

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,

Petitioner

v.

SMITH INTERFACE TECHNOLOGIES, LLC

Patent Owner

IPR2024-01090
Patent 10,725,581 B1

PATENT OWNER RESPONSE

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PATENT OWNER'S EXHIBIT LIST

Exhibit	Shorthand	Description
2001	Davis Declaration	Declaration of Marc Davis, Ph.D.
2002	CV	CV of Marc Davis, Ph.D.
2003	JCC	Excerpts of Joint Claim Construction Chart
2004	Ma	Shanshan Ma, 10 Ways Mobile Sites Are Different from Desktop Web Sites, UXMatters, (https://web.archive.org/web/20110321201254/https://www.uxmatters.com/mt/archives/2011/03/10-ways-mobile-sites-are-different-from-desktop-web-sites.php)
2005	Hammer	Hammer.JS, Understanding Gestures, https://web.archive.org/web/20201001103751/https://squadette.github.io/hammer.js/understanding-gestures/
2006	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).
2007	McKean Declaration	Declaration of Brett McKean
2008	Mahon Declaration	Declaration of Mark Mahon, Ph.D.
2009	CV	CV of Mark Mahon, Ph.D
2010	Deposition	Deposition of Andrew Cockburn, Ph.D. (April 2, 2025)
2011	'918 Provisional	Provisional Patent Application 61/581,918

I. INTRODUCTION

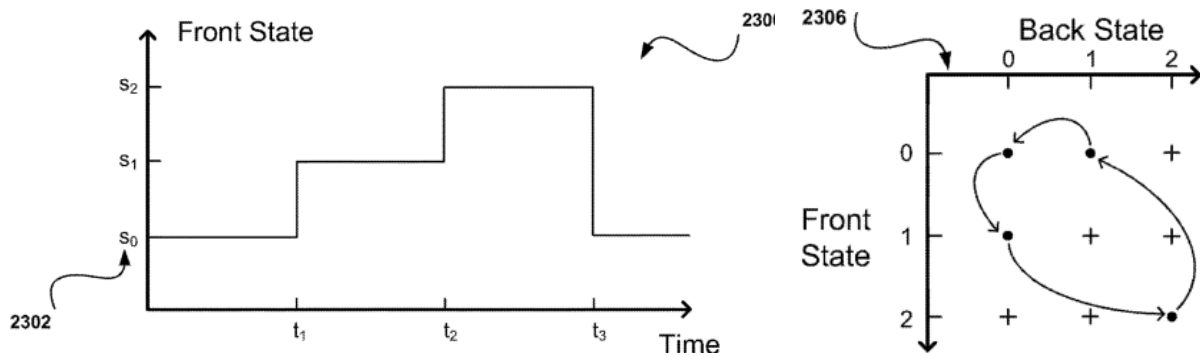
Petitioner fails to establish unpatentability of any challenged claim because the asserted references fail to disclose or suggest all features of any challenged claim and the references teach away from combining them as proposed. In an effort to support its flawed theories, Petitioner attempt to rewrite the claims in a manner contradictory to their plain and ordinary meaning. Further, Petitioner's alleged motivations-to-combine reflect an effort to stitch together an obviousness theory based on discrete portions of the references without considering their teachings as a whole. Thus, for the reasons explained herein, the Board should affirm the patentability of all challenged claims.

II. OVERVIEW OF THE '581 PATENT

As of the '581 Patent's December 2011 priority date, touch screen mobile devices were becoming capable of more complex tasks that required more control than possible with basic input methods. EX2008, ¶34. Further, the limited screen space of such devices meant that input/output techniques used for more complex tasks on laptop/desktop computers could not be used. *Id.* The '581 Patent addresses these shortcomings by enabling users to operate mobile devices and their feature-rich applications using multi-part gestures, which allow users to take successive actions and receive feedback at each stage. *Id.*

A. Multi-Part Pattern-Based Gestures

The '581 Patent describes multi-part gestures as “pattern-based gestures” that “may be recognized in the form of an ordered sequence” by, for example, “using a decision tree.” EX1001, 73:45-47; EX2011, ¶[00581]. Such gestures are described as “a path through a phase space of one or more dimensions.” EX1001, 71:48-50; EX2011, ¶[00564]; *see also* EX1001, 74:15-22; EX2011, ¶[00585]. As an example, “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, 71:62-65; EX2011, ¶[00566].



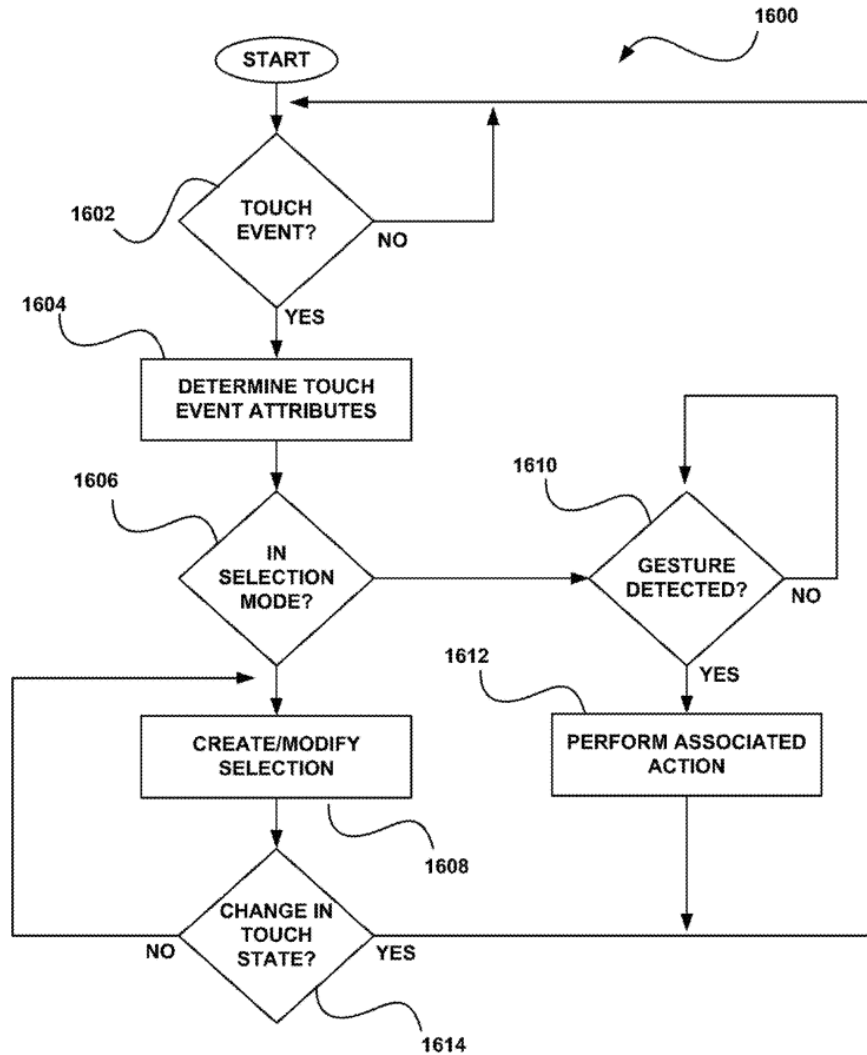
EX1001, FIG. 23; EX2011, FIG. 28. Each state and transitions between them may be defined by factors including “the time spent on each leg of the path through phase space.” EX1001, 72:1-28; EX2011, ¶[00567]-[00570]. Thus, if a touch duration does **not** exceed time threshold t_1 , FIG. 23 illustrates the device will stay in state S_0 . EX1001, 72:1-9; EX2011, ¶[00567]; EX2008, ¶36. But if the touch duration exceeds

time threshold t_1 the device transitions to state S_1 , and if it exceeds time thresholds t_2 the device transitions to state S_2 . *Id.*

As explained below, Figures 16, 6, and 18 (and related portions of the specification) illustrate the decision-tree programming logic underlying the challenged claims. EX2008, ¶¶37-43. The figures show how such logic causes a device to detect and interpret touch event attributes and trigger the appropriate action when those attributes satisfy predetermined conditions. *Id.* For example, Figure 16 illustrates programming logic that begins with “determin[ing] if a touch event has occurred,” and thereafter requires evaluating the “touch event attributes” to determine whether they correspond to a gesture and, if so, triggering “an associated action.” EX1001, 53:7-54:20. Figure 6 further illustrates programming logic that creates a selection based on touch attributes (EX1001, 26:41-49), while Figure 18 illustrates programming logic that determines whether the touch event corresponds to a pre-defined gesture and, once confirmed, triggers the corresponding action. EX1001, 56:24-60. Together these disclosures reinforce that the challenged claims require executable instructions that detect, evaluate, and respond to user input—ensuring that actions are performed when the specific, defined preconditions for those actions are met.

1. Figure 16

To detect pattern-based gestures, the '581 Patent describes a mobile device having various components, including a touch screen, through which signals can be received via contact on the touch screen. EX1001, 13:61-67, 14:7, 14:31-53, Limitations [1.pre]-[1.c]; EX2011, ¶¶[0077]-[0078], [0082]. In response to these touch-signals, the output from the device and/or processing by the device can be altered. EX1001, 15:39-51, FIG. 3; EX2011, ¶[0089]. The '581 Patent describes implementing decision-tree-based programming logic, like that shown in Figure 16 (inset below), to enable the device to determine whether a user's contact with the touchscreen corresponds to a pre-defined gesture and trigger the action mapped to the particular gesture that is detected. EX1001, 73:45-47, 83:63-65, FIG. 26; EX2011, ¶¶[00507], [00581], FIG. 24; EX2008, ¶37. The particular logic illustrated in Figure 16 enables the device to determine whether a user's contact with the touchscreen corresponds with "a selection made within a user interface." EX1001, 53:7-54:34, FIG. 16; EX2008, ¶37.



EX1001, FIG. 16; EX2011, FIG. 16. The logic operation of Figure 16 begins with detecting a touch event and determining the “touch event attributes” for that event. EX1001, 53:7-27, Limitation [1.h]-[1.l]; EX2011, ¶¶[00355]-[00357]. “Touch event attributes” can include any measurable aspect of the user interaction with the touch screen, such as touch state, contact area, contact point, and touch event attributes over time. EX1001, 53:28-34, Limitations [1.h]-[1.l]; EX2011, ¶[00359]; *see also*

EX1001, 56:45-16 (“Possible gesture inputs may include, but are not limited to, touch event attributes (both initial and over time)”); EX2011, ¶[00386].

After determining the attributes of the touch event that started the logic operation, a determination is made, at step 1606, as to whether the “system is in a selection mode.” EX1001, 54:35-36. “If the system is in a selection mode, then a selection is created and / or modified as a function of the touch event attributes [and] then displayed.” *Id.*, 54:53-55. “[I]f it is determined in 1606 that the system is not in a selection mode,” then a determination must be made, at step 1610, whether “a gesture has been detected.” EX1001, 54:12-15, Limitation [1.m.ii]-[1.m.iii]; EX2011, ¶[00368].

If no gesture is detected, the system repeats the gesture detection loop without performing an associated action. EX1001, 54:12-18, FIG. 16, Limitations [1.m.ii]-[1.m.iii]; EX2011, ¶[00368]. But “if a gesture is detected, then an associated action is performed (step 1612).” EX1001, 54:19-20. For example, a gesture may be mapped to a particular command or operation within the device’s programming logic, such as “scrolling a display or user interface element, zooming in or out, modifying the display brightness, or “placing the system in a selection mode.” EX1001, 54:20-34, Limitations [1.n.ii]-[1.n.vi]; EX2011, ¶¶[00369]-[00370]; *see also* EX1001, 53:53-55 (“If the system is in a selection mode, then a selection is created and/or modified as a function of the touch event attributes...”).

With respect to determining whether a touch event is a gesture, the '918 Provisional (which the '581 Patent incorporates by reference (EX1001, 1:24-26)) discloses “gesture differentiation,” which it distinguishes from simply detecting a “basic user interaction (i.e., button press, basic application interaction, etc.).” EX2011, ¶¶[00498], [00502]. The “gesture differentiation” process begins by “determine[ing] whether there is any meaningful user input,” including 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.*; EX2008, ¶38; *see also* EX2011, FIG. 24.

2. Figure 6

Each of the decision blocks shown in Figure 16 above, may include its own decision-tree-based programming logic. For example, Figure 6 illustrates decision-tree-based programming logic for creating a selection based on touch event attributes, as in step 1608 of FIG. 16. EX1001, 26:41-49, FIG. 6. As shown below, “if it is determined in 608 that there is at least one embedded hyperlink within the context determination zone, then a context sensitive embedded hyperlink selection

function is chosen” and a “selection may be defined based upon user input.” *Id.* 30:44-49; EX2011, ¶[00188].

