

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.

Petitioner

v.

SMITH INTERFACE TECHNOLOGIES, LLC,

Patent Owner

IPR2024-01085
Patent 10,649,580

PATENT OWNER SUR-REPLY

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	GROUND 1A: THE PETITION FAILS TO RENDER OBVIOUS CLAIMS 1, 3, 17, 19, 22, 24, 36, 41, 58, 60, 77, 82, 83 OVER THE RAMOS PAPER, RAMOS VIDEO, AND ORDING DEVICE.....	2
A.	Petitioner Has Not Identified Any Credible Motivation to Combine Ording’s Semitransparent Overlay	2
B.	The RROD Lacks a “Plurality of Markings in a Second Virtual Display Layer” That is “Partially Translucent” and “Appears to Have a Lesser Depth Than The First Virtual Display Layer”	10
C.	When Image Content Is Zoomed, the “Zoom Operation Is Also Performed on the Zlider Markings	14
D.	A “Hover” is Not an “Aspect of a Touch”	16
E.	Petitioner’s Shifting Mapping Confirms its Flaws	18
F.	Ramos Does Not Teach a “Single Continuous Gesture in Constant Contact”	20
G.	Lack of Motivation to Incorporate a Duration Threshold.....	22
III.	GROUND 1B: THE RAMOS PAPER-RAMOS VIDEO-ORDING- HAYWARD COMBINATION DOES NOT RENDER OBVIOUS CLAIM 48	23
IV.	CONCLUSION.....	25

I. INTRODUCTION

The Reply restyles its mappings and adds fresh gloss, yet the core defects remain. The asserted Ramos Paper–Ramos Video–Ording device (“RROD”) still does not disclose or suggest the claimed architecture with: (1) a “plurality of markings” in “a second virtual display layer” that “appears to have a lesser depth than the first virtual display layer,” (b) where at least a portion of the second virtual display layer is “at least partially translucent,” and (c) zooming the contents of the first layer “without performing the zoom operation on the plurality of markings.”

First, Petitioner never identifies a credible reason why a POSITA would have relocated Ramos’ Zlider from its position adjacent an image to an overlay atop the image content and then render the Zlider semitranslucent. Ording is directed to determining a cursor position and mentions, in passing, a semitransparent “virtual click wheel,” but does not teach benefits for either making Ramos’ precision Zlider translucent or moving it above the image. Petitioner’s hindsight-driven rationale remains untethered to Ramos’ design goals or user needs.

Second, Petitioner’s mapping improperly intermixes Ramos’ independent pressure cursor with the Zlider’s working area and Vernier markings. The cursor is not integral to the Zlider and, in any event, does not place the Zlider’s markings in a second layer at a lesser apparent depth than the image layer.

Third, Petitioner contrives a position on “zoom” that cannot be reconciled with the claims or Ramos. Ramos scales the Vernier as the image is zoomed, so the “zoom operation” is also performed on the markings, which is contrary to the claims’ requirement that the “zoom operation” is not performed on the plurality of markings.

Fourth, the touch limitations remain unmet. The claims require detecting “an aspect of a touch” surpassing a threshold. But the Petition maps hovering, which is not touching, and the RROD combination does not suggest otherwise.

Finally, Petitioner still lacks a non-hindsight motivation to add a duration magnitude threshold, invoking generalities from Ording without identifying a problem in Ramos that feature would address. Indeed, there is no such problem in Ramos that requires or would even benefit from Petitioner’s alleged modification.

For these reasons, and as elaborated below, Petitioner has not met its burden.

II. GROUND 1A: THE PETITION FAILS TO RENDER OBVIOUS CLAIMS 1, 3, 17, 19, 22, 24, 36, 41, 58, 60, 77, 82, 83 OVER THE RAMOS PAPER, RAMOS VIDEO, AND ORDING DEVICE

A. Petitioner Has Not Identified Any Credible Motivation to Combine Ording’s Semitransparent Overlay

In its claim mappings, Petitioner proposes modifying the Zlider widget disclosed in the Ramos Paper and Ramos Video by (1) relocating the Zlider from its native position adjacent to the image to an overlay position on top of the image content and (2) rendering the widget semitransparent. Pet., 56–59. The Petition

refers to this as the Ramos Paper–Ramos Video–Ording device or “RROD.” *Id.* Petitioner invokes Ording’s mention of a virtual click wheel that “may be either an opaque or semitransparent object” to supply the translucence feature. Reply, 4–5; EX1006, [0045]. But Petitioner’s purported motivations are generic and not credible.

