feb. 25, 2019) (designated precedential). The patent owner must demonstrate the following: (1) the amendment responds to a ground of unpatentability involved in the trial; (2) the amendment does not seek to enlarge the scope of the claims of the patent or introduce new subject matter; (3) the amendment proposes a reasonable number of substitute claims; and (4) the proposed claims are supported in the original disclosure of the patent. *See* 35 U.S.C. § 316(d); 37 C.F.R. § 42.121; *see also Lectrosonics*, Paper 15 at 4–8.

We also consider unpatentability. In that regard, the “patent owner does not bear the burden of persuasion to demonstrate the patentability of [the proposed] substitute claims.” *Lectrosonics*, Paper 15 at 4 (citing *Aqua Prods., Inc. v. Matal*, 872 F.3d 1290 (Fed. Cir. 2017); *Bosch Auto. Serv. Sols. LLC v. Iancu*, 878 F.3d 1027 (Fed. Cir. 2017), *as amended on reh’g in part* (Mar. 15, 2018)). “Rather, as a result of the current state of the law and [U.S. Patent and Trademark Office] rules and guidance, the burden of persuasion ordinarily will lie with the petitioner to show that any proposed

substitute claims are unpatentable by a preponderance of the evidence.”
Lectrosonics, Paper 15 at 4.

1. Responsive to a Ground of Unpatentability

Patent Owner contends that amendment one distinguishes the proposed substitute claims from Jonsson’s INQUIRY message (PO MTA 18–19) and amendment two distinguishes the proposed substitute claims from Bernstein’s downloading of additional content (*id.* at 20). Petitioner does not challenge this aspect of the Motion.

We agree that the amendments address the asserted grounds of unpatentability set forth in the Petition, all of which rely on Bernstein and Jonsson. Thus, we conclude that Patent Owner has satisfied this requirement.

2. Does Not Enlarge Claim Scope or Add New Matter

Patent Owner argues that the amendments do not enlarge the claim scope or add new matter because they make explicit what was already “implicit in the originally challenged claims.” PO MTA 5–6.

Petitioner argues that amendment two adds new matter and, thus, there is a lack of written description support for amendment two. Pet. Opp. to MTA 2–9. Petitioner argues that although the specification supports a negative limitation excluding downloading *software* from the recited “provid[ing] the mobile electronic device with access to . . . features,” there is no support for a negative limitation excluding downloading *data*. *Id.* at 5–6. According to Petitioner, “Patent Owner simply conflates software and data with no explanation whatsoever of how the software teachings have any bearing on a limitation directed to downloading data.” *Id.* at 6 (citing PO

MTA 21). Petitioner argues that “[t]he ’561 [p]atent repeatedly describes ‘enhancing’ the mobile device with features associated with the central control computer by downloading data to the mobile device.” *Id.*; *see also id.* at 7–8 (citing Ex. 1001, 6:10–13, 14:11–20, 15:37–43).

Patent Owner replies by arguing that “it is Petitioner, not [Patent Owner], who has the burden to prove the contingently amended claims are unpatentable as lacking written description support.” PO Reply to Opp. to MTA 1 (citing *Bosch*, 878 F.3d at 1040). Patent Owner argues that the Motion to Amend “provided example citations where the specification expressly refers to example ‘enhanced features’ as certain resources (*e.g.*, software and data) that are stored and executed *at the central computer* in a manner that does not require the same to be downloaded to the mobile electronic device.” *Id.* at 5 (citing PO MTA 8, 13, 21–22). Patent Owner argues that, by identifying disclosure that data may be downloaded to the mobile device, Petitioner has identified support in the ’561 patent for the negative limitation added by amendment. *Id.* at 5–7 (citing Pet. Opp. to MTA 7).

Petitioner argues that a prohibition against downloading data does not follow from a prohibition against downloading software. Pet. Sur-Reply to Opp. to MTA 3–7. Petitioner argues that every example of non-software data discussed in the ’561 patent is downloaded to the mobile electronic device. *Id.* at 4 (citing Ex. 1001, 13:52–55, 14:11–20).

