

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC and MOTOROLA MOBILITY LLC,
Petitioners,

v.

MULTIFOLD INTERNATIONAL INC. PTE. LTD.,
Patent Owner.

Case IPR2025-00059
U.S. Patent No. 9,141,135

PATENT OWNER'S SUR-REPLY

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I. INTRODUCTION

For the reasons discussed in detail below and in the Patent Owner Response, the Petition has not shown that the art asserted in Grounds 1 and 3 suggest “the modified display of the annunciator window displays information selectively across the annunciator window.” The Petition also has not shown that the art suggests an annunciator window that extends across portions of two different physical screens as in claim 9, or that the art suggests an annunciator window that extends across two displays in portrait mode as in claim 15. Respectfully, the Board should confirm the patentability of claims 1, 3, 5, 6, 9, 15, and 20.

II. CLAIM CONSTRUCTION

A. “[W]herein the modified display of the annunciator window displays information selectively across the annunciator window”

“[D]isplays information selectively across the annunciator window” should be construed as “displays information in a way that involves intentionally choosing some information to display and not others.” POR, 10-16.

This proposed construction is consistent with the claim language. Admittedly, the Institution Decision expressed concern that the “limitation ‘masking at least one icon representing the device status, connectivity status, or messaging status’ of [dependent claims 3, 8, and 12] indicates that ‘displays information selectively’ recited by the independent claims has a meaning broader than Patent Owner’s proposal.” Inst. Dec., 11. But the Patent Owner Response explained that Patent

Owner's proposed construction is consistent with the masking limitation recited by dependent claims 3, 8, and 12 because the masking limitation should be read *narrower* than Patent Owner's proposed construction of "displays information selectively." POR, 14-16. Petitioners' Reply does not dispute that this is the correct way to read the masking limitation in claims 3, 8, and 12. Because the masking limitation is narrower, it does not conflict with the proposed construction.

Instead, the Reply argues that the last step of claim 1 (which reads in full "modifying, by the processor, the display of the annunciator window in response to a changed state of at least one of the device status, connectivity status, and messaging status, wherein the modified display of the annunciator window displays information selectively across the annunciator window") requires "displays information selectively" to include updating a status icon because updating a status icon is "modifying... the display of the annunciator window in response to a changed state of at least one of the device status, connectivity status, and messaging status." Reply, 2-4. This argument erroneously conflates the first part of the "modifying" step ("modifying, by the processor, the display of the annunciator window in response to a changed state of at least one of the device status, connectivity status, and messaging status") with the second part of the "modifying" step ("wherein the modified display of the annunciator window displays information selectively across the annunciator window"). Updating a status icon to show a new icon plainly falls within the scope

of “modifying, by the processor, the display of the annunciator window in response to a changed state of at least one of the device status, connectivity status, and messaging status.” Thus, the additional clause “wherein the modified display of the annunciator window displays information selectively across the annunciator window” must require more than simply updating a status icon to show a new icon. Otherwise, the second part of the modifying step would be superfluous – the concern expressed by the Board when comparing this clause to the masking limitation in claims 3, 8, and 12. *See Pause 22 Technology LLC v. TiVo Inc.*, 419 F.3d 1326, 1334 (Fed. Cir. 2005) (“In construing claims[,] we must give each claim term the respect that it is due.”); *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1305 (Fed. Cir. 2014).

Petitioners’ analysis of the specification suffers the same error. The Reply argument at 4-5 conflate a disclosure of the first part of the last step of claim 1 (“modifying, by the processor, the display of the annunciator window in response to a changed state of at least one of the device status, connectivity status, and messaging status”) as a disclosure of the second part of the last step of claim 1 (“wherein the modified display of the annunciator window displays information selectively across the annunciator window”). But, as explained above, “wherein the modified display of the annunciator window displays information selectively across the annunciator window” must be narrower than “modifying, by the processor, the display of the annunciator window in response to a changed state of at least one of the device

status, connectivity status, and messaging status.” Otherwise, the last clause is rendered superfluous.

