

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

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

v.

MULLEN INDUSTRIES LLC,
Patent Owner.

IPR2024-01472
Patent 11,190,633 B2

Before MIRIAM L. QUINN, JEFFREY S. SMITH and
BARBARA A. PARVIS, *Administrative Patent Judges*.

SMITH, *Administrative Patent Judge*.

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

I. INTRODUCTION

Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc. (“Petitioner”) filed a Petition to institute an *inter partes* review of claims 1–39 of U.S. Patent No. 11,190,633 B2 (“the ’633 patent,” Ex. 1001). Paper 3 (“Pet.”). Mullen Industries LLC (“Patent Owner”) filed a Preliminary Response. Paper 7 (“Prelim. Resp.”).

Institution of an *inter partes* review is authorized by statute when “the information presented in the petition . . . and any 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.” 35 U.S.C. § 314; *see* 37 C.F.R. § 42.4. Upon consideration of the Petition, the Preliminary Response, and the evidence of record, we determine that Petitioner has established a reasonable likelihood of prevailing with respect to the unpatentability of claims 1–39 of the ’633 patent. Accordingly, we grant the Petition and institute an *inter partes* review.

A. Related Proceedings

The parties state that the ’633 patent is the subject of civil action in the United States District Court for the Eastern District of Texas (Case. No. 2:24-cv-49) (“parallel district court litigation”). Pet. 1; Paper 4, 1. The ’633 patent was also the subject of IPR2022-01389, which was terminated after institution due to settlement. Pet. 1.

B. The ’633 patent

The ’633 patent “relates to cellular notifications.” Ex. 1001, 1:18.¹ According to the ’633 patent, “[t]raditional incoming call notification

¹ Unless otherwise noted, citations are to the original pagination of each exhibit, and not the pagination added by the parties.

devices for cellular phones are deficient because they exist physically on the cellular phone.” *Id.* at 1:18–22. The ’633 patent explains that “mobile phones, and devices capable of receiving wirelessly transmitted calls, generally have two schemes of notifying a user of incoming calls” when the phone is stored (for example, in a user’s purse): a sound or a tactile signal. *Id.* at 1:23–29. The ’633 patent states that these notification methods originate physically from the cell phone and may not be observed by a user. *Id.* at 1:30–38.

Fig. 1 of the '633 patent, shown below, illustrates a non-wireless remote cell phone notification device and cell phone. *Id.* at 2:56–58.

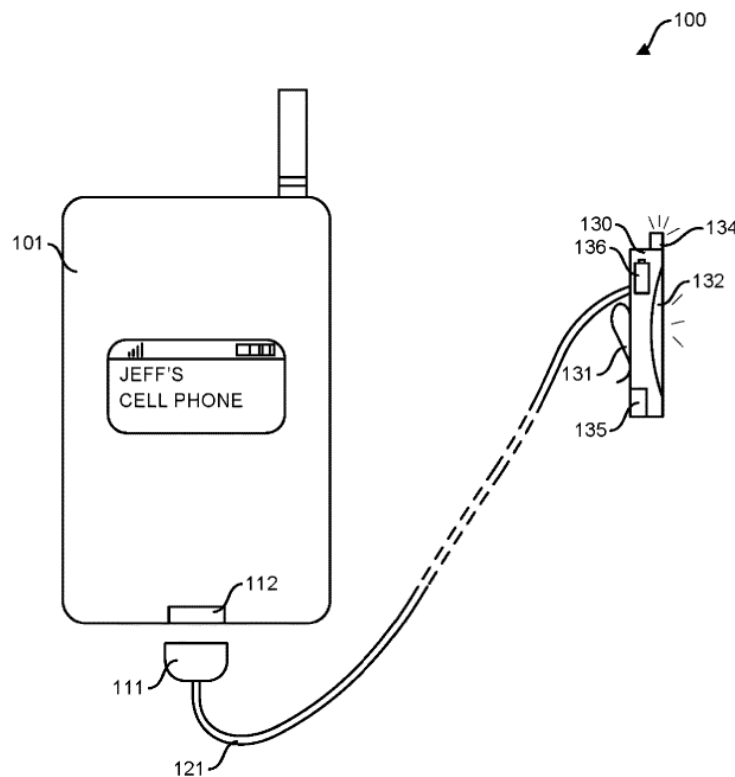


FIG. 1

Cell phone 101 includes communication device 112 and remote notification device 130 includes communication device 111. *Id.* at 3:9–11. The '633 patent describes remote notification device 130 as responding to signals

from communication device 112 and alerting “a user of a cell phone activity or event,” such as “when cell phone 101 receives an incoming call, a calendar notification occurs, a reminder occurs, a missed call occurs, a new voice or text message is received, or any other cell phone activity.” *Id.* at 3:11–18.

The '633 patent states that “[c]ommunication devices 112 may be, for example, the headset (e.g. headphone) output, input/output connection, speaker, or vibrational output of cell phone 101,” “communication device 112 may be the speaker or vibration device of cellular phone 101,” and “communications device 111 may detect the audible signals or vibrations that emanate from cell phone 101.” *Id.* at 3:19–21, 3:31–34. Further, remote notification device 130 can receive communication signals from cell phone 101 and “send communication signals to cell phone 101 (e.g. a signal to pick up the phone, voice signals to talk via cell phone 101).” *Id.* at 3:34–41.

Fig. 2 of the '633 patent, shown below, depicts a wireless remote cell phone notification device and cell phone. *Id.* at 2:59–61.

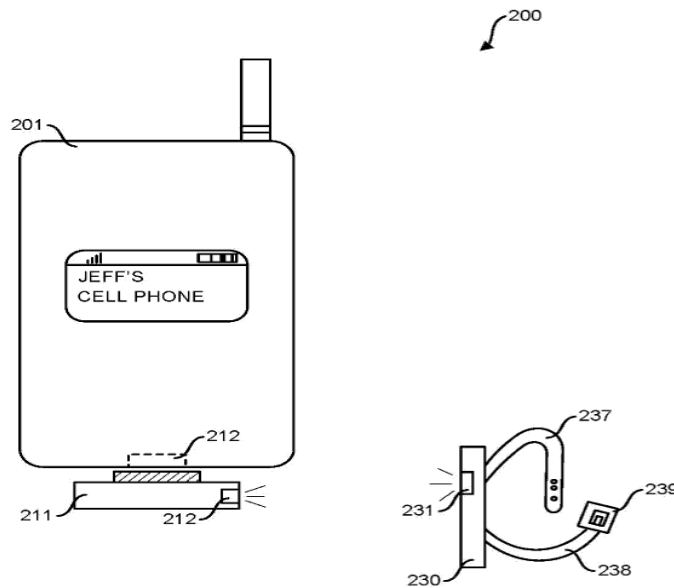


FIG. 2

The '633 patent explains that “[r]emote notification device 230 includes wireless communications device 231 that can communicate with a wireless communications device located on cell phone 201.” *Id.* at 3:62–65.

