

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MOTOROLA MOBILITY LLC and GOOGLE LLC,
Petitioner,

v.

MULTIFOLD INTERNATIONAL INCORPORATED PTE. LTD.,
Patent Owner.

IPR2025-00039
Patent 9,146,589 B2

Before KRISTEN L. DROESCH, ARTHUR M. PESLAK, and
BRIAN P. MURPHY, *Administrative Patent Judges*.

DROESCH, *Administrative Patent Judge*.

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

I. INTRODUCTION

A. Background

Motorola Mobility LLC and Google LLC (collectively, “Petitioner”) filed a petition (Paper 1, “Pet” or “Petition”) requesting *inter partes* review of claims 1–6, 11–14, and 16 of U.S. Patent No. 9,146,589 B2 (Ex. 1001, “’589 Patent”). Petitioner filed a Declaration of Jeffrey J. Rodriguez, Ph.D., with its Petition. Ex. 1003. Multifold International Incorporated Pte. Ltd. (“Patent Owner”) did not file a preliminary response.

We have authority to determine whether to institute review under 35 U.S.C. § 314 and 37 C.F.R. § 42.4(a). An *inter partes* review may not be instituted unless it is determined that “the information presented in the petition filed under section 311 and any response filed under section 313 shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a).

For the reasons provided below, we determine, based on the record before us, there is a reasonable likelihood Petitioner would prevail in showing at least one of the challenged claims is unpatentable.

B. Real Parties In-Interest

Petitioner indicates that the real parties-in-interest are Motorola Mobility LLC and Google LLC. *See* Pet. 3. Patent Owner indicates that Multifold International Incorporated Pte. Ltd. is the real party in-interest. *See* Paper 4, 1.

C. Related Matters

The parties indicate that the ’589 Patent is the subject of the following: *Multifold International Incorporated Pte. Ltd. v. Motorola Mobility LLC*, No. 1:23-CV-1173 (D. Del.); and

Multifold International Incorporated Pte. Ltd. v. Google LLC,
No. 1:23-CV-01323 (D. Del.). *See* Pet. 3–4; Paper 4, 1.

D. The '589 Patent (Ex. 1001)

The '589 Patent is directed to “[m]ethods and devices for selectively presenting a user interface during an image capture,” that “include[] a change in the display mode of a multiple screen device for a first screen and a second screen when capturing the image.” Ex. 1001, code (57); *see id.* at 1:45–2:4.

Figure 1A of the '589 Patent is reproduced below.

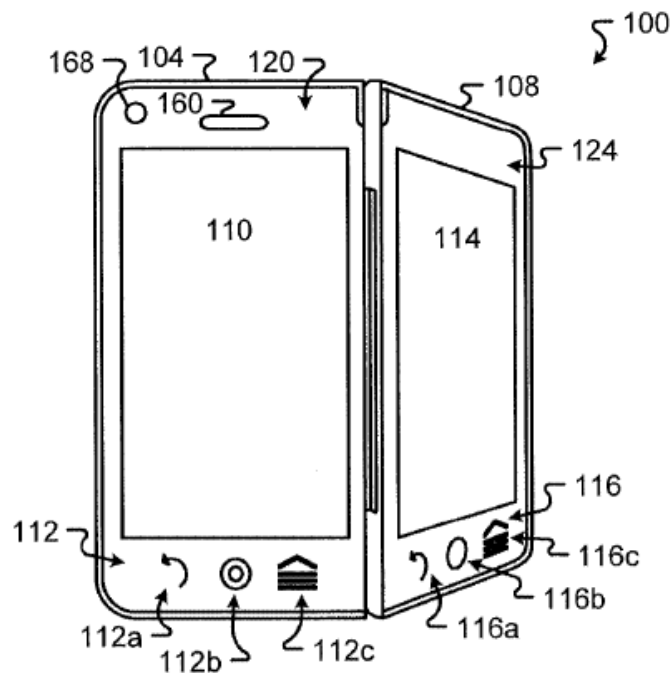


Figure 1A illustrates multi-screen device 100 including primary screen 104 with touch sensitive display 110, configurable area 112 for specific inputs, and gesture capture area 120, and secondary screen 108 with a touch sensitive display 114, configurable area 116 for specific inputs, and gesture capture area 124. *See* Ex. 1001, 5:18–19, 7:17–56. Touch sensitive displays 110 and 114 display information to the user, but gesture capture areas 120 and 124 are not capable of rendering displayed images. *See id.* at 7:26–30, 7:60–67. Screens 104 and 108 are

connected together with a hinge and “device 100 may have different functionalities depending on the relative positions of screens 104 and 108.” *Id.* at 8:1–11.

Device 100 also includes camera 168 and two position sensors (not shown) used to determine the relative positions of screens 104, 108. *Id.* at 8:65–9:2.

Figure 19 of the '589 Patent is reproduced below.

