

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,

Petitioner

v.

SMITH INTERFACE TECHNOLOGIES, LLC

Patent Owner

IPR2024-01089
Patent 10,671,212

PATENT OWNER RESPONSE

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PATENT OWNER'S EXHIBIT LIST

Exhibit	Shorthand	Description
2001	Surati	Declaration of Dr. Rajeev Surati, Ph.D.
2002	CV	CV of Dr. Rajeev Surati, Ph.D.
2003	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).
2004	JCC	Excerpt of Joint Claim Construction Chart Exhibit A.
2005	Madisetti	Declaration of Dr. Vijay Madisetti
2006	Cockburn Deposition	Transcript of Andrew Cockburn March 25, 2025 Deposition
2007	'918 Provisional	U.S. Provisional Patent Application No. 61/581,918
2008	Madisetti CV	CV of Dr. Vijay Madisetti

I. INTRODUCTION

Petitioner challenges the three independent claims of the '212 Patent: Claims 1, 16, and 84 (the “Challenged Independent Claims”).¹ The Challenged Independent Claims each include a series of limitations that collectively recite logic for detecting, on a touch screen, aspects of multi-part, multi-action pattern-based user gestures and performing various functions “when” / “based on” various criteria are met. Each Challenged Independent Claim includes five limitations, each reciting a separate “when” / “based on” criteria and function pair, all of which must be included in the device logic to meet the claim. Limitations [1.b-f], [16.g-k], [84.c-g].

To challenge the claims, Petitioner proposes beginning with a “main menu GUI” disclosed by Hotelling. But Petitioner only contends that this “main menu GUI” discloses *one of the five* “when” / “based on” Limitations. Pet., 23-25. From there, Petitioner picks and chooses disclosures from various locations—or nowhere at all—to graft onto the “main menu GUI” in a process that Petitioner unapologetically characterizes as “to successfully arrive at the '212 patent’s claimed

¹ While the Petition includes two grounds, Ground 2 merely addresses two dependent claims, whose mapping the POR does not address, and does not purport to solve any of the flaws in the Ground 1 mappings of the independent claims presented herein. Pet., 64. Thus, the flaws in Ground 1 fully resolve the Petition.

invention.” *Id.*, 12. In doing so, Petitioner repeatedly commits the cardinal sin of obviousness, pointing to disparate disclosures and using the ’212 Patent’s claims, rather than the teachings in the art, as a roadmap. Repeatedly, Petitioner either fails to provide any reasoned analysis for why a POSITA would make the proposed modifications or ignores conflicting disclosure that would lead a POSITA to a different modification not matching the claims—or both.

First, to meet Limitations [1.c], [16.h], and [84.d], Petitioner proposes the Hotelling-Martyn-Cho combination include providing haptic feedback upon exceeding a time threshold to detect a long touch of an ongoing touch. But Hotelling describes providing haptic feedback for various purposes at various times, none of which are upon exceeding a time threshold of an ongoing touch. EX1004, [0160]-[0163]. Thus, Petitioner is forced to: (a) point to Hotelling’s general disclosures of use of haptics responsive to **different** criteria in Hotelling, (b) abstract that disclosure to *haptics are good*, (c) bootstrap on its separate grafting of functionality to meet Limitations [1.d], [16.i], [84.e] of displaying a context menu in response to a long touch, and (d) argue that general *haptics-are-good* statements disclose or render obvious modifying Hotelling to include specific, undisclosed haptics to meet the claim. Pet., 26-29. Such general “well-known and predictable” assertions are insufficient. Further, Petitioner fails to acknowledge or account for Hotelling’s actual haptics disclosure, which conflicts with proposed additions. Hotelling

discloses using haptics to make a virtual button feel more like the physical counterpart it is replacing by providing feedback on press and release. EX1004, [0163]; EX2005, ¶¶55-57, 64. Ignoring this explicit disclosure because adding haptics on press or release would not meet the claim’s “when” / “based on” criteria, Petitioner proposes more, different haptics after the press but before the release. But those additional haptics would confuse the user, making the user think the device has inaccurately detected a release of the touch while the touch remains ongoing. EX2005, ¶51. Thus, not only does the art not disclose the haptics Petitioner seeks to add, adding such haptics conflicts with what Hotelling actually discloses.

Second, to meet Limitations [1.d], [16.i], and [84.e], Petitioner takes: (a) the concept of providing an “App Snapshot” context menu from Martyn and (b) the concept of calling a context menu through a long touch on a virtual button from another portion of Hotelling unrelated to a “main menu GUI” (Figure 27A’s disclosure of “a touch vocabulary associated with a music player”). Pet., 22-33. While the Petition addresses why a POSITA would incorporate Martyn’s “App Snapshot” disclosure, it is *silent* on why a POSITA would turn to unrelated disclosure in Hotelling for reference to a “long” touch—or why that long touch would be on an application icon, as is necessary for Petitioner’s claim mapping. *Id.* Hotelling itself does not state that Figure 27A is applicable to a main menu GUI—it consistently and uniformly describes Figure 27A as “a touch vocabulary *associated*

with a music player”—and a “main menu GUI” is *not* a “music player.” EX1004, [0038], [0151]. Thus, Petitioner’s reliance on this disclosure is not an application of Martyn’s disclosure, but rather a proposal to *modify* Martyn’s main menu GUI. As such, Petitioner was obligated to provide a reason for that modification—but provided none.

Further, Petitioner again ignores Hotelling’s actual teachings, which, even assuming a POSITA sought to apply Figure 27A to a “main menu GUI,” would lead a POSITA to an implementation that does not match the claims. Figure 27A does not disclose calling a “context menu” using a long touch on a list of items as in the proposed combination, but rather specifies the long touch is on a “virtual button.” This is a reference to Hotelling’s primary disclosure of re-creating physical buttons of known devices in virtual forms. EX2005, ¶¶84-85. Thus, even if a POSITA would have been motivated to apply Figure 27A’s teachings to a main menu GUI, doing so would result in a main menu GUI that includes virtual buttons for scrolling and selecting apps, and it would be a long touch on such a virtual button, not an application icon, that would call up the menu. *Id.*, ¶¶86-89. Such functionality does not meet Limitations [1.d], [16.i], and [84.e].

Third, Petitioner points to a grab-bag of disclosures from each of Hotelling, Martyn, and Cho to provide multiple alternative mappings to Limitations [1.f], [16.k], and [84.g], which require changing “at least one aspect of the display of the

at least one menu” “[when] / [based on] a slide or swipe gesture.” Pet., 33-40. But each of these attempts either relies upon functionality that makes no sense to include or is simply plucked from a reference with no real motivation. As one example, Petitioner proposes that functionality from Martyn, a non-touch screen reference, on moving a highlight through a list of applications, be incorporated in Hotelling and a swipe used to move the highlight. *Id.*, 51. But Petitioner’s expert, Dr. Cockburn, conceded that on a touch screen device such as Hotelling “it’s not necessary to highlight” an item prior to selecting it. EX2006, 80:11-21. And, Hotelling’s Fig. 27A defines a different gesture—a touch with light pressure—not a swipe to highlight an item. EX1004, FIG. 27A. As another example, Petitioner points to a third reference, Cho, as describing a swipe to scroll the contents “of the information window” (i.e., make some list items that were not displayed visible) and proposes performing such scrolling of contents in Martyn’s “App Snapshot” as integrated into Hotelling. Pet., 38. But Dr. Cockburn conceded that Martyn’s “App Snapshot” is designed to make all items initially visible. EX2006, 82:5-90:17. Thus, there is no need to include functionality for swiping to scroll contents of the “App Snapshot” window because there is no hidden content to reveal. EX2005, ¶¶100-102.

Failure on any of these three separate sets of limitations is sufficient to reject the mapping of all Challenged Claims. And Petitioner’s mappings of dependent claims include additional flaws. As such, all Challenged Claims should be upheld.

II. OVERVIEW OF THE '212 PATENT

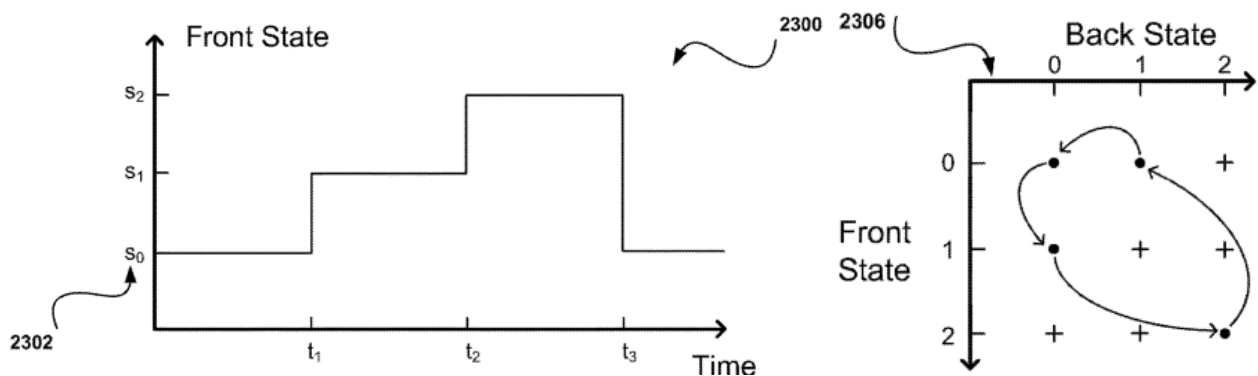
A. Multi-Part Pattern-Based Gestures

At the time of the '212 Patent's 2011 priority date,² touch screen mobile devices were becoming increasingly capable of more complex tasks that required

² While not necessary to resolve any issue in this proceeding, PO asserts that the Challenged Claims are entitled to the priority date of the '918 Provisional Application. Petitioner asserts that the '212 Patent does not have written description support in its own specification or any earlier application, but the single conclusory paragraph provides no analysis and cites no evidence to substantiate that claim. Pet., 4-5. Likewise, Dr. Cockburn includes in a footnote in his declaration a single sentence asserting that the specification does not describe the claimed features (EX1003, n.1), but when asked "[d]o you provide any analysis anywhere in Exhibit 1003 to [support] the assertion made in the second sentence of footnote 1?" he responded "No." EX2006, 98:3-7. Petitioner and Dr. Cockburn's unsubstantiated (and gratuitous where no issue before the Board rests on this point) assertions ring particularly hollow given the Petition does not even cite to the incorporation-by-reference provisional application that contains substantial written description and priority support, as discussed below, and Dr. Cockburn confirmed "I have not reviewed those provisional applications." *Id.*, 102:1-11.

