Trials@uspto.gov
571.272.7822

Paper: 10
Entered: May 20, 2024

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO., LTD. and
SAMSUNG ELECTRONICS AMERICA, INC.,
Petitioner,

v.

FENDGO, LLC,
Patent Owner.

IPR2024-00114
Patent 11,265,404 B2

Before JON M. JURGOVAN, JAMES J. MAYBERRY, and AARON W. MOORE, *Administrative Patent Judges*.

JURGOVAN, *Administrative Patent Judge*.

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

I. INTRODUCTION

A. Background and Summary

Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc. (collectively, "Petitioner") filed a Petition requesting *inter partes* review of claims 1–8 of U.S. Patent No. 11,265,404 B2 (Ex. 1001, the "'404 patent"). Paper 2 ("Petition" or "Pet."). The Petition was accorded a filing date of November 1, 2023. Paper 7 (Notice of Filing Date Accorded dated November 22, 2023). Patent Owner, Fendgo, LLC, filed a Preliminary Response to the Petition on February 22, 2024. Paper 9 ("Prelim. Resp.").

Under 35 U.S.C. § 314(a), an *inter partes* review may not be instituted unless the information presented in a petition and the preliminary response "shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition." Upon consideration of the Petition and Preliminary Response, and accompanying exhibits and evidence, we determine Petitioner has established a reasonable likelihood that it would prevail with respect to at least one challenged claim in the *inter partes* review. Therefore, we grant institution of an *inter partes* review as to all of the challenged claims of the '404 patent on all challenges in the Petition.

B. Real Parties in Interest

Petitioner identifies Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc. as the real parties in interest. Pet. 27 (Petitioner's Mandatory Notices).

Patent Owner identifies itself as the real party in interest. Paper 6, 2 (Patent Owner's Mandatory Notices); Paper 8, 2 (Patent Owner's Updated Mandatory Notices).

C. Related Matters

Petitioner and Patent Owner ("the parties") identify the following as matters related to this proceeding:

- *Samsung Electronics Co., Ltd. v. Fendgo, LLC*, IPR2024-00113 (concerning claims 9–15 of the '404 patent); and
- *Fendgo, LLC v. Samsung Electronics Co., Ltd. et al.*, 2:23-cv-00221-JRG (E.D. Tex.), filed May 19, 2023 ("the District Court litigation").

Pet. 27 (Petitioner's Mandatory Notices); Paper 6, 2 (Patent Owner's Mandatory Notices); Paper 8, 2 (Patent Owner's Updated Mandatory Notices).

Petitioner contends that the '404 patent is related to the following patents and applications:

- US Provisional Application No. 60/643,865, filed January 14, 2005;
- US Application No. 11/333,809, filed January 17, 2006, and issued as US Patent No. 8,472,915 on June 25, 2013;
- US Application No. 13/897,353, filed May 17, 2013, published December 19, 2013, and issued as US Patent No. 10,230,827 on March 12, 2019;
- US Application No. 17/566,597 filed December 30, 2021, and published August 25, 2019 (pending); and
- US Application No. 13/897,359 filed May 18, 2013, and published June 12, 2014 (abandoned).

Pet. 27; Ex. 1032.

D. The ’404 Patent

The ’404 patent is titled “Emergency Personal Protection System Integrated with Mobile Devices.” Ex. 1001, code (54) (emphasis and capitalization omitted). The ’404 patent integrates a self-defense device with a mobile phone/device to protect against violent crime. *Id.* at 1:21–31. The ’404 patent asserts that integrating the self-defense device with the mobile phone/device means that “a person may be less likely to forget [the self-defense device] while traveling.” *Id.* at 2:36–38.

The ’404 patent provides that the self-defense device may include a self-defense mechanism that, when activated, causes a camera built into the mobile phone/device to take a still or moving image of the attacker and send image data and audio data to the authorities along with specific information such as the name and description of the owner of the self-defense device, location information, a time and date stamp, etc. Ex. 1001, 3:4–16. A separate panic button located on the device may be used to activate these processes. *Id.* at 3:16–19.

To provide this functionality, the mobile device has a camera to obtain image and audio data; a location unit to obtain location data; a transmitting unit to transmit the image, audio, and location data; and a panic button to activate the camera, location unit, and transmitting unit. Ex. 1001, 3:51–58.

Figure 1A of the ’404 patent is reproduced below.

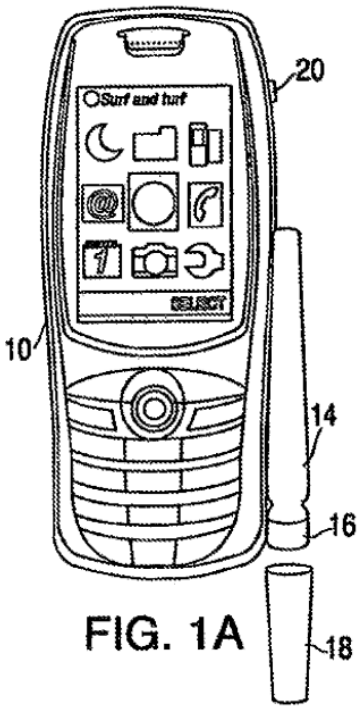


FIG. 1A

As shown in Figure 1A, mobile device 10 includes an attached vial 14 containing pepper spray or mace. Ex. 1001, 7:63–67. "Nozzle 16 releases the pepper spray or mace one protective cap 18 is removed." *Id.* at 8:1–2.

Figure 1A also shows panic button 20. Ex. 1001, 8:2–3. "[A] separate 'safety' switch which, upon being moved into position, readies the panic button to contact 911 upon being pressed." *Id.* at 6:59–62. "The panic button may be activated by . . . depressing of the panic button together with another button." *Id.* at 3:60–64.

E. Challenged Claims

Claim 1 is independent and claims 2–8 are dependent from claim 1. Claim 1 is set forth below, with limitation identifiers indicated in brackets.

