

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MOTOROLA SOLUTIONS INC.,
Petitioner,

v.

STA GROUP LLC,
Patent Owner

CASE: IPR2023-01295
U.S. PATENT NO. 8,994,830 B2

PATENT OWNER'S NOTICE OF APPEAL

Pursuant to 35 U.S.C. §§ 141 and 142, and 37 C.F.R. §§ 90.2 and 90.3, STA Group LLC, (“Patent Owner”) hereby provides notice that it appeals to the United States Court of Appeals for the Federal Circuit from the Patent Trial and Appeal Board’s (“Board”) Final Written Decision Determining All Challenged Claims Unpatentable entered on March 17, 2025, (Paper 39, “Final Written Decision”) in the above-captioned matter regarding U.S. Patent No. 8,994,830 (“the ’830 Patent”). A copy of the Final Written Decision is attached hereto as Exhibit A. This notice of appeal is timely filed within 63 days of the Final Written Decision. 37 C.F.R. § 90.3(a)(1).

In accordance with 37 C.F.R. § 90.2(a)(3)(ii), Patent Owner states that the issues on appeal may include all findings of unpatentability by the Board in the Final Written Decision, including but not limited to, the Board’s determination that the challenged claims of the ’830 Patent are unpatentable, and any related issues, findings, or determinations, leading thereto or underlying that decision.

Pursuant to 35 U.S.C. § 142 and 37 C.F.R. § 90.2(a), this Notice is being filed with the Patent Trial and Appeal Board. In addition, a copy of this Notice and the required docketing fees are being filed with the Clerk’s Office for the United States Court of Appeals for the Federal Circuit via CM/ECF.

Respectfully submitted,

Dated: May 14, 2025

/Jason A. Engel/
Jason A. Engel (Reg. No. 51,654)
K&L GATES LLP
70 W. Madison Street, Suite 3300
Chicago, IL 60602

Jason.Engel.PTAB@klgates.com
T: (312) 807-4236
F: (312) 827-8145

Counsel for Patent Owner

CERTIFICATE OF SERVICE

The undersigned hereby certifies that, in addition to being electronically filed through P-TACTS, a true and correct copy of the above-captioned **PATENT OWNER'S NOTICE OF APPEAL** is also being filed pursuant to 37 C.F.R § 90.2(a) with the Director of the United States Patent and Trademark Office, on May 14, 2025, by electronic mail to efileSO@uspto.gov, which is the e-mail address indicated on the United States Patent and Trademark Office's web page for the Office of the General Counsel, <<https://www.uspto.gov/about-us/organizational-offices/office-general-counsel>>.

I also hereby certify that, on May 14, 2025, a true and correct copy of the foregoing Patent Owner's Notice of Appeal, and the filing fee, were filed with the Clerk's Office of the United States Court of Appeals for the Federal Circuit, via CM/ECF.

Respectfully submitted,

/Jason A. Engel/
Jason A. Engel
Reg. No. 51,654
K&L Gates LLP

CERTIFICATE OF SERVICE

I hereby certify that the foregoing documents were served by electronic service, via e-mail on May 14, 2025 in its entirety on the following:

Eliot D. Williams
Baker Botts L.L.P.
eliot.williams@bakerbotts.com

Katharine Burke
Baker Botts L.L.P.
katharine.burke@bakerbotts.com

Michael Knierim
Baker Botts L.L.P.
michael.knierim@bakerbotts.com

Clarke W. Stavinoha
Baker Botts L.L.P.
clarke.stavinoha@bakerbotts.com

Joseph B. Cahill
Baker Botts L.L.P.
Joe.cahill@bakerbotts.com

Stephen O'Donohue
Baker Bott L.L.P.
Stephen.odonohue@bakerbotts.com

dlbbstamsiiprs@bakerbotts.com

Dated May 14, 2025

Respectfully submitted,

/Jason A. Engel/

Jason A. Engel

Reg. No. 51,654

K&L Gates LLP

EXHIBIT A

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MOTOROLA SOLUTIONS, INC.,
Petitioner,

v.

STA GROUP LLC,
Patent Owner.

IPR2023-01295
Patent 8,994,830 B2

Before MICHAEL J. FITZPATRICK, DAVID C. McKONE, and
KEVIN C. TROCK, *Administrative Patent Judges*.

TROCK, *Administrative Patent Judge*.

JUDGMENT
Final Written Decision
Determining All Challenged Claims Unpatentable
35 U.S.C. § 318(a)

I. INTRODUCTION

We have authority to hear this *inter partes* review under 35 U.S.C. § 6. This Final Written Decision issues pursuant to 35 U.S.C. § 318(a) (2018) and 37 C.F.R. § 42.73 (2019). For the reasons discussed herein, we determine that Petitioner, Motorola Solutions, Inc. (“Petitioner”) has shown by a preponderance of the evidence that claims 1–5, 7–19, and 21–24 (the “challenged claims”) of U.S. Patent No. 8,994,830 B2 (Ex. 1001, “the ’830 patent”) are unpatentable. *See* 35 U.S.C. § 316(e) (2018); 37 C.F.R. § 42.1(d) (2019).

II. BACKGROUND

A. Procedural History

Petitioner filed a Petition, Paper 1 (“Pet.” or “Petition”), requesting *inter partes* review of the challenged claims. STA Group LLC (“Patent Owner”) timely filed a Preliminary Response, Paper 7 (“Prelim. Resp.”). With our approval, Petitioner filed a Preliminary Reply (Paper 9, “Prelim. Reply”) and Patent Owner filed a Preliminary Sur-reply (Paper 10, “Prelim. Sur-reply”). Based on the record at that time, we issued a Decision granting *inter partes* review. Paper 11 (“Dec.” or “Institution Decision”).

After institution, Patent Owner filed a Response (Paper 18, “PO Resp.” or “Resp.”), Petitioner filed a Reply (Paper 26, “Pet. Reply” or “Reply”), and Patent Owner filed a Sur-reply (Paper 32, “PO Sur-reply” or “Sur-reply”).

On January 21, 2025, an oral hearing was held. A transcript of the hearing is made part of the record. Paper 38.

B. Related Proceedings

According to the parties, the '830 patent is the subject of the following actions: *STA Group LLC v. Motorola Solutions, Inc.*, Case No. 2:22-cv-00381 (E.D. Tex.) filed Sept. 30, 2022 (the “Related Litigation”); and *STA Group LLC v. Motorola Solutions, Inc.*, Case No. 4-22-cv-00840 (E.D. Tex.) filed Sept. 30, 2022, and administratively closed Oct. 6, 2022. Pet. 1; Paper 4, 1; Paper 6, 4–5; Paper 8, 4–5.

C. Real Party in Interest

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

D. The '830 Patent (Ex. 1001)

The '830 patent issued on March 31, 2015, and “relates to providing access to video streams associated with communication channels in a communication network.” Ex. 1001, 1:7–9. Figure 1B of the '830 patent is reproduced below.

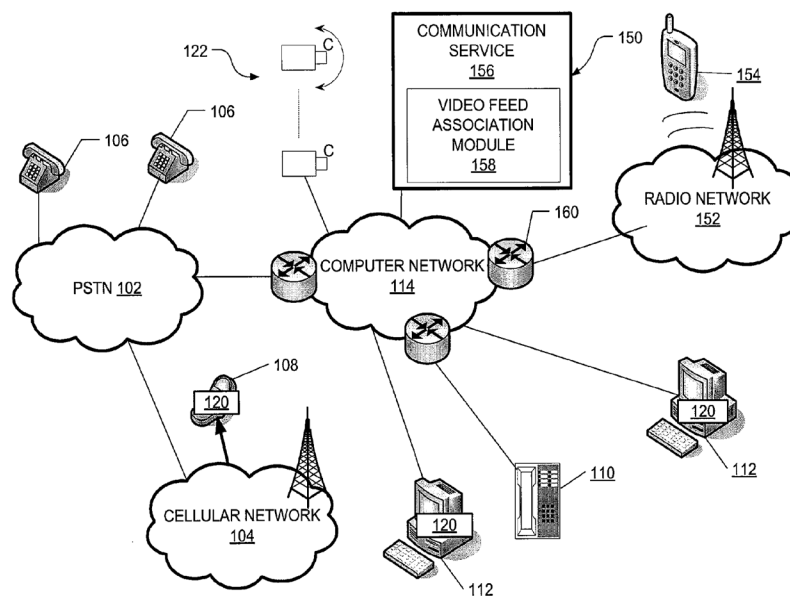


FIG. 1B

Figure 1B, above, is a diagram of communication system 150, including “a public switched telephone network (PSTN) 102, cellular network 104, and various networked computing devices,” which is configured to communicate with, for example, “telephones 106, computers 112, Voice over Internet Protocol (VoIP) phones 110, mobile phones 108, gateways 116, routers 118, switches, transmission systems, relay systems, and other communication devices.” *Id.* at 2:34–40; *see also id.* at 3:30–36. “The communication system 150 further includes a radio network 152 configured to communicate with one or more mobile communication devices (e.g., one or more push-to-talk (PTT) radios).” *Id.* at 3:37–40. According to the ’830 patent, “[a] plurality of cameras 122 provide video feeds that . . . are associated with communication channels (e.g., communication channels providing Virtual Talk Groups (VTGs)).” *Id.* at 2:40–43.

Figure 4 of the ’830 patent is reproduced below.

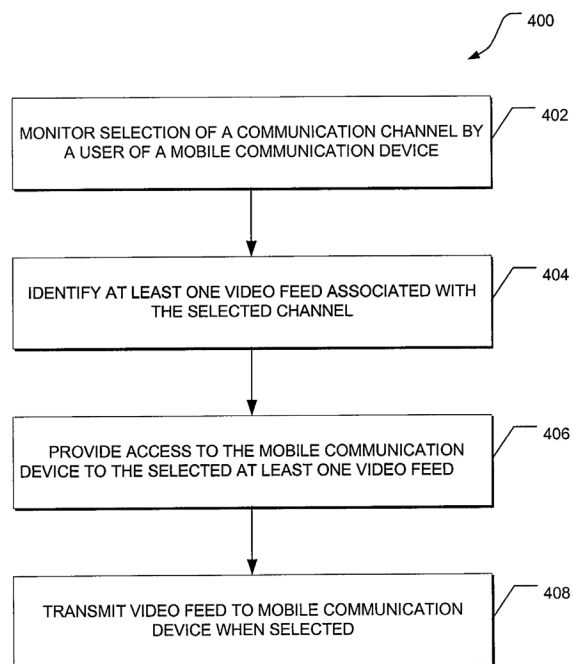


FIG. 4

Figure 4, above, is a flow diagram of method 400 “for associating video feeds with a communication channel associated [with] a plurality of mobile communication devices.” *Id.* at 6:18–21. Referring to Figure 3, the ’830 patent discloses that “a user interface may optionally be presented to a user (e.g., the user 305.1–305.q or 307.1–307.r) to allow the user to select a communication channel 302.1–302.n to which his/her mobile communication device 304.1–304.q or 306.1–306.r is to be set or tuned to.” *Id.* at 6:24–28. At block 402, the method 400 “may then monitor selection of a communication channel by the user 305.1–305.q, 307.1–307.r of an associated mobile communication device 304.1–304.n, 306.1–306.r.” *Id.* at 6:28–32. At block 404, “[a]t least one video feed associated with the selected channel . . . may be identified.” *Id.* at 6:35–36. “Once the particular channel has been selected and the at least one video feed associated with the channel has been identified, the method 400 may then provide any mobile communication device 305.1–305.q or 307.1–307.r that is set to the particular channel with access to the at least one video feed.” *Id.* at 6:57–62. At block 408, “the video feed may be then communicated to the mobile communication device.” *Id.* at 7:1–3.

Figure 9 of the '830 patent is reproduced below.

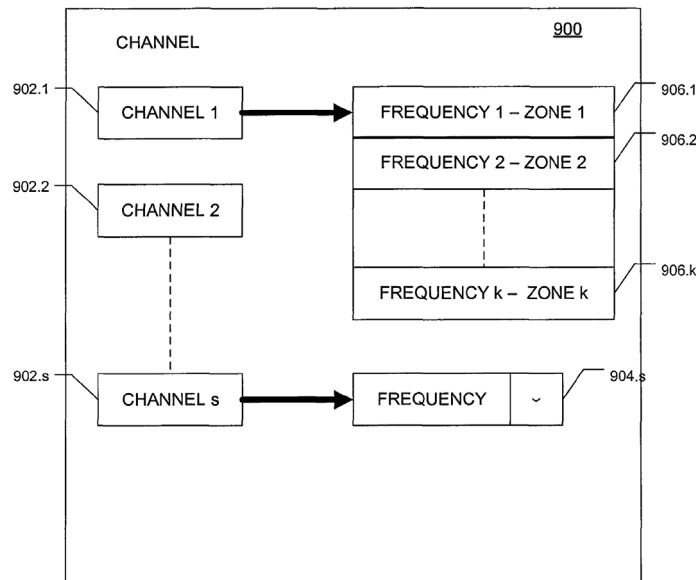


FIG. 9

Figure 9, above, depicts a graphic user interface (GUI) 900 “to allow a user to select a communication frequency associated with a communication channel.” *Id.* at 9:60–62. For example, “a user may select a specific VTG by selecting one of the channels 902.1–902.s,” and then “a frequency associated with a region in which the user is located may be selected using the drop-down menus.” *Id.* at 10:13–16. “Thus, in an example embodiment, a radio frequency of a given base station in a specific geographical region may be selected, thereby automatically providing access to video feeds associated with the selected frequency.” *Id.* at 10:20–24.

E. Illustrative Claim

Petitioner challenges claims 1–5, 7–19, and 21–24 of the '830 patent. Pet. 9–10. Claims 1 and 15 are independent. Claim 1 is generally illustrative and is reproduced below.

1. [pre]¹ A method comprising:

[a] monitoring a selection of a communication channel by a user of a mobile communication device;

[b] providing a plurality of radio frequencies on a display of the mobile communication device, each radio frequency being associated with a geographical zone

[c] from which a plurality of video feeds associated with the geographic zone are sourced;

[d] monitoring a selection of a radio frequency of the plurality of radio frequencies by the user[;]²

[e] identifying at least one video feed by selecting the at least one video feed from the plurality of video feeds associated with the geographic zone, wherein the at least one video feed is associated with the selected communication channel based on a user policy that identifies one or more video feeds that are relevant to the user when the user accesses the selected communication channel,

[f] the one or more video feeds being independent of the selected communication channel; and

[g] providing access to the identified at least one video feed to the mobile communication device based on the user policy.

Ex. 1001, 12:18–39.

F. Evidence

Petitioner relies upon the following evidence:

(1) U.S. Patent Application Publication No. US 2006/0281471 A1, published December 14, 2006 (“Shaffer”) (Ex. 1004);

(2) U.S. Patent No. 7,113,090 B1, issued September 26, 2006 (“Saylor”) (Ex. 1011);

¹ Bracketed letter designations added.

² Here, the ’830 patent appears to have a typographical error. Instead of a semicolon, it has a period. *See* Ex. 1001, 12:27.

(3) U.S. Patent Application Publication No. US 2007/0173273 A1, published July 26, 2007 (“Gogic”) (Ex. 1006); and

(4) U.S. Patent No. 8,090,388 B1, filed March 20, 2007, and issued January 3, 2012 (“Opitz”) (Ex. 1007).

Petitioner also relies on the declaration of Nathaniel Polish, Ph.D. (Ex. 1002).

Patent Owner relies on the declaration of Robert Akl, Ph.D. (Ex. 2006).

G. Asserted Grounds of Unpatentability

Claims Challenged	35 U.S.C. §	References
1–5, 7–19, 21–24	103(a) ³	Shaffer, Saylor
1–5, 8–19, 22–24	103(a)	Gogic, Opitz

Pet. 10.

III. ANALYSIS

A. Applicable Legal Standards

A claim is unpatentable under 35 U.S.C. § 103(a) if “the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying

³ Because the application from which the ’830 patent issued has an effective filing date before March 16, 2013 (Ex. 1001, code (22)), citations to 35 U.S.C. § 103 are to the pre-AIA version. Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29 § 3(n).

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) objective evidence of nonobviousness, i.e., secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). Neither party has presented evidence on the fourth *Graham* factor.

The Supreme Court has made clear that we apply “an expansive and flexible approach” to the question of obviousness. *KSR*, 550 U.S. at 415. Whether a patent claiming the combination of prior art elements would have been obvious is determined by whether the improvement is more than the predictable use of prior art elements according to their established functions. *Id.* at 417. Reaching this conclusion, however, “requires more than a mere showing that the prior art includes separate references covering each separate limitation in a claim.” *Unigene Labs., Inc. v. Apotex, Inc.*, 655 F.3d 1352, 1360 (Fed. Cir. 2011). “Rather, obviousness requires the additional showing that a person of ordinary skill at the time of the invention would have selected and combined those prior art elements in the normal course of research and development to yield the claimed invention.” *Id.*

B. Level of Ordinary Skill

In determining whether an invention would have been obvious at the time it was made, we consider the level of ordinary skill in the pertinent art at the time of the invention. *Graham*, 383 U.S. at 17. “The importance of resolving the level of ordinary skill in the art lies in the necessity of

maintaining objectivity in the obviousness inquiry.” *Ryko Mfg. Co. v. Nu-Star, Inc.*, 950 F.2d 714, 718 (Fed. Cir. 1991).

Petitioner describes a person of ordinary skill in the art as a person having “at least (a) a bachelor’s degree in computer science, electrical engineering, or a similar field, and (b) approximately 2 years industry experience in networking or communication systems, including interoperating different types of networks that include video feeds.” Pet. 13 (citing Ex. 1002 ¶¶ 45–47). Patent Owner does not dispute Petitioner’s description of a person of ordinary skill in the art. PO Resp. 13.

Petitioner’s description of a person of ordinary skill is consistent with the subject matter of the ’830 patent. This is supported by the testimony of Petitioner’s declarant, Dr. Polish. Ex. 1002 ¶ 46. Patent Owner’s declarant, Dr. Akl, does not dispute Petitioner’s description. Ex. 2006 ¶ 30. We, therefore, continue to use the same description that we adopted in our Institution Decision, as it is consistent with the challenged patent and the asserted art. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001) (the prior art itself may reflect an appropriate level of skill).

C. Claim Construction

A claim shall be construed using 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. Thus, we apply the claim construction standard as set forth in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc).

Under *Phillips*, claim terms are generally given their ordinary and customary meaning as would be understood by one with ordinary skill in the art. *Id.* at 1312–17. “In construing the claims we look to the language of the claims, the specification, and the prosecution history. Extrinsic evidence may also be considered, *if needed* to assist in determining the meaning or scope of technical terms in the claims.” *Pall Corp. v. Micron Separations, Inc.*, 66 F.3d 1211, 1216 (Fed. Cir. 1995). Usually, the specification is dispositive, and it is the single best guide to the meaning of a disputed term. *Phillips* at 1315. Extrinsic evidence is “less significant than the intrinsic record in determining ‘the legally operative meaning of claim language.’” *Id.* at 1317.

Petitioner contends that the term “video stream association module” recited in claim 15 may invoke pre-AIA 35 U.S.C. § 112 ¶ 6⁴ and proposes the following construction:

⁴ Because the application from which the ’830 patent issued has an effective filing date before September 16, 2012 (Ex. 1001, code (22)), citations to 35 U.S.C. § 112 are to the pre-AIA version. AIA § 4(e).