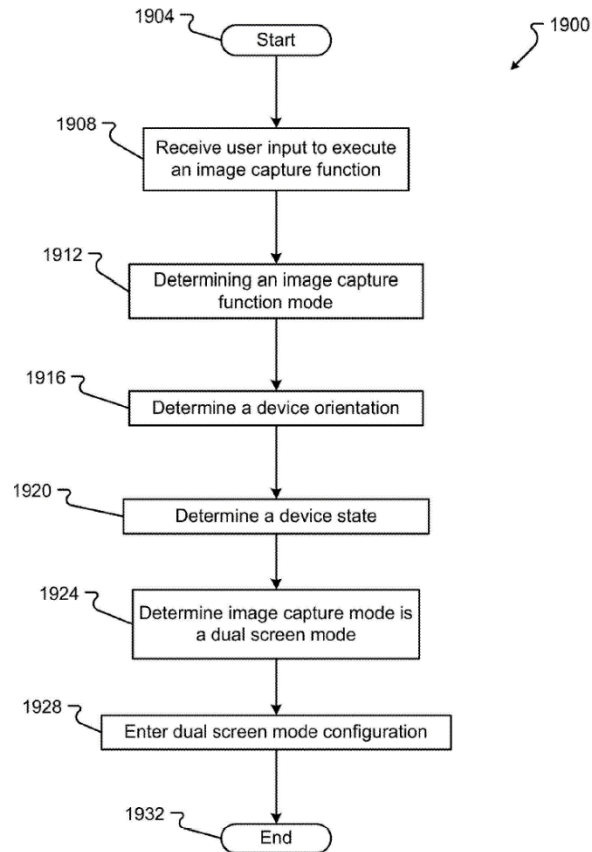


Figure 19 depicts a flow chart of method 1900 for providing an image capture feature. *See* Ex. 1001, 6:57–58, 35:30–31. Method 1900 begins with start operation 1904 followed by device 100 receiving user input to execute an image capture function in step 1908. *See id.* at 35:31–47. In order to determine how to display the image capture function, device 100 may determine an image capture function mode in step 1912, such as self-portrait mode, outward facing mode, or other modes. *See id.* at 35:47–52. Device 100 determines a device orientation in

step 1916, such as portrait, landscape and other orientations. *See id.* at 35:53–55. Device 100 determines device state in step 1920, such as opened or closed, and other states. *See id.* at 35:55–58. Through these determinations, device 100 determines that the image capture mode is for a dual screen configuration in step 1924 and enters dual screen mode configuration in step 1928. *See id.* at 35:59–64. Method 1900 ends at step 1932. *See id.* at 35:32–34.

Figures 12 and 20 of the '589 Patent are reproduced below.

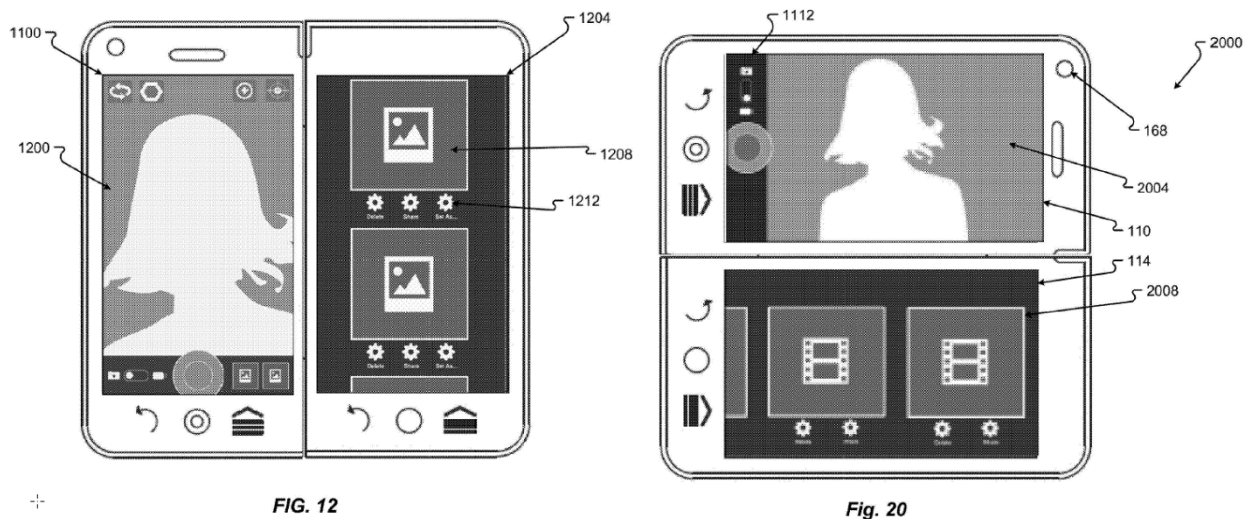


Figure 21 of the '589 Patent is reproduced below.

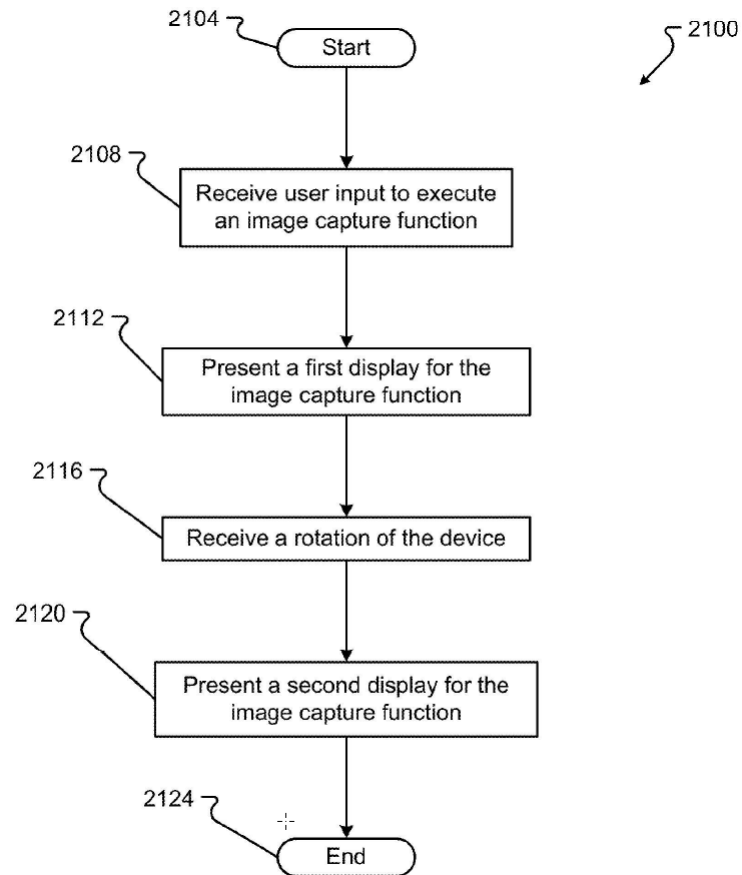


Figure 21 is a flowchart of method 2100 for providing an image capture feature. *See* Ex. 1001, 6:61–62, 36:19–20. Method 2100 begins with start operation 2104 followed by device 100 receiving user input to execute an image capture function in step 2108. *See id.* at 36:36–37. In step 2112, first display 1200 (Fig. 12) is presented for image capture function 1100. *See id.* at 36:38–39. Device 100 may receive an indication of a rotation of device 100 in step 2116. *See id.* at 36:40–42. After rotation, device 100 presents second display 2000 (Fig. 20) that is different from first display 1200 (Fig. 12) in step 2120. *See id.* at 36:42–45. Method 2100 ends at step 2124. *See id.* at 36:21–23.