The Federal Circuit addressed the burdens regarding motions to amend in *Aqua Products*:

[W]e believe that the only reasonable reading of the burden imposed on the movant in § 316(d) is that *the patent owner must satisfy* the Board that the statutory criteria in

§ 316(d)(1)(a)–(b) and § 316(d)(3) are met and that any reasonable procedural obligations imposed by the Director are satisfied before the amendment is entered into the IPR. *Only once the proposed amended claims are entered into the IPR does the question of burdens of proof or persuasion on propositions of unpatentability come into play.*

Aqua Prods., 872 F.3d at 1305–06 (lead plurality opinion by J. O’Malley) (emphases added); *see also id.* at 1341 (“There is no disagreement that the patent owner bears a burden of production in accordance [with] 35 U.S.C. § 316(d).”) (majority opinion by J. Reyna); *see also Lectrosonics*, Paper 15 at 4 (“Before considering the patentability of any substitute claims, however, the Board first must determine whether the motion to amend meets the statutory and regulatory requirements set forth in 35 U.S.C. § 316(d) and 37 C.F.R. § 42.121.”). Thus, Patent Owner must first show that the motion meets the statutory and regulatory requirements set forth in 35 U.S.C. § 316(d) and 37 C.F.R. § 42.121 before we consider the patentability of the proposed substitute claims.

Petitioner argues “[w]ritten description support for a negative limitation may be found where the specification describes a reason to exclude the relevant limitation, such as describing disadvantages of the limitation.” Pet. Opp. to MTA 4–5 (citing *Santarus, Inc. v. Par Pharm., Inc.*, 694 F.3d 1344, 1351 (Fed. Cir. 2012)). In *Santarus*, the Federal Circuit stated “[n]egative claim limitations are adequately supported when the specification describes a reason to exclude the relevant limitation.” *Santarus*, 694 F.3d at 1351. The Federal Circuit later provided clarification regarding this language: “We hold that *Santarus* did not create a heightened written description standard for negative claim limitations and that properly described, alternative features are sufficient to satisfy the written description

standard of § 112, paragraph 1 for negative claim limitations.” *Inphi Corp., v. Netlist, Inc.*, 805 F.3d 1350, 1357 (Fed. Cir. 2015).

The ’561 patent discloses multiple ways in which access to features associated with the central control computer can be provided to the mobile electronic device. For example, the mobile device may be connected to hardware devices, such as “a wireless transceiver, a global positioning system, antenna, speaker, microphone, printer, display screen, [and] keyboard.” Ex. 1001, 2:7–12. The mobile device may be given access to software or other features located on the central control computer, such as “voice response, databases, spreadsheets, computer games, video games, processing power, [and] word processing.” *Id.* at 2:13–14. And data, such as “maps [and] directions,” can be downloaded to the mobile device. *Id.* at 2:14. Indeed, Petitioner identified these three alternatives for providing access to features of the central control computer during the oral hearing. *See* Tr. 41–43, 51.

By disclosing downloading data as one alternative for providing access to features and disclosing differing alternatives (such as running a video game on the central control computer (*see* Ex. 1001, 14:66–15:7)), the written description provides support for the negative limitation prohibiting the downloading of data. *Inphi*, 805 F.3d at 1357. Thus, we conclude that Patent Owner has satisfied this requirement.

3. Reasonable Number of Substitute Claims

a. Claims 34–43, 46–59, and 61–66

Patent Owner proposes substitute claims 34–43, 46–59, and 61–66 in a one-to-one relationship for challenged claims 1–10, 13–26, and 28–33, respectively. PO MTA, Appendix A (Claim Listing) 1–13. As the

submission of these proposed claims comports with “[t]he presumption . . . that only one substitute claim would be needed to replace each challenged claim” (37 C.F.R. § 42.121(a)(3)), we conclude that Patent Owner has satisfied this requirement for these claims.

b. Claims 44, 45, and 60

Patent Owner proposes to substitute claims 44, 45, and 60 for original claims 11, 12, and 27. PO MTA, Appendix A (Claim Listing) 4–5, 10. However, claims 11, 12, and 27 were not challenged in the Petition. *See* Pet. 1.

Section 316(d) does not permit Patent Owner to cancel or propose substitutes for non-challenged claims. 35 U.S.C. §§ 316(d)(1)(A), (B). We, therefore, deny Patent Owner’s Motion to Amend with respect to canceling non-challenged claims 11, 12, and 27 and adding proposed substitute claims 44, 45, and 60, identified by Patent Owner as substitutes for claims 11, 12, and 27, respectively.

4. Supported in the Original Disclosure

Patent Owner provides a list of the proposed substitute claims including citations to the specification of the application resulting in the ’561 patent that Patent Owner alleges to provide support for each recitation. PO MTA 7–18.

