

**UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD**

ROKU, INC.,
Petitioner,

v.

ECOLINK INTELLIGENT TECHNOLOGY, INC.,
Patent Owner.

Case IPR2023-00792
Patent No. 10,692,340

**PATENT OWNER'S SUR-REPLY TO
PETITIONER'S REPLY**

TABLE OF CONTENTS

I.	ARGUMENT	1
A.	Petitioner's Proposed Constructions Of "timed alarm signal" And "first alarm signal" Are Incorrect.	1
B.	The Board Should Hold That A Status Signal Is Not The "timed alarm signal" Or "first alarm signal."	4
C.	The Board Should Hold That Each Of A Bypass Signal And A Signal That Causes An Alarm System To Be Disarmed Is Not The "timed alarm signal" Or "first alarm signal."	7
D.	The Board Should Adopt The Undisputed Plain And Ordinary Meaning Of "immediate alarm signal."	7
E.	If The Board Adopts Petitioner's Proposed Construction Of "timed alarm signal," Then The Board Should Hold That Petitioner Has Not Carried Its Burden Of Proving Lamb Is Prior Art To Challenged Claims 1, 2, 11, And 12 Because Petitioner Argues That Lamb Discloses The "timed alarm signal" Under Its Proposed Construction Of That Term [Ground 1, Claims 1, 2, 11, And 12].	8
F.	Petitioner Has Failed To Show That Lamb In View Of Williams Renders Claims 1-2, 6, 11-12, And 16 Obvious [Ground 1].	13
	1. Petitioner's Reply Confirms That Lamb In View Of Williams Fails To Disclose Or Teach The "timed alarm signal" [Claims 1 and 11].	13
	2. .Petitioner's Reply Confirms That Lamb Fails To Disclose The "first alarm signal" [Claims 6 and 16].	15
	3. Petitioner's Reply Confirms That Lamb In View Of Williams Fails To Disclose Or Teach "determine whether the elapsed time has exceeded a predetermined time" And "generate a security response when it is determined that the elapsed time has exceeded the predetermined time" [Claim 6].	15
	4. Petitioner's Reply Confirms That Lamb In View Of Williams Fails To Disclose The "immediate alarm signal" [Claims 2 and 12].	16
	5. Petitioner Has Failed To Show That A POSITA Would Have Been Motivated To Modify Lamb In View Of Williams To Arrive At The Claimed Inventions.	16
	(a) Petitioner Has Failed To Explain Why A POSITA Would Have Modified Lamb In View Of Williams In The Specific Manner Of The Claimed Inventions.	17
	(b) Petitioner Has Failed To Show That Its Proposed Modifications Would Provide Any Benefit.	19

	(c)	Petitioner Does Not Dispute That Its Proposed Modifications Would Change Lamb's Basic Principle Of Operation And Would Frustrate Lamb's Intended Purpose.	21
	(d)	Petitioner Has Failed To Account For The Fundamental Differences Between Lamb And Williams.	22
G.		Petitioner Has Failed To Show That Sharma, Alone, Renders Claims 1 And 11 Obvious [Ground 2].	22
	1...	Petitioner Has Failed To Show That Sharma, Alone, Discloses The "timed alarm signal" [Claims 1 and 11].	22
II.		CONCLUSION	25

TABLE OF EXHIBITS

Exhibit No.	Description
2001	U.S. Patent App. Pub. No. 2013/0257611
2002	USPTO Assignment Record for U.S. Patent App. Pub. No. 2013/0257611
2003	Declaration of James Parker in Support of Patent Owner's Response
2004	Transcript of the January 25, 2024 Deposition of Bruce McNair

I. ARGUMENT

A. Petitioner's Proposed Constructions Of "timed alarm signal" And "first alarm signal" Are Incorrect.

Petitioner's proposed constructions of "timed alarm signal" and "first alarm signal" (collectively, the "Alarm Terms") were first offered by Petitioner in its Reply (*see* Petition at 13) and are reproduced below:

timed alarm signal—Petitioner argues that the "timed alarm signal" should be defined as a signal (i) transmitted by the alarm device; and (ii) that is used for initiating a timer associated with the security panel (*i.e.*, the timed alarm signal's purpose is to initiate a timer associated with the security panel). (Reply at 4, 5, 7, 9.)

first alarm signal—Petitioner argues that the "first alarm signal" should be defined as only raw data indicative of the barrier being opened. (Reply at 8, 9.)

Petitioner's proposed constructions of the Alarm Terms are incorrect because they render the word "alarm" superfluous, are overbroad, are inconsistent with the specification, improperly repeat language that already appears in the claims, including functional and purpose language, and fail to define the Alarm Terms. (Reply at 1-9.)