Elements	Function and Structure
15[b] “video stream association module”	<u>Function</u>: monitoring a selection of a communication channel. . . , providing a plurality of radio frequencies on a display. . . , monitoring a selection of a radio frequency. . . , identifying at least one video feed. . . , providing access to the identified at least one video feed. . . <u>Structure</u>: “a variety of software applications and/or hardware that can monitor and process communications between the communication devices,” as described at Ex[1001], 3:46–49 and FIGs. 2–4, 89, 11 and associated text.

Pet. 14–15.

In its Response, Patent Owner argues that “[t]he E.D. Tex. rejected this construction, undermining Petitioner’s challenge to claim 15.” PO Resp. 11.

According to Patent Owner, the parties agreed on the following constructions in the Related Litigation:

Term	Agreed Construction
Order of Steps (Claim 1)	The “monitoring a selection of a communication channel” step must be performed before the “identifying at least one video feed by selecting the at least one video feed from the plurality of video feeds” step.
“Push-to-Talk (PTT) channel in a PTT communication network” (Claim 5)	“A channel for transmitting half-duplex communications in a Push-to-Talk communication network”

PO Resp. 9–10 (citing Ex. 2001, 7, 9–10).

Patent Owner states that “[t]he Eastern District of Texas further construed certain claims as follows:

Term	E.D. Tex. Construction
“wherein the at least one video feed is associated with the selected communication channel . . . the one or more video feeds being independent of the selected communication channel” (Claim 1)	“the one or more video feeds being capable of being associated with more than the selected communication channel”
“video stream association module” (Claim 15)	Plain and ordinary meaning; not subject to 35 U.S.C. § 112 ¶ 6

PO Resp. 10–11 (citing Ex. 2005, 17–31).

In its Reply, Petitioner argues that “[t]he obviousness grounds in the Petition apply under the district court’s constructions,” and that Patent Owner’s “assertion that the court’s plain and ordinary meaning construction of video stream association module ‘undermin[es]’ Petitioner’s challenge to claim 15 has no support or explanation.” Pet. Reply 1 (quoting PO Resp. 11) (alteration in original). Petitioner argues that “Shaffer-Saylor and Gogic teach these limitations under that court’s construction.” Pet. Reply 2.

For purposes of this Decision, we adopt the claim construction agreed to by the parties as well as the claim construction provided by the district court. We otherwise use the ordinary and customary meaning of the claim terms as they would be understood by a person of ordinary skill in the art at the time of the claimed invention.

D. Relevant Prior Art

1. Shaffer (Ex. 1004)

Shaffer is a U.S. Patent Application Publication published on December 14, 2006, more than one year before the earliest priority date of the ’830 patent. Ex. 1001, code (22); Ex. 1004, code (43).

Shaffer relates to “a method and system for communicating using position information.” Ex. 1004 ¶ 1. According to Shaffer, a method for communicating using position information includes:

communicating on a first communication network at a first location using one or more first communication parameters of the first communication network and, upon moving from the first location to a second location, receiving position information identifying the second location.

adjusting the one or more first communication parameters to one or more second communication parameters based on the second location and communicating on a second communication network at the second location using the one or more second communication parameters.

Id. ¶ 5; *see also id.* at Fig. 5, ¶¶ 49–50. “The first and second communication parameters may comprise a frequency, a modulation method and/or an encryption key.” *Id.* ¶ 6. According to Shaffer, “[t]echnical advantages of particular embodiments include providing a mobile endpoint user the ability to communicate, while changing locations, with different communication networks that utilize different communication parameters, such as different radio frequencies, modulation methods and/or encryption keys.” *Id.* ¶ 8.

Shaffer’s Figure 3 is shown below:

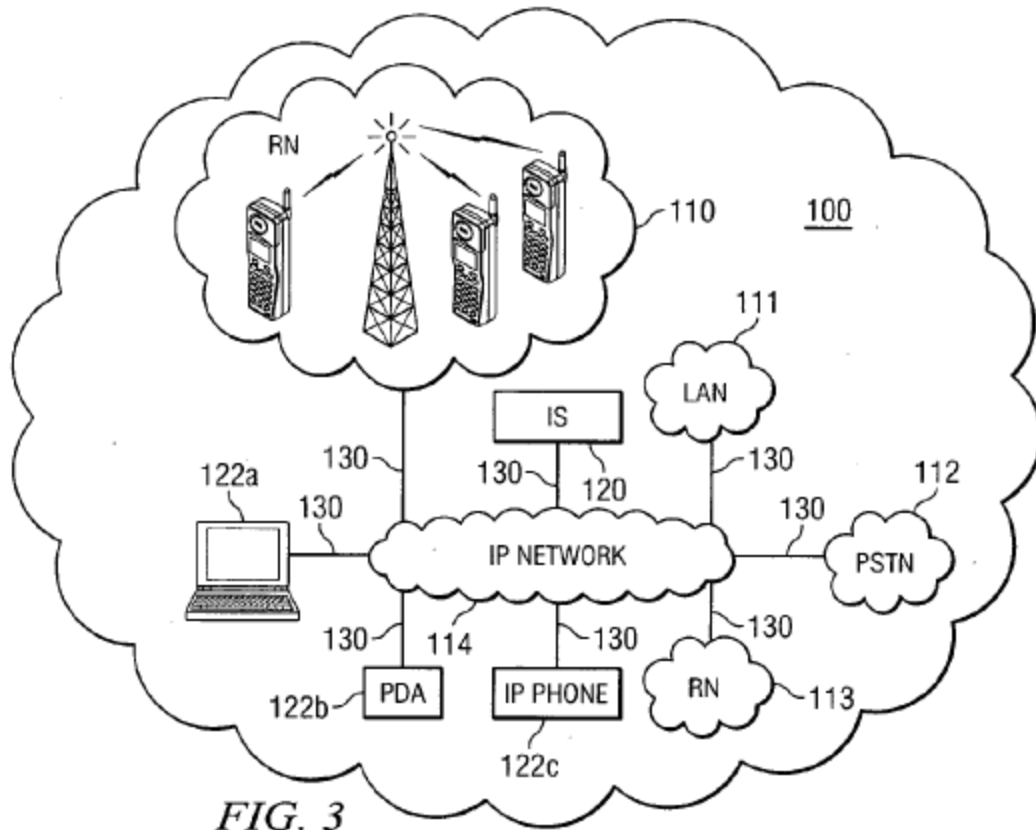
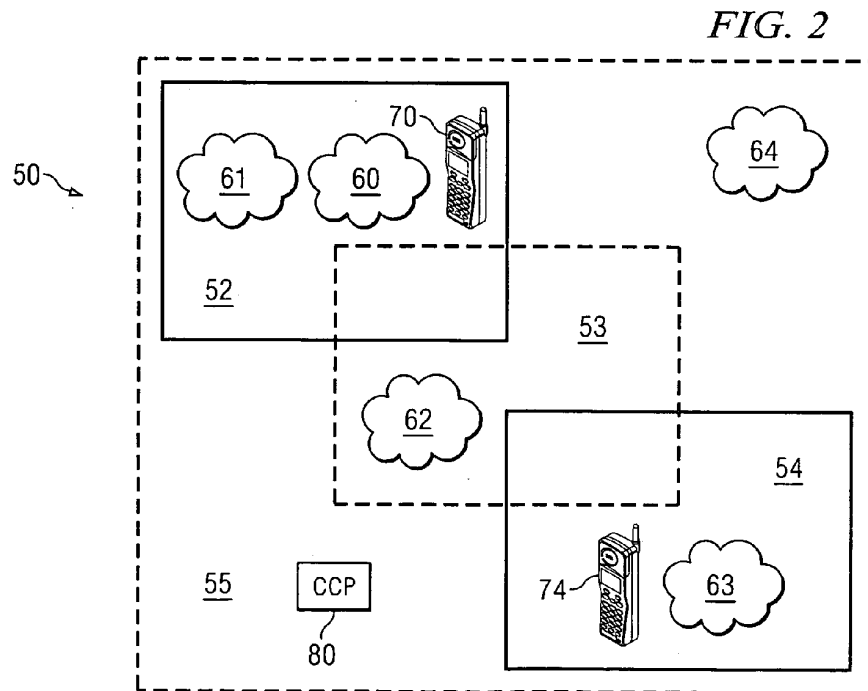


FIG. 3

Shaffer's Figure 3 illustrates "[c]ommunication system 100, [that] includes communication networks 110–114, interoperability system (IS) 120 and endpoints 122." Ex. 1004 ¶ 37. "[C]ommunication network 110 comprises a radio or wireless network, communication network 111 comprises a LAN, communication network 112 comprises a [Public Switched Telephone Network] (PSTN), communication network 113 comprises a radio network and communication network 114 comprises an [Internet Protocol] (IP) network." *Id.* According to Shaffer, "communication system 100 may comprise any number of IP or non-IP communication networks of any wireless or wireline form capable of communicating audio and/or video telecommunication signals, data, and/or messages, including signals, data or messages." *Id.*

Shaffer explains that “[c]ommunication networks 110–113 may comprise networks of particular groups or agencies (e.g., a municipality’s police department network), whether operational with respect to a particular area or otherwise.” *Id.* For example, “endpoints 122 comprise a PC (endpoint 122a), a [personal digital assistant] (PDA endpoint 122b) and an IP phone 122c.” *Id.* Interoperability system “120 may be configured to communicate with any type of communication endpoint.” *Id.*

Shaffer’s Figure 2 is shown below:



Shaffer’s Figure 2 depicts “communication system 50 for communicating using position information,” which “includes a plurality of geographic regions 52–55, communication networks 60–64, endpoints 70 and 74 and CCP [communication control post] 80.” *Id.* ¶ 26.

“Communication networks 60–64 each may communicate information (e.g., signals, data or messages) over assigned radio frequencies, modulation methods and/or various encryption keys to support communication among

network communication devices.” *Id.* ¶ 27. According to Shaffer, “frequencies, modulation methods and/or encryption keys utilized by the various communication networks 60–64 may be embedded in memory of mobile endpoints” such that “as mobile endpoint 70 (e.g., a LMR in a safety vehicle) moves between geographic areas, the endpoint may use GPS information to pin-point its location and automatically adjust its current communication radio frequency, modulation method and/or encryption key settings to allow the user of the endpoint to communicate with local safety and security forces in the area in which the endpoint is currently located.” *Id.* ¶ 31.

Shaffer’s Figure 4 is shown below:

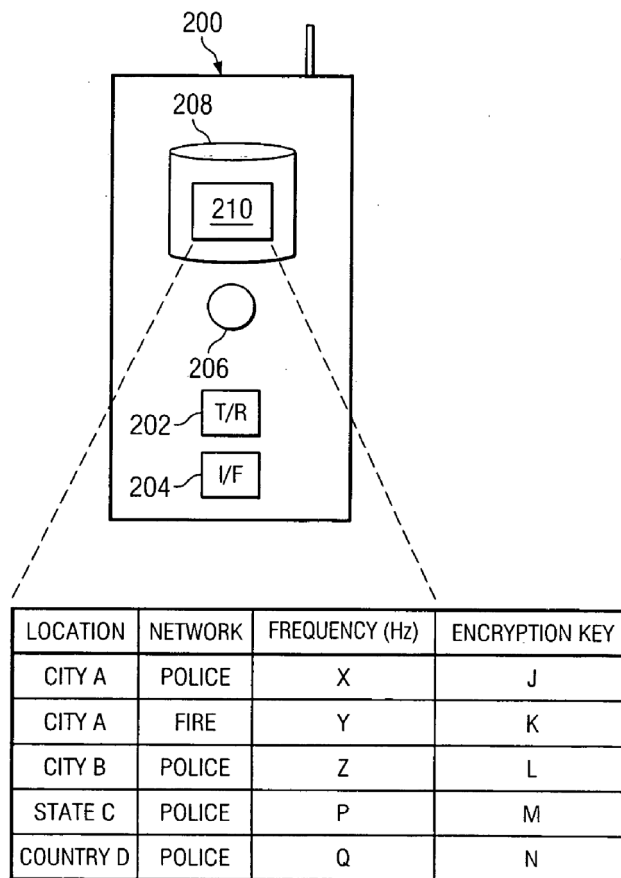


FIG. 4

Shaffer's Figure 4 illustrates mobile endpoint 200 including "a transmitter/receiver 202, a user interface 204, a processor 206 and a memory module 208." *Id.* ¶¶ 43, 44. According to Shaffer, "[t]ransmitter/receiver 202 obtains signals from GPS satellites or ground stations of a communication network in order to determine a position of endpoint 200 and receives and transmits voice and other data between endpoint 200 and other network devices and components." *Id.* ¶ 44. Shaffer discloses that "[u]ser interface 204 provides a mechanism through which a user of mobile endpoint 200 may operate the endpoint and communicate with other network devices," and "may comprise a keypad, display, touch screen, audio input or any other suitable interface." *Id.* "For example, through interface 204 a user may input instructions regarding adjustment of the endpoint's communication settings (e.g., radio frequency, modulation method and encryption key) upon entering a new communication network." *Id.*

2. *Saylor (Ex. 1011)*

Saylor is a U.S. Patent that issued on September 26, 2006, more than one year before the earliest priority date of the '830 patent. Ex. 1001, code (22); Ex. 1011, code (45).

Saylor describes "a security network where a user may set up personalized alarms and alert services; identify various methods of contact; order at which to be contacted; individuals and entities to be contacted; type of situations to be alerted of and other relevant security and other information." Ex. 1011, Abstr. Saylor's "security system [may be] connected to a wireless communication system which enables communication with a subscribed user when an alarm (or other defined) situation occurs." *Id.* at 2:10–13. Saylor describes "a personal security network where one or more security devices related to a subscriber may be

connected to a central security network over wireless communication,” where the central security network “may monitor those security devices and alert a user when an alert situation occurs.” *Id.* at 2:20–26.

Figure 1 of Saylor is shown below.

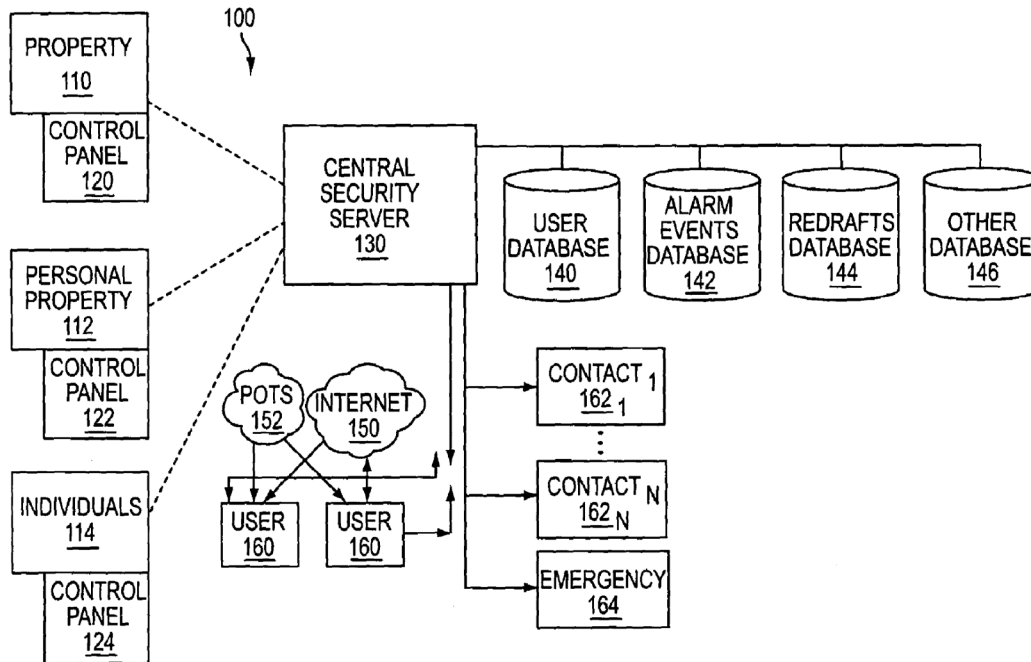


FIG. 1

Saylor’s Figure 1 depicts “a graphical representation of a central security network system 100.” *Id.* at 5:63–64. According to Saylor, “[a]larm situations may be detected by a control panel 120, 122, 124 associated with and preferably local to each security device and/or system (e.g., property, personal property, individual, or combination),” wherein “[c]ontrol panels 120, 122, 124 may transmit alarm information to central security network 130.” *Id.* at 6:1–6; *see also id.* at 7:29–40. “Central security server 130 may then alert users and other identified entities via wireless and/or other devices, such as mobile device 240, via a voice alarm, text message and other notifications.” *Id.* at 7:40–43; *see also id.* at 6:19–25. According to Saylor, “[c]ontact individuals and/or entities 161₁–162_N

identified by the user may also receive alert notification in an order determined by the user,” and “the user may select contact order and/or other actions through menu options at the time of alarm situation notification.” *Id.* at 6:25–30. Saylor also discloses that “[d]atabases 140, 142, 144 and 146 may store relevant information for personalized alarm services.” *Id.* at 6:9–10.

Saylor explains that

[c]entral security network 130 may process the alarm situation. User profile information may be retrieved from user database 140. User database 140 may contain user information, such as profile information, user preferences, contact information, special instructions and/or other information. User profile information may include one or more of name, identification information, address information, and other profile information. User preferences may include mode of communication, order of communication, contact information and other preferences. User preference information may be associated with each security device, group of devices, systems or other combinations. For example, different alarm situations that may be detected in various locations or systems may warrant different levels of response. In addition, a user may maintain a personal address book where contact information (e.g., phone, pager, mobile device, etc.) associated with various individuals may be stored and accessed based on various identified alarm situations and/or potential alarm situations. Special instructions may include information to be conveyed to entities reacting to the alarm for a particular location or object. For example, when a fire detector is activated, the user may want to inform the fire department that the user has two pets living at the user’s primary residence. Other instructions for different registered locations, objects and/or individuals may be stored and conveyed to entities reacting to the alarm situation per the user’s instructions or preferences.

Id. at 8:34–60.

Saylor also explains that “[b]ased on user information retrieved from one or more databases 140, 142, 144 and 146, central security network 130 may contact one or more users 160 or other identified contacts 162₁–162_N as specified by the user. Other identified contacts may include neighbors, family members, personal doctors, emergency entities 164, such as the police, fire department, hospital and others.” *Id.* at 9:22–28.

For example, Saylor explains that
when a smoke alarm goes off, a user may instruct a central security network to first contact the user’s home to verify the alarm. If no one is home or the emergency situation was confirmed by someone at home, the central security network may directly contact a local fire department and provide the location, nature and/or other information related to the emergency.

Id. at 12:15–21.

Saylor further describes “a monitoring system for providing images (e.g., photos, pictures, video, diagrams, illustrations, etc.) where an alarm situation may be detected by comparing images” such that “[w]hen a change in images (indicating motion) is detected, an alarm may be signaled.” *Id.* at 2:45–50.

Figure 10 of Saylor is set out below.