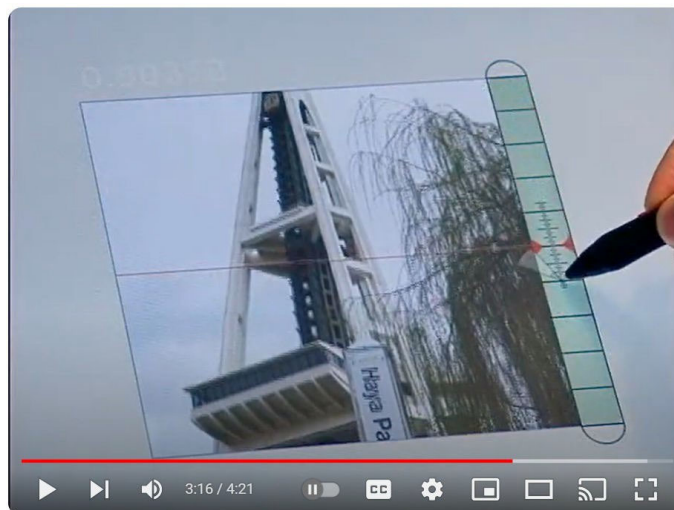
Petitioner identifies three purported motivations for “combining” Ramos with Ording. Pet., 31–33. As Patent Owner explained, the first two—Ording purportedly providing “foundational hardware (including processor and memory) for implementing a widget,” and Ording’s “various applications” that “could use the Zlider widget”—say nothing about semitransparency and do not justify the particular RROD configuration Petitioner needs. POR, 12; EX2012, ¶¶49–51; *Belden Inc. v. Berk-Tek LLC*, 805 F.3d 1064, 1073 (Fed. Cir. 2015) (obviousness concerns not only whether POSITA “could have made” the proposed combination, but whether they “would have been motivated to [do so]”). In fact, Petitioner acknowledges that “some of the motivations were not directly related to semitransparency.” Reply, 1. The inquiry, however, is not whether a POSITA would combine features from a first reference with features from a second reference to meet requirements that are not in the claims at issue. *See Axonics, Inc. v. Medtronic, Inc.* 73 F.4th 950, 957–58 (Fed. Cir. 2023) (reversing PTAB finding of obviousness because the Board improperly combined references to address a feature not set forth in the claims at issue). Yet that is precisely what Petitioner asks the Board to do. The proper inquiry is “whether ‘a

skilled artisan would have been motivated to combine the teachings of the prior art references to achieve *the claimed invention*.”” *Allied Erecting & Dismantling Co. v. Genesis Attachments, LLC*, 825 F.3d 1373, 1381 (Fed. Cir. 2016) (internal citations omitted) (emphasis added). Neither motivation would lead to combining the references in any way that would address the “at least partially translucent” features.

