

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LG ELECTRONICS INC.,
Petitioner,

v.

PANTECH CORPORATION,
Patent Owner.

IPR2023-01268
Patent 9,575,631 B2

Before THU A. DANG, CHRISTOPHER L. OGDEN, and
SCOTT B. HOWARD, *Administrative Patent Judges*.

DANG, *Administrative Patent Judge*.

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

I. INTRODUCTION

A. *Background*

LG Electronics Inc. (“Petitioner”) filed a Petition requesting an *inter partes* review of claims 1–10 (“the challenged claims”) of U.S. Patent No. 9,575,631 B2 (Ex. 1001, “the ’631 patent”). Paper 1 (“Pet.”). Pantech Corporation (“Patent Owner”) filed a Preliminary Response. Paper 22 (“Prelim. Resp.”). Pursuant to our authorization, Petitioner filed a Preliminary Reply. Paper 23 (“Prelim. Reply”). Patent Owner did not file a Preliminary Sur-reply.

Under 37 C.F.R. § 42.4(a), the Board has authority to determine whether to institute an *inter partes* review. Applying the standard set forth in 35 U.S.C. § 314(a), which requires demonstration of a reasonable likelihood that Petitioner would prevail with respect to at least one challenged claim, we grant Petitioner’s request and institute an *inter partes* review of all challenged claims.

B. *Related Proceedings*

The parties identify the ’631 patent as the subject of *Pantech Corp. v. LG Elecs. Inc.*, No. 5:22-cv-00113-RWS-JBB (E.D. Tex.). Pet. 5; Paper 3, 1 (“the district court litigation”).

C. *The ’631 Patent*

The ’631 patent, titled “Method for Selecting and Controlling Second Work Process During First Work Process in Multitasking Mobile Terminal,” issued on February 21, 2017, from Application No. 15/010,629 (“the ’629 application”), was filed on January 29, 2016. Ex. 1001, codes (54), (45), (21), (22). The ’629 application is a continuation of Application No.

14/840,844, which in turn is a continuation of Application No. 11/495,863 (“the ’863 application”), filed on July 28, 2006. *Id.* at code (63).

The ’631 patent relates to controlling a plurality of work processes in a multitasking mobile terminal, wherein icons corresponding to respective work processes are displayed in response to a user command and a desired work process is selected through the displayed icons. *Id.* at code (57). A predetermined function of the selected work process is controlled through a pop-up menu activated in response to the user command. *Id.*

An illustration of the displayed icons of the work processes (*id.* at 35–37) is depicted in Figures 5A–5C of the ’631 patent, reproduced below:

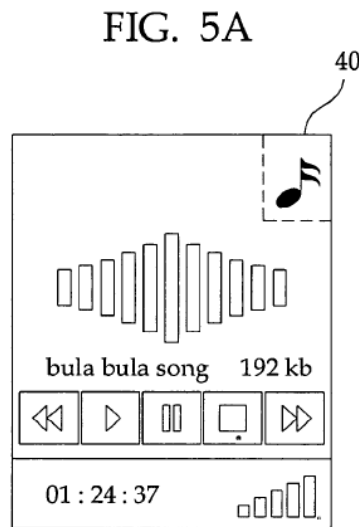


Figure 5A of the ’631 patent shows an icon indicating an “MP3” music play process is displayed in a first portion of display 40, while an MP3 music file is played. *Id.* at 4:31–33.

FIG. 5B

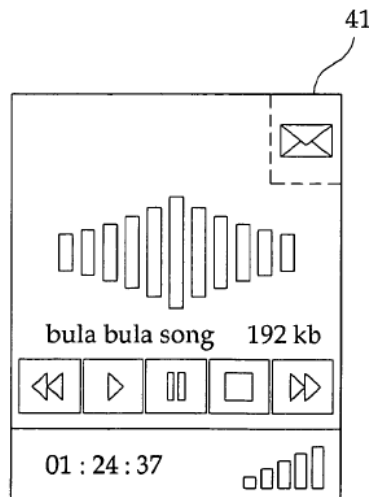


Figure 5B of the '631 patent illustrates an icon indicating an SMS message creation process is displayed in a first portion of display 41 when a first user command for sending an SMS is inputted while an MP3 music file is played. *Id.* at 4:34–36.

FIG. 5C



Figure 5C of the '631 patent illustrates an icon corresponding to the MP3 play process that is performed concurrently is displayed in a first portion of display 42 together with a screen of the SMS message creation process when

a user inputs a second command for selecting a displayed SMS icon and an SMS message creation process is activated. *Id.* at 4:38–45.

Figure 5D of the '631 patent is reproduced below.

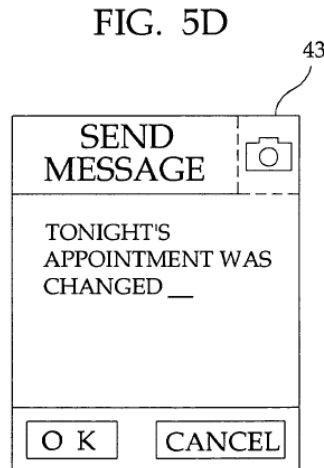


Figure 5D of the '631 patent illustrates an icon corresponding to a camera mode work process that is played in a first portion of display 43 in response to a first user command for selecting a new work process of a camera mode being inputted. *Id.* at 46–50. As shown in Figure 5D, by selecting the displayed camera mode icon, the work process for sending an SMS message is changed to the camera mode work process. *Id.* at 50–52.

An illustration of the displayed pop-up menus (*id.* at 3:48–49) is depicted in Figure 8B of the '631 patent, reproduced below:

FIG. 8B

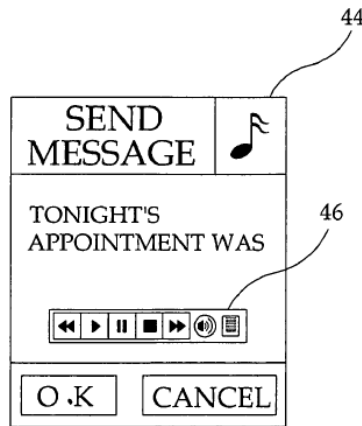


Figure 8B of the '631 patent illustrates a pop-up menu displayed in response to the first user command. *Id.* at 6:21–22. As shown in Figure 8B, pop-up menu 46 has a predetermined format, wherein image information for pop-up menu 46 displayed is stored in the memory of the mobile terminal. *Id.* at 6:22–25. In an embodiment, pop-up menu 46 is displayed brightly and clearly while the screen corresponding to the SMS message process is displayed darkly and unclearly. *Id.* at 6:25–28.

D. The Challenged Claims

Of the challenged claims (claims 1–10), claim 1 is the sole independent claim. Claim 1 is illustrative and is reproduced below:

1. A method for controlling a predetermined function of a second work process during a first work process in a multitasking mobile terminal that performs the first work process and the second work process, the method comprising:

displaying one icon in a designated portion of a display, wherein the displayed icon corresponds to the first work process;

if the displayed icon corresponding to the first work process is selected, displaying a screen of the first work process in the display;

in response to a first command for sequentially displaying icons, performing sequential display of icons such that an icon corresponding to the second work process is displayed, wherein the icon corresponding to the second work process is displayed in the designated portion of the display;

in response to a second command for changing to the second work process, replacing the screen of the first work process with a screen of the second work process;

controlling the multitasking of the second work process and the first work process;

in response to a third command for activating a control menu for controlling a predetermined function of the first work process, activating the control menu for controlling the predetermined function of the first work process; and

in response to a fourth command for controlling the predetermined function of the first work process through the activated control menu, controlling the predetermined function of the first work process through the activated control menu.

Ex. 1001, 7:37–67.

E. Asserted Grounds of Unpatentability

Petitioner challenges the patentability of claims 1–10 of the '631 patent on the following grounds (Pet. 8):

Claim(s) Challenged	35 U.S.C. §¹	Reference(s)/Basis
1–10	102/103	Paasonen ²
1–10	103	Paasonen, Nakano ³
4, 7	103	Paasonen, Aaltonen ⁴
4, 7	103	Paasonen, Aaltonen, Nakano
1–4, 7	102/103	Hotelling ⁵
1–4, 6–10	103	Hotelling, Hellyar ⁶
5, 6	103	Hotelling, Hellyar, Tu ⁷

Petitioner relies on the declaration of Vijay Madiseti, Ph.D.
(Ex. 1003) in support of its unpatentability contentions.

¹ The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, 125 Stat. 284, 287–88 (2011), amended various provisions of 35 U.S.C. The parties agree that pre-AIA law applies. *See* Pet. 1 n.1; Prelim. Resp. 25 n.2. On the record before us, we agree that the pre-AIA versions of 35 U.S.C. §§ 102 and 103 apply.

² U.S. Patent No. 9,785,329 B2, issued October 10, 2017, filed May 23, 2005 (Ex. 1005, “Paasonen”).

³ U.S. Patent Appl. Publication No. 2004/0100479 A1, published May 27, 2004, filed May 9, 2003 (Ex. 1006, “Nakano”).

⁴ U.S. Patent Appl. Publication No. 2006/0020904 A1, published January 26, 2006, filed July 11, 2005 (Ex. 1007, “Aaltonen”).

⁵ U.S. Patent Appl. Publication No. 2006/0197753 A1, published September 7, 2006, filed March 3, 2006 (Ex. 1009, “Hotelling ’753”); Provisional Application No. 60/663,345, filed on March 16, 2005 (Ex. 1010, “Hotelling-Prov”); U.S. Patent Appl. Publication No. 2006/0026521 A1, filed on Jul. 30, 2004 (Ex. 1011, “Hotelling ’521”) (collectively, “Hotelling”).

⁶ U.S. Patent Appl. Publication No. 2003/0117440 A1, published June 26, 2003, filed December 21, 2001 (Ex. 1012, “Hellyar”).

⁷ U.S. Patent Publication No. 2005/0257169 A1, published November 17, 2005, filed June 22, 2004 (Ex. 1008, “Tu”).

II. ANALYSIS

A. 35 U.S.C. § 314(a)

Patent Owner argues that we should exercise discretion to deny institution under 35 U.S.C. § 314(a) because the factors identified in *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (PTAB Mar. 20, 2020) (precedential), weigh in favor of denying institution in view of the district court litigation. Prelim. Resp. 27–47.

A USPTO Memorandum from Director Vidal titled Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation (June 21, 2022), *available at* https://www.uspto.gov/sites/default/files/documents/interim_proc_discretionary_denials_aia_parallel_district_court_litigation_memo_20220621_.pdf (“Interim Procedure”) provides that “the PTAB will not deny institution of an IPR or PGR under *Fintiv* . . . where a petitioner stipulates not to pursue in a parallel district court proceeding the same grounds as in the petition or any grounds that could have reasonably been raised in the petition.” Interim Procedure 9. Petitioner has submitted such a stipulation. Ex. 1300; Paper 24, 8. Thus, we do not exercise discretion to deny institution under 35 U.S.C. § 314(a).

B. Claim Construction

We construe each claim “in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent.” 37 C.F.R. § 42.100(b). Under this standard, claim terms are generally given their plain and ordinary meaning as would have been understood by a person of ordinary skill in the art (POSITA) at the time of the invention and in the

context of the entire patent disclosure. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc).

