

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MASIMO CORPORATION,
Petitioner,

v.

APPLE INC.,
Patent Owner.

IPR2023-00664
Patent 11,106,352 B2

Before KEN B. BARRETT, JOSIAH C. COCKS, and
ROBERT L. KINDER, *Administrative Patent Judges*.

KINDER, *Administrative Patent Judge*.

JUDGMENT
Final Written Decision
Determining No Challenged Claims Unpatentable
Dismissing Patent Owner's Revised Motion to Amend
35 U.S.C. § 318

I. INTRODUCTION

A. *Background and Summary*

Masimo Corporation (“Petitioner”)¹ filed a Petition requesting *inter partes* review of claims 1–24 (“challenged claims”) of U.S. Patent No. 11,106,352 B2 (“the ’352 patent,” Ex. 1001). Paper 1 (“Pet.”). The Petition challenges the patentability of claims 1–24 of the ’352 patent. We instituted the petitioned review (Paper 8).

Apple Inc. (“Patent Owner”)² filed a Patent Owner Response (Paper 15, “PO Resp.”) to oppose the Petition. Petitioner filed a Reply (Paper 20, “Pet. Reply”) to the Patent Owner Response. Patent Owner filed a Sur-reply (Paper 27, “Sur-reply”) to the Reply. We conducted an oral hearing on August 1, 2024. A transcript has been entered into the record (Paper 44, “Tr.”).

We have jurisdiction under 35 U.S.C. § 6(b)(4) and § 318(a). This Decision is a final written decision under 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73 as to the patentability of claims 1–24 of the ’352 patent. We determine Petitioner has not shown by a preponderance of the evidence that any of those claims are unpatentable.

B. *Related Proceedings*

Both parties identify, as a matter involving or related to the ’352 patent, *Apple Inc. v. Masimo Corporation and Sound United, LLC*, No. 1:22-cv-01378-MN (D. Del.). Pet. 1; Paper 4.

¹ Petitioner identifies Masimo Corporation as the real party-in-interest. Pet. 1.

² Patent Owner identifies Apple Inc. as the real party-in-interest. Paper 4.

C. The '352 Patent

The '352 patent “relates generally to electronic devices with touch-sensitive surfaces, including but not limited to electronic devices with touch-sensitive surfaces that include user interfaces for displaying notifications.” Ex. 1001, 1:16–19. The '352 patent identifies “a need for electronic devices with faster, more efficient methods and interfaces for accessing notifications.” *Id.* at 1:55–57. The '352 patent claims priority through a series of continuation applications to Provisional Application No. 62/507,181, which was filed May 16, 2017. *Id.* at codes (60), (63).

The '352 patent describes, and claims, various user interactions with a display for accessing notifications or applications. *Id.* at code (57). The Abstract describes that when “displaying the wake screen user interface . . . a first input that is directed to a portion of the wake screen user interface” is detected and “if the first input includes first movement in a first direction, the computer system displays [] a home screen user interface; and the first movement is in a second direction, the computer system displays a widget screen user interface that is different from the wake screen user interface and the home screen user interface.” *Id.* Further, “the widget screen user interface includes a plurality of user interface objects corresponding to different applications,” which may “contain[] application content from an application corresponding to the respective user interface object.” *Id.*

D. Illustrative Claim

Claims 1, 9, and 17 are independent claims. Claim 1, reproduced below, is illustrative.

1. A method, comprising:

at computer system that is in communication with a display

generation component and one or more input devices:

while the computer system is in a power saving state, detecting an input that meets display-waking criteria;

in response to detecting the input that meets the display-waking criteria, displaying, via the display generation component, a wake screen user interface;

while displaying the wake screen user interface, detecting a first input that is directed to a portion of the wake screen user interface and includes first movement; and

in response to detecting the first input that is directed to the portion of the wake screen user interface:

in accordance with a determination that the first input meets first criteria, wherein the first criteria require the first movement to be in a first direction in order for the first criteria to be met:

displaying of a home screen user interface that is different from the wake screen user interface, wherein the home screen user interface includes a plurality of application icons corresponding to different applications, and wherein a respective application icon of the plurality of application icons, when selected, causes display of an application corresponding to the respective application icon; and

in accordance with a determination that the first input meets second criteria different from the first criteria, wherein the second criteria require the first movement to be in a second direction that is different from the first direction in order for the second criteria to be met:

displaying a widget screen user interface that is different from the wake screen user interface and the home screen user interface, wherein the widget screen user interface includes a plurality of user interface objects corresponding to different applications, wherein a respective user interface object of the

plurality of user interface objects contains application content from an application corresponding to the respective user interface object, and when selected, causes display of an application corresponding to the respective user interface object.

Ex. 1001, 86:49–87:27.

E. Evidence

Petitioner relies on the following references:

Name	Reference	Exhibit(s)
Chae	US 2012/0129495 A1, pub. May 24, 2012	1005
Narendra	US 2013/0305351 A1, pub. Nov. 14, 2013	1006
Android	Android 4.2 lock screen widgets (MP4 publicly accessible on YouTube video by Nov. 19, 2012)	1007, 1041
Shuttleworth	US 2014/0189577 A1, pub. July 3, 2014	1008
Hong	US 2015/0095819 A1, pub. Apr. 2, 2015	1010
Karunamuni	US 2015/0346976 A1, pub. Dec. 3, 2015	1011

Petitioner supports its arguments by submitting, *inter alia*, four declarations from Craig Rosenberg, Ph.D.: the first declaration (Ex. 1003), the second declaration (Ex. 1054), the third declaration (Ex. 1056), and the fourth declaration (Ex. 1064). Petitioner also relies on other exhibits as discussed below. Patent Owner submits, *inter alia*, two declarations from Andrew Cockburn, Ph.D.: the first declaration (Ex. 2003) and the second declaration (Ex. 2010).

F. Asserted Grounds of Unpatentability

Petitioner asserts that the challenged claims are unpatentable on the following grounds:

Claim(s) Challenged	35 U.S.C. §³	Reference(s)/Basis
1, 2, 6, 9, 10, 14, 17, 18, 22	103	Chae alone or Chae, Narendra
3–5, 11–13, 19–22	103	Chae, Narendra, Shuttleworth
7, 8, 15, 16, 23, 24	103	Chae, Narendra, Karunamuni
1, 2, 6, 9, 10, 14, 17, 18, 22	103	Chae, Narendra, Hong and/or Android
3–5, 11–13, 19–22	103	Chae, Narendra, Shuttleworth, Hong, and/or Android
7, 8, 15, 16, 23, 24	103	Chae, Narendra, Karunamuni, Hong, and/or Android

II. ANALYSIS OF PETITIONER’S CHALLENGES

A. Principles of Law

Petitioner bears the burden of persuasion to prove unpatentability of the claims challenged in the Petition, and that burden never shifts to Patent Owner. *Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015).

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.” 35 U.S.C. 103; *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including: (1) the

³ The Leahy-Smith America Invents Act (“AIA”) includes revisions to 35 U.S.C. §§ 102 and 103 that became effective on March 16, 2013. Because the earliest filed application identified in the ’352 patent has a filing date of May 16, 2017 (Ex. 1001, codes (60), (63), 1:5–22), we apply the AIA-versions of 35 U.S.C. §§ 102 and 103.

scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of skill in the art; and (4), if present, any objective evidence of obviousness or non-obviousness.⁴

Graham v. John Deere Co., 383 U.S. 1, 17–18 (1966).

B. The Level of Ordinary Skill in the Art

In determining the level of ordinary skill in the art, various factors may be considered, including the “type of problems encountered in the art; prior art solutions to those problems; rapidity with which innovations are made; sophistication of the technology; and educational level of active workers in the field.” *In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995) (quoting *Custom Accessories, Inc. v. Jeffrey–Allan Indus., Inc.*, 807 F.2d 955, 962 (Fed.Cir.1986)).