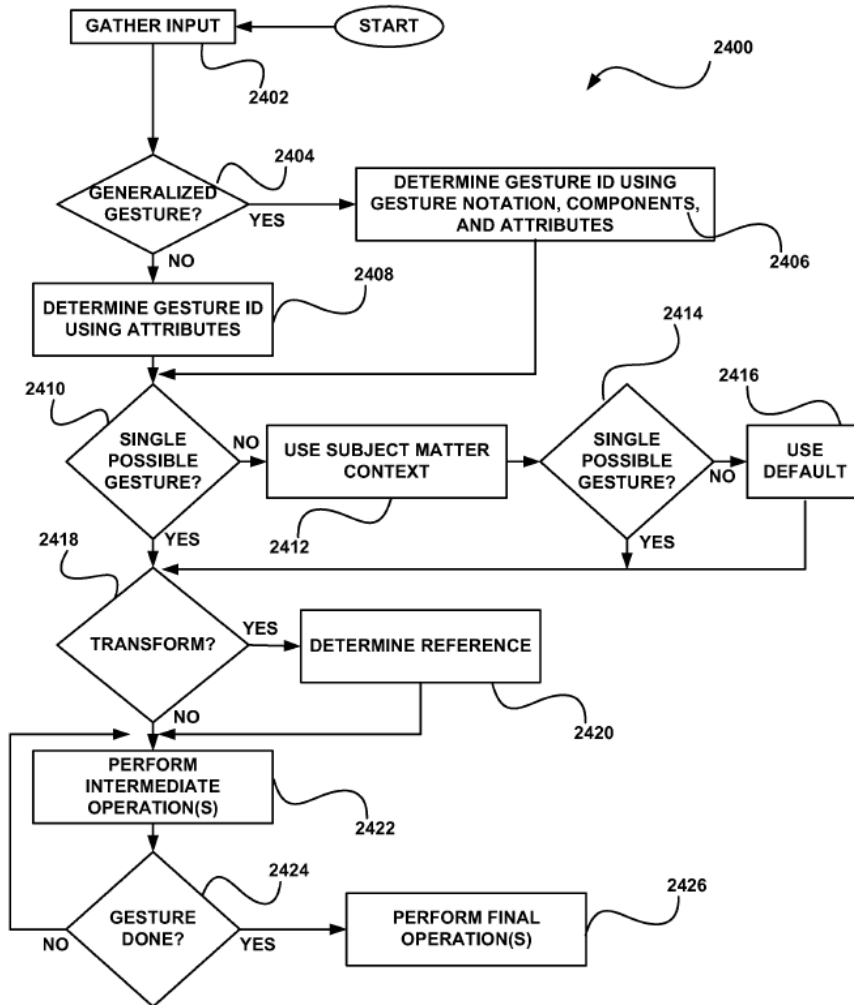
control beyond what was possible with the basic input methods known in the art. EX2005, ¶26. Further, limited screen space meant that input and output techniques used for more complex tasks on desktop computers could not be used. *Id.* The '212 Patent addresses this shortcoming by enabling users to operate these new, powerful mobile devices and their feature-rich applications through multi-part gestures where users can take successive actions and receive feedback at each stage. *Id.*

The '212 Patent describes these multi-part, multi-action gestures as “pattern-based gestures” that “may be recognized in the form of an ordered sequence” by, for example, “using a decision tree.” EX1001, 74:24-26; EX2007, [00581]. The “pattern-based gesture” may be defined as “a path through a phase space of one or more dimensions.” EX1001, 72:27-29; EX2007, [00564]. Exemplary “pattern-based gesture 2302” is “described by a phase space path which represents the time evolution of the touch state associated with a contact point” on the touch screen. EX1001, 72:41-46; EX2007, [00566].



EX1001, FIG. 23; EX2007, FIG. 28. Each state, and transitions between states, may be defined by factors including “contact point changes” and “the time spent on each leg of the path through phase space.” EX1001, 73:5-7; EX2007, [00567]-[00570]. Consistent with the “decision tree” aspect of these pattern-based gestures, multiple patterns may share the same starting (and intermediate) points. EX1001, 74:24-26; EX2007, [00581]; EX2005, ¶27.

To detect these pattern-based gestures, the '918 Provisional, which the '758 incorporates by reference (EX1001, 1:22-24), discloses “gesture differentiation,” which is distinguished from simply detecting a “basic user interaction (i.e., button press, basic application interaction, etc.),” techniques. EX2007, [00498]-[00502]. The process begins by “determin[ing] whether there is any meaningful user input,” including by applying a “threshold above which user interaction may rise before it may be deemed meaningful.” *Id.*, [00501]-[00502]. Detecting the gesture may involve “gesture subject matter context,” including “objects displayed at or near the location of the gesture.” *Id.*, [00512]. For example, the starting point may be the beginning of a touch contact at a particular location of a specific object on the touch screen. *Id.*; EX2005, ¶28.



EX2007, FIG. 24.

Again, as indicated by the flow chart, multiple complete, full patterns may share the same starting (and intermediate) points. EX2005, ¶29. Consistent with the multi-part nature, the device may perform “intermediate operations associated with the identified gesture.” EX2007, [00521]. “[E]ach execution of intermediate gesture operations may trigger a display update (i.e. rendering, etc.).” *Id.*, [00524]. One purpose of these intermediate gestures is so “a user may receive feedback on their gesture before terminating the interaction.” *Id.*, [00522].

A “gesture may be ended by ending one or more user inputs” or “by performing a different gesture” at which time “the final operations associated with the identified gesture are performed.” *Id.*, [00526]-[00528]. “For example, in one embodiment, a gesture which triggers the display of a pop-up menu and allows a user to cycle through menu items may have as a final operation the selection of the current menu item and removal of the pop-up menu.” *Id.*, [00529].

B. Independent Claims 1, 16, and 84

Challenged Independent Claims 1, 16, and 84 are substantially similar. Claim 1 is directed to a “non-transitory computer-readable media storing computer instructions.” Limitation [1.pre]. Claim 16 is directed to a “mobile device” comprising “a touch screen.” Limitations [16.pre-a]. Claim 84 is directed to a method. Limitation [84.a]

The Challenged Independent Claims each recite logic to process user inputs, some of which begin from a common starting point (the claimed “touch”), and some of which may be used after the logic has detected a second duration of the touch (the “selection touch” and “slide or swipe gesture”). EX2005, ¶32; *see* Limitations [1.pre], [16.pre-a], [84.a]. This sort of decision tree logic is described both in the ’212 Patent and in the ’918 Provisional, as explained in Section II.A. *See also* EX2005, ¶¶26-30.

The Challenged Independent Claims recite the following logic and corresponding device functionality:

- “[when] / [based on]” “a first duration of a touch” “[is] / [being] detected as ceasing,” “perform[ing] an operation.” Limitations [1.b], [16.g], [84.c].
- “[when] / [based on]” “a second duration of the touch, that is different than the first duration of the touch” “[is] / [being] detected” “after the first duration is detected without the ceasing”:
 - “output[ting] feedback that is perceptible by touch” and
 - “display[ing] at least one menu including a plurality of particular actions.”Limitations [1.c-d], [16.h-i], [84.d-e].
- “[when] / [based on] a selection touch applied to the touch screen [is] / [being] detected in connection with at least one of the particular actions of the at least one menu,” “perform[ing] the at least one particular action.” Limitations [1.e], [16.j], [84.f].
- “[when] / [based on] a slide or swipe gesture applied to the touch screen [is] / [being] detected,” “chang[ing] at least one aspect of the display of the at least one menu.” Limitations [1.f], [16.k], [84.g].

III. LEVEL OF ORDINARY SKILL

PO agrees with the level of ordinary skill in the art adopted by the Board for the purposes of the Institution Decision. *See* Paper 7, 8-9. Specifically, a POSITA:

would have had “a bachelor’s degree in computer science, computer engineering, or a comparable field and at least two years of professional experience working with graphical user interfaces and applications for computers.”

Id., 8.

PO agrees with the Board’s rejection of two other aspects of Petitioner’s proposal. *Id.*, 8-9. First, the phrase “[a]dditional years of experience could substitute for an advanced-level degree (and vice versa)” (Pet., 6) is inapplicable where the base degree is a bachelor’s degree as here and was likely a simple copy and paste error. Dr. Cockburn confirmed that striking “additional years of experience could substitute for the advanced-level degree” from his definition cited in the Petition would still leave a “complete definition.” *See* EX2006, 12:15-21.

Second, PO agrees with the Board that Petitioner’s additional statement that a POSITA “would have possessed extensive background knowledge and understanding of the pertinent technologies” in a list of specific areas (Pet., 6) should not be adopted. *See* DI, 9. This additional requirement is either redundant with the level of ordinary skill articulated above, or inconsistent to the extent it seeks to impose a level of ordinary skill beyond “a bachelor’s degree ... and at least two years

of professional experience.” EX2005, ¶25. Further, to the extent inclusion of these statements might permit Petitioner to pivot to references the Petition does not identify for a given ground and element, that is contrary to the requirement that the Petition include an “identification of particular portions of prior art on which the petitioner is relying.” *Corephotonics, Ltd. v. Apple Inc.*, 84 F.4th 990, 1001 (Fed. Cir. 2023).

IV. CLAIM CONSTRUCTION

A. “Conditional” Limitations³

Limitations [1.b-f], [16.g-k], [84.c-g] collectively recite logic and functionality for paths of a decision tree, support for each of which is necessary to meet the claims. Limitation [1.b] describes one path’s logic: “[when] / [based on] a first duration of a touch [being applied to the touch screen is] / [applied to the touch screen being] detected as ceasing in connection with the indicia,” and Limitations [1.c-d] describe another path’s logic: “[when] / [based on] a second duration of the touch ... [being applied to the touch screen is] / [applied to the touch screen being] detected in connection with the indicia after the first duration is detected without the

³ PO uses the term “conditional” limitation to refer to limitations that recite an action to be performed when a precondition is met without conceding such form is subject to any particular case law.

ceasing.” These Limitations collectively describe logical functions/steps to process instances of user input on a touch screen that begin from a common starting point—the start of “a touch being applied to the touch screen ... in connection with the indicia.” EX2005, ¶34. This is consistent with “decision-tree” and detection logic for detecting multi-part pattern-based gestures as described in connection with Figure 23 of the ’212 Patent and Figure 24 of the incorporated-by-reference ’918 provisional as further discussed in Section II.A, above. EX2005, ¶35.⁴

Limitation [1.b] will not be met during the same instance of a user touch as Limitations [1.c-d] (and vice versa), but that is not a basis, as a matter of law, to relieve Petitioner from demonstrating the alleged prior art combination includes *logic* meeting each Limitation such that each Limitation will be performed when

⁴ While PO has demonstrated that the plain language of the claims is consistent with the specification disclosure, PO respectfully notes that it was not incumbent on PO to do so, nor would the lack of any specific embodiment be a justification to ignore the plain language. As the Federal Circuit recently reaffirmed, “the patentee is free to choose a term and expect to obtain the full scope of its plain and ordinary meaning unless the patentee explicitly redefines the term or disavows its full scope.” *Iqris Techs. LLC v. Point Blank Enters., Inc.*, 130 F.4th 998, 2025 U.S. App. LEXIS 5316, *13 (Fed. Cir. Mar. 7, 2025).

presented with an instance of user input “where their preconditions apply.” *See Sierra Wireless, ULC v. Sisvel S.P.A.*, 130 F.4th 1019, 2025 U.S. App. LEXIS 5458, *5 (Fed. Cir. Mar. 10, 2025). As an initial matter, *Ex Parte Schulhauser* at best, applies only to claim 84, which is a method claim. No. APPEAL 2013-007847, 2016 WL 6277792 (P.T.A.B. Apr. 28, 2016) (precedential) (applying BRI standard). “[A] **system claim** [reciting] structure that performs a function, which only needs to occur if a condition precedent is met, **still requires structure for performing the function should the condition occur.**” *Id.*, *7; *see also Ex Parte John Rebstock & Christopher K. Schrichte*, No. APPEAL 2022-003164, 2023 WL 4643799, *4 (P.T.A.B. June 23, 2023) (“We construe the scope of the computer program product claim 17, as being such that the computer program has the capability of performing operations of both the alternatives”).

