

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

VIVINT, INC.,
Petitioner,

v.

SB IP HOLDINGS LLC,
Patent Owner.

IPR2022-01352
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 11, 13, and 14 (“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 7 (“Prelim. Resp.”). Petitioner filed a Preliminary Reply. Paper 8 (“Prelim. Reply”).

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 3, 2.

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.) (the “Texas Litigation”); and *Vivint Inc. v. SB IP Holdings LLC*, No. 8:22-cv-00034 (C.D. Cal.) (the “California Litigation”). Pet. 1; Paper 3, 2–3. The California Litigation was transferred to the U.S. District Court for the Eastern District of Texas, and is now pending under Civil Action No. 4:22-cv-00648-ALM. Pet.1–2, Paper 3, 2–3.

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); IPR2022-00812 (U.S. Patent No. 8,154,581 B); IPR2022-00813 (U.S. Patent No. 8,164,614 B2); and IPR2022-00814 (U.S. Patent No. 8,144,183 B2); IPR2022-01364 (U.S. Patent No. 8,144,184 B2); and IPR2022-01365 (U.S. Patent No. 8,164,614 B2). Pet. 2; Paper 3, 2.

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 3, 3.

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 comprises 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.

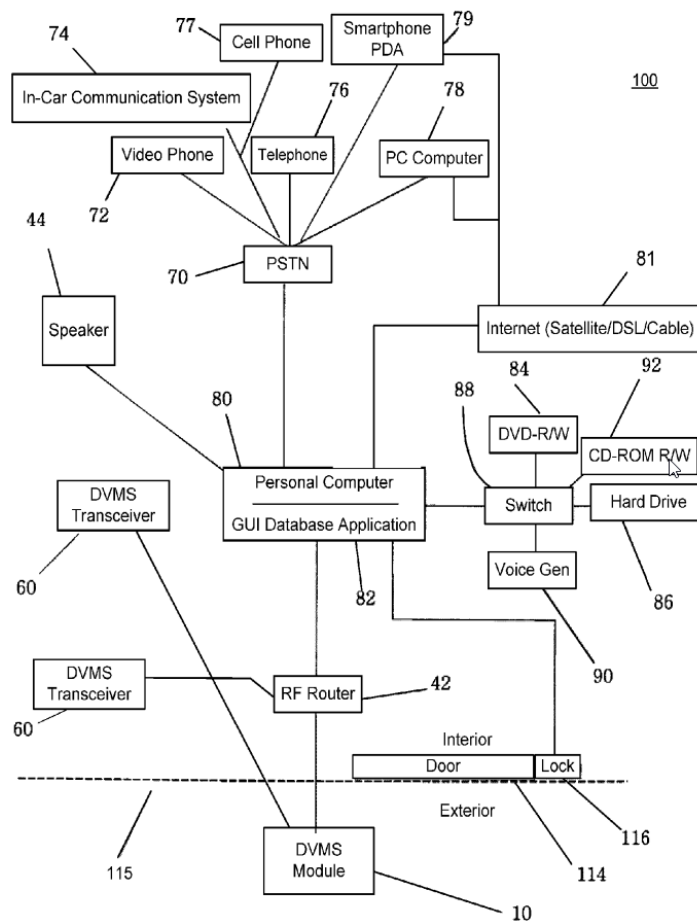


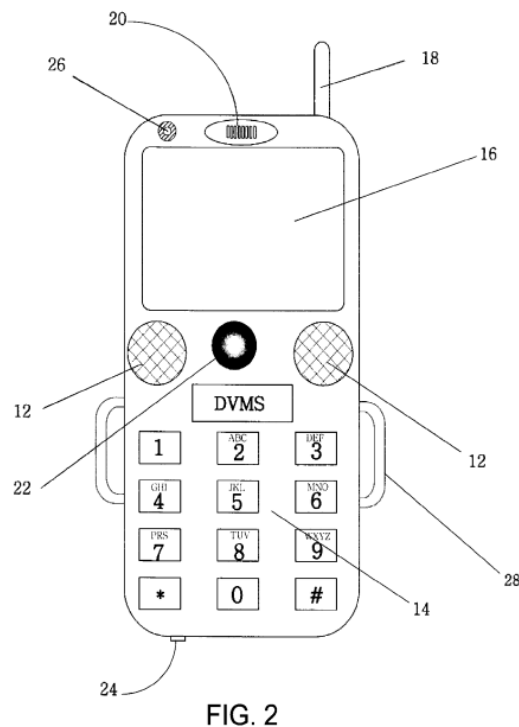
FIG. 1

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.

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

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:



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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 Claims

Claim 1 is the only independent claim of the '581 patent, and claims 11, 13, and 14 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.

11. The audio-video communication system of claim 1, wherein said wireless exterior module includes a display screen.

Ex. 1001, 19:32–34.

13. The audio-video communication system of claim 1, wherein said wireless exterior module is portable and includes a locking mechanism and an electrical receptacle for quickly attaching to a source of electricity.

Ex. 1001, 19:38–41.

14. The audio-video communication system of claim 1, wherein said wireless exterior module has a portable energy source and is secured in a holster.

Ex. 1001, 19:42–44.

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 Aug. 7, 2001; filed Oct. 2, 1998	1003
Menard ⁴	International Pat. Pub. No. WO 01/093220 A1	Published Dec. 6, 2001; filed May 26, 2000	1004
Klein ⁵	U.S. Application No. 2004/0080615 A1	Published April 29, 2004; filed Aug. 21, 2003	1006
Schnell ⁶	U.S. Patent No. 6,735,387 B1	Issued May 11, 2004; filed Jan. 10, 2001	1031

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).

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

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

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

References		Date	Exhibit
Choi ⁷	U.S. Patent No. 5,604,551	Issued Feb. 18, 1997; filed Feb. 2, 1995	1032

Petitioner also relies on a Declaration of Bertrand M. Hochwald, Ph.D. (Ex. 1034).

G. Asserted Grounds of Unpatentability

Petitioner challenges the patentability of claims 11, 13, and 14 of the '581 patent on the following grounds (Pet. 10, 38, 49, 61, 63, 77):

Claims Challenged	35 U.S.C. § ⁸	Reference(s)/Basis
11, 13, 14	103(a)	Vaios, Schnell
13, 14	103(a)	Vaios, Choi
13	103(a)	Vaios, Menard
11, 13, 14	103(a)	Vaios, Menard, Schnell
13	103(a)	Klein, Menard, Vaios
11, 13, 14	103(a)	Klein, Menard, Vaios, Schnell

⁷ Petitioner contends Choi is prior art under at least § 102(b).

⁸ 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 '581 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.

II. PRELIMINARY MATTERS

A. *Filing of Multiple Petitions Challenging the Same Patent*

Patent Owner argues that because Petitioner already challenged the '581 patent in IPR2022-00812, we should discretionarily deny institution under *General Plastic Industrial Co., Ltd. v. Canon Kabushiki Kaisha*, IPR2016-01357, Paper 19 at 16–17 (PTAB Sept. 6, 2017) (precedential as to § II.B.4.i) (“*General Plastic*”). Prelim. Resp. 24–28. Petitioner contends that discretionary denial under *General Plastic* “is not warranted.” Pet. 79–80. We address Petitioner’s and Patent Owner’s arguments as we analyze the *General Plastic* factors below.

1. *whether the same petitioner previously filed a petition directed to the same claims of the same patent;*

Patent Owner acknowledges that dependent claims 11, 13, and 14 of the '581 patent were not previously challenged in IPR2022-00812. Prelim. Resp. 26. However, Patent Owner contends independent claim 1 is necessarily challenged in both proceedings. *Id.* Patent Owner also asserts the same grounds as IPR2022-00812 are asserted in this *inter partes* review.