Petitioner contends that:

A POSITA [person of ordinary skill in the art] of the ’352 patent would have had at least a bachelor’s degree in a discipline related to human-computer interaction, such as Human Factors, Computer Science, Computer Engineering, or an equivalent discipline, and at least two years of experience working with touchscreen user interfaces. More education could substitute for less work experience, and vice-versa.

Pet. 12 (citing Ex. 1003 ¶ 34).

Patent Owner makes several observations regarding Petitioner’s identified level of skill in the art but does not put forth their own level of skill in the art. *See generally* PO Resp. However, Patent Owner’s expert, Dr. Andrew Cockburn, contends:

a POSITA in the field of the ’352 Patent would have had at least a bachelor’s degree in computer science, computer engineering,

⁴ Neither party has introduced any objective evidence in this proceeding.

electrical engineering, human-computer interaction, or a related field, and would have had at least two years of relevant work experience in the design and development of graphical user interfaces (GUIs), human-computer interfaces, or equivalents thereof. Additional education could substitute for professional experience and significant work experience could substitute for formal education.

Ex. 2003 ¶ 21.

Petitioner's proposed level of ordinary skill in the art is thus similar in scope to that proposed by Patent Owner's expert, with each requiring a bachelor degree in a discipline related to human-computer interaction and at least two years of related work experience. We adopt Petitioner's uncontested level for the person of ordinary skill in art because it is consistent with the level of ordinary skill reflected in the prior art references of record, and because it is supported by the testimony of Dr. Cockburn. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001) (recognizing that the prior art itself may reflect an appropriate level of skill in the art). Our analysis and the end result are the same under either proposed definition.

C. Claim Construction

We apply the same claim construction standard used in district court actions under 35 U.S.C. § 282(b), namely that articulated in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). *See* 37 C.F.R. § 42.100(b). In applying that standard, claim terms generally are given their ordinary and customary meaning as would have been understood by a person of ordinary skill in the art at the time of the invention and in the context of the entire patent disclosure. *Phillips*, 415 F.3d at 1312–13. “In determining the meaning of the disputed claim limitation, we look principally to the intrinsic

evidence of record, examining the claim language itself, the written description, and the prosecution history, if in evidence.” *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 469 F.3d 1005, 1014 (Fed. Cir. 2006) (citing *Phillips*, 415 F.3d at 1312–17).

In our Decision to Institute, we construed “input that is directed to a portion of” a user interface. Paper 8, at 9; *see also* Pet. 24–25. Because this interpretation is not necessary for our final determination, we do not repeat it here.

Patent Owner contends that “no claim construction is necessary to address the invalidity grounds” and that “Patent Owner’s arguments do not hinge on the outcome of an actual controversy about any claim construction expressed in the Petition and are applicable regardless of whether the Board adopts Petitioner’s constructions.” PO Resp. 6.

Petitioner proposes claim constructions for several terms and phrases. *See* Pet. 14–26. For example, Petitioner proposes constructions for “wake screen user interface,” “home screen user interface,” “widget screen user interface,” and “control panel user interface.” Pet. 14–24. Notably, Petitioner’s proposed constructions rely on surrounding claim language that already provides context for each term. For example, the claims require that “a home screen user interface [] is different from the wake screen user interface,” and similarly, “a widget screen user interface [] is different from the wake screen user interface and the home screen user interface.” Ex. 1001, 87:1–2, 16–18. Petitioner then adopts these additional claim elements into the definitions for the “home screen user interface,” and “widget screen user interface,” respectively. Pet. 18, 21.

Petitioner does not, however, explain the significance of its proposed constructions to the factual or legal issues before us or why they are necessary to make a final determination. In Reply, Petitioner noted that the Board construed only the phrase “input is directed to a portion of,” and that “no additional claim construction is necessary to resolve the parties’ disputes.” Pet. Reply 2. Accordingly, upon consideration of the entirety of the arguments and evidence presented, we conclude no explicit construction of any claim term is needed to resolve the issues presented by the arguments and evidence of record. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co. Matal*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (per curiam) (claim terms need to be construed “only to the extent necessary to resolve the controversy” (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999))).

D. The Alleged Obviousness of Claims 1, 2, 6, 9, 10, 14, 17, 18, and 22 Over Chae or Chae and Narendra

Petitioner contends that claims 1, 2, 6, 9, 10, 14, 17, 18, and 22 are obvious over Chae alone or Chae and Narendra. Pet. 33–70. Patent Owner contends that Petitioner has failed to demonstrate how the combination of references teach certain claim limitations. *See generally* PO Resp.

For the reasons set forth below, and based on the final record before us, Petitioner has not established by a preponderance of the evidence that any of these claims of the ’352 patent would have been obvious based on this ground. Below, we focus our analysis on one issue (limitation) we determine is dispositive and provide Petitioner’s contentions and Patent Owner’s response regarding that issue. Finally, we provide our analysis and explanation as to why we determine that Petitioner has failed to demonstrate

that the combination of prior art references teaches or suggests this limitation required by each independent claim.

1. *Chae (Ex. 1005)*

Chae is titled “Mobile Terminal and Operating Method Thereof” and it relates to a mobile terminal with a touch screen and controller configured to simultaneously unlock the mobile terminal and a user identification module in response to a touch made on the touch screen. Ex. 1005, codes (54), (57). Chae discloses a dual-SIM smartphone that uses directional swipe gestures to navigate between different user-interface screens as depicted below in Figure 3:

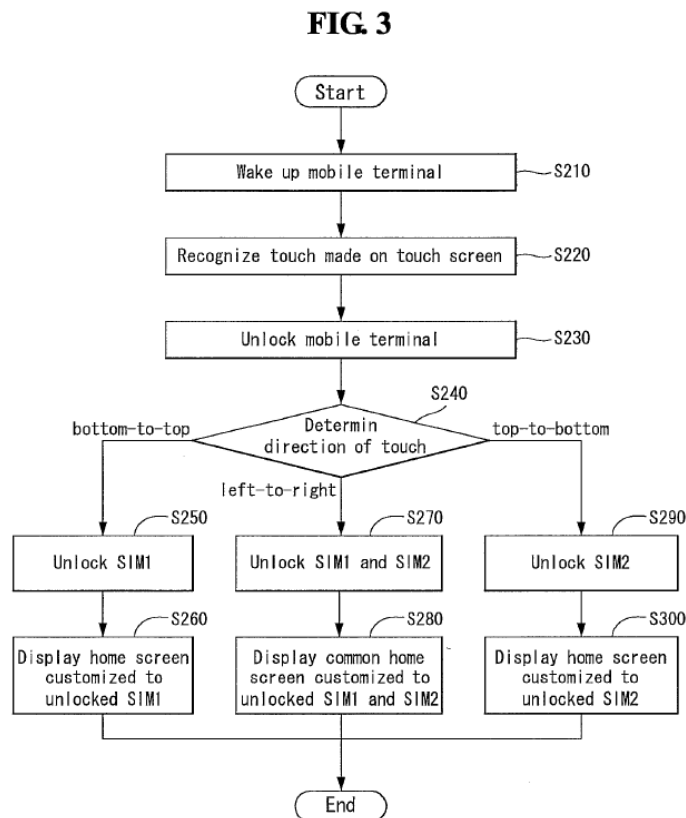


Figure 3 of Chae represents “a flowchart that illustrates one example of the method for operating a mobile terminal,” and it further “illustrates a method for unlocking SIMs based on a direction of a touch made on a touch

screen.” *Id.* ¶¶ 16, 101. Referring to Figure 3, at step S240, a controller determines the direction of a touch such as the directivity of a line when a user of mobile terminal draws the line on the touch screen. *Id.* ¶ 103. Chae further discloses that the user-interface screens include multiple application “icons and widgets.” *Id.* ¶ 100.