First, Petitioner's proposed constructions of the Alarm Terms render the word "alarm" superfluous. (Reply at 4-6; POR at 16-17.) Petitioner argues that its definitions do not render the term "alarm" superfluous *because an "alarm signal,"*

“in the context of the complete phrase ‘timed alarm signal,’ *is an alarm signal* that is transmitted by the alarm device for initiating a timer.” (Reply at 5-6 (citing Institution Decision (“ID”) at 9) (emphases added).) In using the term “alarm signal” to define the term “alarm signal,” Petitioner *confirms* that the term “alarm” has been rendered superfluous and without meaning. Indeed, Petitioner does not dispute that, under Petitioner’s constructions, the meaning of the claims would be no different if the claims simply recited a “timed signal” (or “first signal”) instead of a “timed *alarm* signal” (or “first *alarm* signal”). (Reply at 4-6; POR at 16-17.)

Second, Petitioner’s proposed constructions are overbroad. Petitioner’s definition of “alarm signal” (*i.e.*, a signal transmitted by an alarm device) incorrectly encompasses signals (*i.e.*, a “bypass signal” and a “status signal”) that the specification expressly distinguishes from an “alarm signal” and that Petitioner’s expert testified are different signals than an “alarm signal.” (Reply at 6; POR at 17; EX2004 at 110:17-111:20; 112:20-113:5; 117:18-118:2; 126:1-5; 126:12-15.) Rather than address this argument and evidence, Petitioner simply states—without explanation, analysis, or evidence—that “[t]hese arguments are plainly without merit.” (Reply at 6.)

Third, Petitioner’s proposed constructions are inconsistent with the specification. The ‘340 patent discloses that an “alarm signal” is more than just a

“signal transmitted by an alarm device.” (POR at 17-18.) Again, Petitioner’s Reply does not address this argument. (Reply at 4-6.)

Fourth, Petitioner’s proposed constructions incorrectly define the terms with language that already appears elsewhere in the claims, including functional and purpose language. *Bot M8 LLC v. Sony Interactive Ent., LLC*, Case No. 2022-1569, 70, 2023 U.S. App. LEXIS 22911, at *12-13 (Fed. Cir. Aug. 30, 2023) (holding that a construction that repeats language which already exists elsewhere in the claim is improper because it would render the claim language void, meaningless, and superfluous) (citing *Intel Corp. v. Qualcomm Inc.*, 21 F.4th 801, 810 (Fed. Cir. 2021)).

With respect to “timed alarm signal,” both parts of Petitioner’s proposed construction already appear elsewhere in claim 1 (EX1001 at claim 1 (“a barrier alarm device comprising . . . a transmitter for transmitting a timed alarm signal” and “the timed alarm signal for initiating a timer associated with the security panel”) and claim 11 (EX1001 at claim 11 (“transmitting by the barrier alarm device a timed alarm signal to the central security panel” and “for the purpose of initiating a timer associated with the central security panel”))).

With respect to “first alarm signal,” claims 6 and 16 already expressly recite that the “first alarm signal” is “indicative of the barrier being opened.” (EX1001 at claims 6, 16.)

The Reply also raises several arguments that are irrelevant. For example, Petitioner accuses Patent Owner of arguing “that ‘timed alarm signal’ and ‘first alarm signal’ have the same exact meaning.” (Reply at 7-9.) Patent Owner made no such argument. The claims are clear regarding any differences between the “timed alarm signal” and “first alarm signal.” (EX1001 at claims 1, 6, 11, 16.) That being said, “alarm signal” should have the same meaning in both “timed alarm signal” and “first alarm signal,” as “the principle that the same phrase in different claims of the same patent should have the same meaning is a strong one.” *In re Varma*, 816 F.3d 1352, 1363 (Fed. Cir. 2016).

B. The Board Should Hold That A Status Signal Is Not The “timed alarm signal” Or “first alarm signal.”

As demonstrated in the POR, the intrinsic evidence confirms that a status signal is not the “timed alarm signal” or “first alarm signal.” (POR at 18-24.)

Petitioner does not dispute that a status signal cannot be the “timed alarm signal.” (Reply at 4-9.) Yet, Petitioner asserts that the “first alarm signal” is nothing more than “‘raw data’ from sensors.” (*Id.* at 7-9 (citing EX1001 at FIGS. 1-3, 4:52-54, 5:54-58, 6:56-7:11, 8:15-20, claims 6 and 16); *see also* EX2004 at 105:19-107:12; 143:2-144:7 (Petitioner’s expert stating that a status signal indicates the condition or state of a sensor).) Petitioner’s application of different meanings to the term “alarm signal” in the limitations “timed alarm signal” and “first alarm signal”

violates “the principle that the same phrase in different claims of the same patent should have the same meaning.” *In re Varma*, 816 F.3d at 1363.

According to Petitioner, the claims themselves support its position because “the processor of the central security panel *responds to the first alarm signal* to determine whether a human being has been indicated to be inside the premises.” (Reply at 8 (emphasis in original).)

Petitioner’s argument is unsupported and ignores the intrinsic evidence.