We do not agree with Patent Owner’s arguments. The only claims of the '581 patent challenged here are claims 11, 13, and 14, and these claims were not challenged in IPR2022-00812. Although it is true that a dependent claim cannot be unpatentable over prior art unless the independent claim from which it depends is also unpatentable over the same prior art, we do not see that, in the context of a *General Plastic* analysis, as challenging the independent claim once again.

Accordingly, the challenge grounds and claims asserted in this *inter partes* review are not the same as IPR2022-00812. This factor weighs strongly against exercising our discretion under § 314(a) to deny institution.

2. *whether at the time of filing of the first petition the petitioner knew of the prior art asserted in the second petition or should have known of it;*

Patent Owner argues that Petitioner knew of Vaios, Klein, and Menard when the petition in IPR2022-00812 was filed because they were used in the challenge grounds for that *inter partes* review. Neither Patent Owner nor Petitioner provide any evidence of when Petitioner knew of the Schnell and Choi references. Prelim. Resp. 26–27.

We weigh this factor in favor of applying discretion to deny because at least some of the prior art asserted in this proceeding was known to Petitioner when the petition in IPR2022-00812 was filed.

3. *whether at the time of filing of the second petition the petitioner already received the patent owner's preliminary response to the first petition or received the Board's decision on whether to institute review in the first petition;*

The preliminary response in IPR2022-00812 was filed the same day as the Petition in this proceeding, August 4, 2022. Accordingly, Petitioner had little if any opportunity to review the preliminary response before filing the Petition in this *inter partes* review.

Patent Owner argues that Petitioner long ago received Patent Owner's validity positions on the references in an ITC investigation, and asserts that the parties have engaged in considerable discovery surrounding the validity of this family of patents. Prelim. Resp. 27.

Factor 3 relates, however, to when the preliminary response was received in relation to when the Petition for this proceeding was filed, not the prior litigation or discovery between the parties.

We find this factor weighs against exercising our discretion to deny institution.

4. *the length of time that elapsed between the time the petitioner learned of the prior art asserted in the second petition and the filing of the second petition;*

Patent Owner asserts that Petitioner knew of Menard and Klein well over a year prior to filing the Petition in this proceeding. Prelim. Resp. 28.

Although this may be so, for reasons explained under factor 5, we find this factor to be neutral.

5. *whether the petitioner provides adequate explanation for the time elapsed between the filings of multiple petitions directed to the same claims of the same patent;*

Patent Owner contends that Petitioner does not address this factor. Prelim. Resp. 28. We disagree. Petitioner contends that it challenged claims 11, 13, and 14 only after Patent Owner served infringement contentions on June 10, 2022, which asserted claim 13 of the '581 patent against Petitioner. Pet. 79–80. Petitioner contends this is the first *inter partes* review to address claims 11, 13, and 14 of the '581 patent. *Id.* at 80.

We find this is an adequate explanation for the time elapsed between the filing of the petition in IPR2022-00812 and the Petition in this proceeding.

We find this factor weighs against exercising our discretion to deny institution.

6. *the finite resources of the Board;*

Patent Owner argues that Petitioner has filed nine *inter partes* reviews against Patent Owner's patents, including duplicative proceedings against several patents. Prelim. Resp. 28 (citing IPR2022-00810, -00811, -00812, -00813, -00814, -01352, 01364, -01365, -01449). Patent Owner contends the Board has already devoted substantial time and effort to Petitioner's first challenge to the '581 patent in IPR2022-00812. Prelim. Resp. 28.

The Petition in this case challenges three claims on six different grounds. While this requires some additional work by the Board over what is required for IPR2022-00812, we find it is not so much more as to justify exercise of our discretion to deny institution. And we are aware of no reason why our decision in this case would affect any of the other cases that Patent Owner mentions.

Accordingly, we weigh this factor as neutral.

7. *the requirement under 35 U.S.C. § 316(a)(11) to issue a final determination not later than 1 year after the date on which the Director notices institution of review.*

Patent Owner contends this factor is neutral. Prelim. Resp. 28. Petitioner does not address this factor. *See* Pet.

We find this factor weighs against exercising our discretion to deny institution because we foresee no issue with issuing a final determination by the one-year statutory date.

8. *Conclusion*

We find factor 1 weighs strongly against exercising our discretion to deny institution, factors 3, 5, and 7 weigh against exercising our discretion to deny institution, factor 2 weighs in favor of exercising our discretion to deny institution, and factors 4 and 6 are neutral. The balance of the *General Plastic* factors thus weighs against exercising our discretion to deny institution.

Accordingly, we decline to exercise our discretion to deny institution based on the *General Plastic* factors.

B. *Fintiv*

Patent Owner argues that we should discretionarily deny institution in view of parallel district court litigation under *Apple Inc. v. Fintiv, Inc.*,

IPR2020-00019, Paper 11 (PTAB Mar. 20, 2020) (designated precedential May 5, 2020) (“*Fintiv*”). However, Petitioner has given Patent Owner a stipulation consistent with *Sotera Wireless, Inc. v. Masimo Corp.*, IPR2020-01019, Paper 12 (PTAB Dec. 1, 2020) (precedential as to § II.A). Pet. 81 (citing Ex. 1030). Petitioner’s *Sotera* stipulation indicates that it will not pursue in the Texas Litigation any grounds of unpatentability raised or that could have been reasonably raised in this *inter partes* review. Ex. 1030, 1.

Pursuant to the Director’s Memorandum dated June 21, 2022,⁹ “the PTAB will not discretionarily deny institution in view of parallel district court litigation where a petitioner presents a stipulation not to pursue in a parallel proceeding the same grounds or any ground that could have been reasonably raised before the PTAB.” Director Memo, 3. Consequently, we decline to discretionarily deny institution under *Fintiv*.

C. Dr. Hochwald’s Declaration

Patent Owner contends that Petitioner attempted to circumvent the page limits and violated 37 C.F.R. § 42.6(a)(3) because Dr. Hochwald’s declaration includes “pages of arguments and evidence that are not in the Petition.” Prelim. Resp. 20–22. Patent Owner contends that we should deny the Petition for this reason. *Id.* at 22. Patent Owner fails to indicate, however, what specific parts of Dr. Hochwald’s declaration are not in the Petition.

⁹ Interim Procedure for Discretionary Denials in AIA Post-grant Proceedings with Parallel District Court Litigation (USPTO June 21, 2022) 3, available at https://www.uspto.gov/sites/default/files/documents/interim_proc_discretionary_denials_aia_parallel_district_court_litigation_memo_20220621_.pdf. (“Director Memo”).

According to the Consolidated Trial Practice Guide¹⁰, “§ 42.6(a)(3) prohibits incorporating arguments by reference from one document into another. Thus, parties that incorporate expert testimony by reference in their petitions, motions, or replies without providing explanation of such testimony risk having the testimony not considered by the Board.” *See Cisco Systems, Inc. v. C-Cation Techs., LLC*, IPR2014-00454 (PTAB Aug. 29, 2014) (Paper 12) (informative). Patent Owner has not informed us which arguments in the Petition allegedly are there simply by incorporating them by reference from the Dr. Hochwald’s declaration. Accordingly, we decline to deny the Petition on the basis alleged by Patent Owner.

Patent Owner argues that Dr. Hochwald’s declaration is mere attorney argument, not proper technical analysis. Prelim. Resp. 22. Patent Owner argues that “the entirety of Dr. Hochwald’s declaration is an extended version of the Petition itself, full of attorney argument without more.” *Id.* citing (*American National Manufacturing, Inc. v. Sleep Number, Corp.*, IPR2019-00497, 2019 WL 3332630, at *11 (PTAB July 24, 2019); *Amazon.com, Inc. v. JumpSport, Inc.*, IPR2018-00715, 2018 WL 4263376, at *19 (PTAB Sept. 6, 2018)).

