

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ADT LLC and ALARM.COM, INC.,¹

Petitioner,

v.

VIVINT, INC.,

Patent Owner.

IPR2021-01374

Patent 7,956,739 B2

Before MICHAEL R. ZECHER, CHARLES J. BOUDREAU, and
IFTIKHAR AHMED, *Administrative Patent Judges*.

AHMED, *Administrative Patent Judge*.

JUDGMENT

Determining All Challenged Claims Unpatentable

35 U.S.C. § 318(a)

¹ Alarm.com, Inc., which filed a petition in IPR2022-00714, is joined as petitioner in this proceeding.

I. INTRODUCTION

ADT LLC (“ADT”) requested an *inter partes* review of claims 1–17 (the “challenged claims”) of U.S. Patent No. 7,956,739 B2 (Ex. 1001, “the ’739 patent”). Paper 1 (“Petition” or “Pet.”). Vivint, Inc. (“Patent Owner”) did not file a preliminary response. Applying the standard set forth in 35 U.S.C. § 314(a), we instituted an *inter partes* review as to all of the challenged claims and on all the grounds raised in the Petition. Paper 6 (“Inst. Dec.”).

After institution, Alarm.com Inc. (“Alarm”) filed a petition in IPR2022-00714 (challenging the same claims of the ’739 patent on the same grounds) and a motion for joinder (seeking to join this proceeding as a petitioner). *Alarm.com Inc. v. Vivint, Inc.*, IPR2022-00714 (PTAB Mar. 15, 2022), Papers 1 (petition), 3 (motion for joinder). We granted institution in IPR2022-00714 and granted Alarm’s motion for joinder. *Id.* at Paper 9 (PTAB July 8, 2022); IPR2021-01374, Paper 20. Accordingly, we refer to ADT and Alarm, collectively, as “Petitioner.”

Also following institution, Patent Owner filed a Patent Owner Response (Paper 19, “PO Resp.”), Petitioner filed a Reply to Patent Owner’s Response (Paper 22, “Pet. Reply”), and Patent Owner filed a Sur-reply (Paper 24, “PO Sur-reply”). An oral hearing was held on November 15, 2022, and a copy of the transcript was entered in the record. Paper 32 (“Tr.”).

We have jurisdiction pursuant to 35 U.S.C. § 6. This Decision is a Final Written Decision under 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73 as to the patentability of the claims on which we instituted trial. To prevail, Petitioner must prove unpatentability by a preponderance of the evidence.

See 35 U.S.C. § 316(e) (2018); 37 C.F.R. § 42.1(d) (2020). Having reviewed the arguments and the supporting evidence, we determine that Petitioner has shown, by a preponderance of the evidence, that claims 1–17 of the ’739 patent are unpatentable.

II. BACKGROUND

A. Real Parties in Interest

Petitioner identifies ADT LLC, ADT Inc., Alarm.com Incorporated, and Alarm.com Holdings, Inc. as the real parties in interest. Pet. 1; IPR2022-00714, Paper 1, 1. Patent Owner identifies itself as the real party in interest, noting that “Vivint, Inc. is a wholly owned subsidiary of Vivint Smart Home, Inc.” Paper 4, 2.

B. Related Proceedings

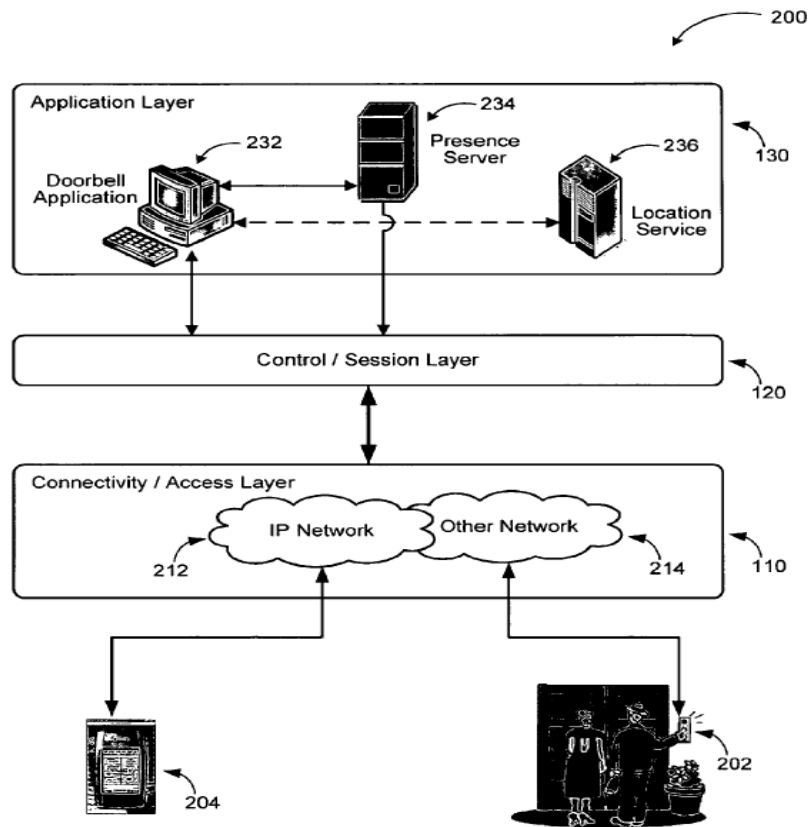
According to the parties, the ’739 patent is asserted in *Vivint, Inc. v. ADT LLC*, No. 2:21-cv-00115 (D. Utah), filed February 25, 2021; and in *SB IP Holdings, LLC v. Vivint Smart Home, Inc.*, No. 4:20-cv-00886 (E.D. Tex.), counterclaim filed May 14, 2021. Pet. 1; Paper 4, 2.

C. The ’739 Patent (Ex. 1001)

The ’739 patent, titled “Monitoring and Entry System Presence Service,” was filed on June 12, 2009, and is a continuation of U.S. Patent Application No. 11/520,262 (now U.S. Patent No. 7,561,041 B2) filed on September 13, 2006. Ex. 1001, codes (22), (54), (63). The ’739 patent is related to methods and systems for “facilitating integration of monitoring and entry systems with a presence service.” *Id.* at 1:15–18. More specifically, the ’739 patent describes methods and systems for providing a notification and interaction system integrated with a unified presence

application interface. *Id.* at 1:47–52. The system provides a notification to a user in response to a trigger event at an interface device, such as a doorbell or an alarm monitor, and also provides the user with a selection of actions, such as video of the location, two-way communications, and enabling entry to a premise. *Id.* at 1:53–62, 3:16–19.

Figure 2 of the '739 patent is reproduced below.



EXAMPLE DOORBELL PRESENCE
SERVICE ARCHITECTURE

FIG. 2

Figure 2 illustrates an example doorbell presence service architecture. Ex. 1001, 2:10–12. The doorbell presence service architecture includes doorbell 202, handheld computing device 204, such as a smartphone or personal digital assistant (“PDA”), optional location service 236, which

determines the user's location, and doorbell application 232, which is configured to receive notification from the doorbell, communicate with presence server 234, and execute actions selected by the user. *Id.* at 4:63–5:63.

Figure 5 of the '739 patent is reproduced below.

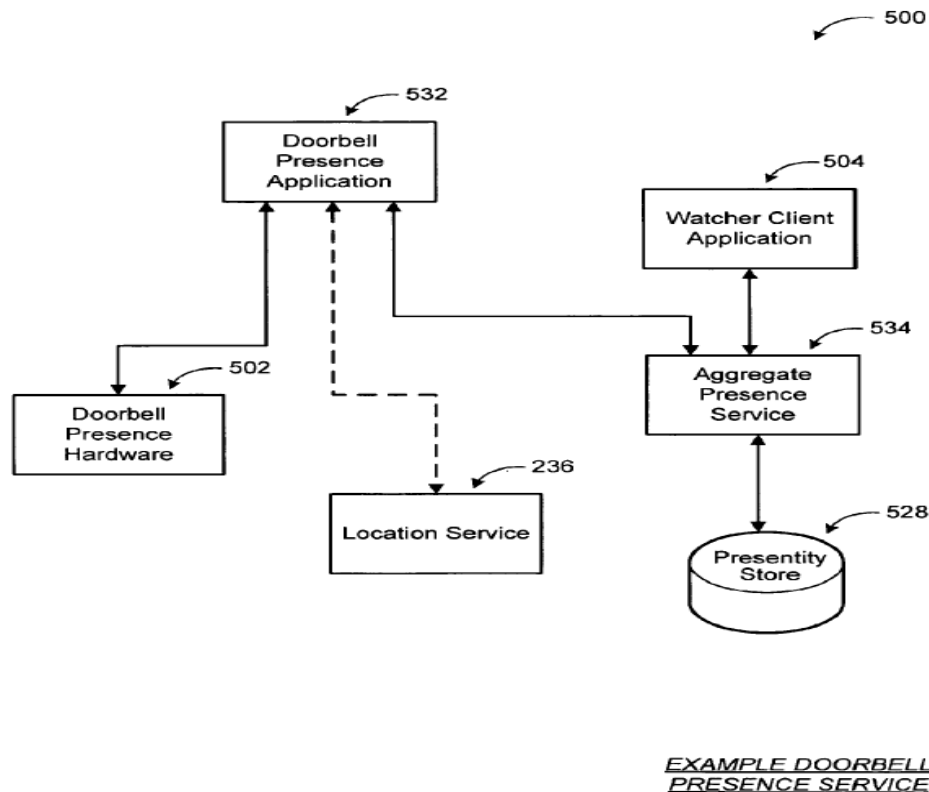


FIG. 5

Figure 5 illustrates a conceptual diagram of the components of a doorbell presence service. Ex. 1001, 2:18–20. A doorbell presence service is a network-based service which receives messages from a residence whenever the doorbell is pressed, i.e., when doorbell presence hardware 502 initiates a session by providing a notification to doorbell presence application 532 that someone is at the door. *Id.* at 7:14–20. The application may optionally determine the resident's location using location service 236 and provide it to

aggregate presence service 534, which updates presentity store 528 and enables watcher client application 504 to provide a notification to the user. *Id.* at 7:20–26. Watcher client application 504 also allows the user to select from a list of actions to be executed. *Id.* at 7:26–28.

Figure 9 of the '739 patent is reproduced below.

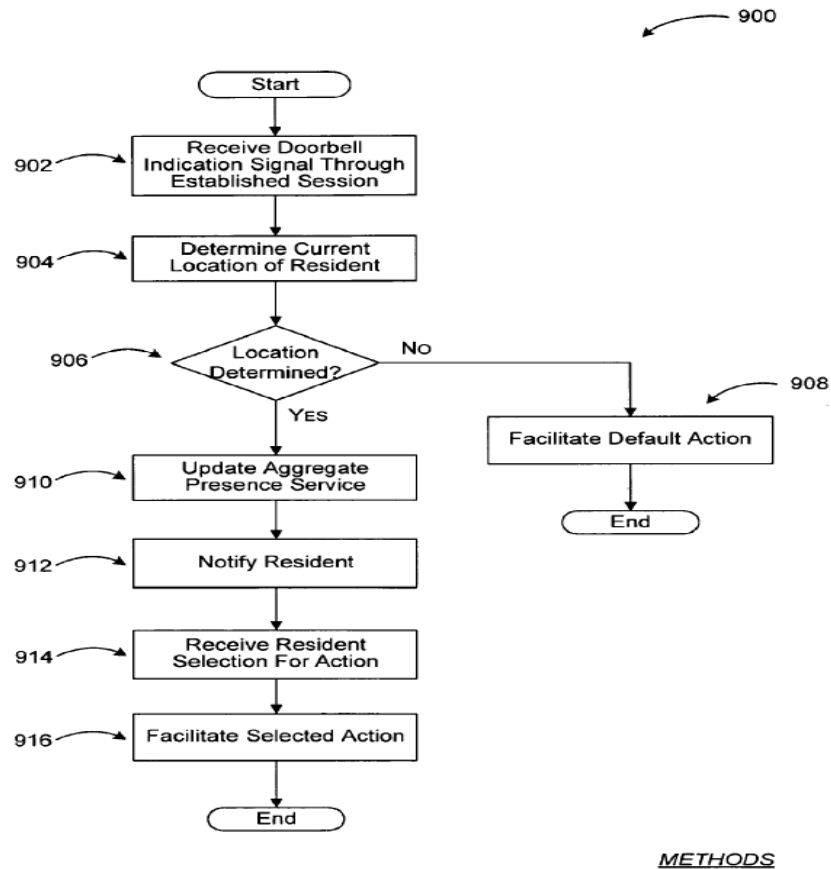


FIG. 9

Figure 9 illustrates a logic flow diagram for the process of providing doorbell presence service, from receiving a doorbell indication to facilitating a resident's selected action. Ex. 1001, 2:17–20, 9:16–65.

D. Challenged Claims

Petitioner challenges claims 1–17, of which claims 1, 8, and 12 are independent claims. Claim 1 is reproduced below.

1. A method for providing distributed access services between a watcher and at least one personal presentity, the method comprising:
 - receiving, at a computing device, an alert from a personal presentity;
 - determining a current location of the watcher;
 - providing a notification associated with the alert to the watcher; and
 - storing data related to a current location of the watcher.

Ex. 1001, 10:15–23. Claim 12 is reproduced below.

12. A system for providing distributed access services between a watcher and a personal presentity, comprising:
 - an interface device configured to:
 - detect a trigger event; and
 - provide a notification associated with the trigger event, wherein the interface device acts as the personal presentity; and
 - a presentity application configured cause the system to:
 - determine a current location of the watcher;
 - provide the current location of the watcher to an aggregate presence service; and
 - in response to receiving a watcher selection from the aggregate presence service, facilitate execution of the selected action by activating at least one of a plurality of client applications associated with the personal presentity.

Ex. 1001, 11:6–20.

