

UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC and MOTOROLA MOBILITY LLC,
Petitioners,

v.

MULTIFOLD INTERNATIONAL INCORPORATED PTE. LTD.,
Patent Owner.

Case IPR2025-00060

U.S. Patent 8,842,080

PATENT OWNER'S PRELIMINARY RESPONSE

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I. INTRODUCTION

Challenged claims 1, 2, 4-9, 12-16, and 20 of U.S. Patent 8,842,080 (the “’080 Patent”) are directed to an improved user interface for displaying applications on one or more displays of a handheld computing device. The displayed application may be displayed in more than one state (e.g., expanded across multiple displays), with each state comprising an open application state. An icon associated with the application is displayed that indicates the state of the application (e.g., the displayed icon changes depending on the open application state). No prior art icon identified by the Petition, however, is associated with the application and indicates the open application state of the application. Therefore, institution must be denied.

II. BACKGROUND

A. The ’080 Patent

The ’080 Patent is titled “User Interface With Screen Spanning Icon Morphing” and describes “[m]ethods and apparatus for indicating a status of an application that is displayable on one or more displays of a handheld computing device.” Ex.1001, abstract. Fig. 5 shows an exemplary embodiment of the invention:

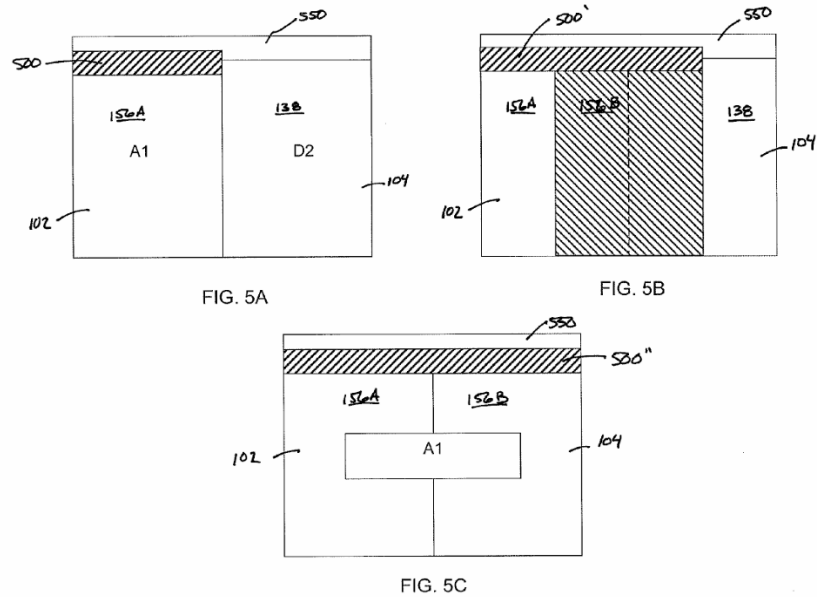


Fig. 5A shows an expandable multiscreen application 156 in state 156A covering only display 102 having an icon 500 that indicates that the application is in an open state and may be expanded (*e.g.*, a first state). Ex.1001, 13:40-45. A user may expand application 156 to state 156B covering display 102 and partially covering display 104 (*e.g.*, a second state), and icon 500 will similarly change to icon 500' as shown in Fig. 5B. *Id.*, 13:66-14:13. Alternatively, the user may expand application 156 such that it covers the entirety of displays 102 and 104 (*e.g.*, a third state), and icon 500 will change to icon 500'' as shown in Fig. 5C. *Id.* In each case, icon 500 is displayed with application 156 (not display 102 or display 104) and “indicates the status and/or potential statuses of the *application*” – not the display or screen. Ex.1001, abstract.

B. The Alleged Prior Art

The Petition asserts the following four grounds of invalidity:

- Anticipation of claims 1, 2, 12, 13, and 20 by Japanese Pub. H09-204288 (“Ogawa”)
- Obviousness of claims 4-9 in view of Ogawa and U.S. Pub. 2010/0248788 (“Yook”)
- Obviousness of claims 1, 2, 12-16, and 20 in view of Ogawa and U.S. Patent 8,649,824 (“Choi”)
- Obviousness of claims 4-9 in view of Ogawa, Choi, and Yook

The Petition exclusively relies on the teachings of Ogawa for the limitations of independent claims 1 and 12 at issue in this preliminary response. Therefore, for the purposes of this preliminary response, Patent Owner focuses on the alleged teachings of Ogawa.