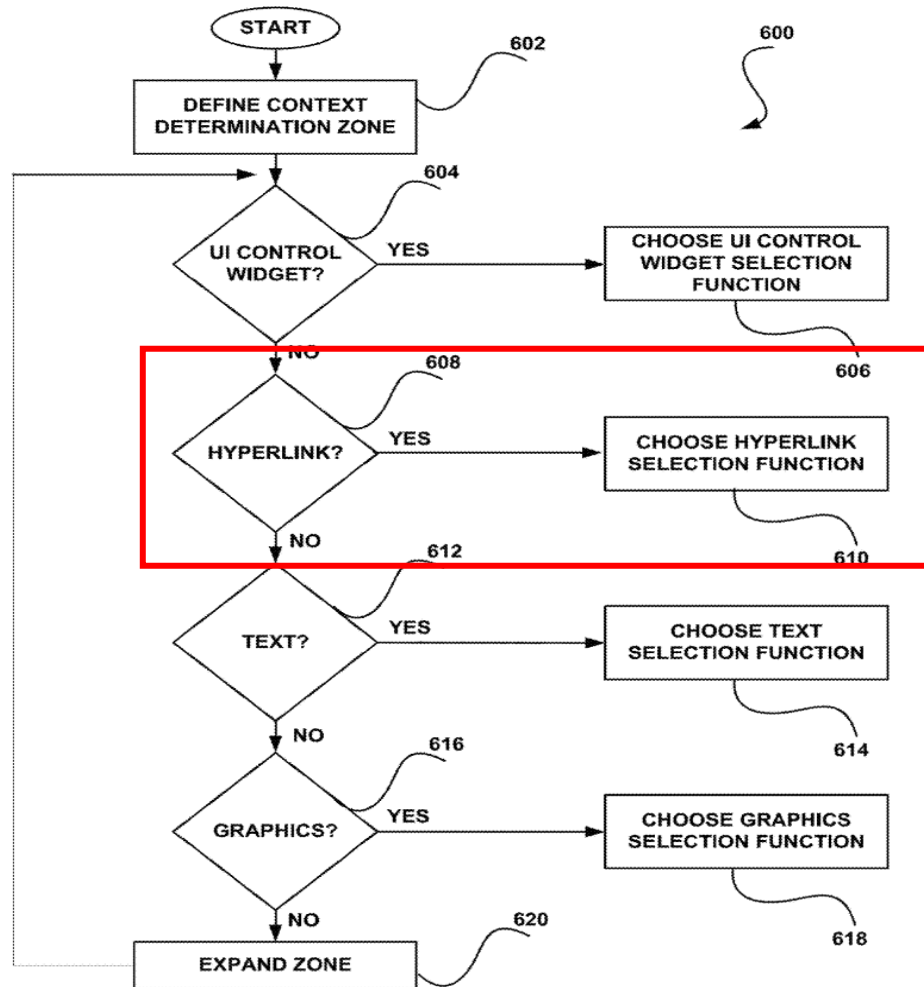


FIGURE 6

EX1001, FIG. 6; EX2011, FIG. 6.

The '581 Patent explains that, in defining a selection associated with a hyperlink, the selections may be based on “method 4[*sic*],” in which “a selection may be established if the user maintains a contact pressure level for a predefined

amount of time.” EX1001, 30:44-50; 25:8-10; Limitations [1.m.ii], [1.n.ii], [1.o.ii]; EX2011, ¶¶[00188], [00150]. The ’581 Patent states that “once the selection establishment conditions have been satisfied, the selected embedded hyperlink may be activated.” *Id.*, 31:53-55; Limitation [1.n.vi]; EX2011, ¶[00195]. The ’581 Patent further explains that an embedded hyperlink “may have selection establishment conditions which change, depending upon previous user input ... to require the selection of an option from a hyperlink contextual menu.” EX1001, 31:39-45; Limitation [1.o.vii]; EX2011, ¶[00194]. “The contextual menu may provide options common to web browsers, including but not limited to ‘open link’, ‘copy link’, and/or any other action which may be performed on or with a hyperlink.” EX1001, 31:46-49; EX2011, ¶[00194].

3. *Figure 18*

Similar to Figure 16, Figure 18 illustrates decision-tree-based programming logic for determining whether a user’s contact with the touchscreen corresponds to a pre-defined gesture and triggering the operation mapped to the particular gesture that is detected. EX1001, 56:24-57:10, FIG. 18; EX2008, ¶43. The logic operation of Figure 18 begins by determining whether a touch event has occurred. EX1001, 56:32-36. If “yes,” the attributes of touch events are determined (at 1804), the touch event attributes (both initial and over time) are evaluated to determine whether they correspond to a gesture (at 1806). EX1001, 56:32-60; EX2011, ¶[00382]. And when

it is determined that the attributes correspond to a particular gesture, the programming logic triggers performance of the operation mapped to the identified gesture (at 1808). EX1001, 56:32-60; EX2011, ¶[00382].

B. Independent Claims 1 and 42

Petitioner challenges the two independent claims of the '581 Patent: Claims 1 and 42 (“Challenged Independent Claims”). Claim 1 is directed to an “electronic device” with “one or more programs including instructions to” cause the device to perform the certain logic operations. EX1001, 102:50-103:55. Claim 1 recites, among other things, “instructions” that cause the claimed device to “detect a first contact ... on the touch-sensitive interface surface.” EX1001, Limitation [1.h]. Claim 1 further recites three logic operations to determine whether “the first contact” satisfies the preconditions for a particular scenario and perform a specified action “when” that determination is made. EX1001, Limitations [1.m], [1.n], [1.o]; Pet., 4 (acknowledging claims “recite a respective functionality associated with each of the three contact scenarios”).

Those logic operations dictate that:

- In a **first scenario** in which the preconditions recited in Limitations [1.m.i]-[1.m.ii] are met, the device “avoid[s] display, on the first web page, a result of any operation based on the first contact” (Limitation [1.m.iii]).

- In a **second scenario** in which the preconditions recited in Limitations [1.n.i]-[1.n.v] are met, the device “replace[s] the display of the first web page with the second web page via the user interface of the network browser application” (Limitation [1.n.vi]).
- And in a **third scenario** in which the preconditions recited in Limitations [1.o.i]-[1.o.v] are met, the device performs several actions, including “display[ing] a menu including at least one option for ... performing an operation on a web address associated with the hyperlink of the first web page,” and “displaying at least a portion of the second web page” (Limitations [1.o.vi]-[1.o.viii]).

See EX2010, 30:9-34:12 (agreeing that the above-cited limitations reflect the claimed scenarios referenced in his declaration).

Limitations [42.h], [42.i], [42.j] of Claim 42 are analogous to Limitations [1.m]-[1.o] of Claim 1. EX1001, 114:53-115:53; *see* Pet., 4-5. Claim 42 recites that the actions of Limitations [42.h]-[42.j] are performed “based on detected usage where” the corresponding preconditions are met. EX1001, 114:53-115:53.

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 8, 9-10.¹

IV. CLAIM CONSTRUCTION

The plain and ordinary meaning of all claim terms are readily understandable from the plain language of the claims themselves and therefore no formal claim construction is necessary. In an effort to fill the gaps in its obviousness theory, however, Petitioner improperly contorts certain claim elements in a manner that deviates from their plain and ordinary meaning. For the reasons explained below, Petitioner's efforts to deviate from the plain and ordinary meaning of the claims should be rejected.

¹ The Board noted in related proceedings that Petitioner's proposal is inconsistent, stating that "[a]dditional years of experience could substitute for an advanced level degree" despite not otherwise requiring an advanced level degree. Pet., 6. Petitioner's expert agreed the above-quoted language could be disregarded. EX2010, 12:6-22.

A. “Conditional” Limitations of Claim 1²

Limitations [1.m], [1.n], and [1.o] collectively recite executable instructions to perform specified actions (e.g., “avoid display” “replace display,” “output, using the actuator,” “display a menu”) “when” it is determined that a user’s contact with the touch screen satisfies the corresponding preconditions for that action. *See supra*, §II.B. The parties agree that, under the plain and ordinary meaning of these limitations, the actions recited in Limitations [1.m.iii], [1.n. vi], and [1.o.vi]-[1.o.viii] must be performed when all preconditions recited in Limitations [1.m.i]-[1.m.ii], [1.n.i]-[1.n.v], and [1.o.i]-[1.o.v], respectively, are met. *See* EX2010, 44:3-5 (“The functionality associated with the second timing scenario must be true when that second...when the conditions of the second scenario are met.”).

But Petitioner attempts to deviate from the plain and ordinary meaning by arguing that the action need not be triggered by a determination that all corresponding preconditions are met. Rather, Petitioner contends the claims merely require that the recited action be performed during any time period that overlaps with one in which the corresponding preconditions are met. Pet., 49-52 (mapping

² PO refers to limitations reciting an action that is triggered when certain preconditions are met as “conditional limitations,” but does not concede that such form is sufficient to meet any particular case law.

Limitation [1.o.viii] to disclosure where Blumenberg begins display of link information before all recited preconditions are met).³

Petitioner’s contention is inconsistent with the nature of programming logic, and thus also with the plain language of the claims. As explained above, Claim 1 recites “one or more programs including instructions to” cause the device to perform a specified action “when” it determines that the preconditions for that action are met. *See supra*, §II.B. A POSITA would understand that language to require programming logic to determine when all recited preconditions in a limitation are met and, in response to that determination trigger performance of the recited action. EX2008, ¶¶47.

That causal-connection is a tenant of programming logic. EX2008, ¶48.. Executable instructions to perform an action require logic operations that detect when the preconditions for that action are met and trigger performance of the action in response thereto. *See* EX2008, ¶48 (explaining that logic operations referred to as “event listeners” include code that triggers performance of a specified action in response to detection of a specified event or multiple events concurrently or in series). Without such logic operations, the system would not know when to trigger

³ *See also* EX2010, 43:18-23 (asserting that “when” is an inclusive term” that merely “relates to a period of time”).

the action. *Id.* Thus, executable instructions that cause the performance of an action “when” certain preconditions necessarily do so *in response to* a determination that those preconditions are met. *Id.*

Here, the plain claim language recites the logic operations necessary to determine when the preconditions recited in Limitations [1.m], [1.n], and [1.o] are met and trigger performance of the recited actions in response thereto. In particular, the logic operations of Claim 1 begin with “detect[ing] a first contact starting at a first contact point at a first contact time,” which the claim defines as the start of “the first contact.” EX1001, Limitation [1.h]; EX2008, ¶49. Detecting “a first contact” triggers the device to perform additional logical operations to determine whether “the first contact” satisfies the preconditions for any of the claimed scenarios, and, if so, those logic operations trigger the device to perform the recited action (e.g., “replace display,” “output, using the actuator,” “display a menu”) for that scenario.⁴ EX1001, Limitations [1.m]-[1.o]; EX2008, ¶49.

⁴ The Board preliminarily pointed to dependent Claim 3 as possibly suggesting that the recited actions “can happen at different times as opposed to ... only [as] responses that are triggered by [all preconditions being met].” D.I., 11. But dependent Claim 3 recites the timing of the triggered actions [1.o.vi-viii] relative to each other, *not* the timing of the actions relative to the preconditions being met.

This is consistent with “decision-tree” logic for detecting pattern-based gestures and altering the output from and/or processing by the device in response thereto described in the specification. EX2008, ¶50; EX1001, 54:19-20 (“If a gesture has been detected, then an associated action is performed.”), 57:9-10 (“Once the gesture has been identified, the corresponding operation is performed”), 25:28-32 (“[i]f it is determined that the selection establishment conditions have not been met, the selection is updated in a loop [and] may continue to vary as a function of user input until the selection establishment conditions have been met”); *see also supra*, §II.A.⁵

Compare Limitations [1.o.i]-[1.o.vii] (“when: [preconditions met] ... output ... a first feedback ... *and* display a menu”) *with* Limitation 3 (“the first feedback ... is output prior to the display of the menu”).

⁵ While PO has demonstrated that the plain claim language is consistent with the specification’s disclosure, it was not incumbent on PO to do so nor would the lack of any such disclosure be a justification to ignore the plain language. *See Iqris Techs. LLC v. Point Blank Enters., Inc.*, ___ F.4th ___, 2025 U.S. App. LEXIS 5316, *13 (Fed. Cir. Mar. 7, 2025) (term should be given “ the full scope of its plain and ordinary meaning unless the patentee explicitly redefines the term or disavows its full scope”).

Petitioner attempts to evade the plain and ordinary meaning by arguing that the claims “only recite a basic when-then conditional relationship” and therefore do not require that the action be performed in response to the preconditions being met. Pet., 52 n.8 (citing EX1003, ¶158). But Petitioner’s assertion that a “when-then relationship” is different from “typical causal language (such as “in response to”) or exclusive conditional language (such as “only when”)” is unsupported. *Id.* And as explained by PO’s expert, a POSITA would **not** distinguish when-then language from “typical causal language (such as ‘in response to’).” EX2008, ¶51. Rather, a POSITA would understand there is no distinction between programming logic that performs an action “when” specified preconditions are met and logic that performs an action “in response to” specified preconditions being met. *Id.*

The Board preliminarily indicated it did not “understand the plain language of Limitation [1.o] to require [performance of the recited actions] **only** after expiration of the ‘second user-configurable predefined duration.’” D.I., 27-28 (emphasis added). PO agrees that the plain claim language does not preclude performance of the recited actions in other circumstances. That is, the claims do not preclude performing the recited actions in response to other logic operations beyond those claimed. As explained above, however, the claims require executable instructions that trigger the recited actions **in response to** a determination that all of the corresponding preconditions are met. As a result, the claims are not satisfied by

programming logic that triggers the recited action in a *different, unclaimed* scenario. *See* EX2008, ¶53.

For example, Limitation [1.n.vi] requires instructions to “replace the display of the first web page with the second web page” “when” the preconditions in Limitations [1.n.i]-[1.n.v] are met. *See supra*, §II.B. While that does not preclude the device from including an alternative logic operation to replace the display of one web page with another when *different* conditions are met, that alternative logic operation would not satisfy the plain language of Limitation [1.n]. Rather, Limitation [1.n] requires executable instructions that trigger “replac[ing] the display” “when” the preconditions recited in Limitations [1.n.i]-[1.n.v] are met. EX2008, ¶53.

Similarly, Claim 1 would not be satisfied where a recited action is triggered in response to a determination that only a subset of the corresponding preconditions are satisfied. Because the preconditions recited in Limitations [1.m], [1.n], and [1.o] are joined with “and”—as opposed to “or”—they must collectively, rather than alternatively, be met. *See Seirra Wireless, ULC v. Sisvel S.P.A.*, __ F.4th __, 2025 U.S. App. LEXIS 5458, *4-*5 (Fed. Cir. Mar. 10, 2025).

