

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,

Petitioner,

v.

SMITH INTERFACE TECHNOLOGIES, LLC,

Patent Owner.

IPR2024-01084
Patent 10,649,578

PATENT OWNER SUR-REPLY

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PATENT OWNER'S EXHIBIT LIST

Exhibit	Shorthand	Description
2001	JCC	Excerpts of Joint Claim Construction Chart
2002	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).
2003	Duarte-992	U.S. Pat. App. No. 12/115,992
2004	Madisetti Declaration	Corrected Declaration of Vijay Madisetti, Ph.D.
2005	Madisetti CV	CV of Vijay Madisetti, Ph.D.
2006	Terveen Deposition	Deposition of Loren Terveen, Ph.D. (April 25, 2025)
2007	'918 Provisional	U.S. Prov. Pat. App. No. 61/581,918
2008	Anzures	U.S. Pat. App. Pub. No. 2009/0174680
2009	Jobs	U.S. Pat. App. Pub. No. 2008/0122796

I. INTRODUCTION

The Reply does not dispute that “the second input” of both Limitations [1j] and [1k] must occur while “displaying the user interface of the application” and therefore **cannot** be met by inputs that occur in two different operational contexts. *See* Paper 13 (“POR”), 23-26. The Reply likewise does not dispute those points for Limitations [15f] and [15g] or Limitations [27e] and [27f]. *See id.* It is also undisputed that Shiplacoff (the sole reference of Ground 1) teaches that its “swipe-up” gesture and “tap or flick” input—which Petitioner maps to the above-referenced limitations—occur in two different operational contexts. *See id.*, 32-38; Paper 17 (“Reply”), 4-10.

Petitioner attempts to overcome this fundamental disconnect between the challenged claims and Shiplacoff by arguing that it would have been obvious to modify Shiplacoff such that its “tap or flick” input is utilized in the same operational context as its “swipe-up” gesture to trigger the display action of Limitations [1k], [15g], and [27f]. Reply, 4-10. Petitioner’s only support for that argument is Shiplacoff’s characterization of certain mode-change gestures—“tap or flick” not being among them—as “examples” and its statement that “other gestures can be used for mode changes.” *Id.*, 4-5 (quoting EX1004, ¶¶[0127], [0129]). But a simple acknowledgement that “other gestures” could be used is insufficient to render obvious using a specific gesture within the broad category of “other gestures” to

trigger a specific display action.

Petitioner attempts to bolster its argument by recasting its Ground 1 theory in two ways. First, Petitioner contends the “second input” of Limitations [1k], [15g], and [27f] is not mapped to Shiplacoff’s “tap or flick”—as asserted in the Petition—but instead some modified version of Shiplacoff’s “flick.” *Id.*, 14-16. Because this new theory is untimely, it should not be considered. But even if considered, it fails. Second, Petitioner contends Shiplacoff’s “tap” satisfies the claims because “a ‘tap’ may include some small amount of movement of a user’s finger.” *Id.*, 16-19. But this theory is also both untimely and unavailing.

For Ground 2, Petitioner’s Reply offers an entirely new mapping for Limitations [1k], [15g], and [27f] and thus tacitly concedes the flaws in its original mapping. Petitioner’s new mapping is untimely and should therefore be disregarded. Even if considered, this new theory fails because Petitioner has not established a motivation to combine Shiplacoff and Nan as proposed (either for its original mapping or its new, untimely mapping).

Lastly, Petitioner’s Reply arguments concerning the dependent claims are effectively a rehash of Petitioner’s “other gestures” argument concerning Ground 1 and are therefore unavailing for the same reasons.

Accordingly, patentability of the Challenged Claims should be affirmed.

II. PETITIONER DOES NOT DISPUTE THAT PATENT OWNER'S CLAIM CONSTRUCTIONS ARE CORRECT

A. Conditional Limitations

In the Institution Decision, the Board requested briefing on whether Limitations [1j] and [1k], and similar conditional limitations in Claims 15 and 27, “are written in the alternative, such that only one of these two limitations needs to be shown in the prior art in order to meet the claim.” Paper 7 (“DI”), 22, 7-8. Patent Owner answered that question in the POR, explaining that (a) the claims “require programming logic that is executed... to detect, evaluate, and respond to user input by triggering each of the recited display actions as appropriate, depending on whether the input ‘meets’ or ‘does not meet’ specified criteria,” and (b), although the programming logic “would not trigger the display actions recited in both [conditional limitations] in response to the same instance of input,” the claims “nonetheless require programming logic capable of triggering each of the recited display actions.” POR, 15-23. In support, Patent Owner pointed to the claim language and specification disclosure “consistent with” that claim language. *Id.*

The Reply did not dispute these points.

