

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,
Petitioner,

v.

SMITH INTERFACE TECHNOLOGIES, LLC,
Patent Owner.

IPR2024-01088
10,656,758

PATENT OWNER PRELIMINARY RESPONSE

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PATENT OWNER'S EXHIBIT LIST

Exhibit	Shorthand	Description
2001	Declaration	Declaration of Rajeev Surati, Ph.D.
2002	CV	CV of Rajeev Surati, Ph.D.
2003	JCC	Excerpt of Joint Claim Construction Chart Exhibit A.
2004	Stay Order	October 2, 2024 Order Granting in Part Apple's Motion to Stay in <i>Smith Interface Technologies, LLC v. Apple Inc.</i> , 3-23-cv-01187, S.D. Cal (Dkt. No. 127).

I. INTRODUCTION

Institution should be denied because the Petition fails to establish a reasonable likelihood of prevailing on any Challenged Claim.¹ The Challenged Claims recite detecting a touch on an application launching user interface and, “in accordance with”/ “based on” the touch meeting certain “duration” criteria, taking various actions: (a) “when the duration” is “less than a first time threshold, launching the first application,” (b) “when the duration” is “greater than the first time threshold, displaying one or more action option objects,” and (c) “when the duration” is “greater than a second time threshold, performing an operation in connection with the first application icon.”

The Petition does not assert that any one reference discloses a device taking all three of these actions and certainly does not assert that any one reference discloses a device taking all three of these actions “in accordance with”/ “based on” a touch meeting the recited duration criteria. Rather, the Petition proposes: (a) adding an “App Snapshot” from Martyn to the device of Chaudhri and (b) launching that “App Snapshot” in Chaudhri in response to a gesture that Chaudhri already uses for a

¹ Petitioner challenges Claims 1, 9, 12, 19-22, 24-32, 35-43, 47, 57-59, 63, 71, 74, 81-84, 86-94, 97-105, 109, 119-121, and 124 (“Challenged Claims”). All Challenged Claims depend from one the three independent claims: Claims 1, 63, and 124.

different function. The Petition reaches this launch method through a series of convoluted modifications beginning by unnecessarily creating a conflict, assigning an already in use gesture—“a touch-and-hold gesture”—to launching the App Snapshot. It then proposes further modification to resolve the artificially-created conflict in a way that, not coincidentally, is necessary for its mapping.

The Petition provides no credible evidentiary support of any motivation to make this series of modifications. It leads with generic assertions of “commonly used” and “predictably improve” that are insufficient and, if at all, would only justify adding the App Snapshot—not the convoluted modifications for launching it. Beyond these generic assertions, the Petition cites to Martyn and Chaudhri, but the citations emphasize the proposed modifications conflict with the actual disclosure of those references.

The Petition points to “specific ‘advantages’ of the ‘App Snapshot’” that Martyn discloses that, again, could at best justify adding the App Snapshot, not the convoluted modifications for launching required to reach the claims. Nor does the Petition explain why a POSITA would ignore the various methods of calling the App Snapshot that Martyn discloses and that do not conflict with Chaudhri’s existing functionality in favor of creating an unnecessary conflict. The Petition also asserts that Chaudhri’s existing disclosure of calling up a sub-menu—using a different series of user gestures than the proposed modification—provides motivation to add

the App Snapshot. But the Petition fails to explain why, in view of this disclosure, a POSITA would undergo the convoluted series of modifications proposed rather than use the existing user gestures Chaudhri already discloses to call a sub-menu.

Rejecting the proposed unsupported modifications fully resolves the Petition as all Grounds rest on the proposed modifications to map the independent claims. Accordingly, institution should be denied.

II. OVERVIEW OF THE '758 PATENT

The '758 Patent relates to “touch screens,” where a “user experience may be altered, utilizing [touch] signal[s].” EX1001, 1:39-40, 17:3-4. The '758 Patent enables a user to access different device functionalities via varying touch sequences. EX1001, 1:44-4:33. The sequence begins when a user is faced with an “application launching user interface.” EX1001, 1:49-50, 2:13-15, 2:46-51, 3:1-5, 3:33-42, 3:54-58, 4:20-25. At this interface a user may perform four different single finger touch sequences to reach unique functionalities of the device. In the first sequence, a user may tap on an application to launch it. EX1001, 97:49-64. In the second sequence, a user may touch-and-hold an application to launch a menu displaying information related to the application. EX1001, 97:65-98:12. In the third sequence, a user may touch-and-hold for a longer duration to access operations associated with the application, like the option to delete the application. EX1001, 101:33-35. In the

fourth sequence, a user may relocate the selected application after touching-and-holding in accordance with a movement criteria. EX1001, 56:62-67.

A. Independent Claims 1, 63, and 124

Petitioner challenges the three independent claims of the '758 Patent: Claims 1, 63, and 124 (“Challenged Claims”). Claim 1 is directed to an “electronic device.” EX1001, 97:29. Claim 63 is directed to a method. EX1001, 108:41. And claim 124 is directed to a “non-transitory computer readable storage medium.” EX1001, 114:60. Claims 1, 63, and 124 are substantially similar.

Claims 1, 63, and 124 each recite “an application launching user interface that includes a plurality of application icons for launching corresponding applications.” Limitations [1.f], [63.b], [124.a]. Claims 1, 63, and 124 each also recite “while displaying application launching user interface/with the application launching user interface displayed, detecting a first single-finger touch input” “at a location on the touch-sensitive surface that corresponds to a[n] ... application icon.” Limitations [1.g], [63.c], [124.b].

Claims 1, 63, and 124 each also recite “in response to detecting the first single-finger touch” “determining a response based on evaluating the” “duration” or “movement” of the “touch input against” one of four criteria. Limitations [1.h], [63.d], [124.c]. These four criteria are an “application-launch criteria,” an “action-option-display criteria,” an “operation criteria,” or a “movement criteria.”

Limitations [1.h], [63.d], [124.c]. The “application-launch criteria” is met when the duration of the touch is “less than a first time threshold.” Limitations [1.i], [63.e], [124.d]. The “action-option-display criteria” is met when the duration of the touch is “greater than the first time threshold.” Limitations [1.j], [63.f], [124.e]. The “operation criteria” is met when the duration of the touch is “greater than a second time threshold that is greater than the first time threshold.” Limitations [1.k], [63.g], [124.f].

Claims 1, 63, and 124 then recite that “in accordance with a”/“based on a” “determination that the first single-finger touch input meets” one of the four criteria, then one of the following sequences happens. Limitations [1.i-l], [63.e-h], [124.d-g]. If the “application-launch criteria” is met, then the application is “launch[ed].” Limitations [1.i], [63.e], [124.d]. If the “action-option-display criteria” is met, then “one or more action option objects associated with the first application without launching the first application” are “display[ed].” Limitations [1.j], [63.f], [124.e]. If the “operation criteria” is met, then “an operation in connection with the first application icon” is “perform[ed].” Limitations [1.k], [63.g], [124.f]. And if the “movement criteria” is met, then the “application” is “mov[ed]” “in a foreground virtual display layer so that the first application icon appears to float.” Limitations [1.l], [63.h], [124.g].

III. LEVEL OF ORDINARY SKILL

Patent Owner does not necessarily agree with all aspects of Petitioner's proposed level of ordinary skill, but does not believe that resolving that level is necessary to resolve the issues raised in this preliminary response.