For the reasons set forth above, the Board should reject Petitioner’s attempts to deviate from the plain language of Claim 1.

B. “Conditional” Limitations of Claim 42

Limitations [42.h], [42.i], and [42.j] collectively recite performing specified actions (e.g., “avoid display” “replace display,” “output, using the actuator,” “display a menu”) “based on detected usage” that meets certain preconditions. *See supra*, §II.B. Petitioner acknowledges that Claim 42 is “substantially similar to” Claim 1 and the Petition makes no distinction between the “when” limitations of Claim 1 and the “based on” limitations of Claim 42. Pet., 64. For that reason alone, Limitations [42.h], [42.i], and [42.j] should be interpreted consistently with Limitations [1.m], [1.n], and [1.o] to require that performance of the recited actions be triggered by a determination that all corresponding preconditions have been met. Indeed, to interpret Claim 42 otherwise would be contrary to its plain language, which expressly requires that the recited actions be executed “***based on*** detected usage where” all corresponding preconditions are satisfied. EX1001, 115:7-53; *see also* Pet., xi-xii.

Further, Claim 42 closely resembles the claim the Federal Circuit addressed in *Hytera Communications Co. v. Motorola Solutions, Inc.*, 841 F. App’x 210, *216-*217 (Fed. Cir. 2021), which the court distinguished from the claim at issue in *Ex Parte Schulhauser*, No. 2013-007847, 2016 WL 6277792 (P.T.A.B. Apr. 28, 2016) (precedential) (applying BRI standard). As in *Hytera*, Claim 42 “requires that a specific action be taken in response to each of [multiple] alternative specified

conditions.” *Id.*; EX1001, 114:53-115:53. The *Hytera* court found that, “in order to render such a claim obvious, the prior art must teach each step of the claim, including the response to each condition.” *Hytera*, 841 F. App’x at *218.

C. “The First Contact”

Petitioner also attempts to deviate from the plain claim language by mapping two separate touch events to the claimed “first contact.” Pet., 9 (identifying “when the user contacts the touch screen” for the first time and identifying a “quick tap on the touch screen,” which occurs “*after breaking contact*”).⁶ The Challenged Independent Claims recite logic operations to “detect a first contact starting at a first contact point at a first contact time on the touch-sensitive interaction surface.” EX1001, Limitations [1.h], [42.c] All subsequent limitations that refer to “contact” reference “the first contact.” *Id.*, 103:66-104:55, 114:63-115:53. The antecedent basis “the first contact” demonstrates that the claims require a single, common contact event as the starting point of the claimed logic operations. EX2008, ¶56.

Further, the Challenged Independent Claims recite “determine a duration of the first contact as a difference between the first contact time and the second contact time.” Limitations 1[h], [1.j], [42.c], [42.e]. The claims further recite comparing “the duration of the first contact” with one or more “predefined” durations to “determine”

⁶ All emphasis added unless otherwise noted.

whether “**the** duration of **the** first contact” is “less than,” or “greater than” the predefined duration. Limitations [1.m.ii], [1.n.ii], [1.o.ii], [42.h]-[42.j].; *see also* EX2008, ¶56. The antecedent bases “**the** duration of **the** first contact” and “**the** first contact time” indicate that evaluating the duration of the first contact requires evaluating a single, common contact event beginning at a common starting point. Limitations [1.h], [42.c]; EX2008, ¶56. Here, the plain claim language defines that common starting point as “a first contact starting at a first contact point at a first contact time on the touch-sensitive interaction surface.” Limitations [1.h], [42.c]; EX2008, ¶56.

Thus, the Challenged Independent Claims cannot be satisfied by programming logic in which one of the recited actions is triggered by a contact other than “***the*** first contact.” Similarly, the claims cannot be satisfied by programming logic that compares a different duration—such as a display duration that starts after “the first contact”—with the predefined durations. EX2008, ¶57.

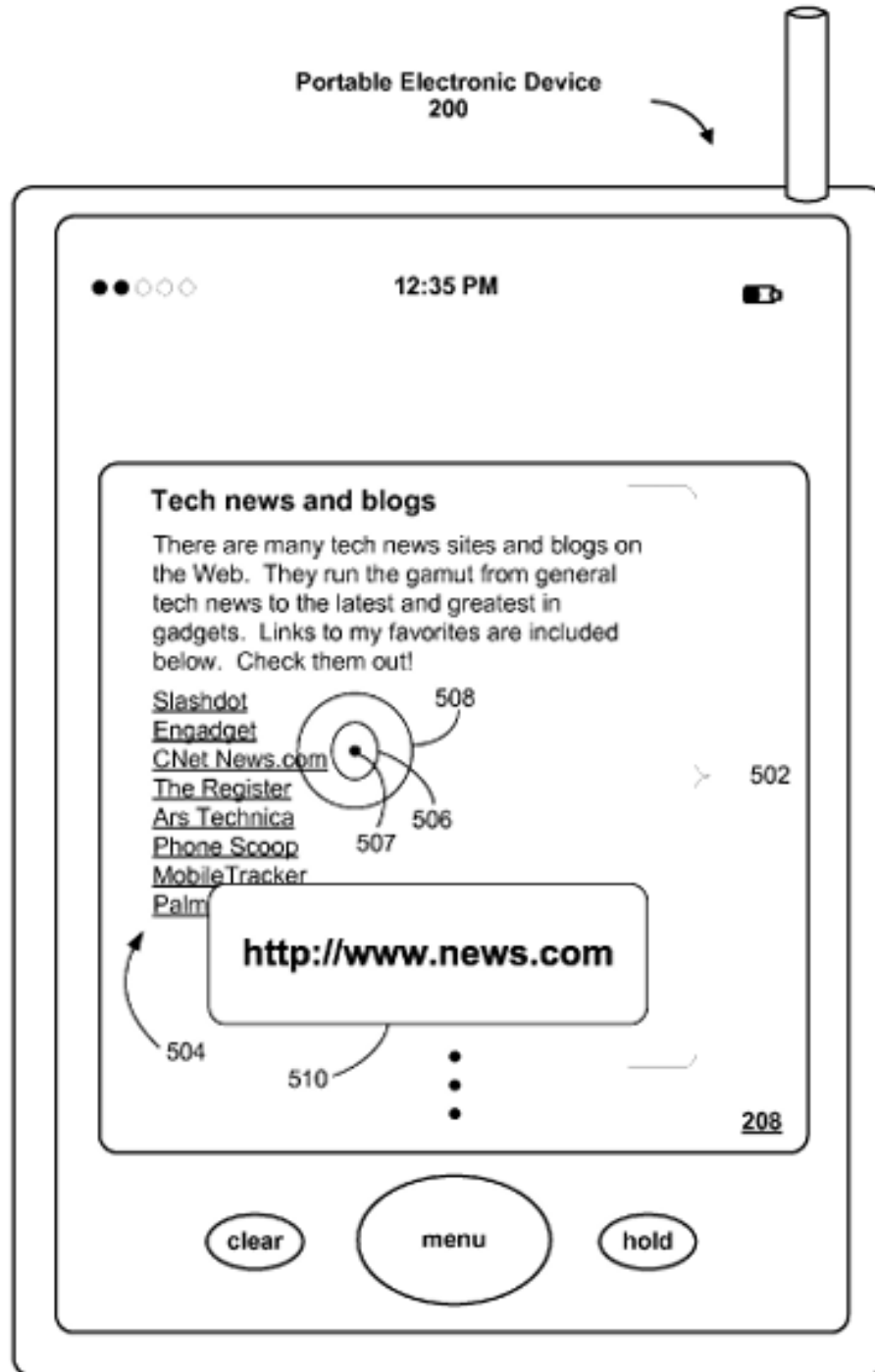
V. OVERVIEW OF THE PRIOR ART

A. Blumenberg (EX1004)

Blumenberg discloses a portable electronic device (i.e., mobile device) with a touch screen that displays hyperlinks that can be contacted by a user’s fingers to cause certain actions to be performed on the device. EX1004, ¶¶[0007]-[0012]. Such

actions include: (1) “displaying” preview information associated with a hyperlink, and (2) “activating” a hyperlink. EX1004, ¶¶[0036], [0041], Figs. 3-5.

Blumenberg discloses that the “small screen size” of mobile devices hinders the user’s ability to accurately navigate hyperlinks. EX1004, ¶[0004] (“navigating...via the hyperlinks takes on a hit-or-miss character [that] frustrate[s] users”). To address this issue, Blumenberg teaches displaying a hyperlink preview (e.g., link information 510) that provides easy-to-read information to help the user confirm correct finger contact with the selected hyperlink. *See id.*, ¶¶[0048], [0053]; EX2008, ¶61. As shown in Figure 5C (below), “link information 510” includes the URL of the link and “a snippet” or “summary of content from the page to which the link points.” EX1004, ¶¶[0047]-[0048], [0053]; EX2008, ¶61.



EX1004, FIG. 5C. A user's selection of a target link is determined based on contact with the touch screen at an adjacent contact area or contact point. EX1004, ¶[0047]. Once the selection is determined, "information associated with the link" (i.e., the

hyperlink preview) “may be displayed on the touch screen.” *Id.*, ¶¶[0048], [0036]-[0040], FIG. 3 (steps 304-310); EX2008, ¶62.

In some embodiments, the hyperlink preview is displayed “after the contact is maintained for at least a predetermined time (e.g., 0.2 seconds, or another value between 0.1 and 0.25 seconds) for displaying the link information.” EX1004, ¶[0049]; EX2008, ¶63. And “if the contact is held for longer than a second predetermined amount of time, whatever link information that is displayed is removed from display and the link is not activated.” EX1004, ¶[0051]; *id.*, ¶[0049]; EX2008, ¶63.

Blumenberg discloses two operational scenarios for hyperlink “activation.” Both scenarios arise when a user’s contact with the touch screen has triggered the display of a hyperlink preview and the user’s contact with the touchscreen is thereafter broken. In particular, Blumenberg teaches that, when the contact is broken *before* the hyperlink preview has been displayed for a first predetermined amount of time, the hyperlink is activated in response to the contact break. EX1004, ¶[0051] (“the selected link is activated by a contact break if the link information was displayed less than the first predetermined amount of time”); EX2008, ¶65. When the hyperlink preview has been “displayed for more than that amount of time [*i.e.*, the first predetermined amount of time], the user must break contact and tap the link information (which is continued to be displayed after the contact break) to activate

the selected link.” EX1004, ¶[0051]. Thus, Blumenberg teaches that when contact is broken *after* the first predetermined amount of time, the link may be activated only when the user makes a separate, second contact, “*such as a quick tap* on the touch screen 208 *after breaking contact*.” EX1004, ¶[0051]; EX2008, ¶66.

Petitioner’s mapping of Blumenberg to the Challenged Independent Claims, is premised on three operational scenarios of Blumenberg’s system (Pet., 9-10) premised on the hyperlink preview and hyperlink activation functionality described above. While each scenario starts with a user’s contact being detected on the touchscreen, they differ as to when contact is broken. *See* EX1004, ¶[0047] (“When the user makes contact with the touch screen 208, the device 200 determines a link amongst the links 504 that satisfies a number of predefined criteria with respect to the contact area 506 and/or the point 507.”).

In the first scenario—which Petitioner maps to maps Limitations [1.m] and [42.h]—the user’s contact is *not* maintained for “at least a predetermined time (e.g., 0.2 seconds ...),” which Petitioner calls “the selection threshold.”⁷ Pet., 9 (citing EX1004, ¶[0049]).

⁷ Blumenberg does not expressly describe this scenario—it describes a scenario where a hyperlink preview is displayed when “the contact *is maintained* for at least a predetermined time (e.g., 0.2 seconds ...).” *See* EX1004, ¶¶[0049].

In the second scenario—which Petitioner maps to Limitations [1.n] and [42.i]—the user’s contact is broken when “the link information was displayed *less than* the first predetermined amount of time,” which Petitioner refers to as the “activation threshold.” Pet., 9, 37-38 (citing EX1004., ¶[0051]). That is, the contact is held past the “selection threshold” of “0.2” seconds, but broken before the “activation threshold,” which triggers activation of the selected link. *Id.*

In the third scenario—which Petitioner maps to Limitations [1.o] and [42.j]—the user’s contact is maintained until “the link was displayed for *more than* [the first predetermined] amount of time,” which Petitioner refers to as the “activation threshold.” Pet., 9, 37-38 (citing EX1004., ¶[0051]). Blumenberg teaches that, in this third scenario, breaking contact does not activate the link; rather, activation requires a separate, second contact (i.e., “quick tap” / “confirmatory tap”). EX1004., ¶[0051].

Blumenberg also describes a fourth operational scenario, which Petitioner does not map to the claims. Blumenberg teaches that when the user maintains the contact “for longer than a second predetermined amount of time, whatever link information that is displayed is removed from the display.” EX1004, ¶[0051]; EX2008, ¶71; *see also* EX1004, ¶[0049] (explaining that the hyperlink preview is “removed” from the display if the contact is held longer than “a predetermined amount of time (e.g., three to five seconds)”).

