

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

VIVINT, INC.,
Petitioner,

v.

SB IP HOLDINGS LLC,
Patent Owner.

IPR2022-00812
Patent 8,154,581 B2

Before JAMESON LEE, KARL D. EASTHOM, and JON M. JURGOVAN,
Administrative Patent Judges.

JURGOVAN, *Administrative Patent Judge.*

DECISION
Granting Institution of *Inter Partes* Review
35 U.S.C. § 314

I. INTRODUCTION

A. *Background*

Vivint, Inc. (“Petitioner”) filed a Petition requesting *inter partes* review of claims 1–10, 12, and 15–20 (“challenged claims”) of U.S. Patent No. 8,154,581 B2 (Ex. 1001, “the ’581 patent”). Paper 1 (“Pet.”). SB IP Holdings LLC (“Patent Owner”) filed a Preliminary Response. Paper 6 (“Prelim. Resp.”).

We have authority to determine whether to institute an *inter partes* review, under 35 U.S.C. § 314 and 37 C.F.R. § 42.4. An *inter partes* review may not be instituted unless it is determined that “the information presented in the petition filed under section 311 and any response filed under section 313 shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a) (2018); *see also* 37 C.F.R. § 42.4(a) (2021) (“The Board institutes the trial on behalf of the Director.”). The “reasonable likelihood” standard is “a higher standard than mere notice pleading,” but “lower than the ‘preponderance’ standard to prevail in a final written decision.” *Hulu, LLC v. Sound View Innovations, LLC*, IPR2018-01039, Paper 29 at 13 (PTAB Dec. 20, 2019) (precedential).

For the reasons provided below and based on the record before us, we determine that Petitioner has demonstrated a reasonable likelihood that it would prevail in showing the unpatentability of at least one challenged claim. Accordingly, we institute an *inter partes* review on all challenged claims on all asserted grounds of unpatentability.

B. Real Parties in Interest

Petitioner identifies only itself as real party in interest. Pet. 1. Patent Owner identifies only itself as real party in interest. Paper 4, 1.

C. Related Proceedings

Petitioner and Patent Owner each identify the following related litigations involving the '581 patent: *SB IP Holdings LLC v. Vivint Smart Homes, Inc.*, No. 4:21-cv-00912 (E.D. Tex.); and *Vivint Inc. v. SB IP Holdings LLC*, No. 8:22-cv-00034 (C.D. Cal). Pet. 1; Paper 4, 2.

The following *inter partes* review proceedings involve patents related to the '581 patent: IPR2022-00810 (U.S. Patent No. 8,139,098 B2); IPR2022-00811 (U.S. Patent No. 8,144,184 B2); IPR2022-00813 (U.S. Patent No. 8,164,614 B2); and IPR2022-00814 (U.S. Patent No. 8,144,183 B2). Pet. 2; Paper 4, 1.

Patent Owner identifies other indirectly related judicial matters before the federal district courts and the U.S. Court of Appeals for the Federal Circuit. Paper 4, 2.

D. The '581 Patent (Ex. 1001)

The '581 patent is titled "Audio-Visual Communication System for Receiving Person at Entrance." Ex. 1001, code (54). The '581 patent discloses an "audio-video communication system with a wireless exterior module located proximate an entrance, a computerized controller running a software application, and a remote peripheral device." *Id.* at code (57). "The wireless exterior module includes a proximity sensor for detecting a person at the entrance, a video camera for recording an image of the person at the entrance, a microphone for recording the person at the entrance, a speaker for playing audio to the person at the entrance, . . . and a receiver for

receiving communications at the wireless exterior module.” *Id.* “The computerized controller is disposed in wireless electronic communication with the wireless exterior module via the transmitter and the receiver of the wireless exterior module.” *Id.* “The remote peripheral device is configured to electronically communicate with the computerized controller for viewing an image from the video camera communicated from the wireless exterior module.” *Id.*

Additional details of the system are shown in Figure 1 below.

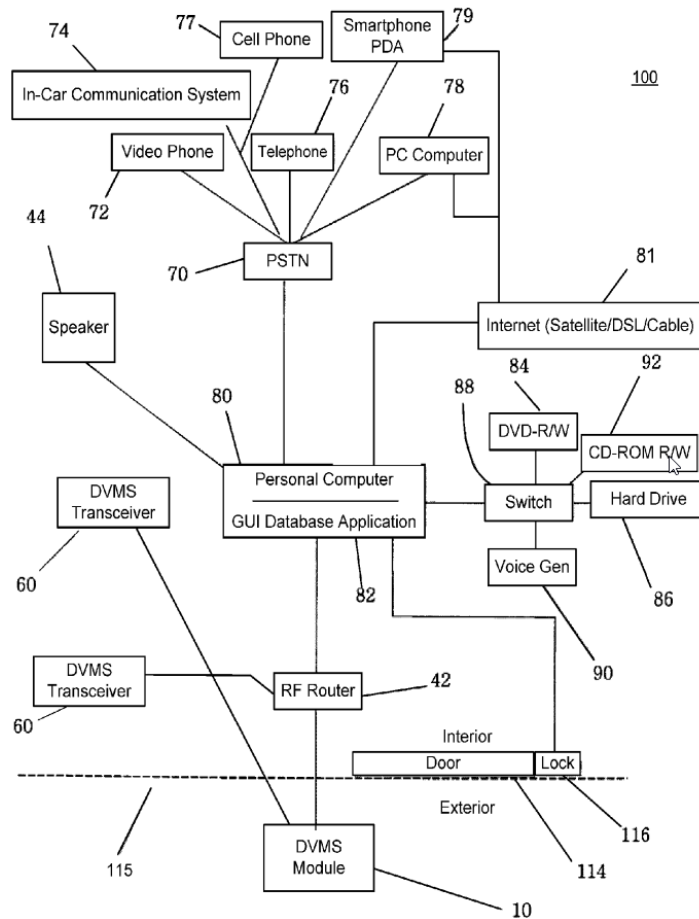


FIG. 1

Specifically, Figure 1 shows system 100 having DVMS module 10 located on the exterior of the home or office proximate door 114.¹ *Id.* at 7:45–47. Personal computer 80 runs a software application that includes DVMS Database Application 82 and graphic user interfaces (GUIs). *Id.* at 7:28–30. Personal computer 80, in accordance with the software application, controls communication in system 100, coordinates multiple communication devices in system 100, and is used to define responses to prompts and events in system 100. *Id.* at 7:30–34.

System 100 further includes one or more remote peripheral devices. *Id.* at 8:54–55. Such devices generally include video phones 72, in-car communication systems such as the well known ONSTAR system 74 currently found in GM cars, telephones 76, cell phones 77, personal computers 78, smartphones/personal digital assistants (PDAs) 79, and other similar communication devices. *Id.* at 8:55–60. Each remote peripheral device is configured for electronic communication with personal computer 80 via at least public switching telephone network (“PSTN”) connection 70 or broadband connection 81. *Id.* at 8:60–63.

Figure 2 of the ’581 patent is reproduced below:

¹ The ’581 patent does not expressly define the acronym “DVMS.”

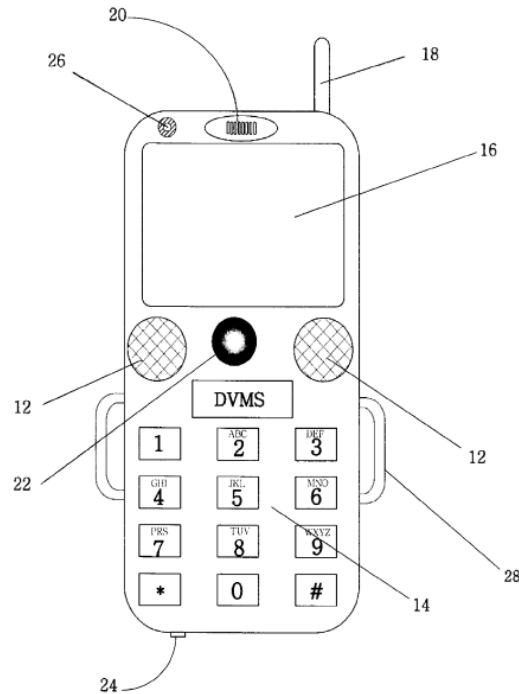


FIG. 2

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Figure 2 shows DVMS module 10 having video camera 22, speakers 12, proximity sensor 26, microphone 20, LCD display 16, quick connect electrical receptacle 24, and radio frequency receiver/transmitter represented by antenna 18. *Id.* at 7:51–55. Upon detection of movement, proximity sensor 26 activates camera 22, which in turn relays an image or streaming video to personal computer 80 where it is saved in a database in association with a timestamp. *Id.* at 7:55–59.