First, Petitioner’s argument that the “first alarm signal” is simply raw sensor data is not supported by the ‘340 patent. Most of Petitioner’s citations make no mention of either an alarm signal or raw data. (EX1001 at FIGS. 1-3, 4:52-54 (reciting transmitting “a message ... indicative of a local alarm condition” to the security panel), 6:56-7:11.) Column 5 lines 52-58 recite that the security panel may receive “an indication of an alarm condition being sensed” in one embodiment or “raw data” in other embodiments but make no mention of an “alarm signal.” (*Id.* at 5:52-58.) Column 8 lines 15-20 recite an “alarm signal” but do not mention raw data. (*Id.* at 8:15-20.) Challenged Claims 6 and 16 similarly recite a “first alarm signal” but do not mention raw data. (*Id.* at claims 6 and 16.)

Second, Petitioner ***does not address*** the portions of the specification, prosecution history, and related patent claims that repeatedly and consistently distinguish a status signal from an alarm signal. (Reply at 7-9; POR at 19-24 (citing

EX1001 at 10:61-64, 11:33-12:3; EX2001 at [0027], [0058], [0071]-[0072], [0102]-[0103], [0110]; EX1005 at claims 1-3, 5, 8-9, 12-14, 16, 19; EX1007 at claims 1-2, 4, 7, 10-11, 13, 16.) These portions of the intrinsic record are fatal to Petitioner's argument, and Petitioner's failure to address them is telling.

Third, Petitioner ***does not address*** Petitioner's expert's testimony stating that a status signal has a different meaning than an alarm signal. (See, e.g., EX2004 at 110:17-111:20; 112:20-113:5; 126:1-5.)

Fourth, the Challenged Claims ***support Patent Owner's construction***. According to the Challenged Claims, the "barrier alarm device" of claims 1 and 11 must have ***both*** "a barrier status detection device for indicating that a barrier monitored by the barrier alarm device has been opened" and "a human detection device for indicating that a human being is inside a premises in proximity to the barrier." (EX1001 at claims 1 and 11.) However, the "barrier alarm device" of claims 6 and 16 need only "monitor[] a barrier of a premises." (*Id.* at claims 6 and 16.) Consistent with the "barrier alarm device" of claims 6 and 16, the specification describes several embodiments where the central security panel communicates with a "barrier alarm device" for monitoring a barrier, while a ***stand-alone*** human detection device detects human presence. (*Id.* at 21:9-19, 22:5-11, 24:17-60, 25:15-38, 27:12-25.) Importantly, the "barrier alarm device" transmits an "***alarm signal***" to the central security panel indicating that a barrier has been opened, while the

stand-alone human detection device merely transmits “*status signals*” to the central security panel. (*Id.*) Thus, the claims and specification of the ‘340 patent further distinguish an “alarm signal” from a status signal for this additional reason.

C. The Board Should Hold That Each Of A Bypass Signal And A Signal That Causes An Alarm System To Be Disarmed Is Not The “timed alarm signal” Or “first alarm signal.”

Petitioner *does not dispute* that each of a bypass signal and a signal that causes an alarm system to be disarmed is not a “timed alarm signal” or “first alarm signal.” (Reply at 4-9; *see also* POR at 24-27; EX2004 at 117:18-118:2; 126:12-15 (Petitioner’s expert testifying that each of a bypass signal and a signal that causes a system to be disarmed has a different meaning than an alarm signal).)

Petitioner concedes that a “timed alarm signal” must at least initiate a security response upon expiration of a timer. (Reply at 1, 3.) A bypass signal and a signal that disarms the alarm system, on the other hand, prevent a security response from being initiated. (EX2003, ¶¶ 74-75.)

Thus, the Board should find that each of a bypass signal and a signal that causes an alarm system to be disarmed is not the “timed alarm signal” or “first alarm signal.”

D. The Board Should Adopt The Undisputed Plain And Ordinary Meaning Of “immediate alarm signal.”

The plain and ordinary meaning of the term “immediate alarm signal” is an alarm signal that instructs the security panel to initiate a security response

immediately. (POR at 28-30.) Petitioner ***does not dispute*** that this is the plain and ordinary meaning of “immediate alarm signal.” (Reply at 4-9; EX2004 at 130:6-18.)

E. If The Board Adopts Petitioner’s Proposed Construction Of “timed alarm signal,” Then The Board Should Hold That Petitioner Has Not Carried Its Burden Of Proving Lamb Is Prior Art To Challenged Claims 1, 2, 11, And 12 Because Petitioner Argues That Lamb Discloses The “timed alarm signal” Under Its Proposed Construction Of That Term [Ground 1, Claims 1, 2, 11, And 12].

If the Board adopts Petitioner’s incorrect construction of “timed alarm signal,” then the Board should hold that Petitioner has not carried its burden of proving that Lamb is prior art to Challenged Claims 1, 2, 11, and 12. “In an *inter partes* review, the burden of persuasion is on the petitioner to prove ‘unpatentability by a preponderance of the evidence.’ 35 U.S.C. § 316(e), and that burden never shifts to the patentee.” *Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015). “[I]n a chain of continuing applications, a claim in a later application receives the benefit of the filing date of an earlier application so long as the disclosure in the earlier application meets the requirements of 35 U.S.C. § 112, ¶1, including the written description requirement with respect to that claim.” *Tech. Licensing Corp. v. Videotek, Inc.*, 545 F.3d 1316, 1326 (Fed. Cir. 2008). “Failure to prove the matter as required by the applicable standard means that the party with the burden of persuasion loses on that point—thus, if the fact trier of the issue is left uncertain, the party with the burden loses.” *Id.* at 1327.