B. “The Second Input”

The POR explained that the plain language and structure of the claims “dictate[] that Limitations [1i]-[1k], [15e]-[15g], and [27d]-[27f] require a single, common contact event as the starting point of the claimed logic operations,” and the

claims define that starting point as “a second input... that includes movement across the display in a direction” and is detected while the device is “displaying the user interface of the application.” POR, 23-26. Thus, the claims cannot be met by programming logic that detects and responds to touch events that occur in separate operational contexts; rather, “the second input” mapped to each limitation must be detected in the same operational context (i.e., “while displaying the user interface of the application”). *Id.*

The Reply did not dispute these points.

III. PETITIONER’S GROUND 1 FAILS

A. **Shiplacoff’s Acknowledgement that “Other Gestures Can Be Used for Mode Changes” Does Not Render Obvious Use of the Particular Gestures Recited in the Claims to Trigger the Recited Display Actions.**

The Reply did not dispute that Shiplacoff does not describe its “tap or flick” as triggering a transition from “full screen mode to the launcher screen.” Petitioner attempts to overcome that failure in its original theory by improperly injecting a new theory—that it would have been obvious to modify Shiplacoff to utilize its “tap or flick” for that purpose because Shiplacoff characterizes certain inputs—“tap or flick” not among them—as “examples” and states that “other gestures can be used for mode changes.” Reply, 4-10. That argument fails.

1. Broadly invoking “other gestures” (a genus) is insufficient to teach or suggest any particular species of gesture.

Petitioner’s argument is effectively that Shiplacoff’s reference to “other gestures” (a genus) renders obvious the specific gesture required by the claims (a species). But “[i]t is well established that disclosure of a genus in the prior art is not necessarily a disclosure of every species that is a member of that genus.” *Wasica Fin. GmbH v. Cont’l Auto. Sys., Inc.*, 853 F.3d 1272, 1285 (Fed. Cir. 2017). In *Wasica*, the Federal Circuit affirmed the Board’s finding that disclosure of “‘any modulation scheme’ (a genus)” was insufficient to teach or suggest “‘the constant frequency modulation scheme of [the claim] (a species).’” *Id.*, 1285-86. Although “a disclosed genus may anticipate a claimed species when the genus is so small that [a POSITA] would ‘at once envisage each member of this limited class,’ a “broad invocation” of a genus is not sufficient to suggest any particular species. *Id.*

The same is true here. Shiplacoff’s acknowledgement that other, unspecified gestures could be used for mode changes does **not** suggest utilizing Shiplacoff’s “tap or flick” to transition from “full-screen mode” to the “launcher screen.” And to the extent Petitioner argues its invalidity theory is premised on mapping “the second input” of Limitations [1k], [15g], and [27f] to some “other gesture”—as opposed to Shiplacoff’s “tap or flick”—that argument fails for the same reasons. At most, Shiplacoff suggests that a POSITA could use an alternative gesture in place of the mode-change gestures Shiplacoff describes. Again, however, broadly invoking

“other gestures” (a genus) does not suggest using the particular species of gesture required by the claims to trigger the claimed display action. *See id.*

2. *When considered as a whole, Shiplacoff would have led a POSITA away from the proposed modification.*

Shiplacoff describes its “tap or flick” as an input utilized in “card mode” to “dismiss activities, for example by closing a card.” EX1004, ¶[0100]. Petitioner argues it would have been a matter of “design choice” to use Shiplacoff’s “tap or flick” input to trigger a return to the “launcher screen” from “full-screen mode.” Paper 2 (“Pet.”), 23-24; Reply, 10. In making that argument, however, Petitioner improperly disregards Shiplacoff’s other teachings. *See In re Enhanced Sec. Research*, 739 F.3d 1347, 1355 (Fed. Cir. 2014) (“§103 does not permit... stitch[ing] together an obviousness finding from discrete portions of prior art references without considering the references as a whole.”). When properly considered as a whole, Shiplacoff would have led a POSITA away from that purported “design choice.”