As discussed above, Petitioner argues that amendment two lacks written description support. Pet. Opp. to MTA 2–9. For the reasons provided above, we disagree and conclude that the specification of the ’561 patent supports amendment two.

Petitioner further argues that amendment two “creates a written description violation with claim 2.”⁶ Pet. Opp. to MTA 8. Claim 2 recites, in relevant part, “wherein the one or more features associated with the central control computer are selected from . . . directions.” Ex. 1001, 15:37–45. Petitioner argues that “the ‘561 [p]atent exclusively teaches that the central control computer providing a mobile device with directions is accomplished by downloading those directions to the mobile device as data.” Pet. Opp. to MTA 8. Continuing, Petitioner argues that, “[b]ecause the proposed [amendment two] excludes providing features to the mobile device by downloading data, it creates a written description violation with claim 2.” *Id.*; *see also* Pet. Sur-Reply to Opp. to MTA 5–6.

Patent Owner replies by stating that, “[i]f the Board determines claim 1 is unpatentable, and determines that substitute claim 35 somehow creates what Petitioner refers to as a ‘written description violation,’ . . . [Patent Owner] would be willing to withdraw substitute claim 35 (and cancel claim 2) to allow entry of the remainder of the contingent amendment.” PO Reply to Opp. to MTA 7 n.4. Patent Owner confirmed during the oral hearing that this statement applies also to original claim 19 and substitute claim 52. Tr. 40–41.

The ’561 patent consistently discloses that providing a mobile electronic device with access to directions is accomplished by downloading the directions to the electronic mobile device. Ex. 1001, 6:8–14 (“[T]he central control computer may download directions on how to get to a particular restaurant . . . directly into a mobile computer, telephone or other

⁶ We understand Petitioner’s contentions to apply also to claim 19, which contains similar limitations as claim 2. *See* Ex. 1001, 17:38–47.

suitable mobile electronic device.”), 14:11–20 (“The present invention provides another example of an enhancement by downloading a map with directions to particular works in the museum or to a section of the museum. . . . The central control computer, in state 416, . . . downloads a map containing directions as requested into the memory of the digital camera for viewing by the user.”). The ’561 patent provides no alternative for providing access to directions. Thus, we agree with Petitioner that the ’561 patent does not provide written description support for substitute claims 35 and 52, which explicitly recite “directions” as one of the enumerated features associated with the central control computer and which preclude (via dependence from independent substitute claims 34 and 51, respectively) the downloading of data as a means of providing access to such features.

Accordingly, we interpret Patent Owner’s comments as a request to cancel claims 2 and 19 and to withdraw substitute claims 35 and 52. PO Reply to Opp. to MTA 7 n.4; Tr. 40–41. We grant Patent Owner’s request.

C. Patentability of the Proposed Substitute Claims

Having determined that Patent Owner’s Motion to Amend meets the statutory and regulatory requirements set forth in 35 U.S.C. § 316(d) and 37 C.F.R. § 42.121, we turn to Petitioner’s arguments regarding unpatentability of proposed substitute claims 34, 36–43, 46–51, 53–59, and 61–66. *See Lectrosonics*, Paper 15 at 4. Petitioner contends that the substitute claims are indefinite under 35 U.S.C. § 112 ¶ 2, and unpatentable under 35 U.S.C. § 103(a). Pet. Opp. to MTA 9–14.

1. Indefiniteness

Petitioner argues that amendment one renders the claims indefinite. Pet. Opp. to MTA 9–11. Specifically, Petitioner argues that the amendment “lacks antecedent basis for ‘the features of the mobile electronic device.’” *Id.* at 10. According to Petitioner, “[c]onsidering the claim as a whole, it is entirely unclear what ‘features’ [amendment one] is referring to.” *Id.* Petitioner argues that the amendment renders the scope of the claim unclear. *Id.* at 10–11.

Patent Owner replies that the claims are not indefinite because a person having ordinary skill in the art would understand “the features of the mobile electronic device” would refer to the only other instance of such features. PO Reply to Opp. to MTA 8. Patent Owner states that it is willing to move the “wherein” clause added by amendment one to be immediately after the first “communicating instructions” recitation. *Id.* at 9.

Petitioner replies by arguing that even if the location of the “wherein” clause of amendment one were to be relocated as suggested by Patent Owner, the claims would still be indefinite because it is not clear whether “the features” refers to all features of the mobile electronic device or just those features that have been disabled. Pet. Sur-Reply to Opp. to MTA 7–8.