Chae’s Figure 4, reproduced below, illustrates a user swiping in a bottom-to-top direction to unlock a first SIM:

FIG. 4

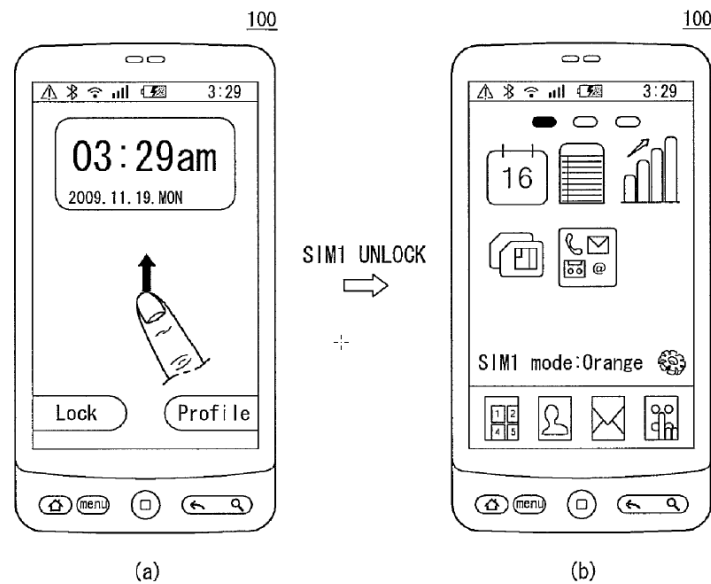


Figure 4 illustrates unlocking a first SIM (SIM1) according to the method of operating a mobile terminal of Figure 3. *Id.* ¶ 104. “[W]hen a user draws a line a directivity of line drawn by a user on the touch screen is a bottom-to-top direction as shown in a diagram (a) of FIG. 4 the controller 180 unlocks the first SIM (SIM1) as shown in a diagram (b) of FIG. 4.” *Id.* Figure 6 of Chae similarly shows a user swiping in a top-to-bottom direction to display a home screen customized to the second screen (SIM2) including multiple distinct items. *Id.* ¶ 109.

2. *Narendra (Ex. 1006)*

Narendra is titled “Mobile Device with Password Protected Desktop Screen” and it relates to a mobile device with a plurality of desktop screens and “a touch sensitive display device that accepts gestures used to navigate between the desktop screens.” Ex. 1006, codes (54), (57). Narendra discloses the use of directional swipe gestures to navigate among multiple user-interface screens of a single-SIM smartphone. *Id.*, code (57), ¶ 2. For example, Narendra’s Figure 1, reproduced below, illustrates a user making a directional swipe gesture to navigate from one screen to another:

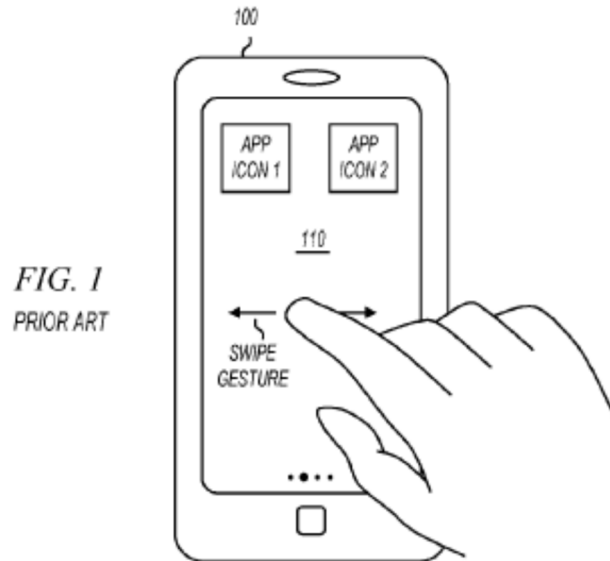


Figure 1 depicts “a prior art mobile device that navigates desktop screens with swipe gestures.” *Id.* ¶ 3. Narendra’s Figure 2, reproduced below, shows navigational paths between multiple screens that a user can navigate between using directional swipe gestures:

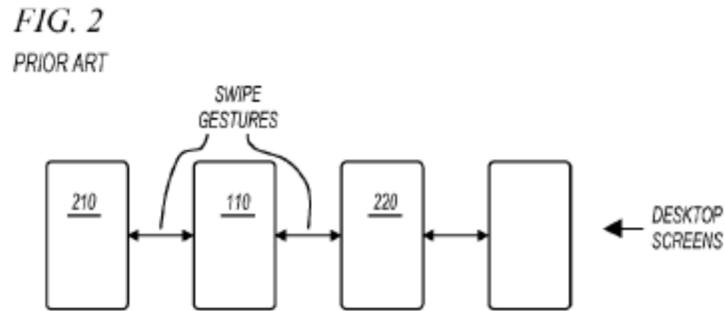


Figure 2 shows a logical orientation of multiple desktop screens with distinct swipe gestures for navigation between desktop screen 110 and two other screens. *Id.* ¶ 4. Narendra states that “[w]hen mobile device 100 is displaying desktop screen 110, a left-to-right swipe gesture navigates from desktop screen 110 to desktop screen 210, and mobile device 100 displays desktop screen 210 as a result.” *Id.* ¶ 2. “Likewise, when mobile device 100 is displaying desktop screen 110, a right-to-left swipe gesture navigates from desktop screen 110 to desktop screen 220, and mobile device 100 displays desktop screen 220 as a result.” *Id.*

3. *Independent Claim 1.*

Independent Claim 1 requires, in pertinent part, the following limitation [1g]:

“displaying a widget screen user interface that is different from the wake screen user interface and the home screen user interface, wherein the widget screen user interface includes a plurality of user interface objects corresponding to different applications, wherein a respective user interface object of the plurality of user interface objects contains application content from an application corresponding to the respective user interface object, and when selected, causes display of an application corresponding to the respective user interface object.”

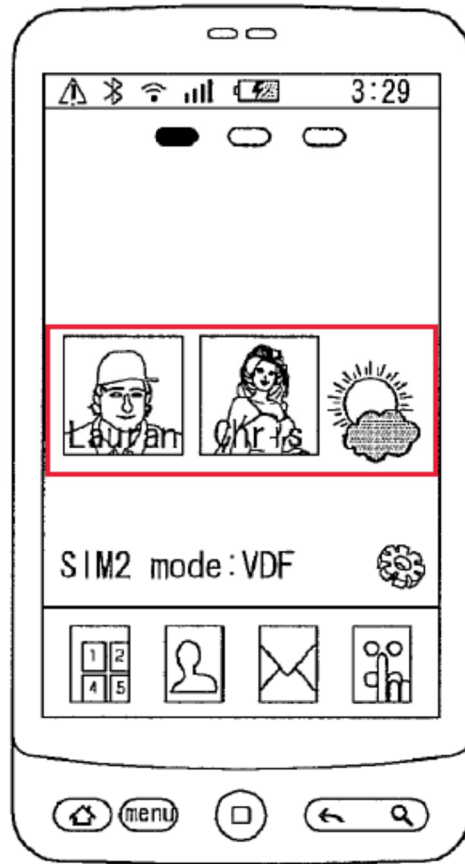
Ex. 1001, 87:16–27. Independent Claim 9 recites a nearly identical limitation as does Claim 17. *Id.* at 89:16–28, 91:22–33; *see also Pet.*, Claim listing at 2, 6, 11.

Petitioner’s Contentions

Petitioner relies on Chae and also Chae and Narendra for this claim limitation. Pet. 49–63. Petitioner relies on Chae Figure 3 illustrating a decision block S240 that determines a “direction of touch,” and when the “direction of touch” is a “top-to-bottom” movement a second SIM is unlocks that “displays a home screen customized to the second SIM.” Ex. 1005 ¶ 108; Pet. 50.