As explained in the POR, Shiplacoff teaches that different display modes are for different activities: “full-screen mode” is optimized for “manipulating on-screen elements” within a single “active activity,” whereas “card mode” is dedicated to “manipulating cards” to switch and close activities. POR, 43-46. A POSITA would thus have recognized that a particular gesture/input Shiplacoff describes as triggering an action/function in card mode would *not* necessarily be equally available to perform that action/function in full-screen mode. *Id.*, 46-47, 32-38.

This is especially true for inputs that are already programmed to trigger a different function in “full-screen mode.” *Id.*, 46-54. Because Shiplacoff (via Duarte-992) teaches that the “flick” is already programmed to trigger scrolling in “full-screen mode,” a POSITA would have understood that the “flick” should not also be programmed to trigger another action in “full-screen mode” (such as transitioning from “full-screen mode” to the “launcher screen”). *Id.*

Petitioner attempts to minimize this issue by arguing that, because Shiplacoff does not expressly “criticize, discredit, or otherwise discourage” a POSITA from utilizing “tap or flick” to transition from full-screen mode to the launch screen, there is no “teaching away.” Reply, 10-11. But that is not the standard. While an express “warn[ing] against the very modification made by the patentee” certainly constitutes teaching away, express statements are “**not** the sole basis” on which a reference may be found to “[lead] away from the direction taken by the patentee.” *Spectralytics, Inc. v. Cordis Corp.*, 649 F.3d 1336, 1343 (Fed. Cir. 2011).¹

Here, Shiplacoff (via Duarte-992) discloses that its “flick” is an on-screen input that, when in “full-screen mode,” is already programmed to trigger “scrolling” of displayed objects. POR, 50. And a POSITA would have understood that flicks commonly trigger scrolling within an application. *Id.*, 50-51. Given Shiplacoff’s

¹ All emphasis added unless otherwise noted.

teachings and this background knowledge, a POSITA would have been “led away” from modifying Shiplacoff such that its “flick” input triggers transitioning from full-screen mode to the launch screen. *See Spectralytics*, 649 F.3d at 1343; POR, 50-51.

3. *Shiplacoff’s purported disclosure that two similar gestures are used to trigger different functions in the same mode is irrelevant because Petitioner’s theory is premised on using the same input to trigger two different functions.*

Petitioner next argues it is irrelevant that Shiplacoff’s “flick” is already programmed to trigger scrolling when in “full-screen mode,” because “the same type of gestures can have different outcomes in the same display mode depending on where, when, and how the gesture is input by the user.” Reply, 11-12. Petitioner points to Shiplacoff’s disclosure that, in “card mode,” “the user can tap on [the] card” that is “in the central position... to switch to full-screen mode” and can tap “icons” displayed in the “quick launch area” to “launch additional activities.” *Id.*, 12. Petitioner also points to Duarte-992’s description of a “drag-scroll” and a “flick.”² *Id.*, 13. But this argument fails because the cited examples involve the use of similar

² In making this argument, Petitioner incorrectly asserts that Dr. Madisetti “admitted to not carefully reading the paragraphs of the references to which he cited.” Reply, 13 n.2. To the contrary, Dr. Madisetti confirmed that he had, in fact, “considered th[o]se paragraphs closely” in preparing his declaration. Ex. 1024, 77:22-80:6.

inputs/gestures on different objects to trigger different functions in the same display mode, while Petitioner's mapping is premised on using the exact *same* input on the *same* object (i.e., Shiplacoff's "flick") to trigger different functions. Specifically, each of the two cited "tap" examples is a touch on a different component in the user interface (i.e., a "card" that is "in the central position" or an "icon" in the "quick launch area") and therefore a different input. Without this distinction, the device would be unable to differentiate the two inputs, thereby creating ambiguity in terms of the function that should be performed in response. EX2006, 44:15-45:17 (Petitioner's expert agreeing that "within the same mode, a single gesture... has to have a single effect, like has to map to a single command, if you will. And that means by a single gesture it has to have something that's distinguishable to a user and the system."); POR, 51-52 (citing same). Moreover, Petitioner's attempt to justify its position confirms that the Petitioner does nonsensically argue for using the same gesture in the same place for two different purposes. That is plainly illogical.

Similarly, the "drag-scroll" and "flick" described by Duarte-992 have different characteristics that enable the device to differentiate them (i.e., whether the user's finger "leave[s] the surface of screen 101 before stopping movement" or "lift[s]... before coming to a rest") and therefore are different inputs. See EX2003, ¶[0070]. That the two gestures can start from the same point of contact or share some characteristics does not make them the same input. As Petitioner

acknowledges, different respective characteristics of a “drag-scroll” and a “flick” enable the device to trigger a different function in response to each. Reply, 13-14.