Communications device 211 may be connected to cell phone 201 and used “to transmit/receive signals wirelessly to/from remote notification device 230 through communications port 212.” *Id.* at 3:65–4:2. According to the '633 patent, “[r]emote notification device 230 may be embedded into a device that is commonly used by users (e.g., a watch, glasses, clothing) and may attach to a user by a variety of devices (e.g., bands 237 and buckle 239).” *Id.* at 4:13–16.

C. Challenged Claims

Petitioner challenges claims 1–39 (“the challenged claims”) of the '633 patent. Claim 1 is illustrative of the challenged claims and is reproduced below.

1. A watch for use with a mobile telephonic device that provides notification of an incoming call, said watch comprising:

a watch band;

a second watch band;

a buckle, wherein said buckle is coupled to said second watch band; and

a device operable to receive first wireless communication signals associated with a first event and second wireless communication signals associated with a second event from said mobile telephonic device, wherein said first event and second event are different, said device includes a battery, said device includes motion sensing operable to distinguish between a plurality of different types of motion, said device is operable to provide first user-perceivable notification signals that are dependent upon said received first communication signals, and said device is operable to provide second user perceivable notification signals that are dependent upon said second communication signals.

Id. at 6:48–67.

D. The Asserted Grounds of Unpatentability

Petitioner challenges the patentability of claims 1–39 on the following grounds:

Reference(s)	Basis	Challenged Claims
Narayanaswami, ² Kita 514, ³	§ 103	1–18, 22, 27, 29, 35
Narayanaswami, Kita 514, Kita 039 ⁴	§ 103	20, 23–26, 31, 36–39
Narayanaswami, Kita 514, Kita 039, Cannon ⁵	§ 103	12, 13, 15–17, 19–21, 28–34

² US Patent No. 6,477,117 B1, issued Nov. 5, 2002 (Ex. 1005).

³ US Patent Pub. No. 2001/0043514 A1 filed May 15, 2001 (Ex. 1007).

⁴ Certified translation (Ex. 1008) of JP 2002/12039 (Ex. 1009).

⁵ US Patent Pub. No. 2002/0137552 A1, filed Mar. 20, 2001 (Ex. 1010).

Reference(s)	Basis	Challenged Claims
Fujisawa, ⁶ Kita 514	§ 103	1–10, 13, 16, 18, 19, 22–27, 32, 35–39
Fujisawa, Kita 514, Cannon	§ 103	11, 12, 14, 15, 17, 19–21, 28–34

Petitioner relies on the Declaration of Dr. Brian W. Anthony (Ex. 1002) in support of its contentions.

II. ANALYSIS

A. Discretionary Denial under 35 U.S.C. § 314(a)

Under 35 U.S.C. § 314(a), institution of *inter partes* review is discretionary. *See Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1367 (Fed. Cir. 2016); *see also* 35 U.S.C. § 314(a). In *Amazon Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (PTAB Mar. 20, 2020) (precedential), the Board set forth six non-exclusive factors for determining “whether efficiency, fairness, and the merits support the exercise of authority to deny institution in view of an earlier trial date in the parallel proceeding.” *Id.* at 6. These factors are as follows:

1. whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted;
2. proximity of the court’s trial date to the Board’s projected statutory deadline for a final written decision;
3. investment in the parallel proceeding by the court and the parties;
4. overlap between issues raised in the petition and in the parallel proceeding;
5. whether the petitioner and the defendant in the parallel proceeding are the same party; and

⁶ US Patent Pub. No. 2002/0115478 A1 filed June 21, 2001 (Ex. 1006).

6. other circumstances that impact the Board’s exercise of discretion, including the merits.

Id. at 5–6. In evaluating these factors, we take a holistic view of whether efficiency and integrity of the system are best served by denying or instituting review. *Id.* at 6.

1. Whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted

Patent Owner contends that “the evidence points to a stay not being entered in the district court litigation pre- or post-institution” because “Judge Gilstrap has already denied Samsung’s request for a stay of the parallel district court case pre-institution” and “has ordered that Samsung may not refile any request for a district court stay until *after* ‘the PTAB’s institution decision on the last of the pending IPRs.’”⁷ Prelim. Resp. 18.

Given that the district court denied Samsung’s motion to stay “without prejudice to refile of the same within fourteen (14) days following the PTAB’s institution decision on the last of the pending IPRs” (Ex. 2008, 3), we decline to speculate whether the district court will grant a stay. Thus, we find that factor 1 is neutral.

2. Proximity of the court’s trial date to the Board’s projected statutory deadline for a final written decision

Patent Owner contends that the “district court trial is set for November 3, 2025, which is five to six months before the earliest expected date of a FWD (late April 2026) in this Petition.” Prelim. Resp. 21.

⁷ From September 30, 2024 through December 30, 2024, Petitioner filed or co-filed with Google LLC eleven *inter partes* review petitions challenging all claims of the patents asserted in the parallel district court litigation. See Ex. 2008, 2 n.2.

Petitioner contends that a “motion is pending to transfer the district-court proceeding to the Northern District of California (Ex-1064, Dkt. 37).” Pet. 81.

We highlight that during parallel district court litigation in IPR2022-01389, which also involved the ’633 patent, the case was transferred to the Northern District of California. IPR2022-01389, Ex. 3001. Given the pending motion to transfer to the Northern District of California in the parallel district court litigation to this case, along with a record of transferring the litigation to the Northern District of California in the previous case, we find that the trial date is uncertain and speculative at this stage. Thus, we find that factor 2 is neutral.

*3. Investment in the parallel proceeding
by the court and the parties*

Patent Owner contends that the parties “have prepared and exchanged infringement and validity contentions, presented initial disclosures,” have begun claim construction discovery and fact discovery, and will brief claim construction by the time the Board decides whether to institute. Prelim. Resp. 23. Patent Owner contends that “Petitioner waited over eight months after the district court complaint was filed to submit [the Petition].” *Id.* at 24.

Petitioner contends that the “parties have invested little in invalidity-related issues, the scheduled *Markman* hearing is over seven months away (Ex-1066, 3), and ‘a significant portion of work remains to be done in the district court proceeding—e.g., the completion of fact and expert discovery and dispositive motions.’” Pet. 82. Petitioner contends that “Petitioner filed this Petition less than five months after receiving Mullen’s infringement contentions and four months before any statutory bar.” *Id.*

We agree with Petitioner that much work remains in the district court case as it relates to invalidity because discovery is in its early stages and a *Markman* hearing has not yet occurred. We also agree with Petitioner, that Petitioner’s diligence in filing its Petition (a) less than five months after receiving Patent Owner’s infringement contentions and (b) prior to the parties briefing claim construction issues weighs against exercising discretionary denial.

*4. Overlap between issues raised
in the petition and in the parallel proceeding*

Patent Owner contends that “Petitioner challenges the *same* claims in its Petition . . . that it does in its invalidity contentions at the district court” and “relies on the same principal references in the Petition as it does in the parallel district court litigation.” Prelim. Resp. 25.

