UNITED STATES PATENT AND TRADEMARK OFFICE

Paper 21

Entered: April 28, 2016

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MOBOTIX CORP., Petitioner,

V.

COMCAM INTERNATIONAL, INC., Patent Owner.

Case IPR2015-00093 Patent 6,975,220 B1

Before MICHAEL R. ZECHER, NEIL T. POWELL, and FRANCES L. IPPOLITO, *Administrative Patent Judges*.

POWELL, Administrative Patent Judge.

FINAL WRITTEN DECISION 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73

I. INTRODUCTION

Mobotix Corp. ("Petitioner") filed a Petition requesting an *inter partes* review of claims 1–28 of U.S. Patent No. 6,975,220 B1 (Ex. 1001, "the '220 patent"). Paper 1 ("Pet."). ComCam International, Inc. ("Patent Owner") filed a Preliminary Response. Paper 8. On April 29, 2015, we instituted an *inter partes* review as to claims 1–28 of the '220 patent. Paper 9 ("Institution Decision" or "Dec. on Inst."). On July 29, Patent Owner filed a Patent Owner Response. Paper 13 ("PO Resp."). On October 13, 2015, Petitioner filed a Reply. Paper 15 ("Pet. Reply"). Neither party requested an oral hearing, and no oral hearing was held. *See* Paper 19.

We have jurisdiction under 35 U.S.C. § 6(b). This Final Written Decision is issued pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73. For the reasons that follow, we determine that Petitioner has shown, by a preponderance of the evidence, that claims 1–6 and 9–28 of the '220 patent are unpatentable, but that Petitioner has not demonstrated, by a preponderance of the evidence, that claims 7 and 8 are unpatentable.

A. Related Proceedings

Patent Owner has asserted the '220 patent against Petitioner in *ComCam Int'l, Inc. v. Mobotix Corp.*, Case No. 2:13-cv-00798 (E.D. Tex.). Pet. 1; Paper 7, 2–3. The '220 patent is also the subject of several other district court proceedings. *Id.*

B. The '220 Patent (Ex. 1001)

The '220 patent discloses a system for detecting an event at a premises and supplying information regarding the event to a website that

various authorized users can access. Ex. 1001, Abstr. Specifically, the '220 patent discloses security system 311 in connection with Figure 3, reproduced below. *Id.* at col. 6, ll. 48–49.

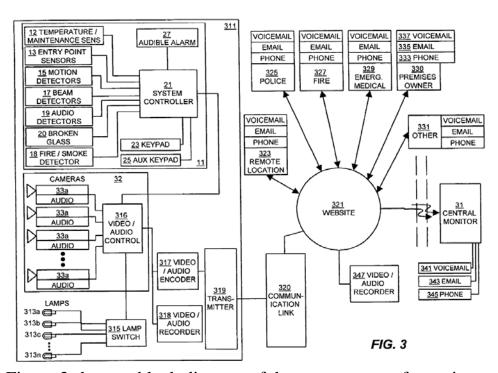


Figure 3 shows a block diagram of the components of security system 311 and its relationship to communication link 320, website 321, and various other entities. *Id.* at 7:14–17. Security system 311 includes sensors 12, 13, 15, and 17–20, cameras 33a–33n, lamps 313a–313n, video controller 316, video encoder 317, transmitter 319, and system controller 21. *Id.* at col. 6, ll. 52–62, col. 7, ll. 7–12, 47–50. The '220 patent discloses polling sensors 12, 13, 15, and 17–20 with system controller 21 to detect an event, such as an intrusion or an emergency. *Id.* at col. 7, ll. 47–52. The '220 patent also discloses responding to such an event by activating one camera 33a–33n and one lamp 313a–313n, encoding the output of that camera 33a–33n with video/audio encoder 317, and "pass[ing] the encoded video/audio signal to

transmitter 319 in the data format for transmission to website 321." *Id.* at col. 7, 1. 50–col. 8, 1. 3.

C. Illustrative Claim

Of the challenged claims, claims 1 and 25 are independent. The other challenged claims depend, directly or indirectly, from one of claims 1 and 25. Claim 1 is illustrative and is reproduced below:

- 1. A system for detecting an event in a premises and transmitting data regarding the event, comprising:
 - at least one sensor for detecting the event;
 - a controller coupled to the at least one sensor for receiving a signal from the at least one sensor indicating that an event has been detected;
 - at least one imaging device coupled to the system controller for capturing event data associated with the event detected at a particular at least one sensor wherein the imaging device is activated by the controller upon receiving the signal from the particular sensor that is in an area covered by a particular imaging device;
 - a transmitter coupled to the imaging device and the controller for transmitting the event data captured by the imaging device upon receiving a transmission activation signal from the controller after detection of the event; and
 - a website for receiving the event data from the transmitter and making the event data accessible for viewing by at least one authorized entity.

Ex. 1001, col. 9, l. 61-col. 10, l. 14.

D. The Prior Art References

The pending ground of unpatentability in this *inter partes* review is based on the following prior art references:

Exhibits Nos.	References
1007	U.S. Patent No. 6,697,103 B1, issued Feb. 24, 2004, filed
	Mar. 19, 1998 ("Fernandez")
1008 and	Provisional U.S. Patent Application No. 60/051,489, filed
1015	July 1, 1997 (Ex. 1008) and U.S. Patent Application No.
	2005/0198063 A1, issued Sept. 8, 2005, filed Apr. 25, 2005
	(Ex. 1015) ("Thomas") ¹

E. Instituted Ground of Unpatentability

We instituted an *inter partes* review involving the following ground of unpatentability:

References	Basis	Claims Challenged
Thomas and	§ 103(a)	1–28
Fernandez		

Petitioner supports its challenge with a declaration executed by Dr.

¹ Petitioner asserts U.S. Patent Application No. 2005/019063 A1 (the "Thomas non-provisional application") as prior art under 35 U.S.C. § 102(e) based on its priority claim to Provisional U.S. Patent Application No. 60/051,489 (the "Thomas provisional application"). *See* Pet. 2, 4, 33. Any arguments that Patent Owner may have had regarding whether the Thomas non-provisional application is entitled to the benefit of the filing date of the Thomas provisional application have been waived. *See In re Giacomini*, 612 F.3d, 1380, 1383–85 (Fed. Cir. 2010) (Appellant argued that provisional application did not provide written description support pursuant to 35 U.S.C. § 119(e) for claims of patent asserted as prior art under 35 U.S.C. § 102(e). The court found that Appellant waived this argument by not raising it below (at the Board of Patent Appeals and Interferences)); *see also* Paper 11, 3 (cautioning Patent Owner that "any arguments for patentability not raised in the response will be deemed waived").

Tal Lavian on October 17, 2014 ("Lavian Declaration") (Ex. 1003). Patent Owner relies on a declaration executed by Mr. David Monroe on July 29, 2015 ("Monroe Declaration") (Ex. 2002).²

II. ANALYSIS

A. Claim Interpretation

In an *inter partes* review, claim terms in an unexpired patent are construed according to their broadest reasonable interpretation in light of the specification. 37 C.F.R. § 42.100(b); *see In re Cuozzo Speed Techs.*, *LLC*, 793 F.3d 1268, 1278–79 (Fed.Cir.2015), *cert. granted sub nom. Cuozzo Speed Techs. LLC v. Lee*, 136 S. Ct. 890 (mem.) (2016).

1. website (independent claims 1 and 25)

Petitioner asserts that the broadest reasonable interpretation of the term "website" is "a computer system that has a recognized domain name and runs a Web server for publishing a group of related webpages on the Web." Pet. 3 (citing Ex. 1005). Based on our analysis below, we determine that the claim term "website" does not require express construction for purposes of this Decision.

2. at least one imaging device coupled to the system controller for capturing event data associated with the event detected at a particular

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² Petitioner filed a Motion to Exclude Evidence asserting that we should exclude Exhibit 2002 in its entirety or, in the alternative, we should exclude at least certain paragraphs of Exhibit 2002. Paper 17 ("Mot. to Exclude"). We are issuing a concurrent decision that Petitioner's Motion to Exclude is denied-in-part and dismissed-in-part as moot. In the process of considering the record evidence and preparing our Final Written Decision in this case, we were cognizant of the concerns raised in Petitioner's Motion to Exclude when assessing the appropriate weight we should accord Mr. Monroe's testimony in Exhibit 2002.

at least one sensor wherein the imaging device is activated by the controller upon receiving the signal from the particular sensor that is in an area covered by a particular imaging device (independent claim 1)

The parties dispute the correct interpretation of this claim language. Ex. 1001, col. 10, ll. 1–7; PO Resp. 4–8; Pet. Reply 4–6. In the Institution Decision, we construed an aspect of this claim language necessary to assess certain patentability arguments made by Patent Owner. Specifically, in the Institution Decision, we concluded that:

Accordingly, for purposes of this Decision, we conclude that the broadest reasonable interpretation of the claim is the plain meaning of the claim language. Thus, we construe the claim to require that the imaging device is activated by the controller upon receiving the signal from the particular sensor that is in an area covered by *a* particular imaging device, but not necessarily *the* imaging device activated.