E. The Prior Art and Instituted Grounds of Unpatentability

We instituted trial based on the following grounds of unpatentability:

Claims Challenged	35 U.S.C. § ²	Reference(s)/Basis
1–3, 6–11	102(e)	Oh ³
1–3, 6–11	103(a)	Oh
4, 5, 12–17	103(a)	Oh, Forbes, ⁴ TS23.141 ⁵

Pet. 3. Petitioner supports its arguments with declaration testimony of Mr. Peter Rysavy. Exs. 1017, 1032; Pet. 3, 10–57. Patent Owner supports its arguments with declaration testimony of Dr. Matthew B. Shoemake. Ex. 2001.

III. ANALYSIS

A. Principles of Law

“In an [*inter partes* review], the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3) (requiring *inter partes* review petitions to identify “with particularity . . . the evidence that supports the

² Because the ’739 patent issued from a patent application that was filed before March 16, 2013, patentability is governed by the versions of 35 U.S.C. § 102 and § 103 preceding the Leahy-Smith America Invents Act (“AIA”), Pub L. No. 112–29, 125 Stat. 284 (2011).

³ U.S. Patent No. 7,683,924 B2, issued March 23, 2010 (Ex. 1004, “Oh”).

⁴ U.S. Patent No. 7,596,102 B2, issued Sept. 29, 2009 (Ex. 1005, “Forbes”).

⁵ 3GPP TS 23.141 v6.8.0, *3rd Generation Partnership Project (“3GPP”); Technical Specification Group Services and System Aspects; Presence Service; Architecture and functional description (Release 6)* (2005) (Ex. 1006, “TS23.141”).

grounds for the challenge to each claim”)); *Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015) (discussing the burden of proof in *inter partes* review).

“Anticipation requires that every limitation of the claim in issue be disclosed, either expressly or under principles of inherency, in a single prior art reference,” *Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.*, 868 F.2d 1251, 1255–56 (Fed. Cir. 1989), and that the claim limitations be “arranged or combined in the same way as recited in the claim[],” *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1371 (Fed. Cir. 2008).

As set forth in 35 U.S.C. § 103(a),

[a] patent may not be obtained . . . if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

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 obviousness or nonobviousness.⁶ *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). An obviousness analysis “need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007). However, Petitioner cannot satisfy its burden of

⁶ Neither party presents evidence of objective considerations of obviousness or non-obviousness.

proving obviousness by employing “mere conclusory statements.” *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016).

Instead, Petitioner must articulate a reason why a person of ordinary skill in the art would have combined the prior art references. *In re NuVasive, Inc.*, 842 F.3d 1376, 1382 (Fed. Cir. 2016).

We analyze the asserted grounds of unpatentability in accordance with these principles to determine whether Petitioner has met its burden to establish unpatentability of the challenged claims by a preponderance of the evidence.

B. Level of Ordinary Skill in the Art

We review Petitioner’s asserted obviousness grounds in view of the understanding of a person of ordinary skill in the art at the time of the invention. *Graham*, 383 U.S. at 17. Petitioner contends that a person of ordinary skill in the art would have had a bachelor’s degree in computer science, electrical engineering, or computer engineering (or equivalent experience) and two years of experience in monitoring or telecommunications systems. Pet. 6 (citing Ex. 1017 ¶ 25). Patent Owner does not dispute Petitioner’s definition for a person of ordinary skill in the art. *See generally* PO Resp.

We determine, on the complete record, that the level of ordinary skill proposed by Petitioner is consistent with the ’739 patent and the asserted prior art. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001). We adopt that level in deciding unpatentability of the challenged claims.

C. Claim Construction

In this *inter partes* review, claims are construed using the same claim construction standard that would be used to construe the claims in a civil action under 35 U.S.C. § 282(b). *See* 37 C.F.R. § 42.100(b) (2021). That claim construction standard includes construing claims in accordance with the ordinary and customary meaning of such claims as would have been understood by one of ordinary skill in the art at the time of the invention. *See id.*; *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–14 (Fed. Cir. 2005). In construing claims in accordance with their ordinary and customary meaning, we take into account the specification and prosecution history. *Phillips*, 415 F.3d at 1315–17.

Patent Owner proposes constructions for the terms “[determining or determine] a current location” and “aggregate presence service,” which are disputed by Petitioner. *See* PO Resp. 4–23; Pet. Reply 1–9, 20–21. Accordingly, we address the parties’ arguments below.

1. [Determining or determine] a current location

a) The Parties’ Arguments

Patent Owner argues that the term “determine a current location” or “determining a current location” of a “watcher” or “user” should be construed as “obtaining location information from a location service regarding a computing device associated with the watcher/user.” PO Resp. 19 (citing Ex. 2001 ¶ 99). Patent Owner contends that “[t]he ’739 patent describes the application layer of its monitoring and entry system architecture as including ‘an application for providing the presence service, and even an application for providing a location service to determine a location of a user to be notified.’” *Id.* at 8 (citing Ex. 1001, 3:49–52, Fig. 1).

Patent Owner further contends that, if a location service is engaged, “the presence application in the application layer (*e.g.*, a doorbell presence application) accesses information from the location service regarding the watcher/user’s mobile device and reports it to the presence server.” *Id.* at 8 (citing Ex. 1001, code (57), 5:32–37, 6:64–67, 7:18–26, 7:30–31, 9:19–22, Figs. 2, 4, 5; Ex. 2001 ¶ 84). According to Patent Owner, “[t]he ’739 patent does not address ‘determining a location’ without tying it expressly or impliedly to use of a ‘location service.’” *Id.* at 9–11 (citing Ex. 1001, 3:50–52, 5:34–36, 5:45–47, 6:64–66, 7:20–22, 7:52–53, Figs. 2, 4, 5, 6, 9; Ex. 2001 ¶¶ 84–85). Patent Owner asserts that “[t]here is no other means of ‘determining’ a location discussed or suggested by the ’739 patent that does not involve use of a location service,” and thus, “‘determining a current location’ in the context of the claims of the ’739 patent can only mean doing so by using a location service.” *Id.* at 11 (citing Ex. 2001 ¶ 85).

Next, Patent Owner points to extrinsic evidence, including certain “IETF and 3GPP (and other) standards documents” to argue that a person of ordinary skill in the art “would have understood the term ‘location service’ as referring to technology that delivers geographic location information associated with certain user equipment or mobile equipment.” *Id.* at 12–15 (citing Ex. 2003 §§ 3.1–3.3, 5, 6.3.4; Ex. 2004 §§ 1, 4.2.1; Ex. 2008, 1; Ex. 2009, xvii; Ex. 2001 ¶¶ 86–91). Patent Owner also argues that location information sourced from a location service is different from an Internet Protocol (“IP”) address or other network address information. *Id.* at 16–19 (citing Ex. 1001, 6:33–40, 7:50–61; Ex. 2003 § 9.1.1; Ex. 2001 ¶¶ 93–99).

Petitioner responds that Patent Owner’s proposal “adds limitations regarding a ‘location service’ and ‘geographic location information’ that are

unsupported by the claims and specification,” and that the plain meaning of the term “at least encompasses determining a physical location of a computing device associated with the user such that communications can be established between the user and a visitor.” Pet. Reply 1 (citing Ex. 1032 ¶ 11). Petitioner argues that the claims do not require that “location” be determined in any particular way, or that a specific type of location-related information needs to be obtained, or even require that the location be used for anything beyond establishing communications between the user and visitor. *Id.* at 2–3 (citing Ex. 1032 ¶¶ 19–20). Petitioner contends that the disclosed system “determine[s] a location of the user . . . such that communication with the user can be established,” and that the ’739 patent specification does not identify any other purpose for determining the location of the user. *Id.* at 3 (quoting Ex. 1001, 5:45–48) (citing Ex. 1001, 1:14–43; Ex. 1032 ¶ 21). Petitioner argues that a person of ordinary skill in the art would have understood that “the physical location of the user’s computing device is at least determined in a manner that enables communication between the user and visitor,” e.g., whether the user is at home or in a remote location. *Id.* at 4 (citing Ex. 1001, 7:9–12; Ex. 1017 ¶¶ 98, 105; Ex. 1032 ¶¶ 9–29).

Petitioner further contends that “the specification expressly—and repeatedly—states that the use of a ‘location service’ is ‘optional,’” and that “there is no ‘clear statement,’ ‘manifest exclusion’ or ‘clear disavowal’ limiting the claims to an embodiment involving a location service.” Pet. Reply 5 (citing Ex. 1001, 5:30–36, 5:45, 6:40; Ex. 2001 ¶ 83). Instead, Petitioner points out the specification specifically states that the “detailed description is . . . *not to be taken in a limiting sense*, and the scope of the

present invention *is defined by the appended claims.*” *Id.* (citing Ex. 1001, 2:41–44, 10:4–13). Petitioner asserts that, contrary to Patent Owner’s construction, the specification expressly discloses an embodiment in which doorbell application 232 that determines a location of the user is shown separate from optional location service 236, and nothing in that embodiment requires that the doorbell application use the optional location service. *Id.* at 6 (citing Ex. 1001, 6:64–66, 7:9–12, Fig. 4, code (57); Ex. 1033, 41:6–42:8; Ex. 1032 ¶ 23).

Moreover, Petitioner argues, the ’739 patent specification does not define “determining a current location,” and even if every location determination described in the specification involves use of a location service, that alone is insufficient to redefine a term with an established ordinary meaning in the art. Pet. Reply 7–8 (citing Ex. 1001, 4:42–44 as defining other terms but not this one). As to Patent Owner’s extrinsic evidence, Petitioner argues that nothing in the claims or specification says anything about determining a geographic location and that extrinsic evidence cannot undo that drafting choice. *Id.* at 8–9.

In its Sur-reply, Patent Owner responds that Petitioner’s construction is improper because it is informed solely by the claim language, to the exclusion of how specification describes location determination, and that upon reading the entire ’739 patent, a person of ordinary skill in the art would have understood that “determining a location” never happens without the aid of a “location service.” PO Sur-reply 5–6 (citing Ex. 1001, 3:50–52, 5:34–36, 5:45–47, 6:64–66, 7:20–22, 7:52–53, 9:26–27, Figs. 1, 2, 4–6, 9). Patent Owner further argues that a person of ordinary skill in the art would have also understood that “determining a location” does indeed serve a

function, for example, to determine a method and device to be used in contacting the resident as well as the set of options presented to the user via the notification. *Id.* at 7–8 (citing Ex. 1001, 7:20–26, 9:45–9:48, claim 9; Ex. 2001 ¶¶ 72, 103, 106; Ex. 2002, 40:21–24).

Patent Owner further argues that portions of the specification that Petitioner points to as not requiring a location service also suggest the use of a location service. PO Sur-reply 9 (citing Ex. 1001, 6:50–7:12, Fig. 4). Patent Owner reiterates that “the specification discloses two embodiments—one that integrates a presence service with a monitoring and entry system, and another that adds determining a user’s current location to that combination,” and “[a]ll of the claims are directed to the latter embodiment.” *Id.* at 10. Further arguing that the claim term should be limited to *geographic* location, Patent Owner contends that a person of ordinary skill in the art “would have recognized ‘location service’ as a term of art, and would have looked to the 3GPP documents and other standards documents to understand the full scope of its meaning in the context of the claims.” *Id.* at 11–12 (citing Ex. 2002, 40:4–24, 41:11–42:14, 43:15–21). According to Patent Owner, a person of ordinary skill in the art in 2006 “would have had a very clear understanding of the meaning of ‘location service,’ and it would have entailed providing *specific and up-to-date geographic* location information, or at least an estimate, of the global position of the user’s device, *expressed in latitude and longitude.*” *Id.* at 12–15 (citing Ex. 2001 ¶¶ 86–91) (emphasis added).

b) Our Analysis

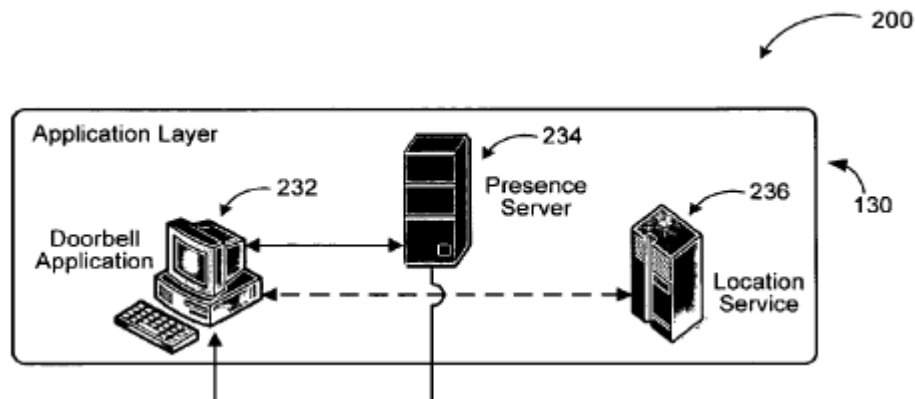
Under the claim construction standard applied in this proceeding, “[t]he words of a claim are generally given their ordinary and customary

meaning as understood by a person of ordinary skill in the art when read in the context of the specification and prosecution history.” *Thorner v. Sony Comput. Entm’t Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012) (citing *Phillips*, 415 F.3d at 1313). “There are only two exceptions to this general rule: 1) when a patentee sets out a definition and acts as his own lexicographer, or 2) when the patentee disavows the full scope of a claim term either in the specification or during prosecution.” *Id.* (citing *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1580 (Fed. Cir. 1996)). Neither of those exceptions apply here, and for the reasons discussed below, we find the plain and ordinary meaning of “determining a current location of the user” to include determining a *physical* location of a computing device associated with the user.

We begin with the claim language at issue. *TQ Delta, LLC v. DISH Network LLC*, 929 F.3d 1350, 1357 (Fed. Cir. 2019). When considering the language of the claim overall, the usage of “[determining or determine] a current location” in the claims does not in any way indicate a specific method of doing so. *See* Ex. 1001, 10:20, 10:55, 11:13. The only recitation in the independent claims related to the determined location is to store the location or to provide it to an aggregate presence service. *See id.* at 10:23, 11:14–15. There is no suggestion in the claims the location needs to be determined in a specific manner or have a specific level of granularity. *See Phillips*, 415 F.3d at 1314 (“[T]he context in which a term is used in the asserted claim” can be “highly instructive.”).

