

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MOTOROLA MOBILITY LLC and GOOGLE LLC

Petitioners,

v.

MULTIFOLD INTERNATIONAL INCORPORATED PTE. LTD.,

Patent Owner.

Case IPR2025-00038

Patent No. 8,836,842

**PETITIONERS' REPLY TO PATENT OWNER'S
RESPONSE TO PETITION**

TABLE OF CONTENTS

	Page
I. INTRODUCTION	1
II. CLAIM CONSTRUCTION	1
A. “wherein in each image capture mode a display on the first or second screen is different”	1
B. “associate” and “faces an opposite direction”	3
III. GROUND 1: THE CHALLENGED CLAIMS ARE ANTICIPATED BY CHIN	6
A. [1E], [11H], and [16D] (“wherein in each image capture mode a display on the first or second screen is different”)	6
1. A POSITA Would Understand Chin as Disclosing Both Screen Displays Are Different in Each Image Capture Mode	6
2. Chin Meets the Claim Language Under Any Construction	11
3. Chin Meets the Claim Language Even If Both Screens Display an Image Preview	13
B. Claim 10 and Limitation [11A]	15
C. Claims 6, 7, 13, 17, and 19; Limitation [16E]	16
D. Claims 2–7, 10, 12–13, 17, and 19–20	17
IV. GROUND 2: THE CHALLENGED CLAIMS WOULD HAVE BEEN OBVIOUS IN VIEW OF CHIN	18
A. Limitations [1E], [11H], [16D], [16E], and Claims 6, 7, 13, and 19	18
B. [11A] and Claim 10	23
C. Claims 2–7, 10, 12–13, 17, and 19–20 and 19	24
V. GROUND 3: CLAIMS 1–7 AND 11 ARE ANTICIPATED BY WHITEHORN	24
A. [1E], [11H]	25
B. [11B]	27
C. Claim 4	28
D. Claims 6 and 7	30

TABLE OF CONTENTS

	Page
E. Claims 2–7.....	30
VI. GROUND 4: CLAIMS 1–7 AND 11 WOULD HAVE BEEN OBVIOUS IN VIEW OF WHITEHORN	30
A. [1E], [11H]	30
B. Claims 6 and 7	31
VII. CONCLUSION.....	32

TABLE OF AUTHORITIES

Page(s)

Cases

<i>Kennametal, Inc. v. Ingersoll Cutting Tool Co.,</i> 780 F.3d 1376 (Fed. Cir. 2015)	10
<i>KSR Int’l Co. v. Teleflex Inc.,</i> 550 U.S. 398 (2007).....	22
<i>Lextron Sys. v. Microsoft Corp,</i> No. C-04-0588 VRW, 2005 WL 6220089 (N.D. Cal. June 1, 2005).....	4
<i>PAR Pharm., Inc. v. TWI Pharms., Inc.,</i> 773 F.3d 1186 (Fed. Cir. 2014)	11
<i>Parus Holdings, Inc. v. Google LLC,</i> 70 F.4th 1365 (Fed. Cir. 2023)	4

LISTING OF EXHIBITS

Exhibit	Description
1001	U.S. Pat. No. 8,836,842 to Sirpal
1002	File History for U.S. Pat. No. 8,836,842 to Sirpal
1003	Declaration of Dr. Jeffrey J. Rodriguez
1004	U.S. Pub. 2009/0190295 A1 to Chin
1005	U.S. Pub. 2005/0078211 A1 to Whitehorn
1006	U.S. Pub. 2012/0139815 A1 to Aono
1007	Scheduling Order in the District Court Actions, dated April 29, 2024
1008	E-mail from counsel for Patent Owner, dated September 27, 2024, identifying the asserted claims in the District Court Actions
1009	U.S. Patent No. 7,471,890 to Lee
1010	U.S. Patent Application Publication No. 2011/0193806 A1 to Kim
1011	U.S. Patent App. Pub. No. 2002/0142810 to Kawasaki
1012	U.S. Patent Publication No. 2010/0048190 to Park
1013	U.S. Patent Application Publication No. 2010/0248788 to Yook
1014	Curriculum Vitae of Dr. Jeffrey J. Rodriguez
1015	Deposition Transcript of Dr. Rajiv Surati (Nov. 4, 2025)
1016	iPhone 4 – Technical Specifications, https://support.apple.com/en-us/112562 .
1017	Press Release: Apple Presents iPhone 4, https://www.apple.com/newsroom/2010/06/07Apple-Presents-iPhone-4/ (June 7, 2010)

I. INTRODUCTION

The Petition presents straightforward cases of unpatentability based on two independent references, Chin and Whitehorn. Multifold's Response ("Response") fails to refute the Petition's clear showing that the Challenged Claims are anticipated by, or at least would have been obvious in light of, Chin and Whitehorn. Multifold hinges its main argument on the term, "wherein in each image capture mode a display on the first or second screen is different." Both Chin and Whitehorn *explicitly* teach two image capture modes. Multifold does not dispute this. And both Chin and Whitehorn *explicitly* teach that the display on the multi-screen device disclosed in each reference changes between those two modes. Yet Multifold ignores that the references teach a choice between two options and instead argues that the displays in both Chin and Whitehorn could somehow be identical in the two modes. This reading of the prior art is nonsensical. Even accepting Multifold's tortured reading, the prior art still meets the limitations of the Challenged Claims. Multifold's remaining arguments likewise ignore the references' express teachings to make "head-in-the-sand" arguments that defy reason, *e.g.*, arguing that it somehow would have been non-obvious to employ a touch screen in a mobile device circa 2011. The Challenged Claims are unpatentable.

II. CLAIM CONSTRUCTION

A. "wherein in each image capture mode a display on the first or

second screen is different”

Multifold’s claim construction argument for the “wherein...” clause is a classic example of knocking down a strawman. Multifold misinterprets both the Petition and the Institution Decision (“ID”) as applying a claim construction that no one has advanced and then argues against that construction. The Board correctly found construction of this phrase unnecessary. *See* ID, 9. As explained below, Whitehorn and Chin render the Challenged Claims unpatentable under any construction.

Multifold’s misunderstanding is most apparent in Section III.B.4. of the Response, where it argues that Petitioners and the Board are improperly looking to “first-screen-to-second-screen comparisons.” Response, 23. Multifold states that Petitioners’ implicit construction would compare the first screen at a first time with the second screen at a later time to determine whether they are “different.” *Id.* at 23–24.

This is not what Petitioners argued. Rather, Petitioners argued that in Chin, “*both* the first and second screens have different displays in the two image capture modes.” Petition, 30. The display on the first screen changes between the two modes: showing a preview of a self-photographing image in one mode and not showing it in the other mode. The display on the second screen also changes

between the two modes: showing a preview of an outward-facing image in one mode and not showing it in the other mode.

Chin thus discloses, or at least renders obvious, the “wherein...” limitation even under Multifold’s construction (“a different display on the first screen between image capture modes or a different display on the second screen between image capture modes”). It also discloses or renders obvious the Challenged Claims under any other possible understanding of the “wherein...” clause. *Infra* Section III.B.2.

