

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

PATENT OWNER'S SUR-REPLY

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PATENT OWNER'S EXHIBIT LIST

Exhibit	Shorthand	Description
2001	Declaration	Declaration of Marc Davis, Ph.D. (WITHDRAWN)
2002	CV	CV of Marc Davis, Ph.D. (WITHDRAWN)
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 does not dispute that its primary reference, Blumenberg, discloses a *shorter* duration, *e.g.*, 0.2 seconds, contact with a link causes the device to display “a snippet” corresponding to the link and a *longer* duration contact (either releasing after the initial touch past 0.2 seconds or a subsequent “quick tap” after the initial touch concludes) causes the device to navigate to the web page of the link. Blumenberg’s disclosure cannot be reconciled with the Challenged Claims, which recite that a *shorter* “duration of the first contact” causes the device to navigate to the web page, and a *longer* “duration of the first contact” causes the device to “display at least a portion of the second web page (mapped to Blumenberg’s calling up a “snippet”). EX1001, [1.n], [1.o], [42.i], [42.j].

To overcome this fundamental disconnect, Petitioner attempts, through claim construction, to remove the Challenged Claim’s causal relationship between recited conditions and actions and, alternatively, urges a combination that removes Blumenberg’s “snippet” functionality, which is fundamental to its mapping. Both efforts are unavailing; patentability of the Challenged Claims should be affirmed.

II. CLAIM CONSTRUCTION

A. When / Based On

The dispute between the parties is whether “when” (Claim 1) and “based on” (Claim 42) connote a causal relationship between the recited conditions and actions, or whether it is enough that a recited function occurs at the time a recited condition is true. Petitioner needs the latter construction because the mapped contact exceeding a second “duration” is *not* the cause of Blumenberg calling up a “snippet” as Limitations [1.o] and [42.j] require, but rather merely occurs at a time when the “snippet” remains displayed. *See infra* Section V.

As an initial matter, the Reply addresses this construction only for “when” in Claim 1, not “based on” in Claim 42. Reply, 12-17. Dr. Cockburn affirms that he agrees with Dr. Mahon and “interprets Claim 1’s “when” and Claim 42’s “based on” “as having effectively the same meaning.” EX1058, ¶55, n.3. Even if the Board were to find that the plain meaning of “when” in contexts other than the Asserted Claims does not require a causal connection, the same is not true for “based on.” Thus, given the parties’ agreement the claims should be construed the same, there is no basis to adopt Petitioner’s construction for either Claim 1 or Claim 42.

As to Claim 1, Dr. Cockburn does not dispute Dr. Mahon’s testimony that in “programming practice, there is no difference between triggering an action ‘when X is true’ and doing so ‘in response to X being true’” because “[b]oth invoke

conditional logic that would be implemented using well-understood constructs such as if-statements or event handlers that monitor for specified conditions.” EX2008, ¶51; EX1058, ¶¶55-56. Instead, Dr. Cockburn asserts Claim 1 does not recite programming logic. EX1058, ¶¶55-56. If Dr. Cockburn is distinguishing executable code from claim elements describing functions that are the result of executing code, that is a distinction without a difference—the context of the claims is programming practice and Dr. Mahon’s undisputed testimony reflects that context. If Dr. Cockburn is arguing Claim 1 does not recite functions representative of code, the plain language reciting “one or more programs” “configured to be executed by the one or more processors” and “including instructions to” performs each the disputed limitations, plainly show otherwise. Limitation [1.f].¹

Petitioner’s other arguments do not overcome these shortcomings.

First, Petitioner contends “[t]he words ‘when’ and ‘in response to’ are not synonymous *in common parlance*.” Reply, 12. Petitioner’s reference to “common

¹ Petitioner similarly argues that the claims do not require any particular type of programming logic because the specification elsewhere states that “any type of logic may be utilized which is capable of implementing the various functionality set forth herein.” Reply, 16. But Dr. Mahon’s undisputed testimony refers to programming practice generally, not specific code.

parlance” and reliance on general purpose dictionaries is not relevant to ascertaining the “meaning in a field of art,” which Dr. Mahon’s undisputed testimony confirms is causal. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005). And even if Petitioner’s assertion that “when” and “in response to” are not synonymous is accepted, that does not negate that “when” *also* refers to causal relationships, as the cited dictionaries confirm. *See* EX0155, p.3 (defining “when” by using examples in which the action—*stop writing or falls asleep*—occurs in response to first condition—*bell rings, listening to music*—being met).