Petitioner acknowledges that it and Patent Owner have proposed constructions in the district court litigation, but contends that “the Board need not construe these terms because the prior art discloses or renders obvious embodiments within the indisputable scope of the claims under the parties’ and any reasonable interpretations.” Pet. 13. Patent Owner similarly points to the proposed constructions in the district court litigation but also does not propose any claim construction in its Preliminary Response. *See* Prelim. Resp. 24–25.

At this time, we determine that no terms of the challenged claims require explicit construction. *See, e.g., Realtime Data, LLC v. Iancu*, 912 F.3d 1368, 1375 (Fed. Cir. 2019) (“The Board is required to construe ‘only those terms . . . that are in controversy, and 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))).

C. Principles of Law

A patent claim is unpatentable under 35 U.S.C. § 103(a) if the differences between the claimed subject matter and the prior art are such that the subject matter, as a whole, would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. *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 scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) objective evidence of

nonobviousness. *Graham v. John Deere Co. of Kan. City*, 383 U.S. 1, 17–18 (1966).

D. Paasonen Grounds

Petitioner contends that claims 1–10 of the ’631 patent are anticipated by or would have been obvious over Paasonen. Pet. 14–42. Alternatively, Petitioner contends that claims 1–10 would have been obvious over Paasonen in view of Nakano. *Id.* at 43–47. Petitioner then contends that dependent claims 4 and 7 would have been obvious over Paasonen in further view of Aaltonen or Paasonen and Aaltonen in further view of Nakano. *See id.* at 47–48. In response, Patent Owner contends Paasonen “does not teach each and every element of claims 1–10” (Prelim. Resp. 37–41), and that Nakano fails to cure the deficiencies of Paasonen. *See id.* at 41–43.

We summarize the asserted art to Paasonen and Nakano below.

1. Paasonen

Paasonen, titled “Pocket Computer and Associated Methods,” is directed to a pocket computer having “an apparatus housing and a user interface with a touch-sensitive display,” with “at least one key for navigation among content shown on said display.” Ex. 1005, codes (54), (57). Paasonen recognizes that, in handheld devices, “there is a need for an invention that allows a user to select both single list items and discontinuous list items in a convenient and efficient manner” (*id.* at 2:55–57), but that “available display space is limited” (*id.* at 3:1–3). According to Paasonen, a user “can not close the dialog and may have to restart the application,” (*id.* at 3:23–25) and thus, “there is a need for an invention allowing a user to conveniently and safely temporarily hide a currently active window” (*id.* at 3:31–33).

An illustration of a display screen layout (*id.* at 10:25–26) is depicted in Figure 7, reproduced below:

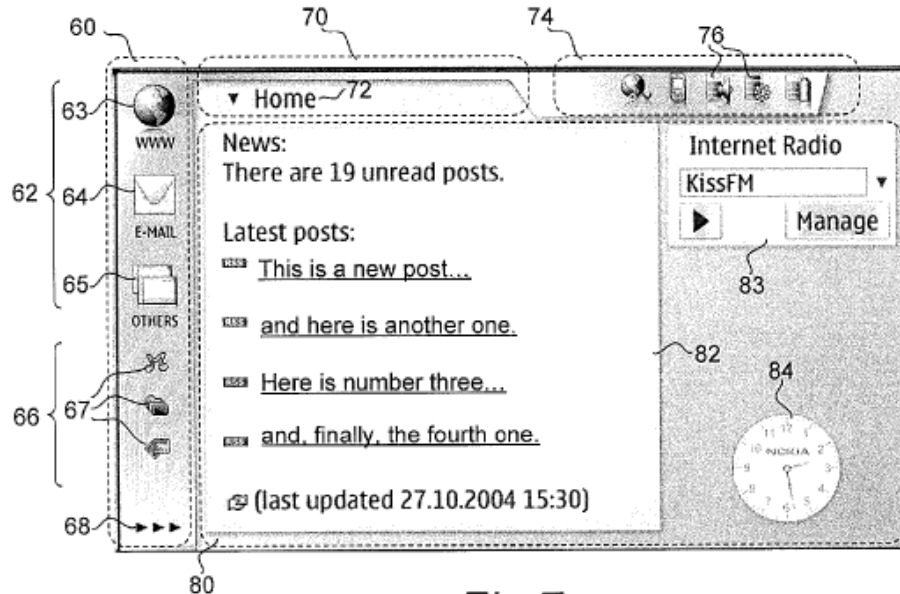


Fig 7

Figure 7 shows the display screen layout divided into four main areas: task navigator 60, title area 70, status indicator area 74, and application area 80. *Id.* at 12:56–59. Application area 80 is used by a currently active application to present content and also provide user interface controls which allow the user to interact with the currently active application. *Id.* at 12:60–65.

Task navigator 60 comprises upper portion 62 comprising icons 63–65 and lower portion 66 comprising icons 67. *Id.* at 13:23–33. Icon 63 is used for accessing tasks related to information browsing. *Id.* at 13:34–50. Icon 64 is used for accessing tasks related to electronic messaging. *Id.* at 13:51–52. By simply clicking on the desired icon, the user will be presented with a list of various tasks for selection. *Id.* at 13:54–58.

Lower portion 66 represents an application switcher panel with respective icons 67 for each of a plurality of launched applications. *Id.*

at 14:22–26. Among the running applications, the active one has control over application area 80 on the display. *Id.* at 14:26–28. The user uses application switcher panel 66 for switching to a desired application by tapping on corresponding icon 67. *Id.* at 14:30–32. Icons 67 have a dynamic appearance, wherein they may change order, appear or disappear over time. *Id.* at 14:38–41.

An illustration of the display screen layout with the topmost icon shown with a “depressed” appearance (*id.* at 14:49–59) is depicted in Figure 10 of Paasonen, reproduced below:

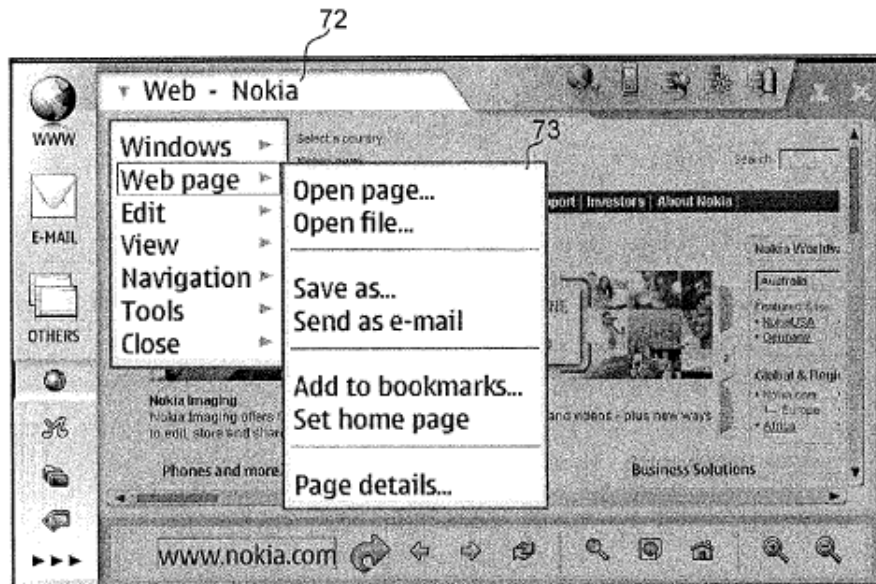


Fig 10

Figure 10 shows the application switcher panel with topmost icon 67a containing a browser symbol with a “depressed” appearance, wherein topmost icon 67a represents the currently active web browser application. *Id.* at 14:51–56.

The vertical order of the icons in the application switcher panel represents a historical order in which the four most recently used applications have been active. *Id.* at 14:60–63. When a user switches from a currently active application to another one, the order of the icons will be updated accordingly. *Id.* at 14:63–65. An illustration of the display screen layout with the order of the icons being updated (*id.* at 14:65–67) is depicted in Figures 11 and 12, reproduced below:

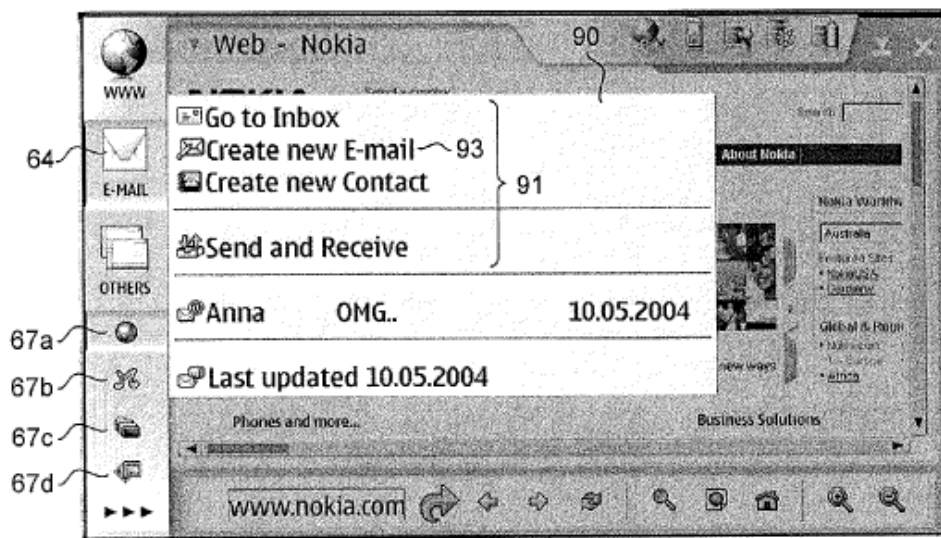


Fig 11

Figure 11 shows the application switcher panel with topmost icon 67a containing a browser symbol with a depressed appearance that represents the currently active web browser application (*id.* at 14:51–56), while a user clicks on icon 64 (*id.* at 14:6–12). As shown in Figure 11, to create a new email, the user clicks on icon 64 and directly selects second menu item 93 shown in task-oriented menu 90. *Id.* Upon selection of second menu item 93, the email messaging application will be automatically launched/switched to and the appropriate functionality will be invoked by

presenting a create new email dialog (*id.*) as depicted in Figure 12, reproduced below:

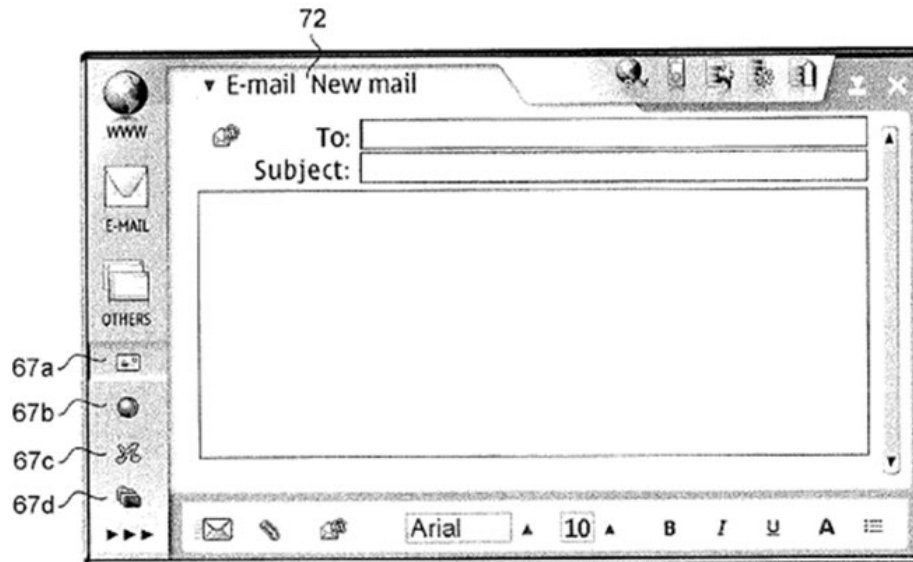


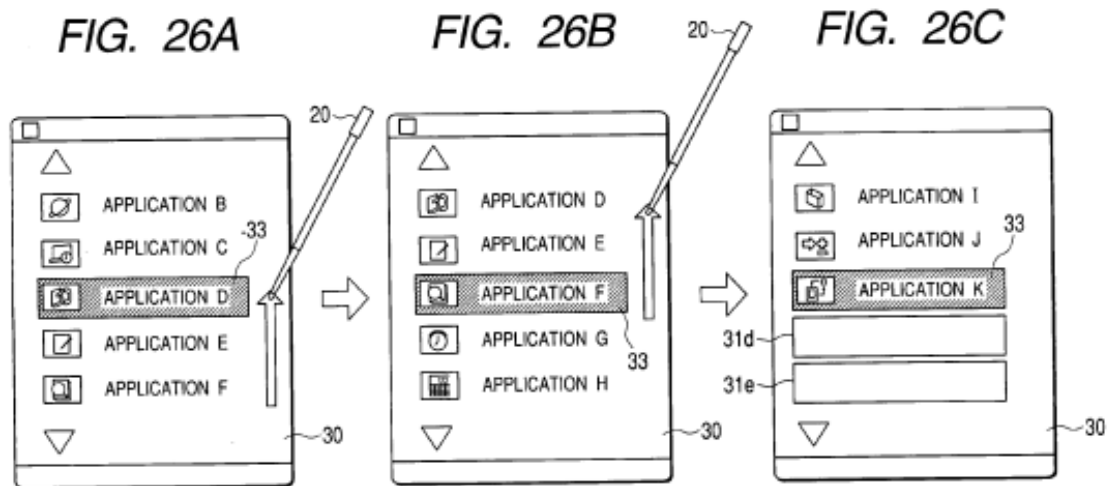
Fig 12

Figure 12 shows the application switcher panel. Along the left of the panel are a plurality of icons 67a–67d corresponding to each of a plurality of launched applications in each of a plurality of positions. *See id.* at 14:22–28. Topmost icon 67a contains an email symbol with a depressed appearance, wherein topmost icon 67a represents the currently active messaging application. *Id.* at 15:6–17. Since the user has invoked the messaging application by selecting menu item 93 in task-oriented menu 90, the messaging application has become active and the messaging icon takes topmost position 67a. *Id.* As shown in Figure 12, icons formerly 67a–67c have shifted one vertical position downwards, so that the web browser icon (formerly icon 67a) takes the second position (now icon 67b). *Id.*

2. Nakano

Nakano, titled “Portable Information Terminal, Display Control Device, Display Control Method, and Computer Readable Program Therefor,” relates to “a display control device for performing display control of menu display.” Ex. 1006, code (54), ¶ 1.

An illustration of the menu screen (*id.* ¶ 102) is depicted in Figures 26A–26C of Nakano, reproduced below:

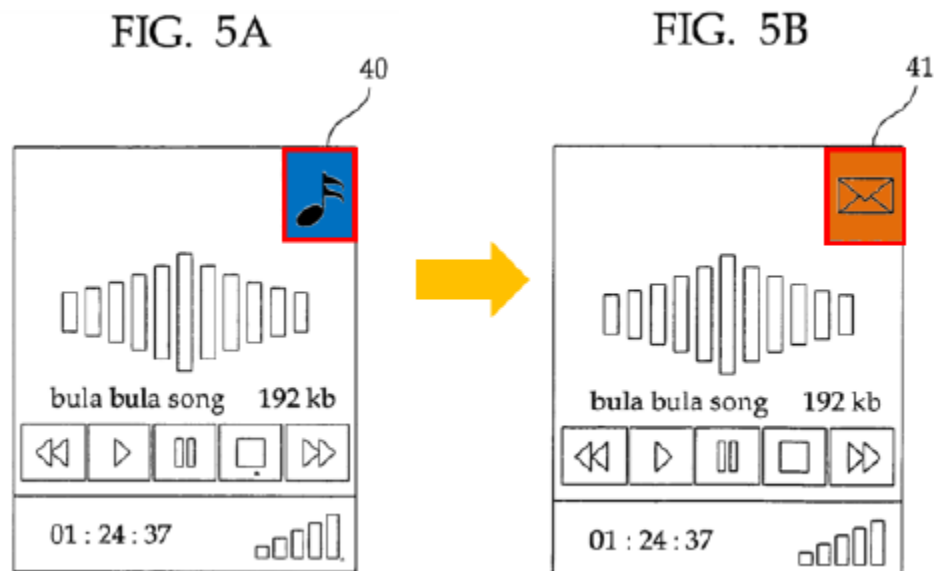


In combination, Figures 26A–26C of Nakano show menu screen 30 comprising “Application B” through “Application K” with focus 33 overlaid on the candidate for selection. *Id.* ¶¶ 289–291. As shown in Figure 26A, focus 33 is overlaid on Application D. *Id.* ¶ 291. In menu screen 30, dragging stylus pen 20 in the upward direction scrolls through the menu display entities. *Id.* ¶ 292. As shown in Figure 26B, the menu display entities are scrolled through in the upward direction by two rows, and focus 33 is then overlaid on Application F. *Id.* ¶¶ 294–295. As shown in Figure 26C, when the lowermost menu display entity (Application K) reaches focus 33, the scroll comes to a halt. *Id.* ¶ 297.

3. Analysis

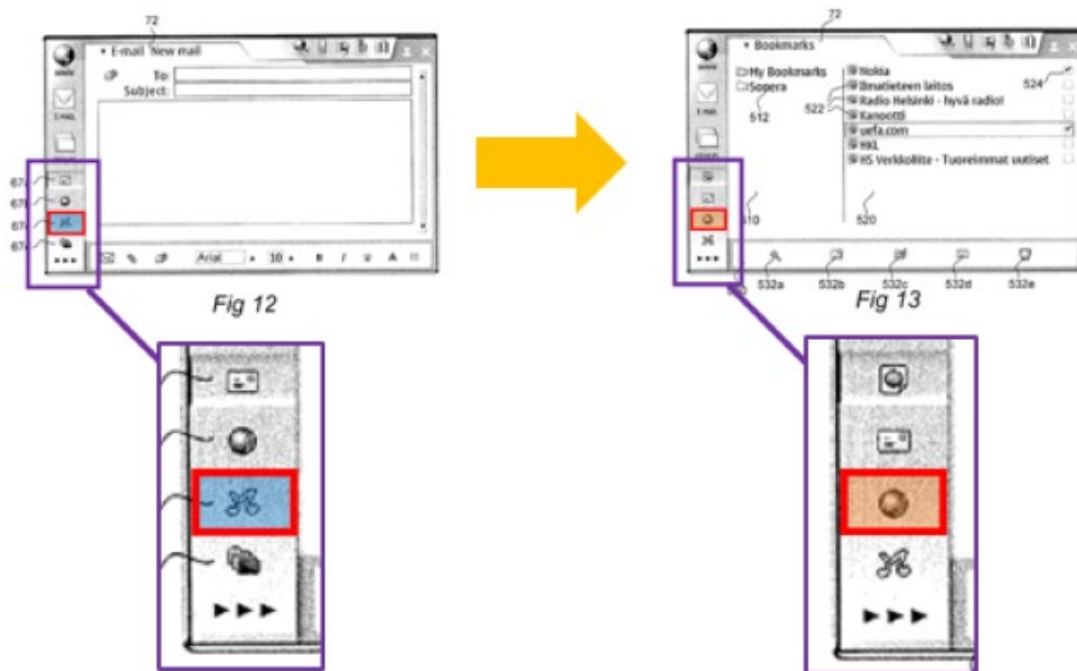
a. Obviousness Over Paasonen

Petitioner contends that the '631 patent is directed to “controlling ‘work processes in a multitasking mobile terminal.’” Pet. 1 (citing Ex. 1001, code (57), 1:23–25). In particular, Petitioner contends that the '631 patent teaches “a command for ‘sequential display of icons,’” which “causes a new icon to be displayed in a designated portion of the display.” *Id.* (citing Ex. 1001, 4:28–37, 5:1–16, Figs. 5A–B). To support its contentions, Petitioner provides annotated Figures 5A–B of the '631 patent, as seen below.



Annotated Figures 5A–B of the '631 patent in the Petition show a designated portion (red box) displaying an icon for work process 40, 41. Pet. 8–9. In particular, annotated Figure 5A shows an MP3 icon (in blue) for work process 40 in the designated portion and annotated Figure 5B shows an SMS icon (in orange) for work process 41 in the designated portion. *Id.*

Petitioner points out that, during prosecution of patent application that issued as the '631 patent, “the Claims were allowed because they recited ‘performing sequential display of icons’ by first ‘displaying one icon in a designated portion’ of the display and then displaying a different icon in that portion.” Pet. 2 (citing Ex. 1002, 189–195). Petitioner contends that such methods, however, “were well-known.” *Id.* In particular, according to Petitioner, Paasonen discloses “a mobile terminal that lists icons for ‘running applications’ that, when selected, switches the screen to the corresponding application.” *Id.* (citing Ex. 1005, 12:56–13:7, 14:22–37). To support its contentions, Petitioner provides annotated Figures 12–13 of Paasonen, as seen below.



Annotated Figures 12–13 of Paasonen in the Petition show a designated portion (red box) displaying an icon for a work process. Pet. 2–3. In particular, annotated Figure 12 shows a music player icon (in blue) in the

designated portion and annotated Figure 13 shows a browser icon (in orange) in the designated portion. *Id.*

Petitioner contends that, in Paasonen, the icons “are sequentially presented based on how recently each application was opened, with the most recent application’s icon on top, and the others shifting down to adjust,” such that, “in a designated portion of the display, a first icon is replaced with a second icon.” *Id.* (citing Ex. 1005, 8:58–9:10, 14:60–15:18, Figs. 12–13; Ex. 1003 ¶ 39).

We begin by addressing in detail Petitioner’s contentions and Patent Owner’s arguments with respect to the limitations of representative claim 1.

- i. *Preamble – a method for “controlling a predetermined function of a second work process during a first work process in a multitasking mobile terminal that performs the first work process and the second work process.”*

Petitioner contends that “Paasonen discloses a method for controlling a predetermined function of a second work process during a first work process (e.g., ‘access[ing]’ a ‘functionality of a[n] . . . application,’ while running another application),” wherein the method is performed “in a multitasking mobile terminal that performs the first work process and the second work process (e.g., ‘mobile terminal’ runs ‘a currently active application’ (e.g., ‘browser’) and another application (e.g., ‘audio’ or ‘music player’)).” Pet. 17 (alterations in original) (emphases omitted). In particular, Petitioner contends that Paasonen discloses “a ‘mobile terminal’ that controls a ‘functionality’ of, e.g., an active ‘browser’ application (second work process) while, e.g., a simultaneously ‘running’ ‘audio[/music] player’ (first work process) plays music.” *Id.* (alterations in original) (citing

Ex. 1005, 9:20–32, 9:65–10:2, 11:48–65, 13:25–50, 14:22–37, 14:60–15:5;
Ex. 1003 ¶¶ 64–66).