Petitioner contends that a “[a] POSITA would have understood that the Figure 6(b) screen [of Chae] is a ‘widget screen user interface’ as claimed,” because “the Figure 6(b) screen is ‘different from’ **both** (1) ‘the wake screen user interface’ (shown in Figures 4(a) and 6(a)) **and** (2) the ‘home screen user interface’ (shown in Figure 4(b)).” Pet. 51–52 (quoting

Ex. 1005 ¶ 109 (“In comparison to the diagram (b) of FIG. 4, the home screen of diagram (b) of FIG. 6 displays different items when the SIM is unlocked.”). Petitioner further argues that “[a] POSITA would have understood that two or more of the objects on the Figure 6(b) screen are ‘user interface objects’ in which each ‘contains application content from an application corresponding to the respective user interface object.’” *Id.* Chae’s Figure 6(b), with Petitioner’s red box annotation over the purported objects, is reproduced below:



(b)

Chae’s annotated Figure 6(b) “illustrates unlocking the second SIM (SIM2) according to the method for operating a mobile terminal.” Ex. 1005 ¶ 19. Petitioner contends that “the left-most and center objects include images and

names of people (Lauran and Chris) and the right-most object includes a graphical depiction of weather conditions (partly cloudy),” such that “[a] POSITA would have understood this information to be ‘application content from an application corresponding to the respective user interface object.’” Pet. 53 (citing Ex. 1003 ¶ 89). Petitioner also contends that the status bar at the top of Figure 6(b) would also retrieve application content. *Id.* at 54–55 (citing Ex. 1003 ¶ 90). Petitioner contends that an ordinary artisan would have understood that “selecting one of the objects shown in the center of the screen (such as the weather object) or one of the objects on the status bar (such as the digital clock) would cause display of a corresponding application (such as a weather application or a digital clock application).” *Id.* at 55 (citing Ex. 1003 ¶ 91).

Petitioner contends that “even if Chae did not expressly disclose that the Figure 6(b) screen is a widget screen user interface, it would have been obvious to include widgets on the Figure 6(b) screen, as taught by Paragraph 100.” Pet. 55. According to Petitioner, paragraph 100 discloses that “the home screen customized to the SIM has items displayed on the home screen different from those on a general home screen,” and “[t]hese items include icons and widgets.” Ex. 1005 ¶ 100.

Petitioner relies on Narendra disclosing “[d]esktop screens on mobile device 300 display content such as application icons, *widgets*, and the like,” and “using directional swipe gestures to navigate between different GUI screens, as shown by prior-art Figures 1 and 2.” Pet. 56 (quoting Ex. 1006 ¶ 25). Petitioner, relying on Dr. Rosenberg’s testimony, contends that “the field of multi-screen GUIs for touchscreen devices, customizing one or more of the GUI screens to include multiple ‘widgets’ was well known,” and “[a]

POSITA would have understood, in view of Chae's and Narendra's disclosures, that those references used the term 'widget' to refer to a user interface object that displays content generated by an associated application without needing to (but being able to) open the application." Pet. 57 (quoting Ex. 1003 ¶ 92).

Although not part of the proposed combination for this ground, Petitioner further relies on Hong to support its assertions of what an ordinary artisan would have understood. Petitioner notes Hong discloses that "application widgets have been provided that enable a user to access contents provided in an application without executing the application" to assert that "a POSITA would have understood that Chae's and Narendra's disclosures of user-interface screens with multiple 'widgets' meet the 'widget screen user interface' limitation of claim 1." Ex. 1003 ¶ 92; Pet. 57–58. Petitioner further asserts that Chae's Figure 22 "supports that Chae uses the term 'widget' to refer to a user interface object that displays content generated by an associated application without needing to (but being able to) open the application." *Id.* at 58.

Similarly, Petitioner relies on Android to support its assertions of what an ordinary artisan would have understood. Petitioner asserts that "Android further supports that a POSITA would have understood a 'widget' to be a user interface object containing application content from an application corresponding to the user interface object." Pet. 59. Petitioner alleges that Android discloses that "widgets are user interface objects containing content from an application corresponding to the user interface object," such as "the calendar widget containing content summarizing

scheduled events from a calendar application” or “an email widget containing content summarizing email messages.” *Id.* at 59–61; Ex. 1007.

Finally, Petitioner contends that “if Chae is interpreted as not disclosing multiple widgets on its Figure 6(b) screen,” an ordinary artisan “would have been motivated to add multiple widgets to that screen” to satisfy claim 1. Pet. 61–62. Petitioner contends that an ordinary artisan “would have been motivated specifically to include *multiple* widgets (not just one) on a single screen so that as much useful information as possible could be viewed on a single screen without needing to switch between screens.” *Id.* at 62. Petitioner further argues that “[c]onvenience, efficiency, and ease of use would have motivated a POSITA to implement directional-swipe-gesture navigation, as taught by Chae and Narendra, on either single-SIM or multi-SIM touchscreen devices.” *Id.* at 63; Ex. 1003 ¶ 98.

Patent Owner’s Response

Patent Owner argues that Chae does not disclose “a respective user interface object of the plurality of user interface objects contains application content from an application corresponding to the respective user interface object, and when selected, causes display of an application corresponding to the respective user interface object” as recited in claim 1. PO Resp. 21 (referred to as the “widget limitation”). Patent Owner specifically identifies two functions required by this limitation. *Id.* Namely, “the two things that are referencing . . . that it contains application content from an application corresponding to the respective user interface object, and when it’s selected, that there’s a display that’s caused of an application corresponding to the respective user interface object.” Tr. 30:22–31:3; *see also id.* at 31:3–8 (“So, in more layman terms, the first is that the object must contain content

from a corresponding application. The second, that the object, when selected, it needs to cause the display of a corresponding application.”).

Patent Owner contends that Petitioner’s arguments are deficient because an examination of the references reveal no disclosure of the claimed functionality as claimed. PO Resp. 22; *see also* Tr. 31:12–15. Patent Owner first argues that “nothing in Chae indicates that the icons displayed in Figure 6(b) are dynamic or change in any way in response to content in the corresponding applications, and that the icons when selected causes display of the corresponding applications.” PO Resp. 22 (citing Ex. 2003 ¶ 46). Patent Owner argues that although Chae displays a graphical object depicting weather conditions, “nothing in Chae states that selecting that graphical object would display a corresponding application.” *Id.* (citing Ex. 2003 ¶ 46). Patent Owner argues that Chae’s widgets for SIM cards “do not correspond to applications and thus do not cause display of applications when the widgets are selected.” *Id.* at 22–23 (citing Ex. 2003 ¶ 46).

Although not specific to this ground, Patent Owner then addresses the combination of Chae and Narendra with either Hong and/or Android. PO Resp. 23–24. Patent Owner argues that Chae *in combination* with Narendra, Hong, and/or Android is deficient with respect to the “widget” limitation. *Id.* Patent Owner argues that “Narendra mentions the word ‘widgets’ only once with no other details.” *Id.* at 23 (citing Ex. 1006 ¶ 25). Patent Owner next addresses Hong and argues that “Hong’s widget provides a preview of a selected application without executing the selected application, but Hong does not teach or suggest displaying the application when the widget is selected as required by limitation 1g.” *Id.* Finally, addressing Android, Patent Owner contends “Android also provides no indication that the

application is displayed when the widget is selected, rather than providing a preview of the selection within the widget without executing the application as similarly described in Hong.” *Id.* (citing Ex. 1007).

Patent Owner next argues that the Petitioner has made assumptions related to the prior art that are not supported by the record evidence. *Id.* Specifically, Petitioner’s allegation that “[o]ne well-known functionality of widgets was displaying ‘an application corresponding to the respective user interface object’ upon selecting a widget,” (Pet. 55) is not supported by any evidence of record. *Id.* at 23–24. Patent Owner argues that Petitioner’s only support for the allegation that widgets display an application upon selection is Dr. Rosenberg’s “declaration parroting the petition.” *Id.* (citing Ex. 2003 ¶¶ 48–49). Patent Owner reiterates that “none of the references relied upon by Petitioner discloses this alleged ‘well-known functionality of widgets,’” and as such, “Petitioner has failed to show that Chae alone or any combination of Chae, Narendra, Hong, and Android renders obvious ‘a respective user interface object . . . contains application content’ and ‘when selected, causes display of an application,’ as required by limitation 1g.” *Id.* at 23 (citing Ex. 2003 ¶¶ 48–49).