B. Bhumkar (EX1005)

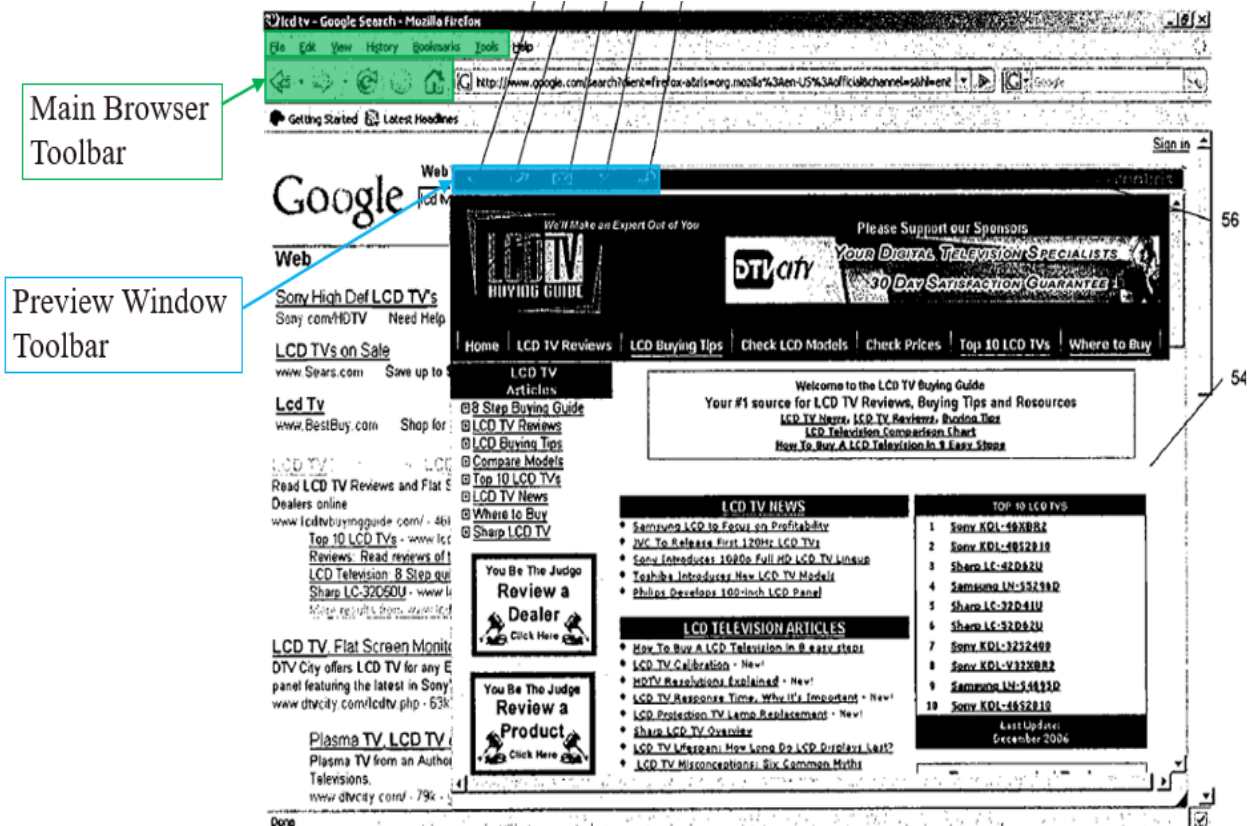
Bhumkar teaches methods of enhancing a user's internet browsing experience on a laptop/desktop computer by displaying “[p]reviews of a target web site or other Internet-accessible resource ... in response to cursor control events.” EX1005, Abstract; EX2008, ¶72. Bhumkar explains that when a user is reviewing “a list of search results,” “it is often difficult for the searcher to differentiate between relevant and irrelevant results because of the limited information returned by the search engine,” which may include only a list of URLs along with “a few lines of text clipped from the target web page.” EX1005, ¶[0005]. Bhumkar explains that this “provides the searcher with little or no information” to determine relevance of each hyperlink, so the user must “click through to the target web page associated with the link” to “fully determine whether or not the result is truly relevant.” *Id.*, ¶[0006]. Bhumkar seeks to solve this problem by providing “a ‘quick view’ or ‘preview’ of a target web site.” EX1005, ¶[0038].

Bhumkar teaches displaying a “preview” of a target web page in “a window superimposed over or adjacent to the first Web page as displayed in the browser.” EX1005, ¶[0014]. Bhumkar explains that such “previews ... are displayed in response to cursor control events,” which Bhumkar describes as user input signals from a cursor control device “such as a mouse, a trackball, or cursor direction keys” EX1005, Abstract, ¶[0083].

Bhumkar describes a non-functional embodiment of its preview window, which includes a static image of a webpage (EX1005, ¶¶[0041], [0049]-[0050] (FIG. 2 illustrates “an image of the actual web page”)), and a functional embodiment, which includes “a fully functioning webpage” (EX1005, ¶¶[0071]-[0072]). EX2008, ¶74. Bhumkar teaches that the functional embodiment includes a toolbar and all the functionality of a conventional web-browser.⁸ EX1005, FIGs. 2, 4, ¶[0040] (“may offer or permit any conventional browser functionality, such as Back, Jump to, Close, Share, Lock, RSS, WAP, Sidekick, Stumble, Full Screen, etc., in order to further facilitate solutions to the aforementioned problems”), ¶[0066] (“all of the functionality available to the browser is available to the quick view process.”); EX2008, ¶75.

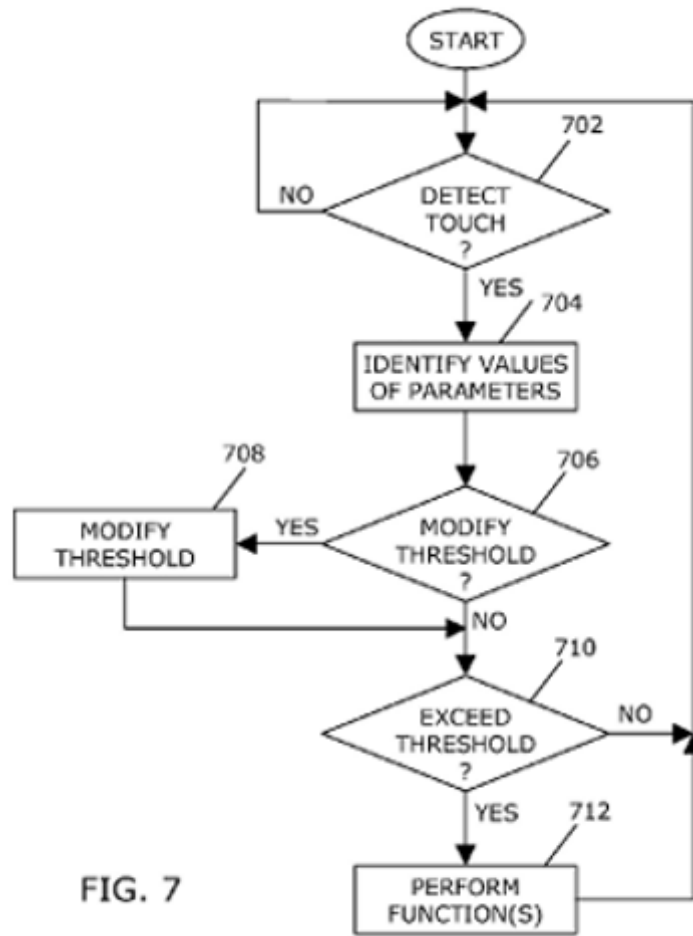
The annotated version of Bhumkar’s FIG. 5 (inset below) illustrates the functional embodiment, which includes a toolbar similar to that of the main window of the web browser. EX2008, ¶76.

⁸ Bhumkar does *not* disclose toolbar functionality as part of its non-functional preview window. EX2008, ¶74; EX1005, FIG. 5.



C. Griffin (EX1006)

Griffin teaches methods of “modifying a touch threshold” that may be used to “trigger performance of functions, such as provision of tactile feedback.” EX1006, ¶[0014]. Griffin’s FIG. 7 (inset below) illustrates such a method. *Id.* ¶[0039].



As illustrated, a touch is detected at step 702 and parameters associated with the touch are identified at step 704. At step 706, a determination is made whether to modify a touch threshold. At step 710, the parameters associated with the touch are compared to the operative threshold (original or modified, whichever is operative at the time) to determine whether the parameters exceed the threshold. If not, the process returns to step 702, but if so, the process proceeds to step 712, where the corresponding functions are triggered.

Griffin provides an example of modifying a touch threshold when a large “number of instances of inadvertent touches occurs during a period of time” such as when the device is “being carried in a pocket or bag.” *Id.*, ¶[0043]. Griffin teaches that, in that scenario, “the force threshold aspect of the touch threshold may be increased for a fixed period of time or until the inadvertent touches are not detected.” *Id.* Thus, during that time period a greater force is required to trigger the functions and “the inadvertent touches do not activate any unintended functions.” *Id.*, ¶[0061] (“reduces the occurrence of inadvertent touches causing functions to be performed, such as ... calling a contact”); EX2008, ¶¶78-79.

VI. PETITIONER FAILS TO DEMONSTRATE THAT THE PROPOSED COMBINATION SATISFIES ALL ELEMENTS OF CLAIMS 1 AND 42

The plain language of the Challenged Independent Claims defines a common starting point for the claimed programming logic: “a first contact starting at ... a first contact time on the touch-sensitive interaction surface.” Limitations [1.h], [42.c]; *supra*, §IV. The claims recite three logic operations that determine when “the first contact” satisfies the preconditions for a particular scenario and trigger performance of a corresponding action (e.g., “avoid display,” “replace display,” “display a menu”) in response thereto. Limitations [1.m]-[1.o], [42.h]-[42.j]; *supra*, §IV.

Petitioner’s proposed combination of Blumenberg, Bhumkar, and Griffin fails to satisfy those claim limitations, and therefore Petitioner therefore fails to carry its burden as to the Challenged Independent Claims.

A. Limitations[1.m] and [42.h]

Limitation [1.m]—which Petitioner refers to including the First Scenario of the claims—recites executable instructions to “avoid display, on the first web page, a result of any operation based on the first contact” ([1.m.iii]) “when” a determination is made that two recited preconditions—“the first web page is displayed via the user interface of the network browser application” ([1.m.i]) and “the duration of the first contact is determined to be less than a first user-configurable predefined duration, and the end of the first contact is detected” ([1.m.ii])—have been met. Pet., vi-vii; EX1001, 103:10-16. The fact that Claim 1 recites executable instructions to cause the device to perform the recited action “when” the corresponding preconditions are met dictates that the action is triggered by a determination that the preconditions are met. EX1001, 103:10-17; *see supra*, §IV.A. Limitation [42.h] is substantially similar. EX1001, 115:7-13; EX2008, ¶¶81-82; Pet., 64 (citing EX1003, ¶181) (agreeing Claim 42 is “substantially similar to” Claim 1); *see supra*, §IV.B.

Petitioner relies on Blumenberg with Griffin as purportedly teaching Limitations [1.m] and [42.h], Pet., 34-36, but Blumenberg does *not* disclose those limitations, and Griffin fails to cure the deficiency.

1. ***Blumenberg does not disclose or suggest “avoid[ing] display” of “a result of any operation” when “the duration of the first contact is ... less than a first ... predefined duration”***

Blumenberg fails to disclose or suggest that “when...the *duration of the first contact* is determined to be *less than a first user-configurable predefined duration*, and the end of the first contact is detected” (Limitation [1.m.ii]) the device “*avoid[s] display[ing]*, on the first web page, *a result of any operation* based on the first contact” (Limitation [1.m.iii]). EX2008, ¶¶83-87. Blumenberg also fails to disclose or suggest the corresponding aspects of Limitation [42.h]. *Id.* In its obviousness mapping for these limitations, Petitioner relies on Blumenberg’s disclosure that hyperlink preview information “is displayed after the contact is maintained for at least a predetermined time.” Pet., 34 (citing EX1004, ¶[0049]). Petitioner assumes that means contacting the hyperlink for *less* than the predetermined time would cause Blumenberg’s device to “avoid display” of the preview information. *Id.* Petitioner attempts to support this assumption with Blumenberg’s disclosure that “inadvertent contact with an icon may not select the corresponding symbol.” Pet, 34-35 (citing EX1004, ¶[0034]). But Petitioner’s efforts to piece together disparate aspects of Blumenberg’s teachings are inadequate.

First, even if valid, Petitioner’s assumption concerning Blumenberg’s response to a break in contact before the predetermined threshold is nonetheless insufficient. The plain claim language requires “avoid[ing] display ... [of] *a result*

of any operation based on the first contact.” Limitation [1.m.iii], [42.h]; EX2008, ¶84. Thus, merely by avoiding display of the hyperlink preview information is inadequate; rather, the claims require avoiding any change in the display based on the first contact. EX2008, ¶84. And Blumenberg ¶[0049] does not address whether contacting the hyperlink for less than the predetermined time would the display to change in some other way. EX2008, ¶84.

Second, Blumenberg’s discussion of “inadvertent contact” relates to a *different embodiment* and is unrelated to a user’s contact (inadvertent or otherwise) with a hyperlink. *See* EX1004, ¶[0034]; EX2008, ¶85.⁹ In particular, Blumenberg’s paragraph [0034] discloses that a touchscreen may display a “keyboard 210 that includes a plurality of icons,” which Blumenberg describes as “symbols.” EX1004, ¶[0034]. Blumenberg teaches that “inadvertent contact with an icon”—may not select a corresponding symbol from the keyboard. *Id.* Blumenberg explains that, for example, “a swipe gesture that sweeps over an icon may not select a corresponding symbol if the gesture corresponding to selection is a tap gesture.” *Id.* But, a POSITA

⁹ *See also* EX1003, ¶118 (acknowledging that “Blumenberg’s statement about disregarding inadvertent contact with icons” relates to a different embodiment, but asserting that a POSITA would “*apply [it] to Blumenberg’s preferred embodiments* about hyperlinks.”).

would not equate an “icon” displayed on a touchscreen keyboard with a hyperlink. EX2008, ¶85.