Although the claims would preferably exclude the article “the” preceding the recitation of “features” in amendment one, the claims are not rendered indefinite by its inclusion. The “features” at issue are recited as “addresses for the features of the mobile electronic device.” PO MTA, Appendix A (Claim Listing) 1, 7. Taking the entire clause into account, it is sufficiently clear that the recited “features” are associated with mobile electronic device, which are described in the written description as including

“user input devices, user output devices, transmitter, receiver, memory, transceiver, I/O controller, drivers for peripheral devices or combinations thereof.” Ex. 1001, 2:24–28. The subsequent recitation of “to disable one or more . . . features within the mobile electronic device” (PO MTA, Appendix A (Claim Listing) 1–2, 7) refers to the same features. In other words, any feature that is disabled must be within the set of features for which the addresses were provided. Petitioner’s argument that “it is entirely unclear what ‘features’ [amendment one] is referring to” (Pet. Opp. to MTA 10) appears to object to the breadth of the claim rather than identifying any ambiguity imparted by amendment one.

Accordingly, we conclude that Petitioner has failed to show by a preponderance of the evidence that the proposed substitute claims are indefinite.

2. *Obviousness*

Petitioner argues that proposed substitute claims 34 and 51 would have been obvious over Bernstein and Jonsson. Pet. Opp. to MTA 11–14. Regarding amendment one, Petitioner argues that “[t]he DIAC [(dedicated inquiry access code)] contained in [Jonsson’s] Bluetooth INQUIRY message requests information describing the mobile electronic device at least because it mandates whether the recipient of the message should respond based on device type.” *Id.* at 11 (citing Ex. 1003 ¶¶ 53, 84). Petitioner argues a device responding to Jonsson’s INQUIRY message necessarily “must respond . . . with its own Bluetooth device address (BD_ADDR) as well as the recipient’s Class of Device.” *Id.* at 12–13 (citing Ex. 1003 ¶¶ 53–57, 83–86, 109). Petitioner argues that amendment one does not require an express request because substitute claims 46 and 62 recite “interpreting the

control message to be an identification request,” and construing amendment one to require an express request would render the “interpreting” recitation of claims 46 and 62 meaningless because “[t]here would be no need to interpret the message as requesting specific information if that request was called out expressly.” *Id.* at 14; *see also* Pet. Sur-Reply to Opp. to MTA 9–11 (citing same).

Patent Owner replies by noting that Petitioner’s assertion that the substitute independent claims would have been obvious fails to address amendment two, and argues, therefore, that Petitioner has failed to establish the unpatentability of the substitute claims. PO Reply to Opp. to MTA 9. Patent Owner argues that even if the DIAC (contained within Jonsson’s INQUIRY message) specifies which devices should respond, this does not amount to a request for the mobile electronic device to provide information describing itself. *Id.* at 10. Patent Owner argues that even if the response to the INQUIRY message contains a Bluetooth device address, “this does not indicate whether the message requests the address.” *Id.*

As correctly noted by Patent Owner, Petitioner does not address amendment two, and, therefore, does not set forth how each of the elements of substitute claims 34 and 51 are disclosed by the prior art. *See* Pet. Opp. to MTA 11–14. For this reason alone, Petitioner fails to show that the proposed substitute claims are unpatentable.

Nonetheless, considering the arguments Petitioner does make, we do not agree with Petitioner’s contentions. Each of proposed substitute claims 34 and 51 recites, in relevant part, “the wireless control message contains one or more requests.” PO MTA, Appendix A (Claim Listing) 1, 7. Petitioner has not explained adequately how the DIAC inquiry message

requests information describing the mobile electronic device simply by indicating which types of devices should respond to the inquiry message. The substitute independent claims affirmatively recite that the control message contains a request for information such as information describing the mobile electronic device. Neither Petitioner nor its declarant discusses the contents of the DIAC, and, thus, fail to identify the recited request within the DIAC. The Petition’s discussion regarding the mobile device’s address (BD_ADDR) and device class being contained within the response to the inquiry message similarly fails to set forth a request within the inquiry message. *See* Pet. Opp. to MTA 12–13. At best, these arguments set forth that the device receiving the inquiry message *interprets* the inquiry message to request certain information, but the arguments do not identify any request within the control message itself as required by the substitute independent claims.