Petitioner “stipulates that, if the [PTAB] . . . institutes this IPR petition on the grounds presented therein, then Samsung will not pursue in the [parallel district court] litigation any grounds that were raised or reasonably could have been raised in the IPR.” Ex. 1069 (“*Sotera*” stipulation).

We find that Petitioner’s stipulation mitigates the concerns of overlap and weighs against exercising discretionary denial.

*5. Whether the petitioner and the defendant
in the parallel proceeding are the same party*

Patent Owner contends that the parties to this proceeding are the same parties in the parallel district court litigation. Prelim. Resp. 25. This factor weighs in favor of exercising discretion.

*6. Other circumstances that impact the
Board's exercise of discretion, including the merits*

Patent Owner contends that “the Petition (i) strategically chose not to address known disputes over the claim terms’ meaning and (ii) misreads both the claims and the cited references, which demonstrates the weakness of the Petition.” Prelim. Resp. 26-27.

We disagree. The issues raised by Petitioner are similar, if not identical, to those raised in IPR2022-01389, in which we instituted. Further, as discussed in detail below, at this stage of the proceeding, we find that Petitioner has shown that at least some claims of the ’633 patent recite well-known and obvious features of a watch for use with a mobile telephonic device that provides notification of an incoming call. This factor weighs against exercising discretionary denial.

7. Conclusion

Having weighed the factors above, including the relative timing of the proceedings, the amount of effort that has been and is yet to be expended in the parallel district court litigation, Petitioner’s *Sotera* stipulation, and the relative merits of Petitioner’s challenges, we find that, taken as a whole, the factors do not favor exercising discretion to deny institution. In consideration of the above, we decline to exercise discretion to deny institution.

B. Level of Ordinary Skill in the Art

Petitioner argues that a person of ordinary skill in the art at the time of the ’633 patent

would have had at least a Bachelor of Science degree in computer science, computer engineering, electrical engineering, electro-mechanical engineering, design or machine design, or a similar degree with one or two years of experience with operating

system, user interface software, and application software in mobile devices, such as cell phones, personal digital assistants, and smart watches. A higher level of education or skill might make up for less experience, and vice versa.

Pet. 7 (citing Ex. 1002 ¶¶ 25–29). Patent Owner does not challenge Petitioner’s definition of a person of ordinary skill in the art. Prelim. Resp. 14.

Petitioner’s description of a person of ordinary skill appears commensurate with the subject matter before us. For purposes of this Decision, we apply Petitioner’s statement as our definition of a person of ordinary skill in the art.

C. Claim Interpretation

We apply the same claim construction standard applied in civil actions under 35 U.S.C. § 282(b), which is articulated in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005). 37 C.F.R. § 42.100(b); *see also Changes to the Claim Construction Standard for Interpreting Claims in Trial Proceedings Before the Patent Trial and Appeal Board*, 83 Fed. Reg. 51,340 (Oct. 11, 2018) (applicable to *inter partes* reviews filed on or after November 13, 2018). Under *Phillips*, claim terms are afforded “their ordinary and customary meaning.” *Phillips*, 415 F.3d at 1312. “[T]he ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.” *Id.* at 1313.

Petitioner does not believe that any term requires express construction to resolve the issues in the Petition. Pet. 8. In contrast, Patent Owner contends that the claim term “said first event and said second event,” and the claim term “said device includes motion sensing operable to distinguish

between a plurality of different types of motion” require express construction. Prelim. Resp. 5–14.

We do not need to resolve this dispute, because even under Patent Owner’s narrower constructions, Petitioner has shown a reasonable likelihood of success that at least one claim is unpatentable, as discussed below. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (“[W]e need only construe terms ‘that are in controversy, and only to the extent necessary to resolve the controversy.’”).

D. Ground 1 — Obvious Over Narayanaswami and Kita 514

Petitioner contends that claims 1–18, 22, 27, 29, and 35 would have been obvious over the combination of Narayanaswami and Kita 514. Pet. 18–45.

1. Narayanaswami

Narayanaswami:

relates generally to mobile computing devices such as personal digital assistants (PDAs), cellular phones, pagers, and the like, and more specifically, to a wearable device/appliance (a wrist watch) capable of wirelessly accessing information and equipped with an interactive user interface that is used to efficiently interact with alarms and notifications on the watch.

Ex. 1005, 1:5–11.

Fig. 1 of Narayanaswami, shown below, illustrates a wearable information access wrist watch device. *Id.* at 2:62–63.

support for various devices such as GPS/compass, thermometer, barometer, altimeter, etc.” *Id.* at 3:47–50.

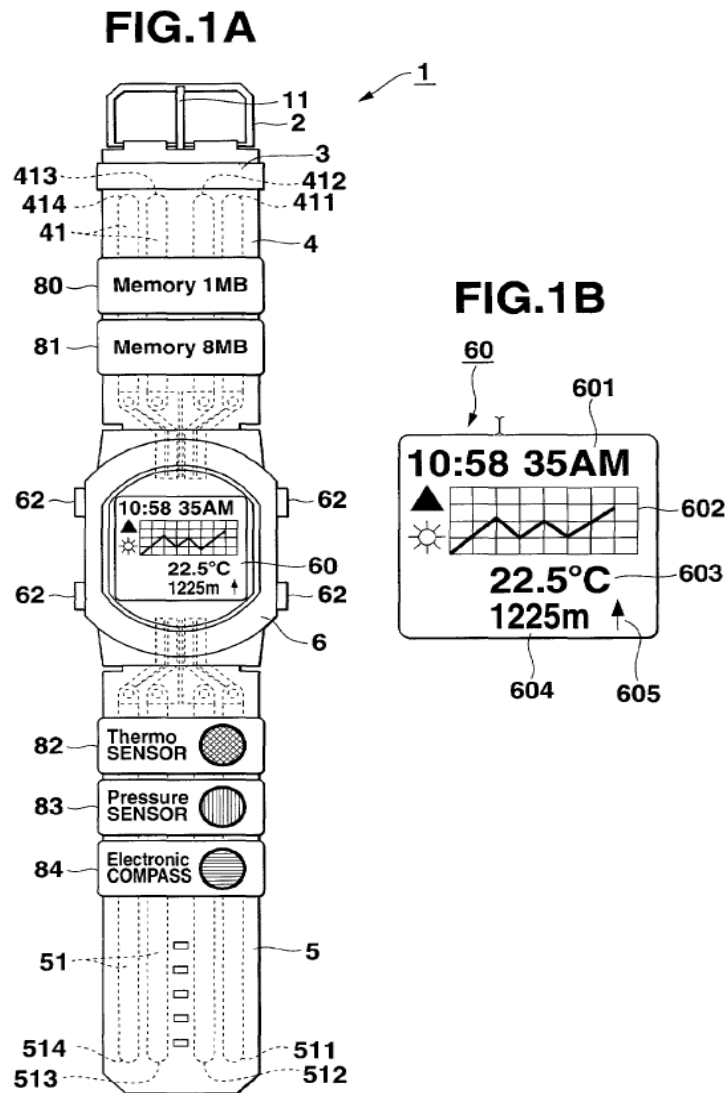
Narayanaswami further describes synchronizing data between the wrist watch device and other devices. *Id.* at 7:3–5. For instance, the wrist watch can receive data and operate with an application to decode the data and update data for the application, such as to provide an update for a calendar event. *Id.* at 7:5–9. Narayanaswami describes displaying caller ID information on the wrist watch’s display when a cell phone rings. *Id.* at 8:3–5. Further, an alarm may come from another source, such as a user’s PC that maintains a list of appointments, so that “the watch may subsequently activate the alarm at the programmed time.” *Id.* at 9:29–30.