E. Illustrative Claim

Claim 1 is the only independent claim of the '581 patent, and claims 2–10, 12, and 15–20 are directly dependent from claim 1, which is reproduced below:

1. An audio-video communication system, comprising:
 - (a) a wireless exterior module located proximate an entrance, said wireless exterior module having a proximity sensor for detecting a person at the entrance, a video camera for recording

an image of the person at the entrance, a microphone for recording sound of the person at the entrance, a speaker for playing audio to the person at the entrance, a transmitter for communicating sounds and images of the person at the entrance, and a receiver for receiving communications at the wireless exterior module;

(b) a computerized controller running a software application and disposed in wireless electronic communication with said wireless exterior module via said transmitter and said receiver of said wireless exterior module, wherein said computerized controller is configured to control recording of communications with said wireless exterior module and playback of such recording, and wherein said software application includes a graphic user interface that enables a user to view images from said video camera communicated from said wireless exterior module; and

(c) a remote peripheral device configured to electronically communicate with said computerized controller for viewing an image from said video camera communicated from said wireless exterior module.

Ex. 1001, 19:36–61.

F. Evidence Relied on by Petitioner

Petitioner relies on the following evidence:²

References		Date	Exhibit
Vaios ³	U.S. Patent No. 6,271,752 B1	Issued August 7, 2001	1003

² The '581 patent issued from Application 11/618,615, filed December 29, 2006. Ex. 1001, codes (21, 22). The '581 patent is a continuation-in-part of Application 10/682,185, filed October 9, 2003, now Patent 7,193,644, and also claims priority to Provisional Application 60/418,384, filed October 15, 2002. *Id.* at codes (60, 63).

³ Petitioner contends Vaios is prior art under § 102(b).

References		Date	Exhibit
Menard ⁴	International Pat. Pub. No. WO 01/093220 A1	Published Dec. 6, 2001	1004
Naidoo ⁵	U.S. Patent No. 6,658,091 B1	Issued December 2, 2003; filed Feb. 1, 2002	1005
Klein ⁶	U.S. Application No. 2004/0080615	Published April 29, 2004; filed August 21, 2003	1006

Petitioner also relies on a Declaration of Bertrand M. Hochwald, Ph.D. (Ex. 1002).

G. Asserted Grounds of Unpatentability

Petitioner challenges the patentability of claims 1–10, 12, and 15–20 of the 581 patent on the following grounds:

Claims Challenged	35 U.S.C. § ⁷	Reference(s)/Basis
1–7, 9, 10, 15–17, 20	103(a)	Vaios
15	103(a)	Vaios, Naidoo
1–10, 12, 15–20	103(a)	Vaios, Menard
15	103(a)	Vaios, Menard, Naidoo
1, 2, 4–10, 12, 16–20	103(a)	Klein, Menard, Vaios

⁴ Petitioner contends Menard is prior art under at least §§ 102(a)–(b).

⁵ Petitioner contends Naidoo is prior art under at least § 102(e).

⁶ Petitioner contends Klein is prior art under at least § 102(e).

⁷ The Leahy-Smith America Invents Act, Pub. L. No. 112–29, 125 Stat. 284 (2011) (“AIA”), amended 35 U.S.C. §§ 102, 103. Based on the record before us, the ’183 patent has an effective filing date prior to the effective date of the applicable AIA amendments (March 16, 2013). Therefore, we apply the pre-AIA versions of 35 U.S.C. §§ 102, 103.

Claims Challenged	35 U.S.C. § 7	Reference(s)/Basis
2, 3, 15	103(a)	Klein, Menard, Vaios, Naidoo

II. ANALYSIS

A. *Level of Ordinary Skill in the Art*

Petitioner contends that a person of ordinary skill in the art at the time of the alleged invention “is generally one who has a Bachelor’s degree in computer science, electrical engineering, or a related field, with two years of experience in audio and/or video processing, networked communication systems, sensor systems, and/or remote monitoring systems.” Pet. 8 (citing Ex. 1002 ¶¶ 21–24).

Patent Owner contends that Petitioner’s declarant relied on conclusory statements in his opinion on the level of ordinary skill in the art, which should be given no weight such that all grounds fail. Prelim. Resp. 2–3. However, Petitioner’s declarant indicates that he considers the relevant factors in determining the level of ordinary skill in the art, and Petitioner notes that “the level of skill in the art is also shown by the art cited herein.” Ex. 1002 ¶¶ 22–23; Pet. 8. Patent Owner does not explain why these bases for Petitioner’s proposed level of ordinary skill in the art may be inadequate, nor does Patent Owner propose any different level of ordinary skill in the art.

We find that Petitioner’s statement of the level of ordinary skill in the art is consistent with the content of the applied prior art references. *Okajima v. Bourdeau*, 261 F.3d 1350, 1354–55 (Fed. Cir. 2001) (the applied prior art

may reflect an appropriate level of skill). For institution purposes, we adopt Petitioner's statement of the level of ordinary skill in the art.

B. Claim Construction

We use the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. § 282(b), including construing the claim in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent. 37 C.F.R. § 42.100(b). The claim construction standard set forth in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc) is applicable.

Claim terms are generally given their ordinary and customary meaning as would be understood by one with ordinary skill in the art in the context of the specification, the prosecution history, other claims, and even extrinsic evidence including expert and inventor testimony, dictionaries, and learned treatises, although extrinsic evidence is less significant than the intrinsic record. *Phillips*, 415 F.3d at 1312–17. Usually, the specification is dispositive, and it is the single best guide to the meaning of a disputed term. *Id.* at 1315.

The specification may reveal a special definition given to a claim term by the patentee, or the specification or prosecution history may reveal an intentional disclaimer or disavowal of claim scope by the inventor. *Id.* at 1316. If an inventor acts as his or her own lexicographer, the definition must be set forth in the specification with reasonable clarity, deliberateness, and precision. *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1249 (Fed. Cir. 1998). The disavowal, if any, can be effectuated by

language in the specification or the prosecution history. *Poly-America, L.P. v. API Indus., Inc.*, 839 F.3d 1131, 1136 (Fed. Cir. 2016).

Only those claim terms “that are in controversy need to be construed, and only to the extent necessary to resolve the controversy.” *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017); *Wellman, Inc. v. Eastman Chem. Co.*, 642 F.3d 1355, 1361 (Fed. Cir. 2011); *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999).

Neither Petitioner nor Patent Owner has proposed a construction for any claim term. Pet. 8; Prelim. Resp. 2–3. As there is no dispute concerning the meaning of claim terms, we determine that no express claim construction is necessary for this Decision.

C. Priority Date of the ’581 Patent

Petitioner contends that claims 1–20 of the ’581 patent are not entitled to their alleged 2002 priority date. Pet. 2–6. Specifically, Petitioner contends that Provisional Application 60/418,384 (the ’384 provisional”) (Ex. 2021) does not provide written description support under § 112 for the claimed limitation of “a remote peripheral device configured to . . . communicate with said computerized controller for viewing an image from said video camera” *Id.* at 4 (citing *Lockwood v. Am. Airlines, Inc.*, 107 F.3d 1565, 1571 (Fed. Cir. 1997); *Martin v. Mayer*, 823 F.2d 500, 505 (Fed. Cir. 1987)). Petitioner contends that the ’384 provisional discloses a GUI for receiving user commands and data, but does not describe a GUI for viewing an image from a video camera. *Id.* at 6. According to Petitioner, none of the claims of the ’581 patent are entitled to the 2002 filing date, and the earliest date they might be entitled to is October 9, 2003. *Id.*

Patent Owner argues that the '384 provisional need not provide *in haec verba* support for the claimed subject matter, but need only reasonably convey to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date. Prelim. Resp. 8 (citing *Lockwood*, 107 F.3d at 1572 (Fed. Cir. 1997); *Novartis Pharms. Corp. v. Accord Healthcare Inc.*, 38 4th 1013, 1020 (Fed. Cir. 2022)). Patent Owner contends that the '384 provisional discloses “a communication link between the control computer and the remote devices” and that the “peripheral devices may include, but are not limited to, laptop computers, cellular phones, pagers, PDA’s or the like.” *Id.* at 10 (citing Ex. 1021, 6) (emphasis omitted). Patent Owner further notes that the '384 provisional discloses that the “control computer is preferably connected to . . . an Internet service provider (ISP) for communication to peripheral devices.” *Id.* at 10. Patent Owner further contends that the '384 provisional discloses “a digital video camera for digitally recording an image of the moving object” and “a transmitter and receiver” to communicate with the centralized control computer. *Id.* at 10 (citing Ex. 1021, 7, 16). Patent Owner further observes that the '384 provisional states that “another option may be to have the [e]xternal video monitoring system digitally record the visitor to the computer’s memory for later review” and further states that one of the objects of the invention is “to provide an improved door answering system which sensing an approaching object and digitally records the same for later viewing.” *Id.* at 10 (citing Ex. 1021, 9). Patent Owner states that the '384 provisional discloses communications that “carry digital data streams representing various types of information” *Id.* at 11 (citing Ex. 1021, 13). Patent Owner further contends that data can be transmitted over the ISP,

which “provides data communication services through the world wide packet data communication network . . . us[ing] electrical, electromagnetic or optical signals that carry digital data streams.” *Id.* (citing Ex. 1021, 14). Patent Owner further states that data streams can then be communicated over the Internet to remote devices in communication with the centralized control computer, specifically including the remote peripheral device. *Id.* (citing Ex. 1021, 6, 15, 20, claim 1, Fig. 2). Patent Owner contends that Figure 2 of the ’384 provisional illustrates a data communication path from the video cameras at an external unit, through the control PC and the ISP, to a remote peripheral device (e.g., “Remote PC” and “Display Phone”). *Id.* at 11–12. Patent Owner further contends that the ’384 provisional discloses “the capability of the owner to permit access to the visitor while at a remote location,” and that “there remains a need, therefore, for a self-contained door communication and messaging device . . . that permits the resident to screen visitors . . . that provides a centralized means of control, [and] that provides a means for storing digital images . . .” *Id.* at 12 (citing Ex. 1021, 4, 5, 17). Patent Owner further argues that