Petitioner’s Reply

Petitioner contends that if the icons shown on Chae’s Figure 6(b) could not display application content or cause display of applications when selected, “then the icons would be images without any function. A POSITA would not have interpreted Chae so rigidly to deprive the Figure 6(b) icons of any function.” Pet. Reply 10. Petitioner contends that “a POSITA would have understood the Figure 6(b) icons have basic application-icon functionality of launching corresponding applications when selected.” *Id.*

(citing Ex. 1056 ¶ 28; Ex. 1057 at 31:20–32:1). However, Petitioner also contends that the “claimed ‘user interface objects’ are merely application icons with the added functionality of displaying application content without requiring execution of the application.” *Id.*

Petitioner contends that “the Figure 6(b) icons at least suggest that the images and names of ‘Lauran’ and ‘Chris,’ and the graphical depiction of weather conditions, are application content.” Pet. Reply 11. In reply to Patent Owner’s argument that Chae’s widgets relate to SIM cards, Petitioner argues that “Chae’s use-state widgets are non-limiting examples” and “each use-state widget corresponds to an application that unlocks a SIM card and displays its customized home screen when the widget is selected.” *Id.* (citing Ex. 1005 ¶¶ 142, 152–153; Ex. 1056 ¶ 30).

In reply to Patent Owner’s argument that neither Hong nor Android renders obvious displaying an application when the widget is selected, Petitioner contends that Patent Owner’s declarant admitted that “displaying an application when the icon is selected is a basic function of any application icon, including a widget.” Pet. Reply 11–12 (citing Ex. 1056 ¶ 31; Ex. 1057, 31:20–32:1). In regard to Hong, Petitioner contends that Hong’s disclosure of “widgets . . . that enable a user to access contents provided in an application without executing the application,” (*see* Ex. 1010 ¶ 4) does not imply that “that an application cannot be executed upon selection of its widget.” *Id.* at 12. Petitioner contends that (1) Hong “never says the application cannot be executed upon selection of its widget,” (2) Hong’s disclosure of “‘without actually executing the application itself’ suggests that selecting the widget will execute the application to display more content,” (3) “a POSITA would have understood that the widget applications

Hong lists . . . are the type of applications that can be executed to display more content,” and (4) “a POSITA would have read Hong consistently with the basic GUI functionality that selecting an application icon launches an application.” *Id.* at 12–13 (citing Ex. 1056 ¶ 32).

In regard to Android, Petitioner contends that Android shows a “device displaying an email application in response to the user selecting an email widget.” *Id.* at 13 (citing Ex. 1007, 2:08–2:14).

Patent Owner’s Sur-reply

Patent Owner argues that Chae and Narendra fail to render obvious the “widget” limitation. Sur-reply 12. More specifically, Petitioner “fails to cite to any disclosure in Chae that the icons (including the Lauren icon, Chris icon, and weather icon) in the center of FIG. 6(b) are the claimed ‘user interface objects’ of the widget screen user interface.” *Id.* Patent Owner again relies on Dr. Rosenberg’s admission that Chae contains no description of what the relied upon icons are or how they would function. *Id.* (quoting Ex. 2005, 54:21–22, 56:9–14). Likewise, Patent Owner contends “Narendra contains no details suggesting that widgets correspond to applications, contain application content, and cause display of applications.” *Id.*

With respect to Hong, Patent Owner argues that Petitioner fails to recognize that because Hong is directed to actually previewing an application without executing the application, there would be no reason to execute the application. *Id.* at 12–14 (citing Ex. 1010 ¶¶ 66–69, 73–77, 88, Figs. 5A–5C). More specifically, “there is no reason to execute the application because the widget provides all the functionality needed to interact with the application without executing the application.” *Id.* at 13. Hong instead “discloses that the ‘preview application screen displayed on

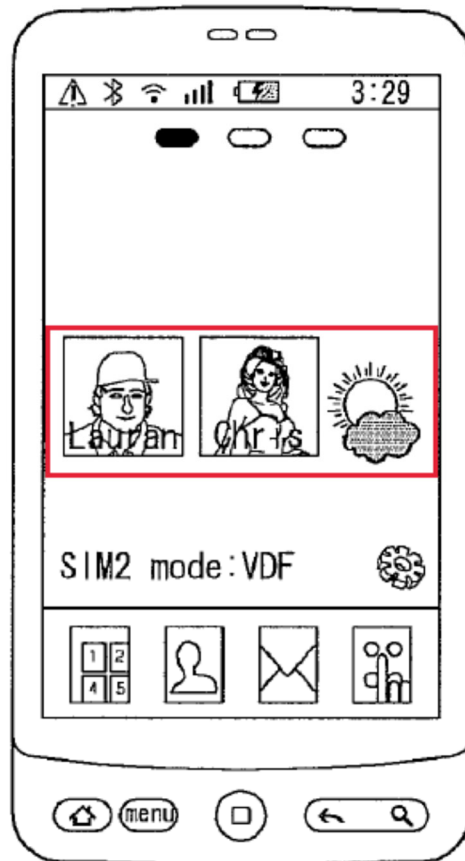
display unit 160 via the widget may be identical to the application screen shown when the user actually executes the application’ and the widget can display ‘the entirety of an application screen.’” *Id.* (quoting Ex. 1010 ¶¶ 68, 69, 88). Patent Owner further cites portions of Hong that disclose “the user may select a desired portion or object from the entire preview of the application screen” and “[t]he object selected by the user may be an item that would be displayed on display unit 160 of electronic device 100, if the application were executed.” *Id.* (quoting Ex. 1010 ¶ 68).

In regard to Android, Patent Owner argues that Android actually shows a preview of the application without executing the application, so Petitioner has not shown that Android displays the application when the widget is selected. *Id.* at 14 (citing Ex. 1007).

Analysis

Based on the final record before us, we conclude that Petitioner has not persuasively shown that the combination of prior art teaches the required widget limitation of “a respective user interface object . . . when selected, causes display of an application corresponding to the respective user interface object” as recited in claim 1.

Petitioner relies on Chae’s Figure 6(b), which is reproduced below:



(b)

Chae’s annotated Figure 6(b) “illustrates unlocking the second SIM (SIM2) according to the method for operating a mobile terminal.” Ex. 1005 ¶ 19. Ex. 1005, Fig. 6(b). Although Figure 6(b) “displays different items” (Ex. 1005 ¶ 109) such as the depictions of people (Lauran and Chris) and partly cloudy weather, Chae does not suggest that selecting these graphics causes display of an application. See PO Resp. 21. Petitioner contends that an ordinary artisan would have understood that selecting one of Chae’s graphics items must cause display of an application (*see* Pet. 55; Pet. Reply 11), but Chae does not teach or suggest this feature. As Dr. Cockburn persuasively testifies, “nothing in Chae indicates that the icons displayed in Figure 6(b) are dynamic or change in any way in response to content in the

corresponding applications, and that the icons when selected causes display of the corresponding applications.” Ex. 2003 ¶ 46. The mere possibility that Chae’s generic graphical objects could perform a function is speculation because nothing in Chae teaches that selecting that graphical object would display a corresponding application. *See id.* The display of icons in Figure 6(b) does not inform the person of ordinary skill in the art whether the item has to indicate or contain content from an underlying application, and also whether it is selectable to get to that corresponding application as required by the claims. *See* Tr. 32:21–33:3.

Petitioner’s reliance of the testimony of Dr. Rosenberg (*see* Ex. 1003 ¶ 91) is unpersuasive because Dr. Rosenberg merely restates the Petitioner’s assertions without reliance on persuasive evidence of record. *See Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, at 5 (Feb 10, 2023) (Vidal, Dir.) (“[T]he Board was correct in giving little weight to Petitioner’s expert because the expert declaration merely offered conclusory assertions without underlying factual support and repeated, *verbatim*, Petitioner’s conclusory arguments.”). When addressing Chae’s three graphics in Figure 6(b) during cross-examination, Dr. Rosenberg testifies that “[t]hey’re not a numbered element, so they’re not spoken about specifically those three ones”). Ex. 2005, 56:9–14, 54:21–22 (“Chae doesn’t talk about the weather icon”). Further, the final record does not support Dr. Rosenberg’s testimony that a person of ordinary skill in the art would have understood that “part of the well-known functionality of widgets was that selecting a widget would cause ‘display of an application corresponding to the respective user interface object.’” Ex. 1003 ¶ 91. None of the references relied upon by Petitioner discloses this alleged “well-known functionality of widgets,” nor does the

evidence of record support any industry standard usage of the term widget in the appropriate timeframe. *See* Ex. 2003 ¶¶ 46–48.