Similarly, the Petition demonstrated that in Whitehorn, “in each of the two image capture modes, a display on at least the top large screen interface **128** ... is different.” Petition, 66. Multifold does not accuse Petitioners of making a “first-screen-to-second-screen” comparison in their assessment of Whitehorn. *See* Response, 60–66. Regardless, Whitehorn discloses or at least renders obvious the “wherein...” limitation under Multifold’s construction or any other possible understanding of the “wherein...” clause. *Infra* Section V.A. Here too, no construction is necessary.

B. “associate” and “faces an opposite direction”

Multifold’s expert, Dr. Surati, also adopted implicit constructions of “associate” and “faces an opposite direction” as used in limitation [11B]. While Dr. Surati sought to distinguish Whitehorn based on these constructions, PO’s

Response did not include these arguments. *See* Response, 66–67. Thus, these claim constructions and related arguments are waived. *See* Paper 9, at 10; *Parus Holdings, Inc. v. Google LLC*, 70 F.4th 1365, 1373 (Fed. Cir. 2023).

Even if not waived, these constructions are incorrect. Dr. Surati asserts that “wherein an image capture lens is *associated* with the second screen” is not met if the image capture lens and the second screen are “physically separate components.” *See* Ex. 2002, ¶¶ 223, 232; Ex. 1015, 122:6–15. Yet he conceded that “it’s possible” that “a person of ordinary skill in the art would understand that two things could be associated with each other... if not physically connected.” Ex. 1015, 126:3–19. He contended that a “narrower interpretation of ‘associated’ would apply” in “the context of the ’842 patent,” *id.* at 126:21–127:2, but could not point to anything specific in the patent supporting that interpretation, *id.* at 125:5–15. Nothing in the patent redefines “associate” to this narrower meaning. If any construction of “associate” is necessary, the Board should adopt the plain and ordinary meaning in view of a POSITA. *See, e.g., Lextron Sys. v. Microsoft Corp.*, No. C-04-0588 VRW, 2005 WL 6220089, at *9–10 (N.D. Cal. June 1, 2005) (construing “associated with” to mean “related to” based on Webster’s Unabridged Dictionary defining “associate” as “to connect or bring into relation”).

Dr. Surati’s opinions regarding “faces an opposite direction” are even more illogical. Dr. Surati states that screens “are facing ‘opposite directions’ when they

are facing away from one another, not when they are facing towards each another.” Ex. 2002 ¶226; *see also* Ex. 1015, 109:10–16. Yet Dr. Surati “[a]bsolutely” agrees that “the ordinary meaning of opposite direction, outside the context of the patent, could encompass two things that are face-to-face with each other.” *Id.* at 109:18–110:1. Dr. Surati’s opinion is misaligned with the plain meaning of the term, and again, the patent does not redefine these common words to limit them so. A POSITA would understand, for example, that two screens are “facing an opposite direction” when “the first and second display units are facing each other” in a “closed” position. Ex. 1003, ¶ 177.

Finally, Dr. Surati’s redirect testimony on these terms should be disregarded by the Board because Dr. Surati was coached by counsel during a recess and then summarily agreed to leading questions that backtracked his prior testimony. First, after exclusively referring to the claim language and failing to mention the specification as informing his understanding of “faces an opposite direction,” Dr. Surati, at the prompting of counsel, stated that his understanding of the term was “based on the claim language” and “also based on [the] specification.” Ex. 1015, 129:20–130:5. Dr. Surati also did an about-face regarding the “associated” language:

Q: So to be clear, you did not give an opinion that – you don’t hold the opinion that in Claim 5, “associated with” is limited to a physical connection. Fair to say?

A: Right.

Ex. 1015, 134:22–135:7 (objection omitted). Upon further examination by counsel for Motorola, Dr. Surati admitted that he “discuss[ed] the substance of [his] testimony with counsel during the break,” but, at the instruction of Multifold’s counsel, refused to answer further questions about the substance of the discussion, thus prohibiting Petitioners from exploring the coaching of the expert witness. *Id.* at 136:22–137:15.

III. GROUND 1: THE CHALLENGED CLAIMS ARE ANTICIPATED BY CHIN

A. [1E], [11H], and [16D] (“wherein in each image capture mode a display on the first or second screen is different”)

Chin teaches these limitations. Ex. 1003, ¶¶ 130–35. Multifold’s arguments to the contrary rest on a strained and illogical reading of Chin. Instead, a POSITA would understand Chin as disclosing that in each image capture mode a display on the first or second screen is different.

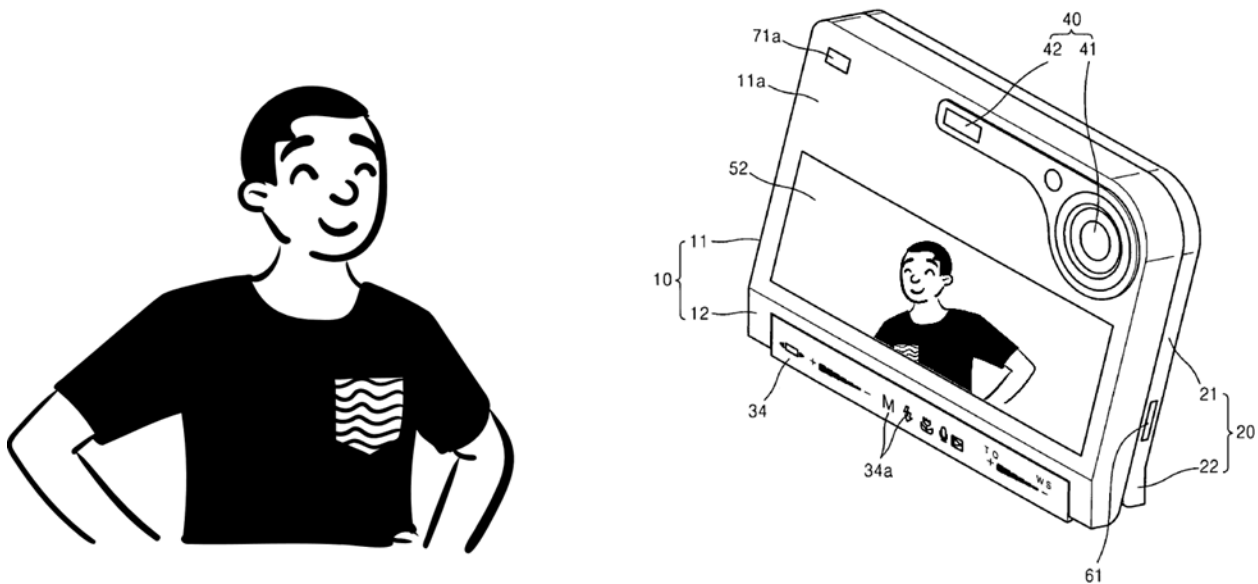
1. A POSITA Would Understand Chin as Disclosing Both Screen Displays Are Different in Each Image Capture Mode

Chin teaches an embodiment with two image capture modes: the “self-photographing mode” and the mode designed to take an outward-facing image. *See*

Petition, 13; Ex. 1004, [0077]–[0079]. Dr. Surati admits that Chin “discloses entering into two different image capture modes,” Ex. 1015, 39:8–13, 40:1–7, and Multifold does not dispute this. *See* Response, 36, 38.