Patent Owner’s arguments are instead based on its reading of the ’739 patent specification. According to Patent Owner, the only way that the ’739 patent specification discloses to determine a location is through the use of a

“location service,” and that mandates a narrow construction of the claim term to exclusion of all other methods of determining a location. PO Resp. 11; PO Sur-reply 6. The specification, however, makes it abundantly clear that the use of a “location service” is “optional.” *See, e.g.*, Ex. 1001, 5:30–36, 5:45, 7:20–24; *see also* Ex. 2001 ¶ 83 (Dr. Shoemake agreeing that the “[u]se of the ‘location service’ is ‘optional’”). For example, Figure 2 of the ’739 patent, a portion of which is reproduced below, depicts the location service 236 using a dashed line, thus indicating that it is an optional component of the doorbell presence service architecture.



Ex. 1001, Fig. 2. Referring to the location service 236, the specification states:

Doorbell application 232 is configured to receive notification from doorbell 202, communicate with presence server 234 and *optional location service 236* to determine a location and reach the user through computing device 204, and perform tasks for execution of action(s) selected by the user.

Ex. 1001, 5:33–38 (emphasis added). The specification further states that “[subscriber location function] 342 may be an interface function for the *optional location service 236* of architecture 200.” *Id.* at 6:39–40 (emphasis added). The specification therefore leaves little doubt as to the optional nature of the location service. And Patent Owner asks that we import this

limitation, which the specification clearly designates as optional, into the claims. We decline to do so. *See MPHJ Tech. Invs., LLC v. Ricoh Ams. Corp.*, 847 F.3d 1363, 1369 (Fed. Cir. 2017) (affirming the Board’s decision not limited to limit the claims to a feature that the specification made clear was optional); *H-W Tech., L.C. v. Overstock.com, Inc.*, 758 F.3d 1329, 1334 (Fed. Cir. 2014) (“The optional nature of such services negates any argument that such a limitation in the claim is implied as necessary to the invention.”); *Phillips*, 415 F.3d at 1323 (warning against “importing limitations from the specification into the claims”).

Patent Owner argues that its not the use of a location service that is optional but instead it is the location determination that is optional, and that when a location is determined, it *must* be done through the use of a location service. PO Resp. 8; PO Sur-reply 9. According to Patent Owner, “the specification discloses two embodiments—one that integrates a presence service with a monitoring and entry system, and another that adds determining a user’s current location to that combination,” and “[a]ll of the claims are directed to the latter embodiment.” PO Sur-reply 10. We find no support in the specification for this position. First, we find no basis, and Patent Owner points us to none, to conclude that the claims are limited to a particular embodiment or exclude any of the disclosed embodiments. *See* Tr. 36:10–37:3, 47:3–48:5. Moreover, the specification includes instances where it mentions determining a location *without* referring to a location service. For example:

The communications may be facilitated through SIP [session initiation protocol] messaging using IMS [IP Multimedia System] sessions. Doorbell application 232 *determines a location* of the user (resident) and notifies presence service 234,

which may update presence information on HSS [Home Subscriber Server] 428.

Ex. 1001, 6:64–67 (emphasis added); *see also id.* at Fig. 4 (depicting the location service as optional). Similarly, the Abstract of the '739 patent mentions “determining the location of a user” with no reference to a location service. *Id.* at code (57). Thus, Patent Owner’s theory that the specification clearly delineates embodiments that determine a location—necessarily using a location service—from those that do not determine a location at all lacks evidentiary support.

And, even if we were to agree with Patent Owner that the specification discloses an alternate embodiment for determining a location and that the claims are directed narrowly to that specific embodiment, we find no support to import the requirement of a location service into a plainly understood claim term. Even in instances where the specification discloses determining a location using a location service, it does not mandate such use. *See, e.g.*, Ex. 1001, 7:52–54 (“doorbell presence application 532 *may* determine a location of the resident using a location service”) (emphasis added). After all, the purpose of determining the location of the user is simply to establish communication between the doorbell application and the user, for which physical location information suffices.⁷ *See id.* at 5:45–48. Moreover, as Petitioner points out, the specification emphasizes that these descriptions are “*not to be taken in a limiting sense*, and the scope of the

⁷ We see nothing in Patent Owner’s cited portions of the specification that suggests that a geographic location instead of a physical location is needed to “determine a method and device to be used in contacting the resident” or “the set of options presented to the user via the notification.” PO Sur-reply 7–8 (citing Ex. 1001, 7:20–26, 9:45–9:48, claim 9).

present invention *is defined by the appended claims.*” Ex. 1001, 2:41–44; *see also id.* at 10:4–13 (stating that “the subject matter defined in the appended claims is not necessarily *limited to the specific features* or acts described,” and that those specific features and acts “are disclosed as *example forms* of implementing the claims and embodiments”) (emphasis added). The use of a location service to determine a location is thus an “example form of implementing the claims.” Mr. Rysavy testifies that “various methods of determining the location of a mobile device were known at the time of the patent,” and we agree that a person of ordinary skill in the art would have understood the claims to encompass any of those known methods of determining the location. *See* Ex. 1032 ¶¶ 12, 19.

Patent Owner’s argument, in effect, is that because there is one way of determining a location disclosed in the purported alternate embodiment, a person of ordinary skill in the art would have understood that to be *only* way to determine a location and that we should limit the claims accordingly. Tr. 44:6–23; PO Resp. 11. But our reviewing court’s precedent mandates otherwise. *See, e.g., Aventis Pharma S.A. v. Hospira, Inc.*, 675 F.3d 1324, 1330 (Fed. Cir. 2012) (“[I]t is . . . not enough that the only embodiments, or all of the embodiments, contain a particular limitation to limit a claim term beyond its ordinary meaning.” (internal quotations omitted)); *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002) (stating that a party may not narrow a claim term’s ordinary meaning “simply by pointing to the preferred embodiment or other structures or steps disclosed in the specification or prosecution history”). Under controlling case law from the U.S. Court of Appeals for the Federal Circuit, the specification “must have sufficient clarity to put one reasonably skilled in the art on notice that the

inventor intended to redefine the claim term.” *Merck & Co. v. Teva Pharm. USA, Inc.*, 395 F.3d 1364, 1370 (Fed. Cir. 2005); *see also Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1117 (Fed. Cir. 2004) (“[E]ven where a patent describes only a single embodiment, claims will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope.” (internal quotation omitted)). Nothing that Patent Owner points us to in the ’739 patent specification shows any intent, let alone a clear one, to limit the claims in the manner proposed by Patent Owner.

Patent Owner’s case law citations to the contrary do not teach otherwise and are inapposite to the facts here. For example, in *Wisconsin Alumni Research Foundation*, the court narrowly construed the term “prediction” in light of the specification because it found that “[r]eading the patent as a whole, it is clear that the claimed prediction must be capable of receiving updates,” and that the specification “repeatedly and consistently” characterized the claim term in a particular way. *Wis. Alumni Research Found. v. Apple Inc.*, 905 F.3d 1341, 1351 (Fed. Cir. 2018) (citing *GPNE Corp. v. Apple Inc.*, 830 F.3d 1365, 1370 (Fed. Cir. 2016)). As discussed above, we are not persuaded that the specification here consistently characterizes “[determining or determine] a current location” as requiring a location service; if anything, the specification suggests that that aspect is entirely optional. Similarly, in *VirnetX*, the court agreed that “when read in light of the entire specification, the term ‘secure communication link’ requires anonymity” because “the addition of anonymity [was] presented as one of the primary inventive contributions of the patent” at issue. *See VirnetX, Inc. v. Cisco Sys., Inc.*, 767 F.3d 1308, 1317 (Fed. Cir. 2014). Use

of a location service is hardly “one of the primary inventive contributions of the [’739] patent.”

In summary, based on the specification of the ’739 patent, including the plain language of the challenged claims, we construe the claim term “[determining or determine] a current location” as including determining a physical location of a computing device associated with the user.⁸ As a result, we need not resort to the extrinsic evidence, which, under these particular circumstances, includes a reference book and certain IETF/3GPP standards—none of which even provide a definition of the claim term—to determine the proper construction of “determining a current location.” *See Phillips*, 415 F.3d at 1317 (“[W]hile extrinsic evidence can shed useful light on the relevant art, we have explained that it is less significant than the intrinsic record in determining the legally operative meaning of claim language.”) (quoting *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 862 (Fed. Cir. 2004)); *id.* at 1322–23 (stating that a tribunal may “rely on dictionary definitions when construing claim terms, so long as the dictionary definition does not contradict any definition found in or ascertained by a reading of the patent documents”) (quoting *Vitronics*, 90 F.3d at 1584 n.6); *See also Seabed Geosolutions (US) Inc. v. Magseis FF LLC*, 8 F.4th 1285, 1290 (Fed. Cir. 2021) (“Given the clarity of the intrinsic evidence, resort to

⁸ Because we decline to import the requirement of using a location service into the claim term, we also do not accept that the location has to be a geographic position or that it needs to be expressed specifically in latitude and longitude format—additional limitations that Patent Owner seeks to include based on its argument relating to the use of a location service. *See* PO Sur-reply 12–15.

extrinsic evidence is unnecessary.”). The record therefore does not support Patent Owner’s position.

2. *Aggregate Presence Service*

a) *The Parties’ Arguments*

Patent Owner argues that “aggregate presence service” should be construed as “a presence service that includes location information obtained from a location service.” PO Resp. 19–23. Patent Owner asserts that the presence service is “aggregate” because it includes ordinary presence information, such as “status” and “communication address,” but adds “other presence markup” in the form of watcher location information. *Id.* at 19 (citing Ex. 1007, § 4.3; Ex. 2001 ¶ 101). Patent Owner contends that “presence service” was a well-known term of art, and “[t]he patentee needed a term to distinguish that presence service from one that has been updated with location information obtained from a location service,” and “thus coined the term ‘aggregate presence service,’ acting as his own lexicographer.” *Id.* at 20 (citing Ex. 1017 ¶¶ 2, 53–57, 61, 63, 65, 70, 84–86, 155, 177, 183, 200, 202, 209, 217–219, 223; Ex. 2001 ¶ 102). According to Patent Owner, the term “aggregate presence service” is used consistently in the specification to refer to a presence service that has been updated to include location information *obtained from a location service*. *Id.* at 20–22 (citing Ex. 1001, 7:13–30, 7:40–61, 9:42–61, Figs. 5, 6, 9; Ex. 2001 ¶¶ 103–105). Patent Owner contends that, once updated with location information, the “aggregate presence service” then uses that information to perform other tasks, such as providing the resident a list of responsive actions, some of which are based on the location information. *Id.* at 22 (citing Ex. 1001, 9:45–62; Ex. 2001 ¶¶ 103–105).

Petitioner urges us not to adopt Patent Owner’s proposal because it requires that the aggregate presence service receive location information from a location service, which is contrary to the claim language and specification. Pet. Reply 20–21 (citing Pet. § II.A.2; Ex. 1032 ¶¶ 30–37). Moreover, Petitioner argues, Patent Owner offers no evidence that location information obtained from a location service would differ from location information from some other source. *Id.* at 21 (citing Ex. 1033, 101:21–102:21; Ex. 1032 ¶ 33). Petitioner also points out that there is no dispute that “presence-related information” already includes location information. *Id.* (citing Ex. 1033, 112:6–10; Ex. 1032 ¶¶ 34–36). According to Petitioner, an ordinarily skilled artisan would have understood “aggregate presence service” to mean a service that receives, stores, and provides presence-related information. Pet. 9 (citing Ex. 1017 ¶¶ 68–71).

In its Sur-reply, Patent Owner responds that, even if a “presence service” can include location information, the patentee coined a term to distinguish aggregate presence service from mere presence service, as a presence service that includes geographic location information *obtained from a location service*. PO Sur-reply 15. Patent Owner argues that “[t]he fact that a ‘presence service’ may, outside the context of the ’739 patent, include location information sourced from a location service cannot undo the patentee’s lexicography.” *Id.* Patent Owner provides the following table to illustrate its claimed distinction:

aggregate presence service	presence service
<u>includes at least:</u> 1. status 2. geographic location sourced from a location service <u>can also include:</u> 3. communication address (e.g., IP address) 4. other presence markup (e.g., geographic location sourced from the user reporting its own location)	<u>includes at least:</u> 1. status <u>can also include:</u> 2. communication address (e.g., IP address) 3. other presence markup (e.g., geographic location sourced from a location service, or sourced from the user reporting its own location)

Id. at 16 (citing Ex. 2001 ¶ 66; Ex. 1006 § 6.1.1; Ex. 1007 § 4.3).

b) Our Analysis

For the reasons below, we construe “aggregate presence service” to mean “a service that receives, stores, and provides presence-related information,” and we disagree with Patent Owner that such a service needs to include geographic location information obtained from a location service. The parties agree that that “presence-related information” already includes location information. Patent Owner’s proposal would have us read the requirement of using a location service into the claims, which, as discussed above, we decline to do on the record before us. As with “determining a current location,” discussed in Section III.C.1 above, we see no lexicographic definition or clear intent in the specification defining “aggregate presence service” in the manner that Patent Owner argues. To be sure, the ’739 patent specification does define other terms. *See, e.g.*, Ex. 1001, 4:42–44 (“The term computer readable media as used herein refers to both storage media and communication media.”). But the specification

does not define “aggregate presence service” in any way, much less using such express language. The portions of the specification that Patent Owner points us to (PO Resp. 20–22) as defining the claim term fall well short of what is required under Federal Circuit precedent to show a lexicographic definition. In relevant part, all the specification says is that a “doorbell presence application” may provide an “[a]ggregate presence service” with information regarding a user’s location, and that “aggregate presence service 534 updates a presentity store 528 and enables watcher client application 504 to provide the notification to the user.” *See* Ex. 1001, 7:20–26, Fig. 5; *see also id.* at 7:40–61, 9:42–61, Figs. 6, 9. There is no disclosure in the specification distinguishing the term “aggregate presence service” from the term “presence service” in a specific way, let alone any other disclosure requiring the use of a location service in the manner that Patent Owner argues. The record therefore does not support Patent Owner’s position.