1. [pre] A mobile device, comprising:

[a] a camera unit, adapted to obtain at least one of image data and audio data;

[b] a location unit, adapted to obtain location data;

> [c] a transmitting unit, adapted to transmit the image data, the audio data, and the location data as emergency information to a specified location, along with specific information including owner identification information; and
>
> [d] a panic button, adapted to, when activated, ready itself to perform the following panic button functions: (1) dialing a public or private network for an emergency purpose and (2) activating the transmitting unit,
>
> [e] wherein the panic button is activated by a depressing of the panic button together with another button at substantially the same initial time such that no panic button function is activated unless both buttons are depressed.

Ex. 1001, 8:40–56.

F. Evidence of Record

Petitioner relies upon the following prior art references[1]:

DiPerna964	US 2006/0201964 A1	Published Sept. 14, 2006	Ex. 1028
Strack	US 10,460,590 B2	Issued Oct. 29, 2019	Ex. 1029

Petitioner also supports its challenges with a declaration from William R. Michalson, Ph.D. Ex. 1002. Patent Owner does not rely on any declarant to support its contentions at this time.

G. The Asserted Challenge to Patentability

Petitioner asserts the following challenge to patentability:

[1] Petitioner alleges that, as a result of the "ready itself" amendment during prosecution, claims 1–8 of the '404 patent are not entitled to priority before the filing date of January 19, 2019. Pet. 1–2. Petitioner contends DiPerna964 is prior art under § 102(a)(1), and that Strack is prior art under § 102(a)(2) (Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) ("AIA")). *Id.* at 4.

Challenged Claims	35 U.S.C. §	Reference(s)/Basis
1–8	103	DiPerna964, Strack

II. PRELIMINARY MATTERS

A. Analysis of Discretionary Denial Under 35 U.S.C. § 314(a)

Institution of *inter partes* review is discretionary. *See* 35 U.S.C. § 314(a); 37 C.F.R. § 42.108(a). When determining whether to exercise discretion to deny institution due to an earlier trial date in a parallel proceeding, we consider the factors set forth in *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 at 6 (March 20, 2020) (precedential) ("*Fintiv*").

Petitioner argues that the *Fintiv* factors as applied to this case weigh against exercising discretion to deny institution of *inter partes* review. Pet. 22–26. Patent Owner argues that we should deny institution. Prelim. Resp. 7–14. In this section, we consider the parties' arguments and evidence in relation to the *Fintiv* factors, and determine not to exercise our discretion to deny institution for the following reasons.

1. Fintiv Factor 1: Stay

Factor 1 addresses whether the District Court granted a stay or evidence exists that one may be granted if an *inter partes* review proceeding is instituted. *Fintiv*, Paper 11 at 6.

Petitioner and Patent Owner agree that this factor is neutral since no stay has been sought, let alone granted, in the District Court litigation. Pet. 23; Prelim. Resp. 8. The evidence here does not establish one way or the other that a stay may be granted by the District Court if an *inter partes* review proceeding is instituted. We agree with the parties that this factor is neutral under these circumstances.

2. Fintiv Factor 2: Timing

Factor 2 concerns the proximity of the District Court's trial date to the Board's projected statutory deadline for a final written decision. *Fintiv*, Paper 11 at 6.

Petitioner and Patent Owner agree that jury selection for the District Court litigation is currently scheduled for March 3, 2025, and the projected statutory deadline for a final written decision in this case is May 2025, approximately two months after the start of the District Court trial. Pet. 23–24; Prelim. Resp. 8–9.

Petitioner contends that "this factor should be neutral or weigh at most minimally in favor of denial," noting that the Board has instituted with even more time between trial and final written decision. Pet. 24. Patent Owner argues that this factor "weighs heavily against institution because trial is set to occur approximately 2 months before the projected statutory deadline for a final written decision," and states that the Board has denied institution on similar or smaller gaps between the final written decision and trial of district court litigation. Prelim. Resp. 8–9.

We determine that this factor is neutral in this case given the relatively small two-month difference between the current expected dates for a final written decision and trial of the parallel District Court litigation.

3. Fintiv Factor 3: Investment

Factor 3 concerns the investment in the District Court litigation by the District Court and parties. *Fintiv*, Paper 11 at 6.

Petitioner contends that this factor weighs strongly against discretionary denial. Pet. 24. According to Petitioner, no substantive orders have been issued by the District Court, and "investment in the parallel

litigation will have remained low at the time of institution." *Id.* (citing Ex. 1035). Petitioner contends much work in the District Court remains and the opening claim construction brief is due July 25, 2024, the *Markman* hearing is scheduled for September 5, 2024, and opening expert reports are due October 15, 2024. *Id.*

Patent Owner contends that this factor, "which considers the resources invested in the parallel district court proceeding, weighs in favor of the Board's exercising its discretionary denial authority." Prelim. Resp. 9–10. Patent Owner argues that Petitioner "wrongly limit[s its] analysis of the parties' investment in the district court proceedings to the stage of those proceedings at the time the petition was filed" and that the "proper timeframe for this factor is the investment in the parallel proceeding at the time of the institution decision" that is "expected by May 22, 2024." *Id.* (citing *Fintiv*, Paper 11 at 9–10).

Patent Owner argues that the parties will have expended significant resources by May 2024. Prelim. Resp. 10. Patent Owner asserts that the parties have exchanged infringement and invalidity contentions for the '404 patent. *Id.* In addition, Patent Owner contends that the parties have engaged in fact discovery, which is to conclude October 1, 2024, approximately four months after the institution decision is projected to issue in this case. *Id.* Patent Owner further argues that the parties will have to begin the claim construction process and exchange preliminary claim constructions by May 2024. *Id.*

We do not agree with Patent Owner's argument that Petitioner wrongly considered the parties' investment in the parallel litigation as of when the Petition was filed as opposed to when the institution decision is

made. Prelim. Resp. 9–10. Petitioner indicated that "investment in the parallel litigation will have remained low *at the time of institution*," thus indicating the proper timeframe for consideration of this factor. Pet. 24 (emphasis added).