E. Illustrative Claim

Claims 1, 11, and 16 are independent, and claims 2–6, and 12–14, depend directly or indirectly from claims 1 and 11. *See* Ex. 1001, 39:26–41:12. Claims 1 and 11 are illustrative and reproduced below:

1. A method, comprising:
providing a device having at least first and second screens;
receiving user interface input to execute an image capture function;
presenting a first display for the image capture function based on a physical device state, a display mode and a device orientation, the physical device state at least including open, closed easel or modified easel, the display mode at least including portrait single, portrait dual, landscape single, landscape dual, portrait max or landscape max;
receiving a device orientation change, wherein the device orientation change is a rotation of the device; and
based on the device orientation change, the device state and the display mode, presenting a second display for the image capture function, wherein a portion on the first and second screen changes from the first display to the second display.

Ex. 1001, 39:26–43.

11. A device, comprising:
a first screen, the first screen including a first gesture capture region;
a second screen, wherein the second screen faces in a substantially same direction as the first screen when the device is open, and wherein a lens is associated with the second screen;
a memory;
a processor in communication with the memory, the first screen, and the second screen, the processor operable to:
receive user interface input to execute a image capture function;
determine an image capture function configuration, a device orientation, and a physical device state, wherein the image capture

function configuration is for a self-portrait, the physical device state at least including open, closed easel or modified easel, the display mode at least including portrait single, portrait dual, landscape single, landscape dual, portrait max or landscape max; based on the image capture function configuration, the device orientation, and the device state, enter a dual screen mode for the image capture function; present a first display for the image capture function; receive a device orientation change, wherein the device orientation change is a rotation of the device; and based on the device orientation change, the image capture function configuration and the device state, present a second display for the image capture function, wherein a portion on the first and second screen changes from the first display to the second display.

Ex. 1001, 39:65–40:29.

F. Asserted Patentability Challenge and Asserted Prior Art

Petitioner challenges claims 1–6, 11–14, and 16 on the following ground of unpatentability (Pet. 7):

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
1–6, 11–14, 16	103 ¹	Aono ²

II. ANALYSIS

A. Claim Construction

In an *inter partes* review proceeding, the Board applies the same claim construction standard as that applied in federal courts in a civil action under 35 U.S.C. § 282(b), which is generally referred to as the *Phillips* standard. *See*

¹ The Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011), amended 35 U.S.C. § 103 effective March 16, 2013. Because the '589 Patent has a filing date prior to the effective date of the applicable AIA amendment, we refer to the pre-AIA version of § 103.

² US 2012/0139815 A1, published June 7, 2012, filed July 12, 2011 (Ex. 1004).

37 C.F.R. § 42.100(b); *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). Under the *Phillips* standard, “words of a claim ‘are generally given their ordinary and customary meaning.’” *Phillips*, 415 F.3d at 1312.

Petitioner points out the express definitions for the terms “screen” and “display” set forth in the ’589 Patent. *See* Pet. 16–17 (citing Ex. 1001, 2:64–65, 3:29–30; Ex. 1003 ¶¶ 38–43). As demonstrated in the analysis below, at this stage of the proceeding, we need not explicitly construe “screen,” “display,” or any other claim term or phrase. *See, e.g., Realtime Data, LLC v. Iancu*, 912 F.3d 1368, 1375 (Fed. Cir. 2019).

B. Level of Ordinary Skill in the Art

Petitioner asserts that

[a] person of ordinary skill in the art . . . (‘POSITA’) would have had at least a bachelor’s degree in electrical engineering, computer engineering, computer science, or a related field plus at least two years of work or post-graduate experience in image capture, image processing, image display, user interfaces, or a related field.

Pet. 16. Petitioner also offers that “[a]dditional education could offset a lesser amount of experience and vice versa.” *Id.*

For the purpose of institution, we adopt Petitioner’s definition of a person of ordinary skill in the art because it is consistent with the level of skill reflected by the ’589 Patent Specification and the asserted prior art.

C. Principles of Law

A claim is unpatentable under 35 U.S.C. § 103 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 the 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 skill in the art; and (4) if in evidence, so-called secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).³

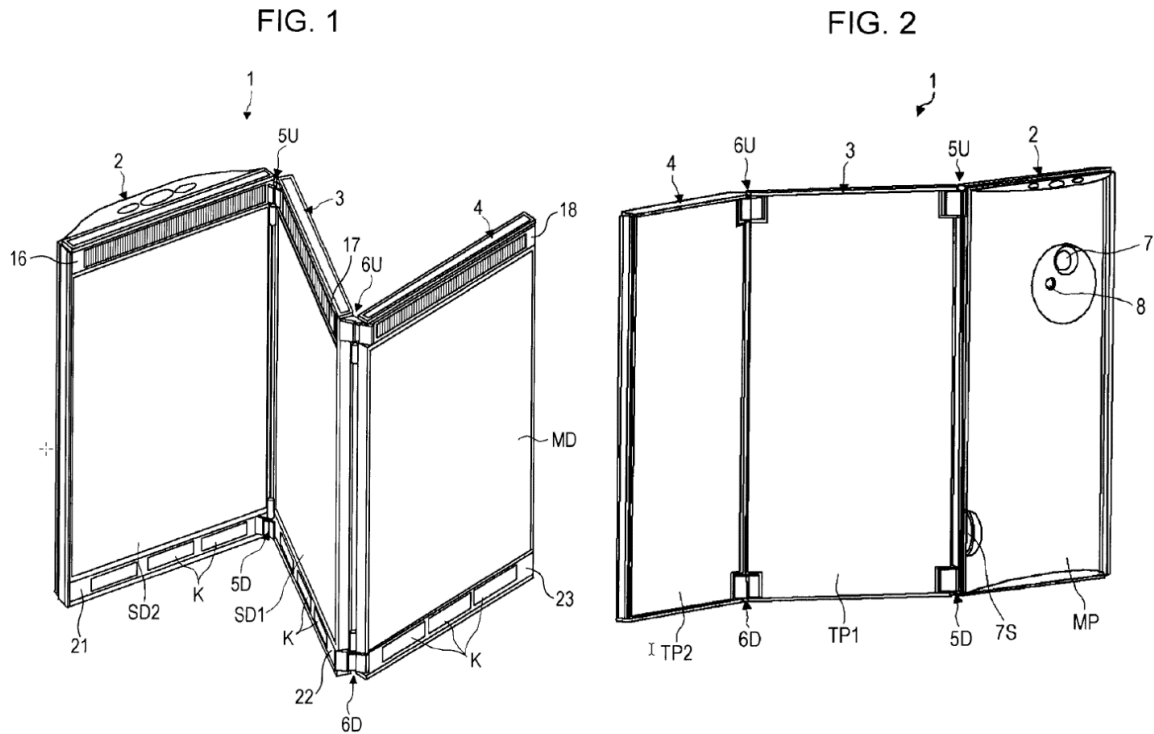
D. Challenge to Claims 1–6, 11–14, and 16 over Aono