Although Petitioner’s expert asserts “Blumenberg’s statement about disregarding inadvertent contact with icons” would “*apply to Blumenberg’s preferred embodiments* about hyperlinks,” he fails to provide any support for that assertion. EX1003, ¶118; EX2008, ¶¶86-87. As PO’s expert explains, a POSITA would *not* understand Blumenberg’s teaching that a swipe gesture over a tap-enabled icon would be deemed inadvertent as a teaching that a static, short-duration contact with a hyperlink is also inadvertent. EX2008, ¶86. Indeed, there is no support for Petitioner’s assumption that contacting a hyperlink for less than 0.2 seconds, as mapped by the Petition (Pet., 34), would be deemed inadvertent. *See* EX2008, ¶¶86-87 (citing EX2005, 1/2) (0.2 seconds is not an exceedingly short duration). EX2008, ¶86.

For these reasons, Petitioner’s combination of Blumenberg, Bhumkar, and Griffin fails to satisfy Limitations [1.m] and [42.h] and Petitioner therefore fails to carry its burden.

2. *Griffin fails to cure the deficiency*

Petitioner’s proposed combination of Blumenberg with Griffin would not arrive at a device that “avoid[s] display[ing]...a result of any operation based on the first contact” when the contact is less than Blumenberg’s “selection threshold”

(which Petitioner equates to the claimed “first user-configurable predefined duration”). Pet., 34-35; EX2008, ¶¶88-91. Petitioner relies on portions of Griffin describing methods of detecting “inadvertent” contact when a device is “carried in a pocket or bag” and altering the way the device processes those input signals to prevent activation of unintended functions. Pet., 35 (citing EX1005, ¶¶[0033], [0043], [0061]). But the Petition does not adequately articulate a motivation to add that functionality to Blumenberg. Pet., 35-36. Indeed, the only motivation articulated concerns modifying Blumenberg to include Griffin’s “user-configurable predefined duration.” Pet., 35-36. The Petition provides no explanation why a POSITA would be motivated to incorporate Griffin’s teachings about inadvertent contact when a device is carried in a pocket or bag. EX2008, ¶88.

Further, a POSITA would not view Griffin’s disclosure concerning “inadvertent” contact as applicable to the scenario of Limitations [1.m.i]-[1.m.iii] and [42.h]. *See* EX2008, ¶89. Griffin describes programming logic to detect scenarios—such as when a large number of “inadvertent touches occur[]”—that indicate the device is “being carried in a pocket or bag.” EX1006, ¶[0043]; *see supra*, §V.C. Griffin teaches that, when such scenarios are detected, a force threshold (i.e., a pressure required to register a touch as intentional rather than inadvertent) is increased to prevent activation of unintended functions, such as a pocket-dial. EX1006, ¶[0043]. That is, Griffin teaches performing an action (i.e., increasing force

threshold) in response to multiple contacts rather than performing an action based on conditions relating to the “first contact.” *See* EX2008, ¶89. A POSITA would not understand Griffin to teach that a single contact of less than a pre-determined duration would or should be deemed inadvertent. EX2008, ¶¶89-90.

Finally, a POSITA would not have been motivated to modify Blumenberg with Griffin’s method of avoiding inadvertent input when a device “is carried in a pocket or bag” because Blumenberg already solves that problem by permitting a user to lock the screen. EX1004, ¶[0025] (“A quick press of the push button (not shown) may disengage a lock of the touch screen 112.”). Thus, a POSITA would have recognized that the problem solved by Griffin was already addressed in Blumenberg. EX2008, ¶¶88-91.

For these additional reasons, Petitioner’s combination of Blumenberg, Bhumkar, and Griffin fails to satisfy Limitations [1.m] and [42.h] and Petitioner therefore fails to carry its burden.

B. Limitations [1.n], [42i]

Limitation [1.n]—which Petitioner refers to as including the Second Scenario of the claims—recites executable instructions to “replace the display of the first web page with the second web page via the user interface of the network browser application” ([1.n.vi.]) “when” a determination is made that the preconditions recited in Limitations [1.n.i]-[1.n.v] are met. Those preconditions include, but are not

limited to: “the duration of the first contact is determined to be greater than the first user-configurable predefined duration and less than a second user-configurable predefined duration” ([1.n.ii]), and “the end of the first contact is detected” ([1.n.v]). Pet., vii; EX1001, 103:17-31. As explained above, under its plain and ordinary meaning, Claim 1 requires that “replacing the display” be performed in response to a determination that the recited preconditions are met. *See supra*, §IV.A. Limitation [42.i] is substantially similar. EX1001, 115:14-29; EX2008, ¶92; Pet., 64 (citing EX1003, ¶[0181]) (agreeing Claim 42 is “substantially similar to” Claim 1); *see supra*, §IV.B.

1. Petitioner mischaracterizes Blumenberg’s teachings regarding its second operational scenario

In its mapping for Limitations [1.n] and [42.i], Petitioner relies on Blumenberg’s second operational scenario, in which “the selected link is activated by a contact break if the link information was displayed for less than a first predetermined amount of time,” which Petitioner refers to as the “activation threshold.” Pet., 9, 37-38 (citing EX1004., ¶[0051]). In an effort to support its mapping for these elements, Petitioner also cites Blumenberg’s disclosure that “the activation of the link may be triggered by...*a quick tap*.” *See* Pet., 9, 37-38; EX1004, [0051]. But Petitioner mischaracterizes Blumenberg by equating “quick tap” activation with Blumenberg’s second operational scenario. EX2008, ¶¶93-94.

As explained above—and in the Petition—in Blumenberg’s second operational scenario the user’s contact with the touchscreen is broken when “the link information [*i.e.*, the hyperlink preview] was displayed less than the first predetermined amount of time.” EX1004, ¶[0051]; *see also* Pet., 9; *supra*, §V.A. In contrast, Blumenberg’s disclosure that “the activation of the link may be triggered by...a quick tap” relates to its third operational scenario, which Petitioner maps to Limitations [1.o] and [42.j]. *See supra*, §V.A.

In Blumenberg’s third operational scenario, “if the link information was displayed for more than that amount of time”—referring back to the “first predetermined amount of time”—“the user must break contact and tap the link information” to activate. EX1004, ¶[0051]. Thus, activation is “triggered by ... a quick tap ... *after breaking*” the first contact. *See* EX1004, ¶[0051]; *see also* EX2010, 65:13-17 (agreeing Blumenberg states that the quick tap on the touch screen is “after breaking contact”). Because Blumenberg’s “quick tap” is a separate, second contact that occurs after the user breaks the first contact, it cannot support Petitioner’s contention that Blumenberg’s second operational scenario—in which the link is activated in response to the user breaking the first contact—satisfies Limitations [1.n] and [42.i]. EX2008, ¶¶94-96. Further, Petitioner’s attempts to cherry-pick disclosure from multiple disclosed embodiments is “impermissible”

within the framework of demonstrating obviousness under § 103. *See Bausch & Lomb, Inc. v. Barnes-Hind/Hydrocurve, Inc.*, 796 F.2d 443, 448 (Fed. Cir. 1986).

2. ***Blumenberg does not disclose or suggest “replac[ing] the display” when “the duration first contact is ... greater than a first ... predefined duration” and “the end of the first contact is detected”***

Blumenberg fails to disclose that “when... the duration of the first contact is determined to be greater than the first user-configurable predefined duration and less than a second user-configurable predefined duration...and the end of the first contact is detected” ([1.n.ii], [1.n.v]), the device “replace[s] the display of the first web page with the second web page” ([1.n.vi]). EX2008, ¶¶97-100. Blumenberg also fails to disclose the corresponding aspects of Claim 42 ([42.i]). *Id.*

Petitioner maps these limitations to Blumenberg’s second operational scenario, in which “the selected link is activated by a contact break if the link information was displayed for less than a first predetermined amount of time,” which Petitioner refers to as the “activation threshold.” Pet., 37-38 (citing EX1004., ¶[0051]); *see supra*, §V.A. But that mapping fails because Limitations [1.n.ii] and [42.i] require that the link be activated in response to a determination that “the ***duration of the first contact***”—rather than the amount of time the hyperlink preview was displayed—is greater than a first threshold, but less than a second threshold. EX2008, ¶98.

Claims 1 and 42 recite “determine[ing] a duration of the first contact as a difference between the first contact time and the second contact time,” wherein the claims define “the first contact time” as the time “a first contact” is detected “on the touch-sensitive interface” and “the second contact time” as the time the “end of the first contact” is detected. *See supra*, §IV.C; EX1001, 102:63-103:67; EX2008, ¶98. Blumenberg’s teaching of activating a hyperlink based on a *display* duration that exceeds a threshold cannot satisfy these claims. EX2008, ¶98.

To the extent Petitioner argues Blumenberg’s “quick tap” hyperlink activation is part of its mapping for Limitations [1.n] and [42.i]—though such a mapping is improper for the reasons explained above—such a mapping fails. EX2008, ¶99. As explained above, these limitations require “replac[ing] the display of the first web page with the second web page” in response to a determination that the recited preconditions are met, one of which is that “the end of the first contact is detected.” *See supra*, §§IV.A-IV.B. Blumenberg expressly states that its “quick tap” is a gesture that occurs “after breaking contact.” EX1004, ¶[0051]. Thus, Blumenberg’s quick-tap hyperlink activation is triggered in response to a separate, second contact rather than “the end of the first contact [being] detected,” as is required by Limitations [1.n.v] and [42.i]. EX2008, ¶99.

In its obviousness mapping for these limitations, Petitioner does not articulate any specific modification of Blumenberg or combination with Bhumkar or Griffin.

See e.g., Pet. at 39 (only citing Griffin for its teaching that duration threshold may be “**user-configurable**”). Consequently, Petitioner’s obviousness mapping for these claims must be limited to the teachings of Blumenberg alone. *See SAS Inst., Inc. v. Iancu*, 138 S. Ct. 1348, 1355 (2018) (“Congress chose to structure a process in which it’s the petitioner, not the Director, who gets to define the contours of the proceeding.”); *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1381 (Fed. Cir. 2016) (rejecting obviousness arguments that “could have been included” in the petition but were not, as the Board may not “raise, address, and decide unpatentability theories never presented by the petitioner and not supported by the record evidence”); *Ariosa Diagnostics v. Verinata Health, Inc.*, 805 F.3d 1359, 1367 (Fed. Cir. 2015) (“a challenge can fail even if different evidence and arguments might have led to success”). *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3) as “requiring IPR petitions to identify ‘with particularity ... the evidence that supports the grounds for the challenge to each claim’”).

For these reasons Petitioner’s combination of Blumenberg, Bhumkar, and Griffin fails to satisfy Limitations [1.n] and [42.i] and Petitioner therefore fails to carry its burden.

C. Limitations [1.o], [42j]

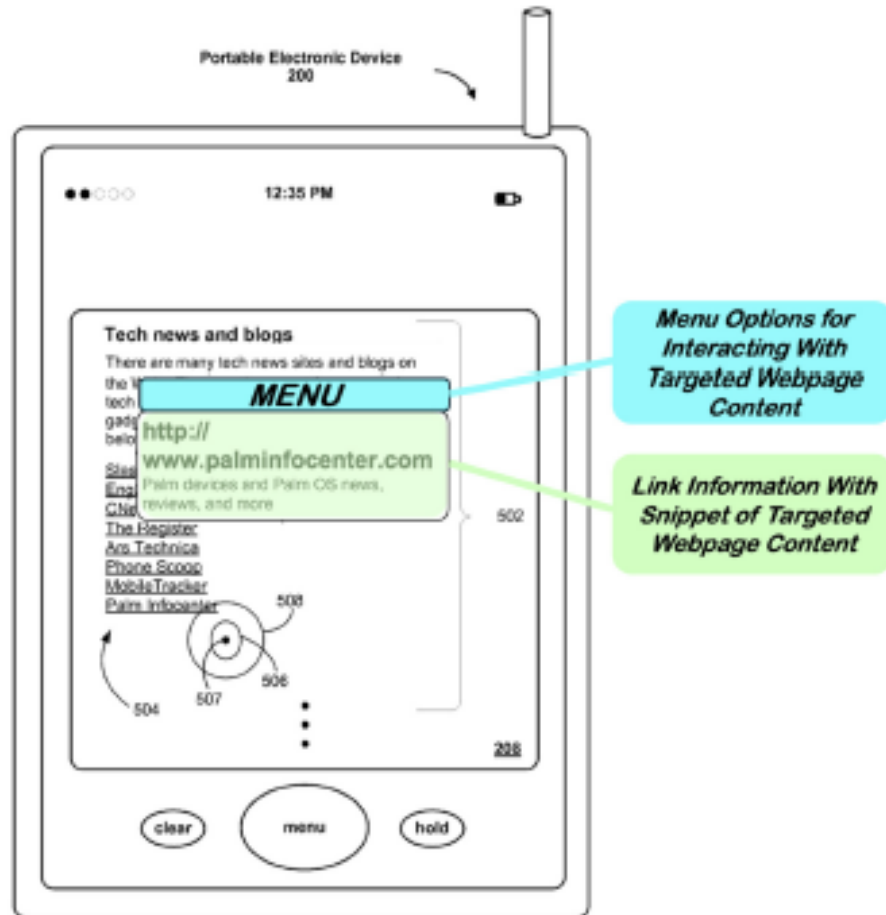
Limitation [1.o]—which Petitioner refers to as including the Third Scenario of the claims—recites executable instructions to perform the three recited ([1.o.vi]–[1.o.viii]) “when” a determination is made that five preconditions recited in are met ([1.o.i]–[1.o.v]). Pet., vi-vii; EX1001, 103:32-55, 115:30-53. The recited actions include, but are not limited to: “output, utilizing the actuator, a first feedback” ([1.o.vi]), “display a menu ... for performing an operation on a webpage associated with the hyperlink” ([1.o.vii], and “display at least a portion of the second web page” ([1.o.viii]). EX1001, 103:32-55, 115:30-53. The recited preconditions differ from those of Limitation [1.n] in two ways: (1) “the duration of the first contact is determined to be **greater than** the second user-configurable predefined duration” ([1.o.ii]), and “the end of the first contact is **not** detected” ([1.o.v]). Limitation [42.j] is substantially similar. EX1001, 115:14-29; EX2008, ¶101; Pet., 64 (citing EX1003, ¶[0181]) (agreeing that Claim 42 is “substantially similar to” Claim 1). As explained above, under their plain and ordinary meaning, these limitations require that the recited actions be performed in response to a determination that all corresponding preconditions are met. *See supra*, §IV.A-IV.B.