Although the parties have expended some resources in the District Court litigation, the evidence shows that the District Court has not issued any substantive orders, a *Markman* hearing has not yet been conducted, and expert reports have not been exchanged. Pet. 24 (citing Ex. 1035). Accordingly, this factor weighs against exercising our discretion to deny institution. *Fintiv*, Paper 11 at 10; *NHK Spring Co., LTD. v. Intri-Plex Techs., Inc.*, IPR2018-00752, Paper 8 at 20 (PTAB Sept. 12, 2018) (precedential, designated May 7, 2019) (determining that "the advanced state of the district court proceeding is an additional factor that weighs in favor of denying the Petition," where the district court proceeding was "nearing its final stages, with expert discovery ending" soon).

4. Fintiv Factor 4: Overlap

Factor 4 addresses the overlap between issues raised in the Petition and the District Court litigation. *Fintiv*, Paper 11 at 6.

Petitioner contends that factor 4 weighs against discretionary denial. Pet. 25. Specifically, Petitioner indicates that it has challenged claims 1–8 in this proceeding, and claims 9–15 in IPR2024-00113, whereas Patent Owner has alleged infringement of only claims 9 and 12 in the District Court litigation. *Id.* (citing Ex. 1033). Accordingly, Petitioner asserts, a material number of the challenged claims will not be addressed by the District Court. *Id.*

Petitioner further stipulates that "unless the Board denies or later vacates institution of this Petition, Petitioners will not seek resolution of invalidity in the copending litigation based on the specific grounds asserted in this Petition or any grounds including *DiPerna964* or *Strack*." Pet. 25 (citing Ex. 1036).

Patent Owner argues that the issues raised in the Petition and the District Court litigation overlap, and Petitioner has provided only a limited *Sand-Revolution*-style stipulation, not a *Sotera*-style one. Prelim. Resp. 11; *see also Sotera Wireless, Inc. v. Masimo Corporation*, IPR2020-00019, Paper 12 at 18–19 (PTAB Dec. 1, 2020) (precedential as to § II.A). Patent Owner argues that the Board has held that Petitioner's *Sand-Revolution*-style stipulation weighs only marginally in favor of not exercising discretion to deny institution. Prelim. Resp. 11 (citing *Sand Revolution II, LLC v. Continental Intermodal Group–Trucking LLC*, IPR2019-01393, Paper 24 at 9–10 (PTAB June 16, 2020) (informative) ("*Sand Revolution*").

There is no overlap at this time between claims 9 and 12 at issue in the District Court litigation and claims 1–8 in this proceeding. Petitioner's stipulation, which is neither a *Sotera*- nor *Sand-Revolution*-type, provides that the ground and prior art references asserted here (DiPerna964 and Strack) will not be asserted again in the District Court litigation assuming this proceeding is instituted and not vacated. Ex. 1036. Petitioner's stipulation mitigates to some degree concerns of duplicative efforts or conflicting decisions. *See Sand Revolution*, Paper 24 at 12.

Accordingly, because there is no overlap between the claims involved in the two proceedings, and due to Petitioner's stipulation, we determine that this factor weighs against discretionary denial.

5. Fintiv Factor 5: Same Party

Factor 5 addresses whether the Petitioner is the defendant in the District Court litigation. *Fintiv*, Paper 11 at 6. The parties agree this is the case. Pet. 25; Prelim. Resp. 11–12.

Petitioner argues that when the Board's deadline for the final written decision is estimated to be close in time to the district court trial date and the parties are the same in both proceedings, factor 5 weighs as neutral. Pet. 25.

Patent Owner argues that Petitioner is the defendant in District Court litigation, so factor 5 weighs in favor of discretionary denial. Prelim. Resp. 11–12. Patent Owner asserts that Petitioner's argument concerning timing is contrary to numerous Board decisions, and that Petitioner's argument would mean that factor 5 would never weigh in favor of denial, contrary to the nature of what a factor is. *Id.* at 12. Patent Owner further argues that any determination based on Petitioner's argument would be "bad public policy" and "likely only a power available to the Director." *Id.*

As the Petitioner is the defendant in the District Court litigation, we find that this factor weighs in favor of discretionary denial.

6. Fintiv Factor 6: Other Circumstances

Factor 6 addresses other circumstances that impact the Board's exercise of discretion, including the merits. *Fintiv*, Paper 11 at 6.

Petitioner argues that the Petition's "merits are compelling" and that "there is a wealth of prior art that the Office did not consider during prosecution that discloses and/or renders obvious the alleged invention." Pet. 26.

Patent Owner argues that the merits of the Petition are "weak and include numerous deficiencies, which cannot meet the high compelling

merits standard needed to overcome *Fintiv* factors 1–5 strongly favoring denial of institution." Prelim. Resp. 12–14.

We determine below that *Fintiv* factors 1–5 do not favor discretionary denial. Thus, we do not reach the issue of whether the merits are compelling. *CommScope Techs. LLC v. Dali Wireless, Inc.*, IPR2022-01242, Paper 23 at 4–5 (PTAB Feb. 27, 2023) (precedential) (Board must first address *Fintiv* factors 1–5, and should engage the compelling merits question only if that analysis favors discretionary denial) ("*CommScope*").