Dec. on Inst. 8; see id. at 6–8.

Patent Owner disagrees with this interpretation, arguing that the broadest reasonable interpretation of the claim language is "activating an imaging device with a sensor associated with that imaging device based on the sensor's presence in the imaging device's covered area." PO Resp. 8. In contrast to our construction in the Institution Decision, Patent Owner's proposed construction requires that the sensor is covered by the imaging device that is activated, as opposed to the sensor being covered by "a particular imaging device" (including an imaging device other than the one activated).

Patent Owner argues that our interpretation from the Institution

Decision is "both grammatically incorrect and create[s] a lack of antecedent
basis." *Id.* at 6. Additionally, Patent Owner argues that "the specification

quite clearly discloses 'activating an imaging device that <u>covers</u> a tripped sensor'" (*id.* at 5 (quoting Dec. on Inst. 7–8)), and that the Specification does not disclose activating an imaging device based on a tripped sensor covered by another imaging device or outside the area covered by the activated imaging device (*id.* at 5–6). Patent Owner further argues that a person of ordinary skill in the art would have interpreted the claim the way Patent Owner proposes. *Id.* at 7 (citing Ex. 2002 ¶¶ 44–48).

Petitioner responds that Patent Owner ignores the plain language of the claim, and that Patent Owner tries to "force '<u>a</u> particular imaging device' into '<u>the</u> imaging device' that is activated." Pet. Reply 4. Petitioner argues that, contrary to Patent Owner's assertions about antecedent basis issues, there is no reason the claim could not have been written to explicitly recite what Patent Owner proposes it means. *Id.* at 5. Petitioner further argues that the Specification does not warrant construing the claim in the manner Patent Owner proposes. *Id.* at 5–6. Additionally, Petitioner asserts that Patent Owner's proposed construction "convert[s] an apparatus limitation (i.e., 'at least one imaging device') into a step/method limitation (i.e., 'activating an imaging device')." *Id.* at 4.

Having considered the arguments and evidence presented during trial, we maintain that the broadest reasonable interpretation of the disputed claim language in view of the Specification is its plain meaning. As we explained in the Institution Decision:

[The] claim language clearly states that the triggering sensor is in an area covered by "a particular imaging device" (emphasis added), not necessarily within an area covered by "the imaging device" activated. Consistent with this, the claim language "capturing event data associated with the event detected at a particular at least

one sensor" (emphasis added) does not require that the triggering sensor is in an area covered by the activated imaging device, as an imaging device would not need to cover the area occupied by a sensor to capture event data associated with an event detected by the sensor.

Dec. on Inst. 7.

Contrary to Patent Owner's assertion, our construction is not grammatically incorrect. See PO Resp. 6–7. Patent Owner suggests that proper grammar dictates that the claim recite "a particular imaging device," as the claim does not include a prior reference to a "particular imaging device." *Id.* at 5–6. As Petitioner notes, if the disputed claim language were intended to refer back to "the imaging device [] activated by the controller," it would have been grammatically correct for the claim to simply recite "the imaging device," as opposed to "a particular imaging device." Pet. Reply 5. Contrary to Patent Owner's argument that "a particular imaging device has proper antecedent basis" (PO Resp. 5), the claim language "a particular imaging device" has no antecedent basis in independent claim 1. Thus, Patent Owner has not identified anything about the claim language itself that is inconsistent with our determination that the plain meaning of the claim is that the imaging device is activated by the controller upon receiving the signal from the particular sensor that is in an area covered by a particular imaging device, but not necessarily the imaging device activated.

Additionally, we do not agree with Patent Owner that anything in the Specification narrows the broadest reasonable interpretation of the disputed claim language from its plain meaning. Patent Owner asserts that, "[a]lthough it may be possible to activate the imaging devices without using a sensor in the area covered by the imaging device, a person of skill would

understand from the specification that what is claimed is automatically activating the imaging device in the immediate area where the sensor detects the event." PO Resp. 7. Patent Owner argues that "the specification *does not disclose any embodiment* in which an imaging device is activated by a tripped sensor covered by a different imaging device or outside the area covered by the imaging device." *Id.* at 5–6. In support of this, Patent Owner argues the Specification's disclosure that "[f]or at least some of sensors 12, 13, 15, 18, 19, 20 and preferably for each of the sensors, a surveillance camera 33a–n covers the area around a particular sensor or sensors" (Ex. 1001, col. 6, ll. 57–60) means "that[,] in the preferred embodiment, each of the sensors may be individually assigned to a surveillance camera, but alternatively multiple sensors may be covered by the same surveillance camera" (PO Resp. 6).

Other than the statement from the Specification itself, Patent Owner cites no evidence supporting this interpretation of column 6, lines 57–60. We do not agree with Patent Owner's interpretation. We read this statement as indicating that the disclosed system preferably, but not necessarily, has a camera covering the area around each sensor. This suggests that an activated camera would not necessarily cover an area of a tripped sensor, contrary to Patent Owner's claim construction arguments.

In sum, Patent Owner's arguments ask us to improperly import an example discussed in the Specification into the claim as a limitation. *See SuperGuide Corp. v. DirecTV Enters., Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004) ("Though understanding the claim language may be aided by the explanations contained in the written description, it is important not to import into a claim limitations that are not a part of the claim."). We decline

to do so. Accordingly, we maintain that the broadest reasonable interpretation of the disputed claim language in view of the Specification is the plain meaning of the claim language itself, i.e., the claim requires that the imaging device is activated by the controller upon receiving the signal from the particular sensor that is in an area covered by *a* particular imaging device, but not necessarily *the* imaging device activated.

Moreover, as explained in detail in Section II.B.4 *infra*, even if we agreed with Patent Owner's proposed construction of the disputed claim language, Petitioner has established the unpatentability of claim 1 over the combination of Thomas and Fernandez by a preponderance of the evidence. Accordingly, even if correct, Patent Owner's arguments regarding the proper construction of the disputed claim language are unavailing.

3. wherein the at least one sensor is a maintenance detector for detecting an event that is a premises maintenance malfunction in the premises while the system is activated (claim 7)

Claim 7 depends from claim 1. Claim 1 recites, in relevant part:

- 1. A system for *detecting an event* in a premises and transmitting data regarding the event, comprising:
 - at least one sensor for detecting the event;
 - a controller coupled to the at least one sensor for receiving a signal from the at least one sensor indicating that an event has been detected; [and]
 - at least one imaging device . . . wherein the imaging device is activated by the controller upon receiving the signal from the particular sensor that is in an area covered by a particular imaging device

Ex. 1001, col. 9, l. 62–col. 10, l. 7 (emphases added). Claim 7 depends from claim 1 and recites "wherein the at least one sensor is a maintenance detector for detecting an event that is a premises maintenance malfunction

in the premises while the system is activated." *Id.* at col. 10, ll. 37–40 (emphasis added). The claim construction dispute for claim 7 revolves around the relationship of the italicized portion of claim 7 to the italicized portions of claim 1.

Patent Owner argues that "claim 7 requires activating an imaging device when a maintenance detector in the imaging device's field of view detects a maintenance malfunction." PO Resp. 10. In other words, Patent Owner contends that this claim requires that claim 1's "the imaging device is activated by the controller upon receiving the signal" is triggered by claim 7's "maintenance detector for detecting an event that is a premises maintenance malfunction" when the maintenance detector detects a maintenance malfunction and sends a signal. Petitioner counters that claim 7's "maintenance detector" need not trigger activation of the imaging device recited in claim 1. Pet. Reply 7–10.