Petitioner's proposed construction of "timed alarm signal" is a signal transmitted by the alarm device whose purpose is to initiate a timer associated with the security panel. (Reply at 4, 5, 7, 9.) If the Board adopts this construction (it should not), then the Board should hold that Petitioner has not carried its burden of proving that Lamb is prior art because:

(i) Petitioner asserts that the "timed alarm signal" is the only aspect of the Challenged Claims 1, 2, 11, and 12 that is not disclosed by Lamb;

(ii) Petitioner has not shown that Lamb fails to disclose the "timed alarm signal" under Petitioner's construction of "timed alarm signal";

(iii) the functional and purpose components of Petitioner's proposed construction of "timed alarm signal" have no patentable weight and cannot be used to distinguish Lamb for prior art purposes;

(iv) Petitioner and its expert argue that Lamb expressly and/or inherently discloses a "timed alarm signal" when the functional and purpose components of Petitioner's construction are excluded; and

(v) even if the functional and purpose components are included, Petitioner and its expert's admissions and arguments demonstrate that these components are inherently disclosed by Lamb.

First, Petitioner and its expert contend that Lamb's disclosure is the same as the '340 patent with the exception of the "timed alarm signal" of claims 1 and 11,

and that Lamb is prior art because the “timed alarm signal” is not disclosed by Lamb¹:

- “Lamb, compared to the ‘340, teaches the very same two sensors, the very same physical arrangement of the two sensors, the very same dual actuation scheme of the sensors, and the very same control signal generation and transmission.” (Reply at 10.)
- “The ‘340 was filed as a continuation-in-part of a divisional of Lamb . . . Lamb and the ‘340 share the same description for the features described.” (Reply at 10, n. 3; *see also id.* at 11-12.)
- “In any event, Lamb’s disclosure [*sic*] is the same supporting description to the ‘340.” (Reply at 16; *see also* Petition at 13-15.)

When questioned about what specifically Petitioner contends is missing from Lamb, Petitioner’s expert stated the following:

Q: So when you said Lamb does not disclose the timer of the ‘340 patent, you’re referring to the timed alarm signal?

A: That’s correct.

Q: Is that the only thing you believe Lamb does not disclose or describe that’s in the ‘340 patent?

A: I believe that is the only thing missing from Lamb.

¹ See Petition at 4-7.

(EX2004 at 51:18-52:4; *see also id.* at 47:20-52:4; 96:13-15; 166:12-14.).)

Second, Petitioner failed to offer its proposed construction of “timed alarm signal” in the Petition and failed to argue that Lamb does not meet its proposed construction in the Petition and Reply. (Petition at 5-7, 13; Reply.)

Third, all of the functional and purpose components of Petitioner’s proposed construction of “timed alarm signal” (*i.e.*, used for initiating a timer associated with the security panel)² have no patentable weight and cannot be used to distinguish Lamb for purposes of determining whether Lamb is prior art to claims 1 and 11. *See, e.g., In re Schreiber*, 128 F.3d 1473, 1477 (Fed. Cir. 1997); *In re Simpson*, 102 Fed. Appx. 675, 678-79 (Fed. Cir. 2004); MPEP § 2114; *Bristol-Myers Squibb Co. v. Ben Venue Labs, Inc.*, 246 F.3d 1368, 1374-77 (Fed. Cir. 2001).

Fourth, after removing the irrelevant functional and purpose components of Petitioner’s new proposed construction of “timed alarm signal,” Petitioner’s proposed construction for “timed alarm signal” is “***a signal transmitted by the alarm device.***” Petitioner and its expert admit that Lamb expressly discloses “a signal transmitted by the alarm device.” (Petition at 13-15, 25-28, 53-55; Reply at 10-12, 14; EX2004 at 159:22-160:12; 167:5; ID at 18.)

² There is no dispute that Lamb discloses a security panel. (ID at 18 (“Lamb’s transmitter sends an alarm signal to security panel 116”).)

Petitioner's proposed construction sets forth nothing more than an intended use or function of the signal generated by Lamb's alarm device—*i.e.*, “that is used for initiating a timer associated with the security panel.” (Reply at 4, 5, 7, 9.) Even if the functional and purpose components of Petitioner's new construction are given weight (they should not be), Petitioner still cannot meet its burden of showing that Lamb is prior art because Petitioner and its expert argue that Lamb inherently discloses that the signal transmitted by Lamb's alarm device can be used to initiate a timer. (Reply at 14, 15 (Petitioner arguing that Ground 1 is based on Lamb's signal which signal is not structurally altered); EX2004 at 167:5-6 (“Lamb is providing the structure that everything rides on”), 94:7-17 (Petitioner's expert stating that he is “relying on the mechanisms of Lamb to actually hold off the alarm”), 96:18-19 (Petitioner's expert stating that “the concept of a timer in any type of system, it's a trivial idea”); *see also Yeda Research & Dev. Co. v. Abbott GmbH & Co. KG*, 837 F.3d 1341, 1345 (Fed. Cir. 2016)).