7. Balancing the Fintiv Factors

Weighing against exercising our discretion to deny institution is factor 3 involving the parties' limited investment and lack of substantive orders in the District Court litigation. Factor 4 concerning the limited overlap of the issues in the two cases also weighs against discretionary denial. Only factor 5, that Petitioner and the defendant in the District Court litigation are the same party, weighs in favor of discretionary denial. Factor 1 concerning the absence of a stay in the District Court litigation, and factor 2 concerning the close proximity between the start of trial in the District Court litigation and the estimated deadline for the final written decision, are neutral on the facts of this case. We therefore determine that the balance of factors 1–5 weighs against discretionary denial. Accordingly, we do not consider the issue of whether compelling merits have been shown under factor 6. *See CommScope*, Paper 23 at 4–5.[2]

[2] Having decided against discretionary denial, we do not reach Petitioner's argument that the *Fintiv* framework is legally invalid. *See* Pet. 23 n.4.

B. Priority Date for Claims 1–8 of the '404 Patent

The '404 patent was filed as U.S. Application No. 16/262,835 ("the '835 application") on January 30, 2019. Ex. 1001, codes (21), (22). The '835 application is a division of U.S. Application No. 13/897,353 ("the '353 application"), filed May 17, 2013. *Id.* at code (60). The '353 application is a continuation of U.S. Application No. 11/333,809 ("the '809 application"), filed January 17, 2006. *Id.* The '809 application claims priority to U.S. Provisional Application No. 60/643,865 ("the '865 provisional"), filed January 14, 2005. *Id.*

1. Petitioner's Contentions

Petitioner contends that the challenged claims are not entitled to a priority date earlier than January 30, 2019. Pet. 1–2, 8–10. Petitioner contends that the claimed "ready itself" in limitation 1[d] lacks written description support in the '835 application (which issued as the '404 patent) and the applications and provisional to which it claims priority (including the '353 application discussed here). *Id.* at 1–2, 8–9. Specifically, Petitioner notes that limitation 1[d] recites

> a panic button, adapted to, when activated, **ready itself to** perform the following panic button functions: (1) dialing a public or private network for an emergency purpose and (2) activating the transmitting unit.

Id. at 9. Petitioner argues that "the '353 application describes an embodiment in which the mobile device includes a 'separate 'safety' switch which, upon being moved into position, readies the panic button to contact 911 upon being pressed.'" *Id.* (citing Ex. 1006, 13). When the panic button is activated (e.g., pressed), various functions or processes are triggered. *Id.* (citing Ex. 1006, 5–6, 10, 15). Petitioner argues that a person having

ordinary skill in the art ("POSITA") "would not have understood the '353 application to disclose expressly or inherently any feature by which the panic button, when pressed or activated, merely readies itself to perform certain functions (as opposed to, for example, just performing the functions)." *Id.* (citing Ex. 1002 ¶ 53). Petitioner thus argues that "a POSITA would not have understood the applicant to have been in possession of the invention claimed in claim 1 as of the priority date of the '353 application" and that claim 1 is thus "not entitled to the priority date of the '353 application." *Id.* at 9–10 (citing Ex. 1002 ¶ 54).

2. Patent Owner's Contentions

Patent Owner asserts that Petitioner incorrectly argues that the '353 application does not disclose readying a panic button. Prelim. Resp. 5. According to Patent Owner, "[t]he '353 application discloses readying the panic button and the safety device in general." *Id.* (citing Ex. 1006, 23). Patent Owner argues that, for example, the '353 application discloses that "[t]here can be a separate 'safety' switch which, upon being moved into position, ***readies the panic button*** to contact 911 upon being pressed." *Id.* at 5–6. Patent Owner contends that "[t]he ability to ready the safety device with minimal steps, such as by readying or activating a panic button or other component of the safety device, is a key feature repeatedly disclosed by the '353 application." *Id.* at 6 (citing Ex. 1006, 15, 19–20 (pocket holding vial of pepper spray in position such that it is ready to be used with only minimal steps such as the removal of protective cap or cover), 17 (voice activation unit activates panic button using codeword), 23).

In response to Petitioner's argument that "a POSITA would not have understood the '353 application to disclose a panic button that readies itself

to perform certain functions," Patent Owner asserts that this "argument is based on [Petitioner's] expert's declaration which merely parrots the Petition's conclusory statements." Prelim. Resp. 6 (citing Pet. 9; Ex. 1002 ¶ 53). Patent Owner further states that "the '353 application explicitly discloses that a switch can 'read[y] the panic button to contact 911 upon being pressed.'" *Id.* (citing Ex. 1006, 23).

Patent Owner asserts that "the challenged claims of the '404 patent are supported by the written description of the '353 application and are entitled to a priority date earlier than January 30, 2019. Patent Owner asserts that "the chain of priority is not broken" and "the challenged claims of the '404 patent are entitled to claim priority to the January 14, 2005 filing date of" the '865 provisional. Prelim. Resp. 6–7.

3. Discussion

Petitioner bears the burden of persuasion regarding unpatentability throughout an *inter partes* review proceeding. *Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015). Petitioner thus bears the initial burden to show that a reference is prior art, for example, by showing that the challenged patent's priority chain does not provide written description support under § 112(a). *Id.* at 1379. Once this is met, the burden of production then shifts to Patent Owner to show that the reference is not prior art, such as by proving entitlement to an earlier priority date. *Id.* at 1380. The Board has extended the *Dynamic Drinkware* framework to the institution stage on many occasions. *See, e.g.*, *Polaris Wireless, Inc. v. TruePosition, Inc.*, IPR2013-00323, Paper 9 at 29 (PTAB Nov. 15, 2013); *Unified Patents, LLC v. MasterObjects, Inc.*, IPR2020-01201, Paper 26 at 9 (PTAB January 11, 2021).

On this record, Petitioner has the better position concerning the '404 patent's priority date. Pet. 8–10. As Petitioner notes, the '353 application states

> the panic button of the present invention can automatically contact 911 upon a press or series of presses of the button, or upon a codeword. There can also be a ***separate*** "safety" switch which, upon being moved into position, readies the panic button to contact 911 upon being pressed.