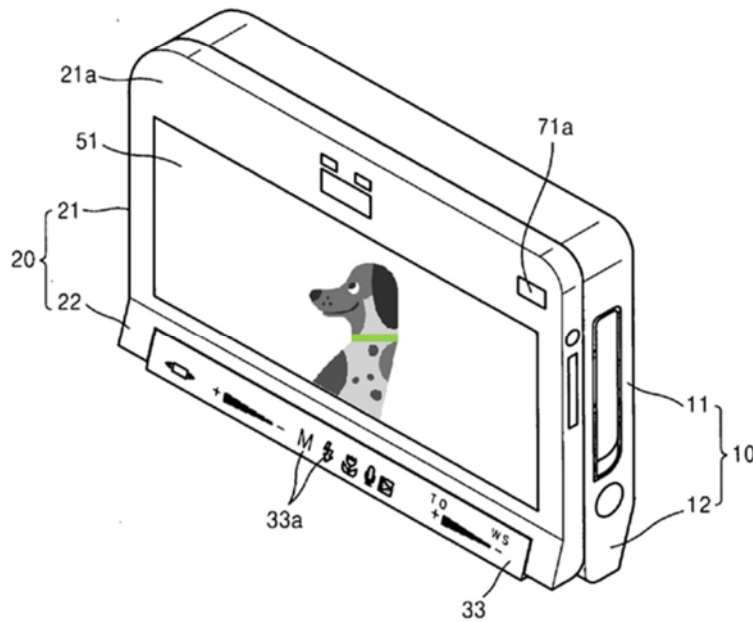
Chin explicitly teaches that the display on the device’s two screens is different depending on the mode. In the self-photographing mode, “[t]he user can perform the self-photographing function while viewing him or herself displayed on the *second* display unit:”

FIG. 5



Ex. 1004, [0078], Fig. 5 (annotated). In the outward-facing mode, the device “displays images on a *first* display unit before a photograph is taken, so that the first display unit can perform a preview function:”

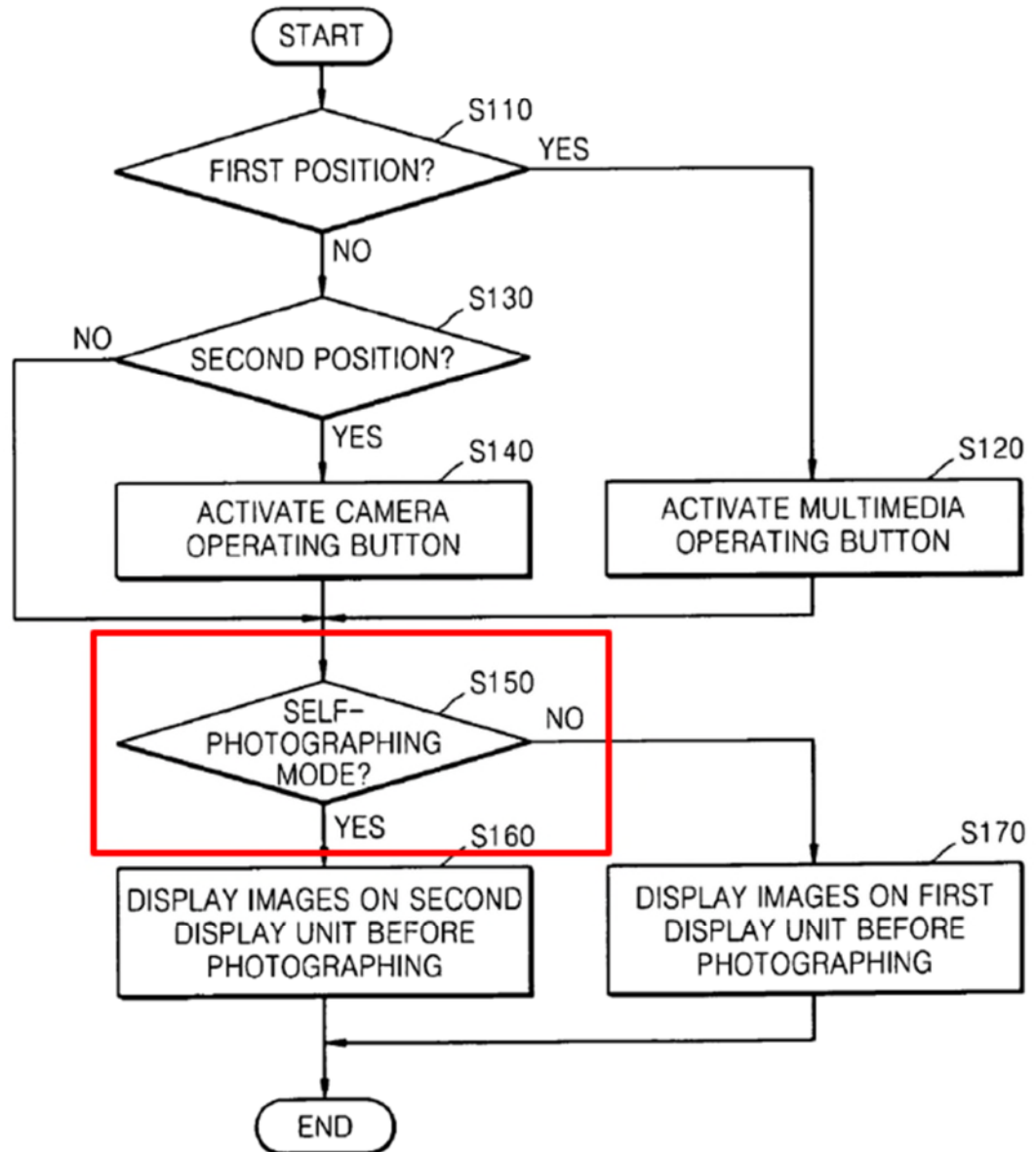
FIG. 6



Ex. 1004, [0079], Fig. 6 (annotated).

Chin’s Figure 9 and its accompanying text removes any doubt that the image preview is *not* displayed on both screens in both modes, and a POSITA would understand the same. *See* Ex. 1003, ¶135. Figure 9 is a flow chart of an embodiment with the self-photographing mode and the outward-facing mode:

FIG. 9



Ex. 1004, Fig. 9 (annotated). Decision point **S150** asks whether the device is in self-photographing mode. If yes, the device should display images on the *second*

display unit. If no, (meaning the device is in outward-facing mode), the device should display images on the *first* display unit.

Ignoring Chin's clear disclosure, Multifold posits that "it is entirely plausible that *both* screens are *always* displaying previews irrespective of whether the camera application is in self-portrait or outward-facing mode." *See* Response, 44 n.8 (emphasis added); *see also* Ex. 1015, 51:9–16. Multifold's interpretation is *not* plausible. It would render the decision point **S150** in Figure 9 meaningless, and it would have made no sense for Chin to explicitly teach that a different display unit displays an image in the two modes if Chin really meant to say that both display units always displayed previews in both modes.