Nor do we agree with Petitioner’s contentions regarding substitute claims 46 and 62. The ’561 patent explains that the central control computer transmits a “wireless control message . . . [that] contains requests, or otherwise prompts the mobile electronic device to provide, information describing the mobile electronic device, addresses for the features of the mobile electronic device, an address for the mobile electronic device and combinations thereof.” Ex. 1001, 2:48–53; *see also id.* at 7:37–43. The ’561 patent further explains that the mobile electronic device receives the control message and “interpret[s] the control message to be an identification request from the central control computer.” *Id.* at 2:54–58. Thus, the ’561 patent uses “interprets the control message” in the sense of reading the control message. Petitioner’s implicit interpretation to the contrary is not

supported by evidence, and, thus, is unpersuasive. Furthermore, even if we were to agree with Petitioner's arguments, such arguments would at best be directed to claims 46 and 62, but would not provide a reason as to why proposed substitute independent claims 34 and 51 would be unpatentable.

We note that our independent review of the proposed substitute claims and the prior art of record does not provide reasoning for a determination that the proposed substitute claims are unpatentable. *See Bosch*, 878 F.3d at 1040 (citing *Aqua Products*, 872 F.3d at 1311 (lead plurality opinion by J. O'Malley)).

Accordingly, we conclude that Petitioner has failed to show by a preponderance of the evidence that the proposed substitute claims are unpatentable over Bernstein and Jonsson.

D. Conclusion

For the foregoing reasons, we *grant* Patent Owner's Motion to Amend with respect to claims 34, 36–43, 46–51, 53–59, and 61–66, and we *deny* Patent Owner's Motion to Amend with respect to claims 44, 45, and 60. Proposed substitute claims 35 and 52 have been withdrawn.

IV. CONCLUSION⁷

In summary,

⁷ Should Patent Owner wish to pursue amendment of the challenged claims in a reissue or reexamination proceeding subsequent to the issuance of this decision, we draw Patent Owner's attention to the April 2019 *Notice Regarding Options for Amendments by Patent Owner Through Reissue or Reexamination During a Pending AIA Trial Proceeding*. See 84 Fed. Reg. 16,654 (Apr. 22, 2019). If Patent Owner chooses to file a reissue application or a request for reexamination of the challenged patent, we remind Patent

Claims	35 U.S.C. §	References	Claims Shown Unpatentable	Claims Not Shown Unpatentable
1, 3–10, 13–16, 18, 20–26, 28–32	103(a)	Bernstein, Jonsson	1, 3–10, 13–16, 18, 20–26, 28–32	
2, 19	103(a)	Bernstein, Jonsson, Heiman	2, 19	
17, 33	103(a)	Bernstein, Jonsson, Squilla	17, 33	
Overall Outcome			1–10, 13–26, 28–33	

Motion to Amend Outcome	Claims
Original Claims Cancelled by Amendment	1–10, 13–26, 28–33
Substitute Claims Proposed in the Amendment	34, 36–51, 53–66
Substitute Claims: Motion to Amend Granted	34, 36–43, 46–51, 53–59, 61–66
Substitute Claims: Motion to Amend Denied	44, 45, 60
Substitute Claims: Not Reached	

V. ORDER

Accordingly, it is

ORDERED that claims 1–10, 13–26, and 28–33 of the '561 patent are determined to be unpatentable;

Owner of its continuing obligation to notify the Board of any such related matters in updated mandatory notices. *See* 37 C.F.R. §§ 42.8(a)(3), (b)(2).

FURTHER ORDERED that Patent Owner's Motion to Amend is *granted* with respect to substitute claims 34, 36–43, 46–51, 53–59, and 61–66;

FURTHER ORDERED that Patent Owner's Motion to Amend is *denied* with respect to substitute claims 44, 45, and 60; and

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

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Patent 6,961,561 B2

For PETITIONER:

Adam P. Seitz
Paul R. Hart
Kathleen D. Fitterling
ERISE IP, P.A.
adam.seitz@eriseip.com
paul.hart@eriseip.com
kathleen.fitterling@eriseip.com
ptab@eriseip.com

For PATENT OWNER:

Brett Mangrum
Ryan Loveless
James Etheridge
Jeffrey Huang
ETHERIDGE LAW GROUP
brett@etheridgelaw.com
ryan@etheridgelaw.com
jim@etheridgelaw.com
jeff@etheridgelaw.com