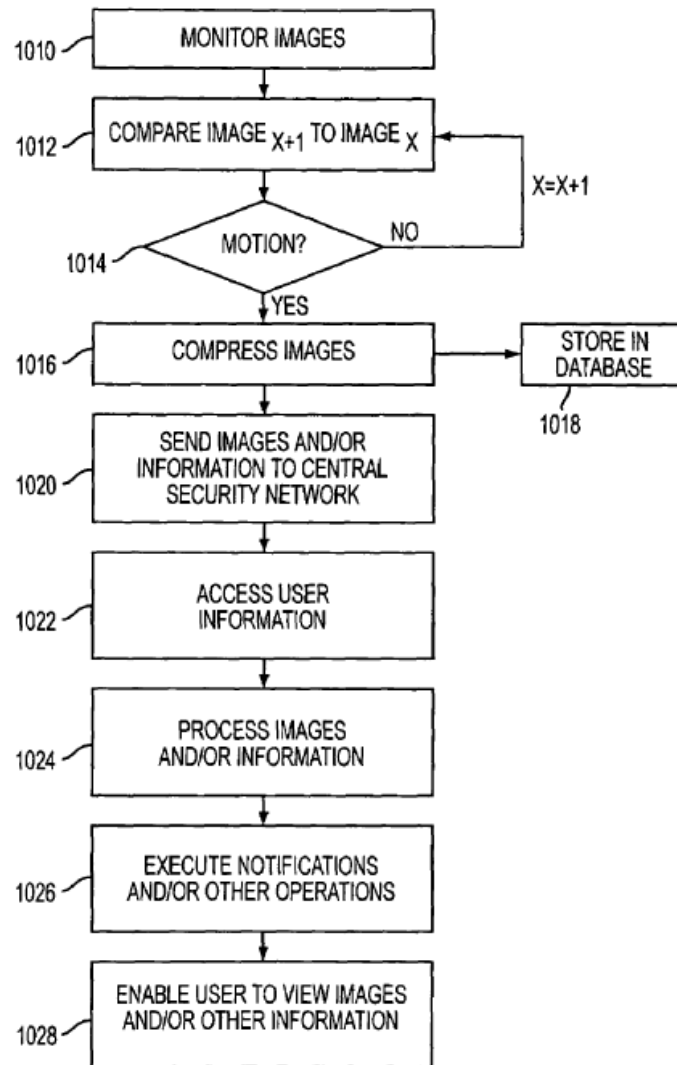


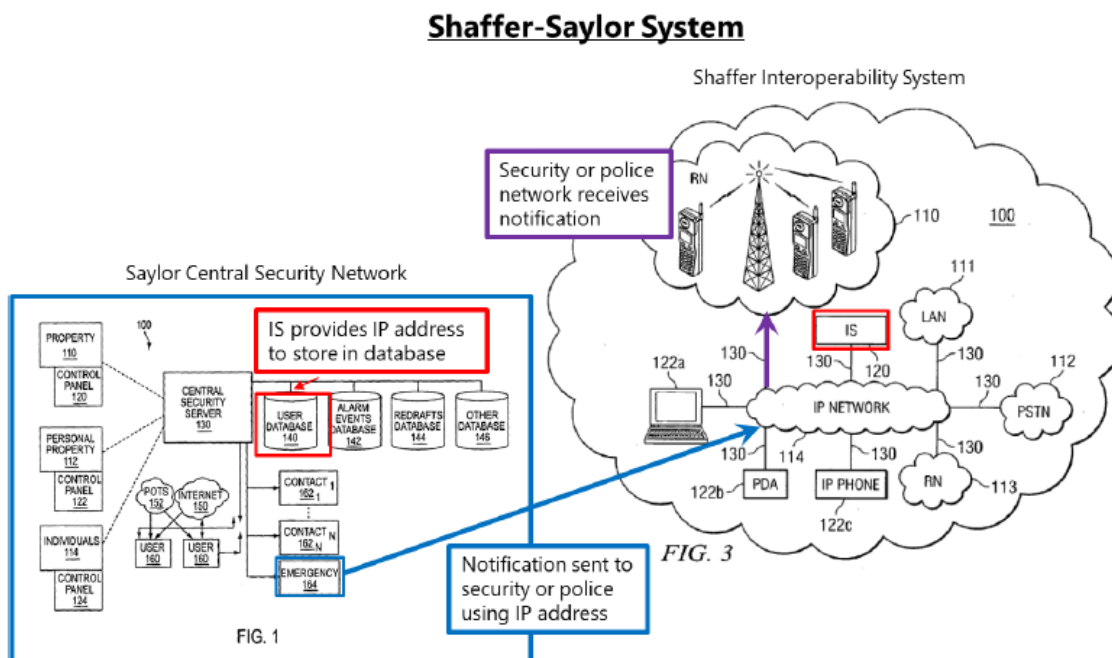
Figure 10 is a flowchart illustrating a process for accessing video images provided by a central system network. According to Saylor, “[u]sers may monitor an identified location by using video or other similar recording device. The video feature of the central security network . . . may compare images. For example, if a change between images is detected, a recording may be triggered. The video clips of movement may be stored or sent to a server of a central security network. The user may then be notified according to predefined notification methods.” *Id.* at 16:41–51.

E. Obviousness Over Shaffer and Saylor (Ground 1)

Petitioner contends that claims 1–5, 7–19, and 21–24 are unpatentable under 35 U.S.C. § 103(a) as obvious over Shaffer and Saylor. Pet. 23–54. Petitioner submits the testimony of Dr. Polish in support of its contentions. Ex. 1002 ¶¶ 82–152. Patent Owner disputes aspects of Petitioner’s evidence and arguments. PO Resp. 14–38. Patent Owner submits the testimony of Dr. Akl in support of its contentions. Ex. 2006 ¶¶ 46–103. We first consider whether Petitioner establishes a rationale to combine the asserted prior art.

1. Rationale to Combine Shaffer and Saylor

Petitioner contends that a person of ordinary skill in the art “would have been motivated to combine Shaffer and Saylor . . . to connect Saylor’s central security network as an input to Shaffer’s IS [Interoperability System].” Pet. 25–26. Petitioner provides an annotated composite of Saylor’s Figure 1 and Shaffer’s Figure 3, shown below, to illustrate the proposed combination.



Petitioner's annotated Shaffer-Saylor system is shown above with Figure 1 of Saylor's Central Security Network on the left next to Figure 3 of Shaffer's Interoperability System on the right. Pet. 27. According to Petitioner, "[i]n the combined system ('Shaffer-Saylor'), the IS in Shaffer ([120 boxed in] red) facilitates communications from Saylor's central security network to the relevant personnel and authorities in a different network (e.g., a building's security personnel or local police)." *Id.* at 26 (citing Ex. 1002 ¶ 84).

"For example," Petitioner explains,

the IS assigns a multicast IP address (communication channel) to a particular endpoint or a group of endpoints in advance (e.g., Ex[1004], ¶¶0039–0040 (describing assigning and storing multicast IP addresses)) and provides that multicast IP address to store in Saylor's databases. Ex[1002], ¶85. When Saylor's central security network detects an alarm situation, it queries its databases to retrieve the relevant IP address of the relevant entities to notify (as provided by Shaffer's IS) and use the address to send the alerts and notifications disclosed in Saylor ([shown in] blue) to the relevant recipients ([shown in] purple). Ex[1011], 9:22–28, 11:67–12:6, 13:51–54; Ex[1002], ¶85.

Id.

Petitioner contends that the motivation for a person of ordinary skill in the art to make this combination

is found in both references. For example, as Shaffer describes, IS 120 is designed to connect various types of networks, including a PTT radio network (typically used by security or emergency personnel) and a local area network (LAN) or public switched telephone network (PSTN) (typically used by sensors in homes and businesses). Ex[1004], ¶0037; Ex[1002], ¶86. In addition, Shaffer describes that the networks can be associated with locations such as business and campuses. Ex[1004], ¶0027. In view of these disclosures, a POSITA would have recognized that Shaffer's IS is well-suited to connect a network,

such as a video security system designed to monitor particular buildings, with a different network that responds to incidents in those buildings, such as a security or emergency network. Ex[1002], ¶86.

Id. at 27.

Petitioner goes on to explain that

Saylor discloses the type of network well-suited to work with Shaffer’s IS. Ex[1002], ¶87. For example, Saylor describes a packet-based central security network (using “TCP/IP”) that receives alarms from sensors in buildings and other facilities. Ex[1011], 17:10–21, FIG. 11, 6:33–43. That central security network processes the alarms and, according to rules and preferences, transmits notifications and information to relevant recipients in *other* networks, including security or emergency personnel in other types of networks with other communication protocols. *Id.*, 6:33–43, 8:18–33, 9:25–28; Ex[1002], ¶87. The notifications and information can include audio, video, or other data. Ex[1011], 16:41–51, 8:52–60. To implement these communications, Saylor describes that the central security network can identify relevant recipients in an “address book,” (*id.*, 7:48–52), but does not explain *how* to convey notifications to recipients in different networks. Ex[1002], ¶88. Shaffer’s IS system provides the needed mechanism for interoperable communications to achieve Saylor’s goals; using Shaffer’s IS, security personnel or other responders could directly and seamlessly receive communications and information from surveillance cameras in an alarming building. *Id.*

Pet. 28. Petitioner’s arguments are supported by Dr. Polish’s testimony. *See* Ex. 1002 ¶¶ 82–88.

Petitioner also argues that a person of ordinary skill in the art “would have had a reasonable expectation of success in combining the references in the manner described.” Pet. 28 (citing Ex. 1002 ¶ 89). Petitioner asserts that, “[i]n the combination, Saylor’s central security network sends communications to another network via Shaffer’s IS in the manner already envisioned by both references—namely, by a first network sending a packet-

based communication through an intermediary network to a second network also connected to the same intermediary network.” Pet. 28–29 (citing Ex. 1011, 6:22–25, Fig. 1; Ex. 1004 ¶ 20; Ex. 1002 ¶ 89). According to Petitioner, a person of ordinary skill in the art “would have recognized that Shaffer’s IS could readily assign and provide a multicast address for a particular group required to communicate (*e.g.*, security personnel for a company receiving notifications from one of the company’s buildings), and that Saylor could store and use the address to direct the video clips and alarm information to that group, according to the user preferences already set up in Saylor.” Pet. 29 (citing Ex. 1002 ¶ 90; Ex. 1004 ¶¶ 39–40).

Patent Owner contests Petitioner’s evidence and arguments directed to a rationale to combine the teachings of Shaffer and Saylor. *See* PO Resp. 16–29. Patent Owner argues that “Shaffer and Saylor are directed to vastly distinct systems that a POSITA would not have considered combining.” PO Resp. 16 (citing Ex. 2006 ¶ 46). Patent Owner claims that “[t]he structural differences between the references, the existing disclosure of each reference, and the lack of any detail regarding the combination evidences the lack of a motivation to combine Shaffer with Saylor.” PO Resp. 16.

Patent Owner first argues that “Shaffer and Saylor are structurally distinct,” and that they “present two ways of structuring networks that are incompatible with one another, or at least so distinct that a POSITA would not be motivated to combine the references.” *Id.* at 17 (citing Ex. 2006 ¶ 47). Patent Owner argues that Shaffer, “where endpoints move between locations and adjust communication parameters as they enter different locations, is markedly distinct from the teachings of Saylor.” *Id.* at 18. “In contrast,” Patent Owner argues, “Saylor handles all communications for a variety of systems of security devices at a specific premises regardless of a

location of a user relative to the premises.” *Id.* (citing Ex. 2006 ¶ 49). Patent Owner argues that “[b]ecause Saylor’s system establishes communication with owners/users and authorized entities in a location agnostic manner, and provides the mechanisms to establish those communications, there would be no need to combine Saylor with Shaffer’s transient endpoints.” PO Resp. 19 (citing Ex. 2006 ¶¶ 50, 82–89; Ex. 2008, 60:19–61:1, 71:20–72:3). According to Patent Owner, “Saylor’s location-agnostic security system would not be a relevant input to Shaffer’s location-specific endpoint communication network,” and “[t]he structural differences between Shaffer and Saylor discourage the combination.” PO Resp. 20–21 (citing Ex. 2006 ¶¶ 51, 54).

Petitioner counters that Patent Owner’s position “is contradicted by Saylor’s actual disclosure that “[n]etwork alerts may be based on alert notifications associated with property, personal property and/or individuals within a ***defined area or locality***.”” Pet. Reply 6 (quoting Ex. 1011, 10:62–11:3) (emphasis by Petitioner). “Indeed,” Petitioner argues, “on cross-examination Dr. Akl admitted that this example in Saylor is not agnostic to location.” Pet. Reply 6 (citing Ex. 1036, 68:3–69:8) (emphasis omitted). Petitioner points out that “Shaffer’s endpoints are also not all ‘transient’ as [Patent Owner] suggests. Shaffer’s endpoints include a ‘personal [desktop] computer’ and ‘command center’ that are not mobile.” Pet. Reply 6 (citing Ex. 1004 ¶ 25; Ex. 1002 ¶ 71; Ex. 1036, 65:3–66:10). Petitioner notes that “Shaffer discloses other stationary, non-transient, endpoints such as those in ‘buildings, campuses, municipalities, counties, states, countries or any other particular geographical area.’” Pet. Reply 6 (citing Ex. 1004 ¶¶ 25–27). Petitioner also points out that “Saylor expressly describes providing alarms to transient ‘emergency entities’ such as ‘the police, fire department . . . and

others.” Pet. Reply 7 (citing Ex. 1011, 1:17–22, 9:22–28) (alteration in original).

In its Sur-reply, Patent Owner argues that the “two communication regimes” of Saylor and Shaffer, “alerts sent to a predetermined list of recipients (*i.e.*, a closed group of recipients) versus creating communication groups based on endpoint position information (*i.e.*, an open group of participants)—are fundamentally at odds with one another such that a POSITA would not have been motivated to combine these references.” PO Sur-reply 10 (citing Ex. 2006 ¶¶ 47–54).

We agree with Petitioner and disagree with Patent Owner. Despite differences between Saylor and Shaffer, it does not follow necessarily that they are “fundamentally at odds with one another” such that a person of ordinary skill in the art would consider them “incompatible with one another, or at least so distinct that a POSITA would not be motivated to combine the references” as Patent Owner argues. PO Resp. 17; PO Sur-reply 10. Indeed, “[u]nder the correct [obviousness] analysis, any need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed.” *KSR*, 550 U.S. at 420.

Here, Dr. Polish testifies, and we agree, that a person of ordinary skill in the art would “have recognized that Shaffer’s IS is designed to connect a network such as a video security system designed to monitor particular buildings with a different network that responds to incidents in those buildings, such as a security or emergency network.” Ex. 1002 ¶ 86. We credit Dr. Polish’s testimony that a person of ordinary skill in the art “would have understood that Shaffer’s IS would have enabled security personnel or other responders to directly and seamlessly receive communications and

information from surveillance cameras in a building utilizing Saylor’s security network.” *Id.* ¶ 88.

Indeed, the Federal Circuit has “repeatedly held that an implicit motivation to combine exists not only when a suggestion may be gleaned from the prior art as a whole, but when the ‘improvement’ is technology-independent and the combination of references results in a product or process that is more desirable, for example because it is stronger, cheaper, cleaner, faster, lighter, smaller, more durable, *or more efficient.*” *Dystar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick*, 464 F.3d 1356, 1368 (Fed. Cir. 2006) (emphasis added). Dr. Polish’s testimony that “Shaffer’s IS would have enabled security personnel or other responders to directly and seamlessly receive communications and information from surveillance cameras in a building utilizing Saylor’s security network,” specifically describes the desirable benefit of efficiency a person of ordinary skill in the art would have reasonably expected to obtain from Petitioner’s proposed combination. Ex. 1002 ¶ 88.

Patent Owner next argues that Shaffer and Saylor provide “redundant disclosures,” i.e., “redundant mechanisms for sending communications between networks.” *See* PO Resp. 23–26. Patent Owner argues that “there would be no need to combine the teachings of Shaffer with Saylor because Saylor already includes everything it needs to send notifications to recipients in different networks.” PO Resp. 25. Patent Owner argues that “[b]ecause Saylor is replete with instructions regarding how to convey notifications to recipients across a wide range of communication mediums, there would be no need to incorporate this with Shaffer’s IS, and therefore no need to combine these references.” *Id.* at 26 (citing Ex. 2006 ¶ 64).

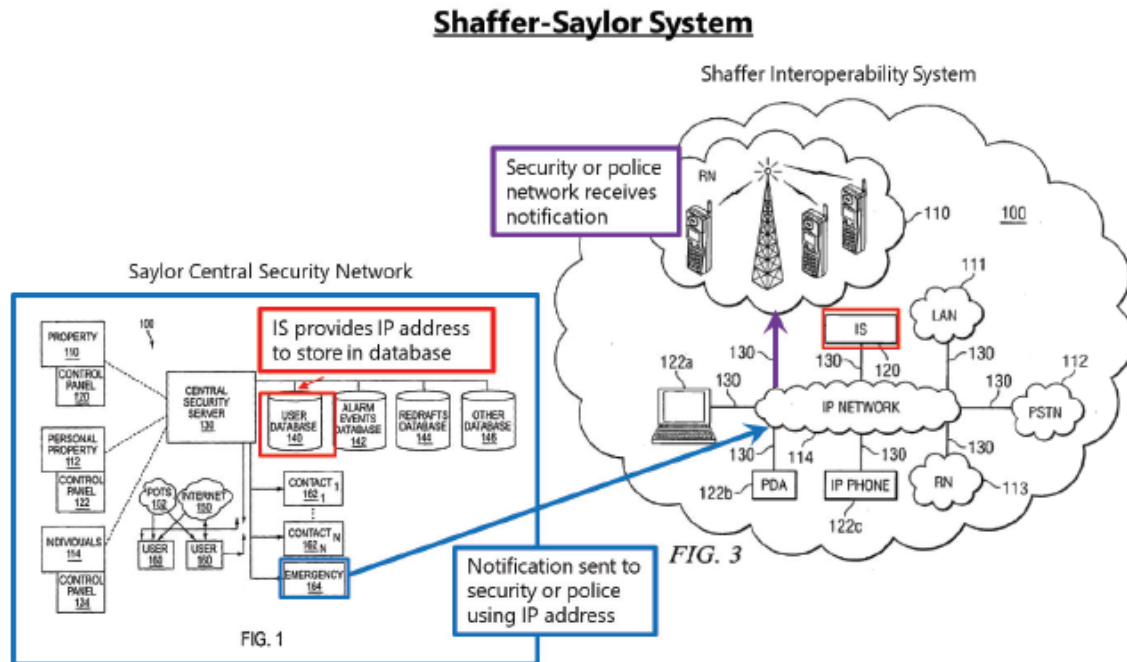
In its Reply, Petitioner argues that Patent Owner “conflates whether the combined references are redundant with the question of whether they are analogous.” Pet. Reply 8. According to Petitioner, Saylor’s disclosure of “different possible ‘[m]ethods of notification’ is not redundant of using Shaffer’s IS approach to implement communications among devices on different networks.” *Id.* at 8–9 (citing Ex. 1002 ¶¶ 87–88). Petitioner explains that “Shaffer’s IS specifically provides the mechanism by which the different ‘[m]ethods of notification’ in Saylor can be used to communicate alarms from sensors in buildings/facilities to emergency services across different networks in different regions, including different buildings.” Pet. Reply 9 (citing Ex. 1004 ¶¶ 39–40, 46; Ex. 1002 ¶¶ 84–85; Pet. 25–26, 28).