Finally, Petitioners’ citations to the ’884 provisional also support Patent Owner’s construction. Reply, 5-6. “[S]electively moving... at least one of the displayed first and second desktops or applications to another selected position” including moving (1) only the first desktop, (2) only the second desktop, or (3) both the first and second desktops. Therefore, the user must choose to move (or not move) one or more desktops. And “selectively presenting a virtual keyboard” involves intentionally choosing to present the keyboard or not, exactly as “selective” is construed by Patent Owner.

Patent Owner’s proposed construction should therefore be adopted.

III. CLAIMS 1, 3, 5, 6, 9, 15, AND 20 ARE PATENTABLE

A. Claim 1: Petitioners’ art does not suggest “wherein the modified display of the annunciator window displays information selectively across the annunciator window”

Claim 1 is not obvious in view of Yook and Lee under Petitioners’ Grounds 1 or 3 because Yook does not suggest selectively displaying information. POR, 33-38.

The Petition relies solely on an alleged status bar at the top of Yook’s Fig. 3 for this element. POR, 34-35 (*citing* Pet., 38-39). But as Petitioners’ expert Dr. Rodriguez confirmed, Yook contains no written description of the status bar. Ex. 2006, 40:3-4 (“I don’t recall the reference specifically discussing that region in

Figure 3 [of Yook].”). A person of ordinary skill would at most recognize the bar to be a status bar without any additional context on how information in the status bar is selected for display. Ex. 2002, ¶106 (“While a person of ordinary skill reviewing Yook may identify a status bar in, for example, Figure 3[,] Yook does not provide any disclosure of the element in Fig. 3 that a person of ordinary skill may identify as a status bar. Yook does not describe what the bar is, what the icons on the bar are, or how the icons on the bar are selected.”). Even if the Board disagrees with Patent Owner’s construction, Yook does not disclose that anything is selectively displayed in any manner. Absent any disclosure of how the information in the status bar is selected for display, a POSITA cannot conclude that Yook suggests selectively displaying icons on the alleged status bar shown in Fig. 3 of Yook – under any construction. *Id.*

The Reply does not dispute that Yook contains no written description of the alleged status bar. It does not dispute that Yook does not teach how the alleged status bar works, or how any icons on the alleged status bar are displayed. Instead, Petitioners allege that the Petition fills in this missing element using expert testimony and common sense. Reply, 26. But this argument is directly contrary to Deputy

Director Stewart’s July 31, 2025 Memorandum to the Board¹ instructing that, under 37 C.F.R. § 42.104(b)(4), “expert testimony, common sense, and other evidence that is not ‘prior art consisting of patents or printed publications’ (collectively, ‘general knowledge’) may not be used to supply a missing claim limitation. July 31, 2025 Memorandum at 1.

Dr. Chatterjee’s testimony perfectly illustrates why Deputy Director Stewart has instructed the Board not to permit the use of expert testimony and common sense to supply a missing claim limitation. Petitioners allege based on Dr. Chatterjee’s testimony that, “when Yook’s battery status changes but the connectivity status does not change, Yook modifies the status bar to ‘selectively’ display information showing a new battery status but chooses not to display information showing a new connectivity status.” Reply, 26. But this scenario lacks any support from Yook. There is no indication that Yook displays a new battery status when Yook’s battery status changes. Yook does not describe displaying battery status at all. Not even Petitioners’ other expert, Dr. Rodriguez, supports Dr. Chatterjee’s opinion.