[n]ot only does the provisional application explicitly describe recording a visitor using a video camera and communicating that data to the centralized control computer, but the provisional further describes communicating data from the centralized control computer to remote peripheral devices (e.g., laptops and PDA’s) for the purpose of screening and permitting visitors from a remote location, which is furthered by viewing the recorded video camera data of the visitor.

Id. as 12–13 (citing Ex. 1021, code (57)).

Patent Owner fails to identify any statement in the ’384 provisional mentioning “a remote peripheral device configured to . . . communicate with said computerized controller for viewing an image from said video camera”

as claimed. Although Patent Owner shows a system that may be configurable to communicate with a computerized controller for viewing an image from a video camera, Patent Owner does not cite to clear support showing that a remote peripheral device is so configured in the '384 provisional. Consequently, we find Petitioner's showing sufficient for purposes of institution, although we do not consider this issue closed.

Neither party mentions why this issue is important in this case. We assume that it is because the issue of whether Klein is prior art turns on the priority date of the '581 patent. For purposes of this Decision, Petitioner has shown sufficiently that Klein does constitute prior art. Petitioner's showing is also sufficient to shift the burden of production going forward to Patent Owner to show that the '581 patent is entitled to the benefit of the '384 provisional by demonstrating written description support under § 112 for all limitations of the claims. *Dynamic Drinkware, LLC v. Nat'l Graphics Inc.*, 800 F.3d 1375 (Fed. Cir. 2015).

D. Alleged Obviousness of Claims 1, 9–12, 15–17, 21 over Vaio

1. Principles of Obviousness

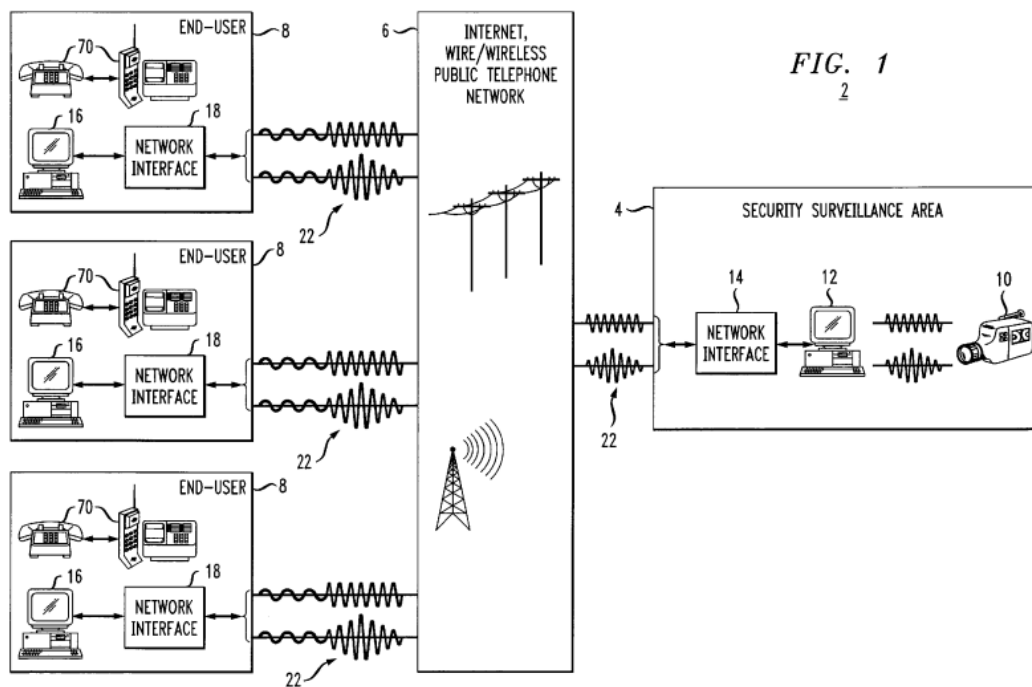
A claim is unpatentable under 35 U.S.C. § 103 if the differences between the claimed subject matter and the prior art are such that the subject matter, as a whole, would have been obvious to a person having ordinary skill in the art to which said subject matter pertains. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations, including (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of skill in the art; and (4) where in evidence, so-called secondary considerations, including commercial

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

When evaluating a combination of teachings, we must also “determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *KSR*, 550 U.S. at 418 (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)). “[T]here must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *Kahn*, 441 F.3d at 988.

2. Overview of *Vaios* (Ex. 1003)

Vaios’s multi-access remote system is shown in Figure 1, which is reproduced below.



Vaios’s Figure 1 shows multi-access remote system 2 with security surveillance area 4, end user locations 8, and communications network 6 for establishing connection 22 with security surveillance area 4 and end user locations 8. *Id.* at 3:14–23.

Security surveillance area 4 comprises local computer system 12 coupled to network interface 14 and to video camera 10 having a motion sensor. *Id.* at 3:24–27.

Local computer system 12 is coupled to camera adapter 116 (Fig. 2) to video camera 10 so that video, sound, and motion sensor data can be transmitted from the camera to the local computer system, and instructions or other data can be transmitted from the local computer system to the video camera. *Id.* at 3:27–32. Local computer system 12 is also coupled to network interface 14 to use communication network 6 to establish connection 22 and communicate with one or more end user locations 8. *Id.* at 3:32–36. Local computer system 12 includes fixed storage means 109, modem 110, operating system software 111, network adapter 112, audio/video coder/decoder 114, application programming interface module 131, and application software 136. *Id.* at 3:37–4:4.

End user locations 8 comprise remote computer systems 16, network interface 18, and one or more optional communicative devices 20 such as a telephone or wireless device. *Id.* at 4:5–14. Remote computer systems 16 each comprise the same software and hardware computer components as local computer system 12. *Id.* at 4:15–17.

3. *Independent Claim 1*

Claim 1 begins with this preamble: “An audio-video communication system, comprising.” Ex. 1001, 19:36. Petitioner asserts that Vaios discloses such a system. Pet. 9–10 (citing Ex. 1003, code (57), 9:2–4, 9:32–34; Ex. 1002 ¶¶ 97–103). Specifically, Petitioner notes that Vaios discloses “a multi-access remote system having a security surveillance area [and] a plurality of end user locations.” *Id.* at 9 (citing Ex. 1003, code (57)). Petitioner states that Vaios further explains that the security surveillance

area comprises local computer system 12, camera 10 with a motion sensor, and network interface 6, and that when the motion sensor detects an obstruction the camera starts recording and the local computer system notifies a remote individual. *Id.* at 10 (citing Ex. 1003, code (57)). Petitioner further notes that, in addition to video, the system also communicates audio, stating “the remote individual can operate the camera and retrieve additional video [and] sound.” *Id.* (citing Ex. 1003, 9:2–4, 9:32–34).

We agree with Petitioner that Vaios teaches the preamble of claim 1. Consequently, it is unnecessary to reach the question of whether the preamble is limiting. *See, e.g., Catalina Marketing Int’l, Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801 (Fed. Cir. 2002) (whether a preamble is limiting depends on various factors).

Claim 1 of the ’581 patent recites limitation (a) as follows:

(a) a wireless exterior module located proximate an entrance, said wireless exterior module having a proximity sensor for detecting a person at the entrance, a video camera for recording an image of the person at the entrance, a microphone for recording sound of the person at the entrance, a speaker for playing audio to the person at the entrance, a transmitter for communicating sounds and images of the person at the entrance, and a receiver for receiving communications at the wireless exterior module.