Pet. 9 (citing Ex. 1006, 23) (emphasis added). From this passage, we understand the "safety" switch to be "separate" from the panic button, not a part of it. This understanding is reinforced by claim 7 which depends from claim 1 and recites that the mobile device "further compris[es] a safety switch," meaning it is a separate element from the panic button. Ex. 1001, 9:3–4.

Thus, moving the safety switch into position readies the panic button, which is not the same as the panic button readying itself to perform functions in claims 1–8 of the '404 patent. Patent Owner does not sufficiently address this issue in its assertions. *See* Prelim. Resp. 5–7.

Patent Owner's reliance on disclosures elsewhere in the '404 patent is likewise not persuasive. Prelim. Resp. 5–6. For example, the '353 application mentions "ready" in relation to using a self-defense mechanism such as pepper spray, which has not been shown to be related to the panic button. Ex. 1006, 5, 9–10. Although Patent Owner relies on the '353 application's description of voice activation using a codeword, voice activation does not ready the panic button for activation to perform functions, but actually activates the panic button to perform those functions. Prelim. Resp. 6 (citing Ex. 1006, 17).

Petitioner thus met its burden here to demonstrate that claims 1–8 of the '404 patent lack written description support for a panic button adapted to "ready itself" to perform the recited functions because the limitation is not present in the '353 application to which the '404 patent claims priority. Pet. 8–10. The burden of production thus shifted to Patent Owner to demonstrate that the '353 application has written description support for this limitation, which it has not done on this record. Prelim. Resp. 5–7.

Accordingly, DiPerna964, having a publication date of September 14, 2006, more than one year before the '404 patent's filing date January 30, 2019, constitutes prior art under § 102(a)(1) on this preliminary record, as Petitioner contends. Pet. 1–2, 8–10.

III. ANALYSIS AND DISCUSSION

In this section, we discuss Petitioner's challenges to claims 1–8 of the '404 patent and Patent Owner's arguments for patentability. For the reasons that follow, we determine that Petitioner has presented a reasonable likelihood that at least 1 claim of the '404 patent is unpatentable.

A. Legal Standards for Obviousness

A patent claim is unpatentable under 35 U.S.C. § 103 "if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains." The question of obviousness is resolved on the basis of underlying factual determinations including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and

(4) where present, objective evidence of nonobviousness. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

B. Level of Ordinary Skill in the Art

Petitioner contends as follows:

> A person of ordinary skill in the art . . . at the time of the '404 patent's priority date—which, Petitioners contend for purposes of this Petition, is January 2019—would have had [at least] a Bachelor's of Science Degree (or equivalent) in an academic area emphasizing electrical engineering, computer engineering, computer science, or a related technical field, and about 2-3 years of experience in the field of telematics systems (e.g. familiarity with control and diagnostic systems, navigation systems and wireless communication technology). A greater amount of education, i.e. a doctorate in an academic area emphasizing electrical engineering, computer engineering, computer science, or a related technical field, would compensate for fewer years of work experience. The POSITA could have also obtained similar knowledge and experience through other means.

Pet. 6–7 (citing Ex. 1002 ¶ 15).

At this stage of the proceeding, Patent Owner does not dispute Petitioner's proposed level of skill in the art, which is consistent with the prior art references asserted by Petitioner. *Okajima v. Bourdeau*, 261 F.3d 1350, 1354–55 (Fed. Cir. 2001) (the applied prior art may reflect an appropriate level of skill). Accordingly, we will use Petitioner's proposed level for purposes of this Decision.

C. Claim Construction

We construe the challenged claims under the same standard used by a federal court in a civil action under 35 U.S.C. § 282(b). 37 C.F.R. § 42.100(b). This standard is articulated in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc), and its progeny, and includes "construing

the claim in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent." 37 C.F.R. § 42.100(b).

Only claim terms in controversy need to be construed, and only to the extent necessary to resolve the controversy. *See Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc*., 200 F.3d 795, 803 (Fed. Cir. 1999).

Petitioner contends that "no express constructions of the claims are necessary to assess whether the prior art reads on the [challenged claims]" and that "the claims should be given their plain and ordinary meaning." Pet. 7. Patent Owner states that "at this stage in the proceeding, Patent Owner will apply the ordinary and customary meaning to the '404 patent's claim terms." Prelim. Resp. 2–3.

As Petitioner and Patent Owner do not dispute the meaning of any claim term at this time, we do not expressly construe any claim term, and instead apply the ordinary and customary meanings consistent with 37 C.F.R. § 42.100(b).

D. Obviousness over DiPerna964 and Strack

We now address Petitioner's contention that claims 1–8 would have been obvious over the combination of DiPerna964 and Strack. Pet. 10–22.

1. DiPerna964 (Ex. 1028)

With the exception of the claims and paragraph numbering, DiPerna964's description is the same as the '404 patent. *Compare* Ex. 1028 ¶¶ 1–51, Figs. 1A–2C, *with* Ex. 1001, 1:1–8:36, Figs. 1A–2C. *See* § I.D.

2. Strack (Ex. 1029)

Strack is titled "Method and System for Mobile Duress Alarm." Ex. 1029, code (22) (emphasis and capitalization omitted). Strack discloses

that "[d]uring a potential security event, a mobile application enters an alarm state and records audio, video and location event data and forwards the event data to a monitoring center, which stores the event data and takes appropriate action such as notifying local law enforcement." *Id.*, code (57). Strack further discloses that "[t]he alarm state is triggered . . . by arming the mobile application and then determining if it has been disarmed within a predetermined period of time." *Id.*

3. Motivation to Combine DiPerna964 and Strack

Petitioner contends as follows:

> A POSITA would have understood *Strack*'s mobile device and *DiPerna964*'s mobile device were similar because *Strack* and *DiPerna964* describe implementing their disclosures on similar types of mobile devices. *Strack*, 6:29 (describing a "smart phone, tablet, etc."); *DiPerna964* ¶[0050] (describing "cellular telephones" and "Blackberry-type devices"). And they both disclose that the mobile device(s) include button(s) that may be used to trigger collection of audio, video, and location data for transmission to a remote location in emergencies. *Michalson* ¶83. A POSITA would have understood that *Strack*'s arming and timer technique would have advanced *DiPerna964*'s objectives to (1) provide users with flexible options for responding to unpredictable and potential security threats, and (2) safeguard against false triggering of the system. For example, a POSITA would have understood that *Strack*'s technique of arming the device and implementing a timer would allow the user the ability to better assess whether the user was actually in a dangerous situation before triggering a call to 911 and transmission of the recorded information. This would both give the user the flexibility to handle ambiguous potential threats as he/she sees fit and also reduce the likelihood of false triggering because the user would have some additional time to evaluate whether triggering the call/transmission is warranted.