“Expert testimony that does not disclose the underlying facts or data on which the opinion is based is entitled to little or no weight.” 37 C.F.R. § 42.65(a); *see also Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 9 at 15–16 (PTAB Aug. 24, 2022) (precedential) (expert testimony entirely unsupported by underlying facts or data).

We do not agree with Patent Owner that the entirety of Dr. Hochwald’s declaration (Ex. 1034) is “attorney argument without more.”

¹⁰ <https://www.uspto.gov/TrialPracticeGuideConsolidated>

For example, the declaration identifies materials considered, including the '581 patent and asserted prior art references which support Dr. Hochwald's testimony. *See* Ex. 1034 ¶¶ 18, 20. Hence, we do not agree that the declaration is entirely unsupported attorney argument, and we discuss its content and assign it the appropriate weight in the analysis of Petitioner's asserted grounds of unpatentability below.

III. 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. 9 (citing Ex. 1034 ¶¶ 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. However, Petitioner's declarant indicates that he considered the relevant factors in determining the level of ordinary skill in the art, and Petitioner notes that "[t]he level of skill in the art is also shown by the art cited herein." Pet. 9 (citing Ex. 1034 ¶¶ 21–24). 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. Matal*, 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 an express construction for any claim term. Pet. 9; Prelim. Resp. 1. Petitioner, however, implies a construction of the recited “locking mechanism” as a device related to a camera module that can removably secure two things together. Pet. 27, 40–42. Patent Owner asserts that Petitioner is taking inconsistent claim construction positions with respect to “locking mechanism” in claim 13 by reading the limitation on multiple features of Schnell that secure the camera in a desired location, and Menard’s deadbolt lock 275 that can be unlocked using a keypad of exterior module 200D. Prelim. Resp. 33.

The ’581 patent describes a “locking mechanism” as follows:

The DVMS module 10 also includes a locking mechanism 28 for receipt in a mounting holster (not shown). The locking mechanism 28 enables the DVMS module 10 to be installed securely wherever holstered, or to be moved to some other remote location, as desired. The DVMS module 10 thus is portable, much like a cell phone, and can be securely mounted and quickly connected to an electrical source.

Ex. 1001, 8:7–13. Thus, the ’581 patent describes the “locking mechanism” as removably securing the module within a holster. Similarly, Schnell’s

“locking mechanism” (which, according to Petitioner, is one or more of Schnell’s mounting members 142, 144, stand 120, housing 102, flexible band 150, mounting holes 126, 128, and bolt 127—*see* Figures 1, 2A, and 2B) removably secures camera 100 (“wireless exterior module”) to stand 120 (“holster”).

Viewed alternatively, “locking mechanism” may be understood to be “1. A device operated by a key, combination, or keycard and used, as on a door, for holding, closing, or securing.” The American Heritage® Dictionary of the English Language, 5th Ed., Copyright © 2022 by HarperCollins Publishers.¹¹ Exhibit 3001. Menard describes that “[e]xterior module 200D includes [an] alpha-numeric keypad 305 for receiving coded information” and “authorized callers can enter a predetermined code sequence to cause deadbolt lock 275 (Figure 8) to engage or disengage.” Ex. 1004, 22:4–13.

Since “locking mechanism” is a broad term that encompasses Schnell’s and Menard’s devices within its plain and ordinary meaning, we see no error in Petitioner’s interpretation (Pet. 39) that the locking mechanism can be met by a device related to a camera module that can removably secure two things together.

As there is no other dispute concerning the meaning of claim terms, we determine that no additional express claim construction is necessary for this Decision and proceed with to our obviousness analysis. However, we invite the parties in future briefings to address construction of the terms

¹¹ [American Heritage Dictionary Entry: lock \(ahdictionary.com\)](https://www.ahdictionary.com/entry/lock.html), last viewed 3-9-2023.

“locking mechanism” (claim 13 of the ’581 patent) and “holster” (claim 14), post institution.

C. Priority Date of the ’581 Patent

Petitioner contends that claims 11, 13, and 14 of the ’581 patent are not entitled to their alleged 2002 priority date. Pet. 3–7. Specifically, Petitioner contends that Provisional Application 60/418,384 (“the ’384 provisional”) (Ex. 1021) 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 4–5 (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 is entitled to the 2002 filing date, and the earliest date they might be entitled to is October 9, 2003. *Id.* at 6–7.

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. 7 (citing *Lockwood*, 107 F.3d at 1572; *Novartis Pharms. Corp. v. Accord Healthcare Inc.*, 38 F.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 9 (citing Ex. 1021, 6) (emphasis omitted). Patent Owner notes that the '384 provisional discloses that the "control computer is preferably connected to . . . an Internet service provider (ISP) for communication to the peripheral devices." *Id.* at 9. 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 9 (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 9–10 (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 10 (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 10–11. 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 11–12 (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.

Patent Owner contends that the issue of whether Klein is prior art turns on the priority date of the ’581 patent. Prelim. Resp. 13. For purposes of this Decision, Petitioner has shown sufficiently that Klein does constitute

prior art. Pet. 3–7. Patent Owner must demonstrate entitlement to the priority date, addressing the element raised by Petitioner. *Dynamic Drinkware, LLC v. Nat’l Graphics Inc.*, 800 F.3d 1375 (Fed. Cir. 2015).

D. Ground 1: Alleged Obviousness of Claims 11, 13, and 14 over Vaios and Schnell

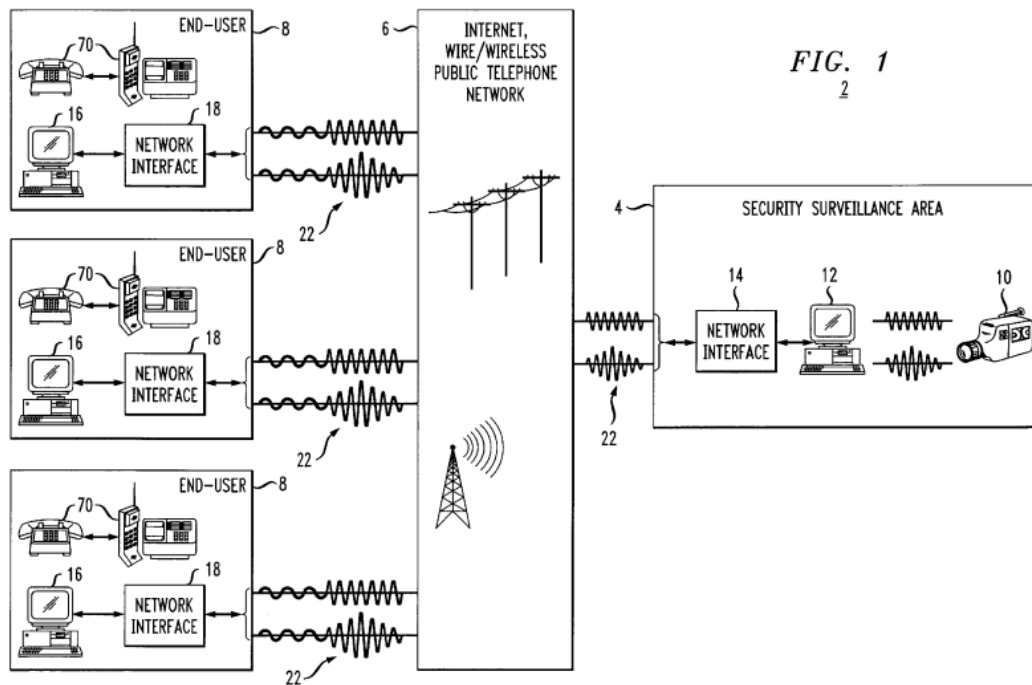
1. Principles of Obviousness

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. Overview of Schnell (Ex. 1031)

Schnell is titled “Motion Detector Camera” and includes a camera 100, 400, 700, as shown below in Figure 1.