Second, Petitioner argues there is a reasonable inference that “when” and “in response to” have different meanings because they are used separately in the same claims. Reply, 12. But again, this improperly assumes that even if the terms do not have the same meaning “when” is not causal, which is a false premise. The context of “when” in Claim 1 and “based on” in Claim 42 recite a causal limitation, which is not changed by use of “in response to” elsewhere in the claim in a different grammatical posture.

Third, Petitioner erroneously contends dependent Claims 41 and 3 are inconsistent with Patent Owner’s (“PO’s”) proposed construction. Reply, 13. Claim 41’s additional limitation that “when includes while” does not negate a causal connection—it merely recites with further specificity the type of causal connection required. Further, Claim 3’s additional limitations relate to the timing of the recited

actions [1.o.vi-viii] relative to each other (i.e., “first feedback” is output “prior to display of the menu.”), NOT relative to the recited preconditions being met. POR, 15, n. 4. Petitioner similarly points to a portion of the specification describing the timing of the recited actions relative to each other (i.e., “display a menu . . . and further subsequently display at least a portion of the second web page”) and argues that because Claim 1 does not include this “temporal limitation”, it does not require a causal connection between recited actions and preconditions. But the fact that Claim 3 and the specification describe a narrower embodiment in which the recited actions are performed in a specific order relative to one another has no bearing on the separately claimed requirement that the recited actions are performed in response to the preconditions being met.

Fourth, Petitioner invokes the prosecution history of U.S. Application No. 16/377,142 (“142 application”), arguing that it weighs against PO’s proposed construction. Specifically, Petitioner cites applicant’s addition of “dependent claims using the narrower phrase ‘only when’ to constrain the broader term ‘when’ in the independent claims.” Reply, 14. But the distinction between “when” and “only when” is not the presence or absence of a causal relationship, as both require a causal relationship. Instead, the distinction is that “only when” requires an exclusive causal relationship, while “when” does not. POR, 17 (“when” does not preclude performance of recited actions in response to other, unclaimed logic operations).

That the applicant limited certain claims in the '142 application to an exclusive causal relationship using the phrase “only when” supports rather than contradicts PO’s proposed construction because it further demonstrates that “when” describes causal connections.²

Fifth, Petitioner attempts to evade PO’s proposed construction by arguing that Claim 1 “doesn’t say ‘trigger’ or ‘in response to’; it just says ‘when.’” Reply, 16. But Petitioner ignores the full context in which “when” appears in the claim. The claim does not merely say “when” in isolation; it recites determining that certain preconditions are met and thereafter recites actions to be performed by the device. This syntactic structure reflects standard programming logic: (1) detect preconditions, (2) upon satisfaction of those preconditions, execute the actions.

² Petitioner’s reliance on *Wang Labs., Inc. v. Am. Online, Inc.*, 197 F.3d 1377, 1384 (Fed. Cir. 1999) to support its prosecution-history-based arguments is misplaced. Reply, 15. *Wang* involved a clear, repeated, and unequivocal description of the invention as a “character-based protocol” and an explicit disavowal of “bit-mapped” protocols, which the Federal Circuit held applied to the continuation application. The '142 prosecution history contains no such repeated, definitive statements concerning the meaning of “when.”

For the reasons set forth above and in the POR, the Board should reject Petitioner’s attempts to deviate from the plain language of the claims, which requires a causal connection between the satisfaction of the recited preconditions and the performance of the recited actions.

B. “The First Contact”

The parties’ dispute is whether the claim language permits Petitioner to map “*the* first contact,” introduced in Limitations [1.h] / [42.c] and referenced by antecedent basis in Limitations [1.m]-[1.o] / [42.h]-[42.j], inconsistently. Petitioner maps Blumenberg’s initial detection of a touch on a link as the “first contact” for most claim limitations but points to a “quick tap”—which is indisputably a separate contact that occurs after cessation of the otherwise-mapped “first contact”—for Limitations [1.n] and [42.i]. *See infra* Section IV; POR, 38-40.

Petitioner argues this inconsistent mapping is permissible because Limitations [1.m]-[1.o] / [42.h]-[42.j] “are mutually exclusive.” Reply, 10. As the POR explained, however, the Challenged Claims recite programming logic that will be executed on many instances of touch. POR, 20-21. One instance of touch will not trigger all recited actions, but that does not negate the claim requirement for logic that is capable of acting upon any instance of touch to determine whether it recites each set of preconditions and, if so, trigger the corresponding action. *Id.* Here, Petitioner alleges Blumenberg’s detection of an initial touch on a link constitutes the

detection of a “first contact” in Limitations [1.h] / [42.c]. Pet., 27-29. The claim’s use of antecedent basis precludes Petitioner from mapping a different contact in later elements that recite “*the* first contact.”