IV. CLAIM CONSTRUCTION

In the Litigation², Apple proposes the following eight claim terms found in the Challenged Claims are indefinite: “performing an operation [in connection with / on] the first application icon,” “application-launch criteria,” “action-option-display criteria,” “operation criteria,” “movement criteria,” “action options,” “action option objects,” and “evaluating the first single-finger touch input against at least one of a plurality of criteria, including evaluating a duration of the first single-finger touch input against at least one of: one or more application-launch criteria, one or more action-option-display criteria, or one or more operation criteria, and further including evaluating a movement of the first single-finger touch input against one or

² *Smith Interface Technologies, LLC v. Apple Inc.*, 3-23-cv-01187, S.D. Cal. (the “Litigation”). On October 2, 2024, the Court granted in part Petitioner's request to stay the Litigation, staying the Litigation “pending the issuance of the last of the PTAB's institution decisions on Apple's pending IPR petitions,” with any “further stay” to be addressed after those decisions. EX2004.

more movement criteria.” EX2003, 9-75/75. Contrary to its Litigation position, Petitioner does not assert that any of these nine terms are indefinite in its Petition and, indeed, had no problem understanding the terms to map them (albeit in a flawed mapping). Pet., 22-39, 61.

Patent Owner disputes that any of the eight terms Petitioner identified in the Litigation are indefinite. The words used in each phrase are common, understandable words, and the arrangement of those words and the surrounding claim language make the plain and ordinary meaning of each term apparent, as demonstrated by the Petition itself. The plain and ordinary meaning of each term is readily understandable, and Patent Owner believes no formal constructions are necessary.

V. OVERVIEW OF THE PRIOR ART

A. Chaudhri (EX1004)

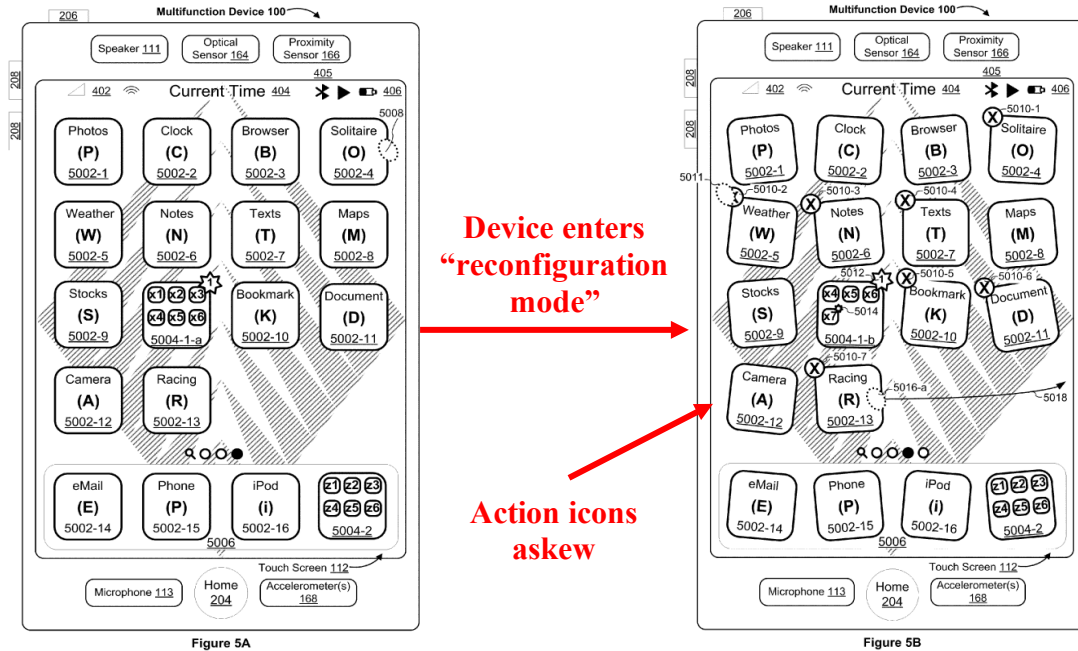
Chaudhri discloses two modes: a “normal operation mode” and a “user interface reconfiguration mode.” EX1004, [0217-0218]. In the “normal operation mode,” tapping on an application will launch the application. EX1004, [0217]. When in “user interface reconfiguration mode,” a user is able to rearrange applications and can reach a “pop-up dialogue” by touching a separate “object modification target.” EX1004, [0274]. Petitioner does not assert and Chaudhri does not disclose entering a menu for displaying information related to the application based on a durational touch.

Chaudhri describes “electronic devices with touch-sensitive surfaces, including but not limited to electronic devices with touch-sensitive surfaces for managing folders.” EX1004, [0003]. Touch inputs include a “flick gesture,” EX1004, [0260], [0292], [0379], [0380], or “multi-touch gesture” EX1004, [0152]. “[A] flick gesture include[es] contact 5176 and subsequent movement 5178 of the contact on a touch screen 112.” EX1004, [0380]. The multi-touch “gesture” includes “one or more taps, one or more swipes (from left to right, right to left, upward and/or downward) and/or a rolling of a finger (from right to left, left to right, upward and/or downward).” EX1004, [0174]. In addition or in combination with touch input, Chaudhri discloses other methods of input such as “physical buttons (e.g., push buttons, rocker buttons, etc.), dials, slider switches, joysticks, click wheels, and so forth.” EX1004, [0085]. The click wheel may be “physical or virtual.” EX1004, [0093]. The “one or more physical buttons, [may be a] ‘home’ or menu button.” EX1004, [0175].

Chaudhri explains that “touch-sensitive surfaces” “are widely used to manage folders by manipulating selectable user interface objects on a display.” EX1004, [0004]. Chaudhri notes that “[e]xemplary manipulations include creating a folder, displaying a folder view associated with a folder, adding ... icons, document icons, folder icons, etc.[] to a folder, removing ... objects from a folder, repositioning ... objects within a folder view of a folder, repositioning a folder icon ... and deleting

a folder.” EX1004, [0005]. Chaudhri understanding this need, emphasizes how “existing methods” “are cumbersome and inefficient.” EX1004, [0006]. To underscore the failure of existing methods, Chaudhri explains that “using a sequence of inputs to create, modify and/or delete folders and content within folders is tedious and creates a significant cognitive burden on a user.” EX1004, [0006].

To facilitate “more efficient methods and interfaces for managing folders” EX1004, [0007], Chaudhri discloses “user interfaces for computing devices with touch-sensitive surfaces,” EX1004, [0008]. As shown below, Figures 5A and 5B illustrate a user interface page where “the device detects a contact 5008 with the solitaire application icon 5002-4 for more than a predetermined period of time (e.g., 2 seconds) and, in response, the device enters a user interface reconfiguration mode.” EX1004, [0217]. Once “the device has entered a user interface reconfiguration mode” “the selectable user interface objects jiggle as though they are floating.” EX1004, [0218]. Because movement cannot readily be depicted on a single still image, the device is in “user interface reconfiguration mode” when Chaudhri depicts the application icons as askew. EX2001, ¶71 (“movement is difficult to depict on still images, so to communicate this Chaudhri depicts the applications as askew when the device is in user interface reconfiguration mode”).