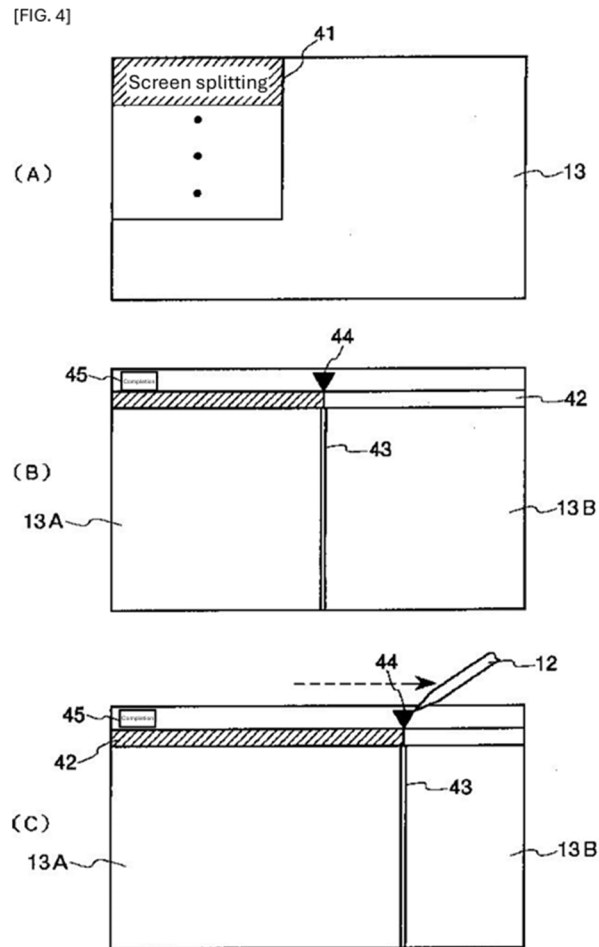
1. Ogawa

Ogawa is a Japanese patent application published as JPH09-204288. Based on the translation provided by Petitioners¹, Ogawa is titled “Display Device” and

¹ Patent Owner does not concede the teachings of Ogawa’s Japanese text and explicitly reserves the right to challenge the accuracy of Petitioners’ translation.

discloses a “pen input type electronic device” with a split screen functionality.

Ogawa teaches a Screen splitting menu 41 that splits display input surface 13 into left and right screens 13A and 13B:



Ex.1005, Fig. 4, [0017]. An access bar displayed above the split screens 13A and 13B indicates which of the two split screens is the active screen. *Id.*, [0018]. A user may use pen 12 to adjust the location of the split 43 to the left or right, thereby

increasing the size of split screen 13A and decreasing the size of split screen 13B or vice versa. *Id.*, [0019].

III. CLAIM CONSTRUCTION

The Petition states that “the Board need not construe any terms of the challenged claims to resolve the underlying controversy,” but notes that the ’080 Patent states that the “term ‘display’ is intended to connote device hardware” and suggests that Grounds 3 and 4 are intended to cover the narrower interpretation of “display” requiring physically distinct displays, whereas Grounds 1 and 2 encompass “a single physical display divided into two or more logical displays.” Pet., 9-10.

For the purposes of this preliminary response, Patent Owner’s arguments do not turn on any specific construction of “display” and the Board need not address the construction of this term for institution. Nonetheless, Patent Owner reserves the right to construe “display” or any other term of the ’080 Patent should the Board institute review.

IV. PERSON OF ORDINARY SKILL

The Petition submits that a “person of ordinary skill in the art at the time of the alleged invention of the ’080 patent (“POSITA”) would have had an undergraduate degree in electrical engineering, computer engineering, computer science or a related field along with two years of work experience in the field of

user interface technologies, including e.g., graphical interface technologies, or a related field. More education can supplement practical experience and vice versa.”

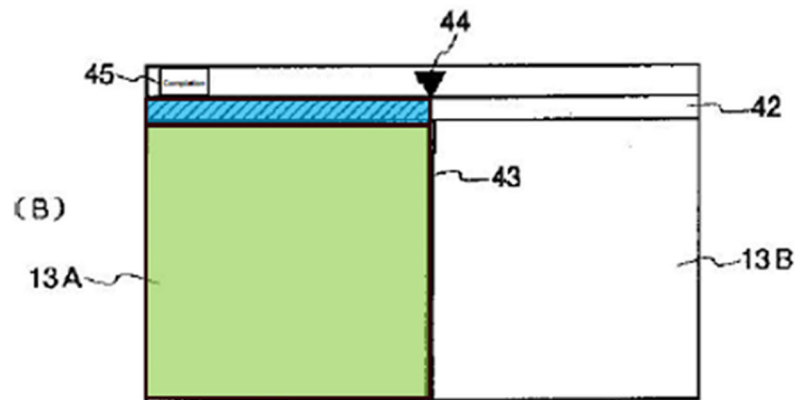
Pet., 5-6. Patent Owner applies this definition of a POSITA for the purposes of this preliminary response but expressly reserves the right to urge a different definition of a POSITA and support such definition with evidence including expert testimony.