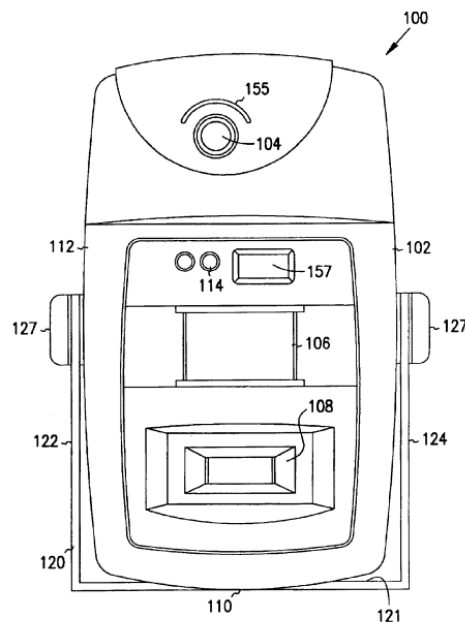


FIG. 1

The camera 100 in Figure 1 includes an LCD display 157. Ex. 1031, code (57), 2:33–37, 3:64–67, Figs. 1–3. LCD display 157 displays the number of exposures taken by the camera, and other information, such as power level and so forth. *Id.* at 3:64–67. The camera 100, 400, 700 is portable and

includes one or more mounting members 142, 144, stand 120, housing 102, flexible band 150, mounting holes 126, 128, and bolt 127. *Id.* at 1:28–30, 1:62–63, 2:33–3:23, 5:34–47, 5:61–64, 6:3–28, Figs. 1–3, 7. In addition, the camera includes a DC jack 464 and electrical connections for batteries 468. *Id.* at 5:10–13, Fig. 5B.

4. *Motivation to Combine*

Petitioner contends that a person of ordinary skill in the art would have combined Schnell’s display screen with Vaios’s system to provide a mechanism for presenting information to a user at the camera itself (including, e.g., power level information, camera activity, etc.). Pet. 26–27 (citing Ex. 1034 ¶ 144). Petitioner contends the proposed combination would have created a more user-friendly, convenient, and robust monitoring system that would allow a user to observe displayed information at the camera/wireless exterior module itself. *Id.* at 27. Petitioner further contends that a POSITA would have readily recognized the benefits associated with being able to quickly and easily relocate a portable monitoring device that may be securely mounted and connected to power in a simple, convenient manner (e.g., using “hand-turnable knobs” and/or straps and battery/DC power supplies), and just as easily unsecured and disconnected to facilitate desired movement to a different location. *Id.* at 34 (citing Ex. 1031, 1:28–30, 1:62–63, 3:2–24; Ex. 1034 ¶ 158). Petitioner further contends that the combination of Vaios and Schnell enables a portable monitoring device that may be securely mounted and connected to power in a simple, convenient manner using a stand and batteries, and just as easily unsecured and disconnected to facilitate desired movement to and secure mounting at a different location. Pet. 38 (citing Ex. 1031, 1:28–30, 1:62–63, 3:2–24; Ex. 1034 ¶ 166).

Patent Owner contends that Petitioner's motivation to combine is "boilerplate *ipse dixit*." Prelim. Resp. 31–32. Patent Owner contends that Petitioner merely fills out a "form" for its obviousness contentions. *Id.* at 32. Patent Owner further argues that Petitioner does not state what the known methods are by which the references are combined. *Id.*

We do not agree with Patent Owner's contentions. Petitioner and Dr. Hochwald identified sections in the prior art references supporting the motivations to combine the prior art references so the stated reasons to combine are not "boilerplate *ipse dixit*" or formulaic. The methods for combining the known elements taught by Vaios and Schnell are readily understood from the cited parts of the references and Dr. Hochwald's testimony. That Patent Owner chose not to address Petitioner's and Dr. Hochwald's statements concerning motivation to combine does not diminish their effect in motivating one of ordinary skill in the art to combine them together.

Accordingly, we find that Petitioner has shown sufficient motivation to combine Vaios and Schnell with a reasonable expectation of success in arriving at the claimed invention.

5. *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. 10–11 (citing Ex. 1003, code (57), 9:2–4, 9:32–34, Fig. 1; Ex. 1034 ¶¶ 92–98). 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 10 (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 11 (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. 12–18. 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 12 (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 13 (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.* (citing Ex. 1003, 9:59–61; Ex. 1034 ¶¶ 101–104) (emphasis omitted). 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 14 (citing Ex. 1034 ¶¶ 105–107). 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 15 (citing Ex. 1034 ¶ 107). 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.* (citing Ex. 1034 ¶¶ 108–110).

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. 16. 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. 1034 ¶ 111). Petitioner further contends that “[v]ideo 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. 1034 ¶ 111).

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. 1034 ¶ 100). Specifically, Petitioner contends that Vaios’s video camera 10 has a motion sensor and motion sensor data can be transmitted from the camera to the local computer system. *Id.* at 16–17 (citing Ex. 1003, 3:14–30). Petitioner contends that, when the motion sensor detects an obstruction, the camera starts recording. *Id.* at 17 (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. 1034 ¶ 100). 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. 1034 ¶ 100). 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. 17 (citing Ex. 1034 ¶ 112). 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. 1034 ¶ 112). Petitioner contends Vaios discloses or renders obvious the “transmitter” and “receiver” limitations.

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. 18 (citing Ex. 1003, 3:24–36, Fig. 1; Ex. 1034 ¶¶ 114–122). 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 18–19 (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 19

(citing Ex. 1034 ¶¶ 115–119). 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 13–16). Petitioner contends that Vaios thus teaches the first part of limitation (b) of claim 1. *Id.* (citing Ex. 1034 ¶¶ 114–122).

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. 20. 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 20 (citing Ex. 1034 ¶¶ 123–137). 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. 1034, code (57) (emphasis omitted)). 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” and “[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). 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 20–21 (citing Ex. 1034 ¶¶ 124–128).

Petitioner contends that the “application specific browser software, plugins, APIs, and other protocols” are provided by local computer system 12. *Id.* at 21 (citing Ex. 1034 ¶¶ 123–136). 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. 1034 ¶ 130). 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. 1034 ¶¶ 123–136).

Turning to the last part of limitation (b), claim 1 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 part of limitation (b). *Id.* at 21–22 (citing Ex. 1034 ¶¶ 130–137). 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 22 (citing *id.* at 18–20). 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” and “[e]mploying 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. 1034 ¶¶ 130–136). 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:

[A]n 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 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 24 (citing Ex. 1034 ¶¶ 133–136).

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 interfacing 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). Patent Owner presents no argument against limitation (b) of claim 1. Accordingly, Petitioner contends Vaios teaches limitation (b) of claim 1.

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. 24 (citing Ex. 1003, code (54), 2:26–33, 4:5–20, 8:55–9:9; Ex. 1034 ¶¶ 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 24–25 (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 25 (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.

Claim 1 is not challenged in this Petition. We address the elements of claim 1 only because they are incorporated by reference into each of dependent claims 11, 13, and 14. Petitioner has sufficiently shown that Vaios discloses or would have suggested each element of claim 1 including the preamble.