Dr. Chatterjee’s testimony attempts to fill in a wholly missing claim limitation with no evidentiary support and nothing but his say-so. But it is improper to use a

¹ Available at https://www.uspto.gov/sites/default/files/documents/aapa_memo_final__signed.pdf

POSITA's common knowledge to supply a wholly missing claim limitation without evidentiary support or satisfying the "searching" standard required by the Federal Circuit under *Arendi SARL v. Apple Inc.*, 832 F.3d 1355, 1362-63 (Fed. Cir. 2016). *See DSS Tech. Mgmt. Inc. v. Apple Inc.*, 885 F.3d 1367, 1377 (Fed. Cir. 2018) (The Board may not "rel[y] on 'ordinary creativity' 'as a wholesale substitute for reasoned analysis and evidentiary support' 'when dealing with a limitation missing from the prior art references specified'"); *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 851 F.3d 1270, 1274-1275 (Fed. Cir. 2017) (expert may not "fill in missing limitations" by alleging that a person of ordinary skill in the art would envision them). As the Federal Circuit has repeatedly held, "references to 'common sense'—whether to supply a motivation to combine or a missing limitation—cannot be used as a wholesale substitute for reasoned analysis and evidentiary support, especially when dealing with a limitation missing from the prior art references specified...In cases in which 'common sense' is used to supply a missing limitation, as distinct from a motivation to combine, moreover, our search for a reasoned basis for resort to common sense must be searching". *Arendi*, 832 F.3d at 1362-63; *TQ Delta, LLC v. Cisco Sys.*, 942 F.3d 1352, 1359 (Fed. Cir. 2019) ("This court's opinions have repeatedly recognized that conclusory expert testimony is inadequate to support an obviousness determination on substantial evidence review").

Yook's meager disclosure cannot suggest "the modified display of the annunciator window displays information selectively across the annunciator window" as claimed. The Board should confirm the validity of claims 1, 3, 5, 6, 9, 15, and 20.

B. Claim 15: Petitioners' art does not suggest "the first and second displays are both in a portrait mode" and "the annunciator window [extends] across a first portion of the first display and a second portion of the second display"

Claim 15 requires an annunciator window that extends across the first and second displays while in portrait mode. POR, 29-33. Yook and Lee do not suggest this configuration. *Id.*

The Patent Owner Response disproved the Petition's assertion that Yook's Fig. 4e suggests claim 15. POR, 29-30. The Reply does not challenge this argument. Instead, Petitioners pivot to Yook's Figures 3 and 10 as allegedly suggesting claim 15, even though Yook never discloses the dimensions of these Figures or whether they are in portrait mode; and the Federal Circuit has repeatedly held that proportions of features in a drawing are not evidence of the actual proportions of those features and may not be relied on to show any particular proportion. *Hockerson-Halberstadt, Inc. v. Avia Group Int'l, Inc.*, 222 F.3d 951, 956 (Fed. Cir. 2000) ("[I]t is well established that patent drawings do not define the precise proportions of the elements

and may not be relied on to show particular sizes if the specification is completely silent on the issue.”).

The Reply at 20 cites several Federal Circuit cases as allegedly suggesting that Petitioners may rely on patent drawings for dimensions. But a review of the case cited as suggesting “patent drawings may be useful in shedding light about the general shapes and relative sizes of elements of the claimed invention” reveals that it supports Patent Owner’s position – not Petitioners’. *Regents of Univ. of California v. Satco Prods., Inc.*, No. 2023-1356, 2024 WL 4972639, at *3 (Fed. Cir. Dec. 4, 2024). There, the Federal Circuit reversed the Board and concluded that it erred in relying on relative thicknesses shown in patent drawings. *Id.* at *3. Rather than supporting Petitioners’ position, the Federal Circuit reaffirmed that “[i]t is ‘well established,’ however, ‘that patent drawings do not define the precise proportions of the elements and may not be relied on to show particular sizes if the specification is completely silent on the issue.’ In other words, ‘figures in a patent are not drawn to scale unless otherwise indicated.’ ‘[A]rguments based on drawings not explicitly made to scale in issued patents’ are thus ‘unavailing.’ Here, nothing in the Yamazaki reference indicates that its figures are drawn to scale.” *Regents of Univ. of California*, 2024 WL 4972639, at *3 (citations omitted).