III. LIMITATIONS [1.M] AND [42.H]

Petitioner’s Reply fails to identify any portion of Blumenberg or Griffin that teach or suggest “avoid display, on the first web page, a result of any operation based on the first contact” when the contact duration is less than a first user-configurable predefined duration and the end of the first contact is detected. Instead, Petitioner contends Blumenberg’s ¶[0049] disclosure of displaying *certain* information *after* a threshold implies avoiding display of *any* information *before* the threshold. Reply, 2-3. That assertion finds no support in Blumenberg.

In apparent acknowledgment of that defect in its primary theory, Petitioner argues that “avoid[ing] display” when the contact duration is less than a threshold would have been obvious because (1) Blumenberg discusses “inadvertent” icon contact, and (2) Griffin describes a “loop back” flow for sub-threshold contacts. *See* Reply, 2-6. But that argument fails as well.

A. Blumenberg Teaches Displaying Information When Contact Duration Is Greater Than a Threshold—Not Avoiding Display When Contact Duration Is Less Than a Threshold

Petitioner’s assertion that Blumenberg “affirmatively teach[es] or suggest[s] the ’581 patent’s avoiding display limitation” (Reply, 3) lacks textual support.

Blumenberg states that link information “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).” EX1004, [0049]. This language is positive disclosure of a condition under which display occurs; it does not imply or suggest avoiding display of a result of any operation before the threshold. And even if it was accepted that Blumenberg does not display link information before a threshold, that does not exclude other display changes. *See e.g.*, EX1006, [0034] (explaining that “a touch that does not meet a touch threshold may cause a selection option to be highlighted”).

Blumenberg’s silence on this point is legally insufficient to support the claimed negative limitation. Rather, “there must be something more to suggest that the silence is significant, or other reasons that establish” the absence of a feature. *In re Strongbridge Dublin Ltd.*, Nos. 2023-2302, 2023-2303, 2025 WL 751116, at *4 (Fed. Cir. Mar. 10, 2025); *IBM Corp. v. Iancu*, 759 F. App’x 1002, 1011 (Fed. Cir. 2019) (silence is “inadequate proof” of a negative limitation). The proper inquiry is what a skilled artisan would understand from the disclosure as a whole, including its internal context. *United Servs. Auto. Ass’n v. PNC Bank N.A.*, No. 2023-2244, 2025 WL 706080, at *3 (Fed. Cir. Mar. 5, 2025). Here, there is no indication that Blumenberg’s silence was meaningful, much less that a POSITA would read it as teaching the claimed negative limitation.

Petitioner incorrectly contends *AC Techs. S.A. v. Amazon.com, Inc.*, 912 F.3d 1358, 1367 (Fed. Cir. 2019) supports its position on this issue. Reply, 2. But while *AC Techs.* recognizes that a reference need not expressly state the absence of a feature to disclose a negative limitation, there must be a contextual showing of how a POSITA would interpret the reference. 912 F.3d at 1367; *see also Novartis Pharms. Corp. v. Accord Healthcare, Inc.*, 21 F.4th 1362, 1373 (Fed. Cir. 2022) (for negative limitations, “the disclosure must be read from the perspective of a person of skill in the art”); *Almirall, LLC v. Amneal Pharms. LLC*, 28 F.4th 265, 273 (Fed. Cir. 2022).

Here, Blumenberg’s silence on whether there are other changes to the display as a result of a sub-threshold contact does not support an inference that no operation is displayed based on the first contact because Blumenberg includes broader teachings of multiple functions associated with displaying information. POR, 33-34. For example, Blumenberg expressly teaches that “***one or more functions of the touch screen as well as corresponding information displayed on the device*** may be adjusted and/or varied from one application to the next and/or within a respective application.” EX1004, [0022].

Further, a POSITA would understand that, as described in Griffin, avoiding display of link-preview information before a threshold does ***not*** exclude other display changes (*e.g.*, highlighting or other feedback). EX1006, [0034]. As

Petitioner acknowledges, a POSITA would consider these teachings in Griffin when seeking out “implementation details.” *See* Reply, 6. Thus, absent something more in Blumenberg, a POSITA would not interpret the limited disclosure that a preview is displayed when contact exceeds a threshold to broadly suggest that there is no display change when contact duration is sub-threshold.