Ex. 1001, 19:37–46. Petitioner contends that Vaios teaches this limitation. Pet. 11–15. Specifically, Petitioner contends that Vaios discloses a “video camera 10” coupled to “local computer system 12” so that “video, sound, and motion sensor data can be transmitted from the camera to the local computer system.” *Id.* at 11 (citing Ex. 1003, 3:24–30, Fig. 1). Petitioner further notes that Vaios discloses that “a monitoring site can be created to

control viewing of . . . a house entrance” and that its cameras provide a “door view.” *Id.* at 12 (citing Ex. 1003, 7:62–8:4, 9:49–53). Petitioner further notes that Vaios discloses that “remotely controllable cameras can be positioned at any location or scenic lookout.” *Id.* at 12–13 (citing Ex. 1003, 9:59–61; Ex. 1002 ¶¶ 106–110). From these excerpts, Petitioner contends that Vaios’s “video camera 10” is an exterior module located proximate an entrance. *Id.*

Petitioner further contends that video camera 10 is also a “wireless” module as demonstrated by Vaios’s teaching that video camera 10 and local computer system 12 may communicate via a wireless connection. *Id.* at 13 (citing Ex. 1003 ¶¶ 111–112). Petitioner contends Vaios’s Figure 1 shows a squiggly line graphic for the connection between video camera 10 and local computer system 12 which is identical to connection 22 for communication types known to be wireless (e.g., LAN, WAN, Internet, satellite). *Id.* (citing Ex. 1003, 3:19–23, 4:30–65). Petitioner contends that a person of ordinary skill in the art would have understood that the connections between video camera 10 and local computer system 12 in Vaios’s Figure 1 included similar wireless connections as for connection 22, confirming that video camera 10 comprises a “wireless device.” *Id.* at 14 (citing Ex. 1002 ¶ 112). Alternatively, Petitioner contends that it was obvious for camera 10 to be a “wireless device” communicatively coupled to a “local computer system 12” because Vaios describes various wireless connections. *Id.* at 14 (citing Ex. 1002 ¶¶ 112–115).

Petitioner contends that video camera 10 includes “a video camera for recording an image of the person at the entrance” and a “microphone for recording sounds of the person at the entrance.” Pet. 15. Petitioner points to

Vaios's disclosure that "when the motion sensor detects an obstruction the camera starts recording" and that "video, sound, and motion sensor data can be transmitted from the camera to the local computer system." *Id.* (citing Ex. 1003, code (57), 3:24–30, 2:12–17; Ex. 1002 ¶ 116). Petitioner further contends that video camera 10 would include a camera to record images and a microphone to record such sound, or alternatively use of a microphone for this purpose would have been obvious. *Id.* (citing Ex. 1002 ¶ 116).

Petitioner further contends that Vaios's video camera 10 includes "a proximity sensor for detecting a person at the entrance" as claimed. *Id.* (citing Ex. 1002 ¶ 105). Specifically, Petitioner contends that Vaios's video camera 10 has a motion sensor and that motion sensor data can be transmitted from the camera to the local computer system. *Id.* at 15–16 (citing Ex. 1003, 3:14–30). Petitioner contends that, when the motion sensor detects an obstruction, the camera starts recording. *Id.* at 16 (citing Ex. 1003, code (57), 8:42–49). Petitioner contends that, when monitoring an entrance, the motion sensor would detect a person at the entrance upon the person's approach. *Id.* (citing Ex. 1002 ¶ 105). Petitioner contends that the '581 patent indicates that a "proximity sensor" includes motion sensing devices, e.g., "proximity sensor 26 activates the camera 22 upon detection of movement." *Id.* (citing Ex. 1001, 7:55–56, 15:22, Ex. 1002 ¶ 105). Petitioner contends that Vaios's motion sensor thus satisfies the "proximity sensor" limitation.

Petitioner further contends that Vaios's video camera 10 includes "a transmitter for communicating sounds and images of the person at the entrance" and "a receiver for receiving communications at the wireless exterior module." Pet. 16 (citing Ex. 1003, ¶ 117). Specifically, Petitioner

contends that Vaios discloses “video, sound, and motion sensor data can be transmitted from the camera to the local computer system” and “instructions or other data can be transmitted from the local computer system to the camera.” *Id.* (citing Ex. 1003, 2:12–17, 3:27–36) (emphasis omitted).

Petitioner states that to transmit video and sound data and receive instructions or other data, video camera 10 would include a transmitter and a receiver, as claimed, or alternatively such components would have been obvious given their widespread use for such purposes at the time of the alleged invention. *Id.* (citing Ex. 1002 ¶ 117). Petitioner contends Vaios discloses or renders obvious the “transmitter” and “receiver” limitations.

Patent Owner argues that claim 1 requires that the “wireless exterior module” must be “a *module* containing a video camera, microphone, speaker, and a transmitter and receiver for receiving communications at the [sic] wirelessly.” Prelim. Resp. 30. Patent Owner contends that because a module is required, Petitioner cannot rely on the local computer system 12 or other components working in tandem with the external video camera 10 as the module. *Id.* Patent Owner argues that Petitioner has not explained how Vaios discloses a camera having a transmitter that can wirelessly communicate “sounds and images,” which is required by claim 1. *Id.*

As Petitioner explains, however, Vaios discloses that local computer system 12 is coupled via camera adapter 116 (Fig. 2) to video camera 10 so that video, sound, and motion sensor data can be transmitted from the camera to the local computer system. Pet. 11 (citing Ex. 1003, 3:24–30, Figs. 1, 2). In addition, Petitioner shows that video camera 10 can be a wireless device because video camera 10 and local computer system 12 are connected by a connection that is described to be wireless, and because it

would have been obvious to use a wireless connection in view of Vaios's teachings. Patent Owner does not explain why Petitioner cannot rely on multiple devices as teaching the claimed module. Furthermore, Petitioner does not conflate communications network 6 with connection 22, as Patent Owner argues. *See* Prelim. Resp. 30–36. Consequently, Patent Owner's arguments do not outweigh Petitioner's showing.

Patent Owner further argues that Vaios does not disclose “a speaker for playing audio to the person at the entrance” or any type of two-way audio communication. Prelim. Resp. 37. We agree with Patent Owner that Vaios does not disclose such a speaker. As shown in Figure 2, however, Vaios discloses that local computer system 12 includes an audio/video coder/decoder 114. Ex. 1003, 5:44, Fig. 2. Nonetheless, Patent Owner's argument is sufficient to overcome Petitioner's showing with respect to Vaios standing alone.

Patent Owner argues that Vaios's camera is “located proximate an entrance” or “at the entrance” and that that is not necessarily a wireless exterior module located outside. Prelim. Resp. 37–38. Petitioner noted that its camera can monitor “at any location or scenic lookout” which implies the Vaios's camera may be outside. Coupled with the teaching to position a camera at a house entrance or for a door view, Petitioner presents sufficient evidence to suggest that Vaios's camera may be a wireless exterior module or part thereof. Pet. 12–13 (citing Ex. 1003, 7:62–8:4, 9:49–53; 9:59–61; Ex. 1002 ¶¶ 106–110). Consequently, Patent Owner's argument does not overcome Petitioner's showing.

Patent Owner further argues that Vaios does not disclose a “transmitter” or “receiver” as claimed. Prelim. Resp. 38. As Petitioner

noted, however, Vaios discloses “video, sound, and motion sensor data can be transmitted from the camera to the local computer system” and “instructions or other data can be transmitted from the local computer system to the camera.” Pet. 16 (citing Ex. 1003, 2:12–17, 3:27–36) (emphasis omitted). Petitioner’s showing is sufficient.

Petitioner has not shown sufficiently that Vaios has a speaker as required by the “wireless exterior module” of limitation (a) of claim 1 of the ’581 patent. Nonetheless, for completeness with respect to the other challenge grounds, we continue to analyze claim 1 with respect to Vaios.

Claim 1 of the ’581 patent recites limitation (b) as follows:

(b) a computerized controller running a software application and disposed in wireless electronic communication with said wireless exterior module via said transmitter and said receiver of said wireless exterior module, wherein said computerized controller is configured to control recording of communications with said wireless exterior module and playback of such recording, and wherein said software application includes a graphic user interface that enables a user to view images from said video camera communicated from said wireless exterior module.

Ex. 1001, 19:47–57. Petitioner contends that Vaios discloses a computerized controller, namely, local computer system 12, in communication with video camera 10. Pet. 17 (citing Ex. 1003, 3:24–36, Fig. 1; Ex. 1002 ¶¶ 119–127). Petitioner contends that Vaios discloses that local computer system 12 communicates with video camera 10 via a transmitter and receiver, or alternatively, it was obvious to include such a transmitter and receiver with video camera 10 to facilitate such communications. *Id.* at 17–18 (citing Ex. 1003, 3:27–32).