Multifold's argument is also contrary to Federal Circuit caselaw. Multifold argues that the [1E] limitation is not met because "Chin does not disclose what both screens are displaying for any alleged image capture mode," Response, 44 n.8, and therefore that Chin "does not expressly disclose 'all elements of the claimed invention arranged as in the claim.'" *Id.* at 41. But "a reference can anticipate a claim even if it does not expressly spell out all the limitations arranged or combined as in the claim, if a person of skill in the art, reading the reference, would at once envisage the claimed arrangement or combination." *Kennametal, Inc. v. Ingersoll Cutting Tool Co.*, 780 F.3d 1376, 1381 (Fed. Cir. 2015) (internal quotations and alterations omitted)). The prior art need not use the same words as

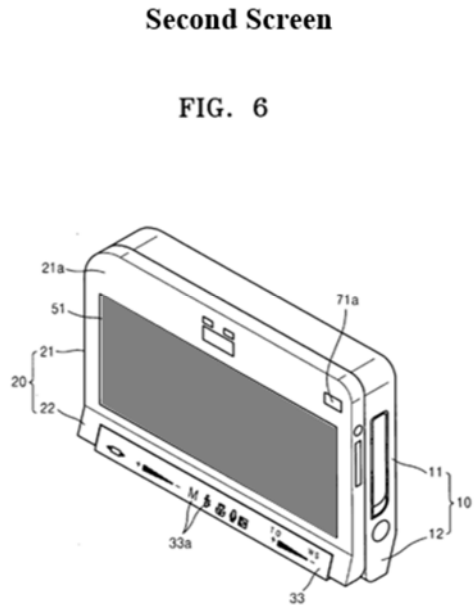
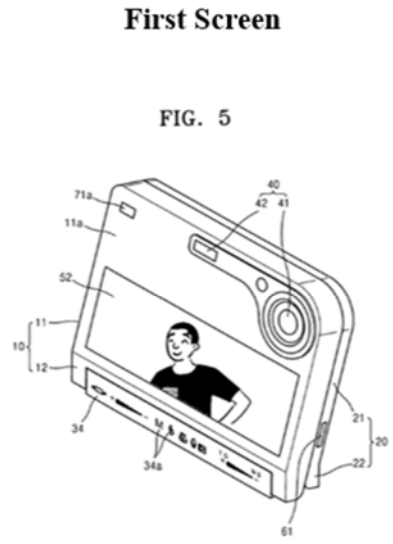
the claim to anticipate. It would be immediately apparent to a POSITA that both screens in Chin do not both display an image preview in both modes for the reasons explained above. Furthermore, Dr. Surati also admits that the [1E] limitation is met “[i]f at one time the screen is displaying an image and at the other time the screen is not displaying anything.” Ex. 1015, 22:2–23:5.

Because the express disclosures in Chin teach that the display on the screens is different in each image capture mode, the Board need not consider inherency. But even if this is viewed as an inherency argument, the limitation is met. For example, in Chin’s self-photographing mode, the second screen necessarily would not show the same thing as the first screen. Otherwise, as discussed above, the reference would make no sense and it would read out the disclosures of Figure 9. *See PAR Pharm., Inc. v. TWI Pharms., Inc.*, 773 F.3d 1186, 1195–96 (Fed. Cir. 2014) (explaining that “in order to rely on inherency” “the limitation at issue necessarily must be present, or the natural result of the combination of elements explicitly disclosed by the prior art.”).

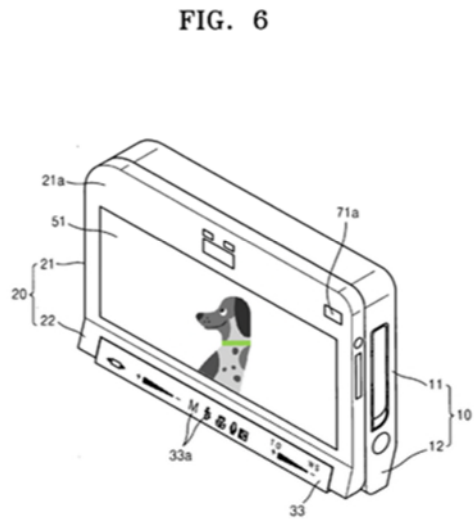
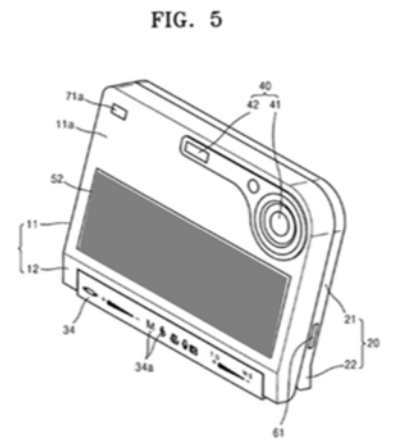
2. Chin Meets the Claim Language Under Any Construction

Chin’s disclosure of the “wherein...” limitation is easily visualized in the below image, which shows, for both image capture modes, the annotated Figures 5 and 6 of Chin from the Petition alongside the other, non-displaying screen:

**Self-
Photographing
Mode**



**Outward-Facing
Mode**



Ex. 1004, Figs. 5 and 6 (annotated).

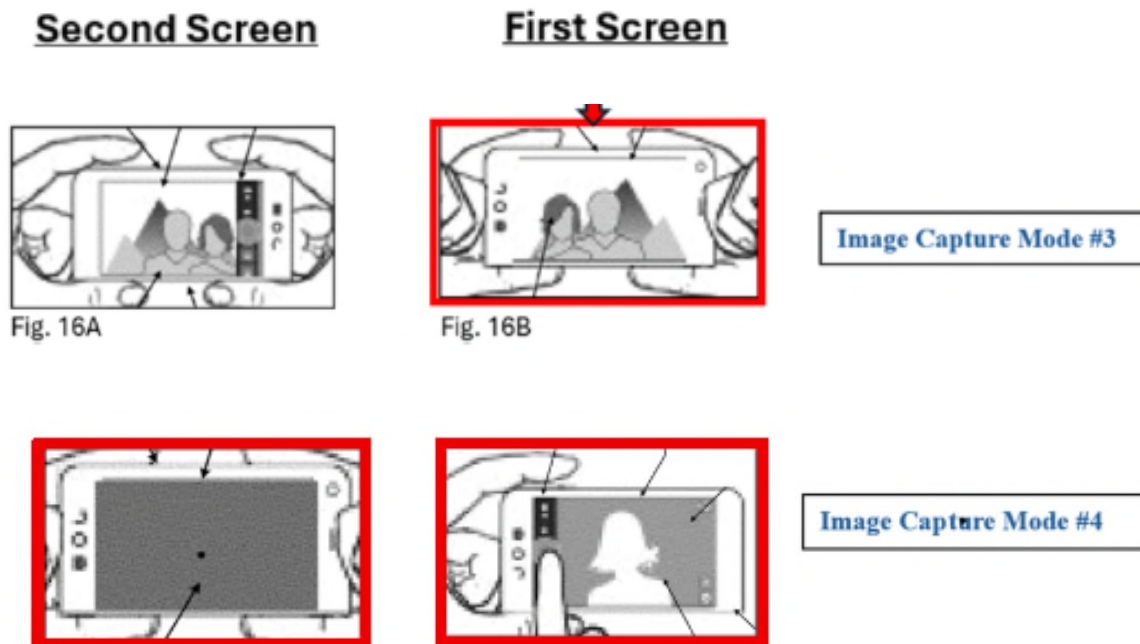
If there is any variance in how the Board, Petitioners, or Multifold understand the meaning of “wherein in each image capture mode a display on the first or second screen is different,” Chin discloses the limitation under any possible construction.