1. Overview of Aono (Ex. 1004)

Aono is directed to “[a]n information processing device including a plurality of rectangular-shaped casings each including a first principal surface, and a second principal surface opposing the first principal surface and including a display panel,” as well as “a connecting portion connecting each of the plurality of rectangular-shaped casings.” Ex. 1004 code (57), ¶ 14.

³ At this stage, the parties do not present evidence or arguments related to secondary considerations.

Figures 1 and 2 of Aono are reproduced below.



Figures 1 and 2 depict schematic external perspective views of personal digital assistant 1. *See* Ex. 1004 ¶¶ 15, 16, 81. Personal digital assistant 1 has first casing 2, second casing 3, and third casing 4, each casing having a rectangular plate shape including a first principal surface having a display panel of a predetermined aspect ratio and a second principal surface having a texture panel. *See id.* ¶ 82. First casing 2 has second display panel SD2 on first principal surface side and main texture panel MP on the second principal surface side that includes digital camera shooting lens 7, light 8, and camera shooting release button 7s. *See id.* ¶ 83. Second casing 3 includes first display panel SD1 and first texture panel TP1, and third casing 4 has main display MD and second texture panel TP2. *See id.* ¶¶ 84, 85. First casing 2, second casing 3, and third casing 4 include pressing keys K set near edge portions 21, 22, and 23 of one of the longer sides of each display. *See id.* ¶ 87. First casing 2 and second casing 3 are rotatably

connected by a set of connecting portions 5U and 5D, and second casing 3 and third casing 4 are rotatably connected by a set of connecting portions 6U and 6D. *See id.* ¶¶ 93–95.

Figures 3 and 5 of Aono are reproduced below.

FIG. 3

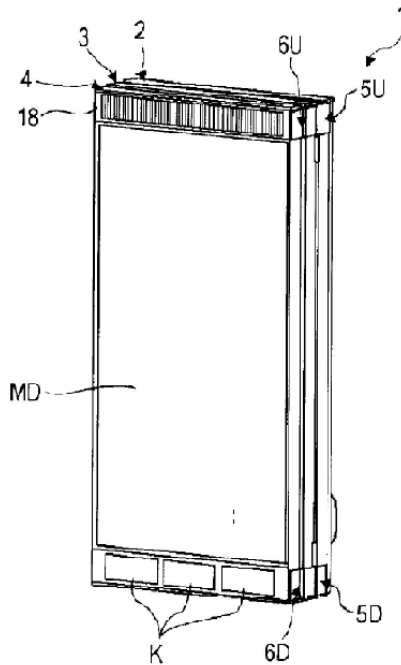


FIG. 5

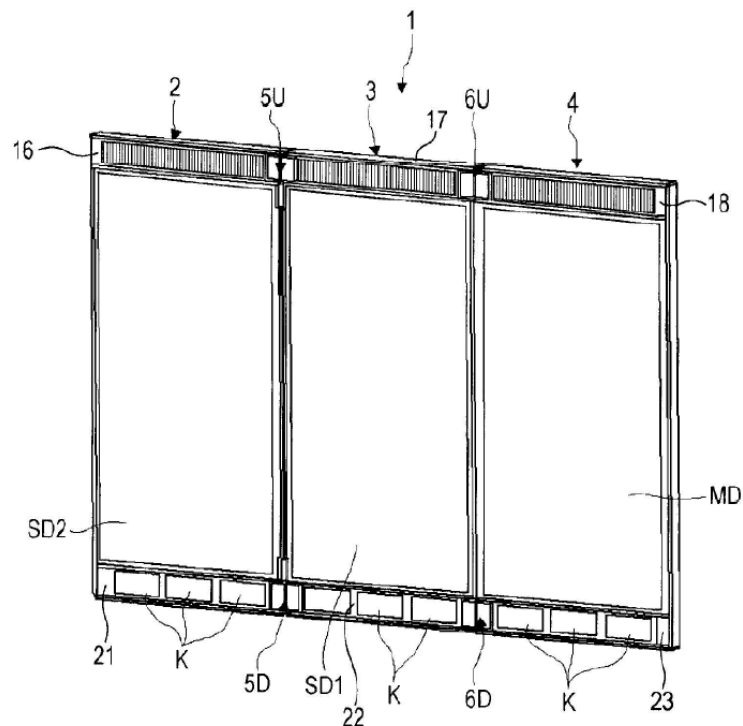


Figure 3 depicts personal digital assistant 1 in a “terminal closed state” and Figure 5 depicts personal digital assistant in a “terminal opened state.” Ex. 1004 ¶¶ 16, 18, 95, 96. Personal digital assistant 1 is in “a terminal closed state” when first casing 2, second casing 3, and third casing 4 are completely overlaid on each other. *See id.* ¶¶ 95, 96, Fig. 3. Personal digital assistant 1 is in “a terminal opened state” when none of first casing 2, second casing 3, and third casing 4 are overlaid on each other and the first principal surfaces or second principal surfaces are arrayed generally in parallel in the same lateral direction. *See id.* ¶¶ 95, 96, Fig. 5. The rotating angular ranges of first and second connecting portions 5U and 5D are