The Petition identifies two alternative mappings of Limitations [1.o] and [42.j], which are premised on two different modifications of Blumenberg in light of

Bhumkar. *See* Pet., 46-53. Both mappings fail to satisfy Limitations [1.o] and [42.j]; EX2008, ¶¶101-120.

1. Petitioner’s first proposed modification of Blumenberg fails because the “menu” is not displayed in response to the contact duration exceeding the “second ... predefined duration”

Petitioner first proposes modifying Blumenberg’s hyperlink preview to include “menu options” (i.e., a browser toolbar) as purportedly taught by Bhumkar. Pet., 13-14 (citing EX1005, [0021], [0042-0043]); *see also* Pet., 46 (citing EX1004, ¶[0048]; EX1005, [0071], FIG. 5). This “First Modification” is illustrated in Petitioner’s modified version of Blumenberg’s FIG. 5F (inset below), in which Blumenberg’s hyperlink preview is shown in green and the added menu is shown in blue. *Id.* Petitioner contends the menu corresponds to the recited action “display a menu ... for performing an operation on a webpage associated with the hyperlink” ([1.o.vii]) and the hyperlink preview corresponds to the recited action “display at least a portion of the second web page” ([1.o.viii]). Pet., 46, 49; EX2008, ¶¶103-104.



As Petitioner acknowledges, Blumenberg teaches that “information associated with the link” (*i.e.*, a hyperlink preview) is displayed when “the contact duration is greater than the selection threshold” (e.g., the 0.2 seconds threshold described in Blumenberg ¶[0049]). Pet., 36-38. Bhumkar teaches that the functional embodiment of its preview window includes a toolbar that is displayed simultaneously with its preview window. EX1005, ¶[0071] (preview window 54 includes a toolbar 56), FIG. 5 (depicting launched preview window with integrated toolbar 56). Thus, in Petitioner’s proposed modification, the menu and hyperlink

preview would be displayed simultaneously after the contact exceeds the “selection threshold,” which Petitioner equates to the claimed “first user-configurable predefined duration.” *See* Pet., 36-38; EX2008, ¶105.

That fails to satisfy Limitations [1.o] and [42.j], however, which require display[ing] a menu...” and “display[ing] at least a portion of the second web page...” in response to a determination that, among other things, “the duration of the first contact is ... *greater than the second user-configurable predefined duration.*”¹⁰ *See* Pet., vii-viii, xii; EX2008, ¶¶106-108. In contrast, in Petitioner’s First Modification the claimed actions occur *when* the contact duration is *less than* “the second user-configurable predefined duration”. EX2008, ¶¶106-107. Petitioner effectively concedes this deficiency in its First Modification. *See* Pet., 46 n.7 (acknowledging the need for an alternative mapping if the claims require the menu and hyperlink preview to be displayed “only when the conditions of Elements [1.o.i]-[1.o.v] occur”).

For these reasons, Petitioner’s First Modification of Blumenberg fails to satisfy Limitations [1.o] and [42.j] and Petitioner therefore fails to carry its burden.

¹⁰ As explained in Sections IV.A-IV.B, under the plain and ordinary meaning of the claims, the recited actions must be performed in response to a determination that all corresponding preconditions are met.

2. ***Petitioner’s second proposed modification of Blumenberg fails because it would render non-operational other aspects of Blumenberg on which Petitioner’s obviousness mapping is premised***

Petitioner next proposes modifying Blumenberg to include “output of feedback perceptible by touch (as taught by Griffin) and the display of a menu (as taught by Bhumkar)” after the “contact duration exceed[s] the activation threshold,” which Petitioner equates with the claimed “second user-configurable predefined duration.” Pet., 52 (citing EX1003, ¶158); EX2008, ¶109. Petitioner contends that in this “Second Modification” the display of a hyperlink preview (which Petitioner equates with “display[ing] ... a portion of the second webpage”) “would be paired with tactile feedback and a menu ***only after and as a consequence of the activation threshold***.” Pet., 52-53 (citing EX1003, ¶158) (emphasis added).¹¹

This Second Modification of Blumenberg is fatally flawed because it would render non-operational the functionality on which Petitioner’s obviousness mapping for Limitations [1.n] and [42.i] is premised. EX2008, ¶¶110-115. In particular, Blumenberg teaches that its hyperlink preview is displayed in response to the user’s

¹¹ See also Pet., 52 (asserting that, in this proposed modification, “the complete set of limitations at Elements [1.o.vi]-[1.o.viii] that constitute the claimed function ***is caused by and only occurs in conjunction with the complete set of limitations*** at Elements [1.o.i]-[1.o.v] that constitute the claimed condition”).

being maintained beyond a “predefined time” (e.g., 0.2 seconds), which Petitioner refers to as “the selection threshold.” Pet., 9 (citing EX1004, ¶[0049]). Once the hyperlink preview is displayed, Blumenberg teaches that the link is activated “by a contact break” occurring when “the link information was displayed less than the first predetermined amount of time,” which Petitioner refers to as “the activation threshold.” Pet., 9, 37-38 (citing EX1004., ¶[0051]); EX2008, ¶110.

Petitioner relies on the above-described operational scenario—which begins with a hyperlink preview being displayed when contact exceeds the “selection threshold”—as purportedly satisfying Limitations [1.n.] and [42.i]. Pet., 9, 37-38 (citing EX1004., ¶[0051]); *see also supra*, §V.A (describing Petitioner’s mapping of the claims to Blumenberg). If Blumenberg were modified as proposed, however, the hyperlink preview would be displayed “*only after* and as a consequence of *the activation threshold*.” Pet., 52 (citing EX1003, ¶158); EX2008, ¶111. As a result, the operational scenario on which Petitioner relies for Limitations [1.n.] and [42.i] would no longer exist in Blumenber’s system. EX2008, ¶111. This is a fatal flaw in Petitioner’s obviousness mapping. *See, e.g., Ex Parte Obrien*, Appeal No. 2002-1846, 2002 WL 33950052, at *2 (BPAI Sept. 20, 2002) (non-binding) (reversing rejections that were “not adequately articulated and appear[ed] *internally inconsistent*”); EX2008, ¶111.

The Second Modification of Blumenberg also fails because Petitioner ignores the significant disadvantages of the combination. EX2008, ¶112; *see also Arctic Cat, Inc. v. Bombardier Recreational Products, Inc.*, 876 F.3d 1350, 1363 (Fed. Cir. 2017) (“Evidence suggesting reasons to combine cannot be viewed in a vacuum apart from evidence suggesting reasons not to combine.”); *Henny Penny Corp. v. Frymaster LLC*, 938 F.3d 1324, 1332 (Fed. Cir. 2019) (“The benefits both lost and gained, should be weighed against one another” when considering motivation to combine). In particular, Petitioner’s Second Modification would result in a slower and less efficient interface. EX2008, ¶112. Specifically, the user would no longer be able to open a hyperlink preview except by maintaining contact for a much longer time than envisioned by Blumenberg. *See* EX1004, ¶[0049] (describing a shorter time for performing the hyperlink preview).

Further, the Second Modification fails because Petitioner ignores that Blumenberg teaches away from displaying a menu and hyperlink preview *after* the activation threshold. *See* Pet., 52-53; EX1003, ¶158; EX2008, ¶113. Specifically, Blumenberg teaches that “if the contact is held for longer than a second predetermined amount of time”—which Petitioner refers to as the “activation threshold”—“whatever link information that is displayed is removed from display and the link is not activated.” *See* EX1004, ¶[0051]; EX2008, ¶113. Petitioner’s assertion that a POSITA would modify Blumenberg such that holding contact for

longer than the activation threshold would instead cause the display of additional information (*i.e.*, a menu and hyperlink preview) is in direct conflict with Blumenberg’s teaching of “remov[ing] [such information] from display.” *See* EX1004, ¶[0051]; EX2008, ¶113.

Petitioner’s attempt to “to stitch together an obviousness finding from discrete portions of prior art references” while failing to address this clear teaching away is improper. *See In re Enhanced Sec. Research, LLC*, 739 F.3d 1347, 1355 (Fed. Cir. 2014) (it is improper “to stitch together an obviousness finding from discrete portions of prior art references without considering the references as a whole.”); *see also Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1568 (Fed. Cir. 1987) (“a prior patent must be considered in its entirety, *i.e.*, as a whole, **including portions that would lead away** from the invention in suit”); *InTouch Techs., Inc. v. VGo Comm’cns, Inc.*, 751 F.3d 1327, 1349 (Fed. Cir. 2014) (noting impropriety of combining references “like separate pieces of a simple jigsaw puzzle” without “explain[ing] what reason or motivation one of ordinary skill in the art ... would have had to place these pieces together”).

Petitioner’s only purported support for why a POSITA would allegedly make the Second Modification is the conclusory testimony of its expert, who asserts that Blumenberg’s “extended touch duration indicates the user’s competing interests,” which a POSITA purportedly would have “attempt[ed] to address” by “integrat[ing]

functionality [i.e., displaying the menu and hyperlink preview] to interact with the target webpage without leaving the current webpage.” Pet., 17-18 (citing EX1003, ¶¶79-80); EX2008, ¶114. But there is no evidentiary support for the assertion that maintaining contact with the display indicates a “user’s competing interests.” Pet., 17-18 (citing EX1003, ¶¶79-80); EX2008, ¶114. Nor does the expert credibly explain why an extended touch duration would indicate an interest in maintaining display of the menu and hyperlink preview, particularly given that Blumenberg teaches the opposite. *See, e.g.*, EX1004, ¶[0051]; EX2008, ¶114. These conclusory assertions are insufficient to establish a motivation to make the Second Modification. *See In re Nuvasive, Inc.*, 842 F.3d 1376, 1383 (Fed. Cir. 2016) (conclusory statements are “insufficient articulations of motivation to combine” references).

As the Petition fails to articulate an adequate motivation to make the Second Modification, it cannot legally establish obviousness. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007), (there must be “a reason” for a skilled artisan “to combine the elements in the way the claimed new invention does”); *Virtek Vision Int’l v. Assembly Guidance Sys.*, 97 F.4th 882, 887 (Fed. Cir. 2024) (“KSR did not do away with the requirement that there must exist a motivation to combine various prior art references in order for a skilled artisan to make the claimed invention.”). As a result, Petitioner fails to carry its burden.

3. *A POSITA would not have made any other alternative modification of Blumenberg*

To the extent Petitioner belatedly attempts to argue that it proposed a third modification of Blumenberg in which Blumenberg’s hyperlink preview is displayed after the selection threshold and the menu is added to the display after the activation threshold, the allegations in the Petition are insufficient. EX2008, ¶¶116-120. Petitioner alleges—in a footnote—that “to the extent” the Board finds that conditional limitations of the claims should be interpreted contrary to Petitioner’s proposed interpretation, “a POSITA would have pursued ... a design option” in which “the menu options [are] displayed only when the conditions of Elements [1.o.i]-[1.o.v] occur.” *See* Pet., 46 n.7. Petitioner cites its “[f]ourth’ motivation rationale,” but otherwise provides no further explanation. *Id.*

The portion of the Petition addressing Petitioner’s “fourth motivation rationale” states that “a POSITA would have appreciated that there are additional benefits of introducing menu options to the displayed webpage preview after the duration of the user’s touch surpasses Blumenberg’s activation threshold.” Pet., 18 (emphasis in original). But the Petition does not explain how such a modification would allegedly satisfy the Challenged Independent Claims nor cite any evidence to support such an assertion. EX2008, ¶116. These threadbare allegations fall far short of “identify[ing] ‘with particularity ... the evidence that supports the grounds for the challenge to each claim’.” *See Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356,

1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3); *Intelligent Bio-Systems, Inc. v. Illumina Cambridge Ltd.*, 821 F.3d 1359, 1369 (“[T]he expedited nature of IPRs bring with it an obligation for petitioners to make their case in their petition to institute.”)).

Further, to the extent Petitioner argues that Blumenberg’s “snippet” could simply be substituted with Bhumkar’s “‘quick view’ or ‘preview’ of a target web site,” that contention is also insufficient. Pet., 50; EX2008, ¶117. Blumenberg’s hyperlink preview includes the URL name and a snippet of content from the web page. EX1004, FIG. 5F. A POSITA would have understood that Blumenberg’s hyperlink preview must accommodate screen size constraints of a mobile device, which are more extreme than those found in desktop web browsers as depicted by Bhumkar. EX2008, 117. Accordingly, a POSITA would not recognize swapping Blumenberg’s “snippet” for Bhumkar’s preview a simple substitution. *Id.*

Regardless, a modification of Blumenberg in which its hyperlink preview is displayed before contact exceeds the activation threshold fails to satisfy Limitations [1.o] and [42.j] for the same reasons as Petitioner’s First Modification of Blumenberg. *See supra*, §VI.C.1 (explaining that Petitioner’s First Modification fails to satisfy Limitations [1.o] and [42.j] because the hyperlink preview (alleged “portion of the second web page”) would be displayed **before** contact exceeds the

activation threshold (alleged “second user-configurable predefined duration”)); EX2008, ¶118.