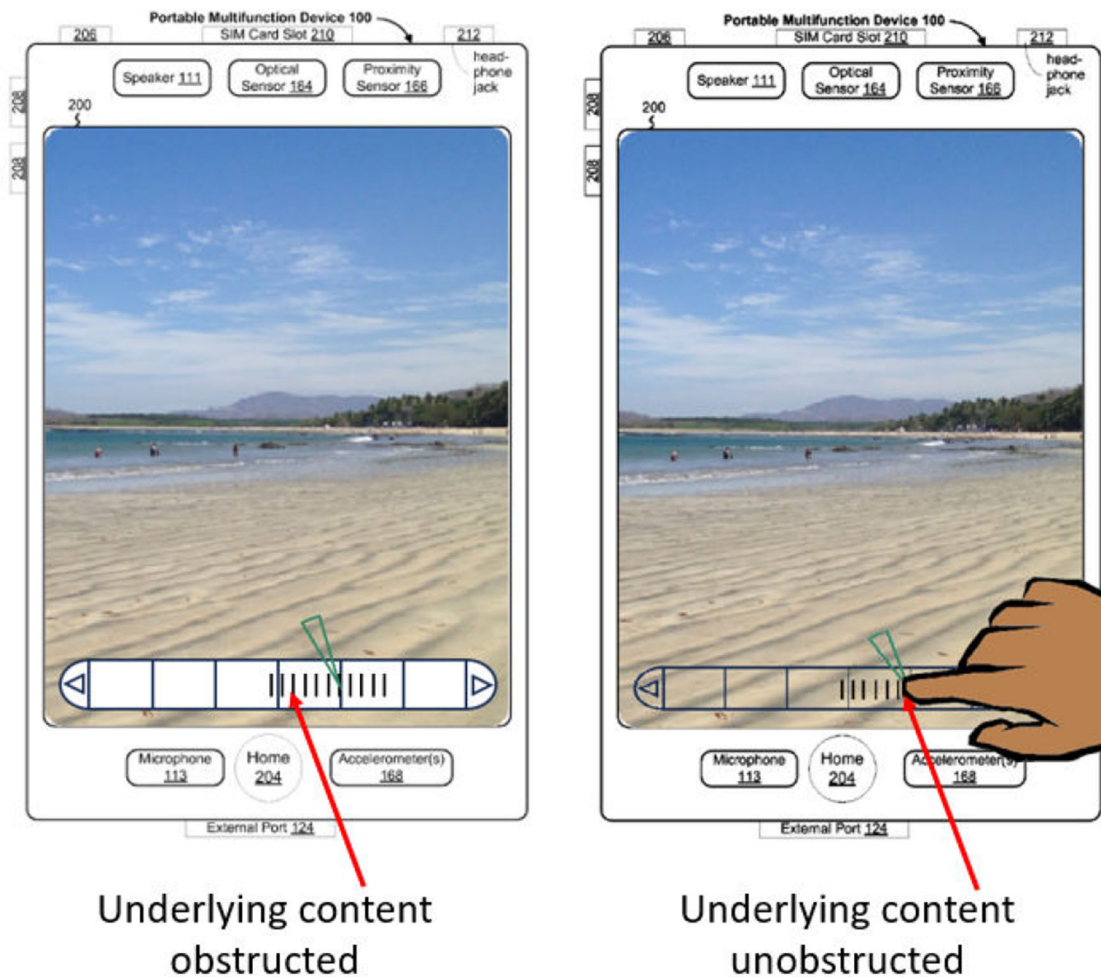
The third purported motivation fares no better. Petitioner cites Ording’s statement that the device’s “common physical architecture (such as the touch screen) ... may support the variety of applications with user interfaces that are intuitive and transparent,” and pairs it with a separate sentence noting a virtual click wheel may be “semitransparent.” Pet., 32 (citing EX1006, [0028], [0045]). As Patent Owner explained, the term “transparent” *in that context* means readily understood or user-friendly, *not* optical transparency. POR, 13–14; EX2012, ¶¶53–55; EX2010. The only reference in Ording relevant to widget transparency involves a virtual click wheel, which appears over a screen of icons and may be “semitransparent.” EX1006, [0045]. That isolated disclosure is specific to Ording’s click wheel context and does not suggest transforming Ramos’ precision Zlider into a see-through overlay. POR, 14–15; EX2012, ¶¶56–57. Nor, does the disclosure provide any reason why a POSITA, *even if* faced with an issue involving transparency, would turn to Ording to address it. Ording relates “generally to portable electronic devices, and more particularly, to portable electronic devices that adaptively determine the cursor

position from a finger contact with a touch screen display and then perform operations according to the cursor position.” EX1006, [0003]. According to Ording, “there is a need for portable multifunction devices that are configured to adaptively determine cursor position from a finger contact with a touch screen and then perform operations according to the cursor position.” EX1006, [0006]. There is no suggestion in Ording that transparency is an issue or would contribute to solving that need.

Even if one assumed a general notion that some UI objects can be made semitransparent, Petitioner still fails to show any benefit, let alone any shortcoming in Ramos that might have been improved by making the Zlider semitransparent and moving it to needlessly obscure the image content. In Ramos, the Zlider is a precise, high-feedback widget consisting of a rectangular working area and Vernier markings. EX1004, 1, 3. Ramos’ disclosures depict the Zlider being adjacent to a viewport for image content, which avoids obstructing the image.