Petitioner attempts to cure this defect in its mapping by citing Blumenberg’s disclosure concerning inadvertent contact with icons, arguing that a POSITA would apply the same methodology to inadvertent contact with hyperlinks. Reply, 3. Even if that were so, however, Blumenberg discloses merely that inadvertent icon contacts should be disregarded for purposes of activating the icon’s intended function—it does not disclose that such contacts cause no display change. POR, 34-35. Thus, Blumenberg’s limited disclosure that a link preview is displayed when a contact duration exceeds a first threshold does not demonstrate that the device avoids displaying the result of any operation (such as the visual feedback described by Griffin) when the contact duration is less than the threshold.

B. Griffin Confirms That Other Display Operations Occur Before a First Threshold

Petitioner’s fallback reliance on Griffin also fails. Reply, 4-6; Pet., 25, 28, n. 5, 45. Petitioner contends the “loop back” process in Griffin’s Figure 7 suggests that when touch duration does not meet any touch threshold, the process continues” by

“looping back to the start without performing any functions.” Reply at 4-5 (citing EX1006, [0033], [0053]); *see also* Pet., 28, fn. 5 (citing EX1006, [0034], [0040], Figure 7). As discussed above, however, Griffin expressly teaches that sub-threshold touches may nonetheless cause the device to display the result of an operation based thereon: “A touch that does not meet a touch threshold *may cause a selection option to be highlighted*, such as a displayed button 602 or key 604...” EX1006, [0034]. Thus, Griffin likewise fails to teach or suggest avoiding display of any operation when the contact duration does not exceed a threshold.

IV. LIMITATIONS [1.N] AND [42.I]

Limitations [1.n] and [42.i] require replacing the display of the first webpage with the second web page in response to determining that the first contact’s duration falls between a first and second thresholds. Petitioner’s mapping to Blumenberg fails because Blumenberg teaches comparing display duration—not contact duration—to a threshold. And despite Petitioner’s contrary assertion, Griffin’s general threshold-related disclosure does not cure these defects.

A. Blumenberg Compares Display Duration, Not Contact Duration

Petitioner mischaracterizes Blumenberg as teaching link activation based on *contact* duration. Reply, 7-8. The initial sentences in ¶[0051] (blue) describe actions that are triggered in response to “breaking of contact before or after a first predetermined amount of time has elapsed.” EX1004, [0051]. Petitioner assumes the

relevant duration is contact duration merely because breaking contact marks the end of the duration. But nothing in these initial sentences suggests that the duration compared to the “first predetermined amount of time” is the contact duration and the final sentence of ¶[0051] (red) demonstrates it is *not*. The final sentence expressly states that the duration compared to “the first predetermined threshold” is the time period “the link information was displayed” before breaking contact. *Id.*

[0051] The activation of the link may be triggered in a variety of ways. In some embodiments, the activation is triggered by breaking the contact. For particular embodiments, the activation may be triggered after the breaking of contact before or after a first predetermined amount of time has elapsed. In some other embodiments, the activation of the link may be triggered by a gesture, such as a quick tap on the touch screen 208 after breaking contact. Furthermore, in some embodiments, 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. In some embodiments, a combination of such activation criteria are used: the selected link is activated by a contact break if the link information was displayed less than the first predetermined amount of time, and if the link information was displayed for more than that amount of time, then 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.

Petitioner’s reliance on the Preliminary Response and Dr. Davis’s withdrawn testimony is also misplaced. Petitioner contends the Preliminary Response Dr. Davis’s testimony include purported “admissions” that Blumenberg uses contact-duration to trigger hyperlink activation. This is inaccurate. Neither the Preliminary

Response nor Dr. Davis conceded that Blumenberg discloses that feature. Rather, PO correctly acknowledged that Blumenberg discloses that *some* operations depend on contact duration. For example, Blumenberg discloses that contact duration triggers display of link information and removal of that display. EX1004, [0049] (“information is displayed after the contact is maintained for at least a predetermined time...” and “information is removed from display if the contact area 506 is not moved for longer than a predefined amount of time”). That Blumenberg discloses performing *some* actions in response to a contact duration exceeding a threshold does not mean that all duration thresholds in Blumenberg are premised on contact duration. Indeed, the plain language of ¶[0051]—on which Petitioner’s mapping is premised—states that display duration determines whether to perform the action of link-activation.

B. The Petition Relied on Blumenberg Alone for the Comparison of Contact Duration to a Threshold

In response to the flaws identified in the POR, Petitioner improperly attempts to shift its theory for the contact-duration aspect of Limitations [1.n] and [42.i]. The Petition relied on Blumenberg alone for these limitations, stating: “Blumenberg’s teachings provide that a link is activated when the user ends the contact with the link at a duration that is greater than the selection threshold (first predefined duration) and less than the activation threshold (second predefined duration).” Pet., at 37–38.