3. *Other Claim Terms*

Petitioner also proposes constructions for “presentity,” “personal presentity,” and “watcher.” Pet. 7–10. In particular, Petitioner contends, a person of ordinary skill in the art “would have understood ‘presentity’ to mean an entity that has presence information associated with it, such as information regarding whether a visitor is present at a resident’s door,” and “would have understood ‘personal presentity’ to mean a presentity that is associated with the presence of a person (*e.g.*, a human visitor).” *Id.* at 7–8 (citing Ex. 1017 ¶¶ 59–63). Petitioner also contends a person of ordinary skill in the art “would have understood ‘watcher’ to mean an entity (person or otherwise) that requests and/or receives presence information regarding a

presentity.” *Id.* at 8–9 (citing Ex. 1017 ¶¶ 64–67). Patent Owner does not address construction of any of these claim terms. *See generally* PO Resp.

We determine we need not explicitly construe any of these remaining claim terms to resolve Petitioner’s patentability challenges. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co. Matal*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (noting that “we need only construe terms ‘that are in controversy, and only to the extent necessary to resolve the controversy’” (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999))).

D. Overview of the Asserted Prior Art

1. Oh (Ex. 1004)

Oh is titled “Intelligent System for Identifying Visitor and Providing Communication Service Using Mobile Terminal and Method Thereof,” and relates to “an intelligent system for identifying a visitor and providing a communication service by using a wireless communication terminal based on a session initiation protocol (SIP) in a home gateway system.” Ex. 1004, codes (54), (57), 1:9–15. Oh discloses an intelligent system that uses a home gateway system to determine the location of a resident in real time when the bell of a video door phone is activated, and providing a communication service to the resident using a wireless terminal, including transmitting video signal to identify the visitor. *Id.* at 4:41–50.

Figure 1 of Oh is reproduced below.

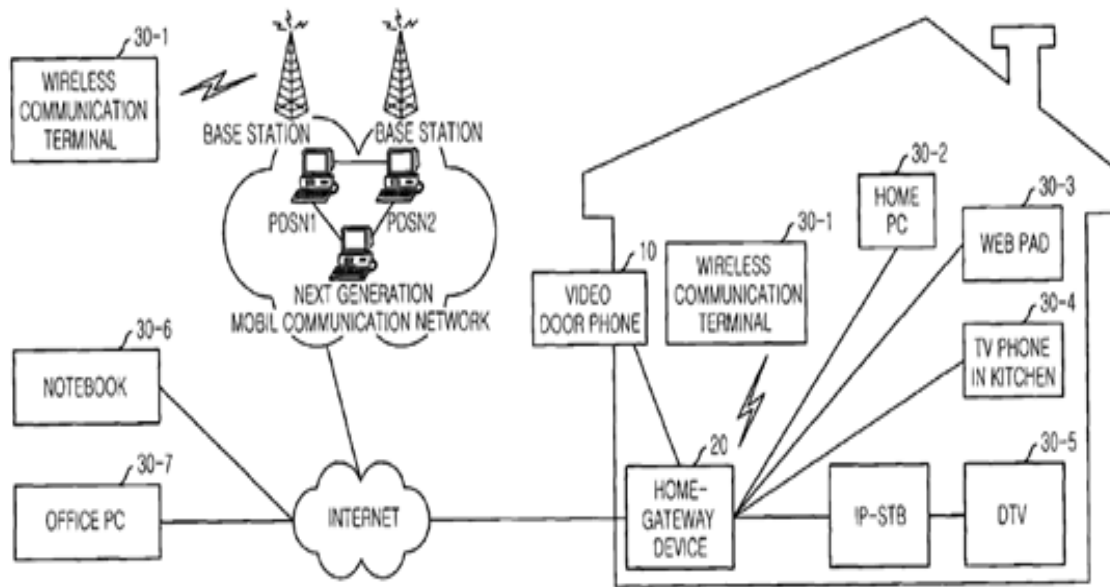


Figure 1 illustrates a system for identifying a visitor and providing a communication service using a wireless communication terminal. Ex. 1004, 7:35–39. When a visitor doorbell event occurs at video door phone device 10, home gateway device 20 communicates with the resident's wireless communication terminal 30-1 to determine whether the resident is at home, and depending on whether the resident is at home, allows the resident to view images of the visitor and communicate with the visitor either through (i) visitor identifying and communicating terminals 30-2 to 30-5 at home, e.g., a tablet personal computer, PDA, television-phone, IP set-top box, web-pad, or (ii) wireless terminal 30-1. *Id.* at 8:13–48; *see also id.* Figs. 4–7 (flowcharts showing methods for identifying a visitor and providing a communication service under different scenarios).

Figure 2 of Oh is reproduced below.

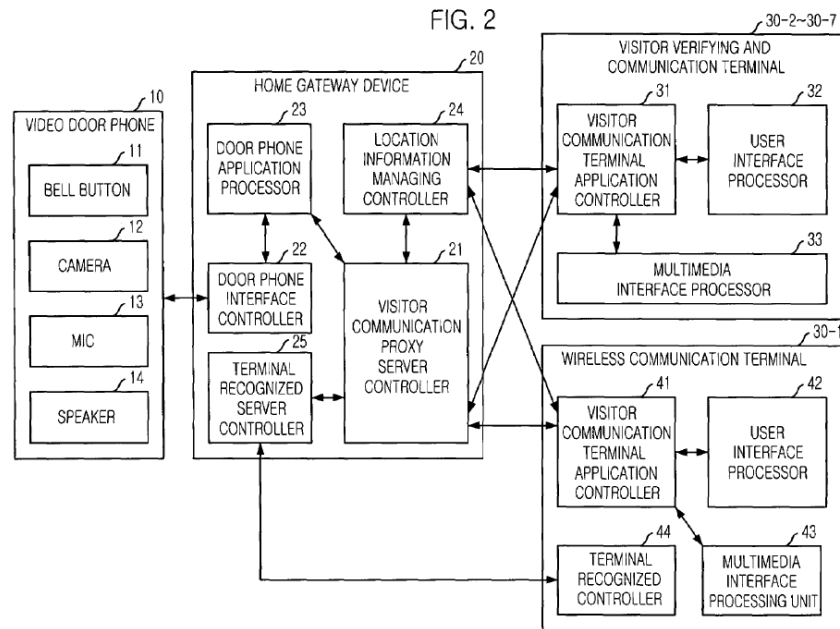


Figure 2 is a block diagram illustrating Oh's system showing video door phone device 10, home gateway device 20, and terminals 30-1 to 30-7. Ex. 1004, 7:49–54. Oh's home gateway device 20 includes door phone interface controller/processor 22 and door phone application processor 23 connected to video door phone 10 for processing a bell signal event, and includes terminal recognition service controller 25 for locating a resident's wireless terminal 30-1 when a visitor bell is activated. *Id.* at 8:54–59. Oh's home gateway also includes location information managing controller 24 and visitor communication proxy server controller 21 for managing and connecting to visitor identifying and communication terminals 30-1 to 30-7. *Id.* at 8:59–62. Terminals 30-2–30-7 include (1) visitor communication terminal application controller 31 for registering and updating a location of a terminal, transmitting/receiving SIP messages, and processing Real-Time Transport Protocol (“RTP”) packets; (2) user interface processor 32 for sensing and processing events inputted from a user, and performing

interactions with the controller 31; and (3) multimedia interface processor 33 for encoding audio data inputted from a microphone, and decoding and reproducing received visitor's voice/video data. *Id.* at 9:22–31. Wireless communication terminal 30-1 includes similar components, but also includes terminal recognition controller 44 which interfaces with terminal recognition server controller 25 for detecting the location of the wireless communication terminal. *Id.* at 9:41–53.

2. *Forbes (Ex. 1005)*

Forbes is titled “Image Exchange for Image-Based Push-To-Talk User Interface,” and relates to “image exchange in wireless communications devices capable of push-to-talk service.” Ex. 1005, codes (54), (57), 1:5–9. Forbes describes a visual interface for a push-to-talk (“PTT”) terminal that displays user images of participants in a PTT conference. *Id.* at code (57).

Figure 4 of Forbes is reproduced below.

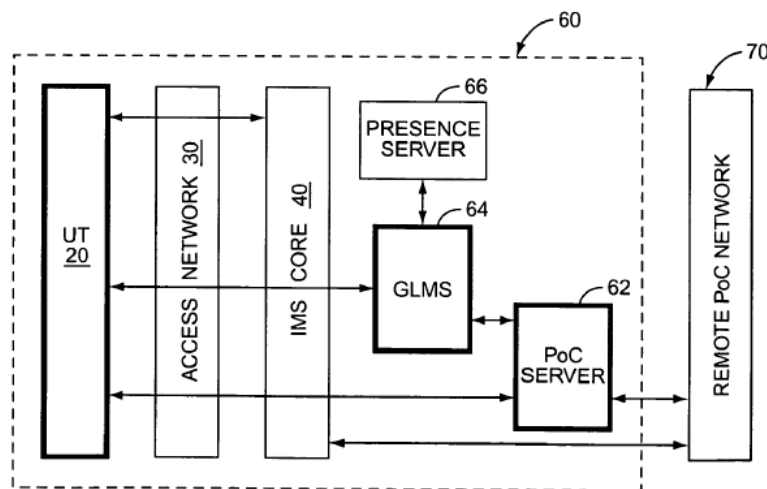


FIG. 4

Figure 4 is a block diagram illustrating the basic architecture and service elements for PTT services. Ex. 1005, 2:28–29. Forbes's push-to-talk over

cellular (“PoC”) network 60 comprises user terminal 20 with PTT functionality, PoC server 62, Presence Server (PS) 66, and IP multimedia subsystem (“IMS”) core 40. *Id.* at 4:37–5:28. The Presence Server maintains the presence status of PTT clients, for example, whether a client is reachable, unavailable, offline, or in do-not-disturb status, and supports publication of such presence information to other clients. *Id.* at 5:18–24. During a group PTT session, conference participants may connect to the same PoC server 62 using SIP. *Id.* at 5:29–31.

3. *TS23.141 (Ex. 1006)*

TS23.141 is a Technical Specification published by the 3rd Generation Partnership Project (“3GPP”), detailing the “stage 2 description (architectural solution and functionalities) for the Presence Service,” which “provides the ability for the home network to manage presence information of a user’s device.” Ex. 1006, 5–6, 8, § 4.1. TS23.141 describes a Presence Server as a network entity residing in the presentity’s home network and responsible for managing presence information on behalf of a presence entity. *Id.* at 7, 12, §§ 3.1, 5.1, Fig. 4.2-1. TS23.141 explains that the Presence Server is able to receive and manage presence information that is published by users and is “responsible for composing the presence-related information for a certain presentity from the information it receives from multiple sources.” *Id.* at 12, § 5.1. The Presence Server also allows “watchers” to request and subscribe to presence information that the watcher is interested in for a given presentity. *Id.* at 13, § 5.1. The Presence Server is also able to generate notifications to such watchers, providing them with the presence information of a presentity whenever it is modified. *Id.*

TS23.141 further explains that the Presence Server supports SIP-based communications for publishing presence information. *Id.* at 7, 13.

E. Obviousness in view of Oh

Petitioner contends that claims 1–3 and 6–11 are rendered obvious by Oh. Pet. 3, 10–29. For the reasons that follow, we are persuaded Petitioner has shown by a preponderance of the evidence that claims 1–3 and 6–11 would have been obvious over Oh.

1. Independent Claim 1

- a) “A method for providing distributed access services between a watcher and at least one personal presentity, the method comprising:”*

Petitioner contends Oh discloses a method for enabling a resident using a terminal to wirelessly communicate with a visitor via a video door phone, where the resident receives information indicating the presence of the visitor at the video door phone. Pet. 11–12, 17 (citing Ex. 1004, 4:40–56, 8:26–40, Figs. 1, 2). Petitioner contends that the video door phone is a personal presentity because it has presence information associated with it, i.e., information whether a visitor is present at the door. *Id.* at 12.

Patent Owner does not present arguments as to the preamble of claim 1. *See generally* PO Resp. Based on the entirety of the record and for the reasons explained by Petitioner, we determine that Petitioner has proved by a preponderance of the evidence that, to the extent the preamble is limiting, Oh teaches the preamble of claim 1.

b) *“receiving, at a computing device, an alert from a personal presentity;”*

Petitioner contends Oh teaches this limitation because Oh provides that, when a visitor activates a bell button on the video door phone, the video door phone sends a doorbell signal to the home gateway device. Pet. 11–12, 18 (citing Ex. 1004, 4:44–50, 6:15–18, 8:54–57, 10:27–32, 12:5–10, 13:42–45, 15:36–38, Figs. 1, 4–7).

Patent Owner does not present arguments as to this limitation. *See generally* PO Resp. Based on the entirety of the record and for the reasons explained by Petitioner, we determine that Petitioner has proved by a preponderance of the evidence that Oh teaches this limitation.

c) *“determining a current location of the watcher;”*

Petitioner contends Oh teaches this limitation because Oh discloses that the home gateway device determines the current location of the resident by determining the location of the resident’s wireless communication terminal, which the resident always carries. Pet. 12–13, 18 (citing Ex. 1004, 4:43–44, 5:1–4, 5:35–38, 6:27–34, 6:53–60, 8:26–33, 9:1–4, 9:45–48, 9:54–10:22, 10:35–40, 12:13–16, 13:50–53, 16:17–20, Figs. 3–7). In its Reply, Petitioner further contends that Oh broadly discloses “determining a location of a resident in real time” by “detecting a location of the resident’s wireless communication terminal.” Pet. Reply 10 (citing Ex. 1004, 4:43, 6:30–31, 6:57–60, 10:15–23). According to Petitioner,

Oh describes specific embodiments in which the location of the user’s wireless terminal is determined based on whether the home gateway device can communicate with the wireless terminal, or based on the IP address assigned to the wireless

terminal by the cellular network as the wireless terminal moves between coverage areas.