The Institution Decision briefly touched on this issue. Dec. on Inst. 26. There, we found unpersuasive Patent Owner's conclusory arguments that assumed the claims require activation of "the imaging device" based on the "maintenance detector for detecting an event that is a premises maintenance malfunction." *Id.* We observed that claim 7 does not "recite activating an imaging device based on the premises maintenance malfunction." *Id.* We further stated that, "[t]o the extent Patent Owner assumes that 'an event' recited in claim 7 is 'the event' recited in claim 1, such an assumption facially does not make sense grammatically, and Patent Owner provides no explanation to otherwise support such an assumption." *Id.*

In its Patent Owner Response, Patent Owner argues that its interpretation is a natural reading of the dependency of claim 7. PO Resp. 8. Patent Owner argues that "claim 1 clearly requires a sensor, an imaging device, and activating the imaging device when the sensor detects an event." *Id.* at 9. Patent Owner further argues that claim 7's recitation that "the at least one sensor is a maintenance detector" "limits the sensor of claim 1 to only maintenance detectors." *Id.* Given this, and given that the other limitations of claim 1 apply in claim 7, Patent Owner reasons that "claim 7 clearly requires activating the imaging device *when the sensor which is a maintenance detector* detects an event." *Id.* Regarding claim 7's recitation of "an event," rather than "the event" recited in claim 1, Patent Owner argues that it does not make sense to interpret the claims as requiring different events, one event that triggers activation of the imaging device, and another event that happens independently. *Id.* at 9–10.

Petitioner responds that we already rejected Patent Owner's argument on the basis that it facially does not make sense grammatically to read "an event" in claim 7 as meaning "the event" in claim 1. Pet. Reply 7 (citing Dec. on Inst. 26). Petitioner further argues that, "because this is a system claim and not a method claim, it is the physical structure that matters (a maintenance detector) and the intended use of that structure is not limiting." *Id.* Petitioner advances a number of bases for discounting Mr. Monroe's testimony regarding the construction of claim 7. *Id.* at 7–10. Petitioner argues that the plain meaning of the language of claim 7 is consistent with its proposed interpretation. *Id.* at 10. And Petitioner asserts that the Specification is consistent with its interpretation of claim 7 because the Specification discloses more than one type of sensor. *Id.* at 9–10. Petitioner

asserts that this is consistent with an interpretation that encompasses one sensor for detecting "the event" and activating the imaging device and another sensor for independently detecting a different event without activating the imaging device. *Id*.

Having considered the arguments and evidence presented during trial, we are persuaded that the broadest reasonable interpretation of claim 7 requires activation of the "imaging device" based on claim 7's "maintenance detector." In contrast to the arguments Patent Owner presented before the Institution Decision, the arguments and evidence presented by Patent Owner during trial identify persuasive reasons that the language of the claims themselves support Patent Owner's proposed construction of claim 7.

For example, Patent Owner points out that claim 7 recites "wherein the at least one sensor is a maintenance detector." PO Resp. 9. We are persuaded that this limits claim 1's "at least one sensor for detecting the event" to a maintenance detector. *Id.* We do not agree with Petitioner's argument that "[t]he plain language of claim 7 'wherein the at least one sensor is a maintenance detector' only requires at least one sensor to be a maintenance detector." Pet. Reply 10. If claim 7 recited that the at least one sensor *includes* a maintenance detector, Petitioner's argument would make sense. But the plain meaning of the language "wherein the at least one sensor *is* a maintenance detector" (emphasis added) is that claim 1's "at least one sensor for detecting the event" is limited to a maintenance detector.

Given this, we also are persuaded that the most logical reading of claims 1 and 7, when read together, is that "the imaging device is activated" based on input from the maintenance detector. After reciting "at least one sensor for detecting the event," claim 1 recites "a controller coupled to the at

least one sensor for receiving a signal from the at least one sensor indicating that an event has been detected," and that "the imaging device is activated by the controller upon receiving the signal." This claim language indicates that the imaging device is activated when an event has been detected by the at least one sensor. With claim 7 specifying that the at least one sensor "is a maintenance detector for detecting an event that is a premises maintenance malfunction" (emphasis added), the language of claims 1 and 7, when read together, indicates that the imaging device is activated when the maintenance detector detects an event that is a premises maintenance malfunction.

In isolation from the other recitations of claims 1 and 7, claim 7's recitation of "an event" (emphasis added), creates some ambiguity, indicating that the claimed maintenance detector may detect an event without triggering activation of the imaging device. In the context of the other language in the claims themselves, however, it becomes clear that the most logical reading of claims 1 and 7 requires activation of the imaging device in response to the maintenance detector detecting an event.³

Consistent with this, the Specification discloses that the system may activate one of cameras 33a–n if an emergency is detected by temperature/maintenance sensor 12. Ex. 1001, col. 7, ll. 47–55. As Petitioner observes, the Specification also discloses that different sensors can detect different events. *Id.*; Pet. Reply 9–10. This, however, does not negate that the most logical reading of the claim language, as a whole,

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³ This differs from the above-discussed dispute regarding claim 1, where Patent Owner did not identify any aspect of claim 1 or certain disclosures in the Specification that contradict the plain meaning of "a particular imaging device."

requires activation of an imaging device in response to an event detected by a maintenance detector, which is consistent with the Specification's disclosure of activating one of cameras 33a–n if an emergency is detected by temperature/maintenance sensor 12.

Furthermore, we find unpersuasive Petitioner's argument that the language of the claims merely recites an intended use of the system. Pet. Reply 7–8. Claim 1 affirmatively recites that "the imaging device *is* activated by the controller upon receiving the signal" (emphasis added), not that the controller is configured, adapted, or otherwise suited or intended to activate the imaging device. Thus, rather than reciting activation of the imaging device based on sensor input as an intended use, claim 1 affirmatively recites that the imaging device *is* activated based on sensor input.

We also find unpersuasive Petitioner's argument that claim 7 could have explicitly recited that the imaging device is activated in response to the maintenance detector detecting an event. Pet. Reply 8. Although the limitations of the claims might have been stated more directly, we are persuaded for the reasons discussed above that the language of claims 1 and 7, when read together, indicates that activation of the imaging device is triggered by an event sensed by the maintenance detector.

We conclude that the broadest reasonable interpretation of claim 7 requires that "the imaging device is activated by the controller" in response to the "maintenance detector" detecting an event. We do not, however, agree with Patent Owner's assertion that claim 7 requires that the maintenance detector is within field of view of the imaging device that is activated. *See* PO Resp. 10. This aspect of Patent Owner's proposed

construction of claim 7 appears to stem from Patent Owner's assertion that claim 1 requires "activating an imaging device with a sensor associated with that imaging device based on the sensor's presence in the imaging device's covered area." *See* PO Resp. 8, 10. For the reasons explained in Section II.A.2 *supra*, we find this assertion unpersuasive.

B. Obviousness of Claims 1–28 over Thomas and Fernandez
Petitioner asserts that claims 1–28 are unpatentable under 35 U.S.C.
§ 103(a) over the combination of Thomas and Fernandez. Pet. 33–60; Pet.
Reply 1–25. Petitioner explains how this proffered combination allegedly renders obvious the claimed subject matter. Petitioner also relies on the Declaration of Dr. Lavian. Ex. 1003. Patent Owner disagrees with Petitioner's assertions and relies on the Declaration of Mr. Monroe. PO
Resp. 1–16; Ex. 2002.

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." Prior art references must be "considered together with the knowledge of one of ordinary skill in the pertinent art." *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994). We analyze the parties' contentions with these principles in mind.

1. Thomas (Ex. 1015 and Ex. 1008)⁴

Thomas discloses "improved techniques to remotely monitor locations." Ex. 1015 ¶ 42; Ex. 1008, 4. In Figure 1, Thomas shows one embodiment of a system according to its disclosure, specifically system 100 illustrated in Figure 1. Ex. 1015 ¶¶ 46–49; Ex. 1008, 5. Figure 1 is reproduced below.

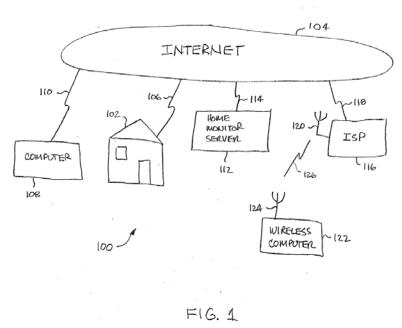


Figure 1 shows components of system 100, including home location 102, Internet 104, communications link 106, remote computer 108, communications link 110, home monitor server 112, communications link 114, Internet Service Provider ("ISP") 116 with antenna 120,

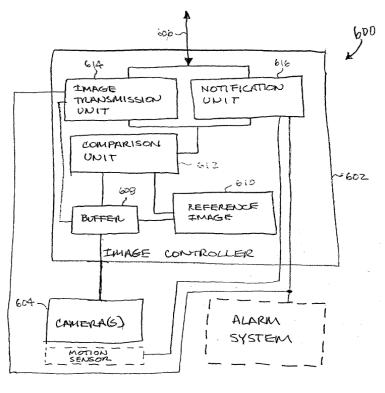
⁴ In our discussion of Thomas, we cite to both U.S. Patent Application No. 2005/0198063 A1 (Ex. 1015) and to U.S. Provisional Patent Application No. 60/051,489 (Ex. 1008).