As to claim 84, nothing in the plain language suggests any of the recited conditional Limitations are optional or may be ignored in mapping the prior art. Rather, “the plain and unambiguous language” of the claims requires that “to come within the claim” each element must be performed “where their preconditions apply.” *See Sierra Wireless*, 2025 U.S. App. LEXIS 5458 at *5. In *Sierra Wireless*, the Federal Circuit emphasized the “and” between two method steps that the Board had deemed “cannot both occur in response to the same set of stimuli” as indicating each step must be performed “where their preconditions apply.” *Id.*, *4-5. Like in

Sierra Wireless, the claims here link the conditional limitations with “and,” indicating each Limitation must be performed where their preconditions apply. *See* Limitations [1.e], [16.j], [84.f]. Further, claim 84 more closely resembles the claim the Federal Circuit addressed in *Hytera Communications Co. v. Motorola Solutions, Inc.*, 841 F. App’x 210 (Fed. Cir. 2021), which distinguished *Schulhauser*. There, the Federal Circuit found the method claim at issue “requires that a specific action be taken in response to each of two alternative specified conditions,” and the claim “is not met unless the TDMA system is configured to perform each claimed responsive action.” *Id.*, 216; *see also Ex Parte Brosius*, Appeal No. 2010-001734, 4-5 (BPAI January 19, 2012) (citing to *Altiris, Inc. v. Symantec Corp.*, 318 F.3d 1363 at 1372 (Fed. Cir. 2003) (holding that two conditional method “limitations (b) and (c) are not optional because if their condition is satisfied, these limitations *require* certain steps to be performed” (emphasis in original))).

The same is true here. Claim 84 includes multiple conditional steps that specify different actions based on evaluation of the touch input against various criteria that must be performed when a precondition is met. EX2005, ¶36. Each condition leads to a different action, or set of actions, and understanding the claim fully requires evaluating all possible conditions and their corresponding actions. *Id.* Further, like the recitation of “in a TDMA system” in the *Hytera* claims, claim 84 here recites the context of the method being performed “at a mobile device including

a touch screen” (Limitation [84.a]), which, as discussed above, connotes a group of logic all expected to be met when a given precondition applies. EX2005, ¶36.

V. OVERVIEW OF THE PRIOR ART

A. Hotelling

Hotelling discloses a “multi-functional hand-held device capable of configuring user inputs based on how the device is to be used.” EX1004, Abstract, [0009]. The goal of the multi-functional hand-held device of Hotelling is to “integrate[] at least two [traditional] devices” (such as a PDA, cell phone, camera, music player, etc.) into a single device. EX1004, [0048], EX2005, ¶37.

Hotelling recognized that, as “traditionally separate hand-held electronic devices have begun to be combined ... [i]t is a challenge to design a merged device with limited input devices without adversely affecting the dedicated inputs for each device.” EX1004, [0006]-[0007]. Specifically, “there is not enough space on the [merged] device to house all the necessary buttons and switches” to accommodate the “particular set of input mechanisms for providing inputs” used by each separate legacy device. *Id.* Also, “it is preferable, not to overload the hand-held devices with a large number of input mechanisms as this tends to confuse the user.” *Id.*

To overcome this problem, Hotelling describes “virtually incorporating the physical inputs for each functionality into the GUI,” which “adapt[s] to whatever device is selected.” EX1004, [0069]. Then, the device has “a GUI for each

functionality.” *Id.* By replacing physical buttons with virtual buttons on a touch screen, Hotelling’s design has the added benefit that the “display size can be substantially increased.” EX1004, [0009], *see also* EX2005, ¶39.

Hotelling also discloses the use of a “haptics mechanism” to “enhance the feel of actuating a GUI element” or to provide “alert[s]” to the user. EX1004, [0161]-[0163]. Hotelling explained “[t]his particular feature enhances the users experience and makes the virtual UI feel more like a physical UI.” EX1004, [0161], EX2005, ¶40. “For example, in response to touching a virtual button of the GUI, the haptics may provide force feedback in the form of vibration and the speaker may provide audio feedback in the form of a click.” EX1004, [0163]. This feedback tells the user that “they actually implemented an input” by “simulat[ing] the audio and tactile feel of a button or switch.” *Id.* Alternatively, the feedback “may be used to simulate a button click” through a “click” and “clock” output “when a hard touch is made.” *Id.*

The Petition focuses specifically on two separate GUI’s of Hotelling—one shown in Figure 18 and another in Figure 11, which are described in more detail below.

1. Figure 18: “an exemplary GUI for a main menu”

Hotelling discloses “an exemplary main menu GUI 260 of a multi-functional device” as illustrated in Figure 18. EX1004, [0085], FIG. 18 (inset below).

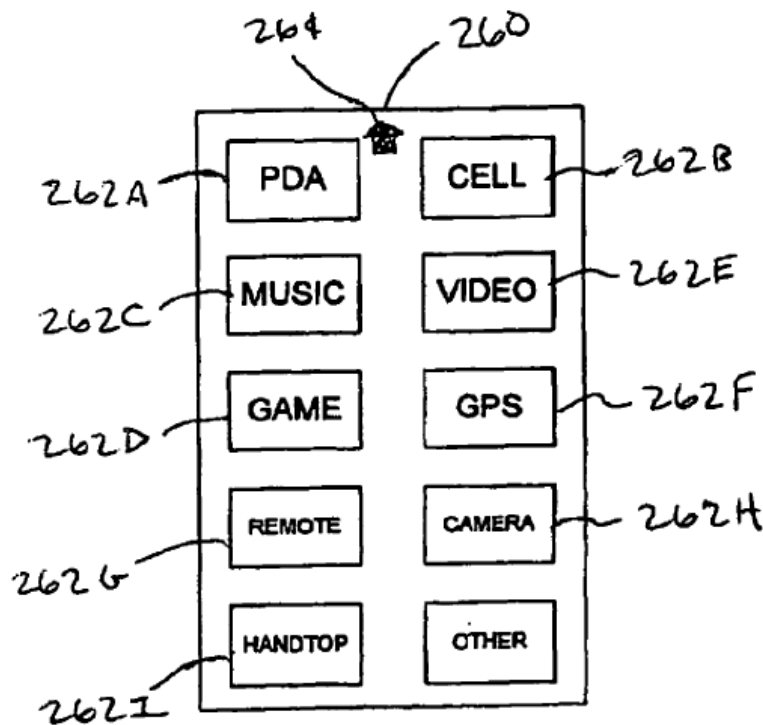
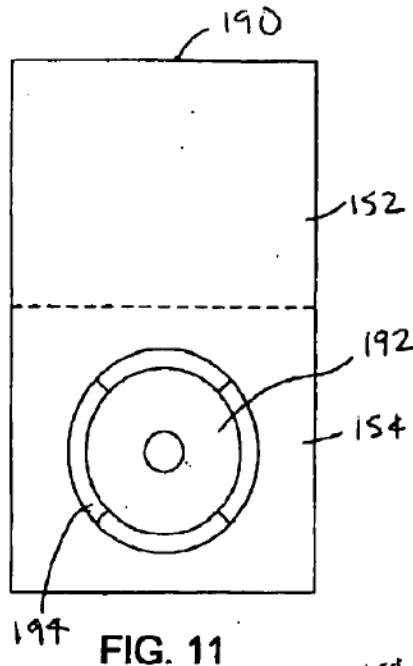


FIG. 18

EX1004, FIG. 18. When the user selects one of the various “virtual buttons” (e.g., “a music player button 262C”) shown in the figure, “the main page for the selected functional[ity]” is shown on the display. EX1004, [0085]. If the user wishes to select a different functionality, “the user simply selects a soft home button ... to return to the main menu page 260.” *Id.* This design ensures that, “[b]y keeping different functionalities distinct, user confusion may be reduced.” EX1004, [0091], EX2005, ¶42.

2. **Figure 11: “an exemplary GUI for a media player”**

Separately, Hotelling discloses “an exemplary GUI for a media player.” EX1004, [0022], [0077], FIG. 11 (inset below).



EX1004, FIG. 11. Consistent with Hotelling’s goal of providing “a GUI for each functionality” (EX1004, [0069]), a POSITA would understand that Figures 18 and 11 disclose distinct GUIs, each with their own functionality and related inputs. EX2005, ¶43. Specifically, Figure 11 depicts a “GUI 190 that is used in a music player mode.” EX1004, [0077]. The “music player mode” GUI is “divided into a standard region 152 and a control region 154.” *Id.* The “control region” further contains a “virtual scroll wheel 192 and five virtual buttons 194.” *Id.*

“FIGS. 27A-E are tables representing one example of a touch vocabulary *associated with a music player.*” *Id.*, [0038]; *see also id.*, [0151] (“One example of

a touch vocabulary associated with a music player is shown in FIGS. 27A-E.”). Consistent with this description, a POSITA would understand that Hotelling’s disclosure relating to FIGS. 27A-E is part of the disclosure of “a music player” GUI, i.e., the Figure 11 GUI. EX2005, ¶44.

A “touch vocabulary” is a set of “behaviors and user feedback” that a device can display based on a set of input variables, including “the UI mode, the force of the touch (e.g., light or hard), the number of fingers used, whether or not there is any movement during the touch, the duration of the touch, and the touch location.” EX1004, [0145]-[0150], FIG. 26, EX2005, ¶45. Figure 27A (inset below) discloses an example of a touch vocabulary that would recreate the button functionality commonly found on portable music players using the “virtual buttons” shown in Figure 11. *See* EX1004, [0038], EX2005, ¶45.

#	UI Mode	Light Touch or Tactile Click	# Fingers used	Movement during touch or click	Duration	Touchdown location (virtual button?)	Proposed Behavior	Feedback
Basic list navigation								
List Nav.	light		1	none	any	anywhere	On touch-down, do nothing. On lift-off, highlight item (if any) under touch	highlight item touched
List Nav.	click		1	NONE	short	virtual button / list item	On touch-down, do nothing. On click-down highlight item under touch (if any). On un-click, execute the item clicked	animate screen sliding RIGHT to expose new screen
List Nav.	click		1	NONE	short	PLAY / PAUSE virtual button	On touch-down, do nothing. On click-down highlight Play/Pause icon. On un-click, PLAY/PAUSE	Change PLAY/PAUSE icon
List Nav.	click		1	NONE	LONG	virtual button	On touch-down, do nothing. On click-down highlight item under touch (if any). After delay, bring-up context sensitive menu.	Context sensitive menu pop-up
List Nav.	light or click		1	UP/DOWN	any	anywhere	On touch-down, do nothing. Scroll list UP/DOWN depending on UP/DOWN distance moved, use inertia & brakes, disregard LEFT/RIGHT motion during gesture. If highlighted item slides off visible screen, change highlighted item to one that is visible.	list scrolling UP/DOWN, first few letters enlarged
List Nav.	light or click		1	LEFT	any	anywhere	On touch-down, do nothing. On left motion, open highlighted folder or execute highlighted item (like legacy SELECT button)	animate screen sliding LEFT
List Nav.	light or click		1	RIGHT	any	anywhere	On touch-down, do nothing. On right motion, go back out a folder (like legacy MENU function)	animate screen sliding RIGHT

FIG. 27A

EX1004, FIG. 27A, *see also* [0038]. As shown in the figure, this “touch vocabulary” recreates the features that required physical buttons on “legacy” music players, such as “PLAY/PAUSE,” “SELECT,” or “MENU.” EX2005, ¶45, *see also* EX1004, FIG. 27A.

B. Martyn

Martyn, filed nearly five years before Hotelling, discloses an “application summary window⁵” for “small screen devices.” EX1005, [0009], EX2005, ¶46. The summary window displays “a limited list of common functions and commonly accessed stored data” that “saves the user from navigating to the required application, opening it up, and then navigating within that application to enable the data of interest to be seen.” EX1005, [0009]-[0015]. In short, Martyn discloses a “snap-shot view” of the application’s data and functions. EX1005 [0010].

This “‘snap-shot’ view” 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.” *Id.*

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

⁵ Martyn uses several different terms interchangeably: “App Snapshot,” “summary window,” and “snapshot view.” EX1005, [0009]-[0010], [0015], [0017]-[0026], [0028]-[0031].

... presented as a standard scrolling list of application[s].” *Id.* “The list is vertical and only one application is presented per line.” Navigating this view is accomplished by “[s]tandard highlight functions.” *Id.* A “highlight” indicates which application the user currently has the choice of selecting. *Id.* 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.” *Id.*

“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.” *Id.* 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.” *Id.* 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

Id., Figure 1 (annotated).