At this stage of the proceeding, Patent Owner does not present arguments in the Preliminary Response addressing the specific merits of Petitioner’s contentions with respect to the preamble. *See* Prelim. Resp. 37–41.

Paasonen discloses a pocket computer comprising an application switcher panel with respective icons 67 for each of a plurality of launched applications. Ex. 1005, 14:22–26, Fig. 11. Among the running applications, the active one has control over application area 80 on the display. *Id.* at 14:26–28.

Having reviewed all of Petitioner’s assertions regarding the preamble, as well as the supporting evidence, we determine on this record that Petitioner has made a sufficient showing Paasonen teaches a method for “controlling a predetermined function of a second work process during a first work process in a multitasking mobile terminal that performs the first work process and the second work process,” as recited in claim 1.⁸

⁸ Because Petitioner has shown that the recitations in the preamble are satisfied by Paasonen, there is no need at this time to determine whether the preamble is limiting. *See Realtime*, 912 F.3d at 1375.

- ii. “displaying one icon in a designated portion of a display, wherein the displayed icon corresponds to the first work process,” “if the displayed icon corresponding to the first work process is selected, displaying a screen of the first work process in the display” (claim 1)

Petitioner contends that Paasonen discloses “an ‘application switcher panel’ showing the ‘audio player’ icon in the ‘third position’ (which is the designated portion).” Pet. 20 (citing Ex. 1005, 14:22–29, 14:38–48, 14:60–15:18; Ex. 1003 ¶¶ 67–69). To support its contentions, Petitioner provides annotated Figure 12 of Paasonen, as seen below.

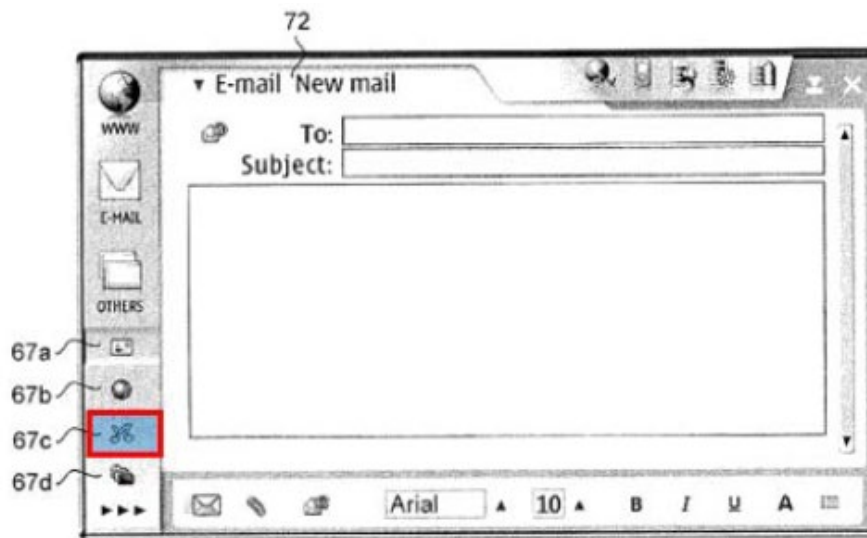


Fig 12

Annotated Figure 12 of Paasonen in the Petition highlights the music player icon 67c (in blue, surrounded by a red box) in the third icon position. Pet. 21. Petitioner relies on this “third position” as the recited “designated portion” in contending that Paasonen discloses displaying an icon in a designated portion. *Id.* at 20.

Petitioner then refers to Figure 7 of Paasonen, reproduced below:

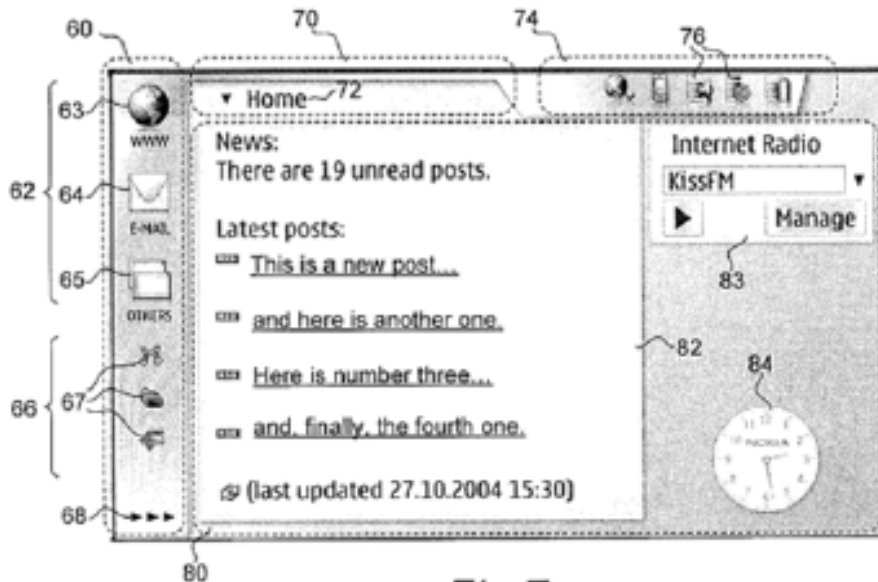


Fig 7

Figure 7 shows application area 80 being used by a currently active application. Pet. 23. According to Petitioner, Paasonen discloses, “if the displayed icon corresponding to the first work process is selected (*e.g.*, if ‘the corresponding icon’ for the ‘audio player’ is ‘tapp[ed]’), displaying a screen of the first work process in the display (*e.g.*, ‘switching to’ the ‘audio player’ in ‘application area 80’).” *Id.* at 21–22 (alteration in original) (emphases omitted) (citing Ex. 1005, 12:56–13:7, 14:22–37, 14:60–15:5; Ex. 1003 ¶¶ 70–72).

At this stage of the proceeding, Patent Owner does not present arguments in the Preliminary Response addressing the specific merits of Petitioner’s contentions with respect to this limitation. *See* Prelim. Resp. 37–41.

As Petitioner points out, Paasonen discloses that if an icon is tapped, the display in the application area is switched to the application

corresponding to the tapped icon. *See* Pet. 21–22 (citing Ex. 1005, 12:56–13:7, 14:22–37, 14:60–15:5; Ex. 1003 ¶¶ 70–72).

Having reviewed all of Petitioner’s assertions regarding these limitations, as well as the supporting evidence, we determine on this record that Petitioner has made a sufficient showing Paasonen teaches “displaying one icon in a designated portion of a display, wherein the displayed icon corresponds to the first work process,” and “if the displayed icon corresponding to the first work process is selected, displaying a screen of the first work process in the display,” as recited in claim 1.

iii. *“in response to a first command for sequentially displaying icons, performing sequential display of icons such that an icon corresponding to the second work process is displayed,” “the icon corresponding to the second work process is displayed in the designated portion of the display” (claim 1)*

Petitioner contends Paasonen discloses “in response to a first command for sequentially displaying icons (*e.g.*, command to launch a different application, such as a ‘bookmark manager’), performing sequential display of icons” such that “an icon corresponding to the second work process is displayed (*e.g.*, ‘order of the icons’ is ‘updated accordingly’ when switching ‘from a currently active application to another one’ by ‘shifting’ icons ‘one vertical position downward’).” Pet. 23 (emphases omitted). Petitioner contends Paasonen then discloses that “the icon corresponding to the second work process is displayed in the designated portion of the display (*e.g.*, the ‘web browser icon’ is displayed in ‘third position 67c’ of ‘application switcher panel 66’ in Fig. 13).” *Id.* (emphasis omitted).

According to Petitioner, Paasonen discloses that the “application switcher panel sequentially shows icons from most- to least-recently opened such that ‘launching’ a new application ‘shift[s] the positions of existing icons.’” Pet. 23 (alteration in original) (citing Ex. 1005, 9:5–10, 13:16–52, 14:60–15:18, Figs. 12–13). For example, according to Petitioner, “a command opening the ‘bookmark manager’ while the ‘web browser’ (second work process) is in the second position is a command for sequential display that moves the ‘web browser’ icon to the third position.” *Id.* at 23–24 (citing Ex. 1003 ¶¶ 73–75).

According to Petitioner, the prosecution history of the ’863 application (from which the ’631 patent claims priority) supports its contention that “sequentially displaying icons” encompasses Paasonen’s showing of icons from most- to least-recently opened. Pet. 24 n.7. Petitioner contends that “Applicant[in the ’863 application’s prosecution] amended the . . . claims to recite ‘sequentially displaying icons comprises displaying the icons in order of the work process performed,’” and “the Examiner stated that generating and displaying icons ‘in a sequential order’ according to ‘activation order’ is sequentially displaying icons.” *Id.* (citing Ex. 1030, 182–91, 214–23, 373–89; Ex. 1003 ¶ 76).

Patent Owner replies that “Paasonen does not disclose performing sequential display of icons *in response to a first command*, as the claim language requires.” Prelim. Resp. 38. In particular, Patent Owner contends that “[t]he display of icons in Paasonen (whether sequential or not) is always present.” *Id.* Patent Owner references Petitioner’s annotated Figure 12, reproduced below, to support its contention:

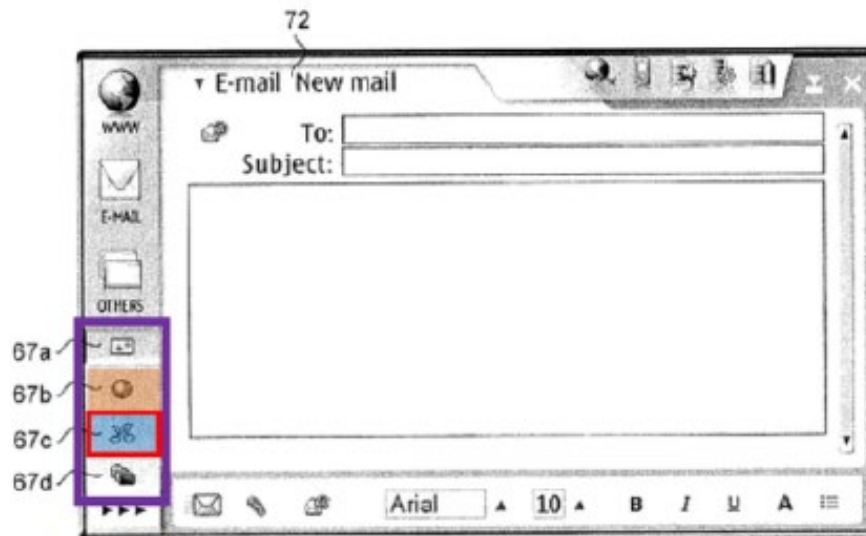


Fig 12

Annotated Figure 12 Paasonen shows application switcher panel (purple) comprising icons 67a–67d. Prelim. Resp. 38; *see also* Pet. 15. Patent Owner contends that Paasonen’s “‘application switcher panel’ (in purple)” is “present regardless of whether a command to launch a different application, such as a ‘bookmark manager’ (the alleged ‘first command for sequentially displaying icons’ according to Petitioner) is executed.” Prelim. Resp. 38 (citing Ex. 1005, 14:30–37). Thus, according to Patent Owner, “any display of icons that occurs in Paasonen is not ‘in response to a first command for sequentially displaying icons.’” *Id.* at 38–39.