⁵ Exhibit 1008 contains two sets of page numbers. A first set of page numbers begins with "1" on the first page of Exhibit 1008, which is the "Provisional Application Cover Sheet." A second set of page numbers begins with "1" on the first page of the actual provisional application, which is the third page of Exhibit 1008. Within this Decision, we cite to the second set of page numbers, as the Petition cites to the second set of page numbers.

communications link 118, wireless computer 122 with antenna 124, and wireless link 126. *Id*.

Thomas discloses that visual monitoring of home location 102 may occur from a remote location. Ex. 1015 ¶ 46; Ex. 1008, 5. Home location 102, remote computer 108, home monitor server 112, and ISP 116 each couple connect to Internet 104. Ex. 1015 ¶¶ 46–49; Ex. 1008, 5. Thomas discloses storing images for home location 102 and other home locations on home monitor server 112. Ex. 1015 ¶ 48; Ex. 1008, 5. People wanting to see remotely images of their home location can access home monitor server 112 via Internet 104. *Id*.

In Figure 6, Thomas shows "visual monitoring system 600 according to an embodiment." Ex. $1015 \, \P \, 57$; Ex. 1008, 8. Figure 6 is reproduced below.



F16.6

Figure 6 provides a block diagram of the components of visual monitoring system 600. *Id.* Visual monitoring system 600 includes image controller 602 and one or more cameras 604. Ex. 1015 ¶ 58; Ex. 1008, 8. Image controller 602 further includes buffer 608, reference image storage 610, comparison unit 612, image transmission unit 614, and notification unit 616. Ex. 1015 ¶¶ 59–60; Ex. 1008, 8. Figure 6 also shows link 606, which couples image controller 602 directly or indirectly to Internet 104. Ex. 1015 ¶ 58; Ex. 1008, 8. Figure 6 further shows an alarm system and a motion sensor connected to notification unit 616 of image controller 602. Ex. 1015 ¶ 62, Fig. 6; Ex. 1008, 9, Fig. 6.

Thomas discloses that "camera(s) 604 produce images of the area being monitored." Ex. 1015 ¶ 58; Ex. 1008, 8. Buffer 608 stores images from camera(s) 604. Ex. 1015 ¶ 59; Ex. 1008, 8. Image transmission unit 614 transmits the current image from buffer 608 to Internet 104 under certain circumstances. Ex. 1015 ¶ 60, 62; Ex. 1008, 8–9. For example, image transmission unit 614 may transmit the current image based on the results of comparison unit 612 comparing the current image to the image stored in reference image storage 610. Ex. 1015 ¶ 60; Ex. 1008, 8. Additionally, Thomas discloses that image transmission unit 614 of image controller 602 "may make use of the alarm signal in determining whether to transmit the current image." Ex. 1015 ¶ 62; Ex. 1008, 9. Thomas elaborates that image transmission unit 614 "can operate to avoid transmission of images until the presence of the alarm signal." *Id.*

Thomas also discloses multiple examples of a graphical user interface ("GUI") window for display in a remote computer of its system. For

example, Figure 15 of Thomas shows GUI window 1500. Ex. 1015 \P 93; Ex. 1008, 16. Figure 15 is reproduced below.

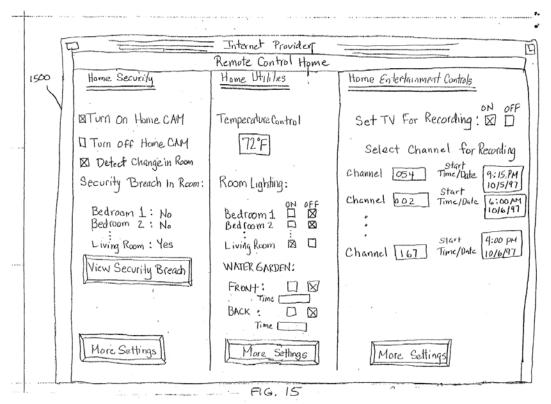


Figure 15 shows GUI 1500 displaying various things related to the operation of Thomas's system. Ex. $1015 \, \P \, 93-95$; Ex. 1008, 16. Specifically, the left side of GUI 1500 displays a home security section; the middle portion of GUI 1500 displays a home utilities section; and the right side of GUI 1500 displays a home entertainment control panel. *Id*.

Figure 16 of Thomas shows another GUI window 1600. Ex. 1015 ¶ 96; Ex. 1008, 16–17. Figure 16 is reproduced below.

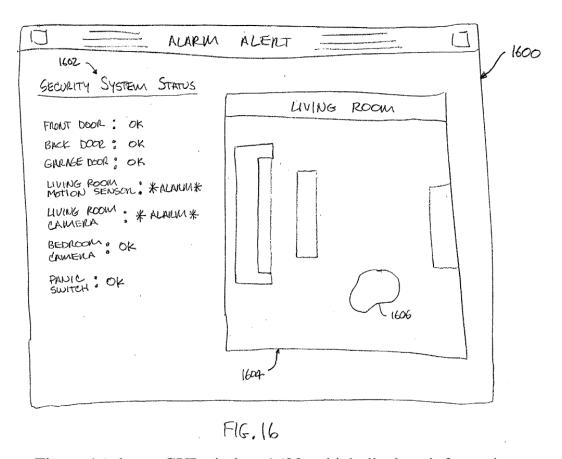


Figure 16 shows GUI window 1600, which displays information related to an alarm condition of a home location. *Id.* GUI window 1600 includes security status area 1602, which "displays the status of various devices of an alarm system, including door sensors, motion sensors, cameras, and switches." Ex. 1015 ¶ 96; Ex. 1008, 16. Additionally, GUI window 1600 includes "image viewer 1604 for displaying an image or series of images." *Id.* Thomas discloses that:

In the GUI window 1600 illustrated, the living room motion sensor and the living room camera both indicate that they have caused an alarm condition. In one embodiment, the image viewer 1604 can automatically display the most appropriate images with respect to the alarm condition, e.g., the living room, and/or could allow the user to select an image from a list of available images. The alarm condition caused the alarm system to

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> forward this status information and/or image to a user of a remote computer in the various ways previously described.

Ex. 1015 ¶ 96; Ex. 1008, 16–17.

2. Fernandez (Ex. 1007)

Fernandez, titled "Integrated Network for Monitoring Remote Objects," shows an embodiment of its system in Figure 1, reproduced below. Ex. 1007, col. 1, 1. 66-col. 2, 1. 3.

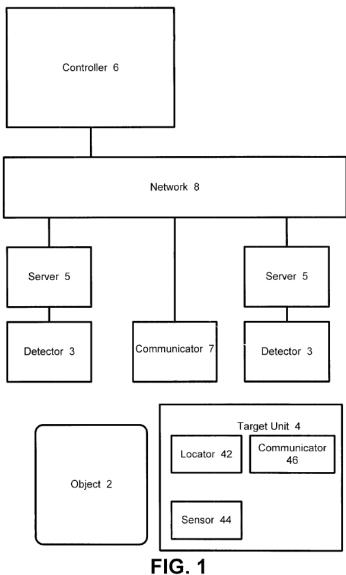


Figure 1 "illustrates a general block diagram of preferred embodiment of integrated fixed and/or mobile network system or apparatus for performing real-time, historical and/or predictive monitoring and data processing of one or more remote or local objects 2." *Id.* at col. 1, 1. 66–col. 2, 1. 3. The system shown in Figure 1 includes controller 6, network 8, servers 5, detectors 3, communicator 7, object 2, and target unit 4. *See id.* at Fig. 1.