Petitioner contends that Vaios’s local computer system 12 comprises a “computerized controller” that runs a “software application.” *Id.* at 18

(citing Ex. 1002 ¶¶ 120–124). Petitioner notes that Vaios states “local computer system 12 includes various components, among them . . . are fixed storage means 109, and operating system software 111 to provide basic resource allocation and computational mechanisms. *Id.* (citing Ex. 1003, 3:27–41). Petitioner states that Vaios’s claim 1 refers to local control system as a “controller module.” *Id.* (citing Ex. 1003, claim 1). Petitioner further notes that Vaios states that the “local computer system . . . comprises application software 136 to handle customized tasks unique to each embodiment of the multi-access system, and browser software 138 for display control and management” and also uses a “Windows operating system,” “Winsock (software) components 118–124,” “API components 126–132,” and “browser software 138.” *Id.* (citing Ex. 1003, 3:27–41, 3:51–4:4). Petitioner further contends that as previously discussed Vaios further discloses that video camera 10 is a “wireless exterior module” in wireless communication with local computer system 12. *Id.* (citing *id.* at 12–15). Petitioner contends that Vaios thus teaches the first part of limitation (b) of claim 1. *Id.* (citing Ex. 1002 ¶¶ 119–127).

Petitioner further states that limitation (b) of claim 1 recites in part that “said computerized controller is configured to control recording of communications with said wireless exterior module and playback of such recording.” Pet. 19. Petitioner contends that Vaios’s local computer system 12 controls recordings of communications (e.g., recordings of video and audio) with video cameras 10 and playback of such recordings. *Id.* at 19 (citing Ex. 1002 ¶¶ 128–142). Petitioner notes that Vaios states that “[u]sing an end user location . . . , the remote individual can logon to the local computer system via the communications network and obtain additional

information, control the video camera remotely, or view video images.” *Id.* (citing Ex. 1003, code (57)). Petitioner further notes that Vaios states “[a]ccess to the security surveillance area, control of the video camera, and viewing of the video data is accomplished advantageously over the Internet with application specific browser software, plugins, APIs, and other protocols.” *Id.* In addition, Petitioner notes that Vaios states “local computer system . . . captures a predetermined length of video, compresses the file, and transmits it to the remote user who subsequently plays the downloaded image in high-quality.” *Id.* (citing Ex. 1003, 2:35–38). Petitioner further notes that Vaios discloses that the “remote individual can . . . logon with the surveillance system so that he or she may communicate with the local computer system Employing the browser software . . . , the remote individual can operate the camera and retrieve additional video, sound, or other data via connection 22.” *Id.* (citing Ex. 1003, 8:65–9:5). Petitioner contends that the “media observed by the remote individual thus includes recordings of video and audio made using camera 10 and communicated with local computer system 12.” *Id.* at 19–20 (citing Ex. 1002 ¶¶ 129–133).

Petitioner contends that the “application specific browser software, plugins, APIs, and other protocols” are provided by local computer system 12. *Id.* at 20 (citing Ex. 1002 ¶¶ 131–141). Petitioner contends that local computer system 12 includes an “interface layer 102 [that] comprises high-level end-user software, such as browser and application software” and “acts as a display interface for the remote user.” *Id.* (citing Ex. 1003, 5:32–33, 6:35–40). Petitioner contends that the video data and associated sound are presented on the devices of end user locations 8 via a graphical user

interface provided by the software of local computer system 12, which further enables control of recording playback. *Id.* (citing Ex. 1002 ¶ 135). Petitioner further contends that the user interface is enabled by the browser and software applications, which are components of the interface layer 102 of Vaios's local computer system 12. *Id.* (citing Ex. 1003, 6:35–40, 7:39–43, Fig. 2). Petitioner contends that Vaios's local computer system 12 controls recordings of communications (e.g., recordings of video and audio) with the video cameras and playback of such recordings. *Id.* (citing Ex. 1002 ¶¶ 128–141).

Limitation (b) of claim 1 further recites “said software application includes a graphic user interface that enables a user to view images from said video camera communicated from said wireless exterior module.” Petitioner contends that Vaios discloses this limitation. *Id.* at 20–21 (citing Ex. 1002 ¶¶ 135–142). Petitioner contends that video data is provided from video camera 10 to local computer system 12, which further provides the video data to one or more user devices (e.g., the remote computer system or communicative devices) at end user locations 8. *Id.* at 21 (citing *id.* at 17–19). Petitioner notes that Vaios states that “the remote individual can . . . logon with the surveillance system so that he or she may communicate with the local computer system for additional information. Employing the browser software . . . , the remote individual can operate the camera and retrieve additional video, sound, or other data.” *Id.* (citing Ex. 1003, 8:65–9:5) (emphasis omitted). Petitioner further notes that Vaios states “a snapshot of video data or other informative content may be attached to the notification [sent to the communicative devices].” *Id.* (citing Ex. 1003, 8:63–64).

Petitioner contends that the video data is presented on the devices of end user locations 8 via a graphic user interface provided by the software of local computer system 12. *Id.* (citing Ex. 1002 ¶¶ 135–141). Petitioner contends that this user interface is presented across the Internet via “browser and application software.” *Id.* (citing Ex. 1003, 7:39–43). Petitioner contends the browser and application software are components of interface layer 102 of local computer system 112. *Id.* (citing Ex. 1003, 6:35–40, Fig. 2). Petitioner contends that Figure 3 of Vaios depicts an example of a graphical user interface provided via “application specific Internet browser 200.” *Id.*

Petitioner further notes that Vaios states the following with respect to the user interface:

an application specific Internet browser 200 (FIG. 3) [serves] as a controller module for visual interface communication between the end-user locations and the surveillance area. [B]rowser 200 can incorporate application specific functions such as video display, and remote operation of video camera 10. FIG. 3 shows the display screen of browser 200 [which comprises] a video display area 232. Video display area 232 is a portion of the browser display screen where all video images and recordings are visibly displayed to the end user.

Id. at 22–23 (citing Ex. 1003, 7:40–59). Petitioner notes that Vaios’s Figure 3 shows that the graphical user interface includes graphical icons with which a user may interact. *Id.* at 23 (citing Ex. 1002 ¶¶ 138–141).

Petitioner further notes that Vaios’s claims demonstrate that remote individuals access video data using a graphical user interface presented by the device at the end user location, e.g., “said controller module . . . comprises a browser software for interface said controller

module with an end-user at said end-user location, said browser software further providing, said user interface.” *Id.* (citing Ex. 1003, claim 10). Accordingly, Petitioner contends Vaios teaches limitation (b) of claim 1.

Patent Owner contends that limitation (b) of claim 1 requires the computerized controller to be “in wireless electronic communication” with the “wireless exterior module” but argues that Vaios’s local computer system 12 does not communicate wirelessly with video camera 10 for reasons stated with respect to limitation (a) of claim 1. Prelim. Resp. 39. For reasons already explained in this section, we do not agree with Patent Owner’s argument.

Patent Owner further argues that Vaios does not disclose “control recording . . . and playback.” *Id.* at 40–41. As Petitioner noted, however, Vaios states that “[u]sing an end user location . . . , the remote individual can logon to the local computer system via the communications network and obtain additional information, control the video camera remotely, or view video images.” Pet. 19. (citing Ex. 1003, code (57)). Vaios states that “[e]mploying the browser software . . . , the remote individual can operate the camera and retrieve additional video, sound, or other data via connection 22.” *Id.* (citing Ex. 1003, 8:65–9:5). It is further noted that Vaios specifically mentions controlling record and play. Ex. 1003, 2:41–49.

Thus, Patent Owner’s arguments with respect to limitation (b) of claim 1 do not overcome Petitioner’s showing.

Limitation (c) of claim 1 recites “a remote peripheral device configured to electronically communicate with said computerized controller for viewing an image from said video camera communicated from said

wireless exterior module.” Ex. 1001, 19:58–61. Petitioner contends that Vaios discloses a remote peripheral device (e.g., remote computer system 16 and/or communicative devices 20 associated with end user location 8) configured to electronically communicate with the computerized controller (e.g., local computer system 12) for viewing an image from video camera 10. Pet. 23 (citing Ex. 1003, code (54), 2:26–33, 4:5–20, 8:55–9:9; Ex. 1002 ¶¶ 143–145).

Petitioner further explains that Vaios’s system includes a plurality of end user locations 8 that include a remote computer system 16 and/or one or more communicative devices 20 such as “a telephone, beeper, fax, e-mail, or wireless device.” *Id.* at 23–24 (citing Ex. 1003, code (54), 4:5–20). Petitioner further notes that Vaios discloses “[u]sing an end user location, having a remote computer system, a network interface, and one or more communication devices, the remote individual can logon to the local computer system via the communications network and obtain additional information, control the video camera remotely, or view video images.” *Id.* at 24 (citing Ex. 1003, code (54)) (emphasis omitted). The video images are received by local computer system 12 from video camera 10. *Id.* (citing Ex. 1003, 3:24–30). Petitioner states that, accordingly, Vaios discloses or renders obvious all elements of claim 1. *Id.*

Patent Owner presents no arguments against limitation (c) of claim 1.