Accordingly, to the extent the Board adopts Petitioner's new proposed construction of “timed alarm signal,” the Board should also hold that Petitioner has failed to meet its burden of showing that Lamb is prior art to Challenged Claims 1, 2, 11, and 12.

F. Petitioner Has Failed To Show That Lamb In View Of Williams Renders Claims 1-2, 6, 11-12, And 16 Obvious [Ground 1].

1. Petitioner's Reply Confirms That Lamb In View Of Williams Fails To Disclose Or Teach The "timed alarm signal" [Claims 1 and 11].

Lamb in view of Williams fails to disclose or teach the "timed alarm signal" of claims 1 and 11.

There is *no dispute* that the claims 1 and 11 require the barrier alarm device to transmit a "timed alarm signal" to the security panel only when it is determined that the human detection device indicates that the human being is inside the premises in proximity to the barrier. (EX1001, claims 1 and 11; Reply at 6, 9.)

There is also *no dispute* that Lamb does not disclose transmitting an "alarm signal" when the human detection device indicates that a person is inside the premises in proximity to the barrier. Rather, as Lamb expressly discloses and as Petitioner admits, Lamb's barrier alarm device transmits a "*bypass signal*" when the human detection device indicates that the human being is inside the premises in proximity to the barrier. (EX1009, FIG. 5, [0029], [0040], [0050], [0060], claims 2 and 13; Petition at 15, 39; Reply at 12.)

Additionally, as discussed in Section I(C), *supra*, there is *no dispute* that a bypass signal is not a "timed alarm signal." (Reply at 4-9; POR at 24-27.)

Petitioner states that Ground 1 merely modifies Lamb's "bypass signal" in view of Williams to start a timer in the security panel. (Reply at 14; *id.* at 10-11.)

According to Petitioner, Williams' signals are "irrelevant to the ground." (*Id.* at 15; *see also id.* at 10.) Rather, "the ground is based on **Lamb's** control signal." (*Id.* at 15 (emphasis in original).)

Petitioner repeatedly refers to Lamb's "bypass signal" as a "control signal," even though the term "control signal" does not appear anywhere in Lamb and the Petition uses that term only in Ground 2 in quotes taken from Sharma. (*See generally* EX1009; Petition at 71, 77.) Petitioner's use of "control signal" appears intended to hide Lamb's express disclosure of a "bypass signal."

Petitioner's Reply confirms that Lamb in view of Williams fails to disclose or teach the "timed alarm signal" because, as shown above, (i) there is ***no dispute*** that the alleged "timed alarm signal" in Ground 1 is Lamb's "bypass signal" that starts a timer in the security panel (Reply at 14-15; Petition at 15, 39); and (ii) there is ***no dispute*** that a "bypass signal" is not a "timed alarm signal." (Reply at 4-9; POR at 24-27; *see also* EX1009 at [0029], [0040], [0042], [0050], [0057], [0060], claims 2 and 13 (Lamb distinguishing between an "alarm signal" and a "bypass signal").)

A "bypass signal" that starts a timer ***is still a "bypass signal."*** As Petitioner concedes, "the ground is based on **Lamb's** [bypass] signal." (Reply at 15 (emphasis in original).) Petitioner is admittedly not relying on any of Williams' signals in Ground 1. (*Id.*) Thus, Lamb in view of Williams cannot disclose or teach the claimed "timed alarm signal."

2. Petitioner's Reply Confirms That Lamb Fails To Disclose The "first alarm signal" [Claims 6 and 16].

Petitioner's Reply confirms that Lamb fails to disclose the "first alarm signal" of claims 6 and 16.

Petitioner *does not dispute* that the Petition asserts that Lamb's "barrier status signal" is the claimed "first alarm signal." (Reply at 15; Petition at 46-47.)

Further, the intrinsic evidence (and Lamb itself) confirms that a status signal is not a "first alarm signal." (See Section I(B), *supra*; POR at 18-24, 35-36.)

Accordingly, if the Board agrees that a status signal is not a "first alarm signal" (it should), then the Board must find that Lamb fails to disclose the "first alarm signal." (POR at 35-36.) Nothing in Petitioner's Reply demonstrates otherwise. (Reply at 15.)

3. Petitioner's Reply Confirms That Lamb In View Of Williams Fails To Disclose Or Teach "determine whether the elapsed time has exceeded a predetermined time" And "generate a security response when it is determined that the elapsed time has exceeded the predetermined time" [Claim 6].