In contrast, the Petition proposes modifying Shiplacoff such that the *same* input—Shiplacoff’s “flick” input—triggers both scrolling and a transition from “full screen mode” to the “launcher screen.”³ See Pet., 23-24; POR, 50-52. Because Shiplacoff teaches that the active application occupies the entire display in “full-screen mode” (EX1004, ¶[0014]), this “flick” input in “full screen mode” would contact the same on-screen component (the active application), resulting in ambiguity as to whether the user intended to trigger scrolling or transition from “full-screen mode” to the “launcher screen.” See POR, 47-51. A POSITA would have avoided the proposed modification in order to avoid that ambiguity. *Id.*, 51-52.

B. Petitioner’s New “Flick” Theory is Both Untimely and Unavailing.

Perhaps recognizing these failures, Petitioner’s Reply abandons the Petition’s mapping of “the second input” of Limitations [1k], [15g], and [27f] to Shiplacoff’s “tap or flick” input and instead asserts that “the second input” is: (1) “a ‘flick’ started in the gesture area 102 or near an edge of screen 101,” or (2) “a ‘flick’ received while

³ Although Petitioner’s Reply includes arguments concerning purported variations on a “flick” input that could be distinguished from one another, those arguments are both untimely and unavailing. See *infra* Section III.B.

[a] modifier key is held down.” Reply, 14-16. Notably, neither of these alternative “flick” inputs is disclosed by Shiplacoff.

Petitioner argues, however, that it would have been obvious to modify Shiplacoff to utilize one of these alternative “flick” inputs in full-screen mode because Shiplacoff’s programming logic could distinguish those from other “flicks.” *See id.*, 14-15. But this new theory is not found in the Petition, which includes no reference to the alternative “flick” versions discussed above. *See id.*, 10-16 (with no cites to the Petition). Petitioner’s effort to change its mappings at this stage of the proceeding is improper, and therefore this new theory should not be considered. *See Intelligent Bio-Systems, Inc. v. Illumina Cambridge Ltd.*, 821 F.3d 1359, 1369-70 (Fed. Cir. 2016) (rejecting a petitioner’s similar attempt to argue, “for the first time [in its reply], ‘that an ordinary artisan would have considered it obvious to use deprotecting conditions *other* than those described in [the petition’s art]’” (emphasis in original) on the basis that the petition “chose which grounds of invalidity to assert in its petition and it chose not to assert this new one”).

Even if considered, Petitioner’s new “flick” theory fails. Shiplacoff never describes a “flick” input as anything other than an *on-screen* input. *See* POR, 43-54, 41 & n.7. And Petitioner offers no reason why, in light of that disclosure, a POSITA would have been motivated to modify Shiplacoff’s programming logic to use “a ‘flick’ started in the gesture area 102 or near an edge of screen 101” or “a

‘flick’ received while [a] modifier key is held down,” both of which include some off-screen component. Reply, 14-16. Petitioner’s argument is effectively that, because Shiplacoff can distinguish between an off-screen input (e.g., Shiplacoff’s “swipe up” gesture or a “‘flick’ started in the gesture area 102”) and an on-screen input (e.g., the “flick” input as actually disclosed in Shiplacoff), a POSITA would have understood that an alternative “flick” that starts in the gesture area *could* be utilized. But the mere fact that it could be utilized does not establish a motivation to modify Shiplacoff to do so. *Belden Inc. v. Berk-Tek LLC*, 805 F.3d 1064, 1073 (Fed. Cir. 2015) (“[O]bviousness concerns whether a skilled artisan not only *could* have made but *would have been motivated to make* the combinations or modifications of prior art to arrive at the claimed invention.” (emphasis in original)). Indeed, when Shiplacoff is considered as a whole—as it must be⁴—it counsels against using a flick-type input to trigger a switch from “full-screen mode” to the “launcher screen.” See POR, 47-54.

In sum, Petitioner’s new “flick” theory is untimely and therefore should not be considered, but it also fails establish the obviousness of any claim.

⁴ *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1578 (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[.]” (emphasis in original)).