With the exception of the speaker, addressed further below in the analysis of Petitioner’s ground based on the combination of Vaios and Menard, we find that Petitioner sufficiently shows that Vaios discloses or renders obvious the limitations of claim 1. Patent Owner’s arguments do not overcome Petitioner’s showing with respect to all limitations except the

speaker. Nonetheless, because Vaios does not disclose a speaker, we determine that Petitioner's evidence is insufficient to establish a reasonable likelihood to prevail in showing claim 1 is unpatentable on this ground.

4. *Dependent Claim 2–7, 9, 10, 15–17, and 20*

Claims 2–7, 9, 10, 15–17, and 20 each depend directly from claim 1. Petitioner accounts for the additional limitations of these dependent claims. Pet. 24–33. Patent Owner has not presented any counter argument for these claims. On the current record, Petitioner has sufficiently shown that Vaios discloses all of the additional limitations of each of claims 2–7, 9, 10, 15–17, and 20. However, because Vaios does not disclose a speaker as recited in claim 1 from which these claims depend, we determine Petitioner's showing of a reasonable likelihood to prevail insufficient for these dependent claims.

E. *Alleged Obviousness of Claim 15 over Vaios and Naidoo*

1. *Overview of Naidoo (Ex. 1005)*

Naidoo discloses a method for remote monitoring of a premises. Ex. 1005, code (57). Figure 1 of Naidoo is reproduced below:

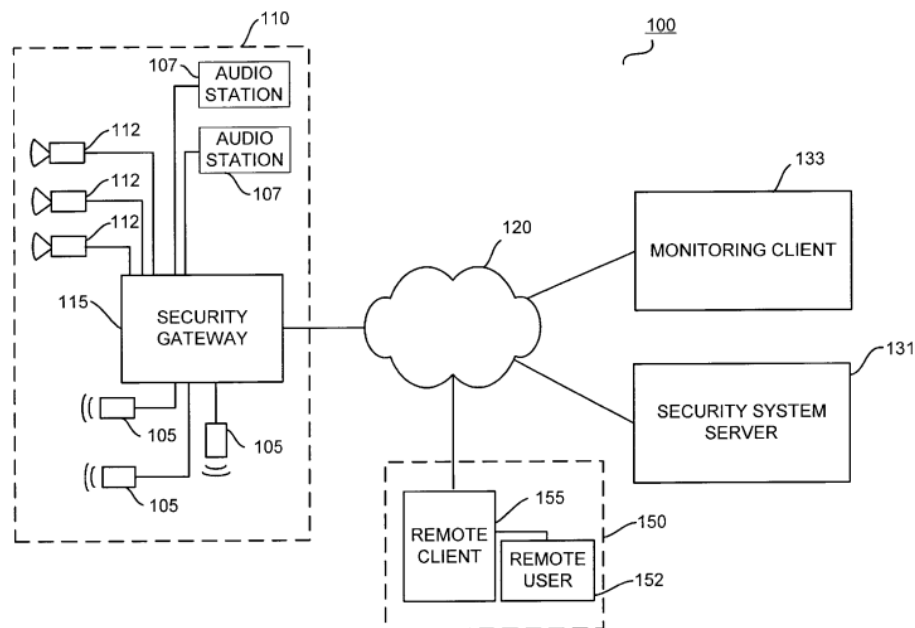


FIG. 1

FIG. 1 depicts a block diagram of security system 100 that comprises security gateway 115, which is typically located at premises 110. *Id.* at 6:20–24. Security system 100 further comprises monitoring client 133 operatively coupled to security gateway 115 through network 120. *Id.* at 6:25–27. Security system 100 further comprises security system server 131 operatively coupled to security gateway 115 through network 120. *Id.* at 6:27–30.

Security gateway 115 detects and relays alarm conditions at premises 110 and captures information relating to such alarm conditions. *Id.* at 6:50–52. Upon triggering of an alarm, security gateway 115 sends cached, stored, and live information from pre-event, pre-alarm, and post-alarm segments to security system server 131 for verification and response. *Id.* at 6:52–56. Security gateway 115 is operatively coupled to security sensors 105, audio stations 107, and video cameras 112 which are located at premises 110

(indoors as well as outdoors). *Id.* at 6:59–65. Video cameras 112 and audio stations 107 capture video data and audio data, respectively, from premises 110. *Id.* at 7:32–34. Audio stations 107 may include microphones and speakers and are capable of providing two-way communication as well as emitting a signal for alerting occupants of the premises that communication is occurring. *Id.* at 7:36–40. Naidoo states: “The present invention provides the advantage of using the security system as a platform for two-way audio and video communication.” *Id.* at 4:23–25. Naidoo further states that the system could recognize a remote user’s facial features, signature, voice or fingerprint. *Id.* at 10:10–15.

2. *Dependent Claim 15*

Claim 15 depends from claim 1 and recites “wherein said computerized controller includes an image recognition module for identifying at least one of faces, eyes, and fingerprints.” Ex. 1001, 20:45–48. Petitioner shows that each of Vaios and Naidoo account for this feature, and explains why one of ordinary skill in the art would have combined Vaios and Naidoo with a reasonable expectation of success. Pet. 34–35. Other than to rely on its argument for claim 1, Patent Owner has not presented a counter argument for claim 15. Prelim. Resp. 42. Petitioner has sufficiently shown that the combination of Vaios and Naidoo teaches the limitation of claim 15. However, because Petitioner has not shown that Naidoo discloses a speaker noted as missing from Vaios with respect to claim 1, we likewise determine this ground insufficient to establish a reasonable likelihood to prevail in demonstrating unpatentability.

F. Alleged Obviousness of Claim 1–10, 12, and 15–20 over Vaios and Menard

1. Overview of Menard⁸ (Ex. 1004)

Menard teaches a wireless communication and control system for a variety of applications, including building maintenance and control, premises security, and personal safety. Ex. 1004, 1:7–9. The system comprises a security sensor and a wireless transceiver communicating using a network protocol. *Id.* at 4:11–13. The sensor may include a motion sensor, a passive infrared motion detector, pressure sensor, position sensor, proximity sensor, glass breakage sensor, or a video camera. *Id.* at 4:16–18.

Figure 1 of Menard is reproduced below:

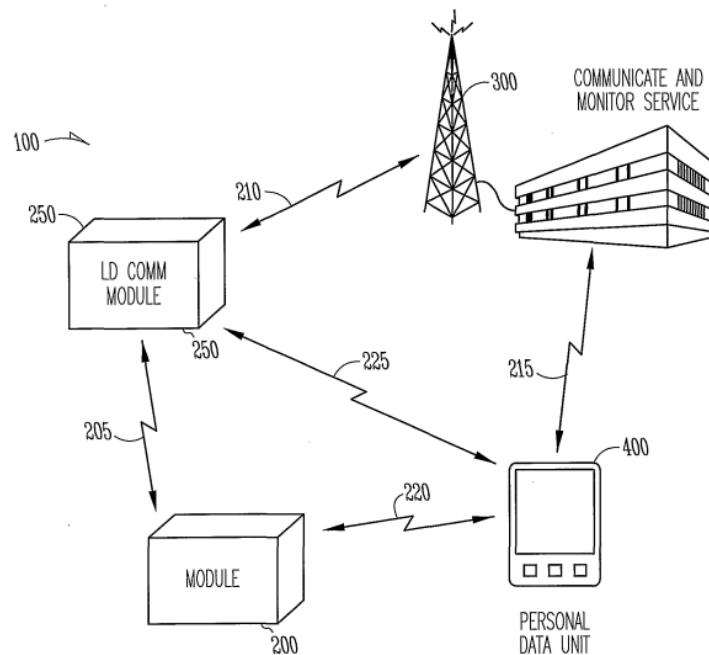


Fig. 1

⁸ Citation to the pages of Menard are made with reference to the actual page numbers of the patent publication, not to the six-digit BATES numbering added by Petitioner to Exhibit 1004.

Figure 1 shows a system 100 that includes “module 200, long distance communication (‘LD comm’) module 250, communication and monitor service facility (‘facility’) 300, and personal data unit (‘PDU’) 400.”⁹ *Id.* at 12:20–23. Module 200, in response to a sensed or detected condition, generates and wirelessly transmits digital data to LD comm module 250. *Id.* at 12:29–13:4. Additionally, module 200 is also in wireless communication with PDU 400 via link 220. *Id.* at 12:27–28.

LD comm module 250 transmits the received signal to facility 300. *Id.* at 13:8–9. LD comm module 250 is also in communication with PDU 400 via link 225. *Id.* at 13:12–13. After receiving the digital data transmitted by module 200, PDU 400 displays or renders the information in a manner useful to a person carrying PDU 400, and provides an audible signal to the user. *Id.* at 13:17–19.

Figure 7 of Menard is reproduced below:

⁹ PDU 400 can be a two-way pager (“400A”), a cellular phone (“400B”), or a personal digital assistant (“PDA 400C”). Ex. 1004, 19:9–15.