6. *Claim 11*

Claim 11 depends from claim 1 and recites “wherein said wireless exterior module includes a display screen.” Ex. 1001, 20:32–34. Petitioner contends that Schnell discloses a wireless exterior module (e.g., camera 100, 400, 700) that includes a display screen (e.g., LCD display 157). Pet. 25 (citing Ex. 1034 ¶¶ 141–142; Ex. 1031, code (57), 2:33–37, 3:64–67, Figs. 1–3). The LCD display 157 may display the number of exposures taken by the camera or other information, such as power level and so forth. *Id.* (citing Ex. 1031, 3:64–67. Petitioner contends that it “would have been obvious to use an LCD display screen in the cameras/wireless exterior modules of Vaios in order to provide a display for presenting information about the camera in view of the teachings of Schnell.” *Id.* at 26 (citing Ex. 1034 ¶¶ 143–144). The preliminary record supports this showing.

Patent Owner argues that Schnell does not disclose a wireless exterior module. Prelim. Resp. 34–36. Specifically, Patent Owner argues that Schnell discloses a still camera, not a video camera, in which “it would be useful to have a screen to tell the user whether and how many pictures the camera took.” *Id.* at 36. According to Patent Owner, those “same concerns are not present for Vaios’s remote-controlled video camera where the user

can watch all the videos from a remote computer. *Id.* Patent Owner fails to address, however, Petitioner’s statement that it would be useful to display the battery level on the display screen. In addition, Patent Owner does not address that Petitioner also relies on Vaios to disclose a “wireless exterior module.” Pet. 12–16.

Thus, Patent Owner does not show any deficiency in Petitioner’s combination of Vaios and Schnell.

7. *Claim 13*

Claim 13 depends from claim 1 and recites “wherein said wireless exterior module is portable and includes a locking mechanism and an electrical receptacle for quickly attaching to a source of electricity.”

Ex. 1001, 20:38–41. Petitioner contends that Schnell discloses a wireless exterior module (e.g., camera 100, 400, 700) that is portable and includes a locking mechanism (e.g., one or more of mounting members 142, 144, stand 120, housing 102, flexible band 150, mounting holes 126, 128, and bolt 127) and an electrical receptacle (e.g., DC jack 464 and/or electrical connections for batteries 468) for quickly attaching to a source of electricity. Pet. 27–34 (citing Ex. 1034 ¶¶ 146–159; Ex. 1031, 1:28–30; 1:62–63; 2:33–3:23, 5:34–47, 5:61–64, 6:3–28, Figs. 1–3, 5B, 7). The preliminary record supports this showing.

Patent Owner does not address Petitioner’s contention that claim 13 would have been obvious over the combination of Vaios and Schnell. *See* Prelim. Resp.

8. *Claim 14*

Claim 14 depends from claim 1 and recites “wherein said wireless exterior module has a portable energy source and is secured in a holster.”

Ex. 1001, 20:42–44. Petitioner contends that Schell discloses a wireless

exterior module (camera 100, 400, 700) having a portable energy source (e.g., batteries 468) and that is secured in a holster (e.g., stand 120). Pet. 35 (citing Ex. 1034 ¶¶ 160–166; Ex. 1031, 1:28–30, 1:62–63, 2:33–3:23, 5:34–47, 5:61–64, 6:3–28, Figs. 1–2B, 5C). Specifically, Petitioner contends “batteries 468” are a “portable energy source” and that stand 120 is a holster. *Id.* at 35–36 (citing Ex. 1031, 2:61–65, Figs. 1, 2B; Ex. 1034 ¶¶ 163–164). The preliminary record supports this showing.

Patent Owner does not address Petitioner’s contention that claim 14 would have been obvious over the combination of Vaios and Schnell.

9. *Conclusion for Ground 1*

Petitioner has shown sufficiently each limitation of claims 11, 13, and 14 is taught or suggested by the combination of Vaios and Schnell, and that a person of ordinary skill in the art would have had reason to combine the prior art references, with a reasonable expectation of success in arriving at the claimed invention. Accordingly, Petitioner has shown a reasonable likelihood to prevail in showing that claims 11, 13, and 14 are unpatentable as obvious over the combination of Vaios and Schnell.

E. *Ground 2: Alleged Obviousness of Claim 13 and 14 over Vaios and Choi*

1. *Overview of Choi (Ex. 1032)*

Choi discloses a video camera (e.g., detachable video camera 230) as shown in Figure 11 below:

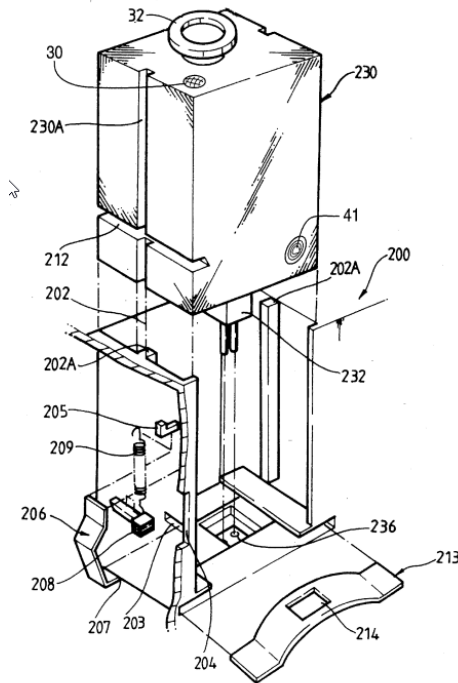


FIG. 11

Choi's video camera in Figure 11 is portable and includes a locking mechanism of one or more of plug 232, connector 236, leaf spring 213, stop 207, fitting groove 212, and rocker 236. Ex. 1032, 11:19–14:38, Figs. 9–12B. Choi's video camera further includes a plug 232 and connector 236 for quickly connecting to a source of electricity. *Id.* at 12:65–67, Fig. 11.

2. *Motivation to Combine*

Petitioner contends it would have been obvious to include the portability, locking mechanism, and electrical receptacle features taught in Choi with the cameras of Vaio to enable a portable monitoring device that can be easily and securely affixed and used in a desired location. Pet. 44 (citing Ex. 1034 ¶¶ 177–178). Petitioner contends this combination would have been a combination of known elements according to known methods, yielding predictable results. *Id.* Petitioner contends the combination would have had a reasonable expectation of success given the simplicity of the

mechanical design and the ubiquitous use of rechargeable batteries and charging stations. *Id.* Petitioner further contends a person of ordinary skill in the art could have successfully included a similar mounting configuration from other cameras, and the widespread use of rechargeable batteries would have made incorporation of such a power supply in Vaios's cameras a simple, predictable task. *Id.* at 45.

Petitioner contends a person of ordinary skill in the art would also have been motivated to make the combination of Vaios and Choi to create a portable monitoring device that may be selectively connected to a base station (for recharging and/or monitoring) and later disconnected from the base station and moved to a different, remote location for monitoring/video recording. *Id.* (citing Ex. 1031, 1:28–30, 1:62–63, 3:2–24; Ex. 1034 ¶ 178).

The preliminary record supports Petitioner's showing.

Patent Owner contends that Choi's locking mechanism is not combinable with Vaios. Prelim. Resp. 36–37. According to Patent Owner, Choi's main body 200 is a magnetic recording/reproducing apparatus. *Id.* Patent Owner argues that Choi's "locking mechanism" allows the camera to connect to magnetic recording/reproducing apparatus. Patent Owner argues that Petitioner does not say how this magnetic recording/reproducing apparatus fits within Vaios's system or why Vaios would need such an apparatus. *Id.* at 37.