If the limitation requires comparing the same screen between two different image capture modes, Chin discloses it: the first screen does not display a preview in the self-photographing mode and does display a preview in the outward-facing mode. Likewise, the second screen does not display a preview in the outward-facing mode and does display a preview in the self-photographing mode. If the limitation requires comparing the two screens within a single image capture mode, Chin discloses it: in self-photographing mode, the second display unit displays a preview and the first display unit does not display a preview. In outward-facing mode, the first display unit displays a preview and the second display unit does not display a preview. *See* Petition, 29–33; Ex. 1003, ¶¶ 130–35.

3. Chin Meets the Claim Language Even If Both Screens Display an Image Preview

Finally, even under Multifold’s incorrect reading of Chin, the limitation is met. Under Multifold’s theory, a self-photographing preview is a different display from an outward-facing preview. Multifold argued that in what it labeled “image capture mode #4” (which shows “a preview display of the user on the first screen”), “the display on the first screen is different” than in what it labeled “image capture mode #3” (which shows a preview of an outward-facing image). Response, 16–18. Dr. Surati confirmed this was his understanding. Ex. 2002, ¶¶ 90–92, 94–97, Ex. 1015, 23:7–24:6, 25:18–26:17 (“Q: So the first screen in image capture

mode 4 is a different display than the first screen in image capture mode 3, which you show on page 36, right? A: I think that's correct.”).



Dr. Surati also testified that if the Chin device was displaying a preview on both screens in self-photographing mode, it would be a preview of the self-photographing image on both screens, and not an outward-facing image. Ex. 1015, 57:7–11, 57:15–22. Likewise, under Multifold’s theory, when the device is in outward-facing mode, both screens would display a preview of an outward-facing image; the Chin device has one camera, and both displays would display what that camera is seeing. *See id.*

Accordingly, *even if* Chin’s device were to display a preview on both screens in both image capture modes, the “display” on Chin’s first screen would be

different between the two modes—changing from a self-photographing preview to an outward-facing preview. This is just like the first screen changes between image capture mode #3 and #4 shown above, which meets Multifold’s theory. The same would be true of Chin’s second screen.

B. Claim 10 and Limitation [11A]

Chin discloses that the first or second display units may be a touch screen, thus meeting claim 10’s requirement “wherein in one or more controls are presented on a second screen,” and satisfying limitation [11A]’s requirement that “the first screen including a first gesture capture region.” Chin teaches configuring the device with a “first display unit **51**” that can be a “liquid crystal display (LCD) apparatus” and further that LCDs can be of a “touch screen-type” Petition, 40–41 (citing Ex. 1004, Fig.1, [0045], [0061]). Chin also teaches that touch-screen LCDs can have regions capable of receiving user input, which is a gesture capture region. *Id.* at 41.

Multifold attempts to avoid this disclosure by taking an overly narrow reading of Chin; arguing that Chin only discloses “that the second button unit 33a on connecting unit 33,” not first display unit **51** or second display unit **52** can be a touch screen. Response, 45. That connecting unit **33** may be a touch screen LCD in some embodiments does not prohibit the first display unit **51** from also being a touch screen type LCD. *See* Ex. 1003 ¶¶ 170–74.

For claim 10, Multifold insists that Chin discloses “that a second button unit 33a on **connecting unit 30**—not on first screen unit 51 or second screen unit 52—can have buttons on a touch screen surface.” *Id.* at 51 (Multifold block quoting paragraph [0061] but inserting “[on connecting unit 30]” twice into the paragraph). Multifold may not rewrite the disclosures of Chin to avoid a finding of anticipation. Far from Multifold’s rigid assertion that the buttons for controlling the device must be on connecting unit 30, paragraph [0061] states that “[t]he structure of the second button unit 33a is not limited to the above structure, and may be embodied by using different components such as a touch screen-type liquid crystal display.” Ex. 1004, [0061] (emphasis added). Chin anticipates claim 10 because it describes that the button unit may be incorporated into different structures, including in a touch screen.

C. Claims 6, 7, 13, 17, and 19; Limitation [16E]

Multifold repeats its illogical reading of Chin’s disclosures in asserting that Chin does not anticipate claim 6 because “Chin does not disclose that the device ‘*does not display an image*’ on second display 52.” Response, 47. This is wrong for the reasons explained at length in Section III.A above. And what Multifold labels “unsupported *ipse dixit*” in Dr. Rodriguez’s declaration, *see id.*, is, to the contrary, the only rational reading of Chin: Because Chin expressly identifies which display unit displays an image in the first or second image capture modes, “a

POSITA would have understood that the other display unit, the one not displaying a preview, is *not* displaying an image.” Ex. 1003 ¶ 162.

Similarly, Multifold is incorrect that Chin does not anticipate claim 7, which requires that “the first screen is disabled and does not receive user interface input while in the image capture mode.” Ex. 1003,71. Dr. Rodriguez clearly explained that the second display unit in the outward-facing mode, which serves as the claimed “first screen,” does not display an image, “nor does Chin describe that screen as being enabled or receiving any user interface input.” Ex. 1003 ¶¶ 164. Accordingly, “[a] POSITA thus would have understood that” where Chin specifies what display unit is displaying an image and receiving user input, “the other display unit is disabled, and does not receive user interface input,” *Id.* Multifold’s contrary arguments rest on the same irrational interpretation of Chin.

For the same reasons that Multifold’s arguments fail for claims 6 and 7, so too do they fail for claims 13, 17, and 19 and limitation [16E]. *See* Response, 46, 50, 53. As explained in the Petition, Chin anticipates claims 13, 17, 19, and discloses limitation [16E]. Petition, 48, 51.

D. Claims 2–7, 10, 12–13, 17, and 19–20

Multifold states that dependent claims 2–7, 10, 12–13, 17, and 19–20 “are patentable over Chin for at least the reasons set forth for the independent claims”

but fails to offer a substantive argument. Response, 53. For the reasons set forth in the Petition and above, all challenged claims are anticipated by Chin.

IV. GROUND 2: THE CHALLENGED CLAIMS WOULD HAVE BEEN OBVIOUS IN VIEW OF CHIN

A. Limitations [1E], [11H], [16D], [16E], and Claims 6, 7, 13, and 19

Even if Chin did not anticipate the limitations discussed in Section III above, “a POSITA at least would have found it obvious that the display on each of the screens changes between modes” and a POSITA “would have been motivated to turn off or disable a screen that is not facing the user.” Ex. 1003 ¶¶ 257–58. Multifold presents several convoluted arguments in an attempt to counter this straightforward modification of Chin.

First, Multifold repeats its prior argument that Chin could have displayed the image preview on both screens. Response, 54. Petitioners have already refuted this understanding of the reference, *supra* Section III.A.1. Further, Chin clearly does not *require* that the screen is turned on or displaying anything. Ex. 1015, 51:18–22 (Dr. Surati admitting that “[t]here’s nothing in Chin that discloses that the first display unit would display an image in the self-photographing mode”); *id.* at 50:4–6. Thus, a POSITA would understand Chin as disclosing two options: the screen can be either on or off. *See id.* at 84:20–85:4 (Dr. Surati admitting it was within a POSITA’s knowledge that “a mobile device’s screen could be designed to turn

off”); *id.* at 52:6–11 (Dr. Surati admitting “it is a choice that could be made” “that in the self-photographing mode, the first display unit could not display anything”).