Pet. 16–17 (citing Ex. 1002 ¶¶ 84–86).

Petitioner further contends that

> A POSITA would have considered the combination to amount to the use of known technique (*Strack*'s arming and timer technique) to improve similar devices (*DiPerna964*'s mobile device) in the same way (to allow a user to start collecting information for sending to an emergency service should it become necessary while giving the user a period of time to disarm the device to reduce false triggering of the system). *Michalson* ¶89. Applying *Strack*'s arming and timer technique to *DiPerna964* would have been well within the skill of an ordinary artisan by January 2019, as evidenced, for example, by the fact that *Strack* already implemented the same functionality in a mobile device similar to *DiPerna964*. *Id.* ¶90.

Pet. 17–18.

At this time, Patent Owner does not dispute Petitioner's contention that a POSITA would have combined DiPerna964 with Strack.

Petitioner has shown sufficiently that a POSITA would have combined DiPerna964 and Strack with a reasonable expectation of success. Pet. 16–18. DiPerna964 and Strack are directed to similar mobile devices for use in security and emergency situations. *Id.* at 16–17. Petitioner demonstrates sufficiently that a POSITA would have regarded Strack's arming and timer technique as an improvement that would have been useful with DiPerna964's mobile device (at least in some circumstances) to provide the user with additional time to evaluate whether triggering the 911 call is warranted. *Id.* at 17–18. This amounts to the use of a known technique to improve similar devices in the same way, which is a recognized rationale for combining prior art references. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 401, 417 (2007).

Accordingly, on this record, Petitioner has presented a reasonable likelihood that a POSITA would have combined DiPerna964 and Strack with a reasonable expectation of success. Pet. 16–18.

4. Claim 1

We proceed to consider Petitioner's contentions that the limitations of claim 1 are disclosed by the combination of DiPerna964 and Strack.

a) Limitation 1[pre]: Mobile Device

The preamble of claim 1 recites "A mobile device, comprising:"

Petitioner contends that DiPerna964 discloses or suggests this feature. Pet. 10 (citing Ex. 1028, code (57), ¶¶ 23, 50, claims 3, 7, 11, 16, 24, 29); Ex. 1002 ¶¶ 55–57).

Patent Owner does not dispute Petitioner's contention.

Petitioner shows sufficiently that DiPerna964 discloses or suggests claim 1's preamble.[3]

b) Limitation 1[a]: Camera Unit

Limitation 1[a] recites "a camera unit, adapted to obtain at least one of image data and audio data."

Petitioner contends that DiPerna964 discloses or suggests this feature. Pet. 11 (citing Ex. 1002 ¶¶ 58–60). Specifically, Petitioner asserts that DiPerna964 discloses that its mobile device includes a camera unit which obtains image data and audio data. *Id.* (citing Ex. 1028, code (57), ¶¶ 17, 23, 25, 27, 35, claims 3, 7, 11, 16, 24, 29).

Patent Owner does not dispute Petitioner's contention.

Petitioner shows sufficiently that DiPerna964 discloses or suggests limitation 1[a] of claim 1.

[3] Because Petitioner has shown sufficiently that DiPerna964 discloses the preamble, we do not decide whether the preamble is limiting. *See Catalina Mrkt'g Int'l, Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801 (Fed. Cir. 2002) (preamble may constitute a claim limitation under some circumstances).

c) Limitation 1[b]: Location Unit

Limitation 1[b] recites "a location unit, adapted to obtain location data."

Petitioner contends that DiPerna964 discloses or suggests this feature. Pet. 11–12 (citing Ex. 1002 ¶¶ 61–63). For example, Petitioner asserts, DiPerna964 discloses "a location unit" that "obtain[s] location data." *Id.* (citing Ex. 1028, code (57), ¶¶ 17, 23–27, 35, claims 3, 7, 11, 16, 24, 29; Ex. 1002 ¶ 62).

Patent Owner does not dispute Petitioner's contention.

Petitioner shows sufficiently that DiPerna964 discloses or suggests the limitation 1[b] of claim 1.

d) Limitation 1[c]: Transmitting Unit

Limitation 1[c] recites "a transmitting unit, adapted to transmit the image data, the audio data, and the location data as emergency information to a specified location, along with specific information including owner identification information."

Petitioner contends that DiPerna964 discloses or suggests this feature. Pet. 12–13 (citing Ex. 1002 ¶¶ 64–67). For example, Petitioner argues, "*DiPerna964* discloses 'a transmitting unit' that 'transmits at least one of the image data, the audio data, the location data, and specific information including owner identification information.'" *Id.* at 12 (citing Ex. 1028, code (57), ¶¶ 17, 23, 25, 27, 35; Ex. 1002 ¶ 65). Petitioner further argues that DiPerna964 discloses "transmitting data using MMS, which 'is one method enabling the present invention to obtain video/audio information and send the data to a specified location.'" *Id.* at 13 (citing Ex. 1028 ¶ 39).

Petitioner thus contends that DiPerna964 discloses or suggests limitation 1[c] of claim 1.

Patent Owner does not dispute Petitioner's contention.