Narayanaswami also describes an embodiment in which “sensors may be attached to the Wrist Watch device over an interface,” such as “additional tilt and motion (velocity, direction, speed) sensors, environment sensors such as thermal sensors, pressure sensors, health monitoring sensors such as blood pressure, etc.” *Id.* at 6:15–21.

2. Kita 514

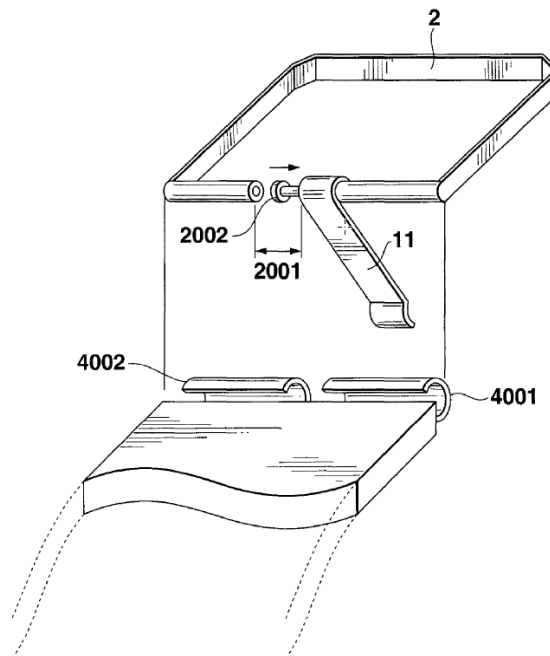
Kita 514 relates “to an information processing terminal device which is wearable on the body of and operable by a user.” Ex. 1007 ¶ 3.

Figure 1A of Kita 514 is a diagram illustrating an external appearance of a wrist watch, and Figure 1B is an enlarged view of a display section. Ex. 1007 ¶¶ 16–17. Figures 1A and 1B are reproduced below.



As shown in Figure 1A, wrist watch 1 comprises body case 6 and a pair of wrist bands 4 and 5 which are attached to opposing ends of body case 6 to securely fasten wrist watch 1 to a wrist. Ex. 1007 ¶ 109. Figure 2 of Kita 514 shows how a buckle member and a center fastening pin are attached in the wrist watch and is reproduced below.

FIG.2



As shown in Figure 2, wrist band 4 is removably joined to buckle member 2 through hole 4001 and notch 4002. Ex. 1007 ¶ 110. Center fastening pin 11 is inserted from space 2001 of buckle member 2 and is pivotably fixed to buckle member 2 by pin 2002. *Id.* at ¶ 111. As shown in Figure 1A, band fastening loop member 3, buckle member 2, and center fastening pin 11 are attached to an end of wrist band 4. *Id.* at ¶ 120.

3. Reason to Combine Narayanaswami and Kita 514

Petitioner contends that Narayanaswami discloses a smart watch capable of receiving information via a wireless mechanism. Pet. 18 (citing Ex. 1005, 3:28–33, 7:38–56, 8:3–5). Petitioner contends that Kita 514 discloses a wrist watch that has two bands, a buckle, and is capable of receiving information via wireless communication. *Id.* at 19 (citing Ex. 1007 ¶¶ 109–110, 184, Figs. 1A, 1B, 2, 18). Petitioner contends that adding the two bands extending from a watch with a buckle to connect the bands as

taught by Kita 514 to the watch of Narayanaswami yields the benefit of providing a watch with a user-adjustable band for different sized wrists. *Id.* at 19–21 (citing Ex. 1002 ¶ 88). We are sufficiently persuaded that Petitioner has shown a reason to use the wrist bands and buckle of Kita 514 with the wrist watch of Narayanaswami.

4. Independent Claim 1

Preamble

The preamble of claim 1 recites a “watch for use with a mobile telephonic device that provides notification of an incoming call.” Petitioner contends that Narayanaswami discloses the preamble in describing that “caller [identification] information may be displayed on the Wrist Watch display when the cell phone that belongs to that person rings.” Pet. 24 (quoting Ex. 1005, 8:3–5). Based on the evidence and arguments currently of record, for purposes of institution, we find that Petitioner has demonstrated that Narayanaswami teaches the features recited in the preamble of claim 1⁸.

Bands and buckle

Claim 1 recites “a watch band; a second watch band; a buckle, wherein said buckle is coupled to said second watch band.” Petitioner contends that the combination of Narayanaswami and Kita 514 teaches a smart watch with two bands and a buckle. Pet. 24–27 (citing Ex. 1005, Fig. 1; Ex. 1007 ¶¶ 109–110, 120, 183, Figs. 1A, 1B, 2, 18). Based on the evidence and arguments currently of record, for purposes of institution, we

⁸ We need not resolve whether the preamble is limiting at this stage because Petitioner shows sufficiently for purposes of institution that the prior art satisfies the recitation in the preamble.

find that Petitioner has demonstrated that the combination of Narayanaswami and Kita 514 teaches this limitation of claim 1.

First and second events

Claim 1 recites “a device operable to receive first wireless communication signals associated with a first event.” Petitioner contends that Narayanaswami discloses the claimed first event in describing that the watch wirelessly receives caller ID information from a cell phone when the cell phone rings. Pet. 27–28 (citing Ex. 1005, 4:60–5:1, 6:53–55, 8:3–5).

Claim 1 recites “a device operable to receive . . . second wireless communication signals associated with a second event from said mobile telephonic device.” Petitioner contends that Narayanaswami discloses the claimed second event in teaching that the watch wirelessly receives an alarm for an appointment in a calendar application from a cell phone. Pet. 28–29 (citing Ex. 1005, 9:23–31). Petitioner contends that although Narayanaswami discloses receiving the alarm from a computer, Narayanaswami also discloses that the watch can execute and update a calendar application with other devices, such as a cell phone having a calendar application. *Id.* at 29 (citing Ex. 1005, 7:3–9). Petitioner, relying on the testimony of Dr. Anthony, contends that a person of ordinary skill in the art would have caused the watch receive the calendar alarm from a cell phone given that Narayanaswami teaches that the watch synchronizes with other devices, such as a cell phone with a calendar application. *Id.* (citing Ex. 1002 ¶¶ 104–105). Dr. Anthony testifies that watches for receiving wireless communication signals from cell phones regarding incoming calls and calendar notifications were known in 2003. Ex. 1002 ¶¶ 104–105 (citing Ex. 1034, 1; Ex. 1035, 1–2; Ex. 1036, 12; Ex. 1024, 33; Ex. 1025, 1;

Ex. 1029, 10; Ex. 1030, 22, 24; Ex. 1026, 1, 13; Ex. 1053, 501; Ex. 1046 ¶¶ 8, 37; Ex. 1043, Abstract; Ex. 1048, ¶¶ 1, 3–6, 20).