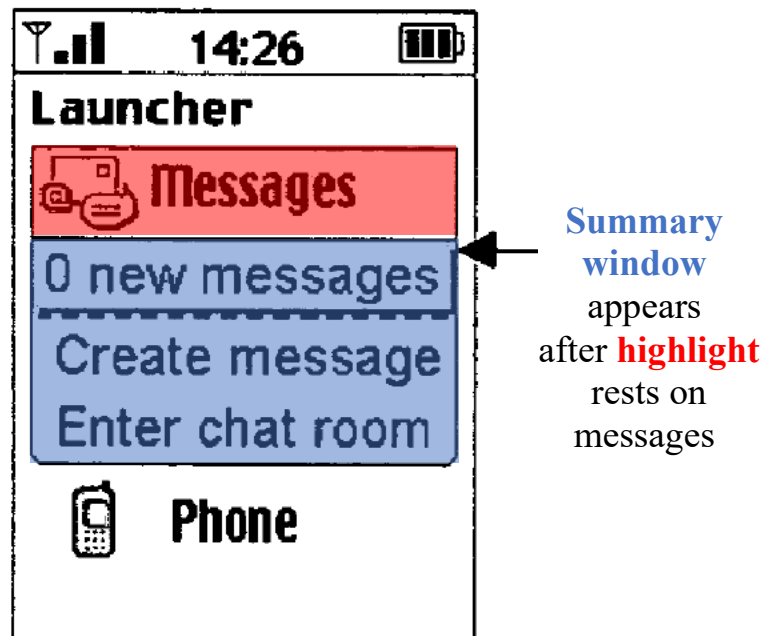


Figure 2

Id., Figure 2 (annotated).

Martyn also discloses multiple 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.” *Id.*, [0021]. “If scroll functions (e.g. right scroll) call the App Snapshot the opposite scroll function removes the snapshot.” *Id.*, [0022].

VI. PETITIONER’S PROPOSED MODIFICATIONS OF HOTELLING’S MAIN MENU GUI TO ADD THE ACTIONS RECITED IN LIMITATIONS [1.C-D], [16.H-F], AND [84.D-E] DO NOT MEET THE REQUIREMENT TO PERFORM THOSE ACTIONS “WHEN” / “BASED ON” THE RECITED CONDITION

A. Limitations [1.c], [16.h], [84.d]: “[when] / [based on] a second duration of the touch . . . [is] / [being] detected . . . output feedback that is perceptible by touch”

Limitations [1.c], [16.h], [84.d] do not simply recite “output[ting] feedback that is perceptible by touch, utilizing the actuator,” they recite doing so “[when] / [based on] a second duration of the touch, that is different than the first duration of the touch, being applied to the touch screen [is] / [being] detected in connection with the indicia after the first duration is detected without the ceasing.” Together with Limitations [1.d], [16.i], [84.d], which recite “display[ing] at least one menu including a plurality of particular actions” “[when] / [based on]” the same condition, these limitations recite providing visual and haptic feedback during an ongoing gesture. This advantageously guides the user through a multi-part gesture. EX2005,

¶51; EX2007, [00522] (“a user may receive feedback on their gesture before terminating the interaction”), [00524] (“each execution of intermediate gesture operations may trigger a display update (i.e. rendering, etc.)”).

In connection with the Figure 18 “GUI for a main menu” that is the basis of Petitioner’s mapping, Hotelling does not describe performing *any* action “[when] / [based on] a second duration of the touch, that is different than the first duration of the touch, being applied to the touch screen [is] / [being] detected in connection with the indicia after the first duration is detected without the ceasing.” EX1004, [0085]-[0091]. Rather, Petitioner proposes modifying the functionality of the Figure 18 “GUI for a main menu” to include: (a) Martyn’s disclosure of an “app snapshot” context menu, (b) Hotelling’s Fig. 27A disclosure of a “long” touch in a “List Nav” UI mode for a “music player,” *and* (c) Hotelling’s references to “tactile feedback.” Pet., 26-29.

The problem for Petitioner is Hotelling describes providing feedback for specific purposes—“mak[ing] the virtual UI feel more like a physical UI” and to “work similarly to the [alert] indicators.” EX1004, [0160]-[0163]. Applying those teachings to modify the Figure 18 “GUI for a main menu” results in adding “tactile feedback” when / based on conditions that do not match the Challenged Claims. EX2005, ¶53. Perhaps aware of the mismatch in Hotelling’s teachings and the Asserted Claims, Petitioner alternatively asserts that it was obvious to incorporate

tactile feedback “for this purpose” as a “well known solution to a longstanding problem.” Pet., 28-29. But 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, 13-14 (PTAB Oct. 16, 2018); *see also KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007) (“[A] patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art.”).

1. Applying Hotelling’s disclosure of haptics to simulate physical button presses does not result in the claims

Petitioner asserts: “Hotelling explains that ‘tactile...feedback can be used in conjunction with an input event including touch events’—e.g., short and long (second) duration touches on ‘a virtual button.’” Pet., 28. The actual context of this partial quotation does not support interpreting “touch events” to include “long (second) duration touches on ‘a virtual button.’” EX2005, ¶55. Rather, Hotelling repeatedly and consistently explains that “haptics mechanism” “may be used to *enhance the feel of actuality a GUI element such as a soft button or scroll wheel*,” which “enhances the users experience and *makes the virtual UI feel more like a physical UI*.” EX1004, [0161]; *see also id.*, [0067]-[0070].

Based on these disclosures, a POSITA would understand that implementing Hotelling’s disclosure to simulate interacting with a physical control would entail

providing haptic feedback upon the initial press and/or upon release—**not** when a time threshold of holding down a button is passed because there is no tactile response of a physical button **during** an ongoing hold. EX2005, ¶56. There is no basis to interpret the words “input event” more broadly than this stated purpose. The very paragraph Petitioner quotes repeatedly emphasizes providing feedback to simulate the physical button—**not** an “input event” that has no impact on a physical button:

Audio and/or tactile feedback may be used to alert a user that a user input has been made. For example, *in response to touching a virtual button on the GUI, the haptics may provide force feedback in the form of vibration* and the speaker may provide audio feedback in the form of a click. The tactile audio feedback can be used in conjunction with **an input event** including touch events, motion events, squeeze events. The feedback may provide information so that the user knows that they actually implemented an input (*simulates the audio and tactile feel of a button or switch*). In one implementation, the feedback is tied to the level of force being applied to the force sensing devices. For example, when a certain force threshold is reached, the audio feedback device may create *a “click” on the press and a “clock” on the release*. The force threshold used may be similar to the threshold used to determine whether a touch is a light or hard touch. *The “click” and “clock” may be used to simulate a button click when a hard touch is made.*

Id., [0163]; EX2005, ¶56.

Thus, a POSITA would have understood Hotelling to disclose “outputting tactile feedback” with a haptics mechanism in order to **mimic physical buttons** by

providing haptic feedback upon the initial press and/or upon release—**not** when a time threshold of holding down a button is passed. EX2005, ¶57. Such functionality does not meet the plain language of Limitations [1.c], [16.h], and [84.d], which require providing haptic feedback “[when] / [based on] a second duration of the touch.” *Id.*

The Board found, on a preliminary record, that “Hotelling teaches haptics ‘alert[ing] a user that a **user input** has been made.’” D.I., at 23-24. However, that finding did not address whether a “long (second) duration touch[] on ‘a virtual button’” is the type of “user input” being referenced in the cited passage Hotelling as Petitioner assumes without analysis. As discussed above, it is not.

2. *Applying Hotelling’s disclosure of haptics as alert indicators does not result in the claims*

The same passage in Hotelling that describes using haptics to simulate physical button presses also states: “The haptics mechanism may work similarly **to the indicators described above (alert)...**” EX1004, [0161]. The D.I. paraphrased this passage to support a finding that Hotelling’s disclosure of is broader than using haptics to simulate a physical UI element. *See* D.I., 23-24. To be clear, Petitioner does not reference (beyond citing the paragraph including this text) or rely on this disclosure. Pet., 28-29. Respectfully, this passage does not support interpreting Hotelling’s disclosure of providing haptic feedback for touches on virtual buttons because “the indicators described above (alert)” has nothing to do with virtual button

touches. EX2005, ¶¶59-61. Rather, “the indicators described above” include “signals, conditions, or status of the device, including” “status of battery life or *alert* a user when there is an incoming call.” EX1004, [0158]-[0159]; EX2005, ¶60. A POSITA would have understood this exemplary list of alerts to refer to the status of the device, not indicating detection of a particular user input gesture. EX2005, ¶61. Thus, this passage (which Petitioner does not cite) cannot change the conclusion that Hotelling discloses providing haptics associated with touches on a virtual button to simulate a physical button press, which does not include haptics based on a “long (second) duration touches on ‘a virtual button.’” *Id.*

3. Petitioner’s “obviousness” theory relies on hindsight

Petitioner asserts: “Alternatively, it would have been obvious for a POSITA to implement Hotelling’s teachings such that the output of feedback that is perceptible by touch occurs in response to detecting a ‘long’ (second) duration of the touch,” providing two reasons. Pet., 28-29. The first reason is a repeat of the inaccurate characterization of Hotelling’s purported “express suggestion.” *Id.*, 28. This reason fails because there is no “express suggestion” as explained in Section VI.A.1, above. EX2005, ¶62.

The second reason is a generic argument that any form of haptics is “well-known.” Pet., 28-29. The evidence Petitioner cites, including Paragraphs 128-30 of Dr. Cockburn’s declaration, demonstrate, at best, that haptics generally has value,

but says nothing about using haptics in response to a touch on a virtual button for any reason other than to simulate a physical button press. Rather, the cited portion of Dr. Cockburn’s declaration just reiterates what Hotelling already discloses: “an improved user experience *from making virtual buttons feel more like physical buttons.*” EX1003, ¶129. As discussed above, providing haptic feedback to make virtual buttons feel more like physical buttons does not result in providing haptic feedback upon detection of a long touch. EX2005, ¶¶55-57, 64.

The only assertion specific to haptics in response to a long touch Petitioner makes is: “The POSITA, appreciating that the user should be notified of this event and given a cue to interact with the menu, would have been motivated to use the widespread solution of tactile feedback.” Pet., 29. That is textbook hindsight. Petitioner does not identify anything in the record on this point except an identical conclusory statement from Dr. Cockburn. *Id.* The cited Paragraph of Dr. Cockburn’s declaration cites no evidence beyond Hotelling and just generically references “design trends and market forces.” EX1003, ¶130. “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.” *Johns Manville*, IPR2018-00827, Paper 9, 13-14. The only place this concept appears in the record is the ’212 Patent claims and specification. *See* EX2007, [00522] (explaining the use of intermediate

gestures where “a user may receive feedback on their gesture before terminating the interaction”).

Petitioner’s obviousness analysis is also inadequate because the proposed additional haptics conflicts with the use of haptics Hotelling actually discloses. As discussed, Hotelling discloses using haptics to simulate the physical press and release of a virtual button. EX1004, [0163]; EX2005, ¶¶55-57, 64. For this functionality, the user receives expected haptic feedback on the initial press and would not expect additional feedback while the touch is ongoing until the release. EX2005, ¶64. Providing haptic feedback while the touch is ongoing *before the release* when a time threshold was exceeded as Petitioner proposes would confuse the user and cause the user to assume the device had incorrectly detected a release. *Id.* Thus, Hotelling not only does not disclose providing the feedback Petitioner proposes, but doing would conflicts with Hotelling’s actual disclosure. *Id.*

Accordingly, Hotelling neither discloses nor renders obvious providing haptic feedback upon detection of a long press and implementing the haptic feedback Hotelling does disclose does not meet the Limitations. EX2005, ¶65.