Petitioner has also not persuasively shown that selections of Chae’s SIM card icons result in the display of an application as claimed. *See* Ex. 1005 ¶¶ 152–154, Fig. 22; *see also* Tr. 43:14–17 (“the claimed interface object causes display of the corresponding application, but selection of this paragraph 152, Figure 22 widget causes selection of something different, a sim environment.”). We find Patent Owner’s position more persuasive, when Chae uses the word widget, it is not using that word to refer to something that launches into an application, but instead Chae’s widgets show use-state information related to a SIM environment. *See* Ex. 1005 ¶¶ 152–154; Tr. 33:3–12. Specifically, Chae discloses “widgets that show use-state information of the first and second SIMs (SIM1 and SIM2),” and “when a user selects one of [the] widgets,” it “unlocks the SIM corresponding to the dragged widget.” Ex. 1005 ¶¶ 152, 153, Fig. 3 (unlocking SIM displays home screen customized to unlocked SIM). Chae does not support that these widgets relate to the graphic items in its Figure 6(b), nor does Chae explain how its widgets could be understood as the claimed “user interface objects” of the widget screen user interface. As explained persuasively by Dr. Cockburn, “the only widgets that are described in Chae are widgets relating to the use state of the multiple SIM cards,” and “[t]hese widgets described in Chae do not correspond to applications and thus do not cause display of applications when the widgets are selected.” Ex. 2003 ¶ 46 (quoting Ex. 1005 ¶ 152).

Petitioner’s reliance on Narendra’s disclosure of swiping between interfaces (*see* Pet. 56–57) is similarly deficient because swiping between

interfaces does not teach or suggest displaying an application in response to selection of an object as required by claim 1. Narendra contains no details suggesting that widgets correspond to applications, contain application content, and cause display of applications. Ex. 2003 ¶ 47 (“Narendra mentions the word ‘widgets’ only once with no other details suggesting that widgets correspond to applications, contain application content, and cause display of applications.”) (citing Ex. 1006 ¶ 25).

Petitioner’s assertions as to the understanding of a person of ordinary skill in the art based on the teachings of Chae and Narendra are also unpersuasive. *See* Pet. 57. Petitioner alleges “those references [Chae and Narendra] used the term ‘widget’ to refer to a user interface object that displays content generated by an associated application without needing to (but being able to) open the application.” *Id.* This theory, however, expressly states that the application does not need to be opened. Not needing to open the application suggests that selecting the object would not cause display of the application because the object already previews the application (*see* PO Resp. 23), which contradicts Petitioner’s previous assertions that selecting the object would cause display of the application as required by claim 1. Petitioner’s position that the references simply “do[] not say that you can’t execute the application itself to see the full application,” is not sufficient evidence to establish that Chae and Narendra teach selecting the graphical object would display a corresponding application. *See* Tr. 13:14–15.

Although not directly required for this ground,⁵ Petitioner’s reliance on Hong and Android (*see* Pet. 57–61) fails to remedy the deficiencies of Petitioner’s combination of Chae and Narendra.

Hong is directed to previewing an application *without executing the application*. *See* Ex. 1010 ¶ 4 (“application widgets have been provided that enable a user to access contents provided in an application without executing the application”); Pet. 57. A person of ordinary skill in the art would understand that because Hong is directed to displaying a preview of the application without executing the application, an application would not necessarily be displayed in response to selection of the preview. *See* PO Resp. 23; Sur-reply 12–14. We find persuasive Dr. Cockburn’s testimony that “Hong’s widget provides a preview of a selected application without executing the selected application,” and that “Hong does not teach or suggest displaying the application when the widget is selected as required.” Ex. 2003 ¶ 47 (citing Ex. 1010 ¶¶ 4, 5, 9–11, 50, 66–68, 71–77, 82–92).

Similarly, Android does not support Petitioner’s case because it shows a preview of a selection without disclosing whether the selection displays an application. Android is a video of a user swiping a smartphone to navigate among interfaces of applications such as calendar and email. Ex. 1007, at 1:11, 2:06. The video does not disclose what occurs if and when the user selects the interfaces on the screen, so Android fails to inform the person of ordinary skill in the art whether a selection would cause display of an application. *See also* Tr. 50:20–23 (“The Android disclosure is merely that

⁵ As noted above, Petitioner also challenges the independent claims based on Chae, Narendra, Hong and/or Android. Our analysis here is equally applicable to that ground addressed more below.

of a person installing a user interface object that offers display of an email inbox and that enables selection to a selected single email from within that inbox.”), 76:5–9 (“You select an item in that inbox. You select an actual email in that inbox, and that’s how you arrive at the screen that’s to the right. That is a far cry different than an object, which is an icon, which is generally selectable to get you into an application”). The video evidence of Android is simply not sufficient to teach “a respective user interface object of the plurality of user interface objects contains application content from an application corresponding to the respective user interface object, and when selected, causes display of an application corresponding to the respective user interface object” as recited in claim 1.

i. Summary

For the reasons explained above, Petitioner does not persuasively show that the subject matter of claim 1 would have been obvious over Chae or the combination of Chae and Narendra.

4. Independent Claims 9 and 17.

Petitioner contends that “Claim 9 is essentially the same as claim 1 in the form of a computer system with a processor that executes instructions stored in memory to perform the method of claim 1.” Pet. 70. Petitioner contends that “Claim 17 is essentially the same as claim 1 in the form of a computer-readable storage medium comprising instructions that, when executed by a processor, perform the method of claim 1.” *Id.* The remaining limitations of claims 9 and 17 are substantially the same as claim 1. Neither Petitioner nor Patent Owner presents any arguments for claims 9 and 17 other than those we have already considered with respect to

independent claim 1. Pet. 70–72; PO Resp. 31–32, 33–34; Pet. Reply 27; Sur-reply 10–15.

For the reasons explained above in connection with claim 1, Petitioner does not persuasively show that the subject matter of claims 9 and 17 would have been obvious over the combination of Chae and Narendra.

5. Dependent Claims 2, 10, 14, 18, and 22.

Petitioner presents contentions that claims 2, 6, 10, 14, 18, and 22, which depend directly or indirectly from independent claim 1, 9, or 17, are unpatentable over the combined teachings of Chae and Narendra, and provides arguments explaining how the references teach the limitations of these claims. Pet. 64–65, 70, 72; Ex. 1003 ¶¶ 101–103, 110, 127.

For the reasons explained above in connection with independent claims 1, 9, and 17, Petitioner does not persuasively show that the subject matter of claims 2, 6, 10, 14, 18, and 22 would have been obvious over the combination of Chae and Narendra.

E. The Alleged Obviousness of Claims 3–5, 11–13, and 19–22 Over Chae, Narendra, and Shuttleworth

Petitioner asserts that claims 3–5, 11–13, and 19–22 of the '352 patent are unpatentable as obvious over the combination of Chae, Narendra, and Shuttleworth. Pet. 73–82. Claims 3–5 depend directly or indirectly from independent claim 1. Claims 11–13 depend directly or indirectly from independent claim 9. Claims 19–22 depend directly or indirectly from independent claim 17.

For the reasons explained above in connection with independent claims 1, 9, and 17, Petitioner does not persuasively show that the subject matter of claims 3–5, 11–13, and 19–22 would have been obvious over the combination of Chae, Narendra, and Shuttleworth.