Fernandez discloses that "[c]ontroller 6 preferably is implemented for user monitoring of one or more objects 2 using [a] conventional computer, workstation or functionally equivalent digital processing equipment and/or software." *Id.* at col. 2, ll. 54–57. Controller 6 is coupled to network 8, which "provides digital connection to or from any allocated web node address or equivalently accessible network resource." *Id.* at col. 2, ll. 22–26, 32–34. Fernandez also discloses that "network 8 further couples to one or more conventional Internet, intranet or other [local area network/wide area network] network connection or server 5 and sensor or detector 3, as well as communicator 7 for communicating, preferably through conventional or proprietary wireless connection, to one or more target unit 4." *Id.* at col. 3, ll. 16–21. In a facility monitoring application, Fernandez discloses that

detectors 3 may be implemented to sense state and other measurement signals from motion detector, burglar alarm, door or window open/close detector, smoke detector, thermostat, phone answering machine, or other electrical home appliance. In certain instances, e.g., unauthorized home entry, such sensed state may trigger other functionality, such as taking electronic photograph and/or notifying certain entities.

Id. at col. 4, 11, 43–50.

3. Discussion

Petitioner asserts that Thomas discloses most of the limitations of claims 1–28. Pet. 37–60; Pet. Reply 10–25. Petitioner cites to the collective teachings of Thomas and Fernandez in support of its contention that the following limitation of independent claim 1 would have been obvious:

at least one imaging device coupled to the system controller for capturing event data associated with the event detected at a particular at least one sensor wherein the imaging device is activated by the controller upon receiving the signal from the particular sensor that is in an area covered by a particular imaging device.

Pet. 39–41; Pet. Reply 10–19. Regarding this limitation, Petitioner notes that Thomas discloses imaging devices coupled to a controller, specifically cameras 604 coupled to image controller 602. Pet. 39. Additionally, Petitioner asserts that Thomas discloses transmitting images from an imaging device that covers an area (e.g., the living room) occupied by sensors that have detected an alarm condition in that area. *Id.* at 39–40. Petitioner further notes Thomas discloses that "image viewer 1604 can automatically display the most appropriate images with respect to the alarm condition, e.g., the living room." Ex. 1015 ¶ 96, Fig. 16; Ex. 1008, 17, Fig. 16; Pet. 39. Petitioner concedes that "Thomas does not expressly disclose that 'the imaging device is activated by the controller upon receiving the signal from the particular sensor." Pet. 40.

Petitioner asserts, however, that this would have been obvious in view of the collective teachings of Thomas and Fernandez. *Id.* at 40–41. Petitioner asserts that it would have been obvious to have a controller activate a particular imaging device in response to receiving a trigger event signal. *Id.* at 40. Petitioner reasons that the system's "imaging devices

would be either 'always on' or activated 'on-demand.'" *Id.* In the case of the "on-demand" operation, Petitioner asserts that it would have been obvious to activate an imaging device in response to tripping of a sensor or event trigger associated with that imaging device. *Id.* In connection with this, Petitioner cites, *inter alia*, Fernandez's disclosure at column 4, lines 43–50, which discloses:

Alternately in facility monitoring application, detectors 3 may be implemented to sense state and other measurement signals from motion detector, burglar alarm, door or window open/close detector, smoke detector, thermostat, phone answering machine, or other electrical home appliance. In certain instances, e.g., unauthorized home entry, such sensed state may trigger other functionality, such as taking electronic photograph and/or notifying certain entities.

Id. at 40–41.

Petitioner further asserts that a person of ordinary skill in the art would have had reason to operate Thomas's system to activate a camera with the controller in response to the controller receiving a sensor signal. *Id.* at 41. Petitioner asserts that it would have been obvious to combine the teachings of Thomas and Fernandez because the references "teach using similar components (cameras, other forms of sensors, and detectors) in the same way (within surveillance systems that use the Internet to allow authorized users to remotely view images and other data on a Website), yielding predictable results." *Id.* at 36. Petitioner argues that combining the teachings of Fernandez with those of Thomas involves applying known technology and would yield predictable results. *Id.* at 36–37 (citing Ex. 1003 ¶¶ 115–26).

We have reviewed the evidence and arguments presented in the Petition, Patent Owner's Response, and Petitioner's Reply. Based on that review, we determine that Petitioner has demonstrated, by a preponderance of the evidence, that all of the limitations of each of claims 1–6 and 9–28 are taught by, or rendered obvious in view of the teachings of Thomas and Fernandez, and that each of these claims, considered as a whole, would have been obvious over the combination of Thomas and Fernandez. Pet. 33–60; PO Resp. 1–17; Pet. Reply 1–25. With respect to claims 1–6 and 9–28, we find Petitioner's citations and arguments persuasive, and we adopt them as the basis for our decision. Pet. 33–60; Pet. Reply 1–25. Regarding dependent claims 7 and 8, as explained in detail *infra*, we determine that Petitioner has not demonstrated, by a preponderance of the evidence, that these claims would have been obvious over the combination of Thomas and Fernandez. As discussed below, the parties' disputes revolve around whether certain limitations of the claims are taught by, or obvious in view of, the teachings of Thomas and Fernandez.

4. Claims 1–6, 9–12, and 14–28

Patent Owner argues that Petitioner has not demonstrated the combination of Thomas and Fernandez render obvious claim 1's recitation of

at least one imaging device coupled to the system controller for capturing event data associated with the event detected at a particular at least one sensor wherein the imaging device is activated by the controller upon receiving the signal from the particular sensor that is in an area covered by a particular imaging device.

Ex. 1001, col. 10, ll. 1–7; PO Resp. 10–13. Patent Owner argues that, "[f]or the reasons discussed *supra*, this claim limitation requires 'activating an

imaging device with a sensor associated with that imaging device based on the sensor's presence in the imaging device's covered area." PO Resp. 10. Patent Owner also argues that Petitioner expressly admits that Thomas does not teach the foregoing claim language, and implicitly admits that Fernandez does not teach the foregoing claim language. *Id.* at 10–11. Instead, Patent Owner argues, "Petitioner alleges that one of skill in the art would modify Thomas's 'on-demand' implementation or Fernandez's 'observe and track' feature as a 'design choice' to arrive at the claimed limitation." *Id.* at 11. Patent Owner adds that "Thomas's 'on-demand' implementation, however, is entirely a creation of Petitioner's expert with no basis in the actual prior art itself." *Id.*

Patent Owner also criticizes Petitioner's citation of Fernandez's disclosure that "the detectors 3 may be coupled to control mechanism for adjusting detector operation, such as focus, tilt, pan, focus [of an image device], etc., as well as means for causing multiple neighboring detectors to observe and track common object or object set, thereby obtaining various comparative surveillance data." Ex. 1007, col. 4, ll. 57–61; Pet. 40; PO Resp. 11–12. Patent Owner argues that this cited disclosure of Fernandez does not teach activating an imaging device. *Id*.

Patent Owner also addresses Petitioner's citation of Fernandez's disclosure that

detectors 3 may be implemented to sense state and other measurement signals from motion detector, burglar alarm, door or window open/close detector, smoke detector, thermostat, phone answering machine, or other electrical home appliance. In certain instances, e.g. unauthorized home entry, such sensed state may trigger other functionality, such as taking electronic photograph and/or notifying certain entities.

Ex. 1003, col. 4, ll. 43–50; Pet. 40–41; PO Resp. 12. Patent Owner argues that this cited disclosure of Fernandez "is completely silent as to whether the sensor is covered by the imaging device as required by claim 1." PO Resp. 12.

Patent Owner asserts that, "[t]hus, neither Thomas nor Fernandez teaches 'activating an imaging device with a sensor associated with that imaging device based on the sensor's presence in the imaging device's covered area." *Id.* Patent Owner further asserts that "[n]either Thomas nor Fernandez teaches the sensor is covered by *any* imaging device, much less the imaging device activated." *Id.* at 13.

Lastly, Patent Owner argues that "one of skill in the art would conclude that Thomas and Fernandez are not combinable." *Id.* In support of this proposition, Patent Owner offers no further explanation, merely citing to Mr. Monroe's testimony. *Id.*

Petitioner responds that, contrary to Patent Owner's assertion, "Thomas does disclose that the sensor is covered by an imaging device." Pet. Reply 11. Petitioner explains that the disclosure of Thomas associated with Figure 16 teaches a living room sensor covered by a living room camera, as explained in the Petition. *Id.* Additionally, Petitioner argues that Fernandez discloses "on-demand" activation of an imaging device in response to detection of an event by a sensor in an area covered by the imaging device. *Id.* at 14–15. Petitioner also argues that, contrary to Patent Owner's assertion, the teachings of Thomas and Fernandez may be combined, and it would have been obvious to do so. *Id.* at 11–13, 15–16. Petitioner further argues that an "*independent* reason that on-demand activation of an imaging device would be obvious to a [person of ordinary

skill in the art] is the extremely limited number of obvious implementations available: always on, on-demand, or user activated" (*id.* at 16), asserting that various evidence other than the teachings of Thomas and Fernandez shows that on-demand operation was old and well-known (*id.* at 16–18).