This is particularly problematic here because Yook’s Fig. 3 shows two alleged displays A.App and B.App each with approximately the same width and height:



FIG. 3 <301>

Ex. 1005, Fig. 3. This is not a case like Yook's Fig. 4e that is described as portrait mode and shows a height significantly greater than the width. Rather, similar to the Federal Circuit's holding in *Regents of Univ. of California*, the closeness of the width and height in Yook's Fig. 3 merely indicates that the screen is divided into A.App and B.App, and not that the division creates two portrait mode screens.

Regents of Univ. of California, 2024 WL 4972639, at *3 ("We think that this is not a case in which the boldness of certain lines can be read as disclosing relative thickness, since the figures could just as well demonstrate only the existence of a separate structure."). The relative dimensions of Yook's Fig. 3 is ambiguous and not analogous to cases like *Unified Patents, LLC v. Oceana Innovations LLC*, IPR2020-01463, Paper 27 at 42-49 (PTAB Feb. 14, 2022) where one side is significantly longer than the other, let alone *Innoscence (Zhuhai) Tech. Co., Ltd. v. Efficient Power Conversion Corp.*, IPR2023-01384, Paper 31 at 35-44 (PTAB

Mar. 25, 2025) where the Board explicitly found that the Patent Owner had forfeited its *Hockerson-Halberstadt* argument.

Finally, to the extent Petitioners argue that portrait-mode displays would have been obvious (Reply, 22-23), Patent Owner is not arguing whether portrait-mode displays are obvious, but whether an annunciator window that extends across the first and second displays while in portrait mode is obvious. Yook's Fig. 4e shows that it would not have been obvious for the annunciator window to extend across both the first and second displays while the displays are in portrait mode because, in Fig. 4e, the annunciator window extends across only one display. POR, 32-33. Every embodiment in Yook and Lee shows a status bar oriented horizontally. *Id.* There is no teaching anywhere of a status bar oriented vertically as would be required for the status bar to extend across two portrait mode displays. *Id.* Nor would a person of ordinary skill do so, because it is difficult to read a status bar rotated ninety degrees from the display. *Id.* And a person of ordinary skill would need "to consider the different modes and how one might hold the phones and how they are used," so any display orientations or status bar positions not taught by Yook and Lee cannot be assumed to be obvious variants of those taught by Yook and Lee. Ex. 2002, ¶101.

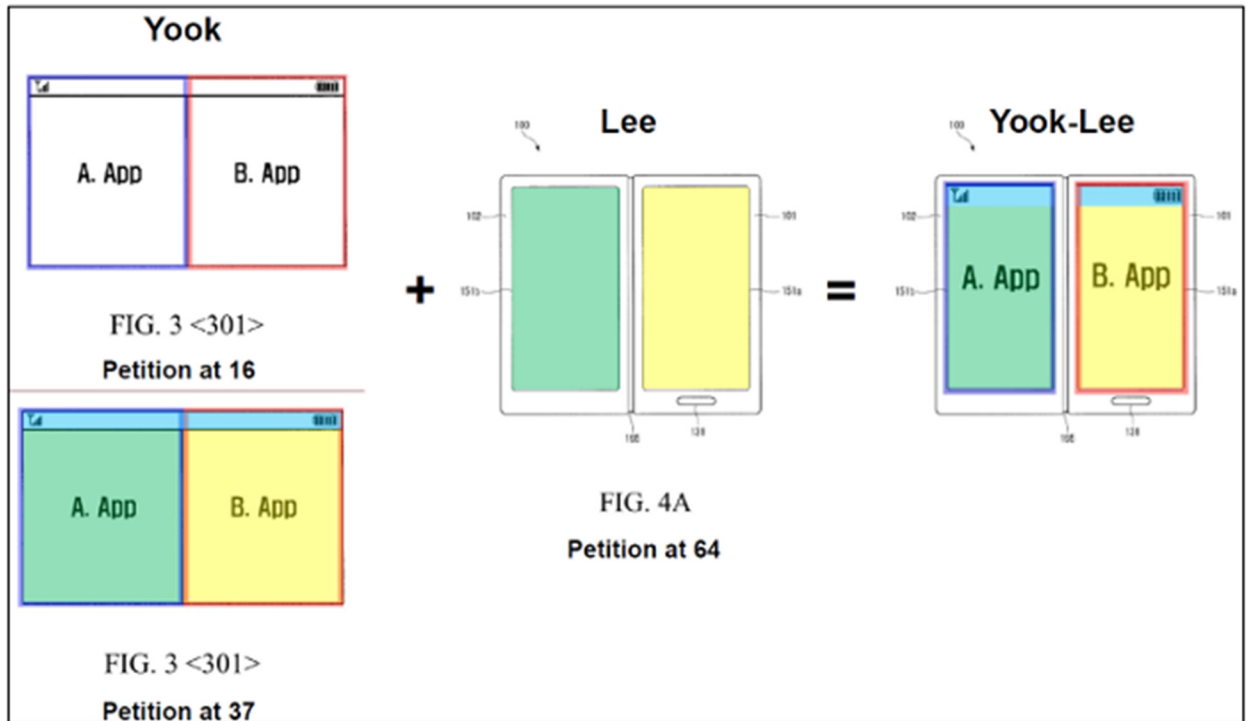
Yook and Lee therefore do not suggest an annunciator window that extends across first and second displays while in portrait mode as in claim 15.