Petitioner's Reply merely asserts that "[n]o implementation details [regarding an elapsed time exceeding a predetermined time] are explained in the '340, let alone recited in the claims." (Reply at 15-16.) However, whether "implementation details" are allegedly missing is irrelevant. Claim 6 requires determining that an elapsed time has exceeded a predetermined time (EX1001 at claim 6), and there is

no dispute that Lamb in combination with Williams fails to make such a determination. (POR at 36-40.)

4. Petitioner's Reply Confirms That Lamb In View Of Williams Fails To Disclose The "immediate alarm signal" [Claims 2 and 12].

As discussed in Section I(D), *supra*, there is *no dispute* that the plain and ordinary meaning of "immediate alarm signal" is an alarm signal that instructs the security panel to initiate a security response *immediately*. (Reply at 4-9; POR at 28-30.)

While the Petition asserts that Lamb's barrier alarm device sends an "alarm signal" to a central security panel 116 when the barrier alarm device determines that a door is open and that a human is not inside the premises in proximity to the door (Petition at 42-43), neither Petitioner nor its expert explains how (or even asserts that) Lamb's "alarm signal" instructs the security panel to initiate a security response *immediately*. (*Id.*; POR at 40-41.) Petitioner's Reply suffers from the same problem. (Reply at 16.)

5. Petitioner Has Failed To Show That A POSITA Would Have Been Motivated To Modify Lamb In View Of Williams To Arrive At The Claimed Inventions.

Petitioner's Reply misconstrues or ignores Patent Owner's arguments and fails to show that a POSITA would have been motivated to modify Lamb in view of Williams to arrive at the claimed invention because: (i) Petitioner cannot explain

why a POSITA would have been motivated to modify Lamb in view of Williams in the specific manner of the claimed inventions; (ii) the sole alleged benefit of Petitioner's proposed modifications to Lamb is outweighed by the proposed modifications' significant drawbacks; (iii) Petitioner's proposed modifications to Lamb would change Lamb's basic principle of operation; (iv) Petitioner's proposed modifications to Lamb would frustrate Lamb's intended purpose; and (v) Lamb and Williams are fundamentally different. (POR at 41-60.)

(a) Petitioner Has Failed To Explain Why A POSITA Would Have Modified Lamb In View Of Williams In The Specific Manner Of The Claimed Inventions.

Assuming a POSITA would have been motivated to modify Lamb in view of Williams in the first place, a POSITA would have eliminated Lamb's human detection device and step of determining whether a human being is inside the premises in proximity to the barrier because they are superfluous, redundant, and unnecessary in view of Williams' personal device. (POR at 44-47.) Eliminating Lamb's superfluous human detection device and step of determining whether a person is inside the premises—which, again, is what a POSITA would have done—would not have resulted in the claimed inventions. (*Id.*)

Petitioner argues that Patent Owner's argument "is plainly incorrect given that Williams also uses motion detection inside the premises..." (Reply at 17.) Petitioner also asserts that adding Williams' "remote" would not be superfluous, and

that Patent Owner's argument "amounts to another strawman" because there is no argument to eliminate any features from Lamb in the Petition. (*Id.* at 18-19.)

Petitioner's Reply arguments misconstrue the POR and are irrelevant. The POR does not assert that adding Williams' "remote" would be superfluous. Rather, the POR asserts that Lamb's human detection device and step of determining whether a human being is inside the premises in proximity to the barrier would become superfluous in Petitioner's proposed combination. (POR at 44-47.) That the Petition did not propose eliminating any features from Lamb is irrelevant, as the POR demonstrates what a POSITA *would have done* if Lamb and Williams were combined as proposed. (*Id.*) That Lamb and Williams both use motion detection is also irrelevant because Lamb and Williams use motion detection for very different purposes—Lamb uses motion detection to verify that an authorized person has opened a barrier (*i.e.*, the exact same function as Williams' personal device), while Williams uses motion detection simply to detect intruders. (EX1009 at [0018]; EX1010 at 1:13-15.)

The POR also demonstrated that Petitioner's sole proposed rationale for modifying Lamb (*i.e.*, to enhance security by verifying that a potential alarm was caused by an authorized person) is not logically connected to Petitioner's proposed modification to Lamb (*i.e.*, modifying Lamb's security panel to initialize a timer), and that the Petition inexplicably overlooks Williams' express alternatives to

initializing a timer—including an alternative that Williams itself describes as “much simpler.” (POR at 47-49.)

Petitioner asserts—without explanation—that Williams’ other embodiments and teachings are “irrelevant to the ground asserted in the petition.” (Reply at 20.) Petitioner’s argument is legally untenable. In assessing obviousness, a prior art reference must be considered for everything it teaches. *Belden Inc. v. Berk-Tek LLC*, 805 F.3d 1064, 1076 (Fed. Cir. 2015). It is error to assume, without explanation (as Petitioner has), that a POSITA would have combined Lamb with Williams’ teaching of a timer, while simultaneously ignoring Williams’ express alternatives to a timer—including an alternative described as “much simpler.”