Having considered the arguments and evidence presented during trial, we are persuaded that Petitioner has presented sufficient evidence to support a finding that the combined teachings of Thomas and Fernandez account for all the limitations recited in claim 1. Patent Owner's argument that "neither Thomas nor Fernandez teaches 'activating an imaging device with a sensor associated with that imaging device based on the sensor's presence in the imaging device's covered area'" is unpersuasive for a number of reasons. PO Resp. 12. First, as explained in Section II.A.2 *supra*, we do not agree with Patent Owner's assertion that claim should be construed to require "activating an imaging device . . . based on the sensor's presence in the imaging device's covered area."

Furthermore, even if we agreed with Patent Owner's proposed construction of claim 1, we are persuaded that Petitioner has demonstrated that claim 1 would have been obvious over the teachings of Thomas and Fernandez. That is, if we were to assume claim 1 requires activation of an imaging device "upon receiving the signal from the particular sensor that is in an area covered by" the imaging device that is activated, we are persuaded that this still would have been obvious in view of the teachings of Thomas and Fernandez, for the reasons that follow.

Regarding the spatial relationship between the imaging device and the sensor, we are persuaded that Thomas teaches operating an imaging device that covers an area occupied by a sensor sending a signal indicating an event

has been detected. Specifically, we are persuaded that, in connection with Figure 16, Thomas teaches operating a camera that covers the living room, which is occupied by a living room motion sensor sending a signal indicating that an event has been detected. *See* Ex. 1008, 16–17, Fig. 16; Pet. 39–40; Pet. Reply 11; Ex. 1003.

Regarding the causal relationship between activation of the camera and a sensor sending a signal indicating an event has been detected, we are persuaded that Fernandez teaches this in its statement that detectors may sense state and that, "[i]n certain instances, e.g. unauthorized home entry, such sensed state may trigger other functionality, such as taking electronic photograph and/or notifying certain entities." Ex. 1007, col. 4, ll. 47–50; Pet. 40–41; Pet. Reply 11–13; Ex. 1003 ¶¶ 128–130. We also are persuaded that it would have been obvious to operate Thomas's system in accordance with this teaching, i.e., to activate the living room camera in response to the living room motion sensor sending a signal indicating that an event has been detected. Pet. 40–41; Pet. Reply 11–13; Ex. 1003 ¶¶ 122–131.

Patent Owner's argument that neither reference individually teaches both the spatial relationship and the causal relationship is unpersuasive because it does not address what the combined teachings of the references convey to one of ordinary skill in the art. "Non-obviousness cannot be established by attacking references individually where the rejection is based upon the teachings of a combination of references." *In re Merck & Co. Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986) (citing *In re Keller*, 642 F.2d 413, 425 (CCPA 1981)).

We also find unpersuasive Patent Owner's argument that "Thomas's 'on-demand' implementation . . . is entirely a creation of Petitioner's expert

with no basis in the prior art itself." PO Resp. 11. First, in view of Fernandez's disclosure regarding taking electronic photographs (Ex. 1007, col. 4, ll. 47–50), we are persuaded that it would have been obvious to modify Thomas to activate an imaging device in response to a sensor detecting an event, regardless of whether a person of ordinary skill in the art would have understood Thomas as disclosing "on-demand" operation as an option. Moreover, we are persuaded by Petitioner and Dr. Lavian that a person of ordinary skill in the art would have understood that one could operate a camera "on-demand" because there are a finite number of identified, predictable ways that a camera could be operated, including always on, on demand, or user-activated. Pet. 40; Pet. Reply 16–18; Ex. 1003 ¶¶ 38–42, 127–131.

Additionally, contrary to Patent Owner's argument, we are persuaded that it would have been obvious to combine the teachings of Thomas and Fernandez in the manner asserted by Petitioner. Petitioner's evidence and arguments provide rational underpinning for its assertion that it would have been obvious to combine the references. We are persuaded that combining the teachings of Thomas and Fernandez amounts to no more than combining known technologies with predictable results. Pet. 35–37, 40–41; Pet. Reply 11–19; Ex. 1003 ¶¶ 115–131; see also KSR Int'l Co. v. Teleflex, Inc., 550 U.S. 398, 401 (2007) ("[A] combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results."). Additionally, we are persuaded that modifying Thomas to activate the imaging device in response to detection of an event, as disclosed by Fernandez, would have been obvious to promote efficiency

and reduce bandwidth requirements, as compared to operating the imaging device all the time. Pet. Reply 12–13.

Patent Owner's argument that "one of skill in the art would conclude that Thomas and Fernandez are not combinable" is unavailing for a number of reasons. PO Resp. 13. First, Patent Owner provides no explanation in support of this conclusory, one-sentence argument. Id. Instead, Patent Owner cites Mr. Monroe's testimony explaining why he believes a person of ordinary skill in the art would not combine the teachings of these references. Id. By itself, the failure of Patent Owner to provide any explanation of the basis of its argument in the Patent Owner Response makes Patent Owner's argument unavailing, as it is improper for Patent Owner to rely wholly on the cited materials to explain the basis of the argument. See 37 C.F.R. § 42.22(a)(2) (requiring each petition or motion to include "[a] full statement of the reasons for the relief requested, including a detailed explanation of the significance of the evidence including material facts, and the governing law, ruled, and precedent."); § 42.23(a) ("Oppositions and replies must comply with the content requirements for motions "); § 42.120(a) ("A patent owner response is filed as an opposition ").

Furthermore, even considering the explanation of Mr. Monroe that Patent Owner improperly incorporates by reference, we are not persuaded "that Thomas and Fernandez are not combinable." PO Resp. 13. Mr. Monroe asserts that "[a person of ordinary skill in the art] would not combine the Thomas 'always on' or user manually activated camera system with the Fernandez 'on demand' camera system as suggested because Fernandez's alleged sensor trigger of an imaging device would change the principle of operation of Thomas which requires continuous operation of an

imaging device." Ex. 2002 ¶ 61. In support of this assertion, Mr. Monroe advances that Thomas discloses that the main problem it desires to solve is reducing bandwidth associated with transmitting images from cameras that are "always on." *Id.* Mr. Monroe asserts that "[t]he 'Summary of the Invention' of Thomas expressly indicates that the invention is directed toward comparing a current image with a reference image and then only transmitting the current image if it differs from the reference image by more than a predetermined threshold amount." *Id.* Mr. Monroe further notes that Thomas discloses operating as an alarm system or detecting intruders based on changes in camera images. *Id.* Mr. Monroe concludes that, "[h]ence, the entire teaching of Thomas involves 'always on' cameras continuously operating and utilizing differences in the images as the basis for transmitting the images and sounding an alarm." *Id.*

In response to Mr. Monroe's assertions, Petitioner argues that nothing in Thomas requires continuous operation of an imaging device, and that combining Fernandez's "on demand" camera with Thomas's system would "help further Thomas's purpose rather than frustrate its principle of operation." Pet. Reply 12–13. Petitioner emphasizes Mr. Monroe's testimony that reducing bandwidth requirements is the main problem Thomas indicates it endeavors to solve. *Id.* at 12. Noting that Thomas discloses one way to reduce bandwidth requirements (involving comparing images), Petitioner asserts that Fernandez teaches a second way to reduce bandwidth requirements, and that modifying Thomas to activate a camera based on a sensor signal would further enhance efficiency and reduce bandwidth requirements. *Id.* at 13.

We are not persuaded that Mr. Monroe correctly identifies the principle of operation of Thomas. In particular, we find that the principle of operation of Thomas is not as narrow as Mr. Monroe asserts. Thomas discloses that:

Broadly speaking, the invention relates to improved techniques to remotely monitor locations and to remotely monitor and control devices or appliances through a network. In one embodiment, the network in the Internet and the transmission is facilitated by an Internet server or electronic mail.