We agree with Petitioner. Dr. Polish specifically testifies that “the IS [Interoperability System] in Shaffer . . . provides the connection from Saylor’s central security network to the relevant personnel and authorities in a different network who may respond to an incident (*e.g.*, a building’s security personnel or local police in the city where the building is located).” Ex. 1002 ¶ 84. Dr. Polish explains that in the combined system,

the IS of Shaffer would assign a multicast IP address (communication channel) to a particular endpoint or a group of endpoints requiring notification of a particular type of event. *E.g.*, Ex[1004], ¶¶ 0039–0040 (describing assigning and storing multicast IP addresses). That IP address would have then been stored in Saylor’s databases for retrieval and use to contact entities outside of the security system upon occurrence of an event. For example, in the combined system, when an alarm is triggered in Saylor’s central security network, the security network could query its databases to retrieve the relevant IP address of the relevant entities to notify (as provided by Shaffer’s IS) and use the address to send the alerts and notifications disclosed in Saylor (blue) to the relevant recipients (purple).

Ex. 1002 ¶ 85 (citing Ex. 1011, 9:22–28, 11:67–12:6, 13:51–54).

Petitioner’s combined Shaffer-Saylor system is shown below.



Petitioner’s annotated Shaffer-Saylor system depicts Figure 1 of Saylor’s Central Security Network on the left next to Figure 3 of Shaffer’s Interoperability System on the right. The clear complementation, interoperability, and benefits of Petitioner’s combined Shaffer-Saylor system directly contradicts Patent Owner’s argument that Shaffer and Saylor provide “redundant disclosures,” and that “there would be no need to combine the teachings of Shaffer with Saylor.” PO Resp. 25.

Finally, Patent Owner argues that “the Petition presents hindsight-ridden ‘motivations’ that fail to consider the context of the art.” PO Resp. 26. In particular, Patent Owner argues that “[t]he Petition fails to provide any reason to deviate from Shaffer’s disclosure regarding storing IP addresses in the endpoints to enable them to communicate locally while travelling between geographic areas,” and “[t]here would be no reason to

store these addresses in Saylor’s stationary network.” PO Resp. 28 (citing Ex. 1004 ¶¶ 40, 8; Ex. 2006 ¶ 68).

We disagree with Patent Owner. As noted above, Dr. Polish testifies that “the IS in Shaffer . . . provides the connection from Saylor’s central security network to the relevant personnel and authorities in a different network who may respond to an incident (*e.g.*, a building’s security personnel or local police in the city where the building is located).” Ex. 1002 ¶ 84. According to Dr. Polish, “Shaffer’s IS is designed to connect a network such as a video security system designed to monitor particular buildings with a different network that responds to incidents in those buildings, such as a security or emergency network.” *Id.* ¶ 86. Dr. Polish further testifies, and we agree, that “Shaffer’s IS would have enabled security personnel or other responders to directly and seamlessly receive communications and information from surveillance cameras in a building utilizing Saylor’s security network.” *Id.* ¶ 88.

Based upon the complete record, we are persuaded that Petitioner has demonstrated by a preponderance of the evidence that a person of ordinary skill in the art at the time of the claimed invention would have had a reasoned basis to combine the teachings of Shaffer and Saylor in the manner described in the Petition and would have had a reasonable expectation of success in that endeavor.

2. Independent Claim 1

Petitioner contends that independent claim 1 is unpatentable under 35 U.S.C. § 103(a) as obvious over Shaffer and Saylor. Pet. 29–42. Petitioner submits the testimony of Dr. Polish in support of its contentions. Ex. 1002 ¶¶ 91–110. Patent Owner disputes certain aspects of Petitioner’s evidence and arguments with respect to claim 1, in particular limitations 1[b], 1[d],

and 1[e]. *See* PO Resp. 14–16, 29–35. Patent Owner does not contest Petitioner’s evidence and arguments with respect to claim 1’s preamble and limitations [1a], [1c], [1f], and [1g]. *See id.* We consider all of Petitioner’s evidence and arguments directed to claim 1, and we address in detail Patent Owner’s arguments directed to the contested limitations.

a. Preamble: A method comprising:

Petitioner asserts that “Shaffer-Saylor discloses “[a] *method, comprising.*” Pet. 29 (citing Ex. 1004, Abstr., ¶ 1; Ex. 1002 ¶ 91). Indeed, the abstract of Shaffer describes “[a] method for communicating using position information includes communicating on a first communication network at a first location using one or more first communication parameters of the first communication network.” Ex. 1004, Abstr. Patent Owner does not contest this evidence. *See* PO Resp. 14–35. Based on the complete record, we determine that Shaffer’s disclosure meets the preamble of independent claim 1.

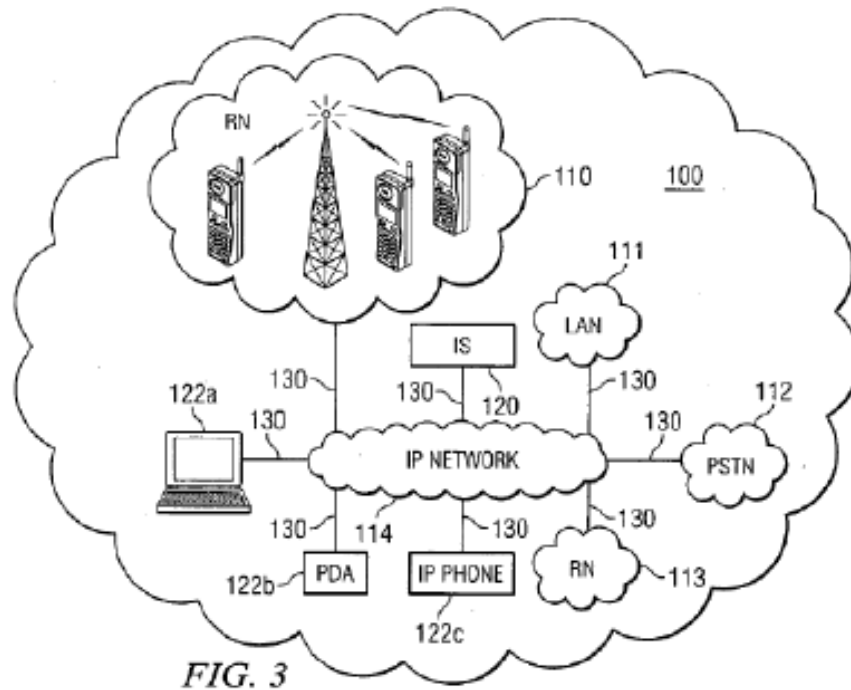
b. Limitation 1[a]

Limitation 1[a] recites: “*monitoring a selection of a communication channel by a user of a mobile communication device.*” Ex. 1001, 12:19–20. Petitioner contends that Shaffer discloses the subject matter recited in limitation 1[a]. Pet. 29–31. Patent Owner does not contest Petitioner’s evidence and arguments with respect to this limitation. *See* PO Resp. 14–35.

Petitioner asserts that, “in Shaffer, mobile security personnel can select and set their device to an IP address associated with the security forces in the area in which the security personnel is located.” Pet. 29. Petitioner asserts that “Shaffer discloses a communication channel as described in the ’830 patent—namely, a ‘particular IP address’ for hosting a ‘virtual talk

group.”” *Id.* at 28–29 (citing Ex. 1001, 2:59–62, 4:22–28; Ex. 1004 ¶ 39; Ex. 1002 ¶ 93).

To illustrate this, Petitioner refers to Figure 3 of Shaffer, shown below. Pet. 30.



With respect to Shaffer’s Figure 3, Petitioner explains that it “illustrates various types of endpoints (including radios in radio network (110), an IP phone (122c), and a PDA (122b)) that can form communication sessions” comprising “audio and/or video telecommunication signals.” *Id.* (citing Ex. 1004 ¶¶ 20, 37–42, Fig. 3; *see also id.* ¶¶ 16, 37). “In particular,” Petitioner explains that “Interoperability System (IS) 120 uses ‘multicast IP addresses’ so that the devices can ‘communicate with each other through IS 120 to provide network interoperability.’” Pet. 30 (citing Ex. 1004 ¶¶ 38–39). “For example,” Petitioner explains, “communication channels

(multicast IP addresses) may exist for ‘local safety and security agencies.’” Pet. 30 (citing Ex. 1004 ¶ 40).

“Second,” Petitioner asserts, “Shaffer discloses a selection of the communication channel by a user of a mobile communication device to set the device to the selected communication channel.” Pet. 31 (citing Ex. 1002 ¶ 94). “For example,” Petitioner explains, “Shaffer discloses that a police officer ‘such as a state highway patrol officer, may be provided with a PC with a touch screen’ where the ‘PC comprises a mobile endpoint.’” Pet. 31 (citing Ex. 1004 ¶¶ 34, 40). According to Petitioner, “[t]he officer can use the touchscreen to select ‘local safety and security forces’ by selecting ‘[i]cons on the touch screen’ to ‘join communication sessions.’” Pet. 31 (citing Ex. 1004 ¶ 34). Petitioner explains that “[t]he IS monitors the officer’s selection, and ‘[u]pon receiving instructions from the officer,’ adjusts ‘communications parameters used by the endpoint.’” *Id.*; *see also id.* ¶ 41 (describing that IS stores multicast addresses “utilized by various agencies”). Petitioner asserts that “[t]he communication parameters identified by IS 120 include a ‘multicast address’ identifying the communication channel for the VTG for ‘local safety and security forces.’” Pet. 31 (citing Ex. 1004 ¶¶ 40–41). According to Petitioner, “[t]his allows the mobile endpoint user to connect with local safety and security forces manually with, for example, a single key stroke.” Pet. 31 (citing Ex. 1004 ¶ 40).

“Finally,” Petitioner asserts, “the selection of the communication channel is monitored by the processor of the mobile endpoint so that the endpoint can ‘receive[] and transmit[] voice and other data’ with other devices.” Pet. 31 (citing Ex. 1004 ¶ 44; *see also id.* ¶¶ 45–47; Ex. 1002 ¶ 95).

Petitioner relies on Shaffer’s teaching of a communication channel similar to one described in the ’830 patent—namely, a particular IP address for hosting a virtual talk group. *See* Pet. 29–30 (citing Ex. 1001, 2:59–62 (“The gateway 116 may provide voice interoperability between computer and non-computer networks, such as the PSTN 102, by bridging telephone transmissions to Internet Protocol (IP) multicast streams.”), 4:22–28 (“The radio network 152 may communicate with the computer network 114 by way of a gateway 160, which provides voice and control interoperability between the radio network 152 and the computer network 114 by bridging media and control transmissions to Internet Protocol (IP) multicast and/or Unicast (e.g., Session Initiation Protocol (SIP)) streams.”); Ex. 1004 ¶ 39; Ex. 1002 ¶ 93).

Petitioner refers to Shaffer’s Figure 3 and explains that Shaffer “illustrates various types of endpoints (including radios in radio network (110), an IP phone (122c), and a PDA (122b)) that can form communication sessions” comprising “audio and/or video telecommunication signals.” Pet. 28 (citing Ex. 1004 ¶¶ 20, 37–42, Fig. 3; *see also id.* ¶¶ 16, 37). In particular, Petitioner points out that Shaffer’s “Interoperability System (IS) 120 uses ‘multicast IP addresses’ so that the devices can ‘communicate with each other through IS 120 to provide network interoperability.’” Pet. 30 (citing Ex. 1004 ¶¶ 38–39).

Petitioner also explains that “[t]he IS monitors the officer’s selection, and ‘[u]pon receiving instructions from the officer,’ adjusts ‘communications parameters used by the endpoint.’” Pet. 31 (citing Ex. 1004 ¶¶ 34, 41). In addition, Petitioner explains that “the selection of the communication channel is monitored by the processor of the mobile endpoint so that the endpoint can ‘receive[] and transmit[] voice and other

data’ with other devices.” Pet. 31 (citing Ex. 1004 ¶ 44; *see also id.* ¶¶ 45–47; Ex. 1002 ¶ 95).

Based upon the complete record, we find that Petitioner has established that Shaffer teaches “*monitoring a selection of a communication channel by a user of a mobile communication device*” as recited in limitation 1[a].

c. Limitation 1[b]

Limitation 1[b] recites: “*providing a plurality of radio frequencies on a display of the mobile communication device, each radio frequency being associated with a geographical zone.*” Ex. 1001, 12:21–23.

Petitioner contends that Shaffer discloses the subject matter recited in limitation 1[b]. Pet. 32–35. Patent Owner disagrees. PO Resp. 29–31.

Petitioner asserts that “in Shaffer, mobile security personnel can select a frequency associated with a nearby building” and “Shaffer describes that a user’s device can store a plurality of radio frequencies associated with geographical zones.” Pet. 32 (citing Ex. 1004, Fig. 4). To illustrate this capability, Petitioner provides an annotated version of Shaffer’s Figure 4, shown below.

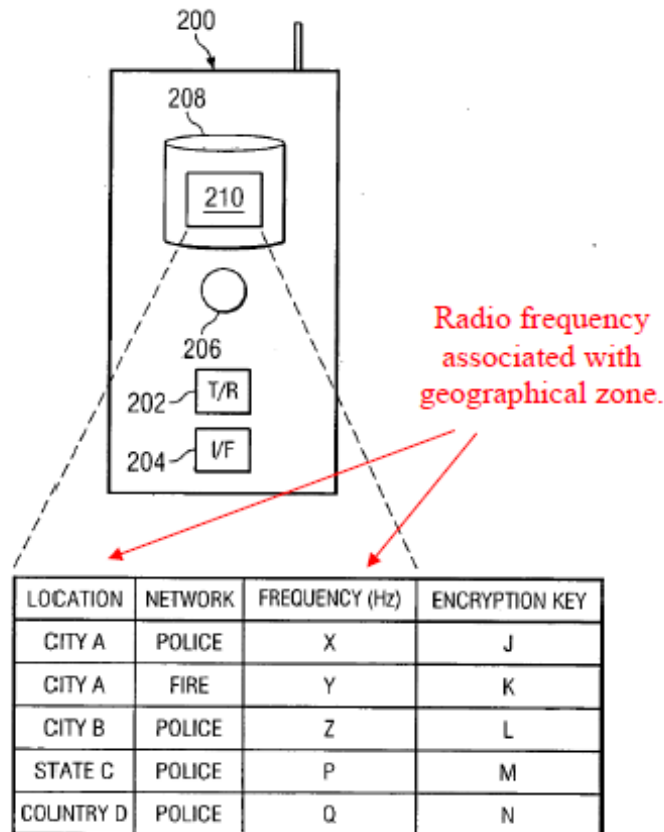
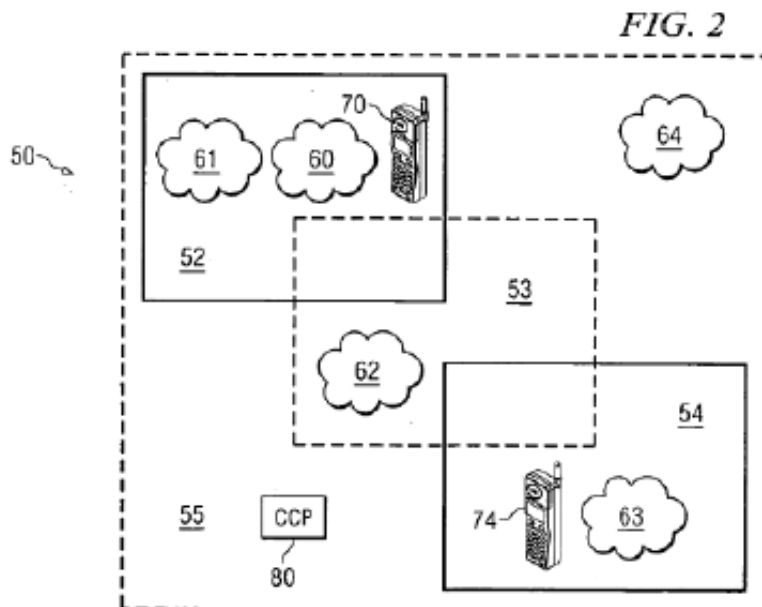


FIG. 4

Petitioner’s annotated version of Shaffer’s Figure 4 depicts an example of mobile endpoint 200 comprising transmitter/receiver 202, user interface 204, processor 206, memory module 208, and network communication parameter listing 210, “which contains mappings of communication settings, such as radio frequencies and encryption keys, of communication networks by location.” Pet. 33; Ex. 1004 ¶¶ 44, 46.

Petitioner explains that Shaffer’s Figure 4 “shows an exemplary mobile communication device with memory module 208 that stores several different communication parameter listings 210.” Pet. 32 (citing Ex. 1004 ¶¶ 43, 46–47). According to Petitioner, “these parameter listings include *radio frequencies*, identified in Hertz (listed as X, Y, Z, P, Q).” Pet. 32 (citing Ex. 1004 ¶¶ 43–48, Fig. 4) (emphasis by Petitioner).

Petitioner asserts that, in Shaffer, “the mobile device stores ‘radio frequencies’ of ‘communication networks by location.’” Pet. 33 (citing Ex. 1004 ¶ 46). Petitioner explains that in Figure 4, “each radio frequency is also specifically associated with a ‘location’ such as City A, City B, State C, or Country D.” Pet. 33 (citing Ex. 1004, Fig. 4). Petitioner also points out that “Shaffer explains the locations can also be ‘buildings’ and ‘campuses,’ in addition to municipalities.” Pet. 33 (citing Ex. 1004 ¶ 27). “For example,” Petitioner explains, Figure 2 of Shaffer shows “different geographic regions (52, 53, 54, 55) ‘may correspond to buildings, campuses, municipalities . . . or any other particular geographical area,’” and “[e]ach geographic region may also contain one or more communication networks (60–64), each of which may have a different ‘assigned radio frequenc[ies].”” Pet. 33–34 (citing Ex. 1004 ¶ 27; *see also id.* ¶¶ 20–22, 26, 34–35; Ex. 1002 ¶¶ 97–98). Shaffer’s Figure 2 is shown below.



Shaffer’s Figure 2 depicts system 50 for communicating using position information that includes a plurality of geographic regions 52–55,

communication networks 60–64, endpoints 70, 74, and communication control post (CCP) 80. Ex. 1004 ¶ 26, Fig. 2.

Petitioner asserts that “Shaffer further discloses that the radio frequencies are provided by the memory of the mobile communication device to a *display* on the user interface of the mobile communication device.” Pet. 34 (citing Ex. 1002 ¶ 99). “For example,” Petitioner explains, “Shaffer describes that mobile endpoint 200 has an interface 204 that may be a “*display*, touch screen . . . or any other suitable interface.” Pet. 34 (citing Ex. 1004 ¶ 44 (emphasis by Petitioner).

According to Petitioner, “[t]he display presents frequencies to the user so that ‘through interface 204 a user may input instructions regarding adjustment of the end point’s communication settings (*e.g.*, radio frequency, modulation method and encryption key) upon entering a new communication network.” Pet. 34–35 (citing Ex. 1004 ¶ 44; *see also id.* ¶¶ 35–36 (describing a “pressing of a key stroke” to change endpoint communication setting), ¶¶ 3, 8 (describing, as background, known functionality for using a handbook to look up local frequencies by location)). “For example,” Petitioner explains with reference to Shaffer’s Figure 4, “if a user enters city A, there are two possible frequencies, X and Y. Shaffer explains that those frequencies are presented to the user (*e.g.*, using a touch screen display) for selection by the ‘pressing’ of a touch screen ‘key stroke.’” Pet. 35 (citing Ex. 1004 ¶¶ 35–36, 44).

Petitioner argues that a person of ordinary skill in the art “would at least have recognized that displaying the multiple available frequencies on Shaffer’s touch screen for selection by a ‘key stroke’ would have been obvious and one of a finite number of predictable options for selecting on the touch screen all available frequencies in an area.” Pet. 35 (citing Ex.