Id. (citing Ex. 1004, 7:20–27, 9:62–10:23, 10:36–47). Petitioner contends that Oh’s summary of the invention discloses “determining a location of a resident,” and that “Oh further discloses that this determination is made by detecting the physical location of the resident’s wireless terminal in real time for purposes of establishing communications between the resident and a visitor.” *Id.* at 11 (citing Ex. 1004, 6:27–31, 6:47–60; Ex. 1017 ¶¶ 95–98). Petitioner further contends that Oh also discloses that the physical location of the user’s wireless terminal is “dynamically obtained” based on the IP address assigned to the wireless terminal by packet data serving nodes (“PDSN”) within the cellular network. *Id.* at 12 (citing Ex. 1004, 7:19–27, 9:62–10:23; Ex. 1017 ¶¶ 102–104; Ex. 2002, 14:2–7, 22:10–14, 44:9–17). According to Petitioner, “[d]etermination of a geographically assigned IP address thus constitutes determining a physical ‘location of the user.’” *Id.* (citing Ex. 2009, 168).

Petitioner asserts that, in the district court litigation, Patent Owner’s position has been that the claims encompass determination of a current location of the user by using a “**cell phone tower, or Wi-Fi signals,**” and also by determining “whether a user is home or away.” Pet. Reply 15 (citing Ex. 1034 (Patent Owner’s infringement contentions), 6, 7, 9). According to Petitioner, those are binding admissions that Oh teaches this limitation. *Id.* at 15–16.

Lastly, Petitioner contends that a person of ordinary skill in the art would have modified Oh to use a global positioning system (“GPS”) to determine and store the location of the resident’s mobile device, and GPS is

a location service that determines the geographical location of a mobile device. Pet. Reply 16 (citing Ex. 1017 ¶ 106).

Patent Owner, relying on its proposed claim construction, argues that Oh does not teach “[determining or determine] a current location.” PO Resp. 30–33. Patent Owner contends that “Oh makes no mention of a location service, nor does Oh teach anything about a watcher/user’s geographic location.” *Id.* at 30. Patent Owner argues Oh “simply discloses the binary home or away assessment made by the terminal recognition modules.” *Id.* at 31. Patent Owner further contends that “Oh’s disclosure of the transmission of a message to a particular network address to determine if a device responds would not be viewed by a [person of ordinary skill in the art] as determining the location,” and that “Oh’s system is fully unaware of geographic location.” *Id.* at 31–33 (citing Ex. 2001 ¶¶ 197–202).

In its Sur-reply, Patent Owner further argues that “Oh’s system acts like a call routing system using a[] SIP proxy server in a gateway to determine how to route calls,” and “[t]his is far from using a location service to determine a user’s geographic location, as required by the claims of the ’739 patent, properly interpreted.” PO Sur-reply 16–18 (citing Ex. 1004, 4:16–36, 6:47–52, 9:62–10:22, 10:41–62, 12:16–35, 13:53–14:3, Fig. 3; Ex. 2001 ¶¶ 61, 120, 125, 127–130, 139–143, 149–152).⁹ Patent Owner reiterates that “[t]he Oh system never knows or cares about the geographic locations of any of its components—the home gateway, the wireless communication device, or the various visitor identifying and communicating

⁹ We consider Patent Owner’s citations to Exhibit 1001 to be an inadvertent error where Patent Owner intends to cite to Oh, which is Exhibit 1004. *See* PO Sur-reply 17–18.

terminals,” and that “[t]he decisions made by the gateway are fully based on IP addresses and whether the wireless communication terminal responds to a ping-like message.” *Id.* at 18–19 (citing Ex. 2001 ¶¶ 121, 130, 145–148, 152, 198–204).

Patent Owner’s arguments are based primarily on its proposed construction of “determining a location” as requiring the use of a location service to determine a geographic location. We do not adopt Patent Owner’s construction, and therefore, find those arguments unpersuasive. Under the proper construction of the term as including determining a *physical* location of a computing device associated with the user, we find Oh discloses this limitation. As Petitioner points out, Oh states in its “Summary of the Invention” that

[i]t is . . . an object of the present invention to provide an intelligent system for identifying a visitor and providing a communication service using a wireless communication terminal *by determining a location of a resident in real time* at a home gateway system when a visitor activates a bell of a video door phone connected to the home gateway system, *noticing a bell activation event to the resident* by connecting to a terminal capable of real-time communication such as a wireless communication terminal based on SIP when the resident is not home, and transmitting video signal to identify a visitor by viewing images of the visitor

Ex. 1004, 4:40–50 (emphasis added). Oh’s purpose in determining a location of the resident is to establish communications between the resident and a visitor. *Id.* at 6:27–31, 6:53–60. This is consistent with the invention claimed by the ’739 patent. *See, e.g.*, Ex. 1001, claim 1 (directed to a “method for providing distributed access services between a watcher and at least one personal presentity”).

Oh discloses using a request message to determine whether the user is home or away based on whether it receives a response from the user's wireless terminal. *See* Ex. 1004, 10:37–47, 12:16–24, 13:53–61, Fig. 4; *see also* PO Sur-reply 16–17. If the user's terminal responds, the user is determined to be at home, and if not, the user is determined to be away. *See* Ex. 1004, 10:48–62, 12:14–26, Figs. 4, 5. We agree with Petitioner that the user being located at home is a physical location of the user, and the user being located away from home is also a physical location of the user. Thus, Oh teaches determining a current location of the user.

Moreover, Oh discloses that, when the wireless terminal moves from one cellular area to another and receives a new IP address from a new PDSN, it “dynamically informs the newly received IP address to the home gateway device.” *See* Ex. 1004, 7:19–27, 9:62–10:23. We agree with Petitioner that using the geographically assigned IP address to determine the user's location also teaches determining a current location of the user.

Lastly, we are also persuaded that a person of ordinary skill in the art would have been motivated to modify Oh's system to determine and store GPS location data associated with the wireless communication terminal.¹⁰ Pet. 19; Pet. Reply 16 (citing Ex. 1017 ¶ 106). Mr. Rysavy testifies that “technology that used GPS to send an ‘alert’ when ‘the location of’ a cellular phone ‘enters or leaves [a] defined area’” was widely available at the time of

¹⁰ Although the Petition presents this contention with regard to the storing limitation (Pet. 19), we determine that the contention equally applies to the determining limitation given that that GPS location data must first be determined for it to be stored. *See* Pet. Reply 16 n.7 (citing *Arthrex, Inc. v. Smith & Nephew, Inc.*, 935 F.3d 1319, 1328 (Fed. Cir. 2019); *Sirona Dental Sys. GmbH v. Institut Straumann AG*, 892 F.3d 1349, 1356 (Fed. Cir. 2018)).

the claimed invention, and that a person of ordinary skill in the art would have found it obvious to take advantage of such GPS capabilities. Ex. 1017 ¶ 106 (citing Ex. 1016). He further testifies that a person of ordinary skill in the art would have understood that “such GPS capabilities could have been built into the wireless terminal device disclosed in Oh, and could readily have been used to report the location of that device to the home gateway device, which would store that location data, as claimed.” *Id.* We credit Mr. Rysavy’s testimony because it is supported by the cited evidence.¹¹

Patent Owner’s argument that “[t]here is nothing in Oh that suggests its system would have benefited from incorporation of resident geographic location information,” and that the “[l]ack of GPS-capability is not a shortcoming that a [person of ordinary skill in the art] would have recognized in Oh” is not persuasive. PO Resp. 35–36 (citing Ex. 2001 ¶ 204). Mr. Rysavy testifies that a person of ordinary skill in the art would have been motivated to take advantage of GPS capabilities already available in the cellular phone to report the location of the device when the phone entered or left a defined area, such as the resident’s home. Ex. 1017 ¶ 106 (citing Ex. 1016); *see also* Ex. 2002, 59:3–21, 60:9–11 (providing additional

¹¹ We disagree with Patent Owner that Petitioner was required to “identify [Exhibit] 1016 as among the prior art references upon which it bases either of its two asserted grounds of unpatentability,” in order to rely on it for purposes of its obviousness analysis. PO Resp. 34. Petitioner here relies on Exhibit 1016 as evidence that a skilled artisan would have known about GPS and been motivated to combine GPS information with Oh’s system. *See* Ex. 1017 ¶ 106 (testifying that this technology was “widely available in cellular phones prior to September 2006”). The Federal Circuit has found reliance on such evidence permissible even where it is not a basis for a petitioner’s asserted ground of unpatentability. *See Koninklijke Philips N.V. v. Google LLC*, 948 F.3d 1330, 1337 (Fed. Cir. 2020).

reasons why Oh would have benefited from incorporation of the resident's GPS information, such as allowing Oh's devices to work on other cellular networks or to providing more precise location information that could enable additional features in Oh's system). We credit Mr. Rysavy's testimony and find that Petitioner has provided sufficient reason why one of ordinary skill in the art would have combined GPS location information with Oh's system in the manner asserted by Petitioner. *See KSR*, 550 U.S. at 420 ("any need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed").

Patent Owner also argues that, because none of the references actually mention GPS, a person of ordinary skill in the art would not have "known enough about GPS to have the technical wherewithal to combine it with Oh." PO Resp. 34–35. But, as Mr. Rysavy testifies, GPS capabilities were already built into cellular phones, i.e., the wireless terminal device disclosed in Oh, and "could readily have been used to report the location of that device to the home gateway device." Ex. 1017 ¶ 106; *see also* Ex. 2002, 58:22–25 (testifying that "at the time GPS was commonly available in handsets, so taking advantage of that information would have been readily available," and "a very simple modification to make"). We find this testimony persuasive, and further, Patent Owner has provided no reason for us to conclude that such a modification would have been uniquely challenging or

otherwise beyond the skill level of an ordinarily a skilled artisan.¹² *See Leapfrog Enters., Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1161–62 (Fed. Cir. 2007) (explaining that Leapfrog had not presented evidence that the proposed modification was “uniquely challenging or difficult for one of ordinary skill in the art” or “represented an unobvious step over the prior art”).

Based on the entirety of the record, we determine that Petitioner has proved by a preponderance of the evidence that Oh teaches this claim limitation.

d) “*providing a notification associated with the alert to the watcher; and*”

Petitioner contends Oh teaches this limitation because Oh discloses that the home gateway device sends a notification of the bell activation event to a visitor identifying and communicating terminal, which presents the notification to the resident. Pet. 13–14, 18–19 (citing Ex. 1004, 4:44–48, 6:15–20, 6:34–65, 8:33–45, 12:36–40, 14:4–10, Figs. 4–6). For example, Petitioner contends, when the home gateway determines that the resident is away from home, Oh’s gateway sends the notification to the resident’s wireless terminal if no other terminal has been registered to receive such notifications. *Id.* at 13–14 (citing Ex. 1004, 9:38–40, 12:24–35, 13:62–14:3).

Patent Owner does not present arguments as to this limitation. *See generally* PO Resp. Based on the entirety of the record and for the reasons

¹² To the extent Patent Owner’s argument is directed at physically combining GPS capabilities into Oh’s system, Petitioner is not required to make such a showing as part of its obviousness ground. *See, e.g., In re Mouttet*, 686 F.3d 1322, 1332 (Fed. Cir. 2012).

explained by Petitioner, we determine that Petitioner has proved by a preponderance of the evidence that Oh teaches this limitation.

e) “*storing data related to a current location of the watcher.*”

Petitioner contends Oh teaches or at least suggests this limitation because Oh provides that the home gateway device stores location information of the wireless communication terminal, which the resident always carries. Pet. 12–13, 19–20 (citing Ex. 1004, 5:1–6, 6:29–34, 6:47–52, 7:19–25, 9:5–8, 9:54–10:22, 12:27–35, Fig. 3). Petitioner further contends that a person of ordinary skill in the art “would have recognized that the home gateway device could readily have been modified to store GPS location data associated with the wireless communication terminal.” *Id.* at 19 (citing Ex. 1017 ¶ 106).

Patent Owner argues that “Oh does not teach the use of a location service to obtain the watcher’s geographic location information,” and therefore, “does not do anything with ‘current location’ information, let alone ‘store’ it.” PO Resp. 33. Patent Owner further argues that Oh only discloses contacting the proper terminal based on its determination that a resident is or is not at home, and does not disclose storing that information. *Id.* at 33–34 (citing Ex. 1004, 1:19–22; Ex. 2001 ¶ 203). Patent Owner also argues that Petitioner fails to explain a rationale for modifying Oh to incorporate GPS technology. *Id.* at 34–36.

For the reasons discussed above with regard to the determining limitation (*see supra* § III.E.1.c), we also do not find Patent Owner’s arguments persuasive as to this storing limitation. Oh discloses that when user’s wireless device moves from packet data service node to another within the cellular network, the device “dynamically informs the newly

received IP address to the home gateway device.” Ex. 1004, 7:19–27; *see also id.* at 9:62–10:18 (“After receiving the new IP address, the wireless communication terminal 30-1 transmits a contact address update request message (SIP REGISTER: update) to the home gateway device 20 by putting the new IP address in the contact address update request message at Step S307.” (referring to Fig. 3)). Oh further discloses that “the home gateway device 20 *changes the contact address* of the wireless communication terminal 30-1 and transmits a response message to the wireless communication terminal 30-1 at step S308.” *Id.* at 10:18–22 (emphasis added). Oh discloses storing the geographically assigned IP address, and therefore, teaches the claim limitation.

For the reasons discussed above with regard to the determining limitation (*see supra* § III.E.1.c), we are also persuaded that a person of ordinary skill in the art would have found it obvious to modify Oh’s home gateway to determine and store GPS location data associated with the wireless communication terminal. *See* Ex. 1017 ¶ 106.

Based on the entirety of the record, we determine that Petitioner has proved by a preponderance of the evidence that Oh teaches this claim limitation.

f) Conclusion as to Claim 1

We have reviewed the parties’ evidence and argument, and based on the complete record, we find that Petitioner has shown by a preponderance of the evidence that Oh teaches each of the limitations of claim 1.

2. Independent Claim 8

Claim 8 recites “[a] computer-readable storage medium storing computer executable instructions for providing a monitoring and entry

system presence service, the instructions configured to perform at least the following” operations: “in response to a trigger event, receiving an indication signal from an interface device,” “determining a current location of a user,” “providing the user a notification associated with the trigger event;” and “activating an application associated with the monitoring and entry system presence service.” Ex. 1001, 10:49–59.