F. The Alleged Obviousness of Claims 7, 8, 15, 16, 23, and 24 Over Chae, Narendra, and Karunamuni

Petitioner asserts that claims 7, 8, 15, 16, 23, and 24 of the '352 patent are unpatentable as obvious over the combination of Chae, Narendra, and Karunamuni. Pet. 82–90. Claims 7 and 8 depend directly or indirectly from independent claim 1. Claims 15 and 16 depend directly or indirectly from independent claim 9. Claims 23 and 24 depend directly or indirectly from independent claim 17.

For the reasons explained above in connection with independent claims 1, 9, and 17, Petitioner does not persuasively show that the subject matter of claims 7, 8, 15, 16, 23, and 24 would have been obvious over the combination of Chae, Narendra, and Karunamuni.

G. The Alleged Obviousness of Claims 1, 2, 6, 9, 10, 14, 17, 18, 22 Over Chae, Narendra, Hong, and/or Android

Petitioner contends that claims 1, 2, 6, 9, 10, 14, 17, 18, and 22 are obvious over various combinations of Chae, Narendra, Hong, and/or Android. Pet. 90–92.

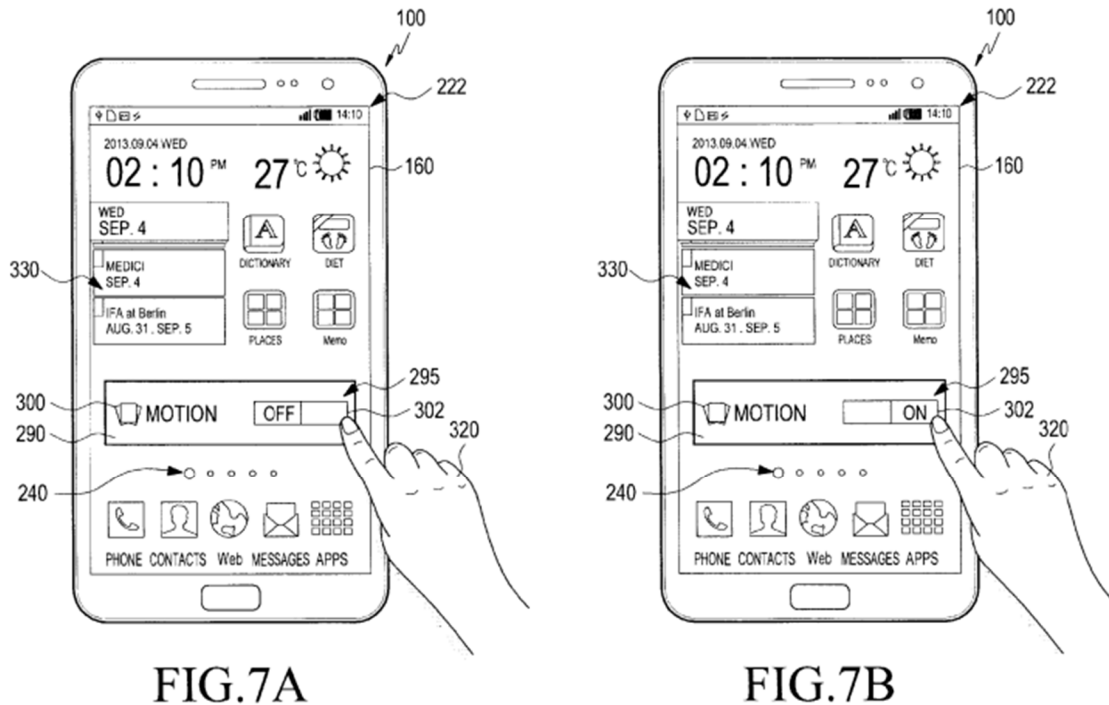
1. Android (Ex. 1007)

Android is a video showing a user navigating among interface screens on a smartphone. Ex. 1007. The video shows the user navigating to a calendar interface that displays events and an email interface that displays email messages. *See, e.g., id.* at 1:11, 2:06.

2. Hong (Ex. 1010)

Hong is titled “Method for Displaying Previews in a Widget” and it relates to displaying in a widget a preview of an application without executing the application. Ex. 1010, codes (54), (57). For example, Hong discloses that a user can preview applications such as “a clock, a calendar, a

memo, search, a map, news, a real-time camera.” *Id.* ¶ 4. Hong’s Figures 7A and 7B depict an example method for displaying a widget:



Id. ¶ 16, Figs. 7A, 7B. Hong discloses that “the controller 170 detects a user input on the motion object 300 in the widget 290, and executes a function associated with the user input or applies settings associated with the user input. In this example, the user 320 selects the on/off button 302 of the motion object 300 so as to activate motion recognition.” *Id.* ¶ 81.

Petitioner’s Arguments - Motivation to combine Chae and Narendra with Hong

Petitioner contends that if Chae and Narendra do not “meet the ‘widget screen user interface’ limitation of claim 1, it would have been obvious to modify Chae and Narendra to implement the specific widgets disclosed by Hong, such as ‘a clock, a calendar, a memo, search, a map,

news,’ etc.” Pet. 90 (quoting Ex. 1010 ¶¶ 4–5, Fig. 7A). Petitioner contends “Chae’s and Narendra’s general disclosure of screens with multiple widgets would have motivated a POSITA to search within the prior art for known details for implementing widgets and the POSITA would have easily located Hong and its detailed disclosure of widgets.” *Id.* at 90 (citing Ex. 1003 ¶ 154).

Petitioner’s Arguments - Motivation to combine Chae and Narendra with Android

Petitioner contends that if Chae does not satisfy “waking up a smartphone from a power-saving state, as recited by limitation 1g,” then “it would have been obvious to modify Chae to implement the detailed wake-up process disclosed by Android.” Pet. 91 (citing Ex. 1007 at 0:24–0:28, 0:40, 1:07, 2:30, 2:59, 3:20, 3:46). Petitioner contends that “Chae’s general disclosure of waking up a smartphone would have motivated a POSITA to search within the prior art for known wake-up processes for smartphones and the POSITA would have easily located Android and its detailed disclosure of a wake-up process.” *Id.* at 91 (citing Ex. 1003 ¶ 155).

Petitioner contends that if Chae and Narendra do not “meet the ‘widget screen user interface’ limitation of claim 1, it would have been obvious to modify Chae and Narendra to implement the specific widgets disclosed by Android, such as the calendar and email widgets.” Pet. 91 (citing Ex. 1007 at 1:11, 2:06). Petitioner contends “Chae’s and Narendra’s general disclosure of screens with multiple widgets would have motivated a POSITA to search within the prior art for known details for implementing widgets and the POSITA would have easily located Android and its detailed disclosure of widgets.” *Id.* at 91 (citing Ex. 1003 ¶ 156).

Petitioner’s Arguments - Motivation to combine Chae and Narendra with Hong and Android

Petitioner contends that a “POSITA would have been motivated to combine both Hong and Android with Chae and Narendra in the manner and for the reasons set forth above with respect to Grounds 4.1 and 4.2.” Pet. 92 (citing Ex. 1003 ¶ 157).

Patent Owner’s Response

Patent Owner argues that any combination of Chae, Narendra, Hong, and/or Android fails to render obvious the “widget” limitation discussed in detail above. *See* PO Resp. 23. Patent Owner argues that “Hong’s widget provides a preview of a selected application without executing the selected application . . . Android also provides no indication that the application is displayed when the widget is selected, rather than providing a preview of the selection within the widget without executing the application.” *Id.* (citing Ex. 1006 ¶ 25; Ex. 1007; Ex. 1010 ¶¶ 4–5, 9–11, 50, 66–68, 71–77, 82–92; Ex. 2003 ¶ 47). Patent Owner argues that Petitioner’s only support for the allegation that widgets display an application upon selection is Dr. Rosenberg’s “declaration parroting the petition.” *Id.* at 23–24 (citing Ex. 2003 ¶¶ 48–49).

Petitioner’s Reply

Petitioner’s Reply arguments are generally directed to claim 1 rather than these specific grounds. *See generally* Pet. Reply.

Patent Owner’s Sur-reply

Patent Owner’s Sur-reply arguments apply to all grounds based on Chae and Narendra. *See generally* Sur-Reply.