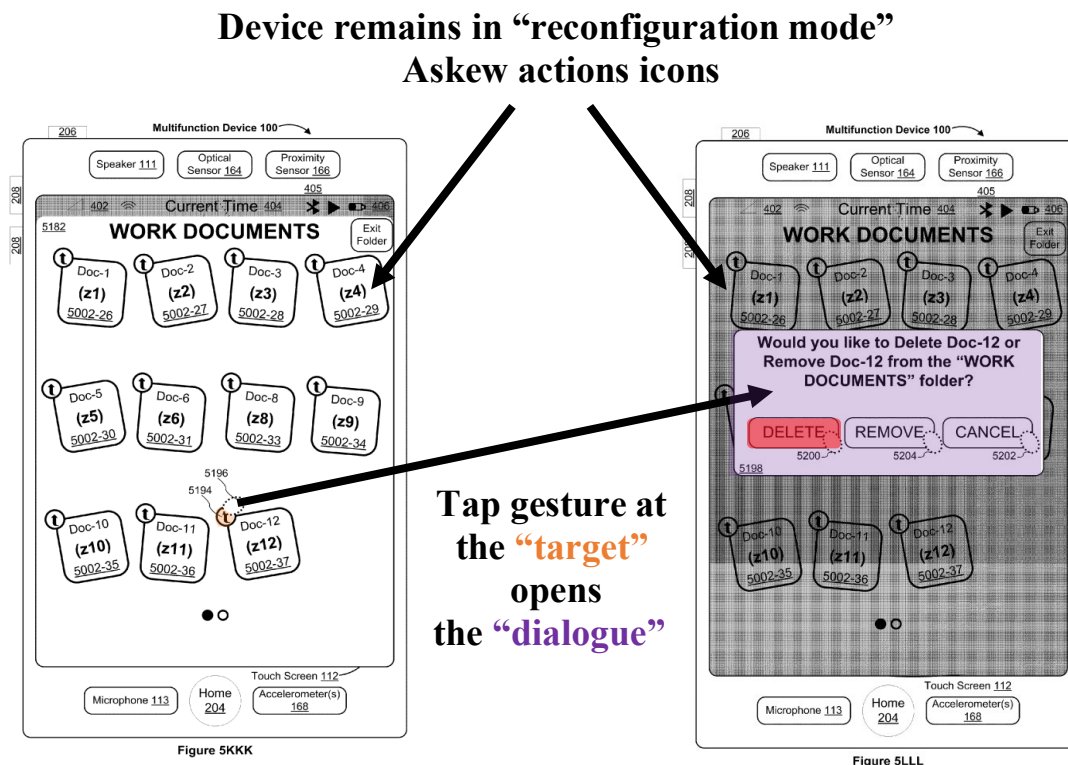


EX1004, Figures 5A-B (annotated).

While in “user interface reconfiguration mode,” “an object removal badge (e.g., 5010 in FIG. 5B)” appears and “when the device detects activation of the object removal badge (e.g., tap gesture 5011 in FIG. 5B), the selectable user interface object (e.g., weather application icon 5002-5 in FIG. 5B) associated with the object removal badge is removed from the user interface (e.g., deleted).” EX1004, [0218]. “In some embodiments, instead of, or in addition to, the selectable user interface object removal region described above, the device displays an object modification target associated with one or more of the selectable user interface objects.” EX1004, [0273].

This object modification target is also only displayed while in “user interface reconfiguration mode.” EX1004, [0274]. While in this mode the device may

“detect[] a request to activate the [orange] object modification target [5194] for a respective selectable user interface object (e.g., tap gesture 5196 at a location on the touch screen 112 that corresponds to a location of an object modification region for action icon 5002-37), the device displays an object modification dialogue. For example in FIG. 5LLL the device displays a [purple] pop-up dialogue 5198 that provides the user with options for modifying the selectable user interface object.” EX1004, [0274]. And then a user is able to delete the “action icon 5002-37” by a “tap gesture 5200 on a [red] delete button.” EX1004, [0274]. The device remains in “user interface reconfiguration mode” throughout this entire process by the askew icons, as shown in the Figures 5KKK and 5LLL.



EX1004, Figures 5KKK-LLL (annotated).

The pop-up dialogue is also disclosed in Chaudhri in the context of operations associated with creating a folder and naming a folder as shown in Figures 5P and 5Q reproduced below. These are referred to as a “name confirmation dialogue” box. EX1004, [0232].

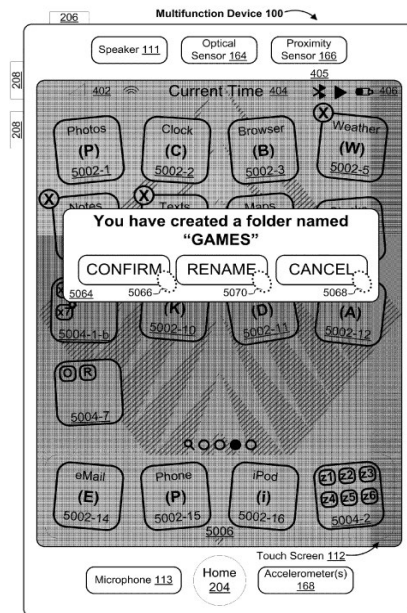


Figure 5P

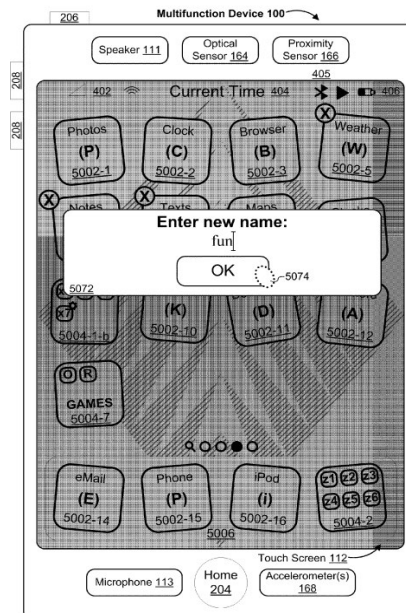
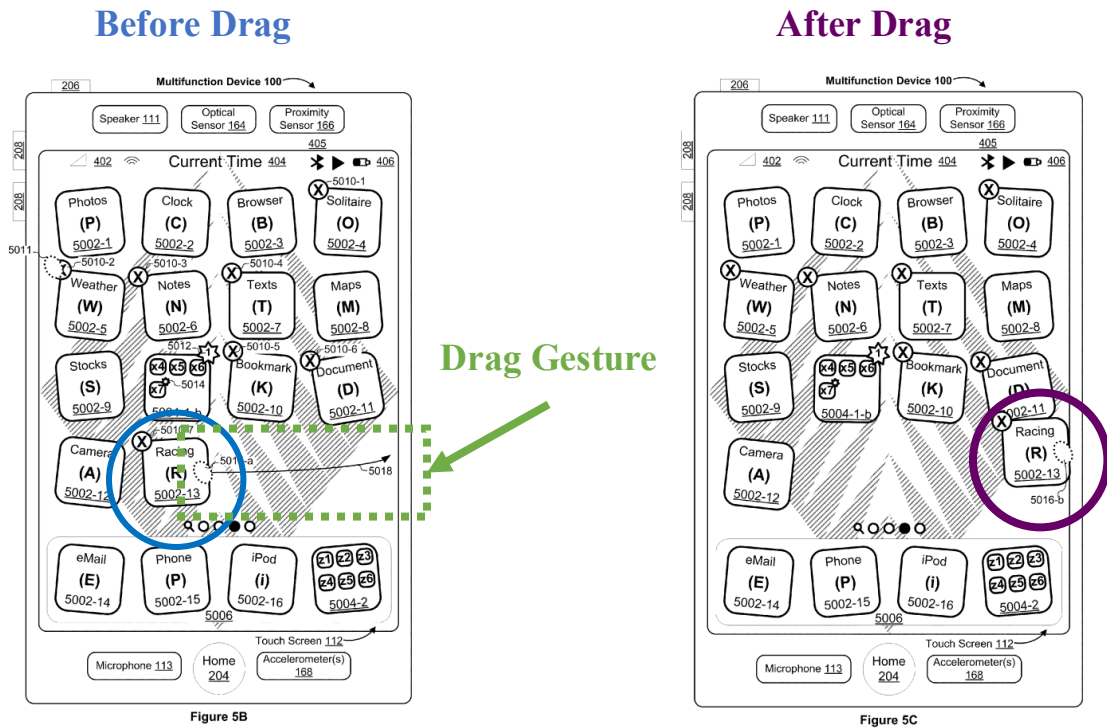


Figure 5Q

EX1004, Figures 5P-5Q.