Further, neither Blumenberg nor Bhumkar teaches or suggests such a modification. Blumenberg discloses displaying all information associated with its hyperlink preview (e.g., URL, title, snippet of content) simultaneously, after exceeding the “*selection* threshold.” See EX1004, ¶¶[0048]-[0049], FIGs. 5C, 5E; EX2008, ¶119. Similarly, Bhumkar teaches displaying its preview window simultaneously with its integrated toolbar. See EX1005, ¶[0071], FIG. 5. Thus, neither reference (nor any other evidence of record) disclose displaying a pop-up window with a portion of a webpage and then displaying a toolbar for that pop-up window based on a subsequent action. See e.g., EX1003, ¶79-82 (citing no independent evidence). EX2008, ¶119.

For these reasons, Petitioner’s allegations concerning an alternative modification to Blumenberg fails to satisfy Limitations [1.o] and [42.j] and Petitioner therefore fails to carry its burden.

VII. PETITIONER FAILS TO DEMONSTRATE THAT A POSITA WOULD HAVE BEEN MOTIVATED TO MODIFY BLUMENBERG AS PROPOSED FOR CLAIMS 1 AND 42

Petitioner’s alleged motivations to modify Blumenberg’s hyperlink preview are inadequate for several reasons. First, they are premised on the erroneous assumption that a POSITA would consider components in a conventional web

browser (as in Bhumkar) to be readily transferable to the user interface of a mobile device (as in Blumenberg).

Second, Petitioner’s alleged motivations are premised on “selected bits and pieces” of the references and therefore fail to account for the teachings of the references as a whole, including the numerous ways in which Bhumkar and Blumenberg teach away from Petitioner’s proposed modifications. *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1577–78 (Fed. Cir. 1987).¹²

Third, certain of Petitioner’s alleged motivations are untethered to the specific modifications proposed in the Petition and therefore cannot furnish a motivation “to combine the elements in the way the claimed invention does.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007).

A. Petitioner’s Proposed Modification Is Contrary To The Teachings of Both of Blumenberg and Bhumkar

A POSITA would have found the mobile-device screen-size problems Blumenberg seeks to address are quite different from the problems Bhumkar seeks

¹² See also *Enhanced Sec.*, 739 F.3d at 1355 (citing *Panduit*, 810 F.2d at 1578) (“§ 103 does not permit ... stitch[ing] together an obviousness finding from discrete portions of prior art references without considering the references as a whole”); *In re Warsaw Orthopedic, Inc.*, 832 F.3d 1327, 1332 (Fed. Cir. 2016) (“must consider the prior art ‘in its entirety, i.e., as a whole.’”).

to address with respect to conventional web browsers used in a desktop or laptop computer. EX2008, ¶¶121-134.¹³ And a POSITA would not have considered the features of Bhumkar’s conventional web browser to be readily transferrable to the hyperlink preview described in Blumenberg. EX2008, ¶¶121-134; EX2004, 1/12 (Mobile Sites Are Different from Desktop Web Sites).

Blumenberg teaches that the “small screen size” of mobile devices “limits the amount ... and/or the size of the information that can be shown on the screen” and “pose[s] problems for web browsing ... because links in webpages displayed on a small screen may not be perceived easily by users.” *See* EX1004, ¶[0004]; EX2008, ¶123. “As a result, getting information about the hyperlinks and navigating to [those] web-pages ... takes on a hit-or-miss character, which can frustrate users and make the web browsing experience ... cumbersome.” EX1004, ¶[0004]. A POSITA would have understood these issues to be specific to mobile devices and not generally applicable to web browsing. EX2008, ¶123; *see also* EX2010, 49:20-25 (agreeing Blumenberg “makes no mention of personal computers” and does not associate the “need for more efficient ways to convey hyperlink information...with conventional web browsers, like those available in a PC”).

¹³ *See* EX2010, 48:11-14 (agreeing Blumenberg does not link the screen-size problem it seeks to address with desktop computers).

To address these issues, Blumenberg teaches displaying a hyperlink preview that includes the URL and a snippet of text from the webpage in a larger font, thereby providing easy-to-read information about the target webpage to help the user confirm that he wants to navigate to the webpage. *See supra*, §V.A; *see also* EX1004, ¶[0053] (text in hyperlink preview “is displayed at a legible size, such as 14 point or larger” including “18 point text.”); EX2008, ¶123. In light of Blumenberg’s emphasis on using larger, more readable text and the small screen size of mobile devices, a POSITA would have understood that the amount of information that can be displayed in, and therefore the functionality of, Blumenberg’s hyperlink preview is limited. EX2008, ¶¶123-124.

In contrast, Bhumkar teaches displaying a preview window (outlined in red in below) that includes “a fully functioning web page” with all the same functionality provided in a conventional web browser. EX1005, ¶¶[0070], [0040]; *see supra*, §V.B; EX2008, ¶124.

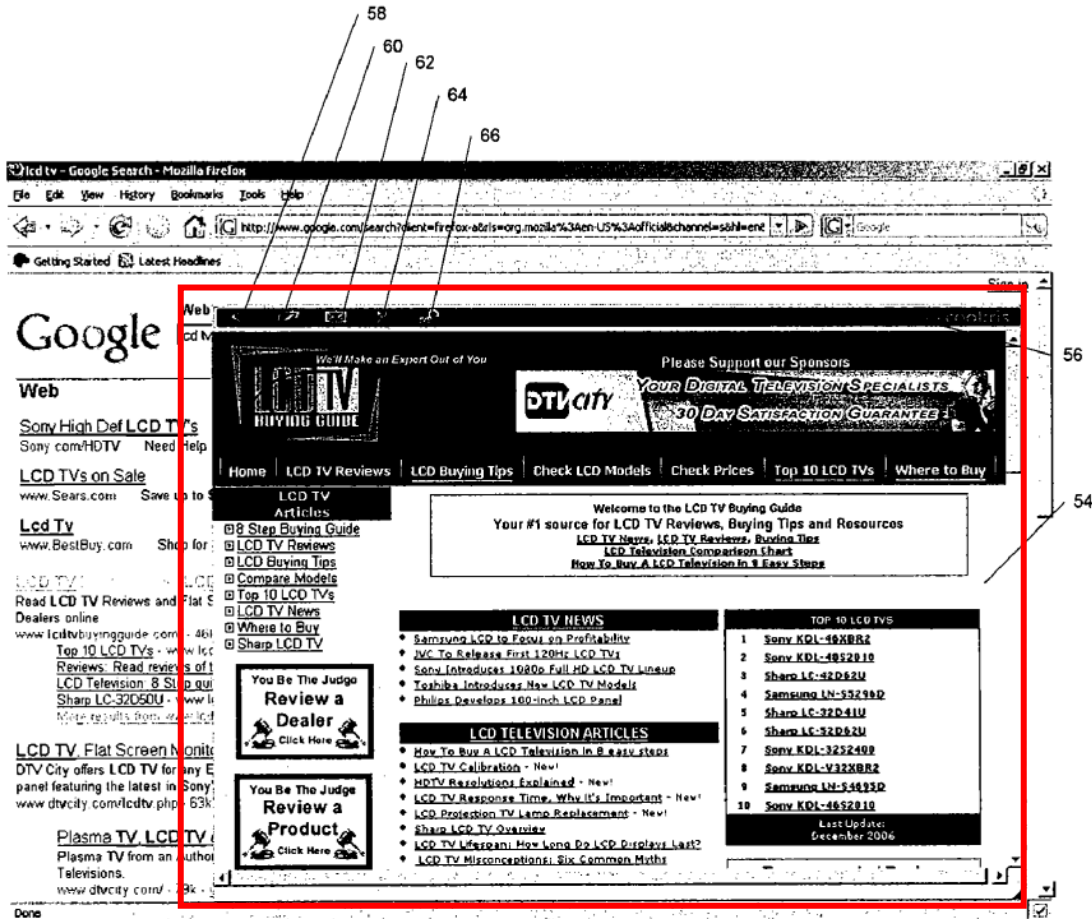


FIGURE 5

Against this backdrop, a POSITA would not have found the toolbar of Bhumkar's preview window readily transferrable to Blumenberg's hyperlink preview window. EX2008, ¶125. In particular, a POSITA would have viewed Bhumkar's focus on providing a fully functioning web page in its preview window as contrary to Blumenberg's teaching to provide a limited subset of information in a larger font-size so it is more legible on a small screen. *Id.* Indeed, a POSITA would have understood Bhumkar to teach away from the use of a preview window like Blumenberg's—in which the preview includes only the URL name and a snippet of

text from the webpage¹⁴—as Bhumkar says it provides “little or no information on which to base a decision as to the relevance of the associated web page.” EX1005, ¶[0006]; EX2008, ¶125; *see also id.*, ¶[0005] (the “few lines of text clipped from the target web page ... is usually limited to a few words which may or may not help the searcher in assessing the relevancy of the returned result”). Thus, a POSITA would understand that a hyperlink preview including the limited information taught by Blumenberg would not advance Bhumkar’s objective to provide *more* information to the user. EX2008, ¶125.

Further, a POSITA would not have found the toolbar of Bhumkar’s preview window—which is described as the toolbar of a fully functioning desktop web browser (EX1005, ¶[0071])—compatible with Blumenberg’s hyperlink preview window, which is not a functioning web page. EX2008, ¶126. As an example, Bhumkar’s toolbar includes a “back” function, which a POSITA would have regarded as inapplicable to Blumenberg’s hyperlink preview, which has no browsing history for the user to navigate back through. *See* EX1005, ¶[0040] (Back, Jump to, RSS, WAP, Sidekick, Stumble, Full Screen); EX2008, ¶126. This understanding is confirmed by Bhumkar, which explains that a toolbar is included *only* in the

¹⁴ *See* EX1004, ¶[0040] (describing the information included in Blumenberg’s hyperlink preview).

embodiments for which the preview window is “a fully functioning web page” and omitted in embodiments where the preview window is not a functional web page, like Blumenberg. *See supra*, §V.B; EX2008, ¶127.

In light of the numerous incompatibilities and teachings away addressed above, a POSITA would *not* have been motivated to modify Blumenberg by adding Bhumkar’s toolbar Blumenberg’s hyperlink preview window. EX2008, ¶¶121-128. As explained below, the purported motivations advanced by Petitioner fail to address, much less resolve, those incompatibilities and teachings away.

B. Petitioner’s First Motivation Fails Because It Is Contradicted By The References’ Teachings

Petitioner first contends that, because “Bhumkar employs a menu to augment a webpage preview,” “it would have been axiomatic for a POSITA to do the same in the context of Blumenberg’s ‘link information’ that similarly previews webpage.” Pet., 14-15. But Petitioner’s assertion that Bhumkar and Blumenberg “similarly preview[] webpage content” (Pet., 15) is *not* correct. EX2008, ¶¶129-130, 135. Bhumkar’s preview window is a fully functioning webpage, whereas Blumenberg’s hyperlink preview is a non-browser window that displays only the URL name and snippet of text from a target webpage. *See supra*, §V.B; EX2008, ¶136. And a POSITA would have had no reason to add a web-browser toolbar to Blumenberg’s hyperlink preview window because, Bhumkar teaches away from providing a toolbar in non-browser windows. EX2008, EX2008, ¶137.; *see supra*, §V.B, n. 7.

Further, adding a toolbar with multiple small icons to Blumenberg’s hyperlink preview window would increase the risk of unintentional selection that Blumenberg seeks to alleviate. *See* EX1004, ¶[0004]; EX2008, ¶138.

Further, despite Petitioner’s contrary assertion, the mere fact that menus were widely used in mobile applications is insufficient to demonstrate that it would have been obvious to modify Blumenberg’s hyperlink preview to include a toolbar. *See KSR*, 550 U.S. at 418 (“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”); *TQ Delta, LLC v. Cisco Sys., Inc.*, 942 F.3d 1352, 1357 (Fed. Cir. 2019) (emphasizing the importance of “[i]dentifying a motivation to combine” beyond the assertion the mere assertion that a POSITA would combine “what ... is already known”). Regardless, a POSITA would have understood that Blumenberg’s hyperlink preview is not a mobile application. EX2008, ¶¶139-140, 144; *see* EX1004, ¶[0030] (listing “[e]xamples of applications” that do not include the hyperlink preview). And Petitioner offers no specific reason a POSITA would have been motivated to add a menu to Blumenberg’s hyperlink preview. EX2008, ¶¶139-140, 144, 150.

For these reasons, Petitioner’s first alleged motivation to combine is inadequate and cannot support an obviousness finding.

C. Petitioner’s Second Motivation Is Untethered To The Proposed Modification And Contradicted By The References’ Teachings

Petitioner next contends that modifying Blumenberg to incorporate Bhumkar’s toolbar “would predictably improve Blumenberg’s browser from a usability standpoint” because it would “allow the user to accomplish common tasks associated with the target webpage (e.g., sharing the page with an acquaintance) more quickly and efficiently (e.g., with fewer user inputs).” Pet., 15.¹⁵ This proposed rationale fails for several reasons. EX2008, ¶¶141-145.

First, Petitioner’s focus on alleged improvements to Blumenberg’s *web browser* are irrelevant because Petitioner’s proposed modification of Blumenberg relates to its hyperlink preview window, which is independent from Blumenberg’s web browser. EX1004, ¶[0045] (describing the hyperlink preview functionality is not limited to “a webpage” but would also function with “other document[s]” (i.e.,

¹⁵ Petitioner and its expert rely on EX1038 to support this motivation, but it is not prior art. *See* EX1038, 1 (2012 25th IEEE Canadian Conference); *see also* Pet., 5 (claimed priority date of August 5, 2011). As shown in Section II, the claims are fully supported by a priority date of at least December 30, 2011 based on Provisional App. No. 61/581,918. Nevertheless, EX1038 is directed to the usability of mobile device *applications* (EX1038, Title, 1) and, as discussed above, Blumenberg’s link information is not an application. *See supra*, §VII.B; EX2008, ¶¶143-144.

documents not displayed in a web browser)); EX2008, ¶142. For the same reason, a POSITA’s purported understanding that task efficiency is “a key differentiator among competing web browsers” is irrelevant. *See* Pet., 15-16 (noting purported benefits over “competing web browsers”); EX2008, ¶¶142-144. Regardless, Petitioner fails to show the proposed modification—adding Bhumkar’s toolbar to Blumenberg’s hyperlink preview—would have *any* impact on the functionality of Blumenberg’s web browser, much less improve it. EX2008, ¶¶142-144.