Contrary to Patent Owner's allegations, Petitioner did not rely on incorporating Choi's magnetic record/reproducing apparatus into Vaios's system in its proposed combination. Instead, Petitioner contends that it would have been obvious to include the portability, locking mechanism, and electrical receptacle features taught in Choi with the cameras of Vaios to

enable a portable monitoring device that can be easily and securely affixed and used in a desired location. Pet. 44. Consequently, Patent Owner's arguments are against a combination that is not the one that Petitioner proposes. Patent Owner's arguments do not undermine Petitioner's showing.

3. *Claim 13*

As noted, claim 13 recites depends from claim 1 and recites "wherein said wireless exterior module is portable and includes a locking mechanism and an electrical receptacle for quickly attaching to a source of electricity." Ex. 1001, 20:38–41.

Claim 13 depends from claim 1 and for the reasons explained for the previous ground, all elements of claim 1 are taught or suggested by Vaio.

Petitioner contends that Choi's module is portable because it is detachable from main body 200. Pet. 39 (citing Ex. 1032, 11:19–25; 13:66–14:4; Ex. 1034 ¶ 169).

Petitioner contends that Choi discloses a locking mechanism including components that selectively lock video camera 230 within main body 200 (e.g., one or more of plug 232, connector 236, leaf spring 213, stop 207, fitting groove 212, fitting hole 203, guide groove 230A, and rocker 206). *Id.* at 40–42 (citing Ex. 1032, 11:19–12:64, 13:29–65, Figs. 9, 10; Ex. 1034 ¶¶ 170–174).

Petitioner contends that Choi's video camera includes an electrical receptacle (e.g., plug 232) for quickly attaching to a source of electricity. *Id.* at 42–44 (citing Ex. 1032, 14:10–16, 14:20–22, Fig. 11; Ex. 1034 ¶¶ 175–176).

The preliminary record supports Petitioner's showing.

Patent Owner argues that Choi does not disclose a locking mechanism. Prelim. Resp. 39–40. Patent Owner argues that the parts of Choi that Petitioner indicates do not secure the camera but only allows the camera to be part of a larger apparatus. *Id.* at 40. According to Patent Owner, anyone can just pick up and walk off with the Choi’s main body. *Id.* Patent Owner contends that Petitioner presents no evidence that any of the components are “locking mechanisms” such that the “wireless exterior module” can be installed securely. *Id.*

Patent Owner assumes a construction of “locking mechanism” that we do not adopt as one which prevents a person from carrying off the device. As Petitioner notes, Choi states as follows:

When the video camera 230 is fully inserted into the camera cage 202 as shown in FIG. 12A, the plug 232 of the video camera 230 is inserted into the connector 236 in the rear wall of the camera cage 202, the leaf spring 213 is compressed and elastically deformed. The stop 207 fits into the fitting groove 212 of the video camera 230 so that the rocker 206 returns to its original state by its own resilient force. This **locks** the detachable video camera 230 within the main body 200 of the magnetic recording/reproducing apparatus.

Pet. 41 (citing Ex. 1032, 13:29–48) (emphasis original). Hence, the Choi parts that Petitioner indicates comprise the “locking mechanism” do in fact “lock” the detachable video camera 230 within the main body 200.

4. *Claim 14*

As noted, claim 14 depends from claim 1 and recites “wherein said wireless exterior module has a portable energy source and is secured in a holster.” Ex. 1001, 20:42–44. Petitioner contends that “Choi discloses a video camera (e.g., detachable video camera 230) that has a portable energy source (e.g., batteries) and that is secured in a holster (e.g., the slot formed

within main body 200 for retaining video camera 230 when attached to main body 200). Pet. 46 (citing Ex. 1032, 11:19–12:64, Figs. 9–11; Ex. 1034 ¶¶ 180–187). The preliminary record supports this showing.

Patent Owner again argues that Petitioner has not explained how Choi’s “magnetic recording/reproducing apparatus” would have been incorporated into Vaios’s system. Prelim. Resp. 38. Petitioner’s combination, however, seeks to include the portability and holster features from Choi into Vaios’s system for recharging and monitoring. Pet. 49. Patent Owner’s bodily incorporation of Choi into Vaios is not the proper approach to the obviousness analysis. *See In re Keller*, 642 F.2d 413, 425 (CCPA 1981) (The “test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference. . . . Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art.”).

5. *Conclusion for Ground 2*

Petitioner has shown sufficiently that each limitation of claims 13 and 14 is taught or suggested by the combination of Vaios and Choi, and that a person of ordinary skill in the art would have had reason to combine the prior art references, with a reasonable expectation of success in arriving at the claimed invention. Accordingly, Petitioner has shown a reasonable likelihood to prevail in showing that claims 13 and 14 are unpatentable as obvious over the combination of Vaios and Choi.

F. Ground 3: Alleged Obviousness of Claim 13 over Vaios and Menard

1. Overview of Menard ¹² (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:

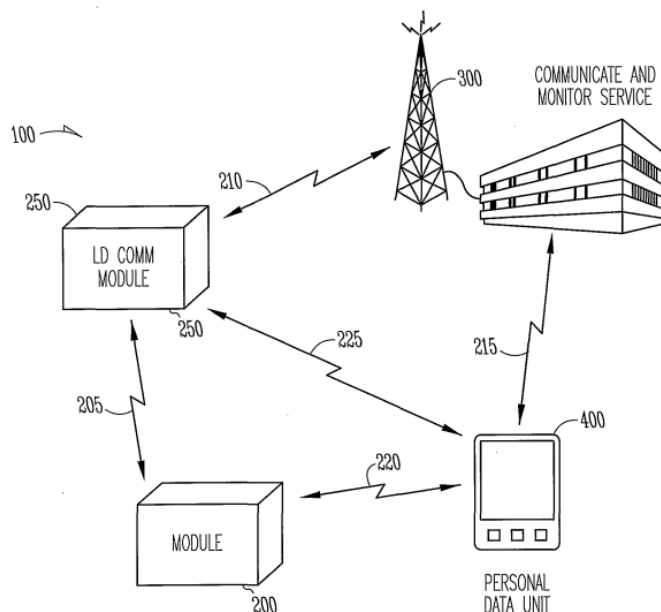


Fig. 1

Figure 1 shows a system 100 that includes “module 200, long distance communication (‘LD comm’) module 250, communication and monitor

¹² 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.

service facility ('facility') 300, and personal data unit ('PDU') 400.”¹³ *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:

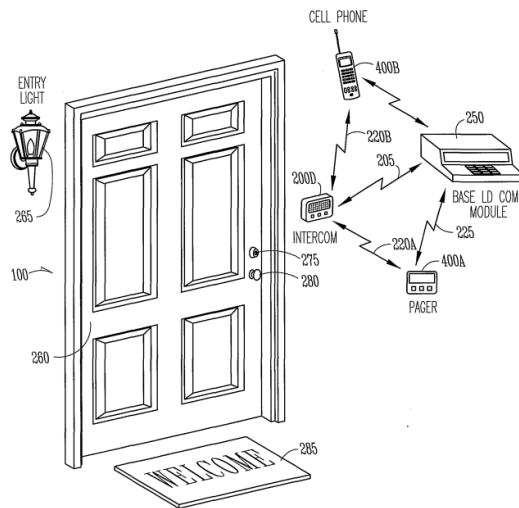


Fig. 7

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

¹³ 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.