Chaudhri also discloses rearranging applications using a drag gesture when in “user interface reconfiguration mode.” EX1004, [0101], [0217-0220], [0273], Figures, 5B-C, 9A-9B, 5KK-5MM. This drag gesture is shown below in Figures 5B and 5C. EX1004, [0220]. “In FIG. 5B, the device detects a request to move a” “user interface object to an edge of the screen.” EX1004, [0220]. The request is initiated by “a contact 5016-a on the touch-sensitive surface” at the location of the “‘racing’ action icon 5002-13” where a “subsequent movement 5018 of the contact to the edge

of the touch-sensitive surface” relocates the action icon 5002-13 as shown in Figure 5C. EX1004, [0220].



EX1004, Figures 5B-C (annotated).

B. Martyn (EX1005)

Martyn only discloses a “‘snap-shot’ view”³ that is accessible by what the Petition asserts a POSITA would understand as an analog of Chaudhri’s touch-and-hold gesture. Pet., 15-16 (“The POSITA would have understood that the analog to

³ Martyn uses several different terms interchangeably: “App Snapshot,” “summary window,” and “snapshot view.” EX1005, [0009-0010], [0015], [0017-0026], [0028-0031].

Martyn's press-and-hold input on a touch screen like Chaudhri's is the well-known touch-and hold gesture.”).

The “‘snap-shot’ view ... brings together, in one summary window, a limited list of common functions and commonly accessed stored data which itself can be reached directly from the main menu listing some or all applications.” EX1005, [0010]. This summary window addresses the need for “user interface[s] ... to demonstrate or make explicit the changing internal status of [a] mobile telephone as navigation proceeds.” EX1005, [0008]. “For example, to select or initiate a function ... a user has to understand (a) how to navigate to that function in order to select that function and (b) that the status of the telephone is such that the function can be selected or initiated.” EX1005, [0008].

To reach the summary window, a user starts by looking at a device in an “application launcher view.” EX1005, [0016]. “The Application Launcher view is ... presented as a standard scrolling list of application[s].” EX1005, [0016]. “The list is vertical and only one application is presented per line.” Navigating this view is accomplished by “[s]tandard highlight functions.” EX1005, [0016]. A “highlight” indicates which application the user currently has the choice of selecting. EX1005, [0016]. A “user may take conventional navigation steps, such as scrolling, to move the highlight and using the available select function to navigate to the required highlighted application.” EX1005, [0016].

“The innovative summary window functionality can be accessed as follows: should the highlight rest on the name of an application in the App Launcher for a certain amount of time (say a 1.2 second timeout), the summary window (the ‘App Snapshot’) drops down from the highlight bar.” EX1005, [0017]. “Other selection processes could also be used (e.g. voice activation, softkey selection etc) to access the App Snapshot.” EX1005, [0017]. Additionally, “the App Snapshot may be ‘called’ ... by using a right scroll function ...; a press and hold of the select function when an application name is highlighted; or using a right cursor key on a highlighted application name.” EX1005, [0017]. This process is shown in Figures 1 and 2 below. In these figures the red highlight rests on the messages application and by leaving the highlight over the messages application a blue summary window is accessed.



Figure 1

EX1005, Figure 1 (annotated).

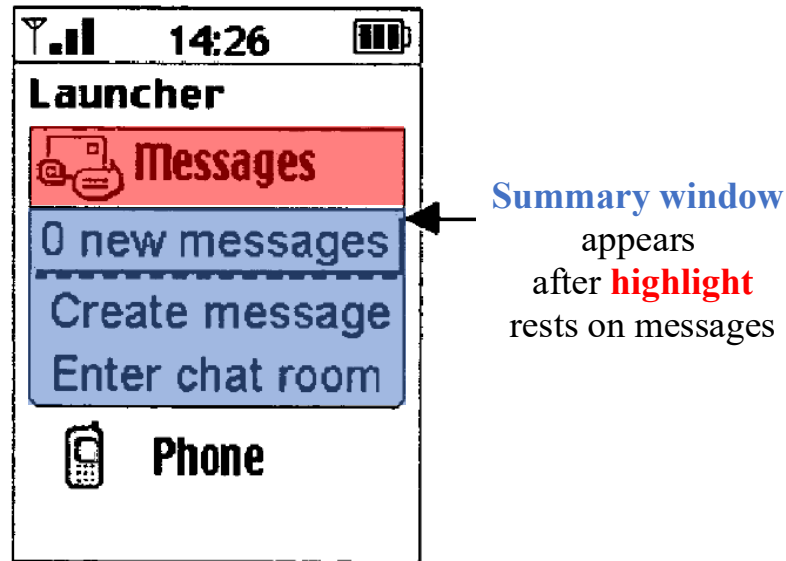


Figure 2

EX1005, Figure 2 (annotated).

Martyn also discloses ways to dismiss the summary window based on how it was called. “If a timeout is used to call the App Snapshot, scrolling the highlight back to the relevant application name” or “[s]crolling down through the App Snapshot” “removes the App Snapshot.” EX1005, [0021]. “If scroll functions (e.g. right scroll) call the App Snapshot the opposite scroll function removes the snapshot.” EX1005, [0022].

C. Griffin (EX1006)

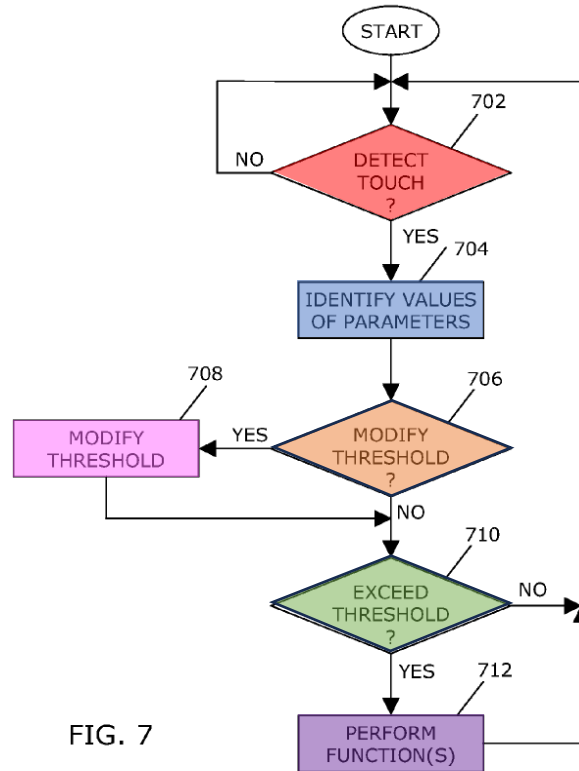
Griffin primarily relates to “a method and apparatus that reduces the occurrence of inadvertent touches causing functions to be performed.” EX1006, [0061]. “The use of multiple thresholds provides a mechanism by which multiple different functions may be triggered by touch alone” while avoiding inadvertent

touches. EX1006, [0061]. Griffin states: “Multiple touch thresholds may be applicable for a touch, and different values of touch thresholds may be associated with different functions or input.” EX1006, [0032].

“A touch threshold is a value associated with a touch, such that when a value of a touch meets the touch threshold, a function is performed.” EX1006, [0032]. A touch threshold can be associated with “a force imparted by a touch,” “a displacement distance,” “an area of contact,” “a time duration,” “or any combination thereof.” EX1006, [0032].