POR, 18 (citing EX1005, 3:16). Petitioner’s RROD, by contrast, pushes the Zlider widget on top of the underlying image. Pet., 56–57. That overlay creates the very obstruction Petitioner then invokes semitransparency to “solve.” Reply, 4–7, 11, EX1032, ¶¶19–24. But even a semitransparent Zlider still needlessly obstructs the image content, and thus lays bare that the “problem” is purely a hindsight construct.



Reply, 12. Creating a “problem” without benefit as a pretext for mitigating that “problem” is quintessential hindsight. A “[d]etermination of obviousness cannot be based on the hindsight combination of components selectively culled from the prior

art to fit the parameters of the patented invention. There must be a teaching or suggestion within the prior art, or within the general knowledge of a person of ordinary skill in the field of the invention, to look to particular sources of information, to select particular elements, and to combine them in the way they were combined by the inventor.” *ATD Corp. v. Lydall, Inc.*, 159 F.3d 534,546 (Fed. Cir. 1998). Petitioner’s theory fails to chin that bar.

Worse, Petitioner’s cure degrades the core function of Ramos’ Zlider, which depends on a clearly visible Vernier and contrasting working area so that users can perceive scale, precision, and position at a glance. POR, 16; EX2012, ¶¶58–59. Making the Zlider semitransparent would cause the visibility of the Vernier markings and the working area to vary with the underlying image, impairing readability on common scenes (e.g., dark-on-dark). POR, 18–20; EX2012, ¶¶63–68. That is the opposite of what the Zlider is designed to achieve: consistent, high-precision manipulation with immediate, legible feedback. POR, 20; EX1004, 1, 3.

Petitioner’s answer is to rely on a “straightforward adjustment”—absent from the Petition—to redraw the Zlider’s outlines or markings (for example, swapping to white) “to account for the content of the underlying layer.” Reply, 5–7; EX1032, ¶¶20–21. But Petitioner offers no implementation detail for this supposed fix. Nothing explains whether such “adjustment” is manual or automatic or how it would respond when different portions of the Zlider simultaneously cover bright and dark

regions. Reply, 4–7. On this record, the “adjustment” is a conclusory and untimely patch, not a motivation to make the change in the first place. POR, 16–20.

Petitioner also points to an instance in the Ramos Video where an eyedropper tool displays a polygon exhibiting “transparency effects,” suggesting this shows the “commonplace nature” of adjusting transparency. Reply, 6–10; EX1032, ¶23. That example concerns a separate overlay polygon used for color readout, not the Zlider’s working area and Vernier. It does not address the problem introduced by Petitioner’s RROD—obscuring image content with the Zlider and then degrading the legibility of Zlider markings by making them semitransparent. POR, 17–20; EX2012, ¶¶63–68. Nor does it bear any apparent relation to translucency of an interfering user interface element.

Petitioner tries to fill the motivation gap by manufacturing a finite “obvious to try” design choice: place the Zlider adjacent to or “overlaying the underlying image.” Pet., 56–57. But the ability to describe two options is not the same as establishing that both are plausible alternatives. There must be “a reason that would have prompted a person of ordinary skill ... to combine the elements in the way the claimed invention does,” not a post hoc assertion that two enumerated alternatives exist. *See KSR Int’l Co. v. Teleflex, Inc.*, 550 U.S. 398, 418 (2007). Here, Ramos itself already implements the Zlider adjacent to the image content—plainly avoiding obstruction—and emphasizes precision through constant, high-contrast visual

feedback. Moving the Zlider to atop the image plainly interferes, yet Petitioner points to no evidence that Ramos' adjacency was "too intrusive" or that users demanded a semitransparent Zlider that would justify relocating the Zlider over the image content or rendering it semitransparent. POR, 16–20.

Petitioner leans on Ording's semitransparent virtual click wheel. Reply, 5. But that disclosure is narrowly tied to a transient control superimposed over a grid of icons, a context where momentary translucency *avoids* blocking the very icons being navigated. POR, 14–16. Petitioner never bridges the logical gap from that scenario to Ramos' precision Zlider, which is engineered around visually prominent, stable markings and a contrasting working area for high-precision parameter manipulation. POR, 14–17; EX2012, ¶¶56–62. In short, the asserted "teaching" from Ording does not generalize to a reason to move Ramos' Zlider from its location adjacent an image to over the image content and make the widget semitransparent.