from a generally 0 degrees angle where both display panel surfaces of first casing 2 and second casing 3 are fully facing each other (Fig. 3) to a generally 180 degrees angle where both display panel surfaces of first casing 2 and second casing 3 are generally lined up sideways (Fig. 5). *See id.* ¶ 99. Likewise, the rotating angular ranges of firsts and second connecting portions 6U and 6D are from a generally 0 degrees angle where both texture panel surfaces of second casing 3 and third casing 4 are fully facing each other (Fig. 3) to a generally 180 degrees angle where both texture panel surfaces of second casing 3 and third casing 4 are generally lined up sideways (Fig. 5). *See id.* Personal digital assistant 1 includes various types of detection sensors on any one casing or all casings 2 through 4 for detecting the state of the terminal, for example, an opening/closing detection sensor for detecting whether personal digital assistant 1 is in the terminal opened state or terminal closed state, and a horizontal/vertical detection sensor. *See* Ex. 1004 ¶¶ 143–147.

Figure 60 of Aono is reproduced below.

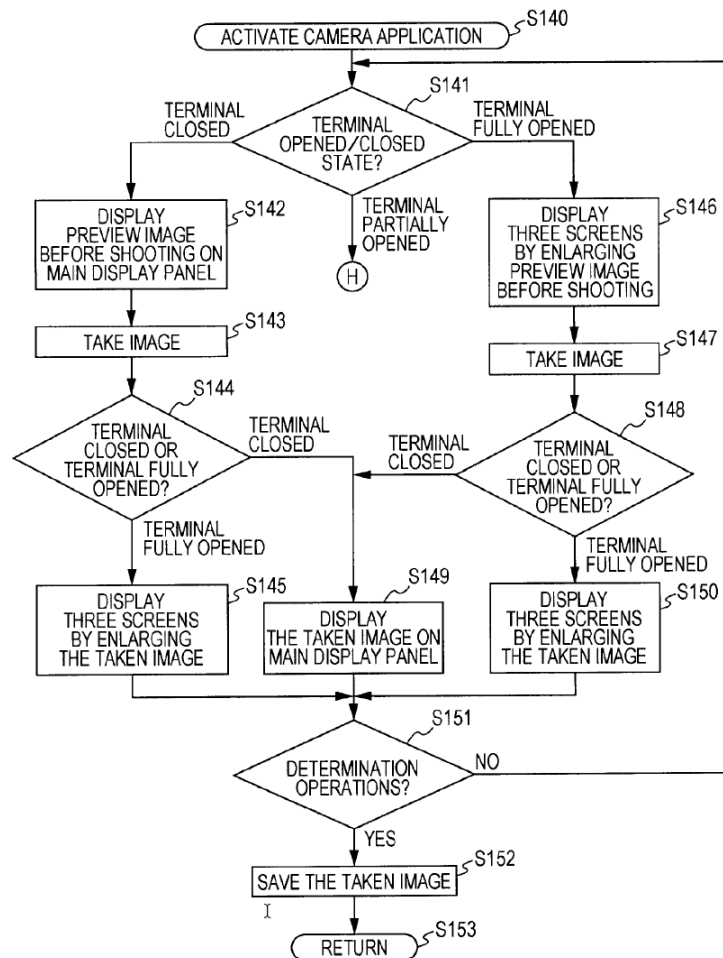


Figure 60 depicts a flowchart of a processing portion of an operation control from shooting to saving an image at the time of a terminal opened state and a terminal closed state after activation of a camera application program. *See* Ex. 1001 ¶¶ 74, 385. In step S140, a control and computing unit activates a camera application program based on an instruction from a user. *See id.* ¶ 386. Next, in step S141 the control and computing unit determines whether personal digital assistant 1 is in the terminal closed or terminal opened state based on output from the terminal state detection sensor. *See id.* ¶ 387. If the terminal state is determined to be in the terminal fully opened state in step S141, a preview of the image is displayed on three screens in step S146 before taking the image in step S147. *See id.*

¶¶ 394–396. If the terminal state is determined to be in the terminal closed state in step S141, a preview of the image is displayed on main display MD in step S142 before taking the image in step S143. *See id.* ¶¶ 388–390. After taking the image in steps S143 or S147, the control and computing unit determines whether the terminal state is in the terminal closed or terminal opened state based on the output of the terminal state detection sensor in either step S144 or step S148. *See id.*

¶¶ 391, 397. If the terminal state is determined to be in a terminal fully opened state in step S144 or step S148, the control and computing unit enlarges and displays the taken image on three screens in step S145 or S150. *See id.* ¶¶ 392, 398. If the terminal state is determined to be in a terminal closed state in step S144 or step S148, the control and computing unit displays the taken image on main display MD in step S149. *See id.* ¶¶ 393, 399. Following display in steps S145, S149, or S150, the control and computing unit determines whether or not a request for storage of the image has been input by the user in step S151, and if no, the process returns to step S141, and if yes, the image is stored in step S152 and the process is returned to the beginning in step S153. *See id.* ¶¶ 392, 393, 398–402.

Figure 61 of Aono is reproduced below.