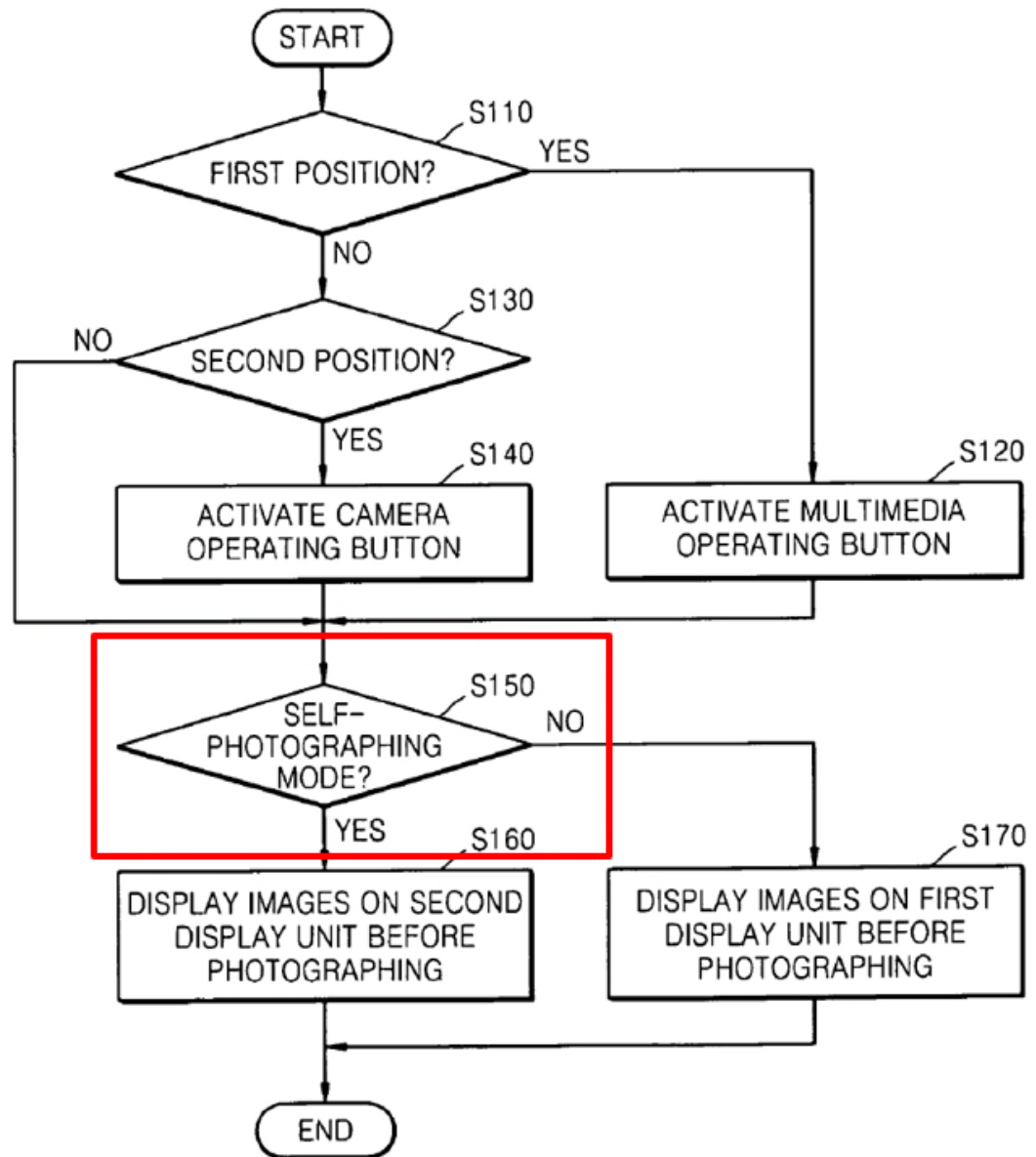
POSITA would also be highly motivated to exercise the option to turn the screen off. Dr. Rodriguez explains why it was known to disable a screen that was not facing the user (and therefore not in use): “[i]n or around 2011, battery capacity was limited and turning off power to one screen in a multi-screen device was a known design option and well within the ability of a POSITA” and further, this modification “would have made intuitive sense to a POSITA” because showing a preview on a non-visible screen would not be worth the power it would consume and because a user may want to avoid inadvertent inputs to the outward-facing screen. Ex. 1003 ¶ 258.

Dr. Surati confirmed the same, admitting that “[i]n 2011, around the time of the ’842 patent’s invention, the battery capacity of mobile devices was limited” and that “at least one reason why you might in some circumstances want to turn off a screen that’s not being viewed is to save battery life.” Ex. 1015, 85:12–16, 86:11–16.

Multifold does not address the Petition’s straightforward obviousness rationale, instead proposing a complex modification of Chin involving facial recognition technology. *See generally* Response, 54–58. Petitioners are not arguing for such a modification, nor is it necessary. Like the ’842 patent, the display of the

screens in Chin is predetermined based on the image capture mode. *See, e.g.*, Ex. 1004, Fig. 9; '842 patent limitation [1D] (“based on one or more of the image capture function configuration, the device orientation, and the device state, entering one of one or more image capture mode”). Figure 9 of Chin shows that the device determines its mode *before* displaying the preview images on the identified display unit.

FIG. 9



Ex. 1004, Figure 9 (annotated). And recall that Multifold *does not dispute* that

Chin teaches the device “entering into one of one or more image capture modes.”

See Petition, 27–29 (describing how Chin teaches this limitation); Response, 33–45

(not contesting this limitation); Ex. 1015, 39:8–13, 40:1–7. Thus, there is no need for the device to automatically detect “when a screen is or is not facing the user.” Response, 57. Dr. Surati confirmed the same, stating that the image capture mode is “automatically selected” and that “the [device] can detect whether a user has selected being in self-photographing mode.” Ex. 1015, 47:4–11.

Further, Multifold’s discussion of the iPhone as the state of the art at the time of the invention is inaccurate and inapposite. Apple introduced iPhones with a front facing camera in 2010, Exs. 1016, 1017, and iPhones are not multi-screen devices. The iPhone is not relevant to a proposed modification of a device with two screens and one camera. Finally, Multifold suggests that Petitioners failed to address expectation of success in the Petition—this is not true. *See* Petition, 55 (“Turning off power to one screen in a multi-screen device was a known design option and well within the ability of a POSITA.”).

“When there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill in the art has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 402–03 (2007). Limitation [1E] as taught by Chin is the simplest possible execution of this rule: a POSITA would have desired to save

battery life, there are but two options for the screens (off or on), a POSITA would know that turning the screens off would save battery, the modification would not have detrimentally affected the device's operation, and it would have been technologically feasible. The limitation is clearly, at minimum, obvious in light of Chin.

For the same reasons as outlined for [1E], limitations [11H], [16D], [16E], and claims 6, 7, 13, and 17 are also obvious in view of Chin.