Based on the present record, we are preliminarily persuaded that Paasonen teaches “performing sequential display of icons” wherein “the icon corresponding to the second work process is displayed in the designated portion of the display,” as recited in claim 1.

Paasonen discloses an application switcher panel with respective icons for each of a plurality of launched applications, wherein, among the running applications, the active one has control over the application area on the

display. *See* Ex. 1005, 14:22–28, Fig. 7. In Paasonen, the user uses the application switcher panel for switching to a desired application by tapping on a corresponding icon, wherein the icon, having a dynamic appearance, changes order, appears or disappears over time. *Id.* at 14:30–41.

In the Petition, Petitioner relies on the third position in Paasonen’s application switcher panel as the claimed “designated portion,” which can be shown in Petitioner’s second annotated Figure 12 of Paasonen, reproduced below:

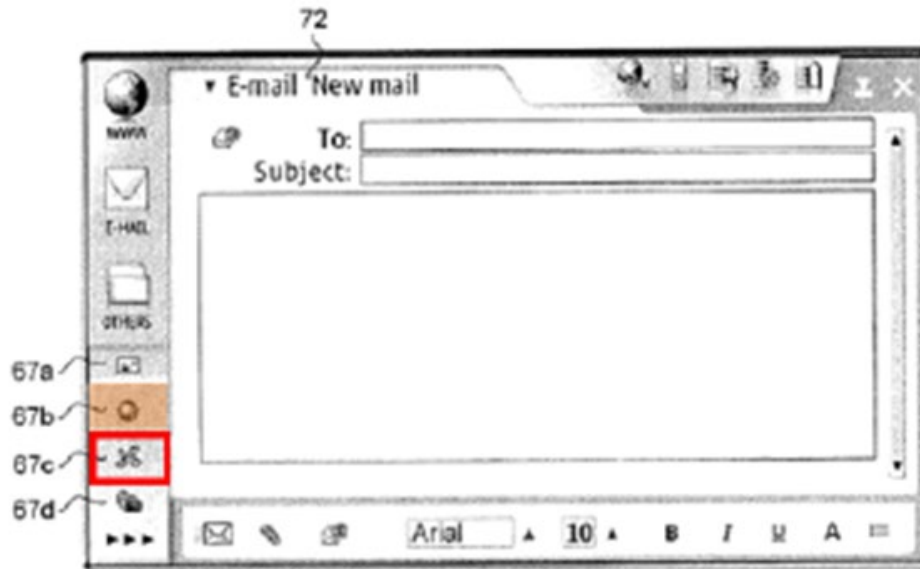
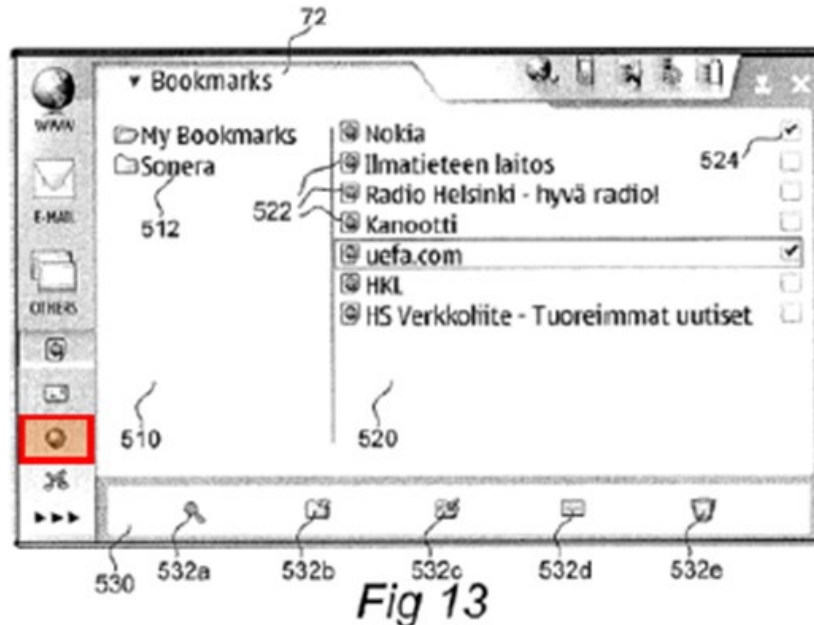


Fig 12

Second annotated Figure 12 of Paasonen in the Petition shows a designated portion (red) displaying an icon for a work process in third position 67c with the web browser icon (orange) above the designated portion. Pet. 25.

Petitioner then provides an annotated Figure 13 of Paasonen, as seen below, to support its contention that, upon launching of a new application, “an icon associated with said new application [is inserted] at said first position in the application switcher panel while . . . the positions of existing icons in the

application switcher panel [are shifted] by one position backwards.” *Id.*
(citing Ex. 1005, 9:5–16) (emphasis omitted).



Annotated Figure 13 of Paasonen in the Petition shows the bookmark icon being tapped (depressed) while the web browser icon (orange) has shifted down to the third position (red). Pet. 25. That is, according to Petitioner, upon launching of the bookmark application, the positions of the icons are shifted one position backward such that the web browser icon is displayed in the third position, which Petitioner contends is the designated portion of the display. *Id.*

Although Patent Owner contends that Paasonen’s application switcher panel is “present regardless of whether a ‘command to launch a different application[.] . . . is executed” (Prelim. Resp. 38), Patent Owner does not specifically address Petitioner’s reliance on Paasonen’s third position on the application switcher panel as the “designated portion,” such that the web browser icon, for example, is shifted down and displayed as the designated

portion upon launching of the new application. *See* Pet. 25; Ex. 1005, Figs. 12–13.

Having reviewed all of Petitioner’s assertions regarding these limitations, as well as the supporting evidence, we determine on this record that Petitioner has made a sufficient showing Paasonen teaches “in response to a first command for sequentially displaying icons, performing sequential display of icons such that an icon corresponding to the second work process is displayed,” wherein “the icon corresponding to the second work process is displayed in the designated portion of the display,” as recited in claim 1.

iv. Remaining limitations of claim 1

Petitioner contends that Paasonen discloses “in response to a second command for changing to the second work process (*e.g.*, command for ‘switching to a desired application,’ ‘web browser’) replacing the screen of the first work process with a screen of the second work process (*e.g.*, changing ‘active’ application in ‘application area 80’ of the ‘display’ to ‘web browser’).” Pet. 26 (emphases omitted) (citing Ex. 1005, 12:56–13:7, 14:22–37, Fig. 9; Ex. 1003 ¶¶ 77–79). Petitioner also contends that Paasonen discloses “controlling the multitasking of the second work process and the first work process (*e.g.*, ‘switch’ between ‘running applications’ including the first and second work processes . . .).” *Id.* at 27 (emphasis omitted) (citing Ex. 1005, 14:22–29, 14:60–15:5; Ex. 1003 ¶¶ 80–82). Petitioner further contends that Paasonen discloses “a third command for activating a control menu for controlling a predetermined function of the first work process (*e.g.*, invoking ‘the home application’ to view ‘application views’; activating ‘menu 90’ for ‘audio player’). *Id.* at 27–28 (emphasis omitted) (citing Ex. 1005, 9:20–32, 11:48–65, 13:16–52, 14:14–17, 15:61–

16:40, Figs. 6–8, 11; Ex. 1003 ¶¶ 83–87). Petitioner then contends that Paasonen discloses “a fourth command for controlling the predetermined function of the first work process through the activated control menu (*e.g.*, pressing play in ‘limited application view’; selecting play task in ‘menu 90’).” *Id.* at 30–31 (emphasis omitted) (citing Ex. 1005, 14:14–17, 15:61–16:40, Figs. 6–7; Ex. 1003 ¶¶ 88–90).

At this stage of the proceeding, Patent Owner does not present arguments in the Preliminary Response addressing the specific merits of Petitioner’s contentions with respect to these claim limitations in view of Paasonen. *See* Prelim. Resp. 37–41.

Having reviewed all of Petitioner’s assertions and the supporting evidence, we determine on this record that Petitioner has made a sufficient showing Paasonen teaches these limitations recited in claim 1.

vii. Dependent claims 2–10

Petitioner contends that Paasonen teaches the limitations recited in dependent claims 2–10. Pet. 32–56 (citing Ex. 1005, 9:5–16, 11:2–11, 11:32–47, 11:48–65, 12:56–13:7, 13:16–52, 14:22–48, 14:60–15:18, 15:61–16:40, Figs. 5–10, 12–13; Ex. 1003 ¶¶ 91–93, 108–117). At this stage in the proceeding, Patent Owner does not address separately Petitioner’s explanations and supporting evidence regarding the dependent claims. *See* Prelim. Resp.

Having reviewed Petitioner’s arguments and supporting evidence in the present record, we determine Petitioner has made a sufficient showing Paasonen teaches the subject matter of dependent claims 2–10.

viii. Conclusion

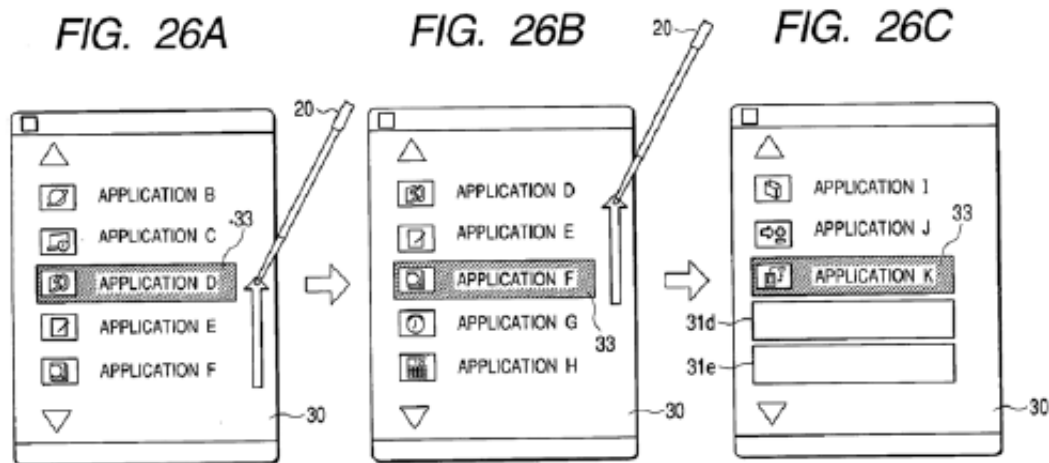
For the foregoing reasons, we determine that the evidence and arguments presented show a reasonable likelihood that Petitioner would prevail in establishing that the subject matter of claims 1–10 would have been obvious over Paasonen.

b. Anticipation by Paasonen

Petitioner contends that claims 1–10 of the '631 patent also are anticipated by Paasonen (*see* Pet. 8), but provides the same arguments discussed above for the obviousness grounds. *Id.* at 14–43. Patent Owner responds with the same arguments discussed above for the obviousness ground based on Paasonen. Prelim. Resp. 37–41. Thus, at this stage of the proceeding, we do not separately address Petitioner's anticipation ground based on Paasonen. Nonetheless, Patent Owner may raise arguments regarding this anticipation ground in the Response after institution.

c. Obviousness over Paasonen and Nakano

Petitioner contends “[t]o the extent additional disclosure is required, modifying Paasonen with Nakano renders obvious those elements.” Pet. 43 In particular, Petitioner contends Nakano discloses a sequential application list with icons, wherein “[a] user ‘scroll[s]’ through this list—a menu of application icons—causing them to be sequentially displayed.” *Id.* at 44 (second alteration in original) (citing Ex. 1006 ¶¶ 5, 16, 46, 288, 301, 303, Figs. 26A–26C). To support its contentions, Petitioner reproduces Figures 26A–26C of Nakano, as seen below.