Claim 1 recites “wherein said first event and second event are different.” Petitioner contends that the call event and the calendar event are different events. Pet. 28–29.

Patent Owner contends that Narayanaswami discloses receiving the calendar event from a personal computer, not from a cell phone. Prelim. Resp. 29. Patent Owner contends that Narayanaswami clearly and deliberately states that the watch is intended to provide desktop PC-like functions which originate from a PC. *Id.* at 30 (citing Ex. 1005, 1:66–2:3, 2:12–16). Patent Owner contends that although Narayanaswami discloses that the watch synchronizes with other devices, Petitioner has not shown that the other devices would have included a cell phone having a calendar capability. *Id.* at 31. Patent Owner contends that the only mention of a device having a calendar capability in Narayanaswami is a PC. *Id.* (citing Ex. 1005, 9:25–26).

At this stage, we disagree with Patent Owner. Narayanaswami discloses a synchronization manager that “synchronize[s] data between the Wrist Watch and the other devices,” and “update[s] the data for the application receiving the data,” where “[a]n example of this would be an update to a calendar event.” Ex. 1005, 7:3–9. Narayanaswami discloses that “the other devices” described in Column 7 include cell phones. *Id.* at 1:5–11, 3:44–45, 4:53–58, 8:3–5. Further, Dr. Anthony’s testimony that a wrist watch that wirelessly receives calendar notifications from a cell phone was known to people of ordinary skill in the art at the time of invention is supported by multiple documents showing wrist watches wirelessly

receiving calendar notifications from cell phones at the time of invention. Ex. 1002 ¶¶ 104–105 (citing Ex. 1034, 1; Ex. 1035, 1–2; Ex. 1036, 12; Ex. 1024, 33; Ex. 1025, 1; Ex. 1029, 10; Ex. 1030, 22, 24; Ex. 1026, 1, 13; Ex. 1053, 501; Ex. 1046 ¶¶ 8, 37; Ex. 1043, Abstract; Ex. 1048, ¶¶ 1, 3–6, 20). We are sufficiently persuaded that Narayanaswami teaches a wrist watch that synchronizes data with a cell phone having a calendar application by receiving an update to a calendar event from the cell phone. Based on the evidence and arguments currently of record, for purposes of institution, we find that Petitioner has demonstrated that Narayanaswami teaches this limitation of claim 1.

Battery

Claim 1 recites “said device includes a battery.” Petitioner contends that Narayanaswami discloses this limitation in describing a battery. Pet. 31 (citing Ex. 1005, Fig. 1). Based on the evidence and arguments currently of record, for purposes of institution, we find that Petitioner has demonstrated that Narayanaswami teaches this limitation of claim 1.

Motion sensing

Claim 1 recites “said device includes motion sensing operable to distinguish between a plurality of different types of motion.” Petitioner contends that Narayanaswami discloses this limitation in describing a shell supporting devices such as an altimeter and a GPS integral with the watch, and in describing additional sensors such as tilt and motion sensors that may be attached to the watch over an interface. Pet. 30–32 (citing Ex. 1005, 3:40–50, 6:15–19; Ex. 1001, 5:13–15). Petitioner contends that Kita 514 discloses this limitation in describing a wrist watch that provides sensor functions such as an accelerometer, barometer for detecting altitude and

depth, direction sensor, positioning meter, and speed meter. *Id.* at 32–34 (citing Ex. 1007, Figs. 1A, 1B, 53, ¶ 148).

Patent Owner contends that the watches of Narayanaswami and Kita 514 receive motion sensing data from external sensors, but do not “include motion sensing” as claimed. Prelim. Resp. 33. At this stage, we disagree. On this record, Figure 1 of Narayanaswami appears to show the GPS and altimeter in shell 25c as part of the watch. Ex. 1005, Fig. 1, 4:40–50. Similarly, Figure 1A of Kita 514 shows sensors as part of the watch.

Patent Owner contends that the sensors of Narayanaswami and Kita 514 are not control circuitry as required by claim 1. Prelim. Resp. 33. However, claim 1 does not recite “control circuitry” and we find no basis for reading “control circuitry” into claim 1. The Federal Circuit has held that “it is improper to read limitations from a preferred embodiment described in the specification – even if it is the only embodiment – into the claims absent a clear indication in the intrinsic record that the patentee intended the claims to be so limited.” *Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1327 (Fed. Cir. 2012); *Phillips*, 415 F.3d at 1323 (internal quotations omitted) (“[C]laims may embrace different subject matter than is illustrated in the specific embodiments in the specification.”).

Patent Owner has not shown “a clear indication in the intrinsic record that the patentee intended the claims to be so limited” to the disclosed control circuitry. *Dealertrack*, 674 F.3d at 1327. To the contrary, the Specification of the ’633 patent discloses that “[c]ontrol circuitry to determine when a cellular phone vibration occurs *may be* included.” Ex. 1001, 5:16 –17. The Specification, in using the phrase “may be,” does not require performing the claimed “motion sensing” with only the disclosed

control circuitry. Further, the Specification discloses that “the present invention is not limited to only the embodiments described,” that “[p]ersons skilled in the art will also appreciate that the apparatus of the present invention may be implemented using other control methods, notification techniques, attachment components, remote hosting devices (e.g., watch), and configurations,” and that “the scope of the present invention . . . is limited only by the claims.” *Id.* at 6:32–45. On this record, we agree with Petitioner that the scope of “motion sensing” encompasses sensing motion with the sensors of Narayanaswami’s watch and Kita 514’s watch.

Patent Owner contends that “each . . . sensor identified by Petitioner at best merely senses data for one type of motion (e.g., purportedly tilt or GPS), and is not configured to ‘distinguish between a plurality of different types of motion’ as claimed.” Prelim. Resp. 34. However, the claim does not require a single sensor to distinguish between different types of motion. On this record, we are sufficiently persuaded that the scope of “motion sensing” as claimed encompasses multiple sensors that each sense a different type of motion, such as tilt and GPS.

Patent Owner contends that claim 1 requires “distinguishing ambient motion from vibrating motion.” Prelim. Resp. 34–35. We disagree. Claim 1 does not recite distinguishing ambient motion from vibrating motion and we find no basis for reading this term into the claim.

Based on the evidence and arguments currently of record, for purposes of institution, we find that Petitioner has demonstrated that the combination of Narayanaswami and Kita 514 teaches this limitation of claim 1.