B. Limitations [1.d], [16.i], [84.e] “[when] / [based on] the second duration of the touch ... [is] / [being] detected ... display at least one menu including a plurality of particular actions”

1. *Petitioner fails to provide reasoned analysis for why a POSITA would combine disparate teaches of Hotelling*

Limitations [1.d], [16.i], [84.e] do not simply recite “display[ing] at least one menu including a plurality of particular actions,” they recite doing so “[when] / [based on] the second duration of the touch, that is different than the first duration of the touch, being applied to the touch screen [is] / [being] detected in connection with the indicia after the first duration is detected without the ceasing.”

In connection with the Figure 18 “GUI for a main menu,” which serves as the base of Petitioner’s mapping, Hotelling does ***not*** describe: (a) displaying a context menu for any of the “icons/buttons 262 for launching each of the various device functionalities,” or (b) performing ***any*** action “[when] / [based on] a second duration of the touch, that is different than the first duration of the touch, being applied to the touch screen [is] / [being] detected in connection with the indicia after the first duration is detected without the ceasing.” EX1004, [0085]-[0091]. Thus, Petitioner must propose substantial modifications to reach this element. Petitioner proposes modifying the functionality of the Figure 18 “GUI for a main menu” by: (1) adopting the “App Snapshot” of Martyn, (2) applying it to the “exemplary main menu GUI 260 of a multi-functional device” shown in Figure 18 of Hotelling, and (3) using the

input gestures of Figure 27A’s “touch vocabulary associated with a music player” with the “exemplary main menu GUI 260” of Figure 18. Pet., 22-33.

While the Petition addresses why a POSITA would perform steps (1) and (2), it is *silent* on why a POSITA would perform step (3). This is fatal because, as discussed in Sections VI.B.2-VI.B.3, below, Hotelling itself does not instruct a POSITA to apply Figure 27A to Figure 18 or even describe them as compatible. Thus, Petitioner’s proposal to apply Figure 27A to Figure 18 is not an application of the teachings of Hotelling, but rather a modification for which Petitioner was obligated to provide a reason. *See St. Jude Med., LLC v. Snyders Heart Valve LLC*, 977 F.3d 1232, 1242-43 (Fed. Cir. 2020); *Intelligent Bio-Sys., Inc. v. Illumina Cambridge Ltd.*, 821 F.3d 1359, 1367-68 (Fed. Cir. 2016) (citing *Kinetic Concepts, Inc. v. Smith & Nephew, Inc.*, 688 F.3d 1342, 1360 (Fed. Cir. 2012)).

Rather than justify its proposed combination, the Petition mixes and matches unrelated disclosures of Hotelling without analyzing or even addressing the relation (or lack thereof) of those disclosures. *See, e.g.*, Pet., 22 (“Hotelling describes a GUI 260 providing a ‘main menu page’”), 23 (depicting “GUI 260” of Hotelling), 26 (“Hotelling’s Figure 27A (below) depicts an exemplary touch vocabulary [for a music player]”). Dr. Cockburn also does not explain why a POSITA would understand Hotelling’s teachings for a “music player” to apply to a “main menu,”

ignoring this obvious discontinuity in the Petition’s mapping of Hotelling. *See* EX1003, ¶¶121-124, 131-132.

Petitioner’s failure to provide reasoned analysis for the modification fundamental to its mapping of these Limitations is dispositive. Since the D.I., the Federal Circuit has reaffirmed the principle that “[u]ltimately, it is the petitioner’s burden to present a clear argument.” *Apple Inc. v. Gesture Tech. Partners, LLC*, 2025 WL 679196, at *5 (Fed. Cir. Mar. 4, 2025) (citing *Netflix, Inc. v. DivX, LLC*, 84 F.4th 1371, 1377 (Fed. Cir. 2023)); *see also Intelligent Bio-Systems*, 821 F.3d at 1369. While the D.I. concludes, on a preliminary record (and for reasons not consistent with the full record as discussed below), that it would be obvious to apply Hotelling’s disclosures to “all user input GUIs⁶,” respectfully, that is not the question before the Board. The question before the Board is whether the Petition explained why Hotelling’s disclosure of a touch vocabulary that Hotelling repeatedly and exclusively states applies to a “music player” applies to its main menu GUI, which is not a music player. It did not, and therefore the Petition fails. *See St. Jude*, 977 F.3d, 1242 (“It was [Petitioner’s] burden to support its assertion by a preponderance

⁶ In reaching this conclusion, the Board did not cite to any portion of the Petition and cited no evidence from Hotelling that supports the general application of the specific gestures disclosed in Figures 27A-E. *See* D.I., 19.

of evidence.”); *Gesture Tech.*, 2025 WL 679196, at *5; *see also* D.I., 19 (“we do not, on the present record, determine that Hotelling limits its disclosed recognition of touch gestures ... only to the music player ... rather than to all user input GUIs.”).

In sum, as discussed below, Hotelling does not describe Figure 27A as applicable to Figure 18 or even describe them as compatible. Further, even if a POSITA had plowed ahead, without reason, in seeking to apply the cited disclosure of Figure 27A to modify Figure 18, a POSITA would have found Figure 27A’s teachings incompatible. EX2005, ¶¶68-70, 75-81. Thus, the Petition fails both procedurally (lack of reasoned analysis) and factually (Hotelling does not teach or suggest what is asserted in the Petition). *Id.*, ¶82.

2. *Figures 27A-E of Hotelling relate to a music player, not a main menu*

Hotelling exclusively, repeatedly, and consistently describes Figures 27A-E as “a touch vocabulary *associated with a music player.*” *See* EX1004, [0038], [0151]. Nowhere does Hotelling describe or suggest the use of Figures 27A-E outside of “*a music player.*” *Id.*

There is no credible argument that Figure 18 is a GUI for a music player. Hotelling describes Figure 18 as a “main menu GUI.” *Id.*, [0029], [0085]. Nor does Figure 18 illustrate a music player.

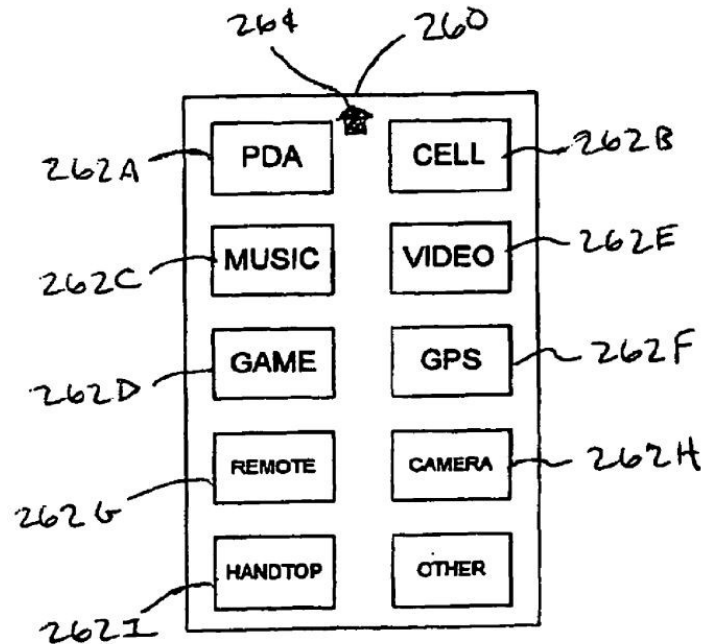
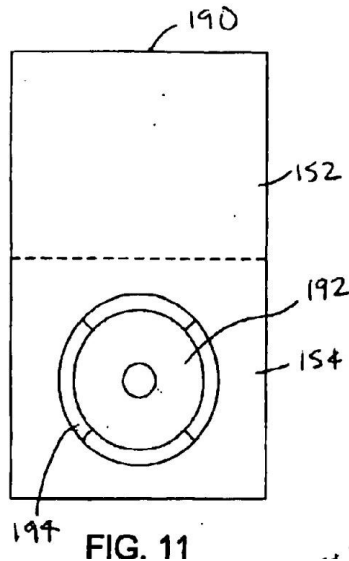


FIG. 18

Id., FIG. 18. Over repeated questioning, Dr. Cockburn refused to concede the obvious: Figure 18 is not a music player GUI. EX2006, 17:13-28:10. But when pressed as to what music player functions Figure 18 included, all he could say is that Figure 18 “will launch,” “provides access to,” and “is associated with” a music player. *Id.*, 17:21-19:20 (“this graphical user interface provides access to a music player”), (“Figure 18 provides a graphical user interface that is associated with a music player”), (“this representation of the graphical user interface in Figure 18 will launch a music player”). That is not what Hotelling describes as a music player: “Music players are generally configured to store, process and output music.” EX1004, [0046]. Rather, Dr. Cockburn’s words that Figure 18 allows launching of

a music player confirms that Figure 18 is not, itself, a music player—or there would be no need to “launch” something else. EX2005, ¶68.⁷

Further, Figure 18 stands in contrast to Hotelling’s actual disclosure of “an exemplary GUI for a media player” shown in Figure 11. EX1004, [0022].



⁷ Dr. Cockburn also insisted that Figure 18 includes music player functionality because a long touch on the music player button 262C would allegedly display a context menu with “functions associated with a music player.” EX2006, 22:7-14. This is not taught by Hotelling. This is the Petition’s proposed combination. Further, Dr. Cockburn’s logic is circular. In essence, his argument is that a POSITA would understand Figure 18 to be associated with a music player and, therefore, apply Figures 27A-E to Figure 18 because, when you apply Figures 27A-E to Figure 18, it is associated with a music player. This is illogical.

Id., FIG. 11. This is the GUI that is launched when music player button 262C is pressed and is the exemplary GUI in Hotelling that is associated with a music player. EX2005, ¶68; *see* EX1004, [0085] (“When a button [262] is pressed, the main page for the selected functional[ity] (*e.g., as shown in FIGS. 9-17*) is brought into view on the display.”), [0077] (“FIG. 11 is a diagram of a GUI 190 that is *used in a music player mode.*”).

Accordingly, Hotelling does not include anything that instructs a POSITA to use Figure 27A with Figure 18’s “main menu GUI.” EX2005, ¶69, 75-81. Thus, Petitioner’s application of Figure 27A to Figure 18 is *not* an application of Hotelling’s teachings, but is, at best, an argument that it would have been obvious to modify—an argument that Petitioner fails to justify.

3. *Applying Figure 27 to a main menu GUI does not result in the claim*

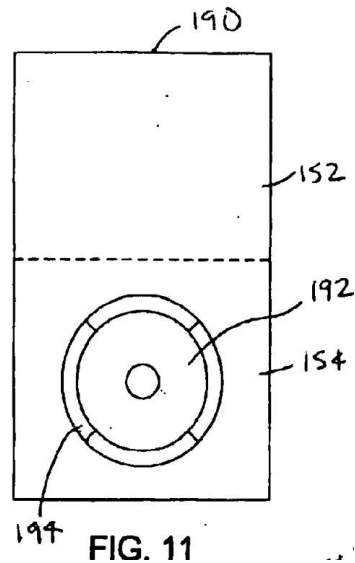
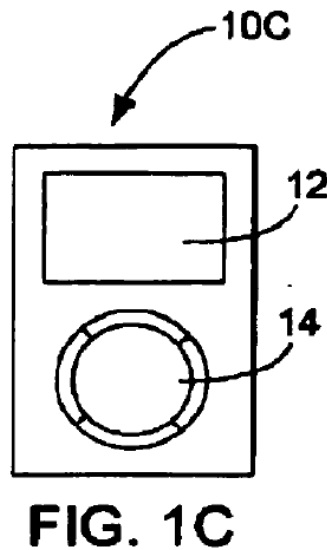
Even if one were to assume, despite no supporting language in Hotelling, that Figure 27A was intended to be applied more broadly, the specific portions of Figure 27A upon which Petitioner relies assume a specific type of GUI that does not match Figure 18. EX2005, ¶83. Thus if a POSITA, absent any real motivation, endeavored to apply the disclosure of Figure 27A to a main menu GUI, doing so would result in a modification that does not match the claims. *Id.*

In addition to the specification’s repeated statements describing Figure 27A as “associated with a music player,” Figure 27A describes itself as a “List Nav” “UI

Mode” (as opposed to other music player UI modes such as Figure 27C’s “Now Playing” “UI Mode”). EX1004, FIGs. 27A, 27C. And, Figure 27A’s “touch vocabulary” includes entries specifying the required location of the touch for various behaviors, specifying for rows 1-4, respectively, “anywhere,” “virtual button / list item,” “PLAY / PAUSE virtual button,” and “virtual button.” By including on Row 2 both “virtual button” and “list item” and including only “virtual button” in Row 4 (the row Petitioner’s mapping relies upon), Hotelling: (1) makes clear that Figure 27A requires a UI that distinguishes between a “virtual button” and “list item,” and (2) teaches away from applying a long touch to a “list item” to call up a pop up menu. EX2005, ¶84.