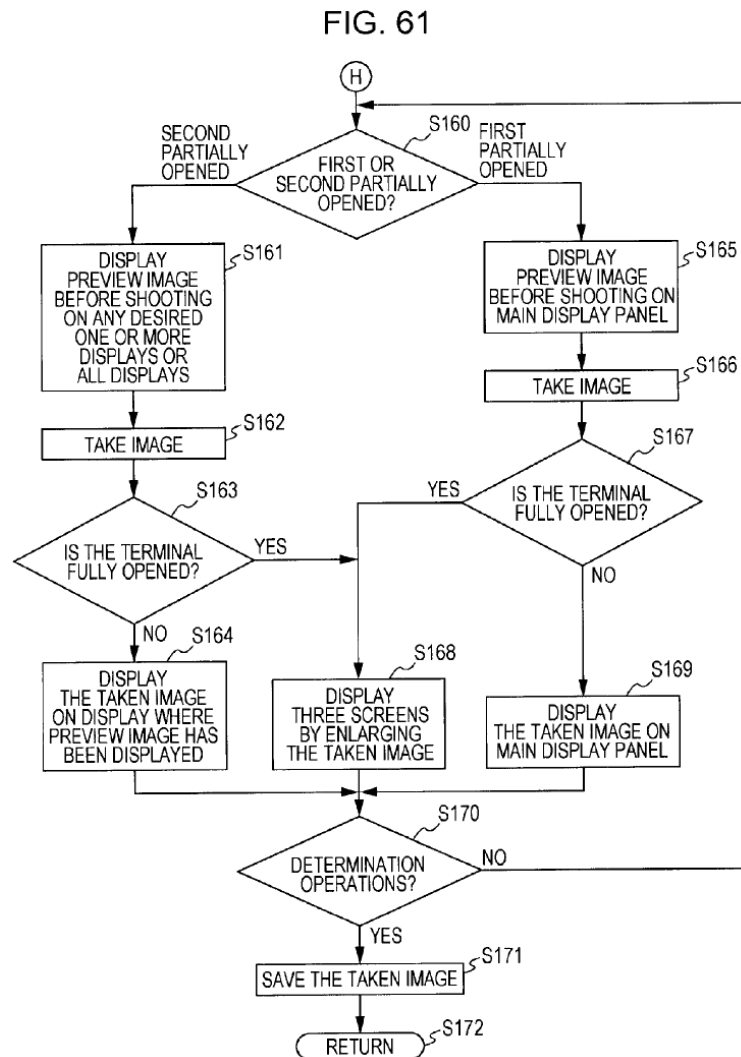


Figure 61 depicts a flowchart of a processing portion of an of operation control from shooting to saving an image at the time of a partially opened state after activation of a camera application program. Ex. 1001 ¶¶ 75, 385, 403. In the event that a determination is made in step S141 (of Figure 60) that the terminal state is the partially opened state, the control and computing unit determines whether the terminal state is in the first partially opened state or the second partially opened state in step S160. *See id.* ¶¶ 403, 404. Aono describes the “first partially opened state” as the state in which the first casing 2 and the second casing 3 are overlaid,

and only the third casing 4 is opened, and the “second partially opened state” as the state in which the second casing 3 and the third casing 4 are overlaid, and only the first casing 2 is opened. *See id.* ¶ 234.

If the terminal state is determined to be the second partially opened in step S160, a preview of the image is displayed on any desired one or more display panels or all display panels in step S161 before the image is taken in step S162. *See id.* ¶¶ 410, 411. If the terminal state is determined to be the first partially opened state in step S160, a preview of the image is displayed on main display MD in step S165 before the image is taken in step S166. *See id.* ¶¶ 405, 406. After taking the image in steps S162 or S166, the control and computing unit determines whether the terminal state is in the terminal fully opened state or not based on the detection output of the terminal state detection sensor in either step S163 following step S162 or step S167 following step S166. *See id.* ¶¶ 407, 412.

If the terminal state is determined to be in the terminal fully opened state in step S163 or step S167, the control and computing unit enlarges and displays the taken image on three screens in step S168. *See id.* ¶¶ 408, 413. If the terminal state is determined to be in a terminal closed state in step S163, the control and computing unit displays the taken image on the display where the preview image has been displayed in step S164. *See id.* ¶ 414. If the terminal is determined to be in a terminal closed state in step S167, the control and computing unit displays the taken image on main display MD in step S169. *See id.* ¶ 409. Following display in steps S164, S168, or S169, the control and computing unit determines whether or not a request for storage of the image has been input by the user in step S170, and if no, the process returns to step S160, and if yes, the image is stored in step S171 and is returned to the beginning of the process in step S172. *See id.* ¶¶ 408, 409, 414–417.

Figures 26 and 27 of Aono are reproduced below.

FIG. 26

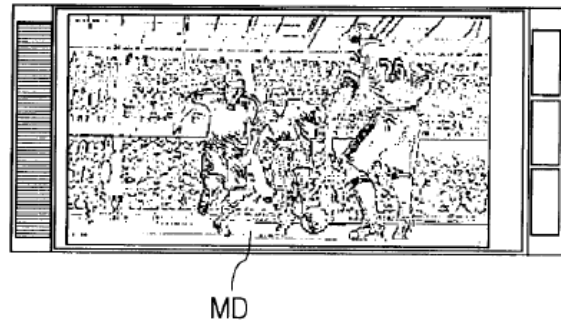
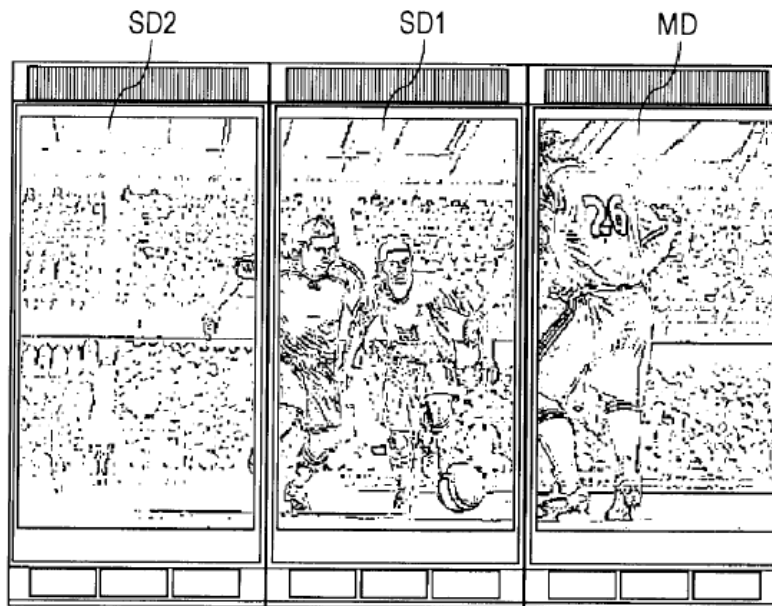