The remote monitoring of locations is provided by efficiently transmitting images over the network to a remote machine located at a remote location. *In one embodiment*, the efficiency is facilitated by comparing a current image with a reference image, and then only transmitting the current image if it differs from the reference image by more than a predetermined threshold amount. The remote monitoring can also operate as an alarm system or provide intruder detection based on detected changes in images from a locally provided camera.

Ex. 1008, 2 (emphasis added).

Thomas's statement that "one embodiment" involves comparing images to determine whether to transmit images indicates that other embodiments do not involve comparing images. This indicates that the principle of operation of Thomas is not limited to having cameras always activated to allow comparing images, as suggested by Mr. Monroe. Indeed, the preceding statement indicates that the principle of operation more generally encompasses "efficiently transmitting images over the network to a remote machine located at a remote location." Given this, we are persuaded by Petitioner that modifying Thomas's system to activate an imaging device in response to detection of an event by a sensor would not

change the principle of operation of Thomas, but would constitute another example of transmitting images efficiently, in accordance with Thomas's principle of operation. Furthermore, Patent Owner does not cite any evidence that a person of ordinary skill in the art could not overcome any challenges associated with combining the teachings of Thomas and Fernandez. *See KSR* 550 U.S. at 421 ("A person of ordinary skill is also a person of ordinary creativity, not an automaton.").

For the foregoing reasons, Petitioner's arguments and evidence regarding claim 1 are more persuasive than Patent Owner's arguments and evidence regarding claim 1. With respect to claims 2–6, 9–12, and 14–24, which depend from claim 1, Patent Owner argues that these claims "are not obvious in view of Thomas and Fernandez for at least the reasons discussed supra with respect to claim 1." PO Resp. 16. We have reviewed Petitioner's arguments and evidence regarding claims 2–6, 9–12, and 14–24, and find them more persuasive than Patent Owner's arguments and evidence with respect to these same claims. Regarding independent claims 25–28, Patent Owner argues that "[f]or substantially the reasons discussed *supra* with respect to claim 1, claim 25 and [claims 26–28] are not obvious in view of Thomas and Fernandez." PO Resp. 17. We have reviewed Petitioner's arguments and evidence regarding claims 25–28, and find them more persuasive than Patent Owner's arguments and evidence with respect to these same claims. In sum, we are persuaded that Petitioner has demonstrated, by a preponderance of the evidence, that claims 1–6, 9–12, and 14–28 are unpatentable because they would have been obvious over the combination of Thomas and Fernandez.

5. Claims 7 and 8

As noted in Section II.A.3 *supra*, claim 7 depends from claim 1 and recites "wherein the at least one sensor is a maintenance detector for detecting an event that is a premises maintenance malfunction in the premises while the system is activated." As also noted above, in view of the evidence and arguments presented at trial, we have concluded that the broadest reasonable interpretation of claim 7 requires that claim 1's recitation that "the imaging device is activated by the controller" is triggered by claim 7's "maintenance detector" detecting an event. Claim 8 depends from claim 7 and recites "wherein the maintenance detector is a temperature sensor for determining that the temperature within the premises has moved outside a specified range."

In addressing the limitations of claims 7 and 8, Petitioner cites to the teachings of both Thomas and Fernandez. Petitioner argues that Thomas discloses maintenance detectors capable of providing "status information, including a malfunction status of premises maintenance." Pet. 45. For example, Petitioner points to Thomas's disclosure that its system allows a user to request status information for home utilities, including heating, cooling, and a sprinkler system. *Id.* (citing Ex. 1008, 12). Petitioner also asserts that Thomas shows a "Temperature Control" in Figure 15 and discloses that "the user may request the control to adjust the temperature control to 60 degrees F." *Id.* (citing Ex. 1008, 13). Petitioner further asserts that "Fernandez discloses a 'thermostat' (*Fern.*, 4:46) for detecting a premises maintenance malfunction, such as high temperatures due to failure of an a/c system." *Id.* Petitioner asserts that "[t]he thermostat can determine the temperature within the premises has moved outside a specific range

(including the set point and all temperatures below the set point)." *Id.* at 46. Petitioner also asserts that Fernandez discloses a "ping test" for detecting defective or unresponsive components. *Id.* at 45–46.

Patent Owner argues that Petitioner advances assumptions and conclusory statements in support of its contention that these references disclose maintenance detectors that can detect maintenance malfunctions, as recited in claim 7. PO Resp. 13–15. Patent Owner states that "[t]he only disclosures Petitioner relies upon for [the language of claim 8] are Thomas's 'Temperature Control' and Fernandez's 'thermostat.'" *Id.* at 13. Patent Owner further argues that the portions of Thomas's and Fernandez's systems that Petitioner points to as maintenance detectors are not actually maintenance detectors. *Id.* at 13–15. Patent Owner also argues that neither Thomas nor Fernandez discloses activating an imaging device when a maintenance malfunction occurs. *Id.* at 14–15.

Petitioner argues that Patent Owner is incorrect to suggest that Petitioner only relies on Thomas's "Temperature Control" and Fernandez's "thermostat" as disclosures of the claimed "maintenance detector." Pet. Reply 20. Petitioner states that this contention is wrong "and contradicted by Patent Owner itself on the next page when Patent Owner asserts that 'Petitioner provides nothing but assumptions and conclusory statements to suggest a thermostat, a sprinkler system, and the like are maintenance detectors or are capable of detecting a maintenance malfunction as required by claim 7." *Id*.

Petitioner also elaborates on its assertions that the prior art discloses maintenance detectors. *Id.* at 20–22. Petitioner explains that Thomas discloses allowing a user to request status information for home utilities. *Id.*

at 20. Petitioner argues that, "[b]esides normal operation status, the status information of the home utilities would include a 'malfunction status of premises maintenance' in the event that any of the home utilities . . . fails to work properly." *Id.* at 20–21. Additionally, Petitioner argues that, in Fernandez, the structure that sends a ping for a ping test constitutes a maintenance detector. *Id.* at 21–22. Petitioner further asserts that Patent Owner "ignores the fact that the '220 Patent itself discloses temperature and other maintenance function sensors 12 . . . as components of prior art security system 11." *Id.* at 22.

Petitioner further argues that "Thomas discloses that the transmitter is triggered by an alarm condition to forward the image and alarm status information over the network to the website." *Id.* at 21. In support of this assertion, Petitioner points to claim 26 on page 21 of the Thomas provisional application (Ex. 1008).⁶ *Id.* Petitioner suggests that it would have been obvious to modify Thomas's system to activate an imaging device based on a maintenance detector. *See id.* at 22.

Having considered the arguments and evidence presented during trial, we are not persuaded that Petitioner has presented sufficient evidence to support a finding that the combined teachings of Thomas and Fernandez account for limitations recited in claims 7 and 8. As explained in Section II.A.3 *supra*, we do not agree with Petitioner's argument that claims 7 and 8 do not require activation of an imaging device based on the maintenance

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⁶ Petitioner's citation reads: "See, e.g., MOB1009, Claim 26." Pet. Reply 21. Facially, this indicates that Petitioner is citing Exhibit 1009. We, however, interpret this as a typographical error, as Petitioner is asserting what Thomas discloses. We, therefore, presume that Petitioner intended to cite to the Thomas provisional application, which is Exhibit 1008.

detector recited in claim 7. We also find unpersuasive Petitioner's argument that the combination of Thomas and Fernandez render it obvious to activate an imaging device in response to a maintenance detector detecting an event. Pet. Reply 22. Petitioner argues that,

[a]s fully addressed in Dr. Lavian's declaration, given the ample examples of malfunction detectors disclosed by Thomas, Fernandez, and the '220 Patent's admitted prior art system, a [person of ordinary skill in the art] would have been motivated to modify the temperature sensor of Thomas or add a thermostat as taught by Fernandez such that the temperature sensor or the thermostat 'sense[s] state and other measurement signals" that "trigger other functionality, such as taking electronic photograph[s].'

Pet. Reply 22 (citing Ex. 1007, col. 4, ll. 43–50; Ex. 1003 ¶¶ 102–06, 145–150). Contrary to Petitioner's assertion, we do not find that the cited paragraphs of Dr. Lavian's testimony provide persuasive evidence that a person of ordinary skill in the art would have been motivated to modify Thomas's system in this manner.