First user-perceivable notification signals

Claim 1 recites “said device is operable to provide first user-perceivable notification signals that are dependent upon said received first communication signals.” Petitioner contends that Narayanaswami discloses this limitation in describing “caller ID information . . . displayed on the Wrist Watch display when the cell phone . . . rings.” Pet. 35 (quoting Ex. 1005, 8:3–5). Based on the evidence and arguments currently of record, for purposes of institution, we find that Petitioner has demonstrated that Narayanaswami teaches this limitation of claim 1.

Second user-perceivable notification signals

Claim 1 recites “said device is operable to provide second user-perceivable notification signals that are dependent upon said second communication signals.” Petitioner contends that Narayanaswami discloses this limitation in describing an alarm activated at the watch at the time of a calendar event. Pet. 35–36 (citing Ex. 1005, 9:23–31, Figs. 7B, 7C). Based on the evidence and arguments currently of record, for purposes of institution, we find that Petitioner has demonstrated that Narayanaswami teaches this limitation of claim 1.

Conclusion for claim 1

Based on this preliminary record, Petitioner has demonstrated a reasonable likelihood that claim 1 would have been obvious over the combination of Narayanaswami and Kita 514.

5. Dependent Claims 2–18, 22, 27, 29, and 35

Petitioner has set forth contentions regarding dependent claims 2–18, 22, 27, 29, and 35. Pet. 36–45. Patent Owner does not set forth additional arguments for these dependent claims at this stage. We find Petitioner’s

contentions sufficiently persuasive for purposes of institution that claims 2–18, 22, 27, 29, and 35 would have been obvious over the combination of Narayanaswami and Kita 514.

E. Ground 2—Obvious Over Narayanaswami, Kita 514, and Kita 039

Petitioner contends that claims 20, 23–26, 31, 36–39 would have been obvious over the combination of Narayanaswami, Kita 514, and Kita 039. Pet. 45–52.

1. Kita 039

Kita 039 teaches a parent terminal, such as a mobile phone, having a wireless connection with a child terminal, such as a wrist watch. Ex. 1008 ¶¶ 32–33. A user, while carrying the mobile phone in a pocket and wearing the wrist watch on an arm, can use the wrist watch to answer an incoming call and send voice signals to the mobile phone. Ex. 1008 ¶¶ 61, 80, Fig. 17. Additionally, incoming messages and e-mails can be displayed on the wrist watch. *Id.* at ¶ 67, Fig. 12.

2. Reason to Combine Narayanaswami, Kita 514, and Kita 039

Petitioner contends that the combination of Narayanaswami and Kita 514 does not explicitly teach answering a call using a wrist watch. Pet. 46. Petitioner contends that a person of ordinary skill in the art would have added the ability of answering a call as taught by Kita 039 to the wrist watch taught by the combination of Narayanaswami and Kita 514 for the benefit of enhancing the user’s convenience. Pet. 46 (citing Ex. 1002 ¶¶ 149–150). Dr. Anthony testifies that a person of ordinary skill in the art would have recognized the value of integrating, into a wrist watch, capabilities such as enabling users to make and receive calls in order to yield the benefits of enhancing usability, convenience, and portability. Ex. 1002 ¶ 150. On the

present record, we find sufficient Petitioner’s proffered reason to integrate the capabilities of Kita 039’s wrist watch, such as enabling a user to answer a call, into the wrist watch of Narayanaswami and Kita 514.

3. Dependent Claim 23

Dependent claim 23 depends directly from claim 22 and indirectly from claim 1 (both of which Petitioner addressed in Ground 1) and recites “wherein said wireless communication signals operable to be sent to said mobile telephonic device comprise wireless communication signals to answer an incoming call.” Kita 039 discloses that when a user carries a mobile phone in a pocket and wears a wrist watch on an arm, the user can make and receive calls. Ex. 1008 ¶ 80, Fig. 17; *see id.* at ¶ 61. Patent Owner does not set forth arguments for claim 23 at this stage.

We find Petitioner’s contentions sufficiently persuasive for purposes of institution that claim 23 would have been obvious over the combination of Narayanaswami, Kita 514, and Kita 039.

4. Dependent Claims 20, 24–26, 31, 36–39

Patent Owner does not set forth additional arguments for these dependent claims at this stage. We find Petitioner’s contentions sufficiently persuasive for purposes of institution that claims 20, 24–26, 31, 36–39 would have been obvious over the combination of Narayanaswami, Kita 514, and Kita 039.

F. Ground 3—Obvious Over Narayanaswami, Kita 514, Kita 039, and Cannon

Petitioner contends that claims 12, 13, 15–17, 19–21, 28–34 would have been obvious over the combination of Narayanaswami, Kita 514, Kita 039, and Cannon.

1. Cannon

Cannon discloses an indication unit for a portable wireless device such as a wireless telephone that wirelessly communicates with a digital watch worn by a user. Ex. 1010 ¶¶ 9, 22, Fig. 4. When the user wearing the digital watch is within the vicinity of the wireless telephone, the indication unit sends a signal of a pending message such as a voice message to the digital watch. *Id.* at ¶ 23. The digital watch notifies the user of the pending message using an audible signal, a vibration, or flashing lights, for example. *Id.* at ¶ 34.

2. Reason to Combine Cannon with Narayanaswami, Kita 514, Kita 039

Petitioner contends that although the combination of Narayanaswami, Kita 514, and Kita 039 teaches providing user-perceivable notification signals from a cell phone to a wrist watch, the combination does not explicitly teach that the notification signals are indicative of a voice message. Pet. 53. Petitioner contends that including notification signals indicative of a voice message as taught by Cannon as part of the notification signals taught by the combination of Narayanaswami, Kita 514, and Kita 039 is the combination of familiar elements according to known methods that does no more than yield predictable results. *Id.* at 53–54 (citing Ex. 1002 ¶ 166). Dr. Anthony testifies that integrating Cannon’s voice message notification into the combination would have been a natural extension of existing functionality, providing the benefit of a more comprehensive notification system that aligns with a user’s expectations and needs. Ex. 1002 ¶ 166. We are sufficiently persuaded that Petitioner has shown a reason to integrate Cannon’s voice message notification into the combination.

3. Dependent Claim 19

Claim 19 depends from claim 1 and recites “wherein said first user-perceivable signals are indicative of a voice message.” Petitioner contends that Cannon discloses notifying the user of a voice message using a user-perceivable signal such as an audible signal, a vibration, or flashing lights. Pet. 57 (citing Ex. 1010 ¶¶ 23, 34). Patent Owner does not set forth arguments for claim 19 at this stage.

We find Petitioner’s contentions sufficiently persuasive for purposes of institution that claim 19 would have been obvious over the combination of Narayanaswami, Kita 514, Kita 039, and Cannon.

4. Dependent Claims 12, 13, 15–17, 20–21, 28–34

Patent Owner does not set forth additional arguments for these dependent claims at this stage. We find Petitioner’s contentions sufficiently persuasive for purposes of institution that claims 12, 13, 15–17, 20–21, and 28–34 would have been obvious over the combination of Narayanaswami, Kita 514, Kita 039 and Cannon.