FIG. 27



Figures 26 and 27 depict an operation control example based on the detection result of a terminal state detection sensor in which a landscape video is displayed on MD in the terminal closed state and the video is enlarged on three screens of display panels in the terminal opened state. *See Ex. 1004 ¶¶ 40, 41, 149.* Personal digital assistant 1 displays the video with a 16:9 aspect ratio on one screen alone of the main display MD in the terminal closed state, and at the time of being changed to the terminal opened state, the video is enlarged and displayed using three

display panels MD, SD1, and SD2 in landscape maintaining a 16:9 aspect ratio. *See id.* ¶¶ 150–153. Aono further discloses that, in addition to detecting the terminal opened/closed transition, personal digital assistant 1 may switch to the enlarged three screen display from the one screen only at the time of transition of the horizontal vertical state based on output of horizontal/vertical detection sensor. *See id.* ¶ 154.

2. Analysis of Claim 1

For the reasons that follow, we are persuaded that Petitioner establishes sufficiently that Aono discloses, teaches, or suggests all of the limitations of claim 1.

Petitioner contends that, if the preamble is limiting, Aono discloses “[a] method” based on Aono’s disclosure of the method of controlling personal digital assistant 1 in Figures 60 and 61. *See* Pet. 18–20 (reproducing Ex. 1004, Figs. 60, 61; citing Ex. 1004 ¶¶ 385–417). Petitioner asserts that Aono discloses “providing a device having at least first and second screens” based on Aono’s disclosure of personal digital assistant 1 having multiple screens including first casing 2 having second display panel SD2, second casing 3 including first display panel SD1, and third casing 4 that includes main display panel MD. *See* Pet. 20–22 (reproducing Ex. 1004, Fig. 1 (with Petitioner’s annotations added); citing Ex. 1003 ¶¶ 65–69; Ex. 1004 ¶¶ 3, 82–85, 192, 241, 287, 425, 426). Petitioner further contends that Aono discloses “receiving user interface input to execute an image capture function” based on Aono’s disclosure of first casing 2 including shooting lens 7 for a digital camera that can take an image based on a user operating buttons or touch screens, such as release button 7S or keys K. *See* Pet. 22–26 (reproducing Ex. 1004, Fig. 1 (with Petitioner’s annotations added), Fig. 2 (with Petitioner’s

annotations added), Fig. 60 (with Petitioner’s annotations added); citing Ex. 1003 ¶¶ 70–72; Ex. 1004 ¶¶ 235, 386, 390).

Petitioner asserts that Aono discloses, suggests, or would have rendered obvious “presenting a first display for the image capture function based on a physical device state, a display mode and a device orientation” based on Aono’s disclosure of determining whether device 1 is closed, fully opened or partially opened (in steps S140, S160), whether device 1 is configured to display an image on one screen, more than one screen, or enlarged across one or more screens (steps S142, S145, S146, S149, S150, S161, S164, S165, S168, S169), and whether the device is in portrait or landscape orientation. *See* Pet. 27–40 (reproducing Ex. 1004, Fig. 1 (with Petitioner’s annotations added), Fig. 2 (with Petitioner’s annotations added), Fig. 60 (with Petitioner’s annotations added), Fig. 61 (with Petitioner annotations added), Figs. 26, 27, 37, 41; citing Ex. 1003 ¶¶ 73–106; Ex. 1004 ¶¶ 40, 143–145, 148–154, 203, 208, 225–227, 231–235, 272–288, 385–417).⁴ Petitioner contends that Aono discloses, suggests, or would have rendered obvious “the physical device state at least including open, closed[,], easel[,], or modified easel,⁵ the display mode at least including portrait single, portrait dual, landscape single, landscape dual, portrait max[,], or landscape max,” based on Aono’s disclosure of digital assistant 1 that can be in a terminal opened state

⁴ Petitioner also asserts “[t]o the extent that it is deemed that the disclosures discussed with respect to this limitation relate to different embodiments of Aono, although such an interpretation would be wrong, a POSITA nonetheless at minimum would have found it obvious to combine different disclosures of Aono in the manner described above. Pet. 39; *see* Pet. 39–40.

⁵ Petitioner also asserts “[t]o the extent [Patent Owner] contends, incorrectly, that Aono does not disclose any one or more of the listed “physical device states,” at minimum Aono suggests and would have rendered obvious to a POSITA a device that can be configured in these states.” Pet. 45; *see* Pet. 45–46.

shown in in Figure 5, a terminal closed state shown in Figure 3, a first partially opened state, and a second partially opened state shown in Figure 43, and having a portrait max mode shown in Figure 27, a landscape max display mode shown in Figure 37, a portrait single and landscape single modes shown in Figures 26, 35, and 39, and dual portrait and dual landscape modes shown in Figures 28–33, 41, and 42. *See* Pet. 41–49 (reproducing Ex. 1001, Fig. 3A together with Ex. 1004, Figs. 3, 5, 43 (with Petitioner’s annotations added); citing Ex. 1001, 6I, 6J; Ex. 1004, Figs. 27, 37; citing Ex. 1003 ¶¶ 107–118; Ex. 1004 ¶¶ 40, 80, 99, 102, 234, 389, 405, Figs. 28–33, 41, 42, 60, 61; Pet. 55–61).