(b) Petitioner Has Failed To Show That Its Proposed Modifications Would Provide Any Benefit.

Petitioner cannot show that a POSITA would have been motivated to modify Lamb in view of Williams to arrive at the claimed inventions because the sole alleged benefit of Petitioner’s proposed modifications (*i.e.*, “enhanced security” by only negating a potential alarm when an authorized person is detected) is outweighed by the proposed modifications’ numerous drawbacks, and Petitioner has provided no evidence that the proposed modifications would actually “enhance security” in Lamb’s system. (POR at 49-56.)

Petitioner repeats the Petition’s conclusory argument that Lamb relies on “assumed authorization” and Williams “motivates the modification by explaining

that security is increased by confirming a detected person is authorized.” (Reply at 16-17 (citing Petition at 18, 28; EX1010 at 2:35-38); *id.* at 19 (“[Patent Owner] ignores the more pressing ‘inconvenience’ of an insecure system.”).) Petitioner adds that a POSITA would perceive an advantage to Williams’ “remote control” because it may be inconvenient for users to walk to the central controller to disarm the alarm system. (*Id.* at 19-20.) Petitioner also dismisses the drawbacks of the proposed modifications as mere “speculation.” (*Id.* at 19.)

Petitioner’s arguments fail to address the arguments in the POR, mischaracterize the prior art, and are irrelevant. For example, Petitioner ***does not dispute*** that there is no evidence that Lamb’s assumption is unreasonable,³ or that Lamb’s system does not fit into the types of systems that Williams allegedly improves upon. (POR at 49-51; Reply at 16-21.)

Petitioner’s argument that a POSITA would perceive an advantage to Williams’ “remote control” mischaracterizes Williams. ***Williams does not disclose a “remote control.”*** (See generally EX1010 (Williams making no mention of a “remote control”).) Rather, Williams discloses a personal device that will transmit an authorization code periodically or in response to an electromagnetic inquiry. (*Id.*

³ Petitioner argues that Lamb and the ‘340 patent make exactly the same assumption. (Reply at 21.) This further confirms that Lamb’s assumption is reasonable.

at 1:64-2:8.) In any case, Petitioner fails to recognize that Lamb's system already eliminates the need for users to walk to the central controller to disarm the system. (POR at 10; *id.* at 57-59.)

Petitioner is also wrong that the drawbacks of the proposed modifications are mere "speculation." Patent Owner has provided detailed, well-supported expert testimony explaining the drawbacks of Petitioner's proposed modifications. (EX2003, ¶¶ 134-147.) Petitioner's hand waving does not meaningfully address these drawbacks. (Reply at 19-20.)⁴

(c) Petitioner Does Not Dispute That Its Proposed Modifications Would Change Lamb's Basic Principle Of Operation And Would Frustrate Lamb's Intended Purpose.

Petitioner *does not dispute* that its proposed modifications would frustrate Lamb's intended purpose. (Reply at 21.) While Petitioner asserts that "[m]odifying Lamb ... changes nothing" (*id.*), Petitioner ignores that it has proposed modifying Lamb's system to, *inter alia*, include Williams' personal device. (Petition at 17-19.)

⁴ Petitioner also argues that a combination need only be a "suitable" option and that "tradeoffs are a design consideration." (*Id.*) Petitioner's argument is misplaced because the POR demonstrates that the proposed combination was *not* a suitable option, and that a POSITA would *not* have modified Lamb in view of Williams as Petitioner has proposed. (POR at 51-56.)

Further, if Petitioner is now arguing that it is *not changing* Lamb, this further confirms that Lamb is not prior art.

(d) Petitioner Has Failed To Account For The Fundamental Differences Between Lamb And Williams.

A POSITA would not have been motivated to modify Lamb in view of Williams in view of the references' significant, fundamental differences. (POR at 8-11, 59-60.) Petitioner *does not dispute* that Lamb and Williams have significant, fundamental differences. (Reply at 18.) Instead, Petitioner argues that Lamb's and Williams' differences are irrelevant because "Lamb and Williams are undisputed analogous art." (*Id.*) Petitioner's argument misses the point. The question of whether prior art references qualify as analogous art is a separate issue from whether there is a motivation to combine those references. *Wyers v. Master Lock Co.*, 616 F.3d 1231, 1237–39 (Fed. Cir. 2010).

G. Petitioner Has Failed To Show That Sharma, Alone, Renders Claims 1 And 11 Obvious [Ground 2].

1. Petitioner Has Failed To Show That Sharma, Alone, Discloses The "timed alarm signal" [Claims 1 and 11].

The Petition asserts that Sharma discloses a barrier alarm device (*i.e.*, door sensing unit 104) that transmits signals to a system control panel 102 to enter a "Timed Exit Mode," and that Sharma's signal to enter the "Timed Exit Mode" is the claimed "timed alarm signal." (Petition at 67, 76.)