1002 ¶ 100). “Such an implementation,” Petitioner asserts, “uses a known technique (touchscreen display and selection) with known benefits (selection using a single ‘stroke’) according to its established function, and is therefore obvious.” *Id.*

Patent Owner argues that “Shaffer notably lacks disclosure of any radio frequency being presented on the user interface (or any display), much less a plurality of radio frequencies presented on a display of the mobile communication device as claimed.” PO Resp. 29. Patent Owner also argues that “[t]here is nothing in Shaffer that suggests interface 204 provides, on a display, any of the “several different communication parameter listings 210” that are stored in memory module 208, much less a plurality of these listings.” *Id.* at 30 (citing Pet. 32; Ex. 1004 ¶ 46). According to Patent Owner, “[t]he assumption that Shaffer discloses providing a plurality of the stored communication parameter listings on a display highlights that the Petition uses hindsight biased reasoning to arrive at the claimed invention.” PO Resp. 30. Patent Owner also asserts that “it is unclear why Shaffer’s ‘instructions regarding adjustment of the end point’s communication settings’ would provide a plurality of radio frequencies on a display.” PO Resp. 30 (citing Ex. 1004 ¶ 44).

We agree with Petitioner and disagree with Patent Owner. Shaffer explains that

[i]n some cases the endpoint may be set to automatically switch communication settings upon such a move once the endpoint enters an area of a different or particular communication network. *In some cases such a switch may occur through a user interface, such as a user pressing a button to enable the switch. For example, specific buttons may be used to switch communication settings.*

Ex. 1004 ¶ 32 (emphasis added). Shaffer explains that these “communication settings” include “radio frequency and encryption key.” *Id.* ¶ 31.

Shaffer’s Figure 4 illustrates mobile endpoint 200 comprising transmitter/receiver 202, user interface 204, processor 206, memory module 208, and network communication parameter listing 210. Ex. 1004 ¶ 44, Fig. 4. Parameter listing 200 provides a call-out table populated with a list of geographic locations of different networks along with their related frequencies (in Hz) and encryption keys. Parameter listing 200 shows different geographic zones (City A, City B, State C, Country D) and associated radio frequencies (frequencies X, Y, Z, P, Q). Shaffer explains that user interface 204 “may comprise a keypad, *display, touch screen*, audio input *or any other suitable interface*.” *Id.* ¶ 44 (emphasis added).

Although Figure 4 represents the frequencies of the different geographic zones by letters (X, Y, Z, P, Q), the column heading of the display clearly indicates that they represent a “FREQUENCY” in Hertz (HZ). We credit Dr. Polish’s testimony on this point. *See* Ex. 1002 ¶ 97 (“These parameter listings include *radio frequencies*, identified in Hertz (listed as X, Y, Z, P, Q”) (citing Ex. 1004 ¶¶ 43–48, Fig. 4)).

We also credit Dr. Polish’s testimony with respect to Figure 2 that Shaffer’s geographic regions “may correspond to buildings, campuses, municipalities . . . or any other particular geographical area.” Ex. 1002 ¶ 98 (citing Ex. 1004 ¶ 27). Dr. Polish testifies, and we agree, that each “geographic region may also contain one or more communication networks (60–64), each of which may have different “assigned radio frequenc[ies].” *Id.*; *see also id.* ¶¶ 20–22, 26, 34–35.

We credit Dr. Polish’s testimony that “Shaffer describes that mobile endpoint 200 has an interface 204 that may be a “*display*, touch screen . . . or any other suitable interface,” such that the “display presents multiple frequencies to the user so that ‘through interface 204 a user may input instructions regarding adjustment of the end point’s communication settings (e.g., radio frequency, modulation method and encryption key) upon entering a new communication network.’” Ex. 1002 ¶ 99 (citing Ex. 1004 ¶ 44; *see also id.* ¶¶ 35–36 (describing a “pressing of a key stroke” to change endpoint communication setting)).

We further credit Dr. Polish’s testimony that

[d]isplaying the multiple available frequencies on Shaffer’s touch screen for selection by a “key stroke” on a touch screen would at least have been obvious to a POSITA. When there are multiple frequencies available for communication in a particular area, as in Shaffer, and when a user’s device can include a touch screen, as in Shaffer, presenting for selection on the touch screen all available frequencies in an area a user enters would have been one of a finite number of predictable options for selecting a frequency.

Ex. 1002 ¶ 100.

Based upon the complete record, we find that Petitioner has established that the combination of Shaffer and Saylor teaches “*providing a plurality of radio frequencies on a display of the mobile communication device, each radio frequency being associated with a geographical zone*,” as recited in limitation 1[b].

d. Limitation 1[c]

Limitation 1[c] recites: “*from which a plurality of video feeds associated with the geographic zone are sourced*.” Ex. 1001,12:23–25.

Petitioner contends that the combination of Shaffer and Saylor teaches the

subject matter recited in limitation 1[c]. Pet. 35–36. Patent Owner does not contest Petitioner’s evidence and arguments with respect to this limitation. *See* PO Resp. 14–35.

Petitioner asserts that “Shaffer-Saylor discloses that each geographic region in Shaffer (*e.g.*, a building or a campus) can also be the source of and associated with a plurality of video feeds.” Pet. 35 (citing Ex. 1002 ¶ 101). “For example,” Petitioner explains, “Saylor discloses ‘video cameras’ located in a geographic zone (*e.g.*, a building of a ‘business’).” Pet. 35 (citing Ex. 1011, 10:32–34, Fig. 10). “In particular,” Petitioner points out, “‘an identified location may be monitored by a video or other recording device,’ and, if motion is detected, ‘video clips’ maybe sent to a ‘central security network.’” Pet. 35–36 (citing Ex. 1011, 16:52–17:9; *see also id.* at 11:64–12:6).

With respect to video feeds associated with geographic zones, the ’830 patent explains that “[i]n an example embodiment, one or more of the cameras . . . are independent video surveillance cameras (*e.g.*, surveillance cameras installed along freeways, at traffic intersections or and public and non-public locations).” Ex. 1001, 3:17–21. The ’830 patent also explains that

[a]s one or more users . . . approach a location from which specific video feed is originating (*e.g.*, a video feed from a camera 122 pointed at a junction towards which a fire-truck is heading, the policy module 312 may automatically associate the video feed from the relevant camera 122 with the communication channels of the fire truck and render access to this video feed to all other members of a fire-truck VTG [virtual talk group].

Id. at 6:4–11.

Dr. Polish testifies that by 2008 “video surveillance systems were ubiquitous. They addressed the well-known need to monitor areas of interest, providing eyes on scene, without the need for the physical presence of personnel.” Ex. 1002 ¶ 66 (citing Ex. 1029 ¶ 17) (“The subject invention is directed to an IP-network-based surveillance and monitoring system wherein video captured from a number of remotely located security cameras may be digitized, compressed, and networked for access, review and control at a remote monitoring station.”).

Saylor also teaches that “[t]he security system may be applied to a user’s home, office, vacation house or other location.” Ex. 1011 2:13–15. Saylor explains that such a system may “provide a monitoring system for providing images (e.g., photos, pictures, video, diagrams, illustrations, etc.) where an alarm situation may be detected,” and that “[t]he user may also view the images (e.g., video clips) remotely via the web or other remote access methods.” *Id.* at 2:53–55.

The term “geographic zone” is not defined in the ’830 patent and neither party has proffered any special meaning for it. *See* Pet. 14–15; PO Resp. 9–12. These examples from the ’830 patent and the prior art indicate that a person of ordinary skill in the art would understand that a “geographic zone” may be a particular location or area where a camera producing a video feed is located, such as a traffic intersection, along a freeway, or at some other public or non-public location, such as a building, business location, or home.

Thus, Petitioner’s assertion that “a building or a campus” may be considered a “geographic zone,” is consistent with the examples provided in ’830 patent and the prior art. Pet. 35 (citing Ex. 1011, 10:32–34, Fig. 10; *see*

also Ex. 1002 ¶ 101). Patent Owner does not challenge Petitioner’s understanding of this term. *See* PO Resp. 14–35.

Based upon the complete record, we find that Petitioner has established that the combination of Shaffer and Saylor teaches “*from which a plurality of video feeds associated with the geographic zone are sourced*” as recited in limitation 1[c].

e. Limitation 1[d]

Limitation 1[d] recites: “*monitoring a selection of a radio frequency of the plurality of radio frequencies by the user.*” Ex. 1001, 12:26–27.

Petitioner contends that Shaffer teaches the subject matter recited in limitation 1[d]. Pet. 36 (citing Ex. 1002 ¶ 102). Patent Owner disagrees. PO Resp. 31–32.

Petitioner asserts that “[a]s discussed with respect to limitation 1[b], Shaffer discloses and renders obvious that the [radio] frequencies are provided on the display of a mobile communication device for *selection* by the user.” Pet. 36. “For example,” Petitioner points out, “Shaffer explains that the display presents frequencies to the user so that ‘through interface 204 a user may input instructions regarding adjustment of the end point’s communication settings (*e.g.*, radio frequency. . .).” *Id.* (citing Ex. 1004 ¶ 44; *see also id.* ¶¶ 35–36 (describing a “pressing of a key stroke” to change endpoint communication setting)). According to Petitioner, “[t]he user’s selection of frequency is monitored by the processor of the mobile endpoint so that the endpoint can ‘receive[] and transmit[] voice and other data’ with other devices.” Pet. 36 (citing Ex. 1004 ¶ 44; *see also id.* ¶¶ 45–47). Petitioner argues that “[d]isplaying the multiple available frequencies on Shaffer’s touch screen for selection by a ‘key stroke’ on a touch screen

would at least have been obvious, as described for limitation 1[b].” Pet. 36 (citing Ex. 1002 ¶ 102).

Patent Owner argues that “[b]ecause Shaffer fails to provide a plurality of radio frequencies on a display, a user cannot select a radio frequency from a plurality of radio frequencies.” PO Resp. 31 (citing Ex. 2006 ¶ 79). Patent Owner also argues that although “Shaffer teaches a user inputting ‘instructions regarding adjustment of the endpoint’s communication settings . . . *upon entering a new communication network,*” when “[r]ead in context, Shaffer’s ‘instructions’ do not monitor for the selection of a radio frequency from a plurality of radio frequencies provided to a user, but instead prescribe how to change networks as the endpoint moves between locations.” PO Resp. 31–32 (citing Ex. 2006 ¶ 80).

We agree with Petitioner and disagree with Patent Owner. Patent Owner’s argument is based on the false premise that “Shaffer fails to provide a plurality of radio frequencies on a display.” This is demonstrably incorrect, as discussed above in connection with Shaffer’s disclosure of parameter listings, include ***radio frequencies***, identified in Hertz (listed as X, Y, Z, P, Q) in Shaffer’s Figure 4. *See supra*, Sec. IV.E.2.b.

Patent Owner’s argument appears to be that because Shaffer’s Figure 4 presents a list of frequencies as letters (X, Y, Z, P, Q) instead of numbers that a person of ordinary skill in the art would not understand that Shaffer’s letters represent different radio frequencies. This argument is unpersuasive, especially given that the table heading in Shaffer’s Figure 4 clearly reads “FREQUENCY (Hz).”

Moreover, the level of information provided in Shaffer’s Figure 4 is similar to the level of information provided in Figure 9 of the ’830 patent, shown below.

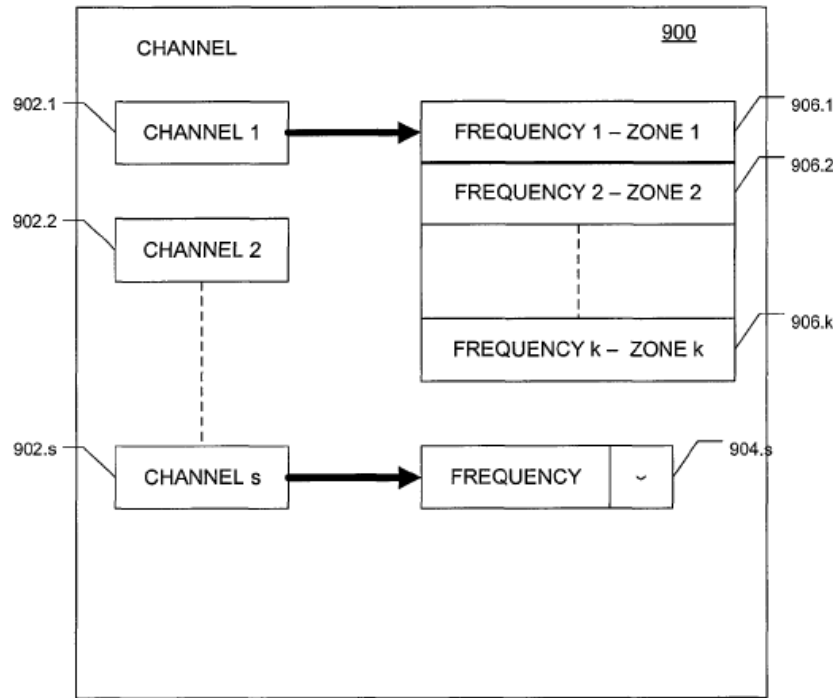


FIG. 9

Figure 9 of the '830 patent illustrates a graphic user interface (GUI) of a mobile communication device “to allow a user to select a communication frequency associated with a communication channel.” Ex. 1001, 9:61–62. Notably, GUI 900 does not list any of its frequencies in Hertz, but merely labels them as Frequency 1 thru Frequency k, apparently assuming that a person of ordinary skill in the art would understand that these labels represent actual radio frequencies.

Equally unpersuasive is Patent Owner’s other argument that Shaffer’s instructions do not monitor for the selection of a radio frequency, but instead “prescribe how to change networks as the endpoint moves between locations.” PO Resp. 31–32. We find more persuasive Dr. Polish’s testimony that “[t]he user’s selection of frequency is monitored by the processor of the mobile endpoint so that the endpoint can ‘receive[] and transmit[] voice and other data’ with other devices,” and “[d]isplaying the

multiple available frequencies on Shaffer’s touch screen for selection by a ‘key stroke’ on a touch screen would at least have been obvious to a POSITA, for the reasons described for limitation 1[b].” Ex. 1002 ¶ 102 (citing Ex. 1004 ¶¶ 44–47).

Based upon the complete record, we find that Petitioner has established that Shaffer teaches “*monitoring a selection of a radio frequency of the plurality of radio frequencies by the user,*” as recited in limitation 1[d].

f. Limitation 1[e]

Limitation 1[e] recites: “[1] *identifying at least one video feed by selecting the at least one video feed from the plurality of video feeds associated with the geographic zone, [2] wherein the at least one video feed is associated with the selected communication channel [3] based on a user policy that identifies one or more video feeds that are relevant to the user when the user accesses the selected communication channel.*” Ex. 1001, 12:28–32.⁵

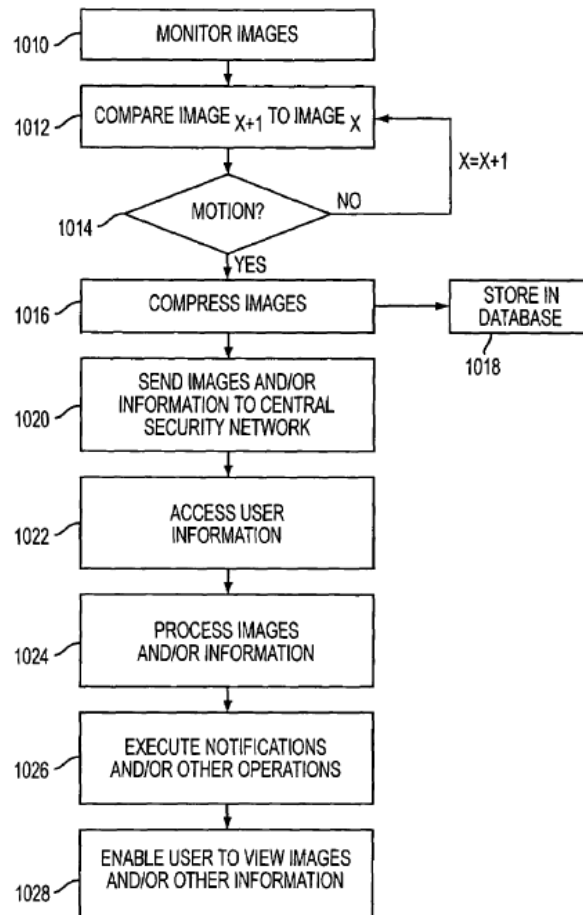
Petitioner contends that the combination of Shaffer and Saylor teaches the subject matter recited in limitation 1[e]. Pet. 36–41. According to Petitioner “the Shaffer-Saylor system identifies a video feed associated with the *geographic zone*, and that feed is also associated with a multicast IP address (*selected communication channel*) based on a user preferences database entry (*user policy*) that identifies video feeds relevant to security personnel (*users*) when they access the communication channel.” Pet. 36–37 (citing Ex. 1002 ¶ 103). Patent Owner disagrees. PO Resp. 14–16, 32–35.

⁵ Bracketed numbers suggested by Petitioner. See Pet. 36–37.

- i. [1]identifying at least one video feed by selecting the at least one video feed from the plurality of video feeds associated with the geographic zone

Petitioner asserts that “Saylor’s central security network [1] *identifies and selects a video feed associated with the geographic zone.*” Pet. 37 (citing Ex. 1002 ¶ 104).

Petitioner relies on Saylor’s Figure 10, which is shown below.



Saylor’s Figure 10 is a flowchart illustrating a process for accessing video images provided by a security system. Ex. 1011, 4:58–59. According to Petitioner, “in step 1010, Saylor’s central security network monitors a specific video feed in an ‘identified location’ of a building (*the geographic zone*) and, in steps 1012, 1014, 1016, and 1020, selects and identifies that

feed when a ‘trigger[]’ event occurs, such as ‘motion.’” Pet. 37 (citing Ex. 1011, 16:52–60, 34:6–10). In steps 1022 and 1024, Petitioner asserts that “a ‘video clip[]’ from that feed is processed to determine whether certain ‘conditions are met for alarm triggers’ or ‘[n]otifications.’” Pet. 37 (citing Ex. 1011, 17:1–5). Petitioner points out that “in steps 1026 and 1028, an ‘image may be automatically transmitted’ to recipients.” Pet. 37 (citing Ex. 1011, 17:8–9; *see also id.* at 34:1–9 (describing that a subscriber can be sent a “video clip” from a camera near the front door if the “front door opens” or “when an unrecognized person enters”).

Patent Owner contends that “[t]he Petition fails to address the portion of limitation 1[e] in which the video feed is selected ‘from the plurality of video feeds.’” PO Resp. 14. Patent Owner argues that “[t]he video monitored at the identified location that sends video clips to a central security network after motion is detected does not teach ‘identifying at least one video feed by selecting the at least one video feed from the plurality of video feeds’ because the identified location is not reviewing a plurality of video feeds.” *Id.* at 15 (citing Ex. 2006 ¶¶ 72–73). Patent Owner argues that “[w]ith each video device monitoring its own feed, Saylor fails to disclose any element that *selects* a video feed from the plurality of video feeds.” PO Resp. 16 (citing Ex. 2006 ¶ 72).