B. [11A] and Claim 10

Multifold and Dr. Surati inaccurately characterize the Petition's proposed modification of Chin to meet limitation [11A] and claim 10 by arguing that the proposed modification would remove existing input options, thereby creating a problem where "buttons disposed on a lateral surface of the display apparatus... are not externally exposed, and thus, are inaccessible which makes it difficult to operate the portable information terminal." Response, 58–59 (quoting Ex. 1004, [0009]); *see also* Ex. 1003 ¶ 207. Petitioners' proposed modification, wherein a POSITA would have found it obvious to implement Chin's display units using touch screens, Ex. 1003 ¶ 252, does *not* remove any existing input options disclosed by Chin, such as button unit **33a**. *See* Petition, 54; Ex. 1003 ¶ 254 ("A POSITA would have been motivated to *add* touch screen functionality to Chin (and in particular, the functionality to control the camera and take an image), to the

extent any modification were deemed necessary, as a known technique to improve Chin’s device by *adding another input option* that some users may have deemed desirable.” (emphasis added)). Multifold’s arguments about contradicting Chin’s “design principle” are unfounded.

Furthermore, as Dr. Surati admitted, for Chin’s Figure 5 (self-photographing mode) “the second display unit 52 is externally exposed,” and for Figure 6 (outward-facing mode) “the display unit 51 is externally exposed.” Ex. 1015, 103:11–18. Chin’s “design principle” to purportedly keep buttons separate such that they are “externally exposed,” is met with the proposed modification.

A POSITA would have had a reasonable expectation of success with this modification: Chin already discloses the use of touch screens, and it would have been well within a POSITA’s skill to modify Chin accordingly. Ex. 1003 ¶ 254; Ex. 1015, 88:8–89:18 (Dr. Surati acknowledging that touch-screen user interfaces to control mobile devices and capture images were known in 2010).

C. Claims 2–7, 10, 12–13, 17, and 19–20 and 19

Multifold states that “[e]ach of the dependent claims is patentable over Chin for at least the reasons set forth for their respective independent claims” but fails to offer a substantive argument. Response, 59. For the reasons set forth in the Petition and above, all challenged claims would be obvious in light of Chin.

V. GROUND 3: CLAIMS 1–7 AND 11 ARE ANTICIPATED BY WHITEHORN

A. [1E], [11H]

Multifold's arguments for [1E] and [11H] are also incorrect as applied to Whitehorn. *See supra* Sections II.A. and III.A.

Both of Whitehorn's exemplary image capture modes meet the "wherein..." limitation. *See* Petition, 66–68. In the first mode, Whitehorn teaches that the device "displays information on the small screen interface **118**" and that the top large screen interface **128** is *not visible* and does not display an image. *See* Petition, 66 (citing Ex. 1005, ¶ [0027]). In Whitehorn's second mode, the top large screen interface displays the image instead. Ex. 1003, ¶ 301.

Like Chin, Whitehorn includes a flow chart that describes two image capture modes and teaches that the display of information on the screens is different between modes.

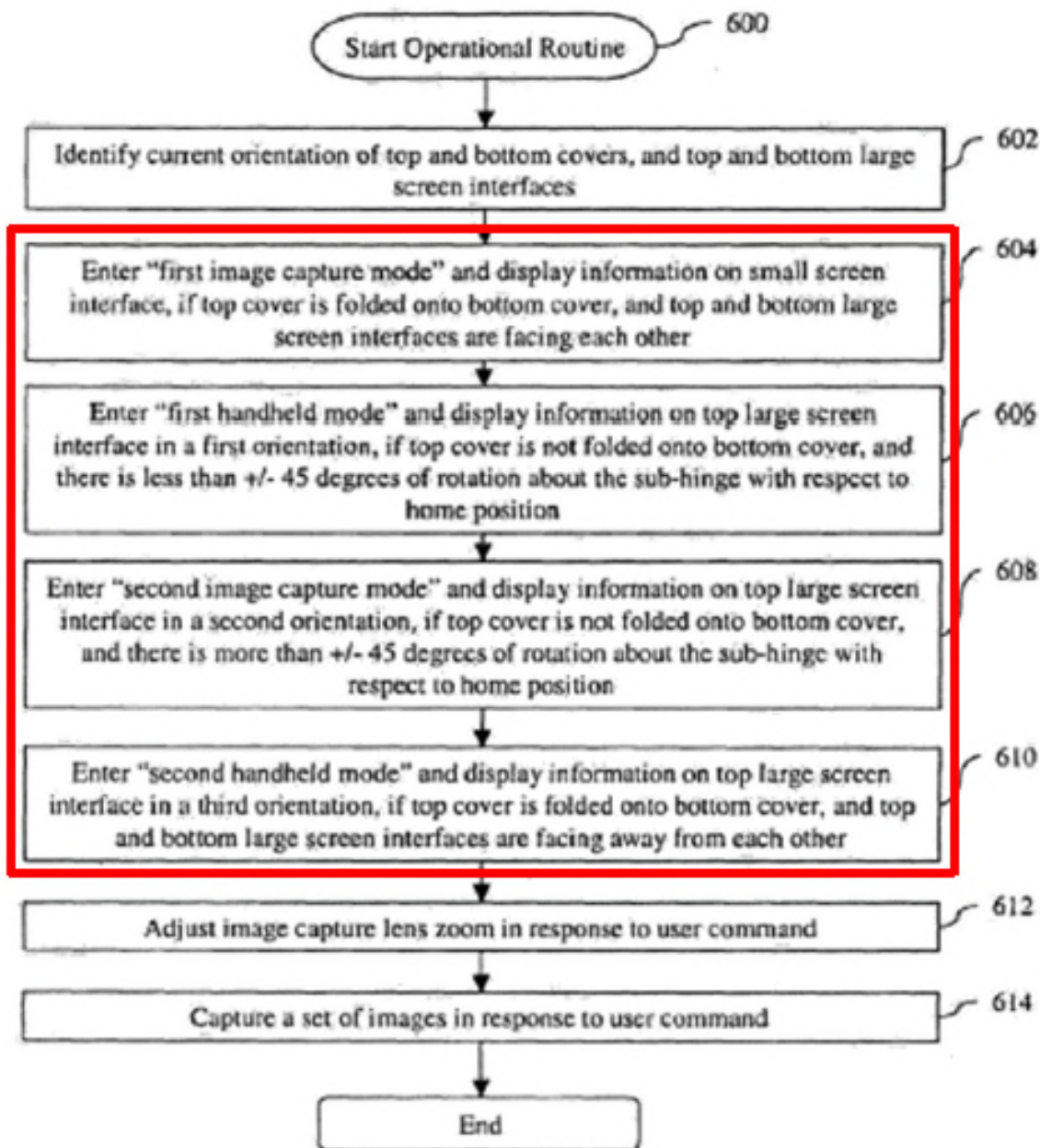


Fig. 6

Ex. 1005, Fig. 6, Steps 604 and 608. Whitehorn even teaches *why* the display changes between modes: for the “convenience” of the user in each orientation. Ex. 1005, [0027], [0029].

Like Chin, Whitehorn meets any possible claim construction of the “wherein...” clause. If the claim requires comparing the same screen between two different image capture modes, Whitehorn’s top large screen interface does not display an image in the first mode and does display an image in the second mode. If the claim term requires comparing two screens within a single image capture mode, in Whitehorn’s first mode, the top large screen interface does not display an image while the small screen interface does.