Petitioner contends that Oh teaches or suggests each of these limitations and provides an element-by-element analysis. Pet. 11–16, 24–26. Petitioner contends that Oh’s home gateway device stores computer-executable instructions for a service for identifying and communicating with a visitor to a property. *Id.* at 24–25 (citing Ex. 1004, 4:44–48, 4:62–66, 6:15–22, 8:33–9:21, 16:1–9, 16:26–30, Figs. 1, 2). Petitioner further contends that Oh’s video door phone teaches an “interface device” because it provides an interface between the visitor and Oh’s home gateway. *Id.* at 12. According to Petitioner, the doorbell signal received by the home gateway is an “indication signal” received in response to the bell activation event, i.e., a “trigger event.” *Id.* at 12, 25 (citing Ex. 1004, 4:44–50, 6:15–18, 8:54–57, 10:27–32, 12:5–10, 13:42–45, 15:36–39, Figs. 1, 4–7). Petitioner further contends that Oh teaches activating an application to provide (a) video of the visitor captured by the video door phone to the resident, (b) voice communication between the visitor and the resident through the video door phone, (c) an image of the visitor to the resident, or (d) causing a recording of the visitor’s voice and image to be transmitted to the resident. *Id.* at 26 (citing Ex. 1017 ¶ 135). For the remaining limitations of claim 8, Petitioner relies on its arguments and evidence relating to claim 1. *Id.* at 25–26.

Patent Owner does not present separate arguments for claim 8. *See generally* PO Resp. For the reasons discussed above with regard to claim 1, and because Petitioner sufficiently shows that Oh teaches the remaining limitations of claim 8, we determine that Petitioner has established by a preponderance of the evidence that Oh teaches each of the limitations of claim 8.

3. *Dependent Claim 2*

Dependent claim 2 adds to claim 1 the further step of “providing the watcher a plurality of actions to select in response to the alert.” Ex. 1001, 10:24–26. Petitioner argues that dependent claim 2 would have been obvious in view of Oh. Pet. 14–15, 20–21. Petitioner contends that Oh discloses providing the resident, in response to a visitor activating the doorbell, the options of (a) allowing a connection to communicate with the visitor, (b) disallowing such connection, or (c) reproducing a recording of the visitor’s voice and image. *Id.* at 20–21 (citing Ex. 1004, 5:38–42, 5:64–6:2, 6:10–14, 6:20–26, 6:43–45, 7:18–19, 9:12–21, 11:1–49, 12:41–13:20, 14:31–64, 15:52–67, Figs. 4–7; Ex. 1017 ¶ 110); *see also id.* at 15 (citing, *inter alia*, Ex. 1004, 8:37–40, 8:45–48, 10:63–11:7, 12:41–54, 14:4–19, 15:22–67, Fig. 7). Petitioner additionally contends that a person of ordinary skill in the art would have found it obvious from Oh’s disclosure to provide the user with a plurality of actions to select from in response to an alert. *Id.* at 20 (citing Ex. 1017 ¶ 110).

Patent Owner responds that “Oh merely contemplates the user selecting a device to use for communicating with the visitor,” and that is not a plurality of “actions” as required by claim 2. PO Resp. 40–41 (citing Ex. 1004, 8:33–40; 11:12; 11:7–10, 12:35–40, 13:61–14:19, Fig. 1). Even

if, as alleged by Petitioner, the act of allowing a connection to communicate in real time constitutes a “selection of an action,” that single action, by itself, Patent Owner argues, does not constitute selection of an option from a *plurality* of available options. *Id.* at 42. Patent Owner contends that disallowing a connection “clearly constitutes *inaction*, and not an ‘action’ as required by claim 2,” and that Oh does not disclose an action that results in disallowing a connection. *Id.* at 42–43. As to Petitioner’s third alleged action for this limitation, Patent Owner argues that reproducing a recording of the visitor is “equally inapplicable as a selectable action” because claim 2 explicitly requires that the “selection” occur *in response to* the alert and Oh teaches reproducing a recording when the resident is unable to use a real-time identifying and communicating function. *Id.* at 43–44 (citing Ex. 1004, 4:57–61, 6:23–26). Patent Owner thus contends that, “at best, Oh only discloses a single ‘action’ for a user to select in response to the alert: selection of a communicating terminal to allow a visitor communication.” *Id.* at 44.

Petitioner persuasively shows that Oh teaches or suggests this limitation. First, as Patent Owner acknowledges, Oh discloses allowing a connection to communicate with a visitor in real time in response to a doorbell notification, which constitutes a selection of an action in response to an alert. *See, e.g.*, Ex. 1004, 11:1–49, 14:11–30. Second, we agree with Petitioner that Oh’s disclosure of providing a user the option to reproduce recorded audio and video of the visitor teaches providing another action that the user may select in response to an alert. *See* Pet. 15 (citing, *inter alia*, Ex. 1004, 15:22–67, Fig. 7), 21 (citing, *inter alia*, Ex. 1004, 6:10–14,

15:52–67, Fig. 7); Pet. Reply 24–25 (citing Ex. 1004, 15:36–54; Ex. 1032 ¶¶ 62–68).

According to the ’739 patent specification, “obtain[ing] a still image or video of the person at the door” is one of the selections that may be provided to the user in response to a doorbell notification. *See* Ex. 1001, 7:4–9. Oh discloses that, if a recording function is set and a visitor activates the door bell, the video door phone device “outputs a recorded guide message” and “receives voice and images of the visitor,” which are then stored at the home gateway device. Ex. 1004, 15:21–51. Oh further discloses a “reproduce button” that the resident can select to view the recorded video. *Id.* at 15:51–67. Thus, Oh teaches providing the resident with a reproduce button to obtain and view video of the visitor, which is an action provided in response to the alert.

Patent Owner argues that Oh’s reproduce functionality is not provided “in response to” the doorbell alert but instead is *only* available when the resident is unable to use the voice communication function. PO Resp. 43–44. Patent Owner explains that “[p]layback, as is the case with voicemail on a traditional phone, is intended to be invoked at a later time and not in response to the doorbell alert itself.” *Id.* at 44. Patent Owner therefore argues that the reproduce “action” is not provided in the manner required by claim 2. We disagree.

Claim 2 merely requires “providing the watcher a plurality of actions to select in response to the alert.” Ex. 1001, 10:24–26. As Petitioner points out, there is no temporal limitation in the claim that requires the plurality of actions to be provided to the watcher contemporaneously. Pet. Reply 24. The claim merely requires that the action be provided “in response to the

alert,” and Oh’s watcher is given the option to play back recorded video of the visitor only “*if* a visitor activates” the doorbell. *Id.* (citing Ex. 1004, 15:36–54; Ex. 1032 ¶ 62). We are therefore persuaded that the reproduce functionality necessarily is provided to the user “in response to” the doorbell alert and teaches one more “action” required by claim 2.

Alternatively, we are persuaded by Petitioner’s argument that, based on Oh’s disclosure, an ordinarily skilled artisan would have found it obvious to provide the resident with multiple options in response to the alert. Pet. 20 (citing Ex. 1017 ¶ 110). Mr. Rysavy testifies that in view of Oh’s express disclosure of providing the resident with the option of allowing a connection in response to a notification of a bell activation event, a person of ordinary skill in the art would have found it obvious to provide the resident with actions to select, which may include allowing or disallowing a communication connection with the visitor, or reproducing a recording of the visitor. Ex. 1017 ¶ 110; Ex. 1032 ¶ 67. He further testifies a person of ordinary skill in the art would have recognized the benefit of facilitating the resident’s selection from among multiple actions by providing the resident “a plurality of actions to select” in response to a doorbell event. Ex. 1032 ¶ 68. We find Mr. Rysavy’s testimony credible because it is based on Oh’s express disclosure of one selectable action and a straightforward modification of Oh’s system. And, contrary to Dr. Shoemake’s testimony, we find nothing in Oh that requires “that a user have a *single* type of communication with the visitor,” or that “communication is fixed by Oh.” Ex. 2001 ¶ 221 (citing Ex. 1004, 11:1–3, 11:18–49, 16:26–29); *see also* Ex. 1032 ¶ 67.

Because Oh teaches or fairly suggests at least two actions provided to the user to select from in response to the alert, we determine that Petitioner has established by a preponderance of the evidence that Oh teaches the limitation recited in claim 2.

4. Dependent Claims 3, 6, 7, and 9–11

Petitioner argues that dependent claims 3, 6, 7, and 9–11 would have been obvious in view of Oh. Pet. 11–16, 20–24, 26–29. Petitioner provides analysis detailing where it contends Oh teaches or suggests each of the additional limitations of dependent claims 3, 6, 7, and 9–11. *Id.*

Claim 3 depends from claim 2 and recites the further step of “activating an application in response to a selection by the watcher, wherein the application includes at least one of: a voice communication through the personal presentity, a video communication through the personal presentity, an image acquisition application, and an electronic control application.” Ex. 1001, 10:27–33. Petitioner contends that Oh teaches the additional limitation of claim 3 because it discloses activating an application to provide (a) video of the visitor captured by the video door phone to resident, (b) voice communication between the visitor and resident through the video door phone, (c) an image of the visitor to the resident, or (d) a recording of the visitor’s voice and image to be transmitted to the resident. Pet. 21–23 (citing Ex. 1004, 5:38–42, 5:64–6:2, 6:20–22, 7:18–19, 9:12–19, 11:18–49, 12:41–13:20, 14:31–64, 15:52–67 Figs. 4–7; Ex. 1017 ¶ 116); *see also id.* at 14–16. Petitioner further contends that it would have been obvious to modify Oh to allow the resident to “buzz” the visitor in, which Oh describes as prior art. *Id.* at 22 (citing Ex. 1004, 3:8–11; Ex. 1017 ¶ 116).

Claim 6 depends from claim 1 and further recites “wherein the personal presentity includes at least one of: a building entry system, a security monitoring system, and an equipment monitoring system.” Ex. 1001, 10:41–43. Petitioner contends that Oh teaches the additional limitation of claim 6 because it discloses the video door phone includes functionality for identifying a visitor based on the visitor’s voice and image, and therefore, is a “security monitoring system” and a “building entry system.” Pet. 23–24 (citing Ex. 1004, 3:8–11, 4:62–66, 8:33–45, 16:26–30; Ex. 1017 ¶ 120); *see also id.* at 11–12.

Claim 7 depends from claim 1 and recites the further step of, “if the watcher is not available, performing at least one of the following: providing a notification associated with the alert to another watcher and executing a predetermined response action.” Ex. 1001, 10:44–48. Petitioner contends that Oh teaches the additional limitation of claim 7 because it discloses that, if the resident is not available, the home gateway device executes a predetermined response action such as recording images and voices of the visitor for later use by the resident. Pet. 24 (citing Ex. 1004, 6:10–14, 6:22–26, 6:43–45, 8:45–48, 15:52–67, Fig. 7); *see also id.* at 16.

Claim 9 depends from claim 8 and further recites “wherein the instructions further comprise: selecting a client application and a client device to provide the notification and to present the plurality of actions to the user based on the current location of the user.” Ex. 1001, 10:60–64. Petitioner contends that Oh teaches the additional limitation of claim 9 because it discloses that the home gateway determines that the resident is away from home and selects a visitor identifying and communicating terminal or the wireless communication terminal to provide the notification

to the resident and present the resident with options, such as allowing a connection for communicating with the visitor or pressing button to reproduce a recording of the visitor's video. Pet. 26–27 (citing Ex. 1004, 9:22–27, 12:24–40, 13:62–14:10, Figs. 5, 6; Pet. 20–21); *see also id.* at 14–16.

Claim 10 depends from claim 9 and further recites “wherein the user is a watcher and the client device is a personal presentity.” Ex. 1001, 10:65–67. Petitioner contends that Oh teaches the additional limitation of claim 10 because it discloses that resident (“watcher”) receives presence information and because its wireless communication terminal (“personal presentity”) is used to determine the location of the resident and is, therefore, associated with the presence of the resident being either at home or away from home. Pet. 28 (citing Ex. 1004, 4:43–49, 5:1–4, 6:15–20, 6:27–34, 6:53–65, 8:26–40, 10:35–40, 12:13–16, 13:50–53, 16:17–20, Figs. 3–7).

Claim 11 depends from claim 10 and further recites “wherein the application includes at least one of: a voice communication through the personal presentity, a video communication through the personal presentity, an image acquisition application, and an electronic control application.” Ex. 1001, 11:1–5. Petitioner contends that Oh teaches the additional limitation of claim 11 because it discloses that the home gateway device provides (a) video of the visitor captured by the video door phone to resident, (b) voice communication between the visitor and resident through the video door phone, (c) an image of the visitor to the resident, and (d) a reproduce button to control playback of a recording of the visitor's voice and image. Pet. 28–29 (citing Ex. 1004, 3:8–11; Ex. 1017 ¶ 150) (also

incorporating its contentions for claim 3); *see also id.* at 14–16. Petitioner further contends that it would have been obvious to modify Oh to allow the resident to “buzz” the visitor in, which Oh describes as prior art. *Id.* at 22 (citing Ex. 1004, 3:8–11; Ex. 1017 ¶ 150).

Patent Owner does not present separate argument for claims 3, 6, 7, and 9–11. *See generally* PO Resp. We have reviewed Petitioner’s evidence and argument and based on the complete record, we find that Petitioner has shown by a preponderance of the evidence that Oh teaches each of the limitations of claims 3, 6, 7, and 9–11.

5. *Weighing the Graham Factors*

“Once all relevant facts are found, the ultimate legal determination [of obviousness] involves the weighing of the fact findings to conclude whether the claimed combination would have been obvious to an ordinary artisan.” *Arctic Cat Inc. v. Bombardier Recreational Prods. Inc.*, 876 F.3d 1350, 1361 (Fed. Cir. 2017). On balance, considering the record before us, Petitioner has shown, by a preponderance of the evidence, that Oh would have rendered the subject matter of claims 1–3 and 6–11 obvious to one of ordinary skill in the art at the time of the invention.