In its Reply, Petitioner argues that “[t]he Petition describes the plurality of feeds in Shaffer-Saylor for limitation 1[c]—namely, a ‘plurality of video feeds’ from ‘video cameras’ (plural) located in ‘each geographic region’ (e.g., a ‘building or campus’) that the system monitors.” Pet. Reply 2–3 (citing Pet. 35–37; Ex. 1011, 10:32–41, Fig. 10). Petitioner points out that Patent Owner “does not dispute that Shaffer-Saylor discloses the plurality of video feeds in limitation 1[c] . . . [n]or does PO explain why

those video feeds do not meet limitation 1[e].” Pet. Reply 3 (citing PO Resp. 14–20). Petitioner contends that Patent Owner’s “argument depends on [Patent Owner’s] narrow interpretation of ‘selecting’ as limited to a specific, unclaimed process in which video feeds are received at a central server that then selects one feed.” Pet. Reply 3.

In its Sur-reply, Patent Owner argues that “all Shaffer-Saylor accomplishes is individual video monitoring devices that are capable of identifying and selecting its own, non-plural video feed.” PO Sur-reply 4 (citing Ex. 2006 ¶¶ 70–71). According to Patent Owner, “Shaffer in combination with Saylor fails to teach identifying and selecting a video feed from a plurality of video feeds because each video monitoring device merely identifies and selects its single, *i.e.*, non-plural, video feed.” PO Sur-reply 4 (citing Ex. 2006 ¶ 73; Ex. 1011, 16:52–60). According to Patent Owner, “Siloed cameras do not select a video feed from a plurality of video feeds, and thus cannot render obvious a claim that expressly requires the identification and selection of at least one video feed from a plurality of video feeds.” PO Sur-reply 6.

We agree with Petitioner and disagree with Patent Owner. The limitation at issue recites “*identifying at least one video feed by selecting the at least one video feed from the plurality of video feeds associated with the geographic zone.*” The claim does not limit how the identifying and selecting takes place. Patent Owner concedes this point in its Sur-reply. *See* PO Sur-reply 6 (“the means of identification and selection are not limited by the claim”).

According to the ’830 patent, a “geographic zone” may, for example, be a section of freeway, a traffic intersection, or some other public or non-public location such as a building with surveillance cameras. *See, e.g.*, Ex.

1001, 3:17–21 (“In an example embodiment, one or more of the cameras 122 are independent video surveillance cameras (e.g., surveillance cameras installed along freeways, at traffic intersections or and public and non-public locations).”).

The identifying and selecting of a video feed may also occur because of some event, trigger, or condition being satisfied. The ’830 patent explains, for example, that

the method 600 monitors an audio signal generated in proximity to a video camera providing a video feed. For example, the audio signal may be a gunshot requiring a response by an ERT. As shown at block 604, the method 600 may process the audio signal to identify an audio event (e.g., the gunshot). Once the audio event had been identified, the identified video feed from the surveillance camera may be associated with a communication channel associated with the ERT.

Ex. 1001, 8:39–47.

Similarly, Saylor explains how its security system “may be applied to a user’s home, office, vacation house or other location.” Ex. 1011, 2:13–15. Saylor explains that “within a house, a user may have window and door contacts, smoke detectors and motion sensors, *video cameras*, key chain control, temperature monitors, CO and other gas detectors, vibration sensors, and other” sensors or detectors. *Id.* at 10:31–34 (emphasis added). Saylor explains that its invention “provides a personal security network *where one or more security devices* related to a subscriber *may be connected to a central security network over wireless communication*. The central security network . . . *may monitor those security devices* and alert a user when an alert situation occurs.” *Id.* at 2:20–26 (emphasis added). Saylor further explains that its invention may provide “*a monitoring system for providing images* (e.g., photos, pictures, *video*, diagrams, illustrations, etc.) where an

alarm situation may be detected by comparing images. When a change in images (indicating motion) is detected, an alarm may be signaled.” *Id.* at 2:45–50 (emphasis added).

Thus, Saylor expressly teaches how multiple “video cameras” may be used at a particular location, such as “home, office, vacation house or other location” to provide a local security network that may be connected to a central network over wireless communication. *Id.* at 2:13–15, 10:31–34. In particular, Saylor explains how “an identified location may be monitored by a video or other recording device,” and, if, for example, motion is detected, “video clips” maybe sent to a “central security network” for further processing and action. *Id.* at 11:64–12:6, 16:52–17:9. Saylor also explains how “the user may select the appropriate one or more actions. For example, the user may be notified of a possible break-in. The user may then select to view an image (e.g., photo, video, etc.) taken of the area associated with the alert at the time of the possible break-in. The user may then execute an appropriate action.” *Id.* at 16:23–28.

As Petitioner points out, Saylor teaches “personalized alarm services” and stores user policies at a central server for determining which triggered video feeds received by the central server should be selected and conveyed to particular entities. *See, e.g.*, Pet. 38–39, 25 (describing Saylor’s “user preferences” set to inform entities of certain alarms), 26 (describing Saylor’s database to determine whether to notify users regarding an alarm), 28 (describing how Saylor’s “central security network processes the alarms and, according to rules and preferences, transmits notifications and information”). Thus, the Petition adequately explains how Saylor’s central server receives multiple video feeds (e.g., where motion is detected) and selects one or more of those feeds to send to a user/entity based on stored rules/preferences.

The Petition is supported by Dr. Polish's testimony. Dr. Polish testifies that

Saylor discloses a security system including "monitoring system" that provide "photos, pictures, [and] video" to an end user. Ex[1011], 2:45–55. The security system notifies a recipient, including emergency personnel, when it detects an "alert situation." *Id.*, 5:37–42. For example, the notification can include "video clips" from video surveillance cameras. *Id.*, 2:49–55, 11:67–12:6, 13:51–54. A central security network (FIG. 1 below) may alert "identified entities via wireless and/or other devices, such as mobile devices." *Id.*, 7:40–42. For example, when an alarm is detected, the central security network can send relevant information "via the Internet 150" or other methods to "[a]n emergency entity 164" or other entities 161–162. *Id.*, 6:22–32, 7:40–48, 9:23–29, 11:46–55; *see also id.*, 11:24–28 (identifying mobile devices receiving notifications).

Ex. 1002 ¶ 74.

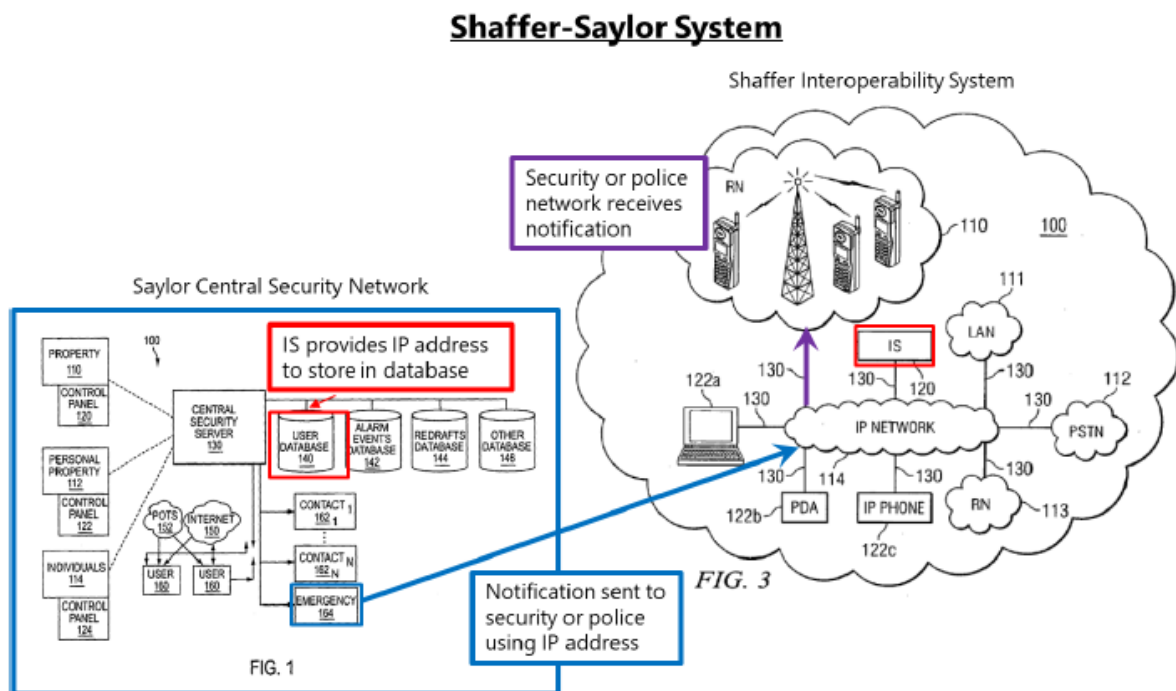
Based upon the complete record, we find that Petitioner has established that the combination of Shaffer and Saylor teaches "*identifying at least one video feed by selecting the at least one video feed from the plurality of video feeds associated with the geographic zone,*" as recited in limitation 1[e][1].

- ii. *[2] wherein the at least one video feed is associated with the selected communication channel*

For this portion of the limitation, Petitioner asserts that "Shaffer-Saylor accesses a user preferences database that [2] *associates the video feed with the selected communication channel.*" Pet. 38 (citing Ex. 1002 ¶ 105). Petitioner points out that "Saylor's databases already store 'relevant information for personalized alarm services.'" Pet. 38 (citing Ex. 1011, 6:9–10). "For example," Petitioner explains, "[u]ser database 140 may contain 'user preferences' that may indicate how 'different alarm situations that may

be detected in various locations or systems may warrant different levels of response’ and ‘[s]pecial instructions’ that may ‘include information to be conveyed to entities reacting to the alarm for a particular location or object.’” Pet. 38–39 (citing Ex. 1011, 8:34–60).

Petitioner provides an annotated composite of Saylor’s Figure 1 and Shaffer’s Figure 3, shown below, to illustrate the combination.



Petitioner’s annotated Shaffer-Saylor system is shown above with Figure 1 of Saylor’s Central Security Network on the left next to Figure 3 of Shaffer’s Interoperability System on the right. Pet. 27.

Petitioner explains that “when an event occurs (such as motion), the central security network can send relevant information (such as video clips) ‘via the Internet 150’ to ‘[a]n emergency entity 164.’” Pet. 39 (citing Ex. 1011, 6:22–32, 7:40–48, 9:23–29, 11:46–55; *see also id.* at 11:24–28 (identifying mobile devices receiving notifications), 12:34–35 (“the user

may specify when emergency dispatch is to occur.”). “For example,” Petitioner explains, “the central security network may directly contact a local fire department and provide the location, nature and/or other information related to the emergency.” Pet. 39 (citing Ex. 1011, 12:17–21).

Petitioner also explains that “to facilitate these communications, Shaffer’s IS system can assign a multicast IP address to the relevant security forces and provide the IP address to Saylor’s databases for storage.” Pet. 39 (citing Ex. 1004 ¶¶ 39–40 (describing assigning and storing multicast IP addresses at an endpoint); Ex. 1002 ¶ 106). Petitioner further explains that, “when an event occurs that requires sending a video clip to security forces, Saylor’s central security network can lookup the appropriate multicast address and use the address to send the information to the security personnel that have selected this communication channel.” Pet. 39.

Patent Owner does not specifically contest Petitioner’s evidence and arguments with respect to this portion of the limitation. *See* PO Resp. 14–35.

Based upon the complete record, we find that Petitioner has established that the combination of Shaffer and Saylor teaches “*wherein the at least one video feed is associated with the selected communication channel,*” as recited in limitation 1[e][2].

- iii. *[3] based on a user policy that identifies one or more video feeds that are relevant to the user when the user accesses the selected communication channel*

For this portion of the limitation, Petitioner asserts that “the association between video feed and communication channel is [3] *based on a user policy that identifies one or more video feeds that are relevant to the user when the user accesses the selected communication channel.*” Pet. 40

(citing Ex. 1002 ¶ 103). According to Petitioner, “[t]he user policy is the set of preferences stored in Saylor’s databases identifying when to notify users (such as security personnel) and what to send them.” Pet. 40 (citing Ex. 1011, 8:34–60, Abstr. (identifying “individuals and entities to be contacted; type of situations to be alerted of and other relevant security and other information”), 11:48–63 (“user-defined conditions” determine which entity to notify and how to send the notification), 12:26–29). Petitioner asserts that “[t]he preferences identify which alarms are relevant to the users (and are designed, e.g., to filter out ‘false alarms’).” Pet. 40–41 (citing Ex. 1011, 12:34–41).

Petitioner explains that

Saylor’s central security network sends the notification to users (such as security personnel) using the assigned multicast IP address. Ex[1002], ¶107. Accordingly, when the security personnel selects a communication channel associated with the multicast IP address, as described in limitation 1[a], the officer can access the transmitted communications, as described in Shaffer.

Pet. 41 (citing Ex. 1002 ¶ 107; Ex. 1004 ¶¶ 40–42).

Patent Owner argues that Petitioner’s combination “fails to teach identification of ‘video feeds that are relevant to the user *when the user accesses* the selected communication channel.’” PO Resp. 32 (emphasis by Patent Owner). Patent Owner argues that “[i]dentifying when to notify users and what to send them does not disclose identifying video feeds that are relevant to a user when the user accesses a selected communication channel.” PO Resp. 32 (citing Ex. 2006 ¶¶ 90–91). According to Patent Owner, Petitioner does not provide “identification of the one or more video feeds that are relevant to the user at all, much less relevant specifically *when the user accesses the communication channel* as claimed.” PO Resp. 33

(citing Ex. 2006 ¶ 92) (emphasis by Patent Owner). Patent Owner contends that “[p]redetermined notifications based on alarm conditions differ substantially from the claimed ‘user policy that identifies one or more video feeds that are relevant to the user *when the user accesses* the selected communication channel.’” PO Resp. 34 (citing Ex. 2006 ¶ 94) (emphasis by Patent Owner). Patent Owner contends that the claims “require user access to a communication channel before video feeds relevant to a user at the time of access are identified.” PO Resp. 34 (citing Ex. 2006 ¶¶ 93–94).

In its Reply, Petitioner argues that

the Shaffer-Saylor combination works in the same way as disclosed by the ’830 Patent. Saylor’s databases implement a user policy that identifies relevant video feeds in Saylor’s security system (*e.g.*, a video feed associated with a triggered alarm) for users associated with a specific communication channel (IP address) provided by Shaffer’s IS. Ex[1002], ¶¶ 84–85, 104–106. The IS makes the video feeds accessible to a user when that user selects the relevant communication channel associated with the IP address.

Pet. Reply 15 (citing Ex. 1002 ¶¶ 86, 103 & n.3, 107).

Petitioner also argues that

dependent claim 6 of the ’830 Patent confirms that identification of video feeds associated with a user in claim 1 can be accomplished via a database before the user selects the channel. Ex[1001], cl. 6. The embodiment in FIG. 3 also discloses a user policy that associates video feeds (308.1–308.m) with a communication channel (first channel 302.1) and makes those video feeds accessible “when any user 305.1–305.q” in a group associated with that channel sets his device “to the first channel.”

Pet. Reply 15 (citing Ex. 1001, 5:23–53, Fig. 3).⁶

Patent Owner does not address Petitioner’s arguments and evidence on this issue in its Sur-reply. *See* PO Sur-reply 3–14.

We agree with Petitioner and disagree with Patent Owner. In our view, Petitioner provides sufficient explanation as to how the proposed Shaffer-Saylor combination would operate. Petitioner explains that Shaffer’s IS system can assign a multicast IP address to the relevant security forces and provide the IP address to Saylor’s databases for storage. Pet. 39 (citing Ex. 1004 ¶¶ 39–40; Ex. 1002 ¶ 106). Petitioner also explains that, “when an event occurs that requires sending a video clip to security forces, Saylor’s central security network can lookup the appropriate multicast address and use the address to send the information to the security personnel that have selected this communication channel.” Pet. 39.

Petitioner further explains that the association between a video feed and a communication channel is based on a “user policy,” which “is the set of preferences stored in Saylor’s databases identifying when to notify users (such as security personnel) and what to send them.” *Id.* at 40 (citing Ex. 1002 ¶ 103; Ex. 1011, 8:34–60, Abstr., 11:48–63, 12:26–29). Petitioner points out that “Saylor’s central security network sends the notification to users (such as security personnel) using the assigned multicast IP address.” Pet. 41 (citing Ex. 1002 ¶ 107). “Accordingly,” Petitioner explains, “when the security personnel selects a communication channel associated with the

⁶ Claim 6 recites: The method of claim 1, further comprising: accessing a database to identify a group of video feeds associated with the user; and when the user selects the communication channel, providing access to the group of video feeds associated with the user to one or more other users of the communication channel. Ex. 1001, 12:61–67.

multicast IP address . . . the officer can access the transmitted communications, as described in Shaffer.” Pet. 41 (citing Ex. 1002 ¶ 107; Ex. 1004 ¶¶ 40–42).

The Petition is supported by Dr. Polish’s testimony. For example, Dr. Polish testifies that

Shaffer’s IS system can assign a multicast IP address to the relevant security forces and provide the IP address to Saylor’s databases for storage. *E.g.*, Ex[1004], ¶¶0039–0040 (describing assigning and storing multicast IP addresses at an endpoint). Accordingly, when an event occurs that requires sending a video clip to security forces, Saylor’s central security network can look up the appropriate multicast address and use the address to send the information to the security personnel that have selected this communication channel.

Ex. 1002 ¶ 106.

Based upon the complete record, we find that Petitioner has established that the combination of Shaffer and Saylor teaches “*based on a user policy that identifies one or more video feeds that are relevant to the user when the user accesses the selected communication channel,*” as recited in limitation 1[e][3].

g. Limitation 1[f]

Limitation 1[f] recites: “*the one or more video feeds being independent of the selected communication channel.*” Ex. 1001, 12:34–36. Petitioner contends that the combination of Shaffer and Saylor teaches the subject matter recited in limitation 1[f]. Pet. 41–42. Patent Owner does not contest Petitioner’s evidence and arguments with respect to this limitation. *See* PO Resp. 14–35.

Petitioner asserts that “the ’830 patent specification describes ‘independent video surveillance cameras’ as those installed at ‘public and

non-public locations,’ and that Shaffer-Saylor describes the same type of video feeds.” Pet. 41 (citing Ex. 1001, 3:17–21; Ex. 1002 ¶ 108). “For example,” Petitioner points out, “the video feed selected by Saylor’s central security network are video surveillance cameras at a building or home.” Pet. 41 (citing Ex. 1011, 10:31–34, 10:43–44). “In the combined system,” Petitioner asserts, “Saylor’s configurable central security network can associate the video feeds with the communication channel based on a user’s preferences and the occurrence of relevant events triggering the forwarding of the video feeds to the multicast channel.” Pet. 41–42 (citing Ex. 1002 ¶ 109).

Dr. Polish testifies that

the video feed selected by Saylor’s central security network are video surveillance cameras independently installed at a building or home and independent of the security forces communication channel. Ex[1011], 10:31–34, 10:43–44 (“[T]he central security network of the present invention may also support users who already have an alarm system in their home, or want to buy a system from an alarm dealer and have it professionally installed.”). It would have been obvious to a POSITA that in the combined system, Saylor’s configurable central security network can associate the video feeds with the communication channel based on a user’s preferences and the occurrence of relevant events triggering the forwarding of the video feeds to the multicast channel.

Ex. 1002 ¶ 109.