C. Petitioner’s Efforts to Rehabilitate Its “Tap” Theory Are Both Untimely and Unavailing.

As explained in the POR, Petitioner’s mapping of Shiplacoff’s “tap” input to “the second input” of Limitations [1k], [15g], and [27f] fails because a “tap” does not “include[] movement across the display,” as is required for the “second input.” POR, 55-56. Petitioner seeks to rehabilitate this theory by arguing—for the first time in its Reply—that a POSITA would have understood that “a ‘tap’ may include some small amount of movement of a user’s finger.” Reply, 16-19. But this new argument fails for three reasons.

First, the argument is premised on portions of Shaffer (EX1008) and Matthews (EX1010) that were either *not* cited in the Petition or *not* cited for these limitations. See Reply, 16-18. It is well-settled that relying on “previously unidentified portions of a prior-art reference to make a meaningfully distinct contention” “crosses the line from responsive to new” and is therefore improper. *Ariosa Diagnostics v. Verinata Health, Inc.*, 805 F.3d 1359, 1368 (Fed. Cir. 2015).

Specifically, in the Reply, Petitioner cites Shaffer at 28:37-62 and Matthews at 10:65-11:7 and 3:38-46 for Limitation [1i]’s “movement across the display in a direction.” Reply, 16-18 (citing these passages as being “[c]onsistent with Limitation [1i]”). Only the citation to Matthews at 10:65-11:7 can be found in the Petition, and it is cited solely for Limitation [27e]’s unique recitation of “a duration parameter that is above a duration threshold.” Pet., 37 (citing EX1010, 11:2-7, to

assert that “a minimum *time period threshold* for a touch was also commonly used in the art”). The Petition’s citations to Shaffer—which do not include the portion of Shaffer cited in the Reply—are likewise limited to Limitation [27e] and its “duration parameter” and “duration threshold.” *Id.*, 37-38. The Petition’s contentions that Shiplacoff’s “tap” satisfies Limitation [1i]’s “movement across the display in a direction” do not reference the portions of Matthews or Shaffer that are cited in the Reply. *See id.*, 21-24, 34 (not citing EX1008 or EX1010 anywhere). Petitioner’s attempt to gap-fill with new citations is improper and the arguments premised on them should not be considered. PTAB Consolidated Trial Practice Guide at 73 (“Petitioner may not submit new evidence or argument in reply that it could have presented earlier, e.g. to make out a prima facie case of unpatentability.”); *see also Netflix, Inc. v. DivX, LLC*, 84 F.4th 1371, 1381-82 (Fed. Cir. 2023) (affirming as untimely a reply argument citing certain prior-art disclosures for a claim limitation, because the petition solely provided those citations for a *different* claim limitation).

Second, even if considered, Petitioner’s new argument fails because Petitioner cites no evidence a POSITA would have understood a “small amount of movement” to constitute “movement across the display in a direction,” as required of the claimed “second input.” And the challenged patent states that “multi-finger *taps*” are “static gestures” that “*do[] not involve movement across* or in proximity to *an interaction surface*.” EX1001, 61:18-24; *see also Phillips v. AWH Corp.*, 415 F.3d 1303, 1315

(Fed. Cir. 2005) (en banc) (“[C]laims ‘must be read in view of the specification, of which they are a part.’” (quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995))).

Third, it is undisputed that Shiplacoff does not teach or suggest that its “tap” input triggers a transition from “full-screen mode” to the “launcher screen,” which Petitioner maps to the recited display action of Limitations [1k], [15g], and [27f]. And Petitioner fails to establish any reason a POSITA would have been motivated to modify Shiplacoff such that its “tap” input triggers that display action. *See supra* Sections III.A-III.B; POR, 32-38. As explained, Shiplacoff’s broad invocation of “other gestures” is legally insufficient to suggest modifying Shiplacoff such that a specific input, such as Shiplacoff’s “tap,” triggers the claimed display action. *See supra* Section III.B.

IV. PETITIONER’S GROUND 2 FAILS

A. Petitioner’s Reply Arguments Reflect a Modification of the Petition’s Ground 2 Theory that is Both Untimely and Fails to Establish Obviousness.

Petitioner improperly attempts to recast its Ground 2 contentions, arguing that the Shiplacoff-Nan combination renders the challenged claims obvious because a “relatively long single-finger gesture” from Nan meets the requirements of Limitations [1j], [15f], and [27e] and a “relatively short single-finger gesture” from

Nan meet the requirements of Limitations [1k], [15g], and [27f]. Reply, 20-23. But the Petition does not reference those gestures.