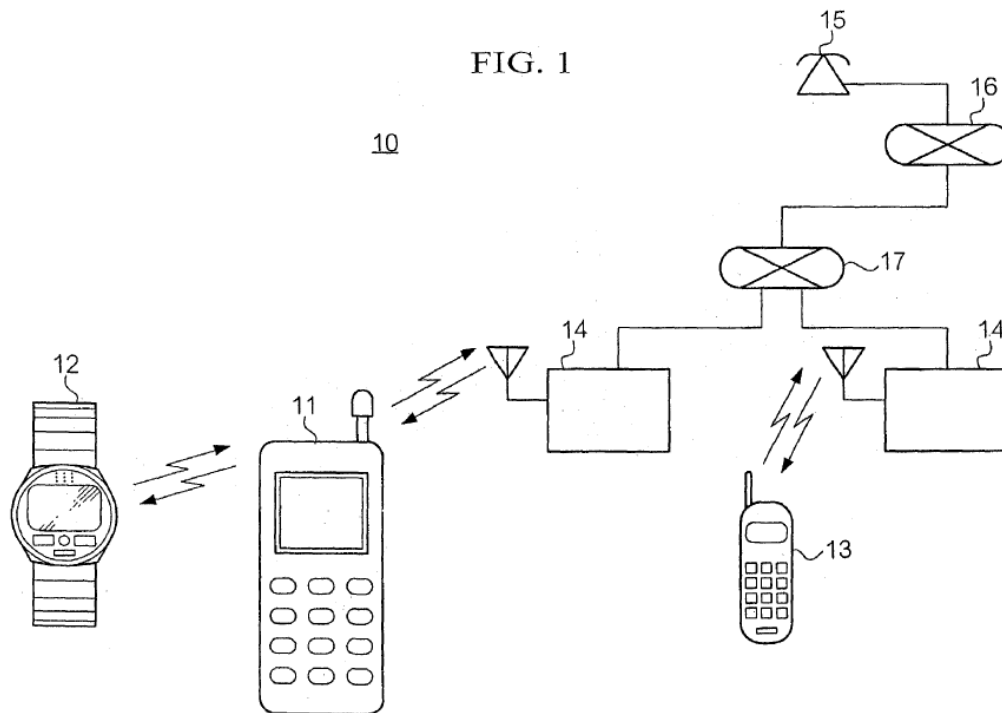
G. Ground 4—Obvious Over Fujisawa and Kita 514

Petitioner argues that claims 1–10, 13, 16, 18, 19, 22–27, 32, 35–39 would have been obvious over Fujisawa and Kita 514. Pet. 60–75.

1. Fujisawa

Fujisawa “relates to a mobile telephone and to a radio communication device that can carry out local and bidirectional radio communication with the mobile telephone.” Ex. 1006 ¶ 1.

Figure 1 of Fujisawa, shown below, illustrates a mobile telephone system. *Id.* ¶ 91.



Fujisawa describes mobile telephone system 10 that includes mobile telephones 11, 13 and watch-shaped information processing device 12 that “performs bidirectional radio communication with the mobile telephone 11.” *Id.* ¶¶ 127–128. System 10 further includes “mobile network 17 and a plurality of radio base stations 14 that are connected with the mobile network 17.” *Id.* ¶ 128.

Fujisawa describes watch-shaped information processing device 12 as receiving an incoming call notification signal that is demodulated into data that “includes information to the effect that there is an incoming call, an ID number NID of the watch-shaped information processing device 12, and a telephone number of the caller.” *Id.* ¶ 155. Fujisawa states that a user is notified of the incoming call via “a buzzer sound or an electronic sound,” a vibration, or a “blink light emitting device such as an LED.” *Id.* ¶ 156.

Also, the telephone number of the caller is displayed on the device's display unit. *Id.*

2. Reason to Combine Fujisawa and Kita 514

Petitioner contends that Fujisawa discloses a wrist watch that performs bidirectional communication with a mobile phone, and Kita 514 discloses a wrist watch having two bands and a buckle. Pet. 60–61 (citing Ex. 1006 ¶ 128, Fig. 1; Ex. 1007, Figs. 1A, 1B, 2, ¶¶ 109–110). Petitioner contends that a person of ordinary skill in the art would have combined the bands and buckle of Kita 514 with the wrist watch of Fujisawa to yield the benefit of providing a wrist watch with a user-adjustable band for different sized wrists as discussed in Petitioner's analysis of ground 1. *Id.* at 61 (citing Pet. 19–21). We are sufficiently persuaded that Petitioner has shown a reason to use the wrist bands and buckle of Kita 514 with the wrist watch of Fujisawa.

3. Independent Claim 1

Preamble

The preamble of claim 1 recites a “watch for use with a mobile telephonic device that provides notification of an incoming call.” Petitioner contends that Fujisawa describes the preamble in discloses that “[w]hen there is an incoming call to a mobile telephone, it sends an incoming call notification signal to a watch-shaped information processing device.” Pet. 63 (citing Ex. 1006, Abstract, Fig. 1). Based on the evidence and arguments currently of record, for purposes of institution, we find that Petitioner has

demonstrated that Fujisawa teaches the features recited in the preamble of claim 1.⁹

Bands and buckle

Claim 1 recites “a watch band; a second watch band; a buckle, wherein said buckle is coupled to said second watch band.” Petitioner contends that Kita 514 describes this limitation as shown in Figures 1A, 1B, and 2. Pet. 64 (citing Ex. 1007). Based on the evidence and arguments currently of record, for purposes of institution, we find that Petitioner has demonstrated that Kita 514 teaches this limitation of claim 1.

First and second events

Claim 1 recites “a device operable to receive first wireless communication signals associated with a first event.” Petitioner contends that Fujisawa discloses this limitation in describing a watch that receives an incoming call notification signal sent from a mobile phone. Pet. 65 (citing Ex. 1006 ¶¶ 155, 237–238). Based on the evidence and arguments currently of record, for purposes of institution, we find that Petitioner has demonstrated that Fujisawa teaches this limitation of claim 1.

Claim 1 recites “a device operable to receive . . . second wireless communication signals associated with a second event from said mobile telephonic device, wherein said first event and second event are different.” Petitioner contends that Fujisawa discloses this limitation in describing a watch that receives signals associated with a missed call event, which is different from the incoming call event, by receiving a “recording caller’s

⁹ We need not resolve whether the preamble is limiting at this stage because Petitioner shows sufficiently for purposes of institution that the prior art satisfies the recitation in the preamble.

message” signal then subsequently receiving a voice message, both of which are sent from the mobile phone. Pet. 65 (citing Ex. 1006 ¶¶ 266, 270, 272); *see* Ex. 1006, Fig. 19.