Based upon the complete record, we find that Petitioner has established that the combination of Shaffer and Saylor teaches “*the one or more video feeds being independent of the selected communication channel*” as recited in limitation 1[f].

h. Limitation 1[g]

Limitation 1[g] recites: “*providing access to the identified at least one video feed to the mobile communication device based on the user policy.*”

Ex. 1001, 12:37–39. Petitioner contends that the combination of Shaffer and Saylor teaches the subject matter recited in limitation 1[g]. Pet. 42. Patent Owner does not contest Petitioner’s evidence and arguments with respect to this limitation. *See* PO Resp. 14–35.

Petitioner explains that “Saylor’s central security network sends video clips to mobile devices of security forces (users) based on the user policy stored in databases.” Pet. 42 (citing Ex. 1011, 11:24–28 (notifications to cell phones, etc.), 11:56–63, 35:15–33; Ex. 1002 ¶ 110). “For example,” Petitioner explains, “when a particular event in a particular building occurs, the user policy describes what notifications are sent and to whom.” Pet. 42 (citing Ex. 1011, 6:9–32, 8:34–60, 9:22–28; Ex. 1002 ¶ 110). According to Petitioner, “[i]f a notification is sent to the selected communication channel (multicast address), the group members can access it.” Pet. 42 (citing Ex. 1004 ¶ 39 (interoperability system (IS 120) may communicate “with endpoints using multicast IP addresses”); Ex. 1002 ¶ 110).

We agree with Petitioner that Saylor’s central security network sending video to the mobile devices of users based on user policies stored in databases meets the recited limitation. Based upon the complete record, we find that Petitioner has established that the combination of Shaffer and Saylor teaches “*providing access to the identified at least one video feed to the mobile communication device based on the user policy*” as recited in limitation 1[g].

i. Conclusion as to Independent Claim 1

We have considered all of the evidence and arguments presented by the parties with respect to independent claim 1. Based on the complete record, we are persuaded that Petitioner has demonstrated by a preponderance of the evidence that the combined teachings of Shaffer and Saylor meet all the limitations of independent claim 1 and that a person of ordinary skill in the art at the time of the claimed invention would have had reason to combine their teachings in the manner described, and would have had a reasonable expectation of success in so doing.

3. Independent Claim 15

Independent claim 15 is substantially similar to independent claim 1. Claim 15, however, is directed to an apparatus while claim 1 is directed to a method. Moreover, claim 15 contains two limitations, 15[a] and 15[b], that are not recited in claim 1. We now consider the evidence and arguments directed to claim 15.

a. 15[pre] An apparatus, comprising:

For the preamble, Petitioner contends that “Shaffer-Saylor discloses “[a]n apparatus.” Pet. 50 (citing Ex. 1004, Abstr., ¶ 1; Ex. 1002 ¶ 136). Paragraph 1 of Shaffer explains that “[t]his invention relates in general to communication systems and, more particularly, to a method and system for communicating using position information.” Ex. 1004 ¶ 1. Patent Owner does not contest Petitioner’s showing with respect to claim 15’s preamble. See PO Resp. 14–35.

b. 15[a] at least one processor

For this limitation, Petitioner asserts that “Shaffer-Saylor discloses ‘at least one processor.’” Pet. 51. “For example,” Petitioner explains, “Shaffer describes a processor in the mobile communication device, and in the IS. *Id.*

(citing Ex. 1004 ¶¶ 38, 44–45, 48). According to Petitioner, “Saylor also discloses a server for ‘processing’ alarm information in the central security network.” Pet. 51 (citing Ex. 1011, 35:45–48; Ex. 1002 ¶ 137).

Petitioner’s position is supported by the testimony of Dr. Polish. See Ex. 1002 ¶ 137. Patent Owner does not contest Petitioner’s showing with respect to this limitation. See PO Resp. 14–35.

- c. 15[b] a memory in communication with the at least one processor, the memory being configured to store a video stream association module executable by the at least one processor; the video stream association module being executed by the at least one processor to cause operations to be performed, the operations comprising:*

For this limitation, Petitioner contends that Shaffer-Saylor discloses “*a memory in communication with the at least one processor, the memory being configured to store a video stream association module executable by the at least one processor, the video stream association module being executed by the at least one processor to cause operations to be performed.*” Pet. 51 (citing Ex. 1002 ¶ 138).

According to Petitioner, “Shaffer discloses a memory at the mobile communication device and the IS for communicating with the processor,” and “Saylor discloses a memory, including databases, communicating with a processor.” Pet. 51 (citing Ex. 1004, ¶¶ 31, 36, 38, 40, 44–46, 48; Ex. 1011, Fig. 1, 6:9–32, 8:34–9:21; Ex. 1002 ¶¶ 138–139).

Petitioner asserts that “Shaffer-Saylor also disclose[s] the claimed ‘video stream association module.’ If not construed as a means-plus-function limitation, it is simply stored in the memory in Shaffer’s mobile device and IS and Saylor’s central security network and databases and perform the recited operations, as described for claim 1.” Pet. 51 (citing Ex.

1001, 4:34–39 (video feed association module may be at a “central node and/or distributed nodes”), 3:21–27; Ex. 1002 ¶¶ 140–142). “If construed as a means-plus-function term,” Petitioner argues that “the video stream association module includes (1) Shaffer’s mobile communication device, (2) Shaffer’s IS, and (3) Saylor’s central security server and databases.” Pet. 52.

Petitioner asserts that “[t]he functions of these elements disclose the functions of the video stream association module, as above with respect to limitations 1[a]–1[g]. In addition, Shaffer-Saylor discloses each element of the ‘video feed association module’ described in the ’830 patent.” Pet. 52.

Petitioner’s position is supported by the testimony of Dr. Polish. *See* Ex. 1002 ¶¶ 138–143. Patent Owner does not contest Petitioner’s showing with respect to this limitation. *See* PO Resp. 14–35.

d. Limitations 15[d]–15[i]

For these limitations, Petitioner relies on the same evidence and arguments it relied upon for limitations 1[a]–1[g]. *See* Pet. 54 (citing Ex. 1002 ¶ 144).

e. Conclusion as to Independent Claim 15

We have considered all of the evidence and arguments presented by the parties with respect to independent claim 15. Based on the complete record, including the reasons discussed above with respect to independent claim 1, we are persuaded that Petitioner has demonstrated by a preponderance of the evidence that the combined teachings of Shaffer and Saylor meet all the limitations of independent claim 15 and that a person of ordinary skill in the art at the time of the claimed invention would have had reason to combine their teachings in the manner described, and would have had a reasonable expectation of success in so doing.

4. Dependent Claims 2–5, 7–14, 16–19, and 21–24

Petitioner argues that the combination of Shaffer and Saylor teaches or suggests the limitations of dependent claims 2–5, 7–14, 16–19, and 21–24. *See* Pet. 42–50, 54. Petitioner provides explanations as to how the combination of Shaffer and Saylor teaches or suggests each claim limitation as well as a rationale for combining the art in the manner proffered. *See* Pet. 42–43 (claim 2), 43–44 (claim 3), 44 (claim 4), 44–45 (claim 5), 45–46 (claim 7), 46–47 (claim 8), 47 (claims 9 and 10), 48–49 (claim 11), 49 (claim 12), 49–50 (claim 13), 50 (claim 14), and 54 (claims 16–19 and 22–24). Dr. Polish provides supporting testimony for Petitioner’s contentions. *See* Ex. 1002 ¶¶ 111–135, 145–152.

Patent Owner specifically contests Petitioner’s evidence and arguments directed to dependent claims 3, 7, 17, and 21. *See* PO Resp. 35–38. Patent Owner, however, does not separately contest Petitioner’s evidence and arguments directed to challenged dependent claims 2, 4, 5, 8, 9–14, 16, 18, 19, 22–24. *See id.* Instead, Patent Owner relies on its previous evidence and arguments made with respect to independent claims 1 and 15 to argue that “[b]ecause independent claims 1 and 15 are patentable, each claim depending therefrom is patentable.” PO Resp. 35. We address contested dependent claims 3, 7, 17, and 21 first.

f. Contested Dependent Claims 3, 17⁷

Dependent claim 3 recites: 3[a]⁸ *The method of claim 1, further comprising: accessing a database to identify a plurality of members of an emergency response team that includes the user of the mobile*

⁷ Claim 17 depends from independent claim 15 and recites limitations similar to dependent claim 3.

⁸ Bracketed designations proposed by Petitioner. *See* Pet. 4, 43–44.

communication device; and 3[b] presenting a plurality of available video feeds on the display of the mobile communication device, the plurality of available video feeds including video streams associated with the plurality of members of the emergency response team.

With respect to limitation 3[a], Petitioner contends that Shaffer-Saylor discloses this limitation. Pet. 43. Petitioner asserts that “[a]s described for claim 2, Saylor’s database may contain location information to identify members of an emergency response team associated with a communication channel.” *Id.* (citing Ex. 1002 ¶ 114).

With respect to limitation 3[b], Petitioner asserts that “video streams may be associated with a communication channel, and team,” and that “[b]y 2008, it would have been obvious that a mobile device could have displayed multiple video feeds, via thumbnails or a drop-down menu for selection.” Pet. 44 (citing Ex. 1002 ¶ 115; Ex. 1004 ¶ 25).

In its Response, Patent Owner asserts with respect to limitation 3[a] that “[n]one of [Petitioner’s] analysis explains how Saylor’s database is accessed ‘to identify a plurality of members of an emergency response team.’” PO Resp. 35–36 (citing Ex. 2006 ¶¶ 96–98).

Patent Owner also asserts with respect to limitation 3[b] that Petitioner’s analysis “regarding the claimed step of ‘presenting a plurality of available video feeds on the display of the mobile communication device’ starts and stops with Dr. Polish’s unsupported assertion that ‘[b]y 2008, it would have been obvious that a mobile device could have displayed multiple video feeds.’” PO Resp. 36 (citing Pet. 44).

In its Reply, Petitioner points out with respect to limitation 3[a] that the Petition “explains that ‘Saylor’s database’ that ‘associates video feeds with the user’s selected multicast IP address’ meets this limitation because

Saylor’s database contains information to identify members of an emergency response team associated with a communication channel.” Pet. Reply 16 (citing Pet. 42–43).

With respect to limitation 3[b], Petitioner points to testimony and other evidence in Dr. Polish’s declaration that supports Dr. Polish’s opinion that “by 2008, it would have been obvious for a mobile device to display multiple video feeds from a security network.” Pet. Reply 16–17 (citing Ex. 1002 ¶¶ 66–68).

In its Sur-reply, Patent Owner argues with respect to limitation 3[a] that “[n]othing in [Petitioner’s] analysis explains how Saylor’s database, or Shaffer’s IS, renders obvious ‘accessing a database to identify a plurality of members of an emergency response team.’” PO Sur-reply 15.

With respect to limitation 3[b], Patent Owner reiterates its argument that “[t]he only evidence in support of the element ‘presenting a plurality of video feeds on the display of the mobile communication device’ is the unsupported testimony of Dr. Polish.” *Id.*

We agree with Petitioner and disagree with Patent Owner. With respect to limitation 3[a], “*accessing a database to identify a plurality of members of an emergency response team that includes the user of the mobile communication device,*” Petitioner explains that “[a]s described for claim 2, Saylor’s database may contain location information to identify members of an emergency response team associated with a communication channel.” Pet. 43 (citing Ex. 1002 ¶ 114). There, Petitioner explains that

Shaffer discloses that the IS can act as a centralized communication control post (CCP) to track GPS information of users. Ex[1004], ¶¶0016, 0041. It would have been obvious to a POSITA that Shaffer’s IS could provide the tracked location information to Saylor’s central security network, so that the

central security network can notify users on the audio communication channel of an event, *e.g.*, by sending a video clip, when any user associated with the channel is within the designated location.

Pet. 43 (citing Ex. 1002 ¶ 113).

With respect to limitation 3[b], Petitioner and Dr. Polish did not specifically cite to Paragraphs 66–68 of Dr. Polish’s declaration and the particular references discussed therein when discussing dependent claims 3 and 17. These paragraphs, however, are found in Section VIII of Dr. Polish’s declaration, titled “KNOWLEDGE OF A POSITA,” and in particular, Section D describing “Video Surveillance Systems Transmitting Video Feeds.” There Dr. Polish opines that “[b]y 2008, video surveillance systems were ubiquitous” and references as support, for example, a September 2005 U.S. Patent Application Publication describing in its abstract “[a] system for capturing, encoding and transmitting continuous video from a camera to a display monitor via a network” that “supports a plurality of cameras.” Ex. 1002 ¶ 66 (citing Ex. 1029). In this section of his declaration, Dr. Polish testifies that “surveillance video feeds could be provided to mobile devices and could be accompanied with other information such as the location from which the video feed is sourced.” Ex. 1002 ¶ 67 (citing Ex. 1029 ¶¶ 17, 20; Ex. 1028 ¶¶ 7–15, 20–22, 27; Ex. 1030 ¶¶ 27–28, 31, 36, 44). One of these references, for example, describes “a system for providing secure streaming multimedia data via a wireless network from a first response unit such as a patrol car, to one or more remote playing devices in response to a trigger.” Ex. 1028 ¶ 10.

It is clear when considering Dr. Polish’s declaration testimony as a whole that that these paragraphs and the references discussed therein provide Dr. Polish’s understanding of the background skill of the art at the time of

the claimed invention and what a person of ordinary skill would have understood about video surveillance systems transmitting video feeds at that time. We are not inclined to disregard this testimony. This testimony was specifically identified in Petitioner's Reply as part of the support for Dr. Polish's opinion (*see* Pet. Reply 16–17), but it was not addressed by Patent Owner in its Sur-reply (*see* PO Sur-reply 14–16).

Accordingly, based on the complete record, including the reasons discussed above with respect to independent claims 1 and 15, we are persuaded that Petitioner has demonstrated by a preponderance of the evidence that the combined teachings of Shaffer and Saylor meet all the limitations of dependent claims 3 and 17 and that a person of ordinary skill in the art at the time of the claimed invention would have had reason to combine their teachings in the manner described, and would have had a reasonable expectation of success in so doing.

g. Contested Dependent Claims 7, 21⁹

7[a] *The method of claim 1, further comprising: monitoring an audio signal generated in proximity to a video camera providing a first video feed included in the identified at least one video feed;*

7[b] *processing the audio signal to identify an audio event; and*

7[c] *based on the identified audio event, providing access to the first video feed to a plurality of mobile communication devices in a group of mobile communication devices, the group of mobile communication devices including the mobile communication device of the user corresponding to the selection of the communication channel.*

⁹ Claim 21 depends from independent claim 15 and recites limitations similar to dependent claim 7.

Petitioner contends that Shaffer-Saylor renders dependent claim 7 obvious. With respect to limitation 7[a], Petitioner asserts that

Saylor discloses that the central security network may include various types of sensors, including “sound” sensors, Ex[1011], 14:17–20, Which could have been located in “proximity” to the camera providing video notifications. Ex[1002], ¶119; §VIII.A.2.f. As Saylor already describes, the video camera may monitor a specific area, such as the front door of a building, Ex[1011], 16:41–51, and a camera near that door can identify motion. *Id.*; Ex[1002], ¶119. It would have been obvious that a “sound” sensor could also be installed by the door to detect breaking glass, or another sign of a break-in, in addition to movement.

Pet. 45 (citing Ex. 1002 ¶¶ 119–120).

With respect to limitation 7[b], Petitioner asserts that “[a]s described for limitation 7[a], it would have been obvious for Saylor’s central security network to process the output of the sound sensor, to determine if there was an audio event, such as breaking glass.” Pet. 46 (citing Ex. 1002 ¶ 121).

With respect to limitation 7[c], Petitioner asserts that

Saylor’s central security network sends a notification, including with a video clip, to a group of users upon the occurrence of events. Ex[1011], 17:1–9, 5:58–62, 8:54–60. It would have been obvious that Saylor’s central security network could send a video clip from a camera near the front door when a sound of breaking glass is detected near the front door. Ex[1002], ¶122. In this scenario, the group (security personnel) would include any mobile users selecting the relevant communication channel.

Pet. 46 (citing Ex. 1002 ¶ 122).

In its Response, Patent Owner asserts that “Petitioner relies on its declarant to create a notification logic structure that is not actually taught in the prior art references.” PO Resp. 37. Patent Owner asserts that “Dr. Polish admitted in his deposition that some teachings did not come

from the prior art references and were simply ‘a statement about general knowledge in the art.’” *Id.* (citing Ex. 2006 ¶ 101; Ex. 2008, 79:9–15).

In its Reply, Petitioner asserts that Patent Owner “ignores Dr. Polish’s declaration, which cites [Ex.] 1008 for this exact point.” Pet. Reply 17 (citing Ex. 1002 ¶ 120 (“[s]ound sensors (or audio sensors) were well known at the time and it would have been obvious to place the sensor nearby a camera that is in an area of interest.”)).

In its Sur-reply, Patent Owner asserts that “[l]ike Shaffer and Saylor, Exhibit 1008 is devoid of any logical structure where access to a video feed is provided in response to an audio event being identified, as recited in claims 7 and 21.” PO Sur-reply 17.

We agree with Petitioner and disagree with Patent Owner. Saylor explains that “[t]he present invention may provide a security system where a user may personalize alert notifications for various security devices and/or systems.” Ex. 1011, 5:19–21. Saylor explains that

[t]he central security network may access the user’s personal preferences, profile information and/or other information which may be used to execute notifications in the manner specified by the user. For example, the user may identify various personal preferences, which may include contact information, contact individuals, *methods of communication*, order of contact, special instructions and other information.

Id. at 5:29–36 (emphasis added). Saylor goes on to explain that

[b]ased on user preferences and other information, *the user may be notified via various methods of communication*, as specified in the user’s profile and preferences information. Alert notification may be communicated via the Internet 150, POTS 152, wireless communication portals, voice portals, and/or other methods.

Id. at 6:19–25 (emphasis added). Saylor further explains that the security system may be applied to the user’s property, which “may include user’s

home, office, vacation house, or other locations.” *Id.* at 6:37–38. Saylor explains that “[f]or property . . . security devices may include sensors, detectors and/or other devices for detecting alarm situations.” *Id.* at 6:46–48.

Saylor also explains that “a user may integrate still or motion video into an alarm system through the use of a broadband landline (e.g., cable or DSL) for image transmission with a wireless connection to send alarm data.” *Id.* at 8:8–12. Saylor explains that “[t]he user may also have the option to view photographs and/or video clips at the time of the alarm incident.” *Id.* at 13:51–53. Saylor further explains that “[b]ased on user defined preferences, a user may be notified before the sounding of an alarm and before contacting an emergency entity (e.g., police, ambulance, etc.) to reduce false alarm penalties and fees.” *Id.* at 8:18–21.

Saylor provides an example to explain how the system may work. Saylor explains that

the user may be notified of a possible break-in. The user may then select to view an image (e.g., photo, video, etc.) taken of the area associated with the alert at the time of the possible break-in. The user may then execute an appropriate action. For example, if the user views an image of a pet knocking over a lamp which falls and breaks a window, the user may cancel the alarm and emergency notification. Thus, police resources may be conserved and the user may avoid a penalty fine for a false alarm.

Id. at 16:24–32.

Saylor provides another example linking the sending of a video clip in response to some other alarm trigger, in this case the opening of a front door (contact sensor). Saylor explains that

a subscriber may request notification when a front door opens, and request that the notification include a video clip of the front

door at the time it was opened. The subscriber may also request a video link or other image data when an unrecognized person enters. According to another example, if an internal motion is triggered but no door has opened and video analysis suggests that a human is inside, the subscriber may request an alert notification with a single frame clip.

Id. at 34:1–9.