Regarding Ground 2, the Petition broadly alleges that the Shiplacoff-Nan combination renders obvious Limitations [1i]-[1k], [15e]-[15g], and [27d]-[27f]. Pet. 46-49. As to those limitations, the Petition proposes modifying Shiplacoff only such that “the edge gesture” of Nan “would substitute the swipe up gesture in Shiplacoff.” *Id.* Although the Petition does not expressly identify what gesture/input allegedly constitutes “the second input” of Limitations [1k], [15g], and [27f], it cannot reasonably be disputed that the Petition’s Ground 2 contentions neither mention Shiplacoff’s “tap or flick”—which Petitioner maps to Limitations [1k], [15g], and [27f] in Ground 1—nor assert that Nan’s “edge gesture” would substitute for Shiplacoff’s “tap or flick.” POR, 57-60. Thus, the only reasonable reading of the Petition’s Ground 2 contentions—and the only theory that should be considered⁵—is that Nan’s “edge gesture” is “substitute[d]” to be “the second input”

⁵ See *Henny Penny Corp. v. Frymaster LLC*, 938 F.3d 1324, 1330-31 (Fed. Cir. 2019) (holding that “an IPR petitioner may not raise in reply ‘an entirely new rationale’ for why a claim would have been obvious,” including one that relies on “a more general reading of the petition and the reply,” when the “petition advanced only [a] substitution of” one part of a reference into another).

of Limitations [1j], [15f], and [27e], while Petitioner’s mapping for “the second input” of Limitations [1k], [15g], and [27f] is unchanged from Ground 1 (where Petitioner mapped to Shiplacoff’s “tap or flick” input). And that theory fails for the reasons explained in the POR. POR, 57-64.

Petitioner implies that its new mapping is permissible because it is premised on a passage in Nan that was cited in the Petition. *See* Reply, 20. But the mere fact that a particular passage was cited does give Petitioner cover to introduce an entirely new mapping based on that passage. Notably, Petitioner does not assert that this passage from Nan was mapped to Limitations [1k], [15g], and [27f] in the Petition. And that is because the above-referenced passage was cited only to support Petitioner’s contention with respect to Limitations [1j], [15f], and [27e] that, in the Shiplacoff-Nan combination, “an edge gesture with a certain length, speed, hold time, or a number of inputs, is used to execute a change from the full-screen mode *to the card mode.*” Pet., 46-47 (citing EX1005, 7:9-55); *see also* POR, 58-59.

Petitioner’s new theory, in which this passage of Nan is mapped to Limitations [1k], [15g], and [27f], is untimely and therefore should not be considered. *Henny Penny*, 938 F.3d at 1330-31; *cf. Dell Inc. v. Acceleron, LLC*, 818 F.3d 1293, 1301 (Fed. Cir. 2016) (holding that a petition’s mapping to one portion of a figure did not permit the petitioner at oral argument to change the mapping to a different portion of that same, petition-cited figure).

To the extent Petitioner later attempts to justify its untimely new theory by pointing to a portion of the Institution Decision crediting Nan as “teach[ing] that ‘a relatively short single-finger gesture’ and ‘a relatively long single-finger gesture’ can be used to determine which screen to display,” the Board’s findings about what Nan teaches are irrelevant. *See* DI, 27-28 (citations omitted) (citing EX1005, 7:39-44). The Board cannot find unpatentability on different grounds than the Petition proposes. *Koninklijke Philips NV v. Google LLC*, 948 F.3d 1330, 1336 (Fed. Cir. 2020) (“Although the Board is not limited by the exact language of the petition, the Board does not ‘enjoy[] a license to depart from the petition and institute a *different* inter partes review of his own design.’” (emphasis in original) (quoting *SAS Inst. Inc. v. Iancu*, 584 U.S. 357, 365 (2018))).⁶

⁶ While the court recognized in *Koninklijke Philips* that the introduction of new evidence by the Board may be permissible in some circumstances, such evidence may be used only to support an invalidity theory that was included in the Petition. 948 F.3d at 1336 (distinguishing *Anacor Pharmaceuticals, Inc. v. Iancu*, 889 F.3d 1372, 1379 (Fed. Cir. 2018) and *Genzyme Therapeutic Products Ltd. Partnership v. Biomarin Pharmaceutical Inc.*, 825 F.3d 1360, 1366 (Fed. Cir. 2016)); *see also Anacor*, 889 F.3d at 1379 (holding that new evidence was permissible when limited to support “the same combination of references... and the same series of inferences

Because Petitioner’s Reply arguments provide a new claim mapping not presented in the Petition’s Ground 2 contentions, the new mapping and the arguments premised thereon are untimely and should not be considered. *Henny Penny*, 938 F.3d at 1330-31. But even if considered, it nonetheless fails because—as explained below and in the POR—Petitioner fails to establish a motivation to combine Shiplacoff and Nan as proposed.