In sum, Petitioner's only identified benefit is the broad generality that semitransparency might make a UI "less intrusive." Reply, 4–7. But if that were the goal, a POSITA would have simply avoided that intrusion altogether by leaving the Zlider where Ramos places it—without intruding into the image space. Yet the Petition's combination first creates obstruction when overlaying the Zlider on the image content, then undermines the Zlider's core readability by reducing contrast, all while offering no concrete advantage over Ramos' original, unobstructive

adjacency. POR, 16–20; EX2012, ¶¶63–68. Petitioner has therefore not “identif[ied] a reason that would have prompted a person of ordinary skill ... to combine the elements in the way the claimed invention does,” and its semitransparency overlay rationale rests on hindsight. *KSR*, 550 U.S. at 418.

B. The RROD Lacks a “Plurality of Markings in a Second Virtual Display Layer” That is “Partially Translucent” and “Appears to Have a Lesser Depth Than The First Virtual Display Layer”

Petitioner’s Reply relies on mischaracterizations of Ramos Video and Ramos Article to meet the independent claims’ requirement of “displaying, via the touch screen, a plurality of markings in a second virtual display layer that appears to have a lesser depth than the first virtual display layer,” with “at least a portion of the second virtual display layer” being “at least partially translucent.” Reply, 13–19; *see, e.g.*, Limitations [1h], [1i], [1l], [22d], [22g], [58c], [58g]. These mappings fail to satisfy the plain language of the claims.

In these mappings, Petitioner relies on the notion that the pressure cursor is in the same virtual display layer as the working area and Vernier markings of the Zlider so that the translucency of the Ramos’ “pressure cursor” can supply the claimed semitranslucent feature. Reply, 16. To meet the virtual display layer requirements, Petitioner argues that the pressure cursor and Vernier markings are both part of the Zlider so are therefore all in a second virtual display layer at a lesser depth than the

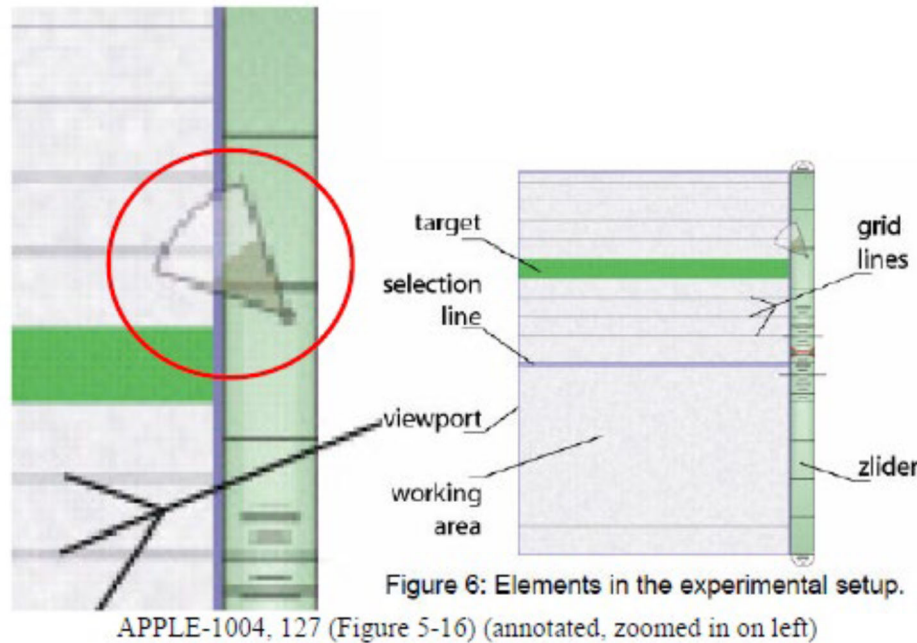
image contents. Reply, 14–16. Ramos belies Petitioner’s position, plainly showing the pressure cursor at a different depth (layer) than the Zlider and Vernier markings.

As a threshold matter, Petitioner’s mappings fail because they mischaracterize Ramos. The Ramos Paper expressly states that the pressure cursor is “not integral to the Zlider design” and is used “instead of the default cursor found in most GUIs.” EX1004, 3. This disclosure confirms the pressure cursor is an interface-wide pointer, not an exclusive component of the Zlider widget, and thus not part of the same “virtual display layer” as the elements of the Zlider widget.