To determine inadvertent touches, “touch threshold[s] may be modified at any time based on one or more parameter or parameters.” EX1006, [0059]. “Modifying a touch threshold involves changing the value of one or more characteristics associated with the touch threshold.” EX1006, [0042]. A method for “modifying a touch threshold is shown” below from Griffin’s Figure 7. As seen in the “flowchart,” several steps occur before a determination is made regarding whether a threshold is exceeded. EX1006, [0039]. First, “touch is detected at [red] 702.” EX1006, [0040]. Second, “values of one or more various parameters are identified at [blue] 704.” EX1006, [0040]. Third, “[a] determination whether to modify one or more touch threshold is made at [orange] 706.” EX1006, [0041]. Only then are “[o]ne or more values of one or more parameters or characteristics of the touch are compared to the touch threshold at [green] 710” and “one or more functions, ..., are performed

[purple] 712.” EX1006, [0053]. Relevant touch thresholds are modified at [pink] 708. EX1006, [0041].



EX1006, Figure 7 (annotated).

Griffin provides “several examples of when and how one or more touch thresholds may be modified.” EX1006, [0042]. For example, “[t]he touch threshold may be modified based on the rate of detected touches” because “when the touch rate is high, the touch threshold may be decreased, to reduce the user’s effort,” and “[w]hen the touch rate is low, the touch threshold may be increased, resulting in more deliberate touches to meet the threshold.” EX1006, [0044]. The touch threshold may also be modified “based on location of the touch,” “based on a function parameter,” “in response to history information for a function,” “based on

one or more ambient parameters,” or “based on user parameters such as user history.” EX1006, [0044-0050]. These “[t]ouch thresholds may be repeatedly modified in response to change in any number, combination, and hierarchy of parameters.” EX1006, [0052].

In relation to modifying *time* thresholds, the only specific example that Griffin gives is for “when a user frequently deletes a ‘K’ after entering an ‘L,’ the touch threshold may be modified to increase the touch threshold, e.g., duration, that triggers entry of a ‘K’ after an ‘L’ is input.” EX1006, [0050].

D. Petitioner’s Proposed Combination of Chaudhri, Martyn, and Griffin

Petitioner proposes “integrat[ing] Martyn’s teachings about providing a contextual shortcut sub-menu in the form of a ‘summary window’ common application functions (an ‘App Snapshot’) in response to a press-and-hold user input with Chaudhri’s disclosure of a touch screen mobile device with a user interface for displaying and reorganizing a menu of selectable application icons.” Pet., 15-16. The Petition acknowledges that “Martyn’s press-and-hold input” is not a touch screen gesture (Martyn does not disclose a touch screen, *see* EX1005; *see also* EX2001, ¶82), but asserts that “[t]he POSITA would have understood that the analog to Martyn’s press-and-hold input on a touch screen like Chaudhri’s is the well-known touch-and-hold gesture.” Pet., 16. The Petition offers no explanation for selecting “Martyn’s press-and-hold input” (and converting it to its purported touch screen

“analog”) over any of the other methods Martyn discloses for activating the App Snapshot. Pet., 16; *see* EX1005, [0016-0017].

Further, despite elsewhere in the Petition acknowledging that Chaudhri “describes how the device transitions from the ‘normal operation mode’ to a ‘reconfiguration mode’ *when the user executes a touch-and-hold gesture*,” Pet., 21, the Petition offers no explanation for selecting a gesture already in use in Chaudhri for a second function, Pet., 16. That is, the Petition offers no explanation why a POSITA would be motivated to create a conflict by assigning a second action to the same gesture rather than use another gesture. Pet., 16. And, despite elsewhere in the Petition acknowledging that “Chaudhri teaches the notion of displaying a contextual ‘pop-up dialogue’ sub-menu,” Pet., 18, the Petition offers no explanation for selecting a *different* gesture (a touch-and-hold) for launching the App Snapshot rather than the gesture (first, touch-and-hold to enter reconfiguration mode and, then, tap on the app, *see* EX1004, [0217,] [0274]) that Chaudhri already disclosed for what Petitioner alleges is an “analogous implementation.” Pet., 16.

Next, without acknowledging that its own first modification had created the conflict of assigning two functions to the same gesture, Petitioner proposes further modifications because “the POSITA would have sought a solution to the problem of distinguishing between the different gesture commands”—*the very problem created by the first modification*. Pet., 21. To resolve this conflict, Petitioner proposes using

two different touch-and-hold durations for the App Snapshot and then, citing nothing but expert testimony, declares that the App Snapshot launch should be assigned the shorter duration and the “reconfiguration mode” the longer. Pet., 21-22 (“understanding that Martyn’s contextual sub-menu ‘summary window’ is related to selecting and launching the application (i.e., assisting the user with selecting a desired application functionality), the POSITA would have appreciated that this operation should likewise be part of the ‘normal’ mode”) (citing EX1003, ¶77).

VI. PETITIONER’S “CHAUDHRI-MARTYN-GRIFFIN COMBINATION” LACKS EVIDENTIARY SUPPORT

A. Petitioner’s Purported Motivations Do Not Justify The Proposed Modifications

Petitioner contends that “the predictable result of the Chaudhri-Martyn Combination is a mobile device featuring an application menu user interface that displays a contextual sub-menu, such as Martyn discloses, in response to a touch-and-hold gesture applied to Chaudhri’s touch screen.” Pet., 16.

The Petition lists four justifications for these modifications. “First, providing a sub-menu of selectable options corresponding to commonly used application functions was a ubiquitous feature in computer GUIs by 2011. ... Second, a POSITA would have recognized that applying Martyn’s teaching of a contextual sub-menu would predictably improve Chaudhri’s user interface for ‘a menu of applications’ from a usability standpoint. ... Third, Martyn identifies specific ‘advantages’ of the

‘App Snapshot’ contextual sub-menu over other known techniques for accessing a desired functionality on a mobile device. ... Fourth, the POSITA would have been prompted to pursue a combination with Martyn based on Chaudhri’s suggestions to do so. ... For example, Chaudhri teaches the notion of displaying a contextual ‘pop-up dialogue’ sub-menu that ‘provides the user with options for modifying the selectable user interface object.’” Pet., 16-18 (emphasis added).

Further, as discussed in Section V.D, Petitioner then justifies further modifications not alleged to be found in any reference as necessary to resolve conflicts created by the first round of modifications. *See also* Pet., 20-22.

For the reasons explained below, the Petition fails to support the alleged combination of Chaudhri and Martyn.

1. Petitioner’s motivation would not have led a POSITA to the proposed Chaudhri-Martyn-Griffin combination

The obviousness inquiry typically requires an analysis of “whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007) (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) (requiring “articulated reasoning with some rational underpinning to support the legal conclusion of obviousness”)). Petitioner cannot satisfy its burden of proving obviousness by employing “mere conclusory statements,” but “must instead articulate specific reasoning, based on evidence of record, to support the legal conclusion of obviousness.” *Magnum Oil*

Tools, 829 F.3d at 1380 (Fed. Cir. 2016). For the reasons explained below, Petitioner’s combination must fail.

a) Petitioner’s first and second motivations are conclusory and do not address the combination

Petitioner’s first motivation merely states that “it would have been axiomatic for a POSITA” to “employ[] a contextual shortcut sub-menu to augment a ‘main menu listing some or all applications’ of a mobile device” “in the context of Chaudhri’s user interface” because “sub-menus were exceedingly well-known solutions to [an] equally well-known problem.” Pet., 16-17. This conclusory assertion fails to meet Petitioner’s burden to show a motivation to combine. “An unsupported statement that combining the teachings of the two references would have been ‘well within the skill of a POS[IT]A,’ because the results . . . ‘were well-known and predictable’ does not meet Petitioner’s burden.” *See Johns Manville Corp. v. Knauf Insulation, Inc.* (IPR2018-00827, Paper 9) at 13-14. Petitioner’s “suggestion is merely that a feature desirable on one device would automatically be desirable if incorporated on another device.” EX2001, ¶126. This is not always the case, and a POSTIA cannot take it for granted. EX2001, ¶127 (explaining the failures of a successful input system in one device to translate to a similar device).