The POR demonstrated that Sharma's signal to enter the "Timed Exit Mode" (*i.e.*, the alleged "timed alarm signal") cannot be the claimed "timed alarm signal" because it is a signal that causes Sharma's system to be disarmed or bypassed and prevents an alarm from being triggered, and a POSITA would not have considered such a signal to be the claimed "timed alarm signal." (POR at 60-61; *id.* at 24-27.)

In the Reply, Petitioner argues that Sharma's signal to enter the "Timed Exit Mode" constitutes a "timed alarm signal" because "[a]fter the predetermined amount of time has elapsed, the system 100 is reset... *or an alarm activated.*" (Reply at 23 (citing EX1011 at 8:15-16) (emphasis added); *see also id.* at 21.)

Petitioner's argument is without merit because it mischaracterizes Sharma, is inconsistent with the Petition's own characterization of Sharma, and is unsupported by a POSITA. Nowhere does Sharma disclose—or the Petition assert—that an alarm is triggered when the "Timed Exit Mode" expires. (EX1011 at 8:11-21; Petition at 67-68, 76.) Rather, Sharma discloses that "[a]fter the predetermined amount of time has elapsed, the system 100 is reset to the Armed Stay Mode, continuing to provide protection from intruders." (EX1011 at 8:15-18.) That is, Sharma discloses that its system is simply rearmed when the "Timed Exit Mode" expires. (*Id.*) Indeed, the Petition *admits* that Sharma's system is rearmed when the "Timed Exit Mode" expires. (Petition at 67; *id.* at 68, 76.) Petitioner's strained attempt to re-write

Sharma is improper and confirms that Sharma does not disclose the “timed alarm signal.”

Petitioner also argues that Patent Owner's arguments about Sharma “rest on a strawman” because Patent Owner has not demonstrated how Sharma's signal to enter the “Timed Exit Mode” is equivalent to a bypass signal. (Reply at 23.) Petitioner's argument *is itself a strawman* and constitutes textbook obfuscation aimed at avoiding the POR's arguments and Petitioner's admissions. As explained in the POR, Sharma's signal to enter the “Timed Exit Mode” is a signal that causes Sharma's system to be *disarmed*. (POR at 61 (citing EX2003, ¶¶ 171-172; EX1011 at 8:6-21; Petition at 67-68, 76).) The Petition confirms that Sharma's signal to enter the “Timed Exit Mode” is a signal that causes Sharma's system to be *disarmed*. (Petition at 67, 76.) As demonstrated in Section I(C), *supra*, there is *no dispute* that a signal that causes an alarm system to be *disarmed* is not a “timed alarm signal.” (POR at 24-27; Reply at 4-9.)⁵ Accordingly, there is no dispute Sharma's signal to enter the “Timed Exit Mode” is not the “timed alarm signal.”

⁵ Again, Petitioner concedes that a “timed alarm signal” must at least initiate a security response upon expiration of a timer. (Reply at 1, 3.) There is no dispute that a signal that disarms or bypasses the alarm system does the opposite—it prevents a security response from being initiated. (EX2003, ¶¶ 74-75.)

II. CONCLUSION

Accordingly, the Board should confirm the patentability of the Challenged Claims.

Respectfully submitted,

Dated: June 21, 2024

By: /s/ James J. Lukas, Jr.
James J. Lukas, Jr.
GREENBERG TRAURIG, LLP
77 W. Wacker Dr., Suite 3100
Chicago, IL 60601
Phone: (312) 456-8400
Fax: (312) 456-8435

Counsel for Patent Owner

CERTIFICATE OF COMPLIANCE

This paper complies with the requirements of 37 C.F.R. § 42.24 and contains 5,594 words (exclusive of the table of contents, the table of exhibits, the certificate of service, and this certification).

This paper complies with the typeface requirements of 37 C.F.R. § 42.6 and has been prepared in 14 point Times New Roman proportionally spaced typeface with normal spacing.

Respectfully submitted,

Dated: June 21, 2024

By: /s/ James J. Lukas, Jr.
James J. Lukas, Jr.
GREENBERG TRAURIG, LLP
77 W. Wacker Dr., Suite 3100
Chicago, IL 60601
Phone: (312) 456-8400
Fax: (312) 456-8435

Counsel for Patent Owner

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on the below date, I caused the forgoing to be served by electronic mail to the following:

Scott A. McKeown
Victor Cheung
WOLF, GREENFIELD & SACKS, P.C.
601 Massachusetts Avenue, NW
Washington, DC 20001
SMcKeown-PTAB@WolfGreenfield.com
VCheung-PTAB@WolfGreenfield.com

Matthew J. Rizzolo
ROPES & GRAY LLP
2099 Pennsylvania Avenue, NW
Washington, DC 20006-6807
matthew.rizzolo@ropesgray.com

Dated: June 21, 2024

By: /s/ James J. Lukas, Jr.
James J. Lukas, Jr.
GREENBERG TRAURIG, LLP
77 W. Wacker Dr., Suite 3100
Chicago, IL 60601
Phone: (312) 456-8400
Fax: (312) 456-8435

Counsel for Patent Owner