The Petition did not include an alternative mapping in which Blumenberg's display-duration comparison is replaced by Griffin's contact-duration comparison. Rather, for these limitations, the Petition relied on Griffin only for its teaching that a duration threshold may be "user configurable." Pet. at 39. Petitioner's attempt to modify its invalidity theory is improper and the arguments in Petitioner's Reply (Reply, 9) concerning this new theory should be disregarded. *See Hulu, LLC v. Sound View Innovations, LLC*, Case IPR2018-00582, Paper 34 at 30-31 (August 5, 2019) (refusing to consider new arguments in the reply).

Even if this new theory were considered, it likewise fails. Petitioner's expert asserts that Griffin "provides an exemplary process flow with implementation details associated with tracking touch contact, comparing the contact to predetermined touch duration thresholds." EX1058, ¶51. But Griffin's Figure 7 merely depicts a process in which a parameter is compared to a threshold to determine if the parameter *exceeds* the threshold. In contrast, the claims require comparing contact duration to two thresholds ("a first user-configurable predefined duration" and "a second user-configurable predefined duration") to determine if the contact duration is greater than the first and less than the second.

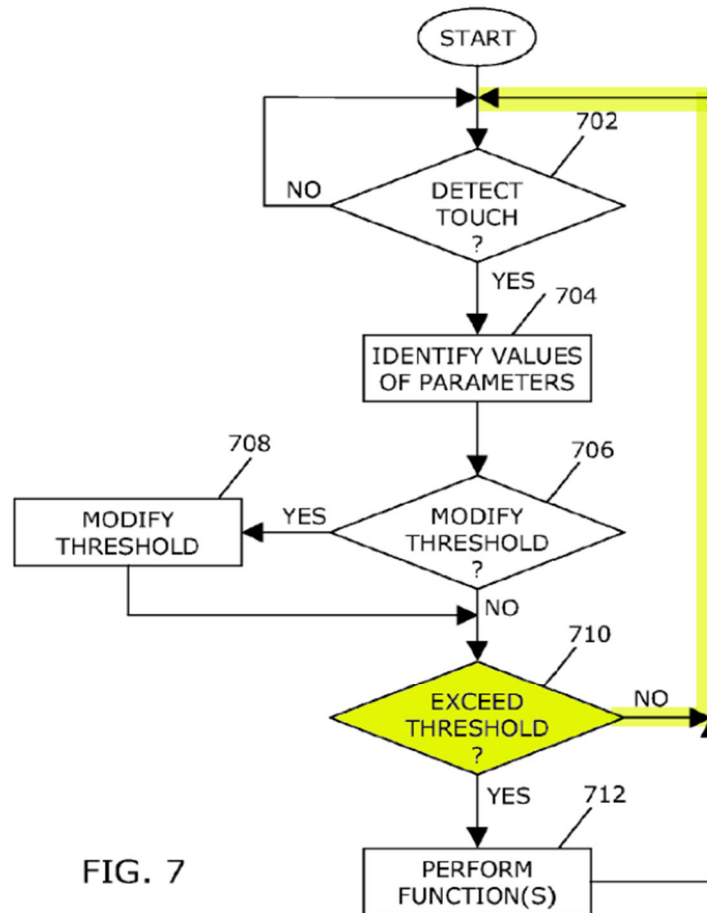


FIG. 7

EX1006, Figure 7 (annotated).

C. The “Quick Tap” Alternative Does Not Meet Limitations [1.n] and [42.i]

Petitioner does not dispute that Blumenberg’s “quick tap” is a second contact that occurs only after the user has already broken the contact that Petitioner maps as “the first contact” in the preceding claim limitations. As explained above, the claims require “detect[ing] *a* first contact” and performing recited actions when / based on: detecting “the end of *the* first contact,” and determining that “the duration of *the first contact*” is greater than a first threshold, but less than a second threshold. See

supra §**Error! Reference source not found.** The claim’s reliance on “a first contact” as antecedent basis for “*the* first contact” precludes Petitioner from mapping a different contact in later elements that recite “*the* first contact.” *Id.*

Regardless, Petitioner has not identified any disclosure that the duration of Blumenberg’s “quick tap” is compared to a first and second duration threshold, as required by the claims.