Petitioner’s second purported motivation asserts that “[a] mobile device with a superior interface from a usability standpoint would be more attractive to consumers” so “a POSITA would have recognized that applying Martyn’s teaching

of a contextual sub-menu would predictably improve Chaudhri’s user interface.” Pet., 17. But this is circular and, again, unsupported. The Petition does not explain why Martyn’s teaching would have resulted in a superior interface from a usability standpoint; the Petition leaves the reader to accept the conclusion on faith alone. EX2001, ¶129; *see also* EX2001, ¶¶130-138 (explaining the need to consider “buttons, battery, and navigation”). Martyn sought to improve user interfaces in 2004 when interfaces were much more limited—i.e., not touchscreens. EX2001, ¶¶81-82. Martyn further recognizes the limitation of input methods on mobile devices: “*if* the mobile telephone has 4-way scrolling capacity.” EX1005, [0017] (emphasis added); *see also* EX2001, ¶139. Chaudhri was not limited in this way. Chaudhri not only describes a variety of button types built into a device for input, but also describes multiple types of gestures, including a flick and a multi-touch gesture, only enabled by a touch screen. EX1004, [0085], [0093], [0152], [0174-0175], [0260], [0292], [0379], [0380], [0380]; *see supra* §V.A; *see also* EX2001, ¶65. The limited input methods of Martyn was not an issue faced by Chaudhri.

Regardless, even if these motivations were sufficiently applicable, they, at best, address a reason to add the App Snapshot—they do not provide any justification for selecting an already-in-use user gesture to launch the App Snapshot or make further modifications not found in any reference to address the conflict created by the first modification.

b) Petitioner’s third motivation regarding Martyn’s specific “advantages” of its App Snapshot does not justify the selection of user gesture in the combination

Petitioner’s third motivation asserts that “Martyn identifies specific ‘advantages’ of the ‘App Snapshot.’” Pet., 17. But the identified advantages, “ease and speed of navigation,” do not match the proposed combination because Petitioner proposes not just including “App Snapshot,” but calling it using a specific input method—press-and-hold. Pet., 18. This specific press-and-hold input method of Martyn is already assigned in Chaudhri to Chaudhri’s core function. Petitioner side-steps this clear conflict to assert that a “POSITA would have sought to predictably improve Chaudhri’s interface for accessing application functions in the same way Martyn did.” Pet., 18. But that too is mere self-serving hindsight.

Martyn discloses multiple alternative methods of triggering the App Snapshot that would not require a conflict with Chaudhri; yet Petitioner neglects them all and does not provide a motivation for choosing the “press and hold of the select function” rather than the trigger disclosed in Martyn that would not conflict. *See* Martyn [0017]. For example, Martyn discloses “a 1.2 second timeout,” “voice activation, softkey selection[,] etc[.]” as well as “using a right scroll function,” “a press and hold of the select function,” or “using a right cursor key.” EX1005, [0017]. Petitioner provides no motivation for selecting the press-and-hold input over the other options. And, as discussed in more detail below, a POSITA would not have been motivated

to use the “touch and hold” input for calling “App Snapshot” because Chaudhri already uses that input for entering its own “reconfiguration mode” that is core to its own invention. *Infra*, § VI.A.2. Yet again, even if one assumes that a POSITA might have been motivated to include the App Snapshot from Martyn, self-serving hindsight is the only path to Petitioner’s alleged combination using the touch-and-hold input to call that App Snapshot. EX2001, ¶146.

c) Petitioner’s four motivation contradicts, rather than justifies, the proposed combination

Petitioner contends that “Chaudhri teaches the notion of displaying a contextual ‘pop-up dialogue’ sub-menu that ‘provides the user with options for modifying the selectable user interface object.’” Pet., 18 (citing EX1004, [0274], [0317] (discussing “a contextual menu”), Figure 5LLL). Yet the Petition fails to explain why—despite Chaudhri’s disclosure of a pop-up dialogue sub-menu—a POSITA would have turned to Martyn’s App Snapshot. Rather, the Petition merely asserts that Chaudhri’s disclosure of the feature “would have prompted a POSITA to seek out and apply the teachings from other references in the same field, like Martyn, that describe analogous implementations of contextual sub-menus to augment a user interface for a multi-functional mobile device.” Pet., 18 (citing EX1003, ¶69, ¶¶43-48). But this is nakedly self-serving hindsight. *See Ex parte Rinkevich*, Appeal No. 2007-1317, slip op. at 8-9 (BPAI May 29, 2007) (noting that “the problem proffered by the Examiner is already solved” by the primary reference,

and explaining that “a person of ordinary skill in the art having common sense at the time of the invention would not have reasonably looked at [a secondary reference] to solve a problem already solved by [the primary reference]”).

Here, Petitioner fails to offer any meaningful rationale, instead concluding merely that because Chaudhri discussed a pop-up sub-menu, a POSITA would have looked to Martyn for a pop-up sub-menu. But that belies the inconvenient truth that the only “problem” with Chaudhri’s pop-up sub-menu is that Chaudhri doesn’t trigger it in a way that Petitioner could argue met the claims.

Further, to the extent a POSITA were motivated to add the App Snapshot because Chaudhri already includes “analogous implementations of contextual sub-menus” as the Petition alleges, Pet., 18, the Petition offers no explanation why a POSITA would select a *different* gesture (a touch-and-hold) for launching the App Snapshot than the gesture that Chaudhri has already disclosed and for what Petitioner alleges is an “analogous implementation,” Pet., 16. See EX2001, ¶142-143. Specifically, Chaudhri discloses the user, first, performing a touch-and-hold to enter reconfiguration mode and, then, tapping an “[orange] object modification region for action icon 5002-37” on the app icon to launch a sub-menu. EX1004, [0217], [0274].

The Petition offers no explanation why this disclosure could not be applied to, for example, add another region on the app icon to launch the App Snapshot. EX2001, ¶143. For example, applying the allegedly analogous functionality, a

POSITA adding App Snapshot could have added such access in the same way by, for example, adding another touch point (shown as red circle “m” in the annotated figure below) to the existing user interface as shown in Figure 5KKK. EX2001, ¶143.

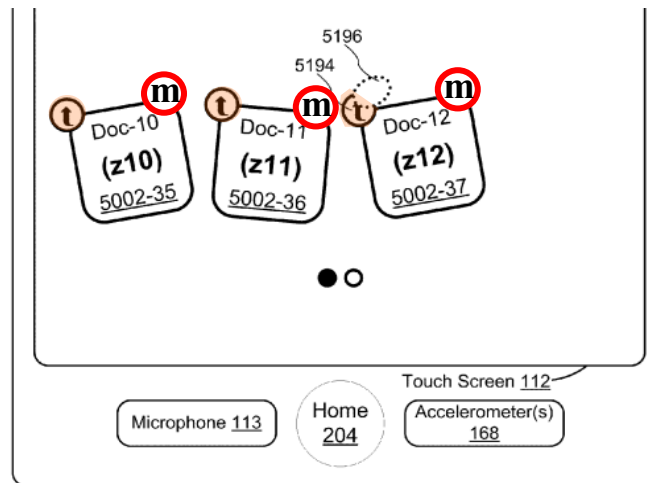


Figure 5KKK

EX1004, Figure 5KKK (annotated).