Not surprisingly, a POSITA can easily apply Figure 27A’s teachings to their intended target—the music player GUI of Figure 11. EX2005, ¶85. Dr. Cockburn agreed that Figure 27A’s reference to “*list items*” would be understood to refer to a list of items such as songs that would be “presented in the display region 152.” EX2006, 47:2-18; EX2005, ¶85. Following Figure 11’s labels, the “virtual buttons,” including the “PLAY / PAUSE virtual button,” referenced in Figure 27A corresponds to “five virtual buttons 194” “[l]ocated inside the control region 154.” EX1004, [0077]; EX2005, ¶85. Thus, in Figure 11, “virtual buttons” refer to the items in the “control region” as opposed to “list items” in the “display region” that are also selectable via touch. EX2005, ¶85. Here, Figure 11’s “exemplary GUI for

a media player” replicates Figure 1C’s “media player 10C” that includes a “display 12” and “one or more [physical] input devices 14.” EX1004, [0022], [0004]; EX2005, ¶85.⁸



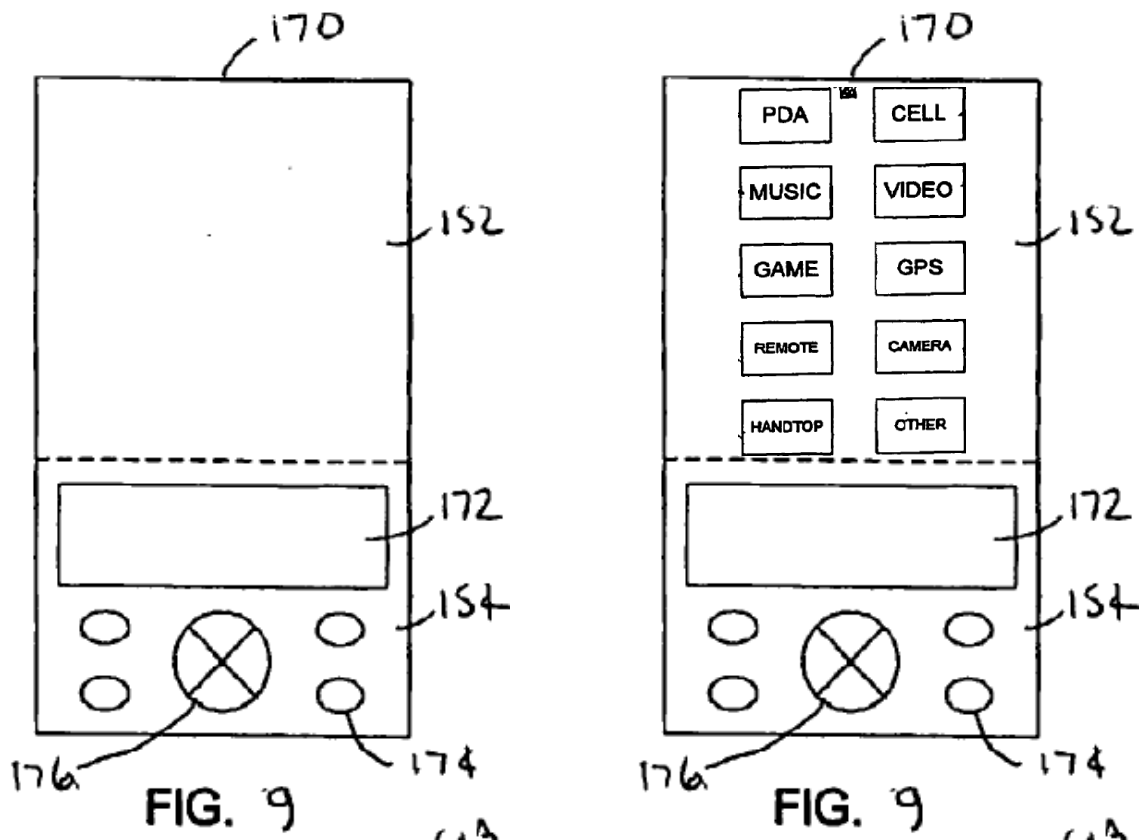
⁸ Figure 11 implements Hotelling’s primary goal of creating a “multi-functional hand-held device” by employing a number of UI’s that replicate the experience of a legacy device assumes the use of separate “general region 152” and “control region 152,” with a “standard region 152 [that] represents what would normally be displayed on the display 122 when using a particular [legacy] device” and a “control region 154 [that], on the other hand, *virtually represents the physical controls* that would normally be physically placed on a particular device.” EX1004, [0070]; EX2005, ¶85. This makes Hotelling’s device-specific UI resemble legacy devices with which users are already familiar. EX2005, ¶56, *see also* EX1004, [0091].

Id., FIGs. 1C, 11. The “virtual scroll wheel” and “virtual buttons” in “control region 154” are “virtual controls that mimic the physical controls.” EX1004, [0070], [0077]; EX2005, ¶85.

Consistent with Figures 27A and 11 and Hotelling’s overall disclosure, even if a POSITA were to seek to apply Figure 27A to a non-music player UI, and, specifically a main menu UI, a POSITA would be motivated to start from a main menu UI that implements the “control region” / “standard region” UI. EX2005, ¶86. Hotelling discloses a compatible embodiment in the form of “GUI 70 that is used in a PDA mode” as shown in Figure 9⁹ that “is divided into a standard region 152 and control region 154” with control region 154 containing “four virtual buttons 174 and a virtual navigation pad 176.” EX1004, [0075], FIG. 9, EX2005, ¶86. In the Figure 9 UI “*a main menu (window with set of icons)*” may be “displayed in the standard region 152.” EX1004, [0070]. Dr. Cockburn confirmed it “would be fair” to call items 262A-262H in Figure 18’s main menu GUI “*icons*.” EX2006, 92:4-8. Thus, to the extent a POSITA desired to use the “touch vocabulary” of Figure 27A on a

⁹ Figures 5-8 disclose examples of GUI’s “separated into a standard region 152 and a control region 154” and Figures “9-17 illustrate various examples of GUIs for different states or modes of the multi-functional device” each employing a “control region” / “standard region” UI. EX1004, [0070], [0074]-[0083].

“main menu GUI” having Figure 18’s items 262A-262H, a POSITA would do so by including items 262A-262H in Figure 9’s “standard region” alongside Figure 9’s virtual controls in a control region. EX2005, ¶86.



EX1004, FIG. 9; *id.* (modified); EX2005, ¶86.

This modification is also consistent with Martyn. Martyn discloses calling up the “App Snapshot” via a “press and hold *of the select function*” when an application name is highlighted.” EX1005, [0017]. This reference to the “select function” refers to press and hold of a physical button—and to the extent Martyn is extrapolated to touch screens, it would be a press and hold on a virtual representation of the select button, not on an application icon. *Id.*; EX2005, ¶87; EX2006, 79:12-19 (“In a non-

touchscreen device, that person would understand that there would be a variety of ways of issuing the select function. On a touchscreen device, a person of skill in the art would understand that one way would be to tap on or otherwise press on the function itself, the virtual representation of the function.”). Thus, while Petitioner points to Martyn’s disclosure as “analogous to Hotelling’s ‘long’ touch” to support its combination’s use of a long touch on an application icon (Pet., 27), both Hotelling’s Figure 27A and Martyn disclose a long touch on a physical/virtual control button, **not** the application icon. EX2005, ¶88.

Applying Figure 27A’s disclosure to a compatible main menu GUI, if a user desired to call a “context sensitive pop up menu,” the user would perform a long touch on virtual buttons 174, **not** the list of applications included in standard region 152. EX2005, ¶89.

Figure 27A: Long touch on list item in standard region does not call context menu

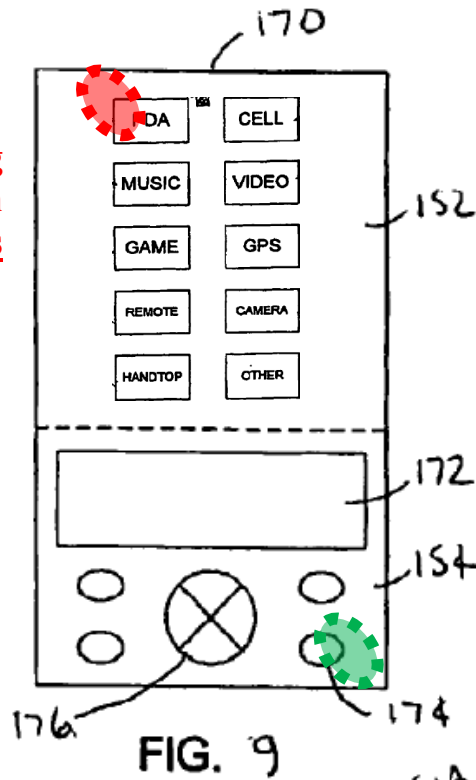


Figure 27A: Long touch on virtual button in control region calls context menu

EX1004, FIG. 9; *id.* (modified); EX2005, ¶89. This modification, which follows Hotelling and Martyn’s actual disclosures, does not meet Limitations [1.d], [16.i], [84.e] because, to meet other limitations, Petitioner already mapped “*the* touch” as a touch at the location of an application icon (the mapped “indicia”) (Pet., 22, 24) and, therefore, a touch on a virtual button in the control region rather than an application icon in the standard region cannot be “*the* touch.” EX2005, ¶89.

4. Petitioner’s unnatural mapping ignores incompatible teachings

For much the same reasons a POSITA seeking to apply Figure 27A to a main menu GUI would result in the modification discussed above, a POSITA would not arrive at Petitioner’s modification. EX2005, ¶90. First, Figure 18 does not provide

a basis to distinguish between a “list item” and a “virtual button” as required by Figure 27A. EX2005, ¶78. Figure 18 is a full-screen native touch GUI with “icons/buttons 262 for launching each of the various device functionalities.” *Id.*; *see* EX1004, [0085]. Hotelling describes these “buttons 262” as “virtual buttons” (EX1004, [0085]) in the sense that they are not physical controls, but they are *not* “virtual controls that mimic the physical controls,” nor are they distinguishable from “list items” as Figure 18 does not include any list other than the buttons themselves. EX2005, ¶78.