Multifold again ignores Whitehorn’s express disclosures and insists that both screens could display the same image preview, even when one screen is obscured from view. *See* Response, 63. Multifold’s interpretation is illogical and contrary to how a POSITA would understand the reference. *See* Ex. 1003 ¶ 299. Whitehorn discloses the [1E] limitation, as well as the identical limitation of [11H].

B. [11B]

In addition to the waived and incorrect claim construction arguments presented in Dr. Surati’s declaration regarding “associated” and “facing an opposite direction,” *see supra* Section II.C, Multifold argues that Whitehorn does not disclose [11B] because, according to Multifold, the two separate parts of the limitation—“wherein the second screen faces an opposite direction from the first screen when the device is closed” and “wherein an image capture lens is associated with the second screen”—must both be met while the device is in the same image

capture mode. Response, 67. This is another attempt by Multifold to baselessly insert limitations into the claim. Limitation [11B] does not require the device being in a particular image capture mode—the claim language does not even contemplate entering into an image capture mode until limitation [11G]. Accordingly, this limitation is met. *See* Petition, 76–77.

C. Claim 4

Claim 4 requires “[t]he method of claim 3, wherein the device is in a landscape or portrait orientation.” Whitehorn discloses a device used in a portrait orientation (*i.e.*, where the width is less than the height), as illustrated in Figure 3. Petition, 73; *see also* Ex. 1015, 123:13–17 (in relation to Whitehorn Figure 4, “agree[ing] that the width of the device is less than the height of the device”).

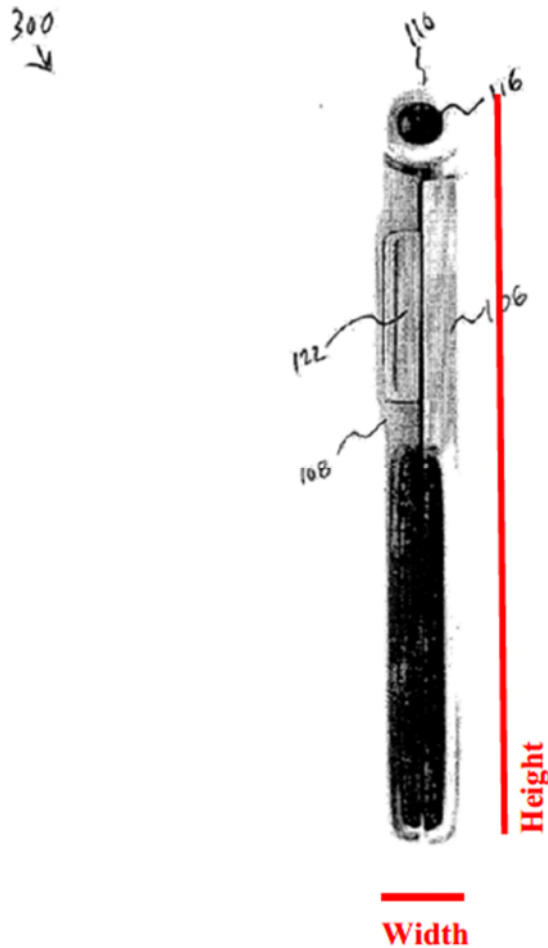


Fig. 3

Multifold cites to a passage of Whitehorn that uses the terms “portrait mode” and “landscape mode” to imply one must look to the *screen* dimensions, not the *device* dimensions for this limitation. *See* Response, 67–69 (citing ’842 patent, 3:44–52). Multifold’s citation is irrelevant and misleading—the passage explains that portrait and landscape are possible ways to define the “*display orientation*.” *Id.* (emphasis added). In contrast, claim 4 explicitly refers to the *device* orientation

as being in portrait or landscape—not the display. Thus, because the *device* is in a portrait orientation in Figure 3, Whitehorn anticipates this claim.

D. Claims 6 and 7

Multifold’s arguments fail for claims 6 and 7 for the same reasons they fail for limitation [1E]. *See supra* Sections III.C, V.A.; Response, 61; Petition, 74; Ex. 1003 ¶ 323.

E. Claims 2–7

Multifold does not make any additional substantive argument for dependent claims 2–7. Response, 71. For the reasons set forth in the Petition and above, claims 2–7 are anticipated by Whitehorn.

VI. GROUND 4: CLAIMS 1–7 AND 11 WOULD HAVE BEEN OBVIOUS IN VIEW OF WHITEHORN

A. [1E], [11H]

Multifold presents the same arguments here as it did for obviousness in light of Chin. For the same reasons set out *supra* Section IV.A., to the extent that Whitehorn does not anticipate this limitation, it would be obvious to a POSITA. *See* Ex. 1003 ¶¶ 374–77. For example, in Whitehorn’s first image capture mode, the device is closed and the top large screen interface **128** is inaccessible. This at least suggests and would have made obvious to a POSITA that the top large screen interface **128** is not displaying anything and is turned off. Thus, the display is different from the second image capture mode, where the top large screen displays

the image preview. In the first image capture mode, a POSITA would have been motivated to turn off (disable) this screen because it would not be visible to the user and disabling the screen would save power. Ex. 1003 ¶ 376. Turning off power to one screen in a multi-screen device was a known design option and well within a POSITA's ability. *Id.*

Furthermore, like Chin, Petitioners are not arguing that the device would employ facial recognition, nor would it be necessary. Thus, Multifold's argument on this is irrelevant. *See Response*, 74.

Finally, although an express teaching, suggestion, or motivation in the prior art is not required for obviousness, Whitehorn has that too. *See Ex. 1005*, [0031] (Whitehorn explaining that a POSITA would know that the disclosed configurations, including “information displayed and/or received on the screen interfaces,” “are preferred but not required” and that embodiments may vary the disclosed elements). Dr. Surati had no basis to disagree, and acknowledged that Whitehorn “certainly allows for” the device to be modified to either display or not display information on a particular screen. Ex. 1015, 77:19–79:8.

B. Claims 6 and 7

For the same reasons set out in the preceding Section VI.A., Multifold's arguments are incorrect. Whitehorn renders obvious claims 6 and 7. *See Petition*, 83.

VII. CONCLUSION

As set forth above, the challenged claims are either anticipated or rendered obvious in view of Chin and Whitehorn. Accordingly, the Board should find them unpatentable.

Respectfully submitted,

Dated: November 20, 2025

By */T. Vann Pearce, Jr./*

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CERTIFICATE OF WORD COUNT

The undersigned certifies that the foregoing PETITIONERS' REPLY TO PATENT OWNER'S RESPONSE TO PETITION complies with the type volume limitation in 37 C.F.R. § 42.24(a)(1)(i). According to the utilized word-processing system's word count, the Reply—excluding the caption, table of contents, table of exhibits, mandatory notices, certificate of word count, and certificate of service—contains 5,535 words.

Dated: November 20, 2025

By */T. Vann Pearce, Jr./*

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CERTIFICATE OF SERVICE

The undersigned hereby confirms that the foregoing paper was caused to be served on November 20, 2025 via electronic mail, upon the following attorneys of record for the Patent Owner:

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