Petitioner shows sufficiently that DiPerna964 discloses or suggests the "transmitting unit" of claim 1.

e) Limitation 1[d]: Panic Button

Limitation 1[d] recites "a panic button, adapted to, when activated, ready itself to perform the following panic button functions: (1) dialing a public or private network for an emergency purpose and (2) activating the transmitting unit."

Petitioner contends that DiPerna964 in combination with Strack discloses or suggests this feature. Pet. 13–18 (citing Ex. 1002 ¶¶ 68–91). For example, Petitioner contends, DiPerna964 discloses a mobile phone with an integrated "self-defense mechanism" such as a "panic button." *Id.* at 13 (citing Ex. 1028 ¶ 17). The "panic button" is "adapted to activate . . . the transmitting unit" to send "data and information to the authorities," and "can automatically contact 911 upon a press or series of presses of the button." *Id.* (citing Ex. 1028 ¶¶ 17, 23, 35–36, 41).

Petitioner states that DiPerna964 allows victims or potential victims of violent crime to flexibly respond to emergency situations but recognizes the need to safeguard against falsely triggering the device by holding down the panic button for a predetermined time, by using a button sequence, or by the number of times the button is depressed. Pet. 14–15 (citing *id.* at § VII.A; Ex. 1029 ¶¶ 5, 7, 37, 45; Ex. 1002 ¶ 74).

Petitioner states that DiPerna964 "does not disclose a technique to allow the panic button to merely ready itself to perform a function when the

panic button is pressed or activated," but argues that "a POSITA would have been aware of such techniques by January 2019." Pet. 14–15 (citing Ex. 1002 ¶ 74). Petitioner asserts that, for example, Strack includes a mobile device for responding to potential security events, that executes a mobile application and communicates with a monitoring center via a network. *Id.* at 15 (citing Ex. 1029, 4:7–17, 6:27–33). The mobile application may be programmed to respond to an "arming event" such as the user pressing one or more buttons on the device. *Id.* (citing Ex. 1029, 8:48–63, 9:24–28, claims 1, 2; Ex. 1002 ¶ 76). Petitioner contends that, once armed, the mobile application triggers a "duress timer" and begins recording audio and video data. *Id.* (citing Ex. 1029, 8:64–9:3, 12:45–50). Petitioner states that the user may extend the duress timer or deactivate the timer, indicating that no potential security event exists, in which case the recording is stopped and deleted. *Id.* (citing Ex. 1029, 12:50–13:5; Ex. 1002 ¶ 77–78).

Petitioner contends that, in Strack, if the timer is allowed to expire, however, the mobile application enters an "alarm state." Pet. 15 (citing Ex. 1029, 8:64–9:3, 13:16–21; Ex. 1002 ¶ 79). According to Petitioner, "[i]n the 'alarm state,' the mobile application sends an alert to the monitoring center with event data including GPS data and streaming and/or recorded audio and video data." *Id.* (citing Ex. 1029, 11:34–47, 13:11–29). Petitioner asserts that "[t]he mobile application also initiates a telephone call from the mobile application to the emergency telephone line of the monitoring center." *Id.* at 15–16 (citing Ex. 1029, 11:34–47; Ex. 1002 ¶¶ 80–82).

Patent Owner does not dispute Petitioner's contention.

Petitioner shows sufficiently that the DiPerna964-Strack combination discloses or suggests limitation 1[d] of claim 1.

f) Limitation 1[e]: Pressing Buttons at Substantially the Same Time

Limitation 1[e] recites "wherein the panic button is activated by a depressing of the panic button together with another button at substantially the same initial time such that no panic button function is activated unless both buttons are depressed."

Petitioner contends that DiPerna964 in combination with Strack discloses or suggests this feature. Pet. 18–19 (citing Ex. 1002 ¶¶ 92–94). According to Petitioner, DiPerna964 discloses that "[t]he panic button may be activated by . . . a depressing of the panic button together with another button." *Id.* (citing Ex. 1028 ¶¶ 24, 41, claim 9).

Patent Owner does not dispute Petitioner's contention.

Petitioner shows sufficiently that the DiPerna964-Strack combination discloses or suggests limitation 1[e] of claim 1.

g) Conclusion for Claim 1

Petitioner has demonstrated a reasonable likelihood that a POSITA would have been motivated to combine DiPerna964 with Strack with a reasonable expectation of success, and that each limitation of claim 1 is disclosed or at least suggested by the combination of DiPerna964 and Strack. Accordingly, Petitioner has demonstrated a reasonable likelihood that claim 1 is unpatentable as obvious over the combination of DiPerna964 and Strack notwithstanding Patent Owner's arguments.

5. Claim 2

Claim 2 depends from claim 1 and recites "wherein the specific information includes a time and date stamp."

Petitioner contends that the DiPerna964-Strack combination discloses or suggests this feature. Pet. 19 (citing Ex. 1002 ¶¶ 95–96). Petitioner asserts that DiPerna964 discloses "wherein the specific information includes a time and date stamp." *Id.* (citing Ex. 1028 ¶¶ 17, 28, claim 17).

Patent Owner does not dispute Petitioner's contention.

Petitioner demonstrates a reasonable likelihood that claim 2 would have been obvious over the DiPerna964-Strack combination.

6. Claim 3

Claim 3 depends from claim 1 and recites "wherein the specific information includes a pre-recorded personal warning message if the panic button is activated during a predetermined time period."

Petitioner contends that the DiPerna964-Strack combination discloses or suggests this feature. Pet. 19 (citing Ex. 1002 ¶¶ 97–99). Petitioner asserts that DiPerna964 discloses that the user may "pre-record a personal warning message which is transmitted to the emergency personnel in the event of an attack during a specific time period." *Id.* (citing Ex. 1002 ¶ 44, claim 18).

Patent Owner does not dispute Petitioner's contentions.

Petitioner demonstrates a reasonable likelihood that claim 3 would have been obvious over the DiPerna964-Strack combination.