B. Petitioner Fails to Establish a Motivation to Combine Shiplacoff and Nan as Proposed Under Either Petitioner’s Original Mapping or its New, Untimely Mapping.

As explained in the POR, a POSITA would *not* have been motivated to combine Shiplacoff and Nan as proposed because doing so would render Shiplacoff’s “gesture area” inoperable for its intended purpose and thereby negate the benefits of “expand[ing] the available space and the vocabulary of gestures.” POR, 60-64. Petitioner argues that is not a barrier to the combination because “Shiplacoff contemplates implementations without a gesture area 102.” Reply, 24-

that the petition proposed”); *Biomarin*, 825 F.3d at 1366 (holding that, in citing new evidence, “the Board did not ‘change theories in midstream,’ much less deny Genzyme notice of any such change,” because “[t]he Board’s final written decisions were based on the same combinations of references” in the Petition and were “on those *same grounds* and no others”).

25. But the Petition did not propose removing “gesture area 102” as part of the Shiplacoff-Nan combination, so Petitioner’s new argument should be disregarded.

Regardless, Petitioner’s new argument is premised on Shiplacoff’s use of “in one embodiment” when referencing “gesture area 102.” EX1004, ¶[0064]. But Shiplacoff does the same when referencing “screen 101.” *Id.* It is plainly unreasonable to suggest Shiplacoff describes an embodiment without “screen 101.” Thus, a POSITA would not understand “in one embodiment” to suggest an embodiment without “gesture area 102.” Further, Shiplacoff describes “gesture area 102” and “screen 101” as a combined “user input mechanism”—as opposed to “other user input mechanisms, such as a keyboard”—suggesting that “screen 101” alone would be insufficient. *Id.*, ¶[0066].

Even if “gesture area 102” could have been omitted, a POSITA would not have been motivated to do so because it would countermand one of Shiplacoff’s goals and negate the associated benefits. *See Polaris Indus., Inc. v. Arctic Cat, Inc.*, 882 F.3d 1056, 1061, 1067-69 (Fed. Cir. 2018) (vacating Board decision for failure to consider that the proposed modification “would run contrary to one of [the

primary reference]’s stated purposes”); POR, 62-64.⁷ Shiplacoff explains (via incorporation of Duarte-992) that “gesture area 102” enables “a vocabulary of touch commands including gestures that are performed within gesture area 102, within screen 101, or on some combination of the two” and thereby “expands the available space and the vocabulary of gestures over prior art systems.” EX2003, ¶[0052]. Petitioner fails to meaningfully address this issue and offers no evidence that a POSITA would have prioritized the alleged benefits of Nan’s edge gestures over the benefits of Shiplacoff’s gesture area. *See Winner Int’l Royalty Corp. v. Wang*, 202 F.3d 1340, 1349 n.8 (Fed. Cir. 2000) (“[T]he benefits, both lost and gained, should be weighed against one another.”).

Petitioner further argues that, “even if the combination... were to include gesture area 102,” “a POSITA would have been drawn to... Nan’s edge gestures when considering how to implement Shiplacoff’s gesture area 102” because the “purpose” of Shiplacoff’s gesture area 102 and Nan’s edge is purportedly “very similar.” Reply, 25. But that is not so. Shiplacoff’s “gesture area” is strictly an off-screen area, which Shiplacoff uses to distinguish between various gestures, such as

⁷ *See also Belden*, 805 F.3d at 1073 (obviousness requires “not only [that a POSITA] *could have made* but *would have been motivated to make*” the claimed invention (emphasis in original)).

those that “cross over” between the “gesture area” and “screen 101.” POR, 62. In contrast, Nan solely uses the screen to distinguish “edge” gestures from other gestures depending on whether the “start point” of the touch event “is at an edge.” *Id.*, 61-62. While Nan’s “edge” may extend beyond the display limit, Nan still treats it as part of the screen for purposes of detecting an “edge” gesture. *Id.*, 62.