Petitioner contends that Aono discloses “receiving a device orientation change, wherein the device orientation change is a rotation of the device” based on Aono’s disclosure that personal digital assistant 1 includes horizontal/vertical detection sensor and disclosing a change in device orientation being a transition of the terminal horizontal/vertical state. *See* Pet. 49 (citing Ex. 1003 ¶¶ 118–121; Ex. 1004 ¶¶ 143, 153, 154, 278). Petitioner asserts that Aono discloses “based on the device orientation change, the device state and the display mode, presenting a second display for the image capture function, wherein a portion of the first and second screen changes from the first display to the second display” based on Aono’s disclosure of personal digital assistant 1 switching from a display of one screen to an enlarged display of three screens only at the time of transition of the horizontal/vertical state based on detection of sensor output as well as Aono’s disclosure that the display of a preview video changes on the first and second screens based on the device being rotated 90 degrees. *See* Pet. 50–54 (reproducing Ex. 1004, Fig. 26 (with Petitioner’s added annotations), Fig. 27 (with Petitioner’s added annotations), Fig. 60 (with Petitioner’s added annotations), Fig. 61 (with

Petitioner’s added annotations); citing Ex. 1003 ¶¶ 122–125; Ex. 1004 ¶¶ 143, 152–154).

At this stage of the proceeding, we determine Petitioner shows sufficiently for the purpose of institution that the preamble and foregoing limitations of claim 1 are satisfied by the teachings of Aono. For the purpose of institution and based on the record before us, Petitioner establishes sufficiently that the subject matter of claim 1 would have been obvious over Aono. Accordingly, there is a reasonable likelihood Petitioner would prevail in showing that claim 1 is unpatentable under 35 U.S.C. § 103.

3. Analysis of Dependent Claims 2–6

Claims 2–6 depend directly or indirectly from claim 1. We have reviewed Petitioner’s contentions and cited supporting evidence addressing how Aono discloses, teaches, or suggests each of the limitations recited in dependent claims 2–6. *See* Pet. 55–66.

For the purpose of institution and based on the record before us, including the reasons explained immediately above addressing claim 1, Petitioner establishes sufficiently that the subject matter of dependent claims 2–6 would have been obvious over Aono. Accordingly, there is a reasonable likelihood Petitioner would prevail in showing that claims 2–6 are unpatentable under 35 U.S.C. § 103.

4. Analysis of Claims 11–14 and 16

Petitioner’s arguments addressing the limitations “determine an image capture function configuration,” and “wherein the image capture function configuration is for a self-portrait” recited in independent claim 11, raise questions regarding the sufficiency of Petitioner’s showing that “Aono discloses, or at least suggests and would have rendered obvious to a POSITA” “a processor . . . operable to: . . . determine an image capture function configuration” and “wherein

the image capture function configuration is for a self-portrait,” recited in claim 11. Pet. 76; *see* Pet. 76–80.

More specifically, Petitioner asserts Aono’s personal digital assistant 1 is configured to take a self-portrait or inward-facing image in the first partially opened state, and also would be configured to capture an inward-facing image in the second partially opened state. *See* Pet. 55–59 (citing Ex. 1003 ¶¶ 126–131; Ex. 1004 ¶¶ 99, 233–235, 405), 76–77 (citing Ex. 1003 ¶¶ 167–174; citing Pet. 55–59), 80 (citing Ex. 1003 ¶¶ 175, 178; Ex. 1004 ¶¶ 234, 235, 410; Pet. 55–59). Petitioner, however, also asserts that in the first partially opened configuration, the shooting angle can be set to angles that would allow a user to take an outward-facing image (*see* Pet. 77 (citing Ex. 1003 ¶ 169; Ex. 1004 ¶ 233)) and, in the second partially opened configuration, the device can take an outward-facing image, with the user looking through SD1 or SD2 (*see* Pet. 77–78 (citing Ex. 1003 ¶ 172)). According to Petitioner, “[t]o the extent that the determination of the image capture function configuration in Aono is deemed to be based on the physical device state, this is consistent with the teachings of the ’589 patent.” Pet. 78 (citing Ex. 1001, 33:16–18; Ex. 1003 ¶ 173).

Petitioner does not direct us to where Aono discloses or suggest any determination by the processor of a self-portrait image capture configuration. *See* Pet. 27–50, 55–59, 76–80. Taking into account Petitioner’s assertion that a determination of the image capture function in Aono is based on the physical device state, along with Petitioner’s inconsistent assertions that personal digital assistant 1 can be configured to take *both* a self-portrait or inward-facing image *and* an outward-facing image in the first partially opened state and in the second partially opened state, it is not evident that Aono discloses, suggests, or renders obvious any determination by the processor of the self-portrait image capture

configuration. *See* Pet. 27–40, 55–59, 76–80. For the same reasons, Petitioner’s arguments addressing the limitations “determine an image capture function configuration,” and “wherein the image capture function is configured to capture an inward-facing image,” recited in claim 16, also raise questions regarding the sufficiency of Petitioner’s showing that “Aono discloses, or at least suggests and would have rendered obvious to a POSITA” “computer executable . . . instructions to determine an image capture function configuration,” “wherein the image capture function is configured to capture an inward-facing image,” recited in claim 16. *See* Pet. 88–89 (citing Pet. 27–40, 55–59, 76–79; Ex. 1003 ¶ 209).

Accordingly, for the purpose of institution, we are not persuaded that Petitioner demonstrates a reasonable likelihood of prevailing in showing that independent claims 11 and 16, and claims 12–14 dependent from claim 11, are unpatentable over Aono. In any event, we institute *inter partes* review of all of the challenged claims articulated in the Petition, including the patentability challenge to claims 11–14 and 16. *See* 37 C.F.R. § 42.108(a); *SAS Inst. v. Iancu*, 584 U.S. 357, 368 (2017) (“The petitioner in an *inter partes* review is entitled to a decision on all the claims it has challenged.”).

III. CONCLUSION

For the foregoing reasons, we determine there is a reasonable likelihood that Petitioner would prevail in showing at least one of the challenged claims of the ’589 Patent is unpatentable.

IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review of claims 1–6, 11–14, and 16 of the ’589 Patent is instituted with respect to all grounds set forth in the Petition; and

FURTHER ORDERED that pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4(b), *inter partes* review of the '589 Patent shall commence on the entry date of this Order, and notice is hereby given of the institution of a trial.

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