V. LIMITATIONS [1.O] AND [42.J]

A. Petitioner’s Mapped Conditions Do Not Cause Display of a “Snippet” In Blumenberg

Petitioner does not dispute that (a) in Blumenberg “the link information is displayed after the contact is maintained for at least a predetermined time (*e.g.*, 0.2 seconds)” (EX1004, [0049]) and (b) that condition is *not* what Petitioner has mapped to the recited preconditions for Limitations [1.o] and [42.j]. Thus, if the Board adopts PO’s construction, the proposed combination fails because the mapped conditions do not cause the display of the “snippet,” which Petitioner maps to the “display at least a portion of the second web page.”

Petitioner offers two reasons why its mapping is purportedly sufficient, but both contradict the plain claim language. First, Petitioner asserts that passing a later threshold causes the “system’s *continued display* of the link information previewing the webpage.” Reply, 17-18. But the claims do not claim an action of “*continued display*” and interpreting the claims in that way would read the causal link, “when”

/ “based on,” out of the claims. Even if “*continued* display” met the claims, the paragraphs Petitioner cites in Blumenberg do not describe the device making any decision regarding continued display based on the mapped “activation threshold.” EX1004, [0049], [0051]. That link is pure attorney argument. Blumenberg only describes a decision to display at 0.2 seconds into a contact and a decision to remove at a later time “e.g., three to five seconds” if the contact continues beyond the mapped activation threshold. *Id.* The display’s continuation at and beyond the “activation threshold” is merely an artifact of its earlier action—not a result of meeting the claimed preconditions. *Id.*

Second, Petitioner argues that “the full set of three functions” “would occur “only after and as a consequence of the activation threshold.” Reply, 18. As discussed below, PO separately disputes the basis of a mapping that arbitrarily places the tactile “feedback” and display of a “menu,” taken from other references, to conveniently occur at the “activation threshold.” *Id.* But even if that mapping were accepted, it still does not satisfy the claims. The claims do not recite causing tactile “feedback” and “display [of] a menu” while *continuing to display* a portion of the second web page. They require causing all three actions in response to the preconditions being met, which Petitioner’s theory concedes is not met.

B. Petitioner Does Not Justify Its Bhumkar-Based Modifications

1. *Blumenberg and Bhumkar Address Fundamentally Different User-Interface Paradigms*

Blumenberg’s core teaching is to mitigate “small screen size limits” by displaying limited preview information associated with a hyperlink and thereby “enable[] easy reading of the link information 510 by ordinary users” despite the small screen size. POR, 21-26 (citing EX1004, [004], [0053]); *see also* [0005], [0006], [0049]–[0051]. Blumenberg teaches a limited preview and omits interactive functionality to improve usability in screen-size-constrained mobile environments. POR, 55-57; *see also* EX1004, [0004]; EX2008, ¶123. In contrast, Bhumkar’s primary teaching is to enhance user navigation by presenting “a fully functioning web page” preview—including embedded toolbars—that enable users to interact with content directly within the preview. POR, 27-29 (citing EX1005, Abstract, [0071]). Bhumkar’s approach presumes sufficient screen size to support multiple functional windows simultaneously. EX1005, [0071]–[0076].

Despite these different approaches, Petitioner argues Bhumkar is equally applicable to mobile devices. Reply, 20. But Petitioner cites nothing more than a generic statement that the invention “can be practiced with...hand-held devices.” Reply, 20 (citing EX1005, [0080]). Bhumkar does not describe any adaptation of its toolbar-equipped previews for mobile devices with screen-size limitations, nor how

such an adaptation would be achieved without causing the very problems Blumenberg seeks to mitigate. *Id.*

Petitioner also ignores the specifics of Bhumkar's teachings in arguing that Bhumkar's toolbar-related teachings "apply equally" to its non-functional image embodiment and therefore would be incorporated into Blumenberg's preview. Reply, 20. But Bhumkar's toolbar descriptions are limited to an embodiment in which the preview window is a fully functioning webpage. *See* EX1005, [0071] (describing "preview window 54" as including a toolbar and explaining that "in this instance the preview *is a fully functioning web page, not merely an image* of such a page"). In addition, Bhumkar's descriptions of the toolbar functionality reveal that the toolbar would be useless in the embodiment in which the preview window is an image rather than a functional webpage. POR, 59-60. For example, Bhumkar's toolbar includes icon 58—a "back" button—that enables the user to trace the click history within the current preview window. EX1005, [0072]. This feature would have no purpose unless the preview contains a functioning web page capable of processing hyperlinks, tracking navigation, and maintaining click history. POR, 59-60. Put another way, a static, non-functional image of a target webpage, as described in Bhumkar's image embodiment ([0041]-[0043]), cannot support these operations because it has no live hyperlink functionality, no dynamic navigation, no click

history. The same incompatibility extends to other toolbar functions tied to active page elements and real-time browser interaction. POR, 59 (citing EX1005, [0040]).