Second, Petitioner assertions concerning this purported motivation fail to account for the teachings of the references as whole. EX2008, ¶145. In particular, Petitioner focuses on the purported benefit of the share-functionality of Bhumkar’s toolbar, which Petitioner contends would enabled a user to “shar[e] the page ... more quickly and efficiently.” Pet. 15. But a POSITA would not have understood that to be true given Bhumkar’s teaching that when limited information about webpage is provided—such as this included in Blumenberg’s hyperlink preview—“the searcher must actually click through to the target web page” to ascertain relevancy.¹⁶ EX1005, ¶[0006] (stating that the type of information in Blumenberg’s hyperlink preview provides “little or no information” on the relevancy of the hyperlink); EX2008, ¶145.

¹⁶ Bhumkar states that this problem applies “to any web page whether or not it is a search results page.” EX1005, ¶[0006].

Thus, the addition of Bhumkar's sharing functionality would provide nothing more than the ability to share a hyperlink of undetermined relevancy. EX2008, ¶¶129-130, 145. Petitioner's failure to address the impact of the full scope of each reference's teachings is "impermissible within the framework [of §103]," which requires a "full appreciation of what [a] reference fairly suggests to one skilled in the art." *See Bausch & Lomb, Inc. v. Barnes-Hind/Hydrocurve, Inc.*, 796 F.2d 443, 448 (Fed. Cir. 1986); *see also Panduit*, 810 F.2d at 1577-78.

Third, Petitioner's assertion that Bhumkar's sharing functionality would enable a user of Blumenberg's device to share a webpage "with fewer user inputs" is unsupported. That is, Petitioner asserts that "fewer user inputs" would be required, but provides no comparison of the number of user inputs necessary to share a webpage in Blumenberg's unmodified system, the proposed combination, or other "competing web browsers." Pet., 15; *see* EX2008, ¶¶129-130, 141.

For these reasons, Petitioner's second alleged motivation to combine is inadequate and cannot support an obviousness finding.

D. Petitioner's Third Motivation Is Untethered To The Proposed Modification And Premised On A Purported Desire To Solve A Problem Already Solved By Blumenberg

Petitioner further contends a POSITA would have understood "the similarities between Blumenberg's 'link information' and Bhumkar's webpage preview" and would have "sought to predictably improve Blumenberg's browser in the same way

Bhumkar did.” Pet., 16. As explained above, however, the proposed modification is to Blumenberg’s hyperlink preview window—which is *separate from* Blumenberg’s web browser. *See supra*, §VII.C. Accordingly, purported improvements to browser functionality cannot supply a motivation to modify Blumenberg as proposed. EX2008, ¶¶146-148.

Regardless, neither Petitioner nor its expert adequately explain how adding Bhumkar’s toolbar to Blumenberg’s hyperlink preview would “improve Blumenberg’s browser in the same way Bhumkar did.” Pet. 16; *see also* EX1003, ¶[0076]; EX2008, ¶147. As explained above, a POSITA would have understood that Bhumkar’s “window to display a preview of a target webpage” (Pet., 16) is *not* similar to Blumenberg’s hyperlink preview window, which displays only the URL and a snippet of text from a target web page. *Supra*, §VII.A; EX2008, ¶¶121-128; 146-148. Further, a POSITA would understand that, in light of the “very large differences between desktop and mobile user interfaces,” the features of one are not readily transferrable to the other. EX2008, ¶¶121-128; *see supra*, §VII.A.

With respect to the two features of Bhumkar’s toolbar referenced by Petitioner—the share and full-screen icons—a POSITA would not have regarded either as beneficial to Blumenberg’s hyperlink preview window. EX2008, ¶¶129-153. As explained above, the addition of Bhumkar’s sharing functionality would provide nothing more than the ability to share a hyperlink of undetermined

relevancy, which a POSITA would not have regarded as beneficial. *See supra*, §VII.C; *see also* EX2008, ¶¶129-130, 141, 145, 151-152.

A POSITA likewise would not have regarded the addition of Bhumkar’s full-screen icon as beneficial. EX2008, ¶¶131-134, 151, 153. Petitioner asserts that Bhumkar’s “full-screen mode” “enhance[s] the consumption of *information displayed* in the *current preview window*.” Pet., 48 (quoting EX1005, ¶[0073]). But a POSITA would not understand that benefit to extend to Blumenberg’s hyperlink preview window. EX2008, ¶¶131-134. Unlike Blumenberg, Bhumkar’s preview window displays a fully functioning web page, the entirety of which is *not* visible in the preview window without horizontal and vertical scrolling. EX1005, FIG.5; EX2008, ¶132. Thus, Bhumkar teaches that “the content of the preview window may be more easily consumed in the full screen mode.” EX1005, ¶[0073]. In contrast, Blumenberg’s hyperlink preview is already displayed “at a legible size, such as 14 point or larger” to make the text easily readable. EX1004, ¶[0053]; *see also id.*, ¶[0040], FIGs. 5C, 5E-5H; EX2008, ¶133. A POSITA would therefore understand that expanding Blumenberg’s hyperlink preview to a full screen mode provides no tangible benefit, as the full contents are already visible and easily readable.¹⁷

¹⁷ To the extent Petitioner is conflating “full screen mode” with a “zoom in” function, this is deficient as the text in Blumenberg’s hyperlink preview window is already

EX2008, ¶¶133-134, 153. Put another way, a POSITA “would not have reasonably looked at [Bhumkar] to solve a problem already solved by [Blumenberg].” *Ex parte Rinkevich*, Appeal No. 2007-1317, slip op. at 8-9 (BPAI May 29, 2007).

For these reasons, Petitioner’s third alleged motivation to combine Blumenberg and Bhumkar cannot support an obviousness finding.

E. Petitioner’s Fourth Motivation Is Supported Only By Conclusory Expert Testimony And Therefore Fails

Petitioner also contends a POSITA would have been motivated to combine the references in light of Blumenberg’s teachings concerning its third operational scenario, in which the hyperlink preview is maintained on the display after contact is broken and a separate, second contact is required to activate the hyperlink. Pet., 17; EX1004, ¶[0049]; *see also supra*, §V.A; EX2008, ¶149. Petitioner contends “the extended touch duration” of this scenario “indicates the user’s competing interests in [i] potentially interacting with the candidate target webpage; and/or [ii] leaving the current webpage” and asserts that adding a menu to the hyperlink preview would “naturally assist the user with choosing an accomplishing their next step.” Pet., 17-18; EX2008, ¶149. But Petitioner fails to articulate how adding Bhumkar’s toolbar

displayed “at a legible size.” EX1004, ¶[0053] (“URL may be displayed using 18 point text”).

would address the alleged “competing interests” of “interacting with” or “leaving the current webpage.” *See id.* EX2008, ¶¶149-150.

The Petition specifically addresses only two functions of Bhumkar’s toolbar: sharing and initiation of full-screen mode. EX2008, ¶151. Bhumkar’s sharing functionality does **not** enable “the user to interact with the candidate target webpage.” Pet., 17-17 (citing EX1003, ¶80); EX2008, ¶152. It merely enables the user to **email the hyperlink** of the webpage. EX1005, ¶74 (“selecting share icon [enables] a user [to] share (e.g., **via email** or other means) the web page currently displayed”); EX2008, ¶152. Adding this limited functionality would **not** assist a user with deciding whether to interact with or leave a webpage. EX2008, ¶152.

Similarly, adding the ability to initiate full-screen mode with respect to Blumenberg’s hyperlink preview would merely allow the user expand the URL and a snippet of text from the web page to occupy the full screen. *See supra*, §VII.D. That modification would **not** assist a user in deciding whether to interact with or leave the webpage. EX2008, ¶153.

Petitioner’s conclusory assertions concerning “competing interests” and a POSITA’s alleged motivation to address them by adding a toolbar are insufficient to establish a motivation to combine. *Magnum Oil Tools*, 829 F.3d at 1380 (Petitioner “must instead articulate specific reasoning, based on evidence of record”).

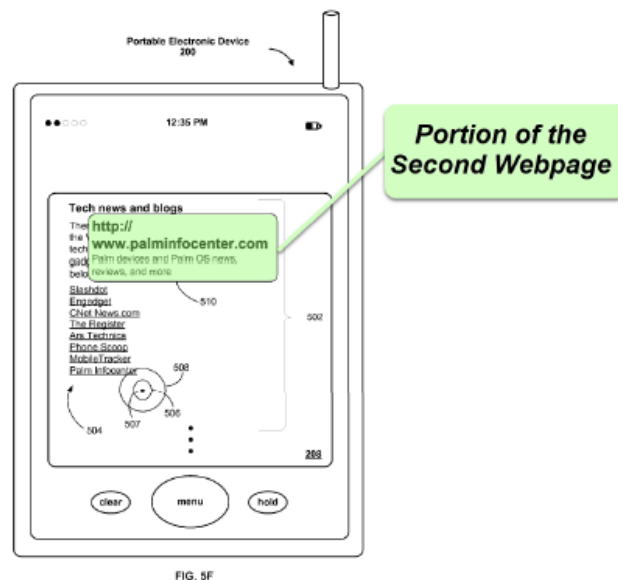
VIII. PETITIONER’S DEPENDENT-CLAIM OBVIOUSNESS MAPPINGS ALSO FAIL

A. Claims 2 and 43

These claims recite that “the user interface of the network browser is configured for performing an operation in response to ... contact movement,” but the “at least portion of the second web page is displayed in a view that is not configured for performing the operation in response to ... contact movement.” Pet., viii. Petitioner maps the “operation” the browser is configured to perform to Blumenberg’s disclosure that the alleged contact movement “updates the selected link.” Pet., 53. Petitioner contends Blumenberg’s hyperlink preview is *not* configured to perform that operation because it is a “snippet of content” rather than a fully interactive version of the page. Pet. 54. To the contrary, Blumenberg teaches that, in response to contact movement across the display, the hyperlink preview for the previously selected link is removed *and the link selection is updated*. EX2008, ¶155; EX1005, ¶[0051] (explaining that as “the contact area 506 and the point 507 have moved downward....link “Phone Scoop” becomes the link that satisfies the shortest distance criterion...[and] the information associated with the link “CNet News.com” is no longer displayed and information 510 associated with the link “Phone Scoop,” such as its URL, is displayed”). Thus, Blumenberg’s hyperlink preview (which Petitioner maps to the “portion of the second web page”) fails to satisfy Claims 2 and 43. EX2008, ¶¶155-157.

B. Claims 21 and 54

Limitations [21.b] and [54.b] recite that “the at least portion of the second web page...is configured for ***not displaying:...the opening of the one or more hyperlinks*** of the second web page in response to detection of the selection thereof.” Pet., ix, xiii. Consistent with its mappings for the independent claims, Petitioner maps the “at least portion of the second webpage” to Blumenberg’s hyperlink preview. *See* Pet., 49 (citing EX1004, ¶¶[0047]–[0048]), 59 (citing EX1003¶¶172-173).



EX1004, Figure 5F (annotated).

But that mapping fails because Blumenberg’s hyperlink preview is configured to enable “the opening of the one or more hyperlinks of the second web page in response to detection of [a] selection” ([21.b], [54.b]). EX2008, ¶¶159-161. As discussed in Section V.A, Blumenberg’s hyperlink preview includes the “URL of

the link” and “a snippet” or “summary of content from the page to which the link points.” EX1004, ¶¶[0047]–[0048], [0053]; EX2008, ¶159. Further, Blumenberg teaches that a user can activate the previewed hyperlink by “break[ing] contact and tap[ping] the link information.” EX1004, ¶[0051].

To the extent Petitioner attempts to shift to Bhumkar, that mapping also fails. Pet., 59 (citing EX1003, ¶¶172-173); EX2008, ¶160. As discussed in Section V.B, while Bhumkar discloses a nonfunctional preview window, Bhumkar also discloses a preview window that includes “a fully functioning webpage.” EX1005, ¶¶[0071]–[0072], [0040]. Bhumkar teaches that, in the functional embodiment, “all of the links are active and a user can navigate within the preview window 54 just as he/she would in a regular window displayed in a browser.” EX1005, ¶[0071]; EX2008, ¶160. Petitioner identifies no reason why a POSITA would select the nonfunctional version of Bhumkar’s preview window. EX2008, ¶161 (explaining that the very purpose of the preview window is to allow the user to obtain more information). Accordingly, Petitioner fails to establish a motivation to combine in a way that would include all features of these claims.

C. Claims 29-30 and 62-63

These claims recite that “in response to detection of a selection of the at least portion of the second web page,” the portion of the second web page “is enlarged.” Petitioner maps these claims to Bhumkar’s “full-screen mode.” Pet., 60-64. As

explained, however, a POSITA would not have been motivated to modify Blumenberg to include the full-screen mode option from Bhumkar's toolbar. *See supra* §VII.D; EX2008, ¶¶162-164.

IX. CONCLUSION

For the foregoing reasons, Petitioner failed to prove obviousness of any of the challenged claims. Accordingly, all challenged claims should be upheld.

Dated: April 16, 2025

Respectfully submitted,

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Lead Counsel for Patent Owner

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 13,967 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 16, 2025, complete copies of this Patent Owner Response and EX2008-EX2011 were served on Petitioner via email (by consent), at the following email address(s):

IPR50095-0170IP1@fr.com

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