2. ***Even if Chaudhri would have led a POSITA to Martyn, the POSITA would not have reasonably expected success with the asserted combination because Petitioner creates a conflict***

Petitioner reaches its proposed combination only by, first, unnecessarily creating a conflict where two functions—calling up an App Snapshot and entering reconfiguration mode—are both assigned the same touch-and-hold input, but then further modifying the Chaudhri-Martyn combination to resolve this conflict. EX2001, ¶147. Stated another way, Griffin serves only to resolve a conflict of the Petitioner’s own unexplained making. EX2001, ¶¶148-151 (explaining the puzzling

decision to propose a conflicting assignment only to resolve in a way not taught by the references). Petitioner fails to explain why a POSITA purportedly motivated to add Martyn's App Snapshot would have chosen to create this conflict at all, rather than simply assigning the App Snapshot to one of the other inputs explicitly disclosed in Martyn for that purpose. *See supra* §V.B; *see also Net MoneyIn, Inc. v. Verisign, Inc.*, 545 F.3d 1359, 1369 (Fed. Cir. 2008) ("it is not enough that the prior art reference discloses part of the claimed invention, which an ordinary artisan might supplement to make the whole, or that it includes multiple, distinct teachings that the artisan might somehow combine to achieve the claimed invention.").

By choosing the touch-and-hold gesture implementation from Chaudhri to launch Martyn's App SnapShot, Petitioner creates an unnecessary conflict with Chaudhri's existing uses of the touch-and-hold input to enter reconfiguration mode. Pet., 13. Petitioner chose to build its combination in a step-wise fashion, and its purported motivations therefore apply solely to the alleged combination of Chaudhri and Martyn. Pet. 15-19. Yet those motivations simply assume that Martyn's menu must be implemented with touch-and-hold, and entirely neglect that the initial combination as articulated by Petitioner would have created an intractable conflict between two core functions being triggered by the same input. EX2001, ¶152-154. This would have resulted in an inoperable device. EX2001, ¶¶85, 154. But that result is utterly nonsensical because the conflict was readily avoidable. EX2001, ¶155.

Instead of creating this conflict, a POSITA could have simply retained Chaudhri's use of touch-and-hold to enter the reconfiguration mode, while assigning one of the other App Snapshot-launching inputs disclosed by Martyn. *See* EX2001, ¶156; *see also supra* § VI.A.1, EX1005, [0017]. This would have avoided any conflict and left both Chaudhri's core function and the borrowed Martyn teaching unaltered.

Petitioner's threshold combination of Chaudhri and Martyn is therefore unsupported and, indeed, unsupportable.

B. The Chaudhri-Martyn-Griffin Combination is Insufficient as a Matter of Law

Petitioner asserts that a POSITA would have looked for references that “provide additional information on [the] subject” of “tracking touch duration.” Pet., 20. The only reason Petitioner needed Griffin is because Petitioner's combination of Chaudhri and Martyn unnecessarily created a conflict. *Supra* §VI.A.2, EX2001, ¶¶148-155. That alone should be the end of Petitioner's theory.

Setting aside, however, that Griffin's only invitation is to solve a problem of Petitioner's own making, a POSITA still would not have been motivated to combine Chaudhri and Martyn with Griffin. Under meaningful scrutiny, Griffin's teachings would have been unhelpful to a POSITA solving the problem of sequential durational touch thresholds, leaving Petitioner to rely on conclusory assertions that are insufficient as a matter of law.

1. The Petition fails to explain why a POSITA would have been motivated to combine Chaudhri, Martyn, and Griffin in the way the Petition alleges

Petitioner asserts two reasons why a POSITA would combine Chaudhri and Martyn with Griffin. Pet., 19-20. “First, Chaudhri’s instruction to trigger specific functionalities based on the duration of the user’s touch contact on an application icon ... would have prompted a POSITA to seek out and apply the teachings from references in the same field, like Griffin, that provide additional information on this subject.” Pet., 20 (emphasis added). And “[s]econd, Griffin’s technique of evaluating the user’s touch against predetermined criteria was well known in the art by 2011, and applying that known technique in the context of a similar reference like Chaudhri to obtain a substantially similar result would have been obvious as a matter of law under KSR.” Pet., 20 (emphasis added). Even taking these at face value would not lead to Petitioner’s combination.

First, applying Griffin’s teachings to Chaudhri’s inclusion of both touch contact and touch-and-hold gestures would not itself lead a POSITA to include two duration thresholds for a single touch to result in any of three different actions. EX2001, ¶162. Second, applying purportedly well-known evaluation of a user’s touch against predetermined criteria also would not have lead a POSITA to expand Chaudhri to include two duration thresholds for a single touch to result in any of three different actions. EX2001, ¶¶162, 165.

To the contrary, the natural sum of those parts is instead using Griffin’s teachings to implement Chaudhri’s discrimination between its two different types of inputs. EX2001, ¶166 (“The time threshold from Griffin is what allows the discernment between a tap and a touch-and-hold. Neither Chaudhri nor Griffin nor Dr. Cockburn explain why a POSITA would bisect the touch-and-hold with another time threshold.”). And Martyn’s teachings would not have added a third as explained above. EX2001, ¶156; *see also* §VI.A.2. Martyn discloses inputs other than pressing-and-holding for launching its App Snapshot, and the Petition fails to articulate any reason to neglect those teachings in favor of creating a conflict between that App Snapshot and Chaudhri’s reconfiguration mode. EX2001, ¶148-155. As such, the Petition improperly assumes the parts—i.e., two functions launched by touch-and-hold—and then adds an inherently *post hoc* motivation. That the motivation is one of hindsight is laid bare by the fact that the proposed combination does not logically follow from the motivation. EX2001, ¶167.

2. *Even if a POSITA would have been motivated to combine Chaudhri and Martyn with Griffin, a POSITA would not have had a reasonable expectation of success*

Griffin primarily relates to “a method and apparatus that reduces the occurrence of inadvertent touches causing functions to be performed.” EX1006, [0061]. “The use of multiple thresholds provides a mechanism by which multiple different functions may be triggered by touch alone” while avoiding inadvertent

touches. EX1006, [0061]. Griffin states: “Multiple touch thresholds may be applicable for a touch, and different values of touch thresholds may be associated with different functions or input.” EX1006, [0032].

This disclosure is bereft of any teaching. It is not enough to simply point to an element in a reference. There must be sufficient motivation to combine from that disclosure. The fact that Griffin notes that multiple thresholds are possible does not convey that multiple thresholds are desirable or should be used in a particular application, especially when there is an alternative available. *See* EX1006, [0032]; *see also* EX2001, ¶¶172-173.

Further, Griffin does not solve the problem created by the Chaudhri-Martyn Combination. The Petitioner’s assignment of two functions to the same gesture are not resolved by Griffin’s disclosure. Griffin does not teach how to assign those thresholds to different functions. EX2001, ¶176. The only explanation of Griffin’s thresholds is to avoid inadvertent touches by modifying those thresholds. EX2001, ¶¶176-177. This does not explain why Griffin would lead a POSITA to create two different time thresholds in order to assign already assigned functions.

VII. GROUNDS 1 AND 2 RELY UPON PETITIONER’S FLAWED COMBINATION TO COBBLE TOGETHER LIMITATIONS IN WAYS NOT SUGGESTED BY THE ART

Petitioner asserts that “[t]he Chaudhri-Martyn-Griffin Combination renders obvious” limitations [1.h], [1.i], [1.j], [1.k], and [1.l]. Pet., 28, 30, 31, 33, 35. Grounds 1 and 2 both rely on the same combination to find these limitations obvious. For the above and below reasons, the Chaudhri-Martyn-Griffin Combination fails to render these elements obvious on either ground. Independent claims 63 and 124, contain similar limitations, such that the Chaudhri-Martyn-Griffin Combination also fails to render claims 63 and 124 obvious for similar reasons. Likewise dependent claims 9, 12, 19-22, 24-32, 35-43, 47, 57-59, 71, 74, 81-84, 86-94, 97-105, 109, and 119-121 are not obvious over the Chaudhri-Martyn-Griffin because of their dependency on claims 1, 63, and 124, respectively.