Figures 26A–26C of Nakano collectively show menu screen 30 with focus 33 highlighting the “candidate for selection.” Ex. 1006 ¶¶ 288–289.

Petitioner contends Figures 26A–26C of Nakano show that “repeated scroll commands cause the top icons to disappear as new bottom icons appear,” such that “a new icon replaces the icon that formerly occupied each relevant portion of the display.” Pet. 44 (citing Ex. 1003 ¶ 118). Petitioner then contends a POSITA would have been motivated “to modify Paasonen’s application switcher panel with Nakano’s scrolling teachings in order to more easily access recently-active applications,” by “scrolling through more than four icons without the need for navigating menus.” *Id.* at 45 (citing Ex. 1006 ¶¶ 15–16).

Although Patent Owner acknowledges that “Nakano discloses ‘the concept of scrolling through menu display entities,’” Patent Owner contends that “Petitioner does not identify where or when an icon corresponding to the second work process is sequentially displayed in response to a first command.” Prelim. Resp. 42. According to Patent Owner, “Nakano simply discloses scrolling through a menu of options in a set screen,” and thus, “the specific proposed combination required to arrive at the claimed invention is

far from obvious.” *Id.* at 43. That is, according to Patent Owner, “Nakano does not disclose the display of icons.” *Id.* at 42.

Based on the present record, we are preliminarily persuaded that Paasonen in combination with Nakano teaches “in response to a first command for sequentially displaying icons, performing sequential display of icons such that an icon corresponding to the second work process is displayed,” as recited in claim 1.

As discussed above with respect to the Paasonen ground, we are preliminarily persuaded that Petitioner has made a sufficient showing Paasonen teaches the sequential display of icons in response to the launching of new applications. *See* Pet. 25; Ex. 1005, 9:5–16, Figs. 11–13. Here, Petitioner is relying on Nakano “[t]o the extent additional disclosure is required,” and contends that Nakano teaches scrolling through a list, causing the items in the list “to be sequentially displayed.” Pet 43–44 (citing Ex. 1006 ¶¶ 5, 16, 46, 288, 301, 303, Figs. 26A–26C). Even Patent Owner acknowledges that Nakano discloses “the concept of scrolling through menu display entities,” and thus, by contending that Nakano “does not disclose the display of icons,” Patent Owner fails to address Petitioner’s reliance on Paasonen for the display of icons. Prelim. Resp. 42.

Here, Petitioner makes a sufficient showing that “Paasonen and Nakano are in the same field as the ’631 [patent]—which includes mobile interfaces,” wherein “Paasonen discloses sequentially displaying the four most-recently active applications in the application switcher panel,” and “Nakano’s teachings permit a user to browse additional applications.” Pet. 44 (citing Ex. 1001, 2:32–51; Ex. 1005, 1:6–9, 3:41–4:25; Ex. 1006

¶¶ 1, 6, 14–15; Ex. 1003 ¶ 119). On this present record, we are sufficiently persuaded by Petitioner’s showing, supported by the testimony of Dr. Madisetti, that a POSITA would have been motivated “to modify Paasonen’s application switcher panel with Nakano’s scrolling teachings in order to more easily access recently-active applications by scrolling through more than four icons.” *Id.* at 45; Ex. 1003 ¶ 120.

Having reviewed all of Petitioner’s assertions, as well as the supporting evidence, we determine on this record that Petitioner has made a sufficient showing Paasonen in combination with Nakano discloses “in response to a first command for sequentially displaying icons, performing sequential display of icons such that an icon corresponding to the second work process is displayed,” “the icon corresponding to the second work process is displayed in the designated portion of the display,” as recited in claim 1. Further, having reviewed all of Petitioner’s assertions and the supporting evidence, we determine on this record that Petitioner has made a sufficient showing of motivation to combine Paasonen and Nakano.

For the foregoing reasons, we determine that the evidence and arguments presented show a reasonable likelihood that Petitioner would prevail in establishing that the subject matter of claims 1–10 would have been obvious over Paasonen and Nakano.

d. Obviousness over Paasonen and Aaltonen, and over Paasonen, Nakano, and Aaltonen

Petitioner provides detailed explanations as to how the combination of Paasonen and Aaltonen, and alternatively, Paasonen, Nakano, and Aaltonen, teaches the claim limitations of dependent claims 4 and 7, citing Dr. Madisetti’s declaration for support. Pet. 47–48 (citing Ex. 1007 ¶¶ 3, 7, 50,

53–54, 60, 121, 158, Fig. 22G; Ex. 1003 ¶¶ 131–140).

At this stage in the proceeding, Patent Owner does not address separately Petitioner’s explanations and supporting evidence regarding the dependent claims. *See* Prelim. Resp. 43. Having reviewed Petitioner’s arguments and supporting evidence in the present record, we determine Petitioner has demonstrated a reasonable likelihood that it will prevail on its assertion that claims 4 and 7 would have been obvious over Paasonen and Aaltonen, and over Paasonen, Nakano, and Aaltonen.

E. Hotelling Grounds

Petitioner contends that claims 1–4 and 7 of the ’631 patent would have been obvious over Hotelling ’753, in view of Hotelling-Prov and Hotelling ’521, collectively Hotelling. Pet. 49–71. Petitioner also contends that claims 1–4 and 6–10 would have been obvious over Hotelling in view of Hellyar. *Id.* at 72–85. Petitioner then contends that dependent claims 5 and 6 would have been obvious over Hotelling and Hellyar in further view of Tu. *Id.* at 85–89.

In response, Patent Owner contends Hotelling “does not teach each and every element of claims 1–4 and 7.” Prelim. Resp. 43–47.⁹

1. Hotelling ’753 (Ex. 1009)

Hotelling ’753, titled “Multi-Functional Hand-Held Device,” was published on September 7, 2006, from Application No. 11/367,749, filed on March 3, 2006. Ex. 1009, codes (54), (43), (21), (22). Hotelling ’753

⁹ Patent Owner does not take issue with Petitioner’s reliance on Hotelling ’753, Hotelling-Prov and Hotelling ’521 as collectively “Hotelling.” For purposes of this Decision, we assume addressing Hotelling ’753, Hotelling-Prov and Hotelling ’521 collectively as “Hotelling” is appropriate.

“claims the benefit of” Provisional Application No. 60/658,777, filed on March 4, 2005 and Provisional Application No. 60/663,345 (Hotelling-Prov), filed on March 16, 2005, “each of which is hereby incorporated by reference.” *Id.* ¶ 1. Hotelling ’753 is also “related to” and “incorporate[s] by reference . . . U.S. [Patent Application] No. 10/903,964, . . . filed on Jul. 30, 2004,” published as U.S. Patent Appl. Publication No. 2006/0026521 A1 (Hotelling ’521). *Id.* ¶ 2.

Hotelling ’753 is directed to “a multi-functional hand-held device capable of configuring user inputs based on how the device is to be used.” *Id.* at code (57). The multi-functional hand-held device “incorporates a variety of input mechanisms” and “a user-configurable [graphical user interface (GUI)] for each of the multiple functions of the devices.” *Id.*

2. Hotelling-Prov (Ex. 1010)

Hotelling-Prov, titled “Multi-Functional Hand-Held Device,” is “related to” and “incorporate[s] by reference” Hotelling ’521. Ex. 1010, 2:1–22. Hotelling-Prov was filed on March 4. *Id.* at 1.

Hotelling-Prov recognizes that there is a need for “an improved user interface that works for multi-functional devices.” *Id.* at 4:23–25. Hotelling-Prov provides a “multi-function device [that] has at most only a few physical buttons, keys or switches so that its display size can be substantially increased.” *Id.* at 8:3–10. Hotelling-Prov’s multi-functional hand-held device is depicted in Figure 2, reproduced below.

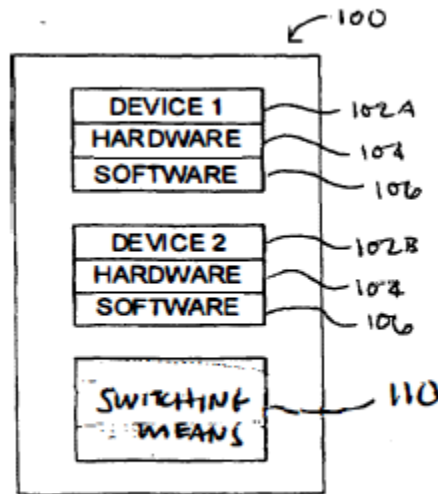


FIG. 2

Figure 2 shows multi-functional hand-held device 100 that integrates two devices 102 into a single device. *Id.* at 10:12–14. As shown in Figure 2, each device 102 includes hardware components 104 and software components 106 to operate each device 102. *Id.* at 10:14–16. Multi-functional device 100 includes switching means 110 that allows the functionality of multi-functional device 100 to be switched from one device to another. *Id.* at 10:25–27.

Multi-functional device 100 may “include at least two or more of the following device functionalities: PDA, Cell Phone, Music Player, Video Player, Gamer Player, Camera, Handtop, Internet terminal, or remote control.” *Id.* at 8:26–29. An example of a user interface in a multi-functional device is depicted in Figure 18, reproduced below.

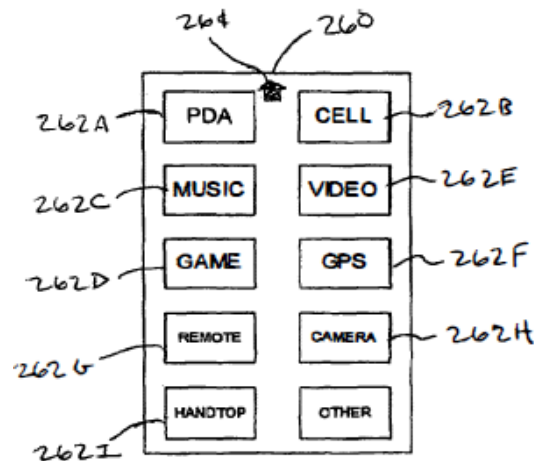


FIG. 18

Figure 18 shows main menu page for user interface 260 of a multi-functional device. *Id.* at 19:19–20. As shown in Figure 18, main menu page 260 includes icons/buttons 262 for launching each of the various device functionalities. When an icon/button is pressed, the main page for the selected icon is brought into view on the display. *Id.* at 19:25–27. In order to select another device, the user selects home button 264 in order to load main menu page 260, and thereafter selects the desired device on main menu page 260. *Id.* at 19:27–29. Figures 10 and 11 are examples of a user interface for a device functionality, and are reproduced below.