Based on our review of Saylor, we credit Dr. Polish’s testimony where he explains that “Saylor discloses that the central security network may include various types of sensors, including ‘sound’ sensors” and “[i]t would have been obvious to locate the ‘sound’ sensor in ‘proximity’ to the video camera providing video clip notifications.” Ex. 1002 ¶ 119 (citing Ex. 1011, 14:17–20) (“Type of device may include smoke, heat, CO, radon, temperature, contact, motion, camera, breakage, sound, panic button, control, light, and others.”). This is consistent with Saylor’s description of sending a video clip (video confirmation) whenever a front door opens (contact sensor triggered).

Dr. Polish’s understanding of Saylor is consistent with ours, where he explains that

Saylor describes that the video camera may monitor a specific area, such as the front door of a building. Ex[1011], 16:41–51. A camera near the front door can identify motion indicating possible unknown entrants or break-ins. *Id.* It would have been obvious to a POSITA that a “sound” sensor could also be installed by the front door to detect breaking glass, or another sign of a break-in, in addition to movement.

Ex. 1002 ¶ 120. We therefore agree with Dr. Polish that “[i]t would have been obvious to a POSITA that Saylor’s central security network could implement a rule to send to a video clip from a camera near the front door to security personnel when a sound of breaking glass is detected near the front door” and that “this is an obvious design choice that would have enabled

timely delivery of relevant information.” *Id.* ¶ 122.

Accordingly, based on the complete record, including the reasons discussed above with respect to independent claims 1 and 15, we are persuaded that Petitioner has demonstrated by a preponderance of the evidence that the combined teachings of Shaffer and Saylor meet all the limitations of dependent claims 7 and 21 and that a person of ordinary skill in the art at the time of the claimed invention would have had reason to combine their teachings in the manner described, and would have had a reasonable expectation of success in so doing.

h. Uncontested Dependent Claims 2, 4, 5, 8, 9–14, 16, 18, 19, 22–24

Petitioner contends that each of dependent claims 2, 4, 5, 8, 9–14, 16, 18, 19, and 22–24 are obvious over the combined teachings of Shaffer and Saylor. *See* Pet. 42–54. Patent Owner does not separately contest Petitioner’s evidence or arguments with respect to these dependent claims other than to argue that “[b]ecause independent claims 1 and 15 are patentable, each claim depending therefrom is patentable.” PO Resp. 35. We consider Petitioner’s evidence and arguments with respect to these dependent claims.

i. Dependent Claims 2, 16

Dependent claim 2 recites: “*The method of claim 1, wherein providing access comprises associating the identified at least one video feed with the mobile communication device in a database that is used to manage access to independent video feeds in a network based on audio communication channels that are selected by communication devices in the network.*” Ex. 1001, 12:40–45. Dependent claim 16 recites similar claim language with respect to independent claim 15. *See id.* at 14:10–15.

With respect to claim 2, Petitioner asserts that

Saylor's database associates video feeds with the user's selected multicast IP address (an audio communication channel). Ex[1004], ¶0039 (describing audio communications); Ex[1003], p. 240; *see* Ground 1, limitation 1[e]; Ex[1002], ¶112. It would have been obvious to also associate video feeds with the particular user selecting the channel based on the user's location. For example, Saylor discloses that the system can be configured to send notifications to users based on a defined area. Ex[1011], 5:49. Shaffer discloses that the IS can act as a centralized communication control post (CCP) to track GPS information of users. Ex[1004], ¶¶0016, 0041. It would have been obvious to a POSITA that Shaffer's IS could provide the tracked location information to Saylor's central security network, so that the central security network can notify users on the audio communication channel of an event, *e.g.*, by sending a video clip, when any user associated with the channel is within the designated location. Ex[1002], ¶113. This would have been a simple and predictable modification to Shaffer-Saylor motivated by how both Shaffer and Saylor are designed and would have been reasonably expected to succeed.

Pet. 42–43 (citing Ex. 1002 ¶ 113). Petitioner relies upon this evidence and argument with respect to claim 16 as well. *See* Pet. 54. Dr. Polish's testimony supports Petitioner's position. *See* Ex. 1002 ¶¶ 111–113, 145. Patent Owner does not specifically contest Petitioner's evidence and arguments with respect to dependent claims 2 and 16. *See* PO Resp. 16–17.

Based on the complete record, including the reasons discussed above with respect to independent claims 1 and 15, we find that Petitioner has established that the combined teachings of Shaffer and Saylor meet the subject matter recited in dependent claims 2 and 16.

ii. Dependent Claims 4, 18

Dependent claim 4 recites: “*The method of claim 3, wherein the available video feeds are sourced from a group of surveillance cameras.*”

Ex. 1001, 12:55–56. Dependent claim 18 recites similar claim language. *See id.* at 14:26–27.

With respect to claim 4, Petitioner relies on the evidence and arguments it made with respect to limitation 1[f]. *See* Pet. 44 (citing Ex. 1002 ¶ 116; Pet. Sec. VIII.A.2.g. Dr. Polish’s testimony supports Petitioner’s position. *See* Ex. 1002 ¶¶ 116, 147. Patent Owner does not specifically contest Petitioner’s evidence and arguments with respect to dependent claims 4 and 18. *See* PO Resp. 16–17.

Based on the complete record, including the reasons discussed above with respect to independent claims 1 and 15, we find that Petitioner has established that the combined teachings of Shaffer and Saylor meet the subject matter recited in dependent claims 4 and 18.

iii. Dependent Claims 5, 19

Dependent claim 5 recites: “*The method of claim 1, wherein: the communication channel is a Push-To-Talk (PTT) channel in a PTT communication network and the mobile communication device is a PTT radio.*” Ex. 1001, 12:57–60. Dependent claim 19 recites similar claim language. *See id.* at 14:28–31.

With respect to claim 5, Petitioner asserts that

Shaffer renders obvious “wherein the communication channel is a Push-To-Talk (PTT) channel in a PTT communication network and the mobile communication device is a PTT radio,” under any party’s proposed construction. Shaffer expressly discloses a PTT communication channel in a PTT communication network, where the device is a PTT radio. Ex[1004], ¶0037. Shaffer also describes that the user of a mobile endpoint can access a communication channel “manually with, for example, a single key stroke. . . .” Ex[1004], ¶0040. A POSITA would have understood that this single keystroke can be a PTT key, and the channel can transmit

half-duplex communications. Ex[1002], ¶¶117–18. Before the ’830 patent, numerous systems had disclosed a PTT key to access IP messages on “half-duplex” PTT channels. Ex[1011], ¶¶0026–0027; Ex[1013], ¶¶0022–0024, 0041, 0048; *see also* Ex[1003], pp. 135, 189, 243, 290 (examiner noting that a POSITA would have “recognize[d] PTT as a widely used type of communication device”).

Pet. 44–45. Petitioner relies on this same evidence and argument for claim 19. *See id.* at 54. Dr. Polish’s testimony supports Petitioner’s position. *See* Ex. 1002 ¶¶ 117–118, 148. Patent Owner does not specifically contest Petitioner’s evidence and arguments with respect to dependent claims 5 and 19. *See* PO Resp. 16–17.

Based on the complete record, including the reasons discussed above with respect to independent claims 1 and 15, we find that Petitioner has established that the combined teachings of Shaffer and Saylor meet the subject matter recited in dependent claims 5 and 19.

iv. Dependent Claims 8, 22

Dependent claim 8 recites: “*The method of claim 1, wherein the communication channel is associated with a Virtual Talk Group (VTG).*” Ex. 1001, 13:12–13. Dependent claim 22 recites similar claim language. *See id.* at 14:52–53.

With respect to claim 8, Petitioner asserts that

Shaffer discloses “*wherein the communication channel is associated with a Virtual Talk Group (VTG),*” under any party’s proposed construction. As described for limitation 1[a], the selected communication channel (*e.g.*, multicast address) in Shaffer is for a virtual talk group, which communicates using the IP multicast address.

Pet. 46–47 (citing Ex. 1004 ¶¶ 27, 34, 37–39; Pet. Sec. VIII.A.2.b; Ex. 1002 ¶ 123).

Petitioner relies on this same evidence and argument for claim 22. *See* Pet. 54. Dr. Polish’s testimony supports Petitioner’s position. *See* Ex. 1002 ¶¶ 123, 151. Patent Owner does not specifically contest Petitioner’s evidence and arguments with respect to dependent claims 8 and 22. *See* PO Resp. 16–17.

Based on the complete record, including the reasons discussed above with respect to independent claims 1 and 15, we find that Petitioner has established that the combined teachings of Shaffer and Saylor meet the subject matter recited in dependent claims 8 and 22.

v. *Dependent Claims 9, 10, 23*

Dependent claim 9 recites: “*The method of claim 1, wherein providing access to the video feeds depends on a video association policy.*” Ex. 1001, 13:14–15. Dependent claim 10 recites: “*The method of claim 9, wherein the video association policy includes a role of the user defined in a policy database.*” *Id.* at 13:16–17. Dependent claim 23 recites similar claim language. *See id.* at 14:54–57.

With respect to claims 9 and 10, Petitioner asserts that

Shaffer-Saylor discloses “*wherein providing access to the video feeds depends on a video association policy.*” The ’830 patent does not use the term “video association policy” but does describe a “video feed association module” that “associate[s] one or more video feeds with one or more communication channels.” Ex[1001], 4:29–33. The specification also describes policies that “governs the association of video streams with communication channels and VTGs,” as well as policies that identify “available feeds” based on a “particular role” associated with the user. *Id.*, 9:45–48, 10:61–65; *see also id.*, 6:3–17, 8:16–33.

In Shaffer-Saylor, the preferences and rules stored in the central security system databases associate video feeds with communication channels (as described for limitation 1[e]) using

the same types of policies. Ex[1002], ¶¶124–25. For example, in the combined system, the databases store rules and preferences that associate video streams with communication channels (e.g., multicast IP addresses) for users with particular roles (e.g., security or police). See §§VIII.A.1, VIII.A.2.f.

For the same reasons described for claim 9, Shaffer-Saylor discloses “wherein the video association policy includes a role of the user defined in a policy database.” Ex[1002], ¶126.

Pet. 47

Petitioner relies on this same evidence and argument for claim 23. See *id.* at 54. Dr. Polish’s testimony supports Petitioner’s position. See Ex. 1002 ¶¶ 124–126, 213. Patent Owner does not specifically contest Petitioner’s evidence and arguments with respect to dependent claims 9, 10, and 23. See PO Resp. 16–17.

Based on the complete record, including the reasons discussed above with respect to independent claims 1 and 15, we find that Petitioner has established that the combined teachings of Shaffer and Saylor meet the subject matter recited in dependent claims 9, 10 and 23.

vi. Dependent Claims 11, 24

Dependent claim 11 recites:

The method of claim 1, further comprising: identifying a geographical location of the user’s mobile communication device using a Global Positioning System; identifying that the at least one video feed is associated with the geographical location; associating the at least one video feed with other mobile communication devices set to the same channel as the user’s mobile communication device; and automatically rendering access to the at least one video feed to the other mobile communication devices.

Ex. 1001, 13:18–28. Dependent claim 24 recites similar claim language. See *id.* at 14:58–15:2.

With respect to claim 11, Petitioner asserts that

Shaffer-Saylor discloses “*identifying a geographical location of the user’s mobile communication device using a Global Positioning System.*” For example, Shaffer expressly describes using GPS for identifying a geographical location of a user’s mobile communication device. *E.g.*, Ex[1004], ¶¶0040–0041, 0044, 0046–0047; Ex[1002], ¶127.

Shaffer-Saylor [also] discloses “*identifying that the at least one video feed is associated with the geographical location; associating the at least one video feed with other mobile communication devices set to the same channel as the user’s mobile communication device; and automatically rendering access to the at least one video feed to the other mobile communication devices.*” Ex[1002], ¶¶128–29.

Shaffer-Saylor [further] discloses that each geographic location in Shaffer (*e.g.*, a building or a campus) can also be the source of a plurality of video feeds. *Id.* For example, Saylor discloses “video cameras” located in a geographic area (*e.g.*, a building of a “business”). Ex[1011], 10:32–34, FIG. 10. Further, the video feeds in that geographical location are associated with a communication channel, such as a multicast IP address associated with security forces as described in limitation 1[e]. §VIII.A.2.f. Any device accessing that multicast IP address (including other mobile devices) will automatically have access to the video feeds associated with that channel. *Id.*; Ex[1002], ¶129.

Pet. 48–49.

Petitioner relies on this same evidence and argument for claim 24. *See id.* at 54. Dr. Polish’s testimony supports Petitioner’s position. *See* Ex. 1002 ¶¶ 127–129, 152. Patent Owner does not specifically contest Petitioner’s evidence and arguments with respect to dependent claims 11 and 24. *See* PO Resp. 16–17.

Based on the complete record, including the reasons discussed above with respect to independent claims 1 and 15, we find that Petitioner has

established that the combined teachings of Shaffer and Saylor meet the subject matter recited in dependent claims 11 and 24.

vii. *Dependent Claims 12, 13, 14*

Dependent claim 12 recites:

The method of claim 1, wherein the selected communication channel is a selected audio communication channel that is selected from a plurality of audio communication channels, the at least one video feed being associated with the selected audio communication channel, and the user policy identifying the one or more video feeds that are relevant to the user when the user accesses the selected audio communication channel.

Ex. 1001, 13:29–36. With respect to claim 12, Petitioner asserts that

As discussed for limitation 1[a] and claim 2, Shaffer discloses that the selected communication channel can be an “audio communication channel,” which the user selected from a plurality as the user moves from one location to another. §§VIII.A.2.b, VIII.A.3; Ex[1004], ¶0040; Ex[1002], ¶131. As also discussed for limitations 1[e] and 1[g], Shaffer-Saylor discloses a user policy stored in a database that identifies the relevant video feeds to a user of a particular group, associates the relevant video feeds with the audio communication channel for that group, and provides those feeds to the user when the user accesses that channel.

Pet. 49 (citing Pet. Secs. VIII.A.1, VIII.A.2.f, VIII.A.2.h; Ex. 1002 ¶ 131).

Dependent claim 13 recites: “*The method of claim 1, wherein the user policy associates the at least one video feed with the selected communication channel based on the geographic zone from which the at least one video feed is sourced and a device group that includes the user’s communication device.*” Ex. 1001, 13:37–41. With respect to claim 13, Petitioner asserts that

[a]s described for claims 1 and 12, Shaffer-Saylor discloses a user policy that associates at least one video feed with the selected communication channel. §§VIII.A.1,

VIII.A.2.f. Moreover, as described for claims 2 and 9, Shaffer-Saylor discloses or renders obvious that the user policy can be based on the geographic zone from which the at least one video feed is sourced and the device group that includes the user's device.

Pet. 50 (citing Ex. 1011, 10:62–67; Pet. Secs. VIII.A.1, VIII.A.2.f; Ex. 1002 ¶¶ 133–134).

Dependent claim 14 recites: “*The method of claim 1, wherein the user policy associates the at least one video feed with the selected communication channel by comparing a first geographic zone from which the at least one video feed is sourced with a second geographic zone corresponding to a location of the user's communication device.*” Ex. 1001, 13:42–47. With respect to claim 14, Petitioner asserts that “[a]s described for claim 2, it would have been obvious for Saylor's database to track the location of users and compare user location with the location of a device providing a video feed before associating the video feed with the communication channel including that user.” Pet. 50 (citing Pet. Sec. VIII.A.3; Ex. 1002 ¶ 135).

Dr. Polish's testimony supports Petitioner's position. See Ex. 1002 ¶¶ 130–135. Patent Owner does not specifically contest Petitioner's evidence and arguments with respect to dependent claims 12–14. See PO Resp. 16–17.

Based on the complete record, including the reasons discussed above with respect to independent claims 1 and 15, we find that Petitioner has established that the combined teachings of Shaffer and Saylor meet the subject matter recited in dependent claims 12, 13, and 14.

viii. Conclusion as to Dependent Claims 2–5, 7–14, 16–19, and 21–24

We have considered all of the evidence and the arguments provided by the parties with respect to dependent claims 2–5, 7–14, 16–19, and 21–

24, as well as the testimony of Dr. Polish and Dr. Akl. Based on the complete record, including the reasons discussed above with respect to independent claims 1 and 15, we are persuaded that Petitioner has demonstrated by a preponderance of the evidence that the combined teachings of Shaffer and Saylor meet all the limitations of these dependent claims and that a person of ordinary skill in the art at the time of the claimed invention would have had reason to combine their teachings in the manner described, and would have had a reasonable expectation of success in so doing.

F. Obviousness Over Gogic and Opitz (Ground 2)

Petitioner contends that claims 1–5, 8–19, and 22–24 are unpatentable under 35 U.S.C. § 103(a) as obvious over Gogic and Opitz. Pet. 55–81.

We have, however, determined that these claims are unpatentable over the combined teachings of Shaffer and Saylor (Ground 1). *See* Section III.E. Accordingly, we need not address Petitioner’s alternative Ground 2 based on Gogic and Opitz. *See Boston Sci. Scimed, Inc. v. Cook Grp. Inc.*, 809 F. App’x 984, 990 (Fed. Cir. Apr. 30, 2020) (non-precedential) (recognizing that “the Board need not address issues that are not necessary to the resolution of the proceeding” and that the Board has “discretion to decline to decide additional instituted grounds once the petitioner has prevailed on all its challenged claims”).

IV. CONCLUSION¹⁰

For the foregoing reasons, we determine that Petitioner has demonstrated by a preponderance of the evidence that claims 1–5, 7–19, and 21–24 of U.S. Patent 8,994,830 B2 are unpatentable on the bases set forth in the following table.

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis	Claim(s) Shown Unpatentable	Claim(s) Not Shown Unpatentable
1–5, 7–19, 21–24	103(a)	Shaffer, Saylor	1–5, 7–19, 21–24	
1–5, 8–19, 22–24	103(a)	Gogic, Opitz		
Overall Outcome			1–5, 7–19, 21–24	

¹⁰ Should Patent Owner wish to pursue amendment of the challenged claims in a reissue or reexamination proceeding subsequent to the issuance of this decision, we draw Patent Owner’s attention to the April 2019 *Notice Regarding Options for Amendments by Patent Owner Through Reissue or Reexamination During a Pending AIA Trial Proceeding*. See 84 Fed. Reg. 16,654 (Apr. 22, 2019). If Patent Owner chooses to file a reissue application or a request for reexamination of the challenged patent, we remind Patent Owner of its continuing obligation to notify the Board of any such related matters in updated mandatory notices. See 37 C.F.R. § 42.8(a)(3), (b)(2).

V. ORDER

Upon consideration of the record before us, it is

ORDERED that Petitioner has demonstrated by a preponderance of the evidence that claims 1–5, 7–19, and 21–24 of U.S. Patent 8,994,830 B2 are unpatentable; and

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

PETITIONER:

Eliot Williams
Michael Knierim
Clarke Stavinoha
Joseph Cahill
BAKER BOTTS L.L.P.
eliot.williams@bakerbotts.com
michael.knierim@bakerbotts.com
clarke.stavinoha@bakerbotts.com
joe.cahill@bakerbotts.com

PATENT OWNER:

Jason Engel
Katherine Allor
Nolan Hubbard
Samuel Richey
Kyle Kantarek
K&L GATES LLP
jason.engel.ptab@klgates.com
katy.allor@klgates.com
nolan.hubbard@klgates.com
samuel.richey@klgates.com
kyle.kantarek@kirkland.com