C. Claim 9: Petitioners’ art does not suggest “the annunciator window [is displayed] across adjacent upper or lower edges of the first and second displays, wherein the first display is on a first screen of the multi-display device, and wherein the second display is on a different second screen of the multi-display device”

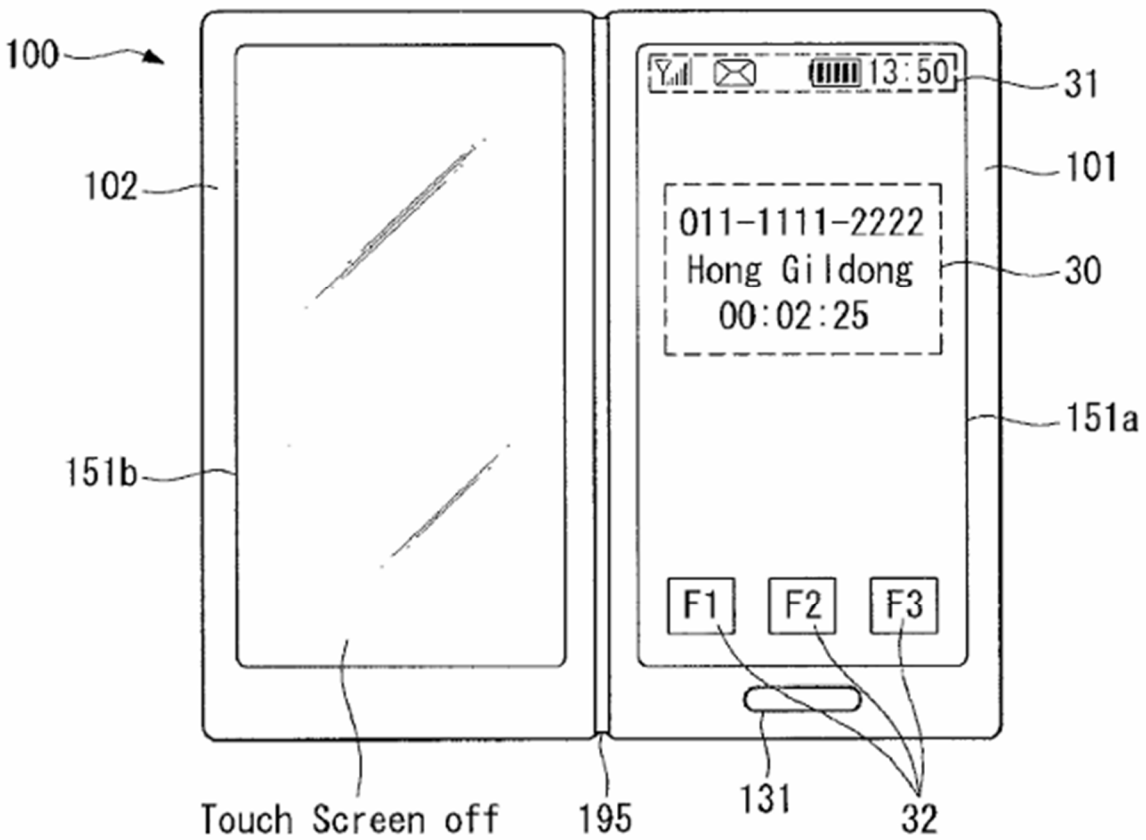
Claim 9 requires displaying an annunciator window across adjacent upper or lower edges of displays on two different physical screens. POR, 17-20. The Reply at 16 appears to argue against Patent Owner’s interpretation of claim 9. But the Reply does not explain why a foldable screen is not two physical screens divided by a hinge. Nor does the Reply address Patent Owner’s argument that the definition at col. 4 ln. 11 of the ’135 patent is intrinsic evidence that outweighs any extrinsic evidence such as Patent Owner’s infringement contentions. The ’135 specification clearly states that “[t]he term “screen” ... refers to a physical structure that includes one or more hardware components that provide the device with the ability to render a user interface and/or receive user input.” Ex. 1001, 4:11-14.