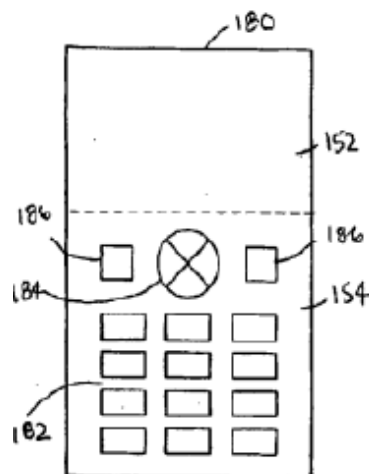


FIG. 10

Figure 10 shows user interface 180 used in a Cell Phone mode. *Id.* at 16:28–31. As shown in Figure 10, user interface 180 is divided into standard region 152 and control region 154, wherein located inside control region 154 are virtual keypad 182, virtual navigation pad 184 and two virtual buttons 186. *Id.*

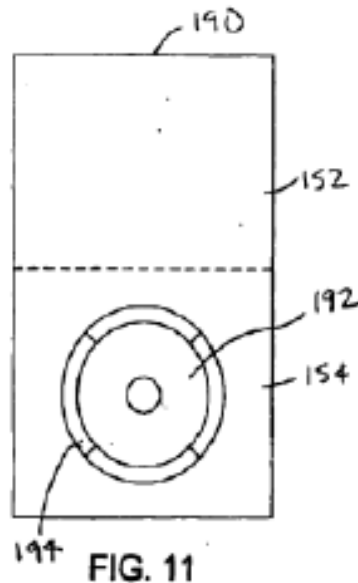


Figure 11 shows user interface 190 used in a Music Player mode. *Id.* at 16:33–34. As shown in Figure 11, user interface 190 is divided into standard region 152 and control region 154. *Id.*

In one embodiment, the multi-functional device operates at least two functionalities simultaneously. *Id.* at 21:9–21. When the user simultaneously touches two device icons, the device activates both device functionalities and brings both user interfaces into view on the screen. *Id.*

3. Hotelling '521 (Ex. 1011)

Hotelling '521, titled “Gestures for Touch Sensitive Input Devices,” was published on February 2, 2006, from Application No. 10/903,964, filed

on July 30, 2004. Ex. 1011, codes (54), (43), (21), (22). Hotelling '521 is directed to “gesturing associated with touch sensitive devices.” *Id.* ¶ 2.

Gestures can be created to detect and effect a user command to resize a window, scroll a display, etc. *Id.* ¶ 85. A rotate gesture for controlling a knob on a user interface is depicted in Figure 6A, reproduced below.

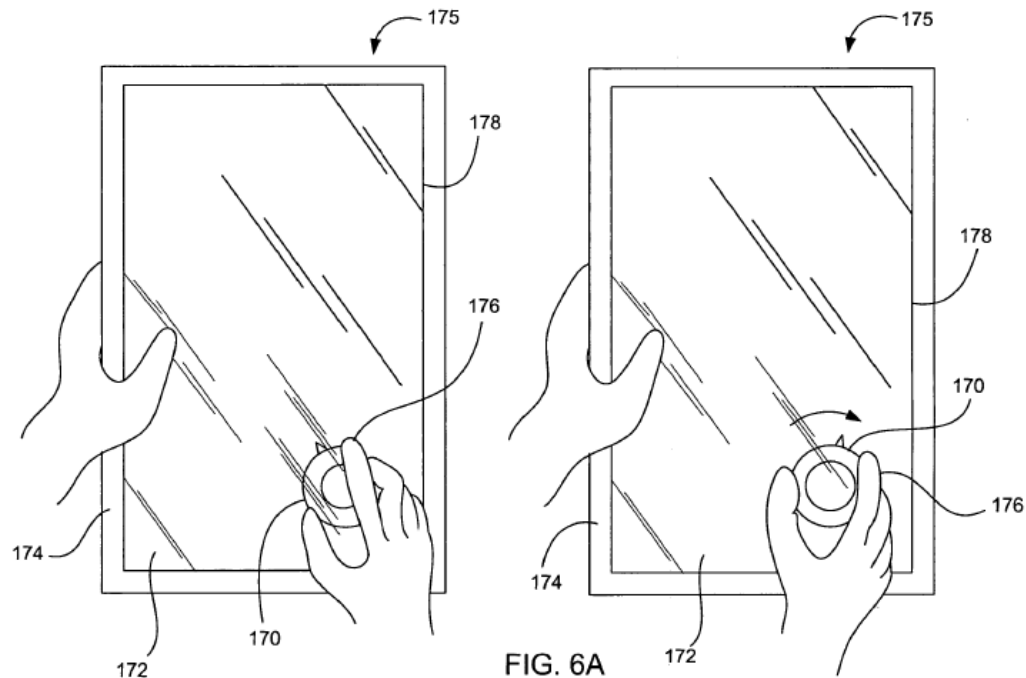
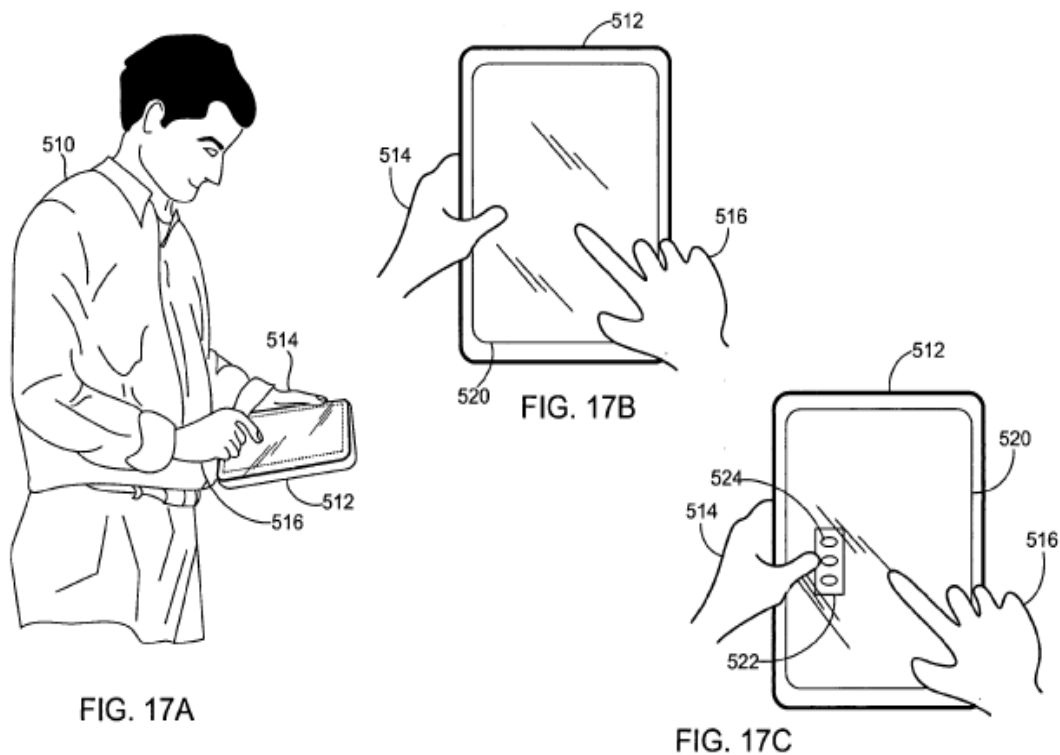


Figure 6A shows knob 170 on user interface 172 of display 174 of tablet 175. *Id.* ¶ 86. In Figure 6A, in order to actuate knob 170, the user places fingers 176 on multipoint touch screen 178. *Id.* Once knob 170 is displayed, user's fingers 176 can be positioned around knob 170 similar to if it were an actual knob, and can be rotated around knob 170 in order to simulate turning knob 170. *Id.* ¶ 87.

In an embodiment, one or more control options can be included for selection by the user. *Id.* ¶ 113. The control options may include one or more control buttons for implementing various tasks. *Id.* A floating control sequence is depicted in Figures 17A–C, reproduced below.



Figures 17A–17C collectively illustrate a floating control sequence. *Id.* ¶ 114. As shown in Figure 17A, user 510 using tablet 512 is holding tablet 512 with hand 514 while navigating with hand 516. *Id.* Figure 17B shows a close up of the user holding tablet 512, where a portion of the thumb of hand 514 is positioned over touch screen 520. *Id.* As shown in Figure 17C, tablet 512 recognizes the thumb and display control box 522 adjacent the thumb. *Id.* Control box 522 includes various buttons 524, which can be selected by the user’s thumb to initiate tasks in tablet 512. *Id.*

4. Analysis

a. Obviousness Over Hotelling

Petitioner contends, like in the ’631 patent, Hotelling teaches the well-known method of “‘performing sequential display of icons’ by first ‘displaying one icon in a designated portion’ of the display and then

displaying a different icon in that portion.” Pet. 2–3 (citing Ex. 1009 ¶ 1; Ex. 1010, 18:19–19:21). Patent Owner responds that Hotelling does not teach “in response to a third command for activating a control menu for controlling a predetermined function of the first work process, activating the control menu for controlling the predetermined function of the first work process.” Prelim. Resp. 43–47. We begin by addressing in detail Petitioner’s contentions and Patent Owner’s arguments with respect to this limitation of claim 1.

- i. *“in response to a third command for activating a control menu for controlling a predetermined function of the first work process, activating the control menu for controlling the predetermined function of the first work process.”*

Petitioner contends that Hotelling teaches this limitation in “three ways.” Pet. 60. For its first proposal, Petitioner contends that “Hotelling discloses touching the ‘music player’ and ‘Cell Phone’ buttons simultaneously to enter a ‘split screen’ mode with a ‘music player’ GUI that includes ‘play/pause’ buttons to control music player functionality,” and thus, “a control menu.” *Id.* (citing Ex. 1010, 9:29–10:2, 16:1–15, 17:32–18:5, 21:9–21). According to Petitioner, in Hotelling, “[a]ccessing split-screen mode (e.g., from a main menu) is available in addition to flipping through GUIs.” *Id.* (citing Ex. 1010, 19:31–20:7, 21:9–21).

For its second proposal, Petitioner contends that Hotelling “discloses touching the screen of the device to display ‘floating controls’ with preset ‘music listening control buttons’ including ‘play’ and ‘pause’ buttons for controlling the predetermined music player functions,” wherein “these

“floating controls” are a control menu.” Pet. 60 (citing Ex. 1011 ¶¶ 111–113; Ex. 1003 ¶ 172).

Petitioner then contends that, for its third proposal, Hotelling “discloses using a gesture to ‘invoke [a] virtual control knob’ to control ‘volume’ for a ‘currently playing’ ‘song,’ which is a ‘volume’ control menu.” Pet. 60 (citing Ex. 1011 ¶ 86).

Patent Owner contends that Petitioner’s first proposal is “incorrect” because “the alleged split screen mode (i.e., dual mode) is not a control menu for controlling the predetermined function.” Prelim. Resp. 44. That is, “the alleged split screen mode simply presents two full device GUIs side by side,” but “does not limit the functionality of the first device GUI or the second device GUI to a predetermined function.” *Id.* at 44–45 (citing Ex. 1010, 21:16–19). According to Patent Owner, “[t]here is nothing in Hotelling that a control menu controls a background application.” *Id.* at 45.

Patent Owner further contends that Petitioner’s second proposal “is also flawed.” Prelim. Resp. 45–46. According to Patent Owner, the Petition “provides no support how Hotelling [’]521 would be combined with Hotelling-Prov’s dual mode.” *Id.* at 46. According to Patent Owner, Hotelling’s “floating controls” are “only disclosed as controlling the application otherwise on the screen.” *Id.* (citing Ex. 1010, 18:7–9). Patent Owner also contends that claim 1 “requires the activation of a control menu ‘in response to a third command,’” and “Petitioner fails to identify any third command [in Hotelling].” *Id.*

Patent Owner then contends that Petitioner’s third proposal also fails because, like in the second proposal, “Petitioner fails to provide support for

how Hotelling [']521 would be combined with Hotelling-Prov's dual mode" and "fails to identify the required third command." Prelim. Resp. 46–47.