Analysis

The shortcomings of Hong and Android as related to the widget limitation have been decided above. In addition, Petitioner also fails to provide a clearly articulated rationale for combining these references with Chae and Narendra. Petitioner does not address how any of the claims would read upon its proposed combinations as a whole, does not convey how the specific combinations would occur, and does not establish a reasonable expectation of success in combining the references. *See* PO Resp. 13–18. As noted by Patent Owner, “the Petition fails to properly articulate which combination is being asserted, and, instead resorts to a vague ‘any two or more’ of six references statement—which effectively means 15 or more combinations, placing an undue burden on both the Board and Patent Owner to decipher which combinations are being asserted and how.” *Id.* at 13 (citing Pet. 32 – “POSITA would have been motivated to combine, and would reasonably have expected success in combining, any two or more of Chae, Narendra, Android, Shuttleworth, Hong, and Karunamuni”). With respect to this ground, we find persuasive Dr. Cockburn’s testimony that “the Petition does not even explain which reference modifies another reference, how and why certain features of a particular reference would have been combined with other features of another reference, or how they would provide the alleged benefits.” Ex. 2003 ¶ 37.

Petitioner has failed to explain how its proposed combinations with Hong and Android would address any independent claim as a whole, instead just focusing on single limitations. *See, e.g.*, Pet. 57 (Hong as related only to a “widget” limitation), 32–33 (asserting fifteen different combinations of

references but not discussing how any particular combination applies to any claim), 90 (stating that Hong with Chae and Narendra render obvious claims but not addressing how the combination would apply to any particular claim). Petitioner has simply not developed a persuasive and coherent explanation so as to establish “the differences between the claimed invention and the prior art are such that the claimed invention *as a whole* would have been obvious,” as required by 35 U.S.C. § 103 (emphasis added).

Further, Petitioner’s reasons for combining references, “compatible with and additive of each other,” (Pet. 32) and “the enhancement to the ease-of-use and user-friendliness of the user interface that each feature would have provided, to combine any two or more of the disclosed features to maximize the ease-of-use and user-friendliness of the user interface,” (*id.*) are generic and fail to identify any specific features being combined. By creating such generic rationales for combining any two or more of the references, Petitioner fails to answer the question of whether a skilled artisan would have plucked one reference out of the sea of prior art and combined it in a specified manner with other conventional elements to address some need present in the field. *See WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1337 (Fed. Cir. 2016).

In addition, and as examined above, Hong and/or Android combined with Chae and Narendra also fail to teach or suggest “a respective user interface object . . . when selected, causes display of an application corresponding to the respective user interface object” as recited in claim 1.

Accordingly, Petitioner does not persuasively show that the subject matter of claims 1, 2, 6, 9, 10, 14, 17, 18, and 22 would have been obvious over the combination of Chae, Narendra, Hong, and/or Android.

H. The Alleged Obviousness of Claims 3–5, 11–13, 19–22 Over Chae, Narendra, Shuttleworth, Hong and/or Android

Petitioner also asserts that claims 3–5, 11–13, and 19–22 of the '352 patent are unpatentable as obvious over the combination of Chae, Narendra, and Shuttleworth in further view of Hong and/or Android. Pet. 92. Claims 3–5 depend directly or indirectly from independent claim 1. Claims 11–13 depend directly or indirectly from independent claim 9. Claims 19–22 depend directly or indirectly from independent claim 17.

For the reasons explained above in connection with independent claims 1, 9, and 17, Petitioner does not persuasively show that the subject matter of claims 3–5, 11–13, and 19–22 would have been obvious over the combination of Chae, Narendra, and Shuttleworth with Hong and/or Android.

I. The Alleged Obviousness of Claims 7, 8, 15, 16, 23, and 24 Over Chae, Narendra, Karunamuni, Hong, and/or Android

Petitioner also asserts that claims 7, 8, 15, 16, 23, and 24 of the '352 patent are unpatentable as obvious over the combination of Chae, Narendra, and Karunamuni with Hong and/or Android. Pet. 93. Claims 7 and 8 depend directly or indirectly from independent claim 1. Claims 15 and 16 depend directly or indirectly from independent claim 9. Claims 23 and 24 depend directly or indirectly from independent claim 17.

For the reasons explained above in connection with independent claims 1, 9, and 17, Petitioner does not persuasively show that the subject matter of claims 7, 8, 15, 16, 23, and 24 would have been obvious over the combination of Chae, Narendra, and Karunamuni with Hong and/or Android.

J. Patent Owner's Motions to Amend

Patent Owner filed a Contingent Motion to Amend. *See generally* Paper 14. Petitioner filed an Opposition to Patent Owner's Contingent Motion to Amend. *See generally* Paper 17. The Board issued Preliminary Guidance on Patent Owner's Motion to Amend. *See generally* Paper 22. Patent Owner filed a Revised Contingent Motion to Amend. *See generally* Paper 26. Petitioner filed an Opposition to Patent Owner's Revised Contingent Motion to Amend. *See generally* Paper 32. Patent Owner filed a Reply to Petitioner's Opposition. *See generally* Paper 38. Petitioner filed a Sur-Reply to Reply to Opposition to Patent Owner's Contingent Motion to Amend. *See generally* Paper 40.

Patent Owner's Revised Contingent Motion to Amend asserts that in "the event the Board finds at least one challenged MTA claim unpatentable, [Patent Owner] respectfully requests that the Board grant this revised Motion to Amend (MTA) with respect to the corresponding proposed substitute claim(s)." Paper 26, 1. Because we determine that Petitioner has not established that any of the challenged claims 1–24 are unpatentable, Patent Owner's Revised Contingent Motion to Amend is moot.

III. CONCLUSION

Based on the evidence presented with the Petition, the evidence introduced during the trial, and the parties' respective arguments, Petitioner has not shown by a preponderance of the evidence that any of claims 1–24 are unpatentable.

In summary:

Claims	35 U.S.C. §	Reference(s)/ Basis	Claims Shown Unpatentable	Claims Not Shown Unpatentable
1, 2, 6, 9, 10, 14, 17, 18, 22	103	Chae, Narendra		1, 2, 6, 9, 10, 14, 17, 18, 22
3–5, 11–13, 19–22	103	Chae, Narendra, Shuttleworth		3–5, 11–13, 19–22
7, 8, 15, 16, 23, 24	103	Chae, Narendra, Karunamuni		7, 8, 15, 16, 23, 24
1, 2, 6, 9, 10, 14, 17, 18, 22	103	Chae, Narendra, Hong, Android		1, 2, 6, 9, 10, 14, 17, 18, 22
3–5, 11–13, 19–22	103	Chae, Narendra, Shuttleworth, Hong, Android		3–5, 11–13, 19–22
7, 8, 15, 16, 23, 24	103	Chae, Narendra, Karunamuni, Hong, Android		7, 8, 15, 16, 23, 24

Motion to Amend Outcome	Claim(s)
Original Claims Cancelled by Amendment	
Substitute Claims Proposed in the Amendment	25–39
Substitute Claims: Motion to Amend Granted	
Substitute Claims: Motion to Amend Denied	
Substitute Claims: Not Reached	25–39

IV. ORDER

Accordingly, it is

ORDERED that claims 1–24 of U.S. Patent No. 11,106,352 B2 are not determined to be unpatentable;

FURTHER ORDERED that Patent Owner’s Motion to Amend is *dismissed* as moot; and

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

IPR2023-00664
Patent 11,106,352 B2

PETITIONER:

Ted M. Cannon
Jarom D. Kesler
Philip M. Nelson
KNOBBE, MARTENS, OLSON & BEAR, LL
2tmc@knobbe.com
2jzk@knobbe.com
2pmn@knobbe.com

PATENT OWNER:

W. Karl Renner
Roberto J. Devoto
Craig A. Deutsch
Grace Kim
Andrew Patrick
Kim Leung
Usman Khan
FISH & RICHARDSON P.C.
axf-ptab@fr.com
devoto@fr.com
deutsch@fr.com
gkim@fr.com
patrick@fr.com
leung@fr.com
kan@fr.com