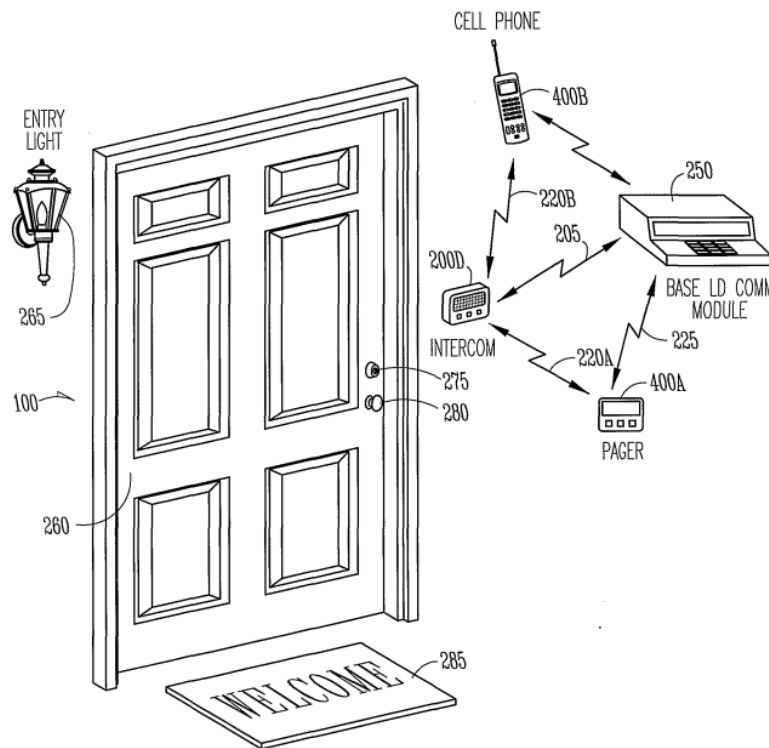


Fig. 7

Figure 7 illustrates an entry door with Menard's system. *Id.* at 10:31–32. Module 200D is mounted on the exterior of the residence and is proximate to entry door 260. *Id.* at 19:32–20:1. Module 200D is in wireless communication with PDU 400B (cellular telephone), PDU 400A (two-way pager), and base 250A that includes LD comm module as well as user operable controls and display to enable programming and operation of system 100. *Id.* at 20:3–8. Menard describes the following:

In operation, a caller at entry door 260 can initiate communication with a user via a PDU. For example, in one embodiment, a caller arriving at locked door 260 can operate module 200D in much the same way as a doorbell, that is, by activating a prominent and conspicuous button. Module 200D then encodes and communicates a digital message for transmission to PDU 400. The digital message may be

communicated directly from module 200 to PDU 400B, for example, either directly (via link 220B), or indirectly, via LD comm module 250A. In one embodiment, the communication to, and from, module 200D involves a BLUETOOTH® channel. In this example, the user receives notification of the presence of the caller by means of PDU 400B. The user, and PDU 400B, may be located inside the residence, in which case a direct connection using link 220B may be possible. Alternatively, the user, and PDU 400B, may be located outside of the residence, in which case, an indirect link, including link 205 coupling the LD comm module 250A may be employed. In either case, the caller is unlikely to perceive the actual location of the user. Furthermore, by way of operating the controls or a numeric keypad on PDU 400B, the user may control the operation of entry light 265 or lock 275 and thereby grant access to the premises for the caller.

Id. at 20:13-31.

Figure 9 of Menard is reproduced below:

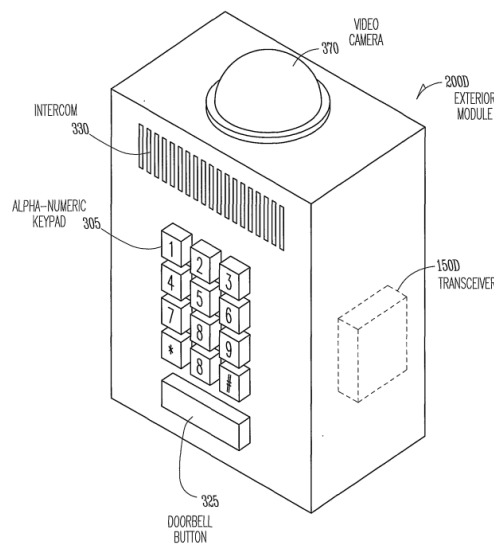


Fig. 9

Figure 9 depict exterior module 300D having video camera 370 and transceiver 150D. *Id.* at 23:15–17. The arrival of the caller is detected by video camera 370. *Id.* at 21:13–14. In response to actuation of the button,

or detection by camera 370, exterior module 200D transmits a wireless signal. *Id.* at 21:14–15.

Figure 10 of Menard is reproduced below:

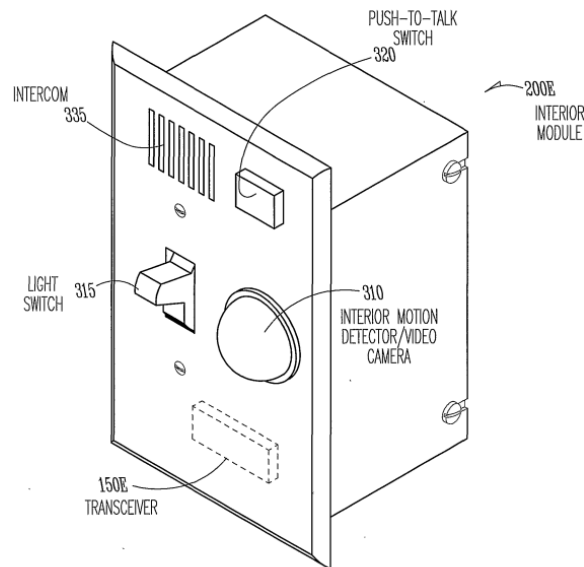


Fig. 10

Figure 10 depicts interior module 200E having intercom 335, push-to-talk (“PTT”) switch 320, interior motion detector/video camera 310, transceiver 150E and light switch 315. *Id.* at 22:29–31.

2. *Claims 1–10, 12, and 15–20*

Petitioner asserts obviousness of claims 1–10, 12, and 15–20 over the combination of Vaios and Menard. Pet. 36–50. We indicate above that Petitioner’s showing is sufficient for Vaios alone with respect to claims 1–7, 9, 10, 15–17, and 20 with the exception of the speaker recited in claim 1. *See* Section II.D.3. Here, Petitioner shows that employing Menard’s speaker and other components with Vaio’s system would have been obvious, for example, to create a more user-friendly, convenient, and easily installed monitoring system. *See* Pet. 36–40. In addition, we find Petitioner’s showing sufficient with respect to claims 1–10, 12, and 15–20 as obvious

over the combination of Vaios and Menard for teaching all limitations of the claims with adequate reasons to combine Vaios and Menard with a reasonable expectation of success in arriving at the claims.

Patent Owner argues that “Petitioner fails to identify with particularity in the Petition which elements are met by Menard versus Vaios and relies entirely on arguments in the expert’s declaration.” Prelim. Resp. 42. Patent Owner contends this is improper as it does not provide information necessary in the Petition and allows Petitioner to escape word count limitations and requires sifting through the expert declaration for arguments that are not in the Petition itself. *Id.* at 42–43. Patent Owner further argues Petitioner failed to perform a proper obviousness analysis by explaining how Vaios and Menard would be combined. *Id.* at 43.

We do not agree with Patent Owner’s arguments. Petitioner identified the parts of Vaios and Menard on which it relies (Pet. 36–50), and provides reasons why one of ordinary skill in the art would have combined Vaios and Menard with a reasonable expectation of success (*see, e.g.*, Pet. 39–40). Patent Owner contends that Petitioner’s modification of Vaios would require its video camera to incorporate numerous additional components which would destroy Vaios’s video camera and render its local computer system superfluous. Prelim. Resp. 43–47, 52–62. Patent Owner has not explained sufficiently why it would be necessary to transfer all components of the Vaios’s local computer system 12 to its video camera 10. Nor does Patent Owner explain sufficiently why packaging such components would have been difficult or impossible for a person of ordinary skill in the art. “A person of ordinary skill in the art is a person of ordinary creativity, not an automaton.” *KSR*, 550 U.S. at 421. We further note that Vaios explicitly

teaches “that various omissions and substitutions and changes in the form and details of the disclosed invention may be made without departing from the spirit of the invention.” Ex. 1003, 10:1–4.

Patent Owner contends that Petitioner mixes and matches an interior module with motion sensor, and an exterior module without one. Prelim. Resp. 48–49. Patent Owner does not explain why the motion sensor must be used strictly indoors. Consequently, Patent Owner’s argument does not overcome Petitioner’s showing.