Based on the present record, we are preliminarily persuaded that Hotelling teaches "in response to a third command for activating a control menu for controlling a predetermined function of the first work process, activating the control menu for controlling the predetermined function of the first work process" recited in claim 1.

Hotelling discloses a user's left thumb on hand 514 pressing on touch screen 520 to activate control box 522, wherein control box 522 includes various buttons 524 to be selected by the thumb to initiate tasks in tablet 512. Ex. 1011 ¶ 114, Fig. 17C. We agree with Petitioner that Hotelling "discloses touching the screen of the device to display 'floating controls' . . . for controlling the predetermined music player functions," and thus, agree preliminarily that "these 'floating controls' are a control menu." Pet. 60. Even Patent Owner acknowledges that Hotelling's "floating controls" are provided for controlling the application on the screen. Prelim. Resp. 46.

Although Patent Owner contends that "[t]here is nothing in Hotelling that a control menu controls a background application" (Prelim. Resp. 45) and that Hotelling's "floating controls" are "only disclosed as controlling the application otherwise on the screen" (*id.* at 46), such contentions are not commensurate with the language of claim 1, which does not require any controlling of a background application or preclude controlling an application on the screen. Claim 1 merely requires that a "third command" is provided "for activating a control menu for controlling a predetermined function of the first work process." *See* Ex. 1001, 7:59–62. Although Patent

Owner contends that claim 1 “requires the activation of a control menu ‘in response to a third command’” (Prelim. Resp. 45), here, Petitioner relies on Hotelling’s control box being activated in response to the user’s pressing of the left thumb on the touch screen. Pet. 60; *see also* Ex. 1011, Fig. 17C.

Hotelling also discloses knob 170 on user interface 172, wherein, in order to actuate knob 170, the user places fingers 176 on multipoint touch screen 178. Ex. 1011 ¶ 86, Fig. 6A. We agree with Petitioner that Hotelling “discloses using a gesture to ‘invoke [a] virtual control knob’ to control ‘volume’ for a ‘currently playing’ ‘song,’ which is a ‘volume’ control menu.” Pet. 60. That is, at this juncture, we are persuaded by Petitioner’s reliance on Hotelling’s control knob being activated in response to the user’s pressing of fingers on the touch screen. *Id.*; *see also* Ex. 1011, Fig. 6A.

We also disagree with Patent Owner’s contention that the Petition “provides no support how Hotelling [’]521 would be combined with Hotelling-Prov’s dual mode.” Prelim. Resp. 46. Here, Petitioner relies on Hotelling-Prov’s dual mode for cell phone mode (Fig. 10) and music player mode (Fig. 11), and relies on Hotelling ’521’s “floating controls” for controlling the music player function, for example. Pet. 60 (citing Ex. 1010, 9:29–10:2, 16:1–15, 17:32–18:5, 21:9–21). Petitioner contends that, in combination, Hotelling “discloses touching the screen of the device to display ‘floating controls’ with preset ‘music listening control buttons’ including ‘play’ and ‘pause’ buttons for controlling the predetermined music player functions,” wherein “these ‘floating controls’ are a control menu.” Pet. 60 (citing Ex. 1011 ¶¶ 111–113; Ex. 1003 ¶ 172).

Although we are preliminarily persuaded that Hotelling teaches this claim limitation recited in claim 1 as set forth in Petitioner’s second and

third proposals, we question whether Petitioner’s first proposal identifies the third command. *See* Prelim. Resp. 44–45. Hotelling teaches activating two device functionalities and bringing the two user interfaces into view on the screen (Ex. 1010, 21:9–21), wherein one of the user interfaces can be divided into standard region and control region (*id.* at 16:33–34). Although Petitioner contends that “Hotelling discloses touching the ‘music player’ and ‘Cell Phone’ buttons simultaneously to enter a ‘split screen’ mode,” wherein the “music player” GUI includes “a control menu” (Pet. 60), we are not sufficiently persuaded that Hotelling teaches the “third command” that activates a “control menu for controlling a predetermined function of the first work process.”¹⁰ In particular, Hotelling’s touching of the “music player” button brings up the “music player” GUI, and although the GUI contains a control region, the control region is not activated “in response to a third command” for controlling a “first work process.” *See* Ex. 1010, 21:9–21. Here, claim 1’s control menu is activated to control a “first work process,” but also requires that the first work process is displayed “if the icon corresponding to the first work process is selected.” *See* Ex. 1001, 7:45–47, 59–62. Hotelling instead displays the “music player” GUI including the control region, if the icon corresponding thereto is selected, but

¹⁰ Patent Owner contends that certain disclosures cited by Petitioner “are found nowhere in Hotelling-Prov and thus not entitled to a priority date predating the ’631 Patent.” Prelim. Resp. 45 n.5. However, since Petitioner has not made a sufficient showing that these certain disclosures support Petitioner’s contention that Hotelling-Prov teaches the recited “third command,” we need not determine whether these disclosures are entitled to Hotelling-Prov’s priority date.

there is no activation of the control region that is already displayed upon selection of the icon. *See* Ex. 1010, 21:9–21.

On this preliminary record, we are persuaded that Petitioner has made a sufficient showing, with its second and third proposals, that Hotelling teaches “in response to a third command for activating a control menu for controlling a predetermined function of the first work process, activating the control menu for controlling the predetermined function of the first work process,” as recited in claim 1.

ii. Remaining limitations of claim 1

Petitioner contends that Hotelling discloses the remaining limitations of claim 1, citing Dr. Madisetti’s declaration for support. Pet. 53–59, 64–65 (citing Ex. 1010, 8:25–29, 9:29–10:2, 17:28–18:5, 19:19–29, 19:31–20:7, 21:9–21, Figs. 2, 10–11, 18; Ex. 1011 ¶¶ 93, 111, 113; Ex. 1003 ¶¶ 151–153, 157–165, 174–176).

At this stage of the proceeding, Patent Owner does not present arguments in the Preliminary Response addressing the specific merits of Petitioner’s contentions with respect to these claim limitations in view of Hotelling. *See* Prelim. Resp. 43–47.

Having reviewed all of Petitioner’s assertions and the supporting evidence, we determine on this record that Petitioner has made a sufficient showing Hotelling teaches the remaining limitations recited in claim 1.

iii. Dependent claims 2–4 and 7

Petitioner contends that Hotelling teaches the limitations recited in dependent claims 2–4 and 7. Pet. 65–71 (citing Ex. 1010, 9:29–10:7, 17:8–18:5, 19:19–20:7, 20:14–16, 20:21–30, 23:6–20, 48:31–49:10, Figs. 8, 18; Ex. 1011 ¶¶ 65, 85–86, 113–114, Figs. 6A, 16, 17A–17C; Ex. 1003

¶¶ 177–188). At this stage in the proceeding, Patent Owner does not address separately Petitioner’s explanations and supporting evidence regarding these dependent claims. *See* Prelim. Resp. 43–47.

Having reviewed Petitioner’s arguments and supporting evidence in the present record, we determine Petitioner has made a sufficient showing Hotelling teaches the subject matter of dependent claims 2–4 and 7.

iv. Conclusion

For the foregoing reasons, we determine that the evidence and arguments presented show a reasonable likelihood that Petitioner would prevail in establishing that the subject matter of claims 1–4 and 7 would have been obvious over Hotelling.

b. Anticipation by Hotelling

Petitioner contends that claims 1–4 and 7 of the ’631 patent also are anticipated by Hotelling, but provides the same arguments discussed above for the obviousness grounds. Pet. 49–71. Patent Owner responds with the same arguments discussed above for the obviousness ground based on Hotelling. Prelim. Resp. 43–47. Thus, at this stage of the proceeding, we do not separately address Petitioner’s anticipation ground based on Hotelling. Nonetheless, Patent Owner may raise arguments regarding this anticipation ground in the Response after institution.

c. Obviousness over Hotelling and Hellyar

Petitioner contends that, alternatively, claims 1–4 and 6–10 would have been obvious over Hotelling and Hellyar, and provides detailed explanations as to how the combination teaches or suggests the claim limitations, citing Dr. Madisetti’s declaration for support. Pet. 72–85 (citing

Ex. 1010, 19:19–20:7; Ex. 1012 ¶¶ 13, 24, 40–42, 45, 50, Figs. 2, 3C; Ex. 1003 ¶¶ 196–220).

At this stage in the proceeding, Patent Owner does not address separately Petitioner’s explanations and supporting evidence regarding the combination of Hotelling and Hellyar. *See* Prelim. Resp. 47. Having reviewed Petitioner’s arguments and supporting evidence in the present record, we determine Petitioner has demonstrated a reasonable likelihood that it will prevail on its assertion that claims 1–4 and 6–10 would have been obvious over Hotelling and Hellyar.

d. Obviousness over Hotelling, Hellyar, and Tu

Petitioner provides detailed explanations as to how Hotelling and Hellyar, in further view of Tu, teach or suggest the claim limitations of dependent claims 5 and 6, citing Dr. Madiseti’s declaration for support. Pet. 85–89 (citing Ex. 1008 ¶¶ 4–8, 33, 39–40, 42, 45, 49–50, Figs. 3–4; Ex. 1010, 3:23–25; Ex. 1012 ¶¶ 3, 13, 45, Fig. 3; Ex. 1003 ¶¶ 221–231).

At this stage in the proceeding, Patent Owner does not address separately Petitioner’s explanations and supporting evidence regarding the combination of Hotelling, Hellyar, and Tu. *See* Prelim. Resp. 47. Having reviewed Petitioner’s arguments and supporting evidence in the present record, we determine Petitioner has demonstrated a reasonable likelihood that it will prevail on its assertion that dependent claims 5 and 6 would have been obvious over Hotelling, Hellyar, and Tu.

III. CONCLUSION

Because we determine that Petitioner has demonstrated a reasonable likelihood that it would prevail in showing at least one of the challenged

claims is unpatentable, we institute *inter partes* review as to all challenged claims and grounds presented in the Petition. At this stage of the proceeding, we have not made a final determination as to the patentability of any of these challenged claims.

IV. ORDER

For the reasons given, it is

ORDERED that pursuant to 35 U.S.C. § 314, an *inter partes* review is instituted as to claims 1–10 of the '631 patent to determine whether:

- 1) claims 1–10 are unpatentable under 35 U.S.C. § 102 as anticipated by or under 35 U.S.C. § 103 as obvious over Paasonen;
- 2) claims 1–10 are unpatentable 35 U.S.C. § 103 as obvious over Paasonen and Nakano;
- 3) claims 4 and 7 are unpatentable under 35 U.S.C. § 103 as obvious over Paasonen and Aaltonen;
- 4) claims 4 and 7 are unpatentable under 35 U.S.C. § 103 as obvious over Paasonen, Nakano, and Aaltonen;
- 5) claims 1–4, and 7 are unpatentable under 35 U.S.C. § 102 as anticipated by or under 35 U.S.C. § 103 as obvious over Hotelling;
- 6) claims 1–4, and 6–10 are unpatentable under 35 U.S.C. § 103 as obvious over Hotelling and Hellyar; and
- 7) claims 5 and 6 are unpatentable under 35 U.S.C. § 103 as obvious over Hotelling, Hellyar and Tu; and

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

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