Dr. Lavian's testimony makes a series of speculative leaps, with little or no explanation, from the language of the cited references to his assertions regarding what the references disclose and what a person of ordinary skill in the art would have understood based on such disclosures. For example, from Thomas's disclosure that a user may request status information of home utilities, Dr. Lavian concludes that "Thomas discloses maintenance detectors that can provide . . . a malfunction status, of premises maintenance," providing no explanation of the reason for this leap of logic. Ex. 1003 ¶ 145. Building on this, based on Thomas's disclosures of providing a GUI that allows a user to request a particular temperature, Dr. Lavian asserts that "[t]he maintenance detector *can be* . . . a temperature

sensor" (id. at ¶ 146 (emphasis added)), and that "the temperature sensor can determine that the temperature within the premises has moved outside the specified range" ((id. at ¶ 147 (emphasis added)). Citing claim 26 of the Thomas provisional application, Dr. Lavian testifies that "Thomas discloses that the transmitter is triggered by an alarm condition to forward the image and alarm status information over the network to the website." Id. at ¶ 149 (citing Ex. 1008, 21). Dr. Lavian then concludes that:

[t]hus, a [person of ordinary skill in the art] reviewing Thomas would understand that the premises maintenance malfunction detected by the maintenance detector (e.g., high temperatures due to failure of an a/c system by the thermostat) can be an alarm condition that activates the camera and triggers the transmitter to transmit the event data over the network to the website.

Id. at ¶ 150. With respect to this conclusion, Dr. Lavian does not explain why, in the absence of any such disclosure in Thomas, a person of ordinary skill in the art would have considered a maintenance malfunction an "alarm condition" that would trigger activation of a camera.

In sum, we find that the cited testimony of Dr. Lavian is not based on sufficient objective evidence to persuade us that it would have been obvious to modify Thomas's system in the manner asserted by Petitioner to account for the elements recited in claims 7 and 8. Accordingly, we are not persuaded that Petitioner has demonstrated, by a preponderance of the evidence, that claims 7 and 8 would have been obvious over the combination of Thomas and Fernandez.

6. Claim 13

Claim 13 recites:

wherein each at least one sensor has a unique identification code associated therewith that is transmitted to the website with the event data for the purpose of identifying the particular sensor that has detected an event, and permitting an authorized accessing entity to determine: a) a type of event that has occurred; b) a particular sensor detecting the event; and c) an imaging device providing the imaged data to the web site for review.

Petitioner argues that this limitation would have been obvious in view of the collective teachings of Thomas and Fernandez. Petitioner asserts that Figures 15 and 16 of Thomas show a GUI displaying multiple sensors for viewing by a user. Pet. 47. Petitioner also notes that Thomas' Figure 16 shows an "alarm" event by the living room motion sensor and the living room camera, as well as the images captured by the living room camera, displayed in image viewer 1604. *Id.* at 47–48. In view of this, Petitioner argues that "to properly distinguish and display the statuses of each of these sensors on the GUI at the website, it would have been obvious to a [person of ordinary skill in the art] that each of the multiple sensors has a unique identification code associated therewith that is transmitted to the website." *Id.* at 53. Regarding the claim language "permitting an authorized accessing entity to determine: a) a type of event that has occurred; b) a particular sensor detecting the event; and c) an imaging device providing the imaged data for review," Petitioner argues that this language recites an intended use, and that a person of ordinary skill in the art would have understood that the disclosure of the prior art meets this claim language. *Id.* (citing Ex. 1003 ¶¶ 139–42).

Patent Owner argues that a person of ordinary skill in the art would not have had any reason to uniquely identify each sensor in Thomas's system. PO Resp. 15. Patent Owner asserts that, "since Thomas merely displays that an alarm has been sounded for a particular area of the house (e.g. living room) . . . , one of skill in the art would have no reason to uniquely identify each sensor because identifying the location of the event is sufficient." *Id.* Patent Owner asserts that "Thomas relates to a single type of event (intrusion)," and then argues that a person of ordinary skill in the art would have no reason to identify the type of event. *Id.*

Petitioner responds that Patent Owner's argument rests on Mr. Monroe's assertions that "identifying the location of the event is sufficient because only one type of event can be detected using the security system," and that, in the '220 patent, "using an identification code to identify the type of event that occurs in a given location is beneficial for the invention of the '220 patent because multiple types of events could occur in a single location (e.g., fire, smoke, motion, or temperature issue could all occur in the living room)." Pet. Reply 22–23 (citing Ex. 2002 ¶ 68). Petitioner argues that Mr. Monroe's testimony does not reflect accurately what is taught in Thomas. *Id.* at 23. Petitioner argues that Figure 15 and the related disclosure of Thomas demonstrate that in addition to provisions for home security, Thomas's system involves information related to home utilities and home entertainment control. *Id.* Petitioner asserts that "[a]pplying Mr. Monroe's own rationale, given that 'various types of events that could be detected by the various types of sensor', 'using an identification code to identify the type of event that occurs in a given location is beneficial' for Thomas." Id. Petitioner further argues that Dr. Lavian's Declaration fully establishes that

it would have been obvious that each of Thomas's multiple sensors could have a unique identification code. *Id*.

Additionally, Petitioner argues that Patent Owner does not justify why knowing the general location of an event is "sufficient," such that a person of ordinary skill in the art would not have reason to uniquely identify each sensor. *Id.* at 24. Contrary to Patent Owner's argument, Petitioner argues that a person of ordinary skill in the art would have had reason to uniquely identify sensors so that it could identify the specific location of the event, "such as front door, back door, garage door, bedroom 1, bedroom 2, and living room, as disclosed by Thomas." *Id.* (citing Ex. 1008, Figs. 15 and 16). Petitioner argues that the unique identifier associated with each sensor allows identifying the location of the sensor. *Id.* Petitioner also argues that Patent Owner does not acknowledge that the Petition and Dr. Lavian both assert that Fernandez discloses unique identifiers for its sensors. *Id.*

Having considered the arguments and evidence presented during trial, we are persuaded that Petitioner has presented sufficient evidence to support a finding that the combined teachings of Thomas and Fernandez account for the limitations recited in claim 13. Contrary to Patent Owner's assertions, we are persuaded that Petitioner has demonstrated that a person of ordinary skill in the art would have had reason to uniquely identify sensors. Pet. 53; Pet. Reply 22–24; Ex. 1003 ¶¶ 139–142; PO Resp. 15–16. Patent Owner's argument that "Thomas relates to a single type of event (intrusion)"

⁷ Petitioner's citation reads: "*see* MOB1009, FIGS. 15 AND 16." Pet. Reply 24. Facially, this indicates that Petitioner is citing Exhibit 1009. We, however, interpret this as a typographical error, as Petitioner is asserting what Thomas discloses. We, therefore, presume that Petitioner intended to cite to the Thomas provisional application, which is Exhibit 1008.

overlooks much of what Thomas discloses. PO Resp. 16. For example, Patent Owner overlooks Figure 15 of Thomas, which shows that its system involves much more than security breaches, including home utilities and home entertainment controls. Ex. 1008, Fig. 15. Accordingly, we agree with Petitioner's assertion that it would be beneficial for Thomas's system to uniquely identify sensors to distinguish between events related to security and events related to other aspects of Thomas's system, such as home utilities and home entertainment. Pet. Reply 23.

Additionally, we find unpersuasive Patent Owner's argument that a person of ordinary skill in the art would have no reason to uniquely identify Thomas's sensors "because identifying the location of the event is sufficient." PO Resp. 15. As Dr. Lavian notes, Figure 16 of Thomas shows that its system has sensors in multiple locations, including the front door, back door, garage door, and the living room. Ex. 1008, Fig. 16; Ex. 1003 ¶ 140. We are persuaded by Petitioner and Dr. Lavian that unique identification codes for each of these sensors would allow the system to distinguish between the sensors and provide the specific location of the sensors. Pet. 47–48, 53; Pet. Reply 24; Ex. 1003 ¶¶ 139–140.

In sum, we are persuaded that Petitioner has demonstrated, by a preponderance of the evidence, that claim 13 would have been obvious over the combination of Thomas and Fernandez.

III. CONCLUSION

For the reasons expressed above, we determine the following:

- (1) Petitioner has demonstrated, by a preponderance of the evidence, that claims 1–6 and 9–28 would have been obvious based on the combined teachings of Thomas and Fernandez; and
- (2) Petitioner has not demonstrated that claims 7 and 8 would have been obvious based on the combined teachings of Thomas and Fernandez.

IV. ORDER

For the reasons given, it is:

ORDERED that claims 1–6 and 9–28 have been shown to be *unpatentable*;

FURTHER ORDERED that claims 7 and 8 have *not* been shown to be *unpatentable*; and

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

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