A POSITA would thus recognize that attaching such a toolbar to a non-functional image is illogical and inconsistent with the toolbar's stated purpose in Bhumkar. Further, the mere statement in the Abstract that "preview windows...may have associated toolbars" does not override the limitations that make the toolbar meaningless in the static-image context. Reply, 20 (citing EX1005, Abstract). Against this backdrop, a POSITA would not have found the toolbar of Bhumkar's preview window readily transferrable to Blumenberg's non-functional preview window. POR, 54-59; EX2008, ¶125.

Petitioner attempts to resolve the oppositional nature of Blumenberg and Bhumkar by arguing that providing any preview—including Blumenberg's limited preview—advances Bhumkar's goal of providing "more information" than a bare hyperlink. Reply, 20-21. But this argument oversimplifies the incompatibility between the two references. Bhumkar's goal is not merely to provide "more information" in the abstract—it is to deliver a functionally rich, navigable preview rather than the sort of limited-content preview taught by Blumenberg, which Bhumkar criticizes as providing "little or no information on which to base a decision as to the relevance of the associated webpage." POR, 58-59 (citing EX1005, [0005]-[0006]; EX2008, ¶125).

2. *These Differences Meet the Legal Standard for Teaching Away*

Petitioner recites the Galderma standard but fails to apply it correctly. A reference teaches away when it “criticizes, discredits, or otherwise discourages investigation” into a modification. *Galderma Labs., L.P. v. Tolmar, Inc.*, 737 F.3d 731, 739 (Fed. Cir. 2013). Blumenberg repeatedly emphasizes problems for web browsing on mobile devices because “links in webpages displayed on a small screen may not be perceived easily by users.” POR, 56 (citing EX1004, [0004]); *see also* EX1004, [0005], [0006], [0049]–[0051], [0053]. This directly discourages the addition of functional toolbars and full-content previews that Bhumkar teaches. A POSITA would have understood that adding Bhumkar’s features would compromise Blumenberg’s usability goal, requiring abandonment of the very design constraints (*e.g.*, “display[ing] at a legible size...which enables easy reading of the link information 510 by ordinary users”) that Blumenberg identifies as important. POR, 55-60 (citing EX1004, [0053]). This is precisely the type of incompatibility that the Federal Circuit has recognized as a teaching away. *See Depuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1327 (Fed. Cir. 2009) (teaching away found where combination would require discarding a feature touted as beneficial in the reference).

C. Petitioner's Motivation Rationales Fail

First, Petitioner's "well-known solution to a well-known problem" rationale (Reply, 21-22) ignores the functional incompatibility between Bhumkar's toolbar and Blumenberg's hyperlink preview. Bhumkar's toolbar is not a generic "menu," but a collection of controls—including back icon 58 (¶[0072])—that rely on dynamic webpage functionality, navigation history, and interactive content within the preview window. POR, 27-29, 55-58, 60-61; EX1005, [0071]-[0076]. Petitioner argues that a modified version of this toolbar could be applied to Blumenberg—which teaches a limited-content preview in order to reduce unintentional selections and avoid small-target interaction issues³—because a POSITA could make menu items "easy and intuitive." Reply, 22. But that modification was not proposed in the Petition—which proposed incorporating Bhumkar's toolbar without modification—nor does it resolve the incompatibility. Pet., 46-48. Bhumkar describes its toolbar in the context of a live, interactive preview, not a static image. POR, 28-29; *see also* EX1005, [0071] (explaining that "this instance the preview window *is a fully functioning web page, not merely an image* of such a page."). A POSITA would find Bhumkar's toolbar inapplicable to Blumenberg's static, limited-information preview window. POR, 60-61. And Petitioner's reliance on GUI menus being "core

³ EX1004, [0004], [0005], [0006], [0049]–[0051], [0053].

features...for nearly half a century” (Reply, 22) does not supply a reason to add Bhumkar’s specific toolbar to Blumenberg’s preview window, especially given Blumenberg’s desire to avoid unnecessary interface elements during preview display. EX1004, [0004]–[0005], [0057].