The Patent Owner Response at 22-26 addressed how a POSITA could display Yook’s Fig. 3 on Lee’s terminal. Lee teaches that both touch screens 151a and 151b are on when the terminal is in the mode of operation shown in, *inter alia*, Figs. 6(b) and 7. *See also* Ex. 1008, 8:46-48. A POSITA wishing to display Yook’s Fig. 3 on both screens of Yook’s terminal would therefore use the mode of operation shown in Fig. 6. The Patent Owner Response then explained why the combination does not display the status bar across both physical screens as claimed. POR, 22-26.

The Reply presents an alternative, new theory where Yook's single two display areas are shown on two screens as in Lee's Figure 4A:



Reply, 10-11. The Reply however ignores the fact that Lee Fig. 10 explicitly teaches that, in the mode of operation shown in Fig. 4A, the left touch screen is off (as denoted by the words "Touch Screen off"):



Ex. 1008, Fig. 10(b). Under Petitioners' theory, the left touch screen is off and nothing is displayed on that screen. Thus, the annunciator window would not be displayed across adjacent upper or lower edges of displays on two different physical screens.

For these reasons, Yook and Lee do not suggest claim 9.

D. Claim 3: Petitioners’ art does not suggest “the first display is on a first screen of the multi-display device, and wherein the second display is on a different second screen of the multi-display device” and “the annunciator window to extend across a first portion of the first display and a second portion of the second display”

Claim 3 is patentable in view of Yook, Lee and Bauer for the same reasons.

Claim 9 is patentable in view of Yook and Lee as explained in Section III.C.

IV. CONCLUSION

For the foregoing reasons, Petitioners have failed to show by a preponderance of the evidence that claims 1, 3, 5, 6, 9, 15, and 20 are unpatentable.

Date: December 26, 2025

Respectfully submitted,

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CERTIFICATE OF COMPLIANCE WITH TYPE-VOLUME LIMITS

This Patent Owner's Sur-Reply ("Sur-Reply") consists of 3,064 words, excluding table of contents, table of authorities, certificate of service, this certificate, or table of exhibits. The Sur-Reply complies with the type-volume limitation of 5,600 words as mandated in 37 C.F.R. § 42.24. In preparing this certificate, counsel has relied on the word count of the word-processing system used to prepare the paper (Microsoft Word).

Respectfully submitted,

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Date: December 26, 2025

CERTIFICATE OF SERVICE

The undersigned hereby certifies that, pursuant to 37 CFR § 42.6(e), a true and correct copy of the foregoing **PATENT OWNER'S SUR-REPLY** have been served electronically via email on counsel of record for Petitioners:

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