A. [1.h], [1.j], and [1.k]: Action-Option-Display Criteria, Action Option Objects, and Two Time Thresholds

Limitation [1.h] recites “evaluating a duration of the first single-finger touch input against at least one of: ... one or more action-option-display criteria.” Limitation [1.j] recites “in accordance with a determination that the first single-finger touch input meets the one or more action-option-display criteria that is met when the duration of the first single-finger touch input is evaluated to be greater than the first time threshold, displaying one or more action option objects associated with the first application without launching the first application.” Further, Limitation

[1.k] clarifies that the “first time threshold” must be less than (and therefore different) than “a second time threshold” associated with “performing an operation,” which Petitioner maps to entering “reconfiguration mode” in Chaudhri. Pet., 34.

Petitioner does not assert that Chaudhri discloses “displaying one or more action option objects associated with the first application without launching the first application,” let alone doing so “when the duration of the first single-finger touch input is evaluated to be greater than the first time threshold.” Pet., 33 Rather, Chaudri discloses performing a different action when the duration exceeds “a predetermined period of time,” which is to “enter a reconfiguration mode.” EX1004, [0217]. Chaudri actually discloses displaying a “pop-up dialogue” sub-menu, which Petitioner alleges as analogous to the App Snapshot in Martyn, Pet., 18, based on detecting a user interface input that is different than required by the claim language “when the duration of the first single-finger touch input is evaluated to be greater than the first time threshold.” *See* EX1004, [0274] (“the device displays a pop-up dialogue ... in response to an input that corresponds to a request to delete the selectable user interface object (e.g., tap gesture 5200 on a delete button)”).

Further, while Petitioner alleges that “Martyn’s App Snapshot” meets the recitation of “one or more action objection objects,” Petitioner does not assert that Martyn discloses displaying the “App Snapshot” “when the duration of the first single-finger touch input is evaluated to be greater than the first time threshold.”

Pet., 31-33. Rather, Martyn discloses a number of possible “selection process[es]” through which “the App Snapshot may be ‘called’ or ‘fired,’” but none involve a touch-screen gesture, let alone a “first single-finger touch input [] evaluated to be greater than the first time threshold.” EX1005, [0017].

Unable to point to disclosure in any of the three cited references, Petitioner relies on the “Chaudhri-Martyn-Griffin Combination” as purportedly including calling up Martyn’s App Snapshot based on a “single-finger touch” evaluated to exceed a “first time threshold” that is less than and different than a “second time threshold.” Pet., 29-30, 31-33. As discussed in Section VI.A.1, the Petition fails to provide evidentiary support demonstrating that a POSITA would have been motivated to incorporate into Chaudhri, Martyn’s App Snapshot using the particular user interface gestures required by the Challenged Claims. EX2001, ¶189. Rather, Petitioner reached the proposed Combination solely through use of hindsight and using the claims as a roadmap.

B. [1.h]: Criteria Evaluation

Limitation [1.h] recites “in response to detecting the first single-finger touch input, determining a response to the first single-finger touch input based on evaluating the first single-finger touch input against at least one of a plurality of criteria, including evaluating a duration of the first single-finger touch input against at least one of: one or more application-launch criteria, one or more action-option-

display criteria, or one or more operation criteria, and further including evaluating a movement of the first single-finger touch input against one or more movement criteria.” EX1001, 97:49-59.

Petitioner attempts to “turn[] back to Chaudhri” to provide the “application-launch criteria, an operation criteria, and a movement criteria” while using Martyn to find the action-option-display criteria. Pet., 29-30. It is undisputed that Chaudhri’s operation criteria and Martyn’s action-option-display criteria are both assigned to a touch-and-hold contact. (“Chaudhri ... a longer-duration touch-and-hold contact (e.g., 2 seconds) for initiating a reconfiguration mode (operation criteria[])” and “Martyn’s ‘summary window’ is invoked by a press-and-hold contact on an application icon that meets a predetermined duration threshold (action-option-display criteria,[])” Pet., 30.) A POSITA would not have been motivated to combine Chaudhri and Martyn to create a conflict and then arbitrarily resolve said conflict when Chaudhri and Martyn suggest alternative ways of assigning the operation criteria and the action-option-display criteria to prevent a conflict from arising in the first instance. *See supra* §VI.A.2.

C. [1.j]: Action-Option-Display Criteria

Element [1.j] recites “in accordance with a determination that the first single-finger touch input meets the one or more action-option-display criteria that is met when the duration of the first single-finger touch input is evaluated to be greater than

the first time threshold, displaying one or more action option objects associated with the first application without launching the first application.” EX1001, 97:60-64.

Petitioner asserts that “Martyn’s teachings regarding a contextual sub-menu called the ‘App Snapshot,’” would have been integrated “with Chaudhri and Griffin such that the App Snapshot summary window is displayed in accordance with a determination that the user’s single-finger touch input meets a corresponding action-option-display criterion where the duration is evaluated to be greater than the first time threshold.” Pet., 32. This fails for the same reasons stated above. *See supra*, §§ VI.A.2, VII.B. A POSITA looking at two references disclosing a touch-and-hold gesture and a press-and-hold gesture assigned to different functions, would not have attempted to arbitrarily resolve this conflict when a POSITA could have completely avoided any conflict by simply using an alternative launch input from Martyn itself. *See supra*, §§ VI.A.2, VII.B. Petitioner’s attempt to justify this resolution based on providing “a superior interface from a usability standpoint would be more attractive to consumers,” uses the claims as a map and is “motivated” solely by hindsight. Pet., 17, EX2001, ¶196 (“Dr. Cockburn fails to articulate any type of superiority by failing to articulate the interplay of user interface design factors.”).

D. [1.k]: Operation Menu

Element [1.k] “in accordance with a determination that the first single-finger touch input meets the one or more operation criteria that is met when the duration of the first single-finger touch input is evaluated to be greater than a second time threshold that is greater than the first time threshold, performing an operation in connection with the first application icon.” EX1001, 98:5-12.

Petitioner asserts that “[a] POSITA would have understood that Chaudhri’s disclosure of detecting a touch lasting ‘more than a predetermined period of time (e.g., 2 seconds)’ teaches or renders obvious making a determination that the user’s single-finger touch input meets an operation criterion where the duration is evaluated to be greater than the second time threshold.” Pet., 34-35. But Chaudhri only discloses one time threshold—the threshold to transition into reconfiguration mode. EX1004, [0217]. Martyn likewise only discloses one time threshold—the threshold giving rise to the App Snapshot for a press-and-hold of a physical button. EX1005, [0017], [0020]. Petitioner’s reasoning that Martyn’s App Snapshot is “related to selecting and launching the application” so it would be assigned a shorter time threshold is arbitrary and is only needed because Petitioner’s proposed combination has created an unnecessary conflict. Pet., 22; *see* EX2001, ¶¶201-202 (explaining that without considering design choices for input methods a POSITA is making an arbitrary decision); *see also supra* §VI.A.2.

VIII. CONCLUSION

For the reasons explained above, the Board should deny institution because Petitioner has not established any reasonable likelihood of success on any of its proposed grounds.

Dated: October 18, 2024

Respectfully submitted,

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CERTIFICATE OF WORD COUNT

Pursuant to 37 C.F.R. § 42.24(a)(i), the undersigned certifies that this Paper—exclusive of the table of contents, table of authorities, certificate of service, and this certificate of word count—includes 8,059 words. The undersigned relies upon the word count generated by Microsoft Word.

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Eagle H. Robinson (Reg. No. 61,361)

CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e), the undersigned certifies that on October 18, 2024, complete copies of foregoing PATENT OWNER PRELIMINARY RESPONSE and EX2001-EX2004 were served on Petitioner via email (by consent), at the following email address(s):

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