7. Claim 4

Claim 4 depends from claim 1 and recites "wherein the panic button is silent."

Petitioner contends that the DiPerna964-Strack combination discloses or suggests this feature. Pet. 20 (citing Ex. 1002 ¶¶ 100–102). Petitioner asserts that "*DiPerna964* discloses the panic button may be silent to alert authorities while keeping the alert secret from an attacker." *Id.* (citing Ex. 1028 ¶¶ 28, 37, 42; Ex. 1002 ¶¶ 101–102).

Patent Owner does not dispute Petitioner's contentions.

Petitioner demonstrates a reasonable likelihood that claim 4 would have been obvious over the DiPerna964-Strack combination.

8. Claim 5

Claim 5 depends from claim 1 and recites "wherein the panic button activates an audible warning message, wherein the audible warning message includes words."

Petitioner contends that the DiPerna964-Strack combination discloses or suggests this feature. Pet. 20 (citing Ex. 1002 ¶¶ 103–106). Petitioner asserts that "*DiPerna964* discloses the panic button 'activat[ing] an audible warning message.'" *Id.* (citing Ex. 1028 ¶ 28). Specifically, Petitioner states that "*DiPerna964* discloses the mobile phone/device broadcasts a warning message via its speaker to announce '911 has been notified and you[r] picture has been taken!'" *Id.* (citing Ex. 1028 ¶ 42).

Patent Owner does not dispute Petitioner's contentions.

Petitioner demonstrates a reasonable likelihood that claim 5 would have been obvious over the DiPerna964-Strack combination.

9. Claim 6

Claim 6 depends from claim 1 and recites "wherein the panic button activates an audible alarm."

Petitioner contends that the DiPerna964-Strack combination discloses or suggests this feature. Pet. 21 (citing Ex. 1002 ¶¶ 107–110). Petitioner asserts that "*DiPerna964* discloses that a victim can alert the authorities and 'may advertise that fact to the attacker (e.g. through pressing a panic button which is also an alarm).'" *Id.* (citing Ex. 1028 ¶ 37). Petitioner states that "*DiPerna964* further discloses that 'one or more features of the present invention (e.g. picture/audio and location information transmitted, mace activated, ***warning sounds***)' may 'occur at once.'" *Id.* (citing Ex. 1028 ¶ 43).

Patent Owner does not dispute Petitioner's contentions.

Petitioner demonstrates a reasonable likelihood that claim 6 would have been obvious over the DiPerna964-Strack combination.

10. Claim 7

Claim 7 depends from claim 1 and further recites "a safety switch that, upon being moved into position, readies the panic button to contact the public or private network for emergency purposes when the panic button is activated."

Petitioner contends that the DiPerna964-Strack combination discloses or suggests this feature. Pet. 21–22 (citing Ex. 1002 ¶¶ 111–114). Petitioner asserts that "*DiPerna964* discloses the mobile phone/device contains a safety switch that 'upon being moved into position, readies the panic button to contact 911 upon being pressed.'" *Id.* (citing Ex. 1028 ¶ 41). Petitioner states that "*DiPerna964* further discloses the mobile phone/device is linked to 911 as an 'emergency assistance number' to 'work with the public authorities in assisting victims.'" *Id.* (citing Ex. 1028 ¶ 36).

Patent Owner does not dispute Petitioner's contentions.

Petitioner demonstrates a reasonable likelihood that claim 7 would have been obvious over the DiPerna964-Strack combination.

11. Claim 8

Claim 8 depends from claim 1 and recites "wherein the owner identification information includes a name and a description of the owner of the mobile device."

Petitioner contends that the DiPerna964-Strack combination discloses or suggests this feature. Pet. 22 (citing Ex. 1002 ¶¶ 115–119). Petitioner asserts that "*DiPerna964* discloses transmitting specific information including owner identification information" and that the "specific information includes 'the name and description of the owner of the self-defense device.'" *Id.* (citing *id.* § VII.B.1.d; Ex. 1028 ¶¶ 17, 35). Petitioner argues that a "POSITA would have understood that the name and description of the owner of the self-defense device is the same as that of the mobile device because *DiPerna964* discloses that 'the present invention provides a self-defense device which is integrated with a mobile phone/device.'" *Id.* (citing Ex. 1028 ¶ 16).

Patent Owner does not dispute Petitioner's contentions.

Petitioner demonstrates a reasonable likelihood that claim 8 would have been obvious over the DiPerna964-Strack combination.

IV. CONCLUSION

In light of the foregoing, based on the current record and at this stage of the proceeding, we are persuaded that Petitioner has demonstrated a reasonable likelihood of prevailing on its assertions that at least one of claims 1–8 of the '404 patent would have been obvious under 35 U.S.C. § 103 based on the ground set forth in the Petition. Accordingly, we

institute trial for all challenged claims on all grounds asserted by Petitioner. *See SAS Institute Inc. v. Iancu*, 138 S. Ct. 1348 (2018).

Our factual findings, conclusions of law, and determinations at this stage of the proceeding are preliminary, and based on the evidentiary record developed thus far. At this stage of the proceeding, we have not made a final determination with respect to the patentability of the challenged claims or to the construction of any claim term.

V. ORDER

For the foregoing reasons, it is

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review of claims 1–8 of the '404 patent is hereby instituted on all challenges to patentability set forth in the Petition; and

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

For PETITIONER:

Ali R. Sharifahmadian
Patrick C. Reidy
ARNOLD & PORTER KAYE SCHOLER LLP
ali.sharifahmadian@arnoldporter.com
patrick.reidy@arnoldporter.com
xSamsungFendgoAP@arnoldporter.com

For PATENT OWNER:

James R. Nuttall
Katherine H. Tellez
Katherine D. Cappaert
STEPTOE LLP
jnuttall@steptoe.com
SJFendgoSamsung@Steptoe.com