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:

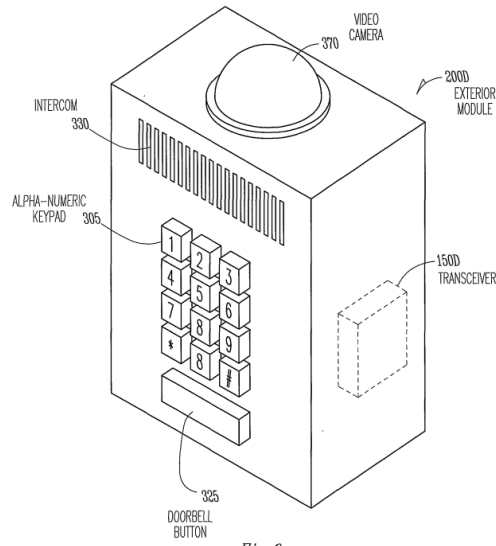


Fig. 9

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:

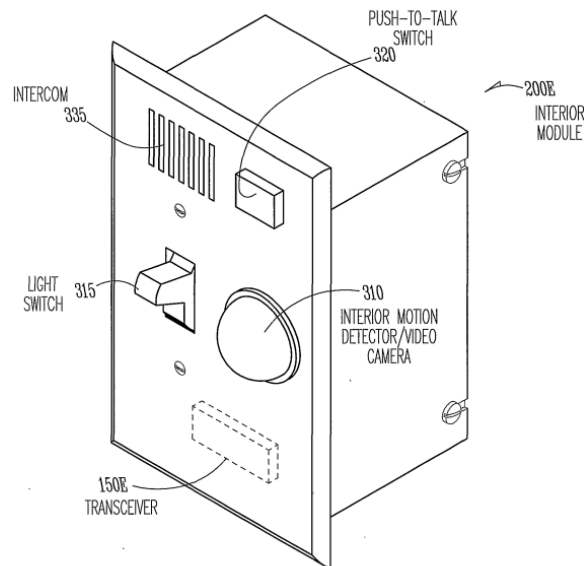


Fig. 10

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. *Motivation to Combine*

Petitioner contends it was obvious to use Menard’s exterior module 200D in Vaios’s system as the substitution of one device for another, yielding a predictable result. Pet. 52 (citing Ex. 1034 ¶¶ 200–204).

Petitioner contends that it was obvious to combine any of the “wireless exterior” features, “proximity sensor,” “video camera,” “microphone,” “speaker,” “transmitter,” and/or “receiver” of Menard with Vaios’ video camera 10. Pet. 53 (citing Ex. 1034 ¶¶ 201–202). Petitioner contends that such a modification is merely a combination of known elements (e.g., any of the components/features of wireless exterior module 200D with Vaios’s camera 10) in a known manner to yield predictable results, and would have had a reasonable expectation of success. *Id.* Petitioner contends such a combination would have been easily implemented using standard engineering techniques at the time, including incorporation of hardware and/or software components and standard communication protocols at the time that would not have required significant or unpredictable changes in interfaces, complexity, cost, or methodology. *Id.* (citing Ex. 1034 ¶ 202).

Petitioner also contends the proposed substitution/combination offers advantages that would have motivations the substitution/combination, such as providing a single device that collects audio and video data at an entrance, communicates wirelessly with other network components, and enables two-way communication with a remote individual, thereby creating a more user-

friendly, convenient, and easily installed monitoring system. *Id.* at 53–54 (citing Ex. 1034 ¶¶ 192–205).

3. *Claim 1*

Petitioner relies on Menard (as well as Vaio discussed in Section III.D) to disclose a wireless exterior module (e.g., “exterior module 200D”) located proximate an entrance (e.g., “entry door 260”) and including a video camera (e.g., “video camera 370”), a proximity sensor (e.g., “proximity detector” such as “video camera 370”), a microphone (e.g., “intercom 330”), a speaker (e.g., “intercom 330”), a transmitter (e.g., “transceiver 150”), and a receiver (e.g., “transceiver 150”). Pet. 50 (citing Ex. 1034 ¶¶ 194–199).

Petitioner contends Menard’s exterior module 200D is “mounted on the exterior of [a] residence and proximate to entry door 260.” *Id.* at 50 (citing Ex. 1004, 19:30–20:2, Figs. 7, 8). Petitioner further contends exterior “module 200D is in wireless communication” with a plurality of devices including PDUs 400A, 400B and base 250A. *Id.* at 51 (citing Ex. 1004, 2:17–19).

Petitioner further contends that exterior module 200D includes video camera 370 from which captured images can be transferred to of the devices (including PDUs 400). *Id.* (citing Ex. 1004, 22:17–19). Petitioner further contends that exterior module 200D further includes an intercom 330 for conduction audio communication functions. *Id.* (citing Ex. 1004, 22:20–23). Petitioner notes that intercom 330 has “a speaker and a microphone.” *Id.*

Petitioner contends that exterior module 200D includes a “transmitter” and “receiver” as demonstrated by Menard’s disclosure that ““module 200D involves a BLUETOOTH® channel’ in one embodiment (Ex. 1004, 20:20–22)” and “modules 200” have a “transceiver 150” which includes a receiver

and transmitter to enable wireless communication. *Id.* at 52 (citing Ex. 1004, 21:15, 13:27–29).

Petitioner further contends that Menard’s exterior module 200D includes a “proximity sensor for detecting a person at the entrance.” *Id.* (citing Ex. 1034 ¶ 199). For example, Menard describes a “proximity detector for signaling the presence of a caller near the exterior module” which includes a “video camera.” *Id.* (citing Ex. 1004, 5:31–6:1, 6:14–15). Exterior module 200D includes such a “proximity detector” including, e.g., “video camera 370” (which detects motion and determines therefrom the “arrival of the caller”). *Id.* (citing Ex. 1004, 5:31–6:1, 6:14–15, 21:6–7, 21:11–15, claim 25).

The preliminary record supports Petitioner’s showing.

Patent Owner does not dispute that Vaios alone or in combination with Menard teaches or suggests all limitations of claim 1.

4. *Claim 13*

As noted, claim 13 recites depends from claim 1 and recites “wherein said wireless exterior module is portable and includes a locking mechanism and an electrical receptacle for quickly attaching to a source of electricity.” Ex. 1001, 20:38–41. Petitioner contends that Menard discloses a wireless exterior module (e.g., exterior module 200D) having each of the additional elements recited in claim 13. Pet. 55 (citing *id.* at 50–53; Ex. 1004, 13:27–29, 21:15, 22:25–28, 23:6–8; Ex. 1034 ¶¶ 212–221).

The preliminary record supports Petitioner’s showing.

Patent Owner does not dispute Petitioner’s contentions that the combination of Vaios and Menard teach or suggest all limitations of claim 13. *See* Prelim. Resp.

5. *Conclusion for Ground 3*

Petitioner has shown sufficiently that a person of ordinary skill in the art would have been motivated to combine Vaios and Menard with a reasonable expectation of success in arriving at claim 13. Petitioner further shows each limitation of claim 13 is taught or suggested by the combination of Vaios and Menard. Accordingly, Petitioner presents a reasonable likelihood to prevail in showing that claim 13 is obvious over the combination of Vaios and Menard.

G. *Ground 4: Alleged Obviousness of Claims 11, 13, and 14, over Vaios, Menard, and Schnell*

Petitioner contends that claims 11, 13, and 14 would have been obvious over the combination of Vaios, Menard, and Schnell. Pet. 61–63 (citing Ex. 1034 ¶¶ 227–238). Claims 11, 13, and 14 depend from claim 1 and Petitioner contends that Vaios and Menard account for all of the features of claim 1 for reasons explained above. *See* Pet. 50–54.

1. *Claim 11*

As noted, claim 11 recites “wherein said wireless exterior module includes a display screen.” Ex. 1001, 20:32–34.

Petitioner contends, as already noted, that Schnell discloses a wireless exterior module (camera 100, 400, 700) that includes a display screen (LCD display 157). Pet. 61 (citing *id.* at 25; Ex. 1031, code (57), 2:33–37, 3:64–67, Figs. 1–3; Ex. 1034 ¶¶ 228–230).