Patent Owner argues that Petitioner did not identify what type of wireless communication would be used in its system. *Id.* at 49–50. The claims of the ’581 patent do not recite anything regarding the type of wireless communication and Patent Owner does not explain why the type of wireless communication matters in the obviousness analysis.

Patent Owner further argues that one of ordinary skill in the art would not wholesale substitute Menard’s “module 200D” for Vaios video camera. *Id.* at 50. However, “[t]he test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference, nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art.” *In re Keller*, 642 F.2d 413, 425 (CCPA 1981) (citation omitted).

Petitioner has shown a reasonable likelihood that it would prevail in establishing obviousness of claims 1–10, 15, and 15–20 over the combination of Vaios and Menard notwithstanding Patent Owner’s arguments to the contrary.

G. Alleged Obviousness of Claim 15 over Vaios, Menard, and Naidoo

Claim 15 was discussed previously and recites that the “computerized controller includes an image recognition module for identifying at least one of faces, eyes, and fingerprints.” Ex. 1001, 20:45–48. Petitioner contends that “Naidoo discloses a software module (e.g., ‘media handler 415’ of security system server 131) that performs authentication of a remote user with biometrics including ‘facial features, signature, voice or fingerprint.’” Pet. 50 (citing Ex. 1005, 10:5–11, 18:61–19:3; Ex. 1002 ¶¶ 284–295). Petitioner contends it was obvious to implement such biometric authentication features (and corresponding software module) of Naidoo with Vaios’s local computer system 12 for the reasons explained. *Id.* at 34–35. Petitioner contends the combination of Vaios, Naidoo, and Menard renders claim 15 obvious for similar reasons. *Id.* at 51 (citing Ex. 1002 ¶¶ 285–295).

Patent Owner relies on its arguments for claim 1 and does not present any separate arguments for claim 15. Prelim. Resp. 62.

Reviewing the evidence, Petitioner has shown a reasonable likelihood that it would prevail in establishing that claim 15 would have been obvious over the combination of Vaios, Naidoo, and Menard.

H. Alleged Obviousness of Claims 1, 2, 4–10, 12, and 16–20 over Klein, Menard, and Vaios

1. Overview of Klein (Ex. 1006)

Klein generally relates to a “digital video security system” in which “[v]ideo images [and sound] . . . may be delivered in near real-time or at a later time.” Ex. 1006, code (57), ¶ 21, Fig. 1. Klein also relates to a “method of motion detection” and “method of maintaining surveillance of a surveillance area.” *Id.* ¶ 9.

Figure 1 of Klein follows:

Figure 1

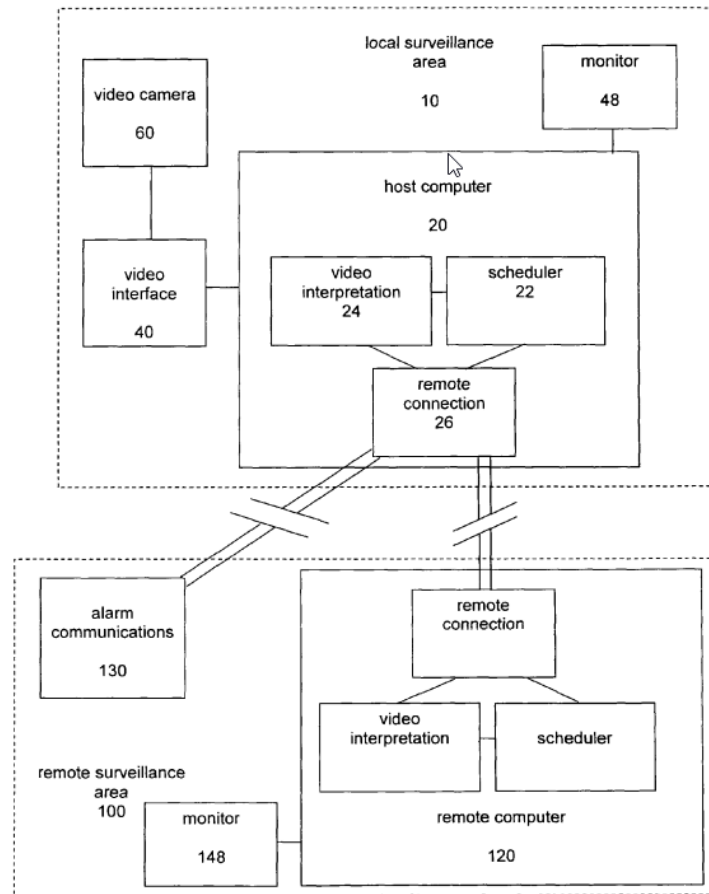


Figure 1 above illustrates Klein’s system, which includes “video camera 60 . . . mounted [at a local] surveillance area 10” that “communicates . . . with a video interface 40, which . . . is connected to a host computer 20”. Ex. 1006 ¶ 17. “[C]amera 60” monitors “an entry door.” *Id.* ¶ 38. The system “respond[s] to a motion detection at an entry door,” which “trigger[s] an alarm event . . . causing the module 22 to direct the video module 24 to record video.” *Id.* ¶ 42. Klein’s system allows the user to “view the intruder at the local surveillance area 10” and also “speak to the intruder.” *Id.* ¶ 35.

2. Claims 1, 2, 4–10, 12, and 16–20

Petitioner contends that each limitation of claims 1, 2, 4–10, 12, and 16–20 are disclosed in the combination of Klein, Menard, and Vaio. Pet.

51–74. As we have already found Petitioner’s showing sufficient for these claims over the combination of Vaios and Menard (Section II.F), we necessarily find Petitioner’s showing sufficient with the addition of Klein.

Patent Owner argues that Petitioner did not perform a proper *Graham* analysis because it did not identify the differences between the ’581 patent and the prior art. Prelim. Resp. 63. We do not agree. Although Petitioner argues for the most part that Klein, Menard, and Vaios identically disclose the claim limitations, Petitioner has acknowledged at points in the Petition that the references do not identically disclose a feature but that it would have been obvious to include the feature in view of what is disclosed. *See, e.g.*, Pet. 15 (stating that Vaios renders obvious a wireless exterior module located proximate an entrance). Patent Owner argues that Klein’s video camera does not include a proximity sensor within a wireless exterior device. Prelim. Resp. 63–65. However, Klein teaches a security camera using motion detection to monitor a surveillance area such as a store entrance. Ex. 1006 ¶¶ 2, 4. According to Vaios’s teaching, for example, the security camera may be located outdoors. *See, e.g.*, Pet. 12 (citing Ex. 1003, 7:62–8:4, 9:49–53, 9:59–61; Ex. 1002 ¶¶ 106–109). Patent Owner’s argument does not overcome Petitioner’s showing.

Patent Owner argues that Klein’s speaker, microphone, and motion detection unit are separate from Klein’s video camera and, consequently, that Petitioner has not shown that the wireless exterior module includes the claimed “receiver” for (audio) communications. Prelim. Resp. 65–66. Petitioner contends, however, that it would have been obvious to combine corresponding elements of Klein’s system with the wireless exterior module

taught by Menard, just as with combining Menard with Vaios as discussed. Pet. 55. Petitioner's showing is sufficient for institution.

Petitioner has shown a reasonable likelihood that it would prevail in establishing obviousness of claims 1, 2, 4–10, 12, and 16–20 over the combination of Klein, Menard, and Vaios.

I. Alleged Obviousness of Claims 2, 3, and 15 over Klein, Menard, Vaios, and Naidoo

Petitioner contends that each limitation of claims 2, 3, and 15 is disclosed in the combination of Klein, Menard, Vaios, and Naidoo. Pet. 75–79. In addition, Petitioner provides reasons why a person of ordinary skill in the art would have combined the teachings of Klein, Menard, Vaios, and Naidoo with a reasonable expectation of success. *Id.* at 76–79.

We have already found Petitioner's showing sufficient for these claims over Vaios and Menard (Section II.F). Accordingly, we necessarily find Petitioner's showing sufficient with the addition of Klein. Patent Owner relies on its arguments for claim 1 which do not overcome Petitioner's showing for the reasons stated.

Consequently, Petitioner has presented a reasonable likelihood of prevailing in showing unpatentability of claims 2, 3, and 15 as obvious over Klein, Menard, Vaios, and Naidoo.

III. CONCLUSION

We determine that Petitioner has demonstrated a reasonable likelihood that it would prevail in establishing that at least one of challenged claims 1–10, 12, and 15–20 of the '581 patent is unpatentable. We therefore institute *inter partes* review for claims 1–10, 12, and 15–20 on all challenge grounds. *See SAS Institute, Inc. v. Iancu*, 138 S. Ct. 1348 (2018).

IV. ORDER

For the foregoing reasons, it is

ORDERED that pursuant to 35 U.S.C. § 314(a), an *inter partes* review of claims 1–10, 12, and 15–20 of the '581 patent is instituted with respect to all grounds set forth in the Petition.

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

IPR2022-00812
Patent 8,154,581 B2

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