F. *Anticipation Based on Oh*

Petitioner also contends that claims 1–3 and 6–11 are anticipated by Oh. Pet. 3, 10–29. We do not reach this alleged ground of unpatentability of claims 1 and 10 because we determine that Petitioner has proved by a preponderance of the evidence that claims 1–3 and 6–11 would have been obvious over Oh. *Cf. In re Gleave*, 560 F.3d 1331, 1338 (Fed. Cir. 2009) (not reaching other grounds of unpatentability after affirming a ground based on anticipation); *see also Beloit Corp. v. Valmet Oy*, 742 F.2d 1421, 1423

(Fed. Cir. 1984) (explaining that an administrative agency is at liberty to reach a decision based on a dispositive issue because doing so “can not only save the parties, the [agency], and [the reviewing] court unnecessary cost and effort,” but “can greatly ease the burden on [an agency] commonly faced with a . . . proceeding involving numerous complex issues and required by statute to reach its conclusion within rigid time limits”).

G. Obviousness over Oh, Forbes, and TS23.141

Petitioner contends that claims 4, 5, and 12–17 are unpatentable under 35 U.S.C. § 103 as obvious over the combination of Oh, Forbes, and TS23.141. Pet. 29–57. For the reasons that follow, we are persuaded that Petitioner has shown by a preponderance of the evidence that claims 4, 5, 12–17 would have been obvious over the combination of Oh, Forbes, and TS23.141.

1. Independent Claim 12

a) “A system for providing distributed access services between a watcher and a personal presentity, comprising:”

Petitioner relies on its contentions for claim 1’s preamble to argue that Oh discloses a system for providing distributed access services between a watcher and a personal presentity. Pet. 47. Petitioner contends that the resident in Oh is a “watcher” because the resident receives notifications indicating the presence of a visitor at the video door phone. *Id.* Petitioner further contends that the video door phone is a “personal presentity” because it had presence information for a person associated with it (i.e., a visitor at the video door phone). *Id.*

Patent Owner does not present arguments as to the preamble of claim 12. *See generally* PO Resp. Based on the entirety of the record and for the

reasons explained by Petitioner, we determine that Petitioner has proved by a preponderance of the evidence that Oh teaches the preamble of claim 12.

- b) *“an interface device configured to: detect a trigger event; and provide a notification associated with the trigger event, wherein the interface device acts as the personal presentity;”*

Petitioner contends Oh teaches these limitations because Oh discloses a video door phone, i.e., an interface device that detects a visitor activating a doorbell button and sends a doorbell signal to the home gateway device indicating the bell activation event. Pet. 47 (citing Ex. 1004, 4:44–50, 6:15–18, 8:54–57, 10:27–33, 12:5–10, 15:36–39, Fig. 4–7). Petitioner further contends that Oh discloses that the video door phone has presence information for the visitor associated with activating the doorbell and, therefore, acts as a “personal presentity.” *Id.* at 47–48 (citing Ex. 1004, 4:44–50, 6:15–18, 8:54–57, 10:27–33, 12:5–10, 15:36–39, Fig. 4–7); *see also id.* at 33–34.

Patent Owner does not present arguments as to this limitation. *See generally* PO Resp. Based on the entirety of the record and for the reasons explained by Petitioner, we determine that Petitioner has proved by a preponderance of the evidence that Oh teaches this limitation of claim 12.

- c) *“a presentity application configured cause the system to: determine a current location of the watcher;”*

Petitioner relies on its contentions for claim 1’s substantively identical determining limitation to argue that Oh discloses determining a current location of the watcher, and that Oh discloses this functionality is performed by components of the home gateway device, which can be embodied as a program on a computer. Pet. 48 (citing Ex. 1004, 8:54–9:21, 16:1–9) (referring to Petitioner’s contentions for claim 1); *see also id.* at 34.

Aside from its argument relating to “determin[ing] a current location,” which we address above, Patent Owner does not present separate arguments as to this limitation. *See generally* PO Resp. Based on the entirety of the record and for the reasons explained by Petitioner, we determine that Petitioner has proved by a preponderance of the evidence that Oh teaches this limitation of claim 12.

d) “*provide the current location of the watcher to an aggregate presence service; and*”

Petitioner contends that Forbes discloses a presence server that maintains the presence status of its PTT clients and publishes that information to other PTT clients. Pet. 48–49 (citing Ex. 1005, 2:44–51, 3:67–4:8, 5:18–24, 7:59–60, Figs. 1, 3, 4). Petitioner contends that TS23.141 similarly discloses a presence server for receiving and providing presence information as well as information regarding the watcher. *Id.* (citing Ex. 1006, 12–14, 21; Ex. 1017 ¶¶ 175–180); *see also id.* at 34–35 (citing Ex. 1005, 3:67–4:8, 5:18–28, Fig. 1, 3; Ex. 1006, 13–14, 21). Petitioner contends that “the presence server disclosed in Forbes, modified as in TS23.141 to receive watcher information” teaches the claimed “aggregate presence service.” *Id.* at 35. In its Reply, Petitioner further contends that “[t]he presence service of TS23.141 expressly receives ‘network provided location’ information, which includes a device’s ‘[l]ast known’ position on a cellular network ‘and/or geographic coordinates.’” Pet. Reply 21–22 (citing Ex. 1006, 21; Ex. 2001 ¶¶ 100–101; Ex. 1033, 111:2–112:10; Ex. 1032 ¶¶ 52–55).

Patent Owner, relying on its claim construction positions, argues that Oh does not teach “providing the current location,” and that the combination

of Oh, Forbes, and TS 23.141 fails to teach an “aggregate presence service” that includes location information obtained from a location service. PO Resp. 37–38.

We do not adopt Patent Owner’s proposed claim constructions for either term, and therefore, we find Patent Owner’s arguments unpersuasive. As discussed above, under the proper construction, Oh discloses determining a current location. *See supra* §§ III.C.1.b., III.E.1.c. Similarly, we disagree with Patent Owner that an “aggregate presence service” requires location information obtained from a location service. *See supra* §§ III.C.2.b.

Based on the entirety of the record and for the reasons explained by Petitioner, we determine that Petitioner has proved by a preponderance of the evidence that Oh teaches this limitation of claim 12.

- e) *“in response to receiving a watcher selection from the aggregate presence service, facilitate execution of the selected action by activating at least one of a plurality of client applications associated with the personal presentity.”*

Petitioner contends Oh teaches receiving a selection made by the resident from options such as allowing a connection for communicating with the visitor in real time or transmitting a recording of visitor’s image and voice, and sending that selection to the home gateway device as well as executing the resident’s selected action on the resident’s terminal. Pet. 49–51 (citing Ex. 1004, 4:62–5:17, 5:38–42, 5:64–6:2, 6:10–14, 6:20–26, 6:43–45, 7:18–19, 8:37–40, 8:54–9:21, 11:1–7, 11:18–49, 12:41–13:20, 14:11–19, 14:31–64, 16:1–9, Figs. 4–6). Petitioner contends that Forbes and TS23.141 both disclose a presence server that receives and publishes information regarding the availability and location of users, and that it would have been obvious to an ordinarily skilled artisan to modify Oh such that the home

gateway device receives watcher information, which could have included a watcher selection, from the presence server. *Id.* at 50–51 (citing Ex. 1005, 3:67–4:8, 5:18–24, Fig. 4; Ex. 1017 ¶¶ 181–185); *see also id.* at 36–37 (citing Ex. 1005, 3:67–4:8, 5:18–20; Ex. 1006, 13–14; Ex. 1017 ¶¶ 181–185).

Patent Owner does not present separate arguments as to this limitation. *See generally* PO Resp. Based on the entirety of the record and for the reasons explained by Petitioner, we determine that Petitioner has proved by a preponderance of the evidence that the combination of Oh, Forbes, and TS23.141 teaches this limitation of claim 12.

f) Motivation to Combine Oh with Forbes and TS23.141

Petitioner contends that an ordinarily skilled artisan would have been motivated to combine the teachings of Oh with Forbes and TS23.141. Pet. 40–43. Petitioner contends that a person of ordinary skill in the art would have considered the teachings of one reference applicable to the other two given the similarities between the three references, such as providing notifications indicating the presence of a person, providing images of the person, and facilitating IP-based voice communication with the person. *Id.* at 40–41 (citing Ex. 1004, 5:18–45, 11:32–49; Ex. 1005, 1:33–39, 1:50–66, 5:18–39; Ex. 1006, 13, 20, 27–30). Petitioner further contends that all three references disclose the use of 3G cellular networks as well as the use of SIP as a preferred communication protocol, and Oh and Forbes teach the use of RTP for transmitting voice data packets. *Id.* at 41 (citing Ex. 1004, 1:29–37, 4:16–24, 6:45–53, 8:16–48, 9:22–26, 10:27–11:65; Ex. 1005, 2:54–58, 3:2–7, 3:64–65, 4:37–53; Ex. 1006, 8, 13, 19–24). Petitioner argues that a person of ordinary skill in the art “would naturally look to incorporate

features of the Forbes system and TS23.141 into the system disclosed by Oh.” *Id.* (citing Ex. 1017 ¶¶ 217–220.)

Petitioner contends that both Forbes and TS23.141 use the IMS infrastructure,¹³ and a person of ordinary skill in the art would have looked to incorporate those features into Oh’s system because that would have provided the benefits of facilitating communications via the well-known IMS infrastructure and utilizing a “presence server” to manage presence information for the system. *Id.* at 41–42 (citing Ex. 1004, 16:29–30; Ex. 1017 ¶¶ 217–220). According to Petitioner, communication of presence information as well as voice and other data via the IMS infrastructure, as disclosed in Forbes and TS23.141, would have resulted in the expected benefit of providing access independent, IP-based multimedia services, which allowed the system to communicate with any number of IP-based terminal devices and applications, including push-to-talk cellular, VoIP, video streaming, email, and instant messaging. *Id.* at 42 (citing Ex. 1005, 3:2–7; Ex. 1017 ¶ 221). Petitioner further contends that a skilled artisan would have recognized that, similar to Oh, the “presence server” disclosed in Forbes and TS23.141 could have managed presence information regarding the location of a resident, and “would have recognized the expected benefit of using a presence server to manage presence information from multiple monitored properties.” *Id.* at 42–43 (citing Ex. 1017 ¶ 222).

¹³ Petitioner asserts that 3GPP, a collaboration among telecommunications standards organizations for standards pertaining to 3G wireless networks, developed IMS in 2001 to provide a standard, IP-based architecture to implement multimedia services, such as Voice of IP (“VoIP”) on 3G wireless networks. Pet. 30 (citing Ex. 1017 ¶¶ 47–52).

Petitioner argues that implementing the teachings of Forbes and TS23.141 in Oh's system would have been technically straightforward for an ordinarily skilled artisan because all three references disclose IP-based systems and use the same communications protocols. Pet. 43 (citing Ex. 1005, 4:34–36; Ex. 1005, 3:2–7; Ex. 1006, 8–24; Ex. 1017 ¶ 223).

(1) Patent Owner's Response

Patent Owner responds that Petitioner's reasons to combine the teachings of Oh with Forbes and TS23.141 are "are legally deficient [and] factually incorrect." See PO Resp. 38–40. Patent Owner argues that the alleged similarities among Oh, Forbes, and TS 23.141 cannot provide a motivation to combine and that Mr. Rysavy's testimony overstates the alleged similarities. *Id.* at 39 citing (Ex. 1017 ¶¶ 179–180, 217–220). Patent Owner argues that Mr. Rysavy testifies that Oh, Forbes, and TS 23.141 "all operate on 3G cellular networks and thus were based on the same networking technology," but he provides no evidentiary support for this statement. *Id.* (citing Ex. 1017 ¶ 218). Oh, Patent Owner argues, "specifically differentiates itself from any specific type of network technology, much less a 3G," and "distinguishes itself from prior art that was dependent on heterogenous network protocols." *Id.* at 39–40 (citing Ex. 1004, 3:18–24; Ex. 2001 ¶ 211). Patent Owner further argues that Petitioner and Mr. Rysavy fail to provide a "rationale for why, or how, a [person of ordinary skill in the art] would have modified Oh to add the presence server of Forbes and TS 23.141." *Id.* at 40 (citing Ex. 1017 ¶ 221; Ex. 2001 ¶ 212).

Patent Owner also argues that there is no evidence as to the ease with which a person of ordinary skill in the art could have added IMS to Oh, nor

is there any evidence as to why such person would do so. PO Resp. 46 (citing Ex. 1017 ¶¶ 156, 202, 210). Patent Owner contends that “[t]he primary benefit of using IMS would have been the advantages of an all-IP system, but Oh was already an all-IP system,” and that Petitioner “identifies no shortcoming in Oh that would have caused a POSITA to look to IMS.” *Id.* (citing Ex. 2001 ¶ 223).

(2) *Petitioner’s Reply*

Petitioner responds that Patent Owner’s arguments “ignore[] Mr. Rysavy’s detailed explanation that the addition of a presence server would have enabled the Oh system to ‘*conveniently support multiple subscribers*’ and ‘manage presence information *from multiple monitored properties*.’” Pet. Reply 22 (citing Ex. 1017 ¶¶ 221–222). Petitioner contends that Oh specifically contemplates that a user might have multiple “properties.” *Id.* (citing Ex. 1004, 16:29–30; Ex. 1032 ¶ 70). Petitioner further argues that Patent Owner is incorrect about Oh differentiating itself from specific types of network technology because “Oh specifically identifies CDMA2000 as a 3G network on which it was designed to operate.” *Id.* at 22–23 (citing Ex. 1004, 4:19–22, 6:47–52; Ex. 1017 ¶¶ 44, 218; Ex. 1032 ¶¶ 71–72).

As to adding IMS to Oh’s system, Petitioner contends that Mr. Rysavy “explained the rationale at length—including that IMS would facilitate the interoperability of the Oh system and its multiple types of terminal devices—and explained how networking commonalities made this combination ‘technically straightforward.’” Pet. Reply 26 (citing Ex. 1017 ¶¶ 48, 202–203, 223). Petitioner argues IMS is IP-based and “improves on existing IP technology by facilitating the interoperability of multimedia services for devices operating on different types of networks (including

IP-based networks), like those disclosed in Oh.” *Id.* (citing Ex. 1001, 6:12–19; Ex. 1032 ¶¶ 73–76).