Thus, although both Shiplacoff’s “gesture area” and Nan’s “edge” are used to distinguish gestures, Nan’s “edge”-based method does not allow for the off-screen/on-screen distinction that Shiplacoff describes as enabling an “expand[ed]... vocabulary of gestures” compared to prior systems. EX2003, ¶[0052]. It therefore cannot reasonably be disputed that substituting Nan’s “edge gesture” for one or more of Shiplacoff’s gestures/inputs—as proposed in either Petitioner’s original or new, untimely claim mapping—would result in fewer inputs/gestures utilizing Shiplacoff’s “gesture area,” if not eliminate them completely. This asserted modification would reduce the overall benefit provided by the off-screen/on-screen distinction that the “gesture area” facilitates. In addition, as explained in the POR, Shiplacoff expressly discourages Nan’s methodology by teaching that the device will “simply *ignore*” contact with any area comparable to Nan’s “edge” “when interpreting touch commands that cross over from gesture area 102 to touch-sensitive screen 100, and vice versa.” POR, 63. In light of this teaching, a POSITA would not have been motivated to use an “edge” to differentiate user inputs in the

manner described by Shiplacoff. *Id.*, 63-64. Petitioner’s failure to meaningfully address these incompatibilities is fatal to its proposed combination. *See Enhanced Sec.*, 739 F.3d at 1355.

V. PETITIONER DID NOT AND CANNOT ESTABLISH ANY OBVIOUSNESS OF DEPENDENT CLAIMS 2-3, 16-17, AND 28-29

Petitioner’s Reply does not dispute that Dependent Claims 2-3, 16-17, and 28-29 cannot be satisfied unless the input/gesture mapped to “the second input” of Limitations [1i]-[1k], [15e]-[15g], and [27d]-[27f] also satisfies the additional limitations for “the second input” in the dependent claims. *See* POR, 64-66. And Petitioner concedes the Petition did not include any contention that Shiplacoff’s “tap or flick” (or any other gesture/input) satisfies both the requirements of “the second input” of Limitations [1k], [15g], and [27f] and the additional limitations of Dependent Claims 2-3, 16-17, and 28-29. Reply, 26.

In an effort to overcome this admitted gap in its Petition, Petitioner argues that “[i]t did not need to” separately address whether the input/gesture mapped to Limitations [1k], [15g], and [27f] satisfies the dependent claims because that input/gesture would do so “for the same reason [as] the ‘swipe up’ gesture.” *Id.* But that argument is logically flawed. Demonstrating that one particular gesture/input satisfies the additional limitations of Dependent Claims 2-3, 16-17, and 28-29 is not sufficient to demonstrate that a different gesture/input does so. For example, Dependent Claim 3 includes the additional limitation that “the second input”

includes “movement across the display in... a vertical direction.” Whether a “swipe up” gesture includes movement in a “vertical direction” has no bearing on determining whether a “tap or flick” input—or any other gesture/input mapped to Limitations [1k], [15g], and [27f]—includes movement in a “vertical direction.”

Petitioner’s argument regarding these dependent claims is effectively a rehash of its “other gestures” argument. *See* Reply, 5-10; *supra* Section III.A.1. Specifically, regarding Limitations [1k], [15g], and [27f], Petitioner contends that, it would have been obvious “to use a different gesture” that satisfies the additional limitations of the dependent claims “for the same reason [as] the swipe up gesture.” Reply, 26. The argument fails because Petitioner has not identified any reason why a POSITA would select a particular gesture that satisfies those requirements from the many potential gestures that are “different” from a swipe-up gesture. *See supra* Section III.A.

As Petitioner concedes, the Petition fails (apparently intentionally) to address whether or how any gesture/input mapped to “the second input” of Limitations [1k], [15g], and [27f] satisfies the additional limitations of Dependent Claims 2-3, 16-17, and 28-29. *See* Pet., 23-26, 34, 39-40, 46-49. That failure is fatal to Petitioner’s obviousness theories for these dependent claims.

VI. CONCLUSION

For the foregoing reasons, the challenged claims should be upheld.

Dated: September 24, 2025

Respectfully submitted,

/Eagle H. Robinson/
Eagle H. Robinson

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 5,581 words. The undersigned relies upon the word count generated by Microsoft Word.

/Eagle H. Robinson/

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CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. §42.6(e), the undersigned certifies that on September 24, 2025, complete copies of foregoing PATENT OWNER SUR-REPLY were served on Petitioner via email (by consent), at the following email address(s):

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