Petitioner contends it would have been obvious to use an LCD display screen in the wireless exterior module resulting from the combination of Vaios and Menard in order to provide a display for presenting information about the camera according to Schnell’s teachings. *Id.* (citing *id.* at 26–27).

The preliminary record supports Petitioner’s showing.

2. *Claim 13*

As noted, claim 13 recites “wherein said wireless exterior module is portable and includes a locking mechanism and an electrical receptacle for quickly attaching to a source of electricity.” Ex. 1001, 20:38–41.

Petitioner contends, as already noted, that

Schnell discloses a wireless exterior module (camera 100, 400, 700) that is portable and includes a locking mechanism (e.g., one or more of mounting members 142, 144, stand 120, housing 102, flexible band 150, mounting holes 126, 128, and bolt 127) and an electrical receptacle (e.g., DC jack 464 and/or electrical connections for batteries 468) for quickly attaching to a source of electricity.

Pet. 62 (citing *id.* at 27–33; Ex. 1034 ¶¶ 231–232).

Petitioner contends it would have been obvious to similarly include portability, locking mechanism, and electrical receptacle features of Schnell in the wireless exterior module of Vaios/Menard for the same reasons discussed for combining Schnell and Vaios. *Id.* (citing *id.* at 33–34; Ex. 1034 ¶¶ 231–234).

The preliminary record supports Petitioner’s showing.

3. *Claim 14*

As noted, claim 14 recites “wherein said wireless exterior module has a portable energy source and is secured in a holster.” Ex. 1001, 20:42–44.

Petitioner contends that “Schnell discloses a wireless exterior module (camera 100, 400, 700) having a portable energy source (batteries 468) and that is secured in a holster (e.g., stand 120).” Pet. 62–63 (citing *id.* at 35–37; Ex. 1034 ¶¶ 235–236). Petitioner contends that it “would have been obvious to include the battery power supply and holster features of Schnell with the wireless exterior module of Vaios/Menard for the same reasons discussed

above for similarly combining Schnell with Vaios.” *Id.* (citing *id.* at 37–38; Ex. 1034 ¶¶ 235–238).

The preliminary record supports Petitioner’s showing.

4. *Conclusion for Ground 4*

Petitioner has shown sufficiently that each limitation of claims 11, 13, and 14 is taught or suggested by the combination of Vaios, Menard, and Schnell, and that a person of ordinary skill in the art would have had reason to combine the prior art references, with a reasonable expectation of success in arriving at the claims. For reasons previously explained, Patent Owner’s arguments (Prelim. Resp. 31–36, 39–40) do not undermine Petitioner’s showing. Accordingly, Petitioner has shown a reasonable likelihood to prevail in showing that claims 11, 13, and 14 are unpatentable as obvious over the combination of Vaios, Menard, and Schnell.

H. *Ground 5: Alleged Obviousness of Claim 13 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, claims 17, 18, 27.

Figure 1 of Klein follows:

Figure 1

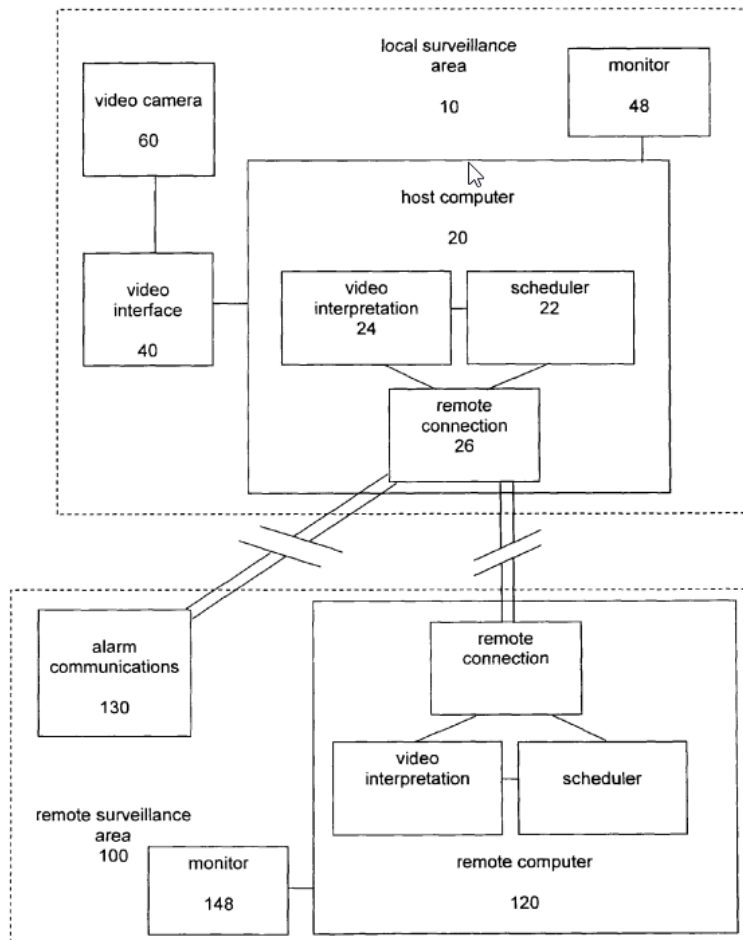


Figure 1 above illustrates Klein's system, which includes "video camera 60 . . . mounted [at a local] surveillance area 10" that "communicates . . . with a video interface 40, which . . . is connected to a host computer 20". Ex. 1006 ¶ 17. "[C]amera 60" monitors "an entry door." *Id.* ¶ 38. The system "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. *Claim 13*

Petitioner contends that each limitation of claim 13 is disclosed in the combination of Klein, Menard, and Vaios. Pet. 63–76. As we have already found Petitioner’s showing sufficient for these claims over the combination of Vaios and Menard (Section III.F), we necessarily find Petitioner’s showing sufficient with the addition of Klein.

The preliminary record supports Petitioner’s showing.

Patent Owner presents no arguments for patentability specific to this ground. *See* Prelim. Resp. 31–40.

Petitioner has shown a reasonable likelihood that it would prevail in establishing obviousness of claim 13 over the combination of Klein, Menard, and Vaios.

I. Ground 6: Alleged Obviousness of Claims 11, 13, and 14 over Klein, Menard, Vaios, and Schnell

Petitioner contends that each limitation of claims 11, 13, and 14 is disclosed in the combination of Klein, Menard, Vaios, and Schnell. Pet. 77–79. In addition, Petitioner provides reasons why a person of ordinary skill in the art would have combined the teachings of Klein, Menard, Vaios, and Schnell with a reasonable expectation of success. *Id.*

We have already found Petitioner’s showing sufficient for these claims over Vaios, Menard, and Schnell (Section III.G). Accordingly, we necessarily find Petitioner’s showing sufficient with the addition of Klein. Patent Owner relies on the same arguments previously presented, which do not undermine Petitioner’s showing for the reasons explained.

Consequently, Petitioner has presented a reasonable likelihood of prevailing in showing unpatentability of claims 11, 13, and 14 as obvious over Klein, Menard, Vaios, and Schnell.

IV. CONCLUSION

We determine that Petitioner has demonstrated a reasonable likelihood that it would prevail in establishing that at least one of challenged claims 11, 13, and 14 of the '581 patent is unpatentable. We therefore institute *inter partes* review for claims 11, 13, and 14 on all challenge grounds. *See SAS Institute, Inc. v. Iancu*, 138 S. Ct. 1348 (2018).

V. ORDER

For the foregoing reasons, it is

ORDERED that pursuant to 35 U.S.C. § 314(a), an *inter partes* review of claims 11, 13, and 14 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.

IPR2022-01352
Patent 8,154,581 B2

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