Second, Petitioner’s “predictable improvement” rational (Reply, 22-24) fails because it treats Bhumkar’s toolbar as functionally agnostic to the preview type, when in fact the toolbar’s interactive controls presume dynamic webpage functionality. POR, 27-29, 55-58, 62-64; EX1005, [0072]. Blumenberg’s preview is neither “integral” to nor interchangeable with a browser session—it is a temporary, static display detached from the browsing process. EX1004, [0040], [0048], [0053], [0054]. Adding Bhumkar’s navigation, sharing, or full-screen controls to such a preview would not predictably “allow the user to accomplish common tasks...more quickly and efficiently,” as Petitioner asserts (Reply, 23), but instead would create controls that are inoperable or misleading in a static environment. POR, 62-63. The record contains no showing that the proposed combination would yield any meaningful functional benefit without converting Blumenberg’s preview into a functioning browser window—an alteration that goes beyond a “predictable” integration and changes the character of Blumenberg’s system. POR, 63-64.

Third, Petitioner’s claim that Bhumkar’s “full-screen” option provides an “additional mechanism” to view the target webpage ignores that Blumenberg’s

preview is not designed to be an alternative way to view a webpage. Reply, 24-25. The functionality Petitioner describes—navigating to a previewed page and entering a full-screen mode—requires that the preview itself be a navigable webpage. *See* EX1005, [0071] (“...the preview window is a fully functioning web page, not merely an image of such a page.”). In Blumenberg’s system, a POSITA would see no advantage in placing such a control in a static preview mode that cannot render additional page content or respond to further navigation commands. POR, 64-67. This is not a case of “misunderstanding” Bhumkar, but of recognizing that the purported “advantage” disappears entirely unless one converts Blumenberg’s preview into an fully interactive browsing window, which is not a modification contemplated by the Petition.

Fourth, Petitioner’s theory that a prolonged contact beyond Blumenberg’s activation threshold signals “competing interests” and thus justifies presenting a menu is speculative and untethered to Blumenberg’s actual disclosure. Reply, 25-26. Blumenberg does not suggest extended contact is a decision point for alternative actions. POR, 67-68. Rather, Blumenberg teaches that extended contact prompts removing the display preview entirely (EX1004, [0049], [0051])—a safeguard to prevent unwanted navigation. Introducing Bhumkar’s menu after the activation threshold would undermine that safeguard by reintroducing potential for unintended interaction. Petitioner also conclusory asserts that Bhumkar’s toolbar could provide

“visual feedback,” but fails to explain how that would be accomplished without altering Blumenberg’s intended user flow and logic. Reply, 26. A POSITA, reading Blumenberg, would see extended contact as a terminal condition—not as an opportunity to present unrelated functions from a toolbar dependent on live page interactivity. POR, 51, 67-68. Petitioner’s rationale not only lacks evidentiary support but contradicts the disclosed purpose of Blumenberg’s timing thresholds. *Id.*

VI. THE DEPENDENT CLAIMS ARE PATENTABLY DISTINCT

A. Claims 2 and 43

Petitioner incorrectly asserts that Blumenberg’s non-functional preview window plays no role in performing an operation in response to contact movement. Reply, 26. Blumenberg discloses that the preview is directly tied to the user’s contact interaction and performs a removal operation when contact movement causes a different hyperlink to be selected. EX1004, [0052] (explaining that “as the finger [] moves...the information associated with the link...is no longer displayed”).

B. Claims 21 and 54

In arguing that Blumenberg’s preview does not include functionality to open a hyperlink, Petitioner ignores Blumenberg’s explicit disclosure of a “quick tap” on the preview as a means to open the link. EX1004, [0051]. The fact that it is a static preview does not prevent it from being associated with the underlying hyperlink, such that a quick tap on the previewed link triggers navigation to the linked page.

C. Claims 29-30 and 62-63

Petitioner's contention that Bhumkar's full-screen mode provides a benefit to Blumenberg's preview misapprehends Blumenberg's design. Blumenberg's preview is already displayed in an optimized layout for small screens and is not a navigable or scrollable page. POR, 71-72. Transitioning this preview into a "full screen" state offers no additional viewable content and no functional advantage to the user. A POSITA would recognize that full-screen mode would simply expand empty space, not enhance usability, making the modification pointless in Blumenberg's context.

VII. CONCLUSION

For the foregoing reasons, Petitioner has failed to carry its burden of proving that the challenged claims are obvious. Accordingly, PO respectfully requests a final written decision affirming the patentability of each of the challenged claims.

Dated: August 25, 2025

Respectfully submitted,

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

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 5,599 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 August 25 2025, a complete copy of this Patent Owner's Sur-Reply was served on Petitioner via email (by consent), at the following email address(s):

IPR50095-0170IP1@fr.com

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