Fundamentally, Figure 18 does not include “standard region 152” and “control region 154” labels found in each of Figures 5-17, nor is there any way to divide Figure 18 into those two regions. EX2005, ¶79; *see* EX1004, [0084]-[0085], FIG. 18; *see also* EX2006, 29:18-19. This is because Figure 18 is not illustrating a virtual version of a physical device having a display that could display list items and physical controls to provide input. EX2005, ¶79. Emphasizing the inapplicability of Hotelling’s primary disclosure to Figure 18, when asked how he would reconcile the standard/control region design with Figure 18, Dr. Cockburn suggested that the standard and control regions would both make up the entire screen. EX2006, 40:3-13. But the Hotelling explains that the GUI is “*separated into* a standard region 152 and a control region 154.” EX1004, [0070]; *see also id.* (describing the control region “*on the other hand*” and thus distinct from the standard region); EX2005,

¶79. If each region occupies the entire screen, the distinction between the two becomes meaningless. *Id.*

Thus, Figure 18 is not compatible with Figure 27A nor Martyn, each of which disclose a long press on a physical button or virtual representation of a physical button that is used to select, but is not the list item (e.g., application icon). *Id.*, ¶¶75-82.

VII. PETITIONER DOES NOT PROVIDE A REASONED EXPLANATION FOR HOW ANY OF THE CITED DISCLOSURES WOULD RESULT IN A MODIFICATION THAT MATCHES THE ACTION AND CONDITION OF LIMITATIONS [1.F], [16.K], [84.G]

A. Limitations [1.f], [16.k], [84.g]: “[when] / [based on] a slide or swipe gesture ... [is] / [being] detected after the second duration ... [change] / [changing] at least one aspect of the display of the at least one menu”

None of the cited references disclose this Limitation. EX2005, ¶91. The Petition points to a variety of different teachings from Hotelling, Martyn, and Cho that, in combination, allegedly teach this Limitation with respect to Martyn’s App Snapshot. *See* Pet., 33-40. However, each of the Petition’s examples cherry-pick from disparate teachings across the three references to create proposed functionality that is not taught in the references themselves, is inconsistent with related teachings in the references, lacks an articulated motivation to combine, or all of the above. This is not enough to establish a case of obviousness. *See Virtek Vision*, 97 F.4th at 888 (“It does not suffice to simply be known. A reason for combining must exist.”);

see also ActiveVideo, 694 F.3d, 1327 (“conclusory statement[s] that a [POSITA] would have known, based on the ‘modular’ nature of the claimed components, how to combine any of a number of references to achieve the claimed inventions ... is not sufficient and is fraught with hindsight bias.”).

1. First Attempt: Martyn’s highlighting to indicate the currently selected item

The Petition first points to “teachings in Martyn about moving a highlight throughout items in a menu.” *See* Pet., 51, *see also id.*, 34-35. However, the highlighting functionality taught in Martyn is a feature unique to non-touch screen devices that required scrolling through a list of options, of which only one could be selected at a time. *See* EX1005, [0018]. Specifically, Martyn teaches that:

“A highlight is available in the App Snapshot dropdown which may be scrolled in order to select a required item. When an item in the App Snapshot is selected (*e.g. by being highlighted and then selected using a conventional selection technique such as pressing a right cursor*), the device displays the relevant data in the application details view.”

Id., [0018]. Martyn adds that “the 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. *Id.*, [0016].

Contrary to what is asserted in the Petition, a POSITA would have understood Martyn’s highlighting to facilitate selection of options on a non-touch screen where a cursor must be scrolled to an item before the item can be selected. EX2005, ¶94;

see also EX1005, [0016]-[0018], FIG. 1. A POSITA would have further understood that such highlighting or other emphasis is required on non-touch screen devices because only one item may be selected at a time using the scroll wheel. EX2005, ¶94; *see* EX1005, FIG. 1. By contrast, a touch screen device enables any item on the screen to be selected without scrolling, as is required in Martyn. EX2005, ¶94; *compare* EX1005, [0018] *with* EX1004, FIG. 27A (teaching that “touchdown” on a “list item” “execute[s] the item clicked”). In his deposition, Dr. Cockburn agreed that “it’s not necessary to highlight” an item prior to selecting it on a touch screen device. EX2006, 80:11-21. And, Hotelling’s Figure 27A defines a different gesture—“lift off” of a touch with a “light” pressure on an item—that already uses highlighting for a different purpose than in Martyn. EX1004, FIG. 27A; EX2005, ¶94.

Accordingly, a POSITA would have understood Martyn’s scrolling of a highlight to be an unnecessary predicate to item selection in Hotelling’s touch screen device. EX2005, ¶95. Further, to the extent highlighting of items were desired, a user would not need to use a “swipe” gesture to trigger highlighting on Hotelling’s device, but would perform a light pressure touch on the item. *Id.*, ¶94; *see* EX1004, FIG. 27A. Therefore, swiping to move a highlight is not a feature of Martyn that a POSITA would have adopted in the proposed combination with Hotelling. EX2005, ¶95.

2. *Second Attempt: Hotelling’s swipe gesture to “back out a folder” of a music player*

The Petition’s next suggestion—to dismiss Martyn’s App Snapshot using Hotelling’s teaching of a slide or swipe to “back out a folder”—relies on the Petition’s unsupported assertion that “back out a folder” as taught in Figures 27A and 27B of Hotelling is “an action analogous to Martyn’s menu dismissal.” *See* Pet., 36. The Petition cites paragraphs [0151], [0087], and [0148], as well as Figures 27A and 27B in support of this assertion. *Id.* None of these portions of Hotelling (nor any other portion of Hotelling) supports the Petition’s assertion that these two teachings are analogous. EX2005, ¶96. Hotelling does not compare folders to menus. *Id.* Hotelling does not compare “back[ing] out” of a folder to dismissing a menu. *Id.* Hotelling does not teach or suggest that the gestures disclosed in Figures 27A and 27B would be useful to dismiss a menu. *Id.* As discussed at length above, Hotelling does not teach that the gestures disclosed in Figures 27A-E are applicable outside of the context of a music player GUI. *Id.* In addition, Dr. Cockburn provides no additional analysis on this point. He merely parrots the Petition. *Compare* EX1003, ¶144 *with* Pet., 36 (citing EX1003, ¶144). Because neither Hotelling nor Dr. Cockburn provide any evidence to support the Petition’s comparison, the Petition asks that the Board take it on faith that a POSITA would consider Row 7 of Figure 27A of Hotelling to be analogous to Martyn’s menu dismissal. This is insufficient analysis. *See Intelligent Bio-Systems*, 821 F.3d at 1369.

Further, a POSITA would affirmatively consider Row 7 of Figure 27A of Hotelling (i.e., the “back[ing] out a folder” gesture) **not** to be applicable to Martyn’s App Snapshot. EX2005, ¶97. For example, Figure 27A teaches that the device “animate[s] screen sliding RIGHT” as the corresponding “Feedback” when this gesture is executed. EX1004, FIG. 27A. Thus, users can easily navigate layers of a folder system, which is fundamentally hierarchical. See EX2005, ¶97. In context, Hotelling teaches that the screen may be swiped left to navigate to a lower layer of the folder hierarchy, see EX1004, FIG. 27A (“On left motion, open highlighted folder”), and may be swiped right to navigate to a higher layer of the folder hierarchy, see *id.* (“On right motion, go back out a folder”). EX2005, ¶97. While this set of gestures makes sense in the folder context, it does not make sense to swipe left and right to navigate between layers of Martyn’s App Snapshot menu because Martyn’s App Snapshot **has no layers**. *Id.* There is only a single menu and it is displayed in one screen (i.e., screen sliding feedback is not applicable). EX1005, Figures 2-3. The menu is not hierarchical in nature and, therefore, the functionality enabled by the gestures in Figure 27A is simply not relevant to Martyn’s App Snapshot. EX2005, ¶97. Neither the Petition nor Dr. Cockburn explains why a POSITA would understand these two contexts to be “analogous” when considering the broader context of Hotelling’s Figure 27A. *Id.* Therefore, this example is also insufficient. See *ActiveVideo*, 694 F.3d, 1327.

3. Third Attempt: Cho's scrolling

The Petition next points to Cho's "teach[ing] that '[t]he contents of the information window 620 may be scrolled ... in response to a flick [(swipe)] on the information window." Pet., 38 (citing EX1006, [0127]). However, as discussed above with respect to Martyn's highlighting, this again conflates the meaning and function of "scrolling" in Martyn with "scrolling" on a touch screen device. EX2005, ¶99; *see also* EX1005, [0016] ("the 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.") (emphasis added); EX1006, [0127] ("**The contents of the information window 620 may be scrolled**") (emphasis added). Accordingly, the Petition must advance a motivation to combine Cho's specific form of scrolling with Martyn's App Snapshot. *See ActiveVideo*, 694 F.3d, 1327. As a threshold matter, the Petition fails because it does not explain why Cho's scrolling, specifically, would be combined with the App Snapshot window. *See* Pet., 36-38. However, even assuming that such a case had been made by the Petition, it would still fail for the reasons discussed below.

A POSITA would not have been motivated to combine Cho's scrolling with Martyn's App Snapshot menu because the contents of Martyn's App Snapshot are all visible when the App Snapshot is first displayed (i.e., there are no list items that must be brought into view via scrolling). EX2005, ¶100; *see* EX1005 [0017], ("The

App Snapshot ... includes the number of new messages (‘0’) and links to the two most common functions”), [0021] (“Scrolling down through the App snapshot and *off the end moves the highlight to the next application in the list (i.e., to ‘Contacts’)*”); Figures 2-3. The only examples that Martyn provides for the contents of its App Snapshot window are “the number of new messages,” “the two most common functions,” that a user has “2 new SMS,” and that the user has “1 Chat ongoing.” EX1005, [0017]. *All* of these features are visible in Figure 3 of Martyn. *See id.*, Figure 3. Martyn does not teach or suggest that there are additional features associated with the Messages application that are available from the App Snapshot menu, but are not shown in Figure 3. EX2005, ¶100. Further, such a design would conflict with Martyn’s express teaching that the App Snapshot is designed for “ease and speed of navigation, particularly on small screen devices” and that it displays “a *limited* list of common functions and commonly accessed stored data.” EX2005, ¶100; *see* EX1005, [0015] (emphasis added).

Martyn does teach that the App Snapshot may accommodate more than the three options depicted in Figure 2, but Martyn teaches that this is accomplished by making the App Snapshot “longer,” not by scrolling. *See* EX1005, [0017]; *compare id.* Figure 2 *with id.* Figure 3. This teaching is consistent with Martyn’s goals of quick, easy navigation, which would be harmed by the inclusion of a long list of unseen options, defeating a primary goal of this “*summary* [App Snapshot]

window.” EX2005, ¶101; *see* EX1005, [0015] (emphasis added). This express teaching is evidence that the inventors of Martyn were aware that the App Snapshot window could contain a variable number of options and deliberately chose to include only as many options as may fit on the device’s screen at one time. EX2005, ¶101. Interpreting Martyn’s App Snapshot in context, Cho’s content scrolling is simply not needed. *Id.*; *see* EX1006, [0127].

When pressed on this point in his deposition, Dr. Cockburn could not point to any express teaching from Martyn that supports the existence of nonvisible menu items in Martyn’s App Snapshot list. *See* EX2006, 82:5-90:17. Instead, Dr. Cockburn asserted that a POSITA would understand Martyn’s teaching that “[s]crolling down through the App Snapshot and off the end moves the highlight to the next application in the list” discloses “**both** moving the highlight through the displayed items **and** moving the highlight such that it brings previously nondisplayed items in the App Snapshot into the App Snapshot’s view.” *Id.*, 89:18-90:13. Such an interpretation is inconsistent with the teachings of Martyn described above and reads a second meaning into this sentence that is neither taught nor suggested by Martyn, but is critical to the Petition’s proposed combination with Cho’s scrolling. EX2005, ¶102. Martyn speaks for itself and it is hindsight for Dr. Cockburn to read in a teaching that is not there to arrive at the mapping advanced in the Petition. *See Metalcraft of Mayville, Inc. v. The Toro Co.*, 848 F.3d 1358, 1367

(Fed. Cir. 2017) (“we cannot allow hindsight bias to be the thread that stitches together prior art patches into something that is the claimed invention”).