V. CLAIMS 1, 2, 4-9, 12-16, AND 20 ARE NOT ANTICIPATED BY OR OBVIOUS IN VIEW OF PETITIONERS’ PRIOR ART

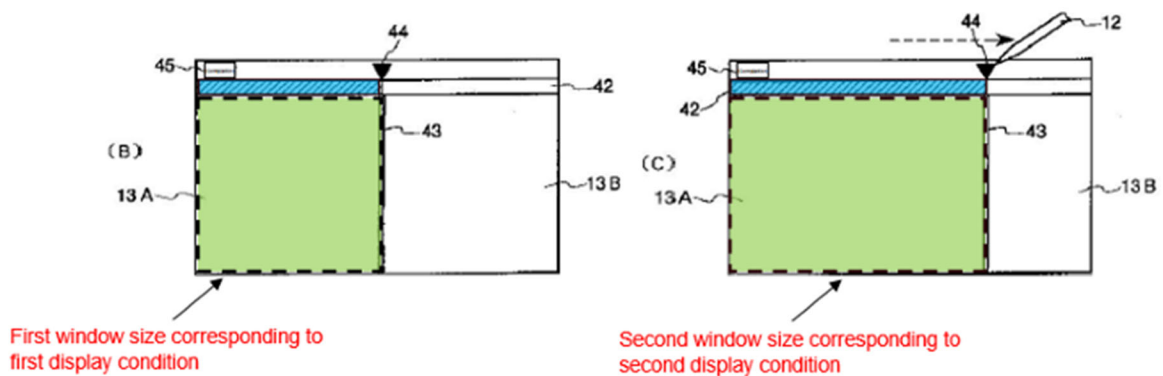
A. Ogawa alone or in combination with any other reference does not suggest “the icon indicates that the application is in a first state” or “the icon [indicates] that the application is in a second state” “wherein the first and the second states comprise an open application state”

Independent claim 1 requires “displaying an icon with the first screen of the application, wherein the icon indicates that the application is in a first state corresponding to [a] first display condition” and “morphing the icon to indicate that the application is in a second state corresponding to [a] second display condition.” The final element of claim 1 then further requires that “the first and the second states comprise an open application state.” Therefore, the icon must indicate the open application state of the application. Independent claim 12, while not requiring the icon to morph, recites substantially similar limitations with respect to the icon indicating the open application state.

The prior art icon identified by the Petition as mapping to the other claim elements, however, does not also satisfy this requirement to indicate the state of the application. The Petition identifies the “colored/shaded portion of access bar 42” (annotated in blue below) as the claimed “icon”:



Pet., 18. The Petition maps “colored/shaded portion of access bar 42” to the claimed icon because it allegedly changes shape and size based on the width of the left screen 13A of Ogawa’s split screen:



Pet., 23. The Petition alleges that this icon indicates an open application state (*e.g.*, the first state of the application or the second state of the application) because it indicates the active screen (the screen currently being accessed)²:

“Ogawa discloses that the program in first screen 13A in both the first state (figure 4(B)) and second state (figure 4(C)) is in an active state (“open application state”) because the colored/shaded portion of access bar 42 corresponds to the active screen on display input surface 13. For example, Ogawa discloses that the ‘portion of the access bar 42 located on an active screen (the screen currently being accessed) is colored (depicted with hatching in FIG. 4) to indicate an active state.’”

Pet., 27 (internal citations omitted). Indicating Ogawa’s active *screen*, however, is very different than indicating an open *application* state, and Ogawa’s teaching of an active screen indicator cannot suggest the claimed open application state indicator.

This distinction is critical because Ogawa discloses a screen splitting tool that simply divides Ogawa’s single screen into two split screens. Ex. 1005, [0016].

² This is the only prior art teaching cited by the Petition for this element. Pet., 49 (relying on Yook for dependent claims 4-9), 63 (relying on Choi for changing the shape of the icon), 87 (relying on Yook again for dependent claims 4-9).

Access bar 42 merely indicates which of Ogawa's two screens are active. *Id.*, [0018]. The size of the colored and uncolored portions of access bar 42 indicates the size of Ogawa's active and inactive screens. *Id.* There is no teaching in Ogawa that its active screen always contains the same open application. Indeed, Ogawa teaches that a user can close the original program that was displayed when the screen was split and execute an entirely different program on the same split screen – and thus explicitly contemplates that an application displayed in one of Ogawa's split screens can be closed. Ex.1005, [0033].

But in this example, closing a first application and opening a second application in the same split screen does not change access bar 42, because the user has not adjusted the split screen. Thus, access bar 42 is not associated with any application, nor does it indicate the state that any application is in. For example, access bar 42 does not indicate any open application state (whether the first state or the second state) because it remains the same regardless of whether an application is open or closed in Ogawa's first split screen. Instead, access bar 42 indicates whether Ogawa's split screen is active or not, because it only changes when the screen (not application) changes. Thus, while access bar 42 may be associated with and indicate Ogawa's active screen, it does not indicate any open application state of the application.

Because the Petition has not demonstrated that Ogawa suggests an icon associated with an application that indicates an open application state of the application as claimed and has not alleged that any other prior art suggests this element, the Petition has not established that the challenged claims are obvious.

VI. CONCLUSION

For the foregoing reasons, the Board should deny institution.

Date: February 28, 2025

Respectfully submitted,

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CERTIFICATE OF COMPLIANCE WITH TYPE-VOLUME LIMITS

This Patent Owner's Preliminary Response ("POPR") consists of 1673 words, excluding table of contents, table of authorities, certificate of service, this certificate, or table of exhibits. The POPR complies with the type-volume limitation of 14,000 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).

Dated: February 28, 2025

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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 PRELIMINARY RESPONSE** have been served electronically via email on counsel of record for

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