Patent Owner contends that Petitioner maps the claimed “second wireless communication signals associated with a second event from said mobile telephonic device” to the voice message of Fujisawa, and maps the claimed “second user perceivable notification signals that are dependent upon said second communication signals” to the “recording caller’s message” signal of Fujisawa. Prelim. Resp. 37–38. Patent Owner contends that the user-perceivable “recording caller’s message” signal does not depend on the second communication signals associated with the voice message because the watch displays the “recording” signal before receiving the voice message. *Id.* at 38–39.

At this juncture, we disagree with Patent Owner. Petitioner identifies the claimed “second event” as a missed call. Pet. 65. In mapping the claimed “second wireless communication signals” associated with a missed call to the disclosure of Fujisawa, Petitioner cites to the “receiving caller’s message” signal and also cites to the voice message, both of which are associated with a missed call. *Id.* On this record, we are sufficiently persuaded that the user-perceivable “recording caller’s message” displayed on the screen of the wrist watch as shown in Figure 19 of Fujisawa is “dependent upon” the corresponding “recording caller’s message” signal received from the mobile phone.

Further, even if we were to accept Patent Owner’s contention that the claimed “second wireless communication signals” only correspond to the voice message of Fujisawa, we are sufficiently persuaded on this record that

the user-perceivable “recording caller’s message” shown in Figure 19 depends on a caller recording the voice message within the meaning of claim 1. Based on the evidence and arguments currently of record, for purposes of institution, we find that Petitioner has demonstrated that Fujisawa teaches this limitation of claim 1.

Battery

Claim 1 recites “said device includes a battery.” Petitioner contends that Fujisawa discloses this limitation in describing a wrist watch including a battery. Pet. 66 (citing Ex. 1006 ¶ 137). Based on the evidence and arguments currently of record, for purposes of institution, we find that Petitioner has demonstrated that Fujisawa teaches this limitation of claim 1.

Motion sensing

Claim 1 recites “said device includes motion sensing operable to distinguish between a plurality of different types of motion.” Petitioner contends that Kita 514 discloses this limitation for the reasons given in Petitioner’s analysis of Ground 1. Pet. 66 (citing Ex. 1007 ¶ 148, Figs. 1A, 1B, 53). Patent Owner contends that Kita 514 does not disclose this limitation for reasons similar to those presented in Patent Owner’s contentions regarding Ground 1. Prelim. Resp. 33–36.

We disagree with Patent Owner for the reasons given in our analysis of Ground 1. Based on the evidence and arguments currently of record, for purposes of institution, we find that Petitioner has demonstrated that Kita 514 teaches this limitation of claim 1.

First user-perceivable notification signals

Claim 1 recites “said device is operable to provide first user-perceivable notification signals that are dependent upon said received first

communication signals.” Petitioner contends that Fujisawa discloses this limitation in describing a watch that notifies a user of an incoming call using a sound, a vibration, or light. Pet. 67 (citing Ex. 1006 ¶ 156). Based on the evidence and arguments currently of record, for purposes of institution, we find that Petitioner has demonstrated that Fujisawa teaches this limitation of claim 1.

Second user-perceivable notification signals

Claim 1 recites “said device is operable to provide second user perceivable notification signals that are dependent upon said second communication signals.” Petitioner contends that Fujisawa discloses this limitation in describing a watch displaying “recording caller’s message.” Pet. 68 (citing Ex. 1006 ¶ 272).

Conclusion for claim 1

Based on this preliminary record, Petitioner has demonstrated a reasonable likelihood that claim 1 would have been obvious over the combination of Fujisawa and Kita 514.

4. Dependent Claims 2–10, 13, 16, 18, 19, 22–27, 32, 35–39

Petitioner has set forth contentions regarding dependent claims 2–18, 22, 27, 29, and 35. Pet. 36–45. Patent Owner does not set forth additional arguments for these dependent claims at this stage. We find Petitioner’s contentions sufficiently persuasive for purposes of institution that claims 2–10, 13, 16, 18, 19, 22–27, 32, 35–39 would have been obvious over the combination of Fujisawa and Kita 514.

H. Ground 5—Obvious Over Fujisawa, Kita 514, and Cannon

Petitioner contends that claims 11–12, 13, 15–17, 19–21, 28–34 would have been obvious over the combination of Fujisawa, Kita 514, and Cannon. Pet. 75–81.

1. Reason to Combine Cannon with Fujisawa and Kita 514

Petitioner contends that the combination of Fujisawa and Kita 514 teaches a watch that indicates incoming calls, missed calls, and voice messages. Pet. 76 (citing Ex. 1006, Figs. 18, 19, 28). Petitioner contends that Cannon teaches a watch that indicates calendar events and text messages. *Id.* (citing Ex. 1010 ¶¶ 23–24). Petitioner contends that modifying the watch taught by the combination of Fujisawa and Kita 514 to indicate calendar events and text messages as taught by Cannon yields the benefit of improving usability. *Id.* (citing Ex 1002 ¶¶ 239–240). On the present record, we find sufficient Petitioner’s proffered reason to indicate calendar events and text messages into the watch of Fujisawa and Kita 514.

2. Dependent Claim 11

Claim 11 depends from claim 1 and recites “wherein said second user-perceivable signals are indicative of a calendar notification.” Petitioner contends that Cannon discloses this limitation in describing a pending message that indicates an upcoming appointment or birthday. Pet. 77 (citing Ex. 1010 ¶¶ 23–24). Patent Owner does not set forth arguments for claim 11 at this stage.

We find Petitioner’s contentions sufficiently persuasive for purposes of institution that claim 11 would have been obvious over the combination of Fujisawa, Kita 514, and Cannon.

3. *Dependent Claims 12, 13, 15–17, 19–21, 28–34*

Patent Owner does not set forth additional arguments for these dependent claims at this stage. We find Petitioner’s contentions sufficiently persuasive for purposes of institution that claims 12, 13, 15–17, 19–21, 28–34 would have been obvious over the combination of Fujisawa, Kita 514, and Cannon.

III. CONCLUSION

Based on the arguments in the Petition and the Preliminary Response, and the evidence of record, we determine that Petitioner has established a reasonable likelihood that it would prevail on its challenges that claims 1–39 patent are unpatentable.

IV. ORDER

In consideration of the foregoing, it is hereby

ORDERED that the Petition is granted;

FURTHER ORDERED that *inter partes* review of claims 1–39 of the ’633 patent is hereby instituted on all grounds stated in the Petition; and

FURTHER ORDERED that, pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4(b), *inter partes* review of the ’633 patent shall commence on the entry date of this Decision, and notice is hereby given of the institution of a trial.

IPR2024-01472
Patent 11,190,633 B2

FOR PETITIONER:

William M. Fink
Benjamin M. Haber
Marc J. Pensabene
Mark Liang
Caitlin Hogan
O'MELVENY & MYERS LLP
tfink@omm.com
bhaber@omm.com
mpensabene@omm.com
mliang@omm.com
chog@omm.com

FOR PATENT OWNER:

Peter F. Snell
Brad M. Scheller
MINTZ, LEVIN, COHN, FERRIS,
GLOVSKY AND POPEO, P.C.
PFSnell@mintz.com
BMScheller@mintz.com