4. *Fourth Attempt: Cho’s window re-sizing*

Next, the Petition points to window “re-sizing” from Cho, which teaches that “the information window 620 may be enlarged or reduced” in response to a “touch-and-drag” gesture. Pet., 38-39. While Cho does disclose window re-sizing, the Petition provides no explanation or analysis as to why a POSITA would be motivated to incorporate Cho’s window re-sizing into Hotelling, Martyn, or Martyn’s App Snapshot. See Pet., 17-20, 38-39. In place of a specific motivation to combine window re-sizing with Hotelling and Martyn (e.g., an expected benefit or improvement), the Petition asserts that a POSITA would look to “tertiary references like Cho to obtain supplemental information about using swipe/slide touch gestures,” and other similar, generic motivations. See Pet., 17-20. It is not clear why Hotelling or Martyn would benefit from a gesture that enables menu windows to be re-sized. EX2005, ¶103. Neither reference provides any suggestion that window re-sizing would be beneficial and neither the Petition nor Dr. Cockburn points to a teaching in Cho that would provide such a suggestion. *Id.*

The Petition’s mapping to Cho’s window re-sizing is clearly insufficient under *Virtek Vision* and other precedent. In *Virtek Vision*, the patent challenger argued that “because the additional elements ... are disclosed in [the prior art] and

are used for their intended purposes, a skilled artisan would have been motivated to combine the references.” *Virtek Vision*, 97 F.4th, 888. The Federal Circuit rejected this argument, finding it “grounded in the fact that the claim elements are known in the prior art,” which “alone does not show a motivation to combine.” *Id.* Petitioner’s argument in this proceeding is no different than the one rejected by both the Board and the Federal Circuit in *Virtek Vision*. Petitioner has pointed to various pieces of touch inputs that were known in the art and combined them together in a way not taught or suggested in any of the references. Thus, this mapping cannot carry Petitioner’s burden to show obviousness. *See id.*; *see also ActiveVideo*, 694 F.3d, 1327; *Gesture Tech.*, 2025 WL 679196, *5 (“[u]ltimately, it is the petitioner’s burden to present a clear argument.”).

5. *Fifth Attempt: Cho’s information window dismissal*

Finally, the Petition points to Cho’s teaching that “a touch-and-drag on the information window may be used ... to end display of the information window.” Pet., 39 (citing EX1006, [0109]). As with the previous mappings based on Cho, the Petition does not provide a specific motivation to combine Cho’s “touch-and-drag” gesture with Hotelling and Martyn to “end display” of the App Snapshot menu in combination with Hotelling’s main menu GUI and thus fails for similar reasons. *See Virtek Vision*, 97 F.4th, 888.

In addition, a POSITA would not have been motivated to combine Cho's teaching with Hotelling and Martyn because Martyn already teaches multiple techniques for ending the display of its App Snapshot. *See* EX1005, [0021] ("If a timeout is used to call the App Snapshot, scrolling the highlight back to the relevant application name ... removes the App Snapshot."), [0022] ("If scroll functions ... call the App Snapshot the opposite scroll function removes the snapshot."); [0023] ("When a user scrolls off the end of the App Snapshot, the main list from which the App Snapshot was opened de-compresses ... (i.e., the screen reverts to that shown FIG. 1)"). None of the cited references suggest that Martyn's disclosed methods for closing its App Snapshot are inadequate, nor does the Petition cite any evidence that would explain why the addition of Cho's "touch-and-drag" gesture would be an improvement to the functioning of Hotelling's main menu GUI or Martyn's App Snapshot. EX2005, ¶105. Without "the glue to combine these references," what remains is the tempting notion—tainted by hindsight—that this specific combination of prior art elements is obvious because similar elements are so combined in the Challenged Claims. *See InTouch Techs., Inc. v. VGO Commc'ns, Inc.*, 751 F.3d 1327, 1348–49 (Fed. Cir. 2014) ("Dr. Yanco's testimony was nothing more than impermissible hindsight; she opined that all of the elements of the claims disparately existed in the prior art, but failed to provide the glue to combine these references.").

This kind of reasoning is not sufficient to support an obviousness combination. *See id.*

VIII. PETITIONER FAILS TO DEMONSTRATE MULTIPLE DEPENDENT CLAIMS

A. Limitation 14: “The non-transitory computer-readable media of claim 13, further including instructions that, when executed by the at least one processor, cause the mobile device to operate such that the slide or swipe gesture is capable of being part of the same gesture.”

The Petition points to Hotelling’s alleged teaching that “motion of the user’s finger (e.g., a slide/swipe) can be part of a short or long touch.” Pet., 43. According to the Petition, this is taught by Hotelling’s disclosure that its device can recognize “touch gestures,” which “comprise a contact chord e.g., one or more fingers and a motion associated with the chord.” *Id.*, 43-44. The Petition also points to Hotelling’s disclosure that “‘movement during the touch’ and ‘the duration of the touch’ are variables ‘which can be combined’” and generic teachings about possible gestures in a related patent application that Petitioner has not included in its proposed combination. *Id.*, 44.

What Petitioner does not (and cannot) point to is a teaching in Hotelling of a gesture that combines a slide or swipe gesture with a short or long touch into the same gesture, as required by the claim. The music player touch vocabulary that Petitioner claims renders obvious the short and long touch features described in the ’212 Patent teaches only gestures that respond to short or long touches, not short or

long touches with a slide or swipe as part of the same gesture. *See* EX1004, FIGs. 27A-E; Pet., 24-29 (citing EX1004, FIGs. 27A-B throughout). In fact, Hotelling teaches the opposite: that the gesture that displays the music player’s “context sensitive menu pop-up” has ***no*** motion associated with the gesture. EX1004, FIG. 27A (showing “Movement during touch or click” is “NONE” for the row that includes the “Context sensitive menu pop-up” feedback).

This lack of explicit disclosure in Hotelling is exacerbated by the fact that the examples of slide and swipe gestures that Petitioner relies on come from Martyn and Cho, not Hotelling. *See id.*, 33-40. Not only does the Petition not explain why a POSITA would read multi-part gestures into Hotelling that are not disclosed, but the Petition also does not explain why a POSITA would have been motivated to combine the alleged slide and swipes gestures from Martyn and Cho with Hotelling in a way that is not taught in Hotelling. Thus, the Petition’s proposed combination fails at two, necessary logical steps.

In place of reasoned analysis, the Petition advances a generalized assertion that multiple variables “can be combined” to form a gesture, which would have rendered this claim obvious to a POSITA¹⁰. Pet., 44. In doing so, the Petition

¹⁰ This may be motivated by a misunderstanding of the claim language as merely requiring that “a slide/swipe gesture is capable of being part of the same multi-part

presents Hotelling’s disclosure as if it teaches that “movement during the touch” and “the duration of the touch” are a closed universe of variables that a POSITA would have experimented with to reach the gestures claimed in the ’212 Patent. *Id.* (citing EX1004, [0145]). In reality, these are two of a “variety of variables” (6 are disclosed, but a POSITA would understand that more are available) that Hotelling teaches can be combined to form a touch vocabulary. EX1004, [0145]. Six independent variables and multiple parts of a gesture quickly results in dozens, if not hundreds, of possible combinations. There are too many possibilities for a POSITA to arrive at the claimed gesture without undue experimentation, rendering the Petition’s mapping hindsight. EX2005, ¶109; *see also In re Kubin*, 561 F.3d 1351, 1359 (Fed. Cir. 2009) (“[W]here a defendant merely throws metaphorical darts at a

gesture as a long/short touch.” *See* Pet., 44. However, the claim language requires that ‘the ***mobile device*** operate such that the slide or swipe gesture is capable of being part of the same gesture.” EX1001, cl. 14 (emphasis added). The mobile device must affirmatively recognize this gesture as a valid input. It is not enough that a POSITA would understand that slide and swipe gestures are ***capable of*** being part of the same gesture as a long/short touch, as alleged by the Petition. Pet., 44. A POSITA must have been motivated to implement support for such a gesture in the mobile device.

board filled with combinatorial prior art possibilities, courts should not succumb to hindsight claims of obviousness.”).

B. Limitation 15: “The non-transitory computer-readable media of claim 1, further including instructions that, when executed by the at least one processor, cause the mobile device to operate such that the at least one aspect of the display of the at least one menu is changed by ceasing display of the at least one menu.”

None of the cited references disclose this Limitation for reasons discussed in Limitation [1.f]. EX2005, ¶111; *see also* Pet., 45 (citing back to Limitation [1.f]).

C. Limitation 61: “The mobile device of claim 16, wherein the mobile device is configured such that the at least one aspect of the display of the at least one menu includes a visibility of the at least one menu.”

None of the cited references disclose this Limitation for reasons discussed in Limitation [1.f]. EX2005, ¶112.

Additionally, the Petition points to Hotelling’s “‘sliding’ gesture for flipping through pages of a GUI.” Pet., 50. The Petition argues that Hotelling “teaches that the ‘transition between pages’ involves ‘fading in and out,’” and that a POSITA “would have been motivated to apply Hotelling’s ‘fading’ transition to the Hotelling-Martyn menu dismissal operation.” *Id.* (citing EX1004, [0086]). However, Petitioner does not explain why a POSITA would look to a gesture for “*flipping through pages* of a GUI” as applicable to dismissing a menu that does not have pages. *See* Pet., 50. Neither Martyn nor Hotelling discloses a menu with separate pages and the Petition does not point to a reference that does. EX2005, ¶113.

Instead, the Petition asserts that a POSITA would understand this as “applying a well-known technique in a slightly different setting.” Pet., 50. However, the proposed combination does not include a transition between pages, and neither Hotelling nor the Petition explain why Martyn’s App Snapshot menu is a similar context. EX2005, ¶113. All that the Petition provides in explanation is a conclusory statement that the contexts are similar. See Pet., 50. Where, as here, the cited references do not actually teach that the two contexts are similar, reasoned analysis by the Petition is required. See *Gesture Tech.*, 2025 WL 679196 at *5; *Virtek Vision*, 97 F.4th at 888. Such a reasoned analysis is missing from the Petition and its mapping for this Limitation fails as a result. EX2005, ¶¶112-113.

D. Limitation 62: “The mobile device of claim 16, wherein the mobile device is configured such that the at least one aspect of the display of the at least one menu includes a highlighting on the at least one menu.”

None of the cited references disclose this Limitation for reasons discussed in Limitation [1.f]. EX2005, ¶114; *see also* Pet., 51 (citing back to Limitation [1.f]).

E. Limitation 63: “The mobile device of claim 16, wherein the mobile device is configured such that the at least one aspect of the display of the at least one menu is changed by moving the at least one menu.”

None of the cited references disclose this Limitation for reasons discussed in Limitation [1.f]. EX2005, ¶115; *see also* Pet., 51 (citing back to Limitation [1.f]).

F. Limitation 64: “The mobile device of claim 16, wherein the mobile device is configured such that the at least one aspect of the display of the at least one menu is changed by ceasing display of the at least one menu.”

None of the cited references disclose this Limitation for reasons discussed in Limitation [1.f]. EX2005, ¶116; *see also* Pet., 52 (citing back to Limitation [1.f]).

IX. CONCLUSION

For the foregoing reasons, the Petition should be denied in its entirety.

Dated: April 15, 2025

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 13,566 words. The undersigned relies upon the word count generated by Microsoft Word.

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

CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e), the undersigned certifies that on April 15, 2025, complete copies of the Patent Owner Response and EX2005-EX2008 were served on Petitioner via email (by consent), at the following email address(s):

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