(3) Our Analysis

On the complete record, Petitioner has shown by a preponderance of the evidence that an ordinarily skilled artisan would have had sufficient reasons to combine the teachings of Oh with those of Forbes and TS23.141, in the manner proposed by Petitioner, with a reasonable expectation of success. *See* Pet. 40–43; Pet. Reply 22–23, 26; Ex. 1017 ¶¶ 217–224; Ex. 1032 ¶¶ 69–76.

Petitioner explains that implementing the teachings of Forbes and TS23.141 in Oh’s system would have resulted in the benefits of using the IMS infrastructure as well as utilizing a “presence server” to manage presence information from monitoring systems installed in any number of properties. Pet. 41–42. Mr. Rysavy testifies:

Communication of presence information and voice and other data via the IMS infrastructure, as disclosed in Forbes and TS23.141, would have provided the expected benefit of providing “access independent, IP-based multi-media services,” which allowed the system to communicate with any number of IP-based terminal devices and applications, including push-to-talk cellular, VoIP, video streaming, email and instant messaging.

Ex. 1017 ¶ 221. He further testifies that a person of ordinary skill in the art would have recognized that IMS’s “access independent” infrastructure would have facilitated the interconnection of devices such as PDAs, web-pads, and PCs disclosed in Oh. *Id.* He also testifies that an ordinarily skilled artisan would have recognized that Oh’s system could benefit from the “presence server” disclosed in Forbes and TS23.141 to manage presence

information from multiple monitored properties. *Id.* ¶ 222; *see also* Ex. 1032 ¶¶ 71–72 (explaining how the proposed combination would work). Mr. Rysavy’s testimony persuasively demonstrates that an ordinarily skilled artisan would have been motivated to apply the teachings of Forbes and TS23.141 to Oh’s system.

We disagree with Patent Owner that “Oh specifically differentiates itself from any specific type of network technology, much less a 3G [one].” PO Resp. 39–40. Oh discloses that “the wireless communication terminal must be capable of packet network based high-speed data communication,” and specifically identifies “CDMA-2000 1x EV-DO/EV-DV or IMT-2000 [a]s a next generation mobile communication service providing an IP mobility of a terminal.” *See* Ex. 1004, 4:16–22. Mr. Rysavy testifies that CDMA2000 refers to a 3G network and that “the PDSN technology described in Oh was specific to the CDMA2000 3G network.” *See* Ex. 1032 ¶ 72. We therefore find Mr. Rysavy’s testimony that Oh, Forbes, and TS23.141 all operate on 3G cellular networks to be based on the express disclosure in those references.¹⁴

Next, Patent Owner’s argument that Petitioner’s proposed combination of IMS with Oh fails because Oh itself was *already* an all-IP system ignores that Petitioner relies on the benefits that IMS brings to an IP-based system, i.e., benefits that are not disclosed in Oh. Mr. Rysavy testifies that “IMS provides important interoperability advantages to

¹⁴ Contrary to Patent Owner’s assertion (PO Resp. 40), the prior art that Oh distinguishes itself from is one that uses telephone numbers and call signaling, not 3G networks that support IP mobility. Ex. 1004, 3:4–25, 4:16–22.

IP-based systems, including allowing them to (for example) interface with various access technologies.” Ex. 1032 ¶ 76 (citing Ex 1008, 14). We credit Mr. Rysavy’s testimony because it is consistent with the cited evidence, including the ’739 patent itself, which states that

IMS also provides *access to IP based services independent of the underlying access technology (mobile or fixed)*. IMS applications and drivers may include voice telephony (VoIP), video telephony, web browsing, presence-based services, push-to media services (e.g. push-to-talk, push-to-view, push-to-video, etc.), group chat, instant messaging, multimedia conferencing, content sharing/data transfer, and the like.

Ex. 1001, 6:12–19 (emphasis added); Ex. 1032 ¶ 76. Patent Owner’s argument therefore ignores the benefits of using IMS in an all-IP system (like Oh’s) that the ’739 patent itself acknowledges.

As to Patent Owner’s arguments relating to a reasonable expectation of success (PO Resp. 40, 46), Mr. Rysavy testifies that IMS uses SIP signaling as well as RTP to transmit voice data via IP, and “implementing the Oh system using the IMS infrastructure would merely have required adapting Oh’s existing communications protocols to use the IMS infrastructure.” Ex. 1017 ¶ 223 (citing Ex. 1005, 3:2–7, 4:34–36; Ex. 1006, 8–24); Pet. 43. We credit Mr. Rysavy’s testimony because it is supported by the cited evidence. To the extent Patent Owner’s argument is directed at physically combining a presence server or IMS into Oh’s system, Petitioner is not required to make such a showing as part of its obviousness ground. *See In re Mouttet*, 686 F.3d at 1332.

For the reasons discussed above, Petitioner has shown, by a preponderance of the evidence, sufficient reasons why one of ordinary skill in the art would have combined Forbes, and TS 23.141 teachings with Oh’s

system in the manner asserted by Petitioner, with a reasonable expectation of success.

g) Conclusion as to Claim 12

We have reviewed the parties' evidence and argument, and based on the complete record, we find that Petitioner has shown by a preponderance of the evidence that Oh teaches each of the limitations of claim 12.

2. Dependent Claims 4, 5, and 13–17

Petitioner argues that dependent claims 4 and 5 (depending from claim 1) and 13–17 (depending from claim 12) would have been obvious over the combination of Oh, Forbes, and TS23.141. Pet. 44–57. Petitioner provides analysis detailing where it contends each of the limitations of dependent claims 4, 5, and 13–17 are taught by the combination of Oh, Forbes, and TS23.141. *Id.*

Claim 4 depends from claim 3 and further recites “providing the notification and receiving the watcher selection through at least one Session Initiation Protocol (SIP) session using an IP Multi Media System (IMS) infrastructure.” Ex. 1001, 10:34–38. Petitioner contends that the combination of Oh, Forbes, and TS23.141 teaches the additional limitation of claim 4 because Oh discloses providing a notification of a bell activation event to the resident and receiving the resident's selection via SIP sessions, and both Forbes and TS23.141 disclose using SIP sessions in an IMS infrastructure. Pet. 44–45 (citing Ex. 1004, 4:44–49, 6:15–20, 6:34–39, 6:60–65, 7:14–18, 8:33–45, 11:1–17, 12:41–53, 14:11–19, Figs. 4–6; Ex. 1005, 2:50–54, 3:15–17, 3:41–43, 3:64–65, 4:22–36, Figs. 1, 2; Ex. 1006, 13, 32; Ex. 1017 ¶¶ 152–157); *see also id.* at 31–32.

Claim 5 depends from claim 3 and further recites “wherein the voice communication is established employing a Voice over IP (VoIP) network.” Ex. 1001, 10:39–40. Petitioner contends that the combination of Oh, Forbes, and TS23.141 teaches the additional limitation of claim 5 because Oh discloses voice communication between the resident and visitor via IP using RTP packets to transmit voice data, and Forbes discloses VoIP communication via RTP. Pet 46–47 (citing Ex. 1004, 6:20–22, 7:11–19, 8:16–25, 11:36–49, 13:5–20, 14:50–64, 16:10–13, Fig. 1; Ex. 1005, 3:2–5, 4:50–51, 5:38–39; Ex. 1017 ¶¶ 158–162); *see also id.* at 32–33 (arguing that, “to the extent Oh did not expressly disclose the use of VoIP for voice communications, a [person of ordinary skill in the art] would have understood from the disclosure in Forbes that the RTP-based communications disclosed in Oh referred to VoIP”).

Claim 13 depends from claim 12 and further recites “wherein the presentity application is a doorbell presence application and the personal presentity is a doorbell presence hardware.” Ex. 1001, 11:21–23. Petitioner contends that the combination of Oh, Forbes, and TS23.141 teaches the additional limitation of claim 13 because Oh discloses that its video door phone is a physical doorbell device, including a bell button, camera, microphone, and speaker. Pet. 51–52 (citing Ex. 1004, 4:44–50, 6:15–18, 8:54–57, 10:27–33, 12:5–10, 15:36–39, 16:1–9, Figs. 4–7) *see also id.* at 33–34.

Claim 14 depends from claim 13 and further recites

wherein the doorbell presence application is further configured to cause the system to perform at least the following:
manage at least one from a set of: a VoIP call between the watcher and a person using the doorbell presence hardware, a

capture of a still image of the person, a capture of a video of the person, and a control mechanism activation by activating one of the plurality of client applications associated with the doorbell presence hardware.

Ex. 1001, 11:24–12:6. Petitioner contends that the combination of Oh, Forbes, and TS23.141 teaches the additional limitation of claim 14 because Oh discloses that the home gateway device includes functionality to provide (i) voice communication between the resident and visitor via VoIP and RTP, (ii) a “still image” of the visitor to the resident, (iii) video of the visitor, and (iv) a video reproduce button. Pet. 52–54 (citing Ex. 1004, 1:18–49, 5:38–42, 5:64–6:2, 6:10–14, 6:20–22, 6:22–26, 6:43–45, 7:18–19, 8:45–48, 9:12–19, 12:41–13:20, 14:31–64, 15:52–67, Figs. 4–7). Petitioner contends that it would have been obvious to modify Oh to allow the resident to buzz the visitor in. *Id.* (citing Ex. 1004, 3:8–11; Ex. 1017 ¶ 192). Petitioner contends that Forbes similarly discloses VoIP support and discloses RTP packets used to transmit voice data, and that it would have been obvious to capture still images from video. *Id.* (citing Ex. 1017 ¶ 196); *see also id.* at 37–39.

Claim 15 depends from claim 13 and further recites “wherein the doorbell presence application is configured to cause the system to communicate with the aggregate presence service and the plurality of client applications through one or more SIP sessions using the IMS infrastructure. Ex. 1001, 12:7–11. Petitioner contends that the combination of Oh, Forbes, and TS23.141 teaches the additional limitation of claim 15 because Oh discloses using SIP sessions to communicate with the visitor, and both Forbes and TS23.141 disclose that PTT clients communicate with the presence server via SIP sessions using the IMS infrastructure. Pet. 54–55

(citing Ex. 1004, 6:34–39, 7:14–18, 11:1–17, 12:41–53, 14:11–19, Figs. 4–6; Ex. 1005, 2:50–54, 3:15–17, 3:41–43, 3:64–65, 5:18–28, Figs. 1, 2; Ex. 1006, 13; Ex. 1017 ¶¶ 197–205); *see also id.* at 34–37.

Claim 16 depends from claim 13 and further recites “wherein the doorbell presence application is further configured to cause the system to register and update a profile associated with the doorbell presence hardware in a home subscriber service component of the IMS infrastructure.”

Ex. 1001, 12:12–16. Petitioner contends that the combination of Oh, Forbes, and TS23.141 teaches the additional limitation of claim 16 because Oh discloses that its home gateway device receives presence information from the video door phone, and both Forbes and TS23.141 disclose the use of a Home Subscriber Server (“HSS”) in the IMS infrastructure to store and provide presence information, e.g., as a profile. Pet. 55–56 (citing Ex. 1004, 4:44–50, 6:15–18, 8:54–57, 10:27–33, 12:5–10, 15:36–39, 16:1–9, Figs. 4–7; Ex. 1005, 3:10–15, 3:24–26, Fig. 2; Ex. 1006, 7, 9, 10, 13, 16, 17, 25–30). Petitioner contends that it would have been obvious to one of ordinary skill in the art to modify the home gateway device to register and update a profile on the HSS disclosed in Forbes in TS23.141. *Id.* (citing Ex. 1017 ¶¶ 206–211); *see also id.* at 39–40.

Claim 17 depends from claim 12 and further recites “wherein the personal presentity is a monitoring device configured to capture an image of a monitored location in response to a selection by the watcher, and wherein the presentity application is a monitoring presence application configured to manage notification of the watcher and delivery of the captured image to the watcher.” Ex. 1001, 12:17–22. Petitioner contends that the combination of Oh, Forbes, and TS23.141 teaches the additional limitation of claim 17

because Oh discloses that the video door phone contains a camera that captures video of the location and that the home gateway device includes functionality that monitors inputs from the video door phone, provides notifications to the resident when the doorbell button is pressed, and delivers a captured image of the visitor to the resident's terminal. Pet. 56–57 (citing Ex. 1004, 4:44–49, 5:57–60, 6:15–20, 6:60–65, 8:26–42, 11:18–21, 12:54–57, 14:31–34, Figs. 4–6); *see also id.* at 37–39.

Patent Owner does not present separate argument for claims 4, 5, and 13–17. *See generally* PO Resp. We have reviewed Petitioner's evidence and arguments, and based on the complete record, we find that Petitioner has shown by a preponderance of the evidence that the combination of Oh, Forbes, and TS23.141 teaches each of the limitations of claims 4, 5, and 13–17.

3. *Weighing the Graham Factors*

“Once all relevant facts are found, the ultimate legal determination [of obviousness] involves the weighing of the fact findings to conclude whether the claimed combination would have been obvious to an ordinary artisan.” *Arctic Cat*, 876 F.3d at 1361. On balance, considering the record before us, Petitioner has shown, by a preponderance of the evidence, that the combination of Oh, Forbes, and TS23.141 would have rendered the subject matter of claims 4, 5, and 12–17 obvious to one of ordinary skill in the art at the time of the invention.

IV. CONCLUSION

For the reasons discussed above, Petitioner has demonstrated, by a preponderance of the evidence, that claims 1–17 of the '739 patent are unpatentable.¹⁵ Our conclusions regarding the challenged claims are summarized below:

Claims Challenged	35 U.S.C. §	Reference(s) /Basis	Claims Shown Unpatentable	Claims Not Shown Unpatentable
1–3, 6–11	103(a)	Oh	1–3, 6–11	
1–3, 6–11	102 ¹⁶	Oh		
4, 5, 12–17	103(a)	Oh, Forbes, TS23.141	4, 5, 12–17	
Overall Outcome			1–17	

¹⁵ 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 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).

¹⁶ As explained above, given our disposition of the obviousness ground based on Oh, we do not reach Petitioner's alternative anticipation ground based on Oh.

V. ORDER

It is therefore,

ORDERED that claims 1–17 of U.S. Patent No. 7,956,739 B2 are determined to be unpatentable; and

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

IPR2021-01374
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