Petitioner’s attempt to treat the pressure cursor as integral with the Zlider’s virtual display layer also conflicts with the ’580 Patent, which explains that “a virtual display layer refers to a collection of display elements which have all been assigned the same *apparent depth* within the 3D layered user interface,” and describes depth cues (e.g., blur, shadow, fog) as the mechanisms by which apparent depth is conveyed.¹ EX1001, 68:7–11, 68:25–52. Ramos’ pressure cursor is translucent over

¹ Petitioner’s further reliance on dependent claim 21’s open language to suggest multiple “sub-layers” within the “second virtual display layer” cannot and does not expand the term beyond the specification’s depth-based definition. *See Phillips v. AWH*, 415 F.3d 1303, 1315 (Fed. Cir. 2005) (en banc) (“Claim language must always be read in view of the specification, of which they are a part.”); *Retractable Techs.*

both the image content region and the Zlider's working area and Vernier markings, and even casts a shadow over those elements in the Ramos Video. POR, 28–32. This directly and unambiguously shows the pressure cursor at a different depth (and layer) from both the image contents and the Zlider widget. POR, 28–32.



Because the pressure cursor is not in the same display layer as the Zlider's markings, its translucency cannot satisfy the requirement that “at least a portion of the second virtual display layer is at least partially translucent” when the claimed “plurality of markings” is in that second layer. POR, 32–33.

v. Becton Dickinson & Co., 653 F.3d 1296, 1304–05 (Fed. Cir. 2011) (construing syringe “body” as one-piece in light of the specification even though the claim language allowed more pieces).

The mappings also fail because Ramos neither discloses that the Zlider's working area or Vernier markings are translucent nor any layered relationship in which those markings "appear to have a lesser depth than the first virtual display layer." The Zlider is positioned adjacent to the image contents, not above it, and the Ramos references do not describe any "display layers." While Petitioner points to the pressure cursor's semitransparency, that only shows the cursor's overlay; it does not show that the "plurality of markings" is translucent or that those markings are in a second layer at a lesser depth. POR, 30–33; EX2012, ¶¶90–97.²

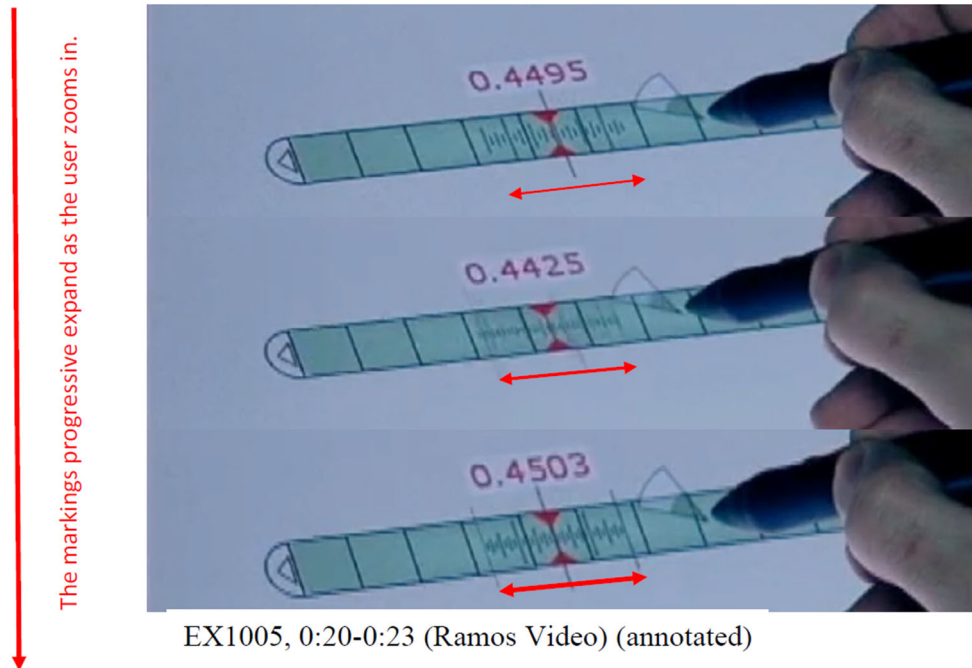
In sum, because they do not shown that the "plurality of markings" lie in a second virtual display layer that is at least partially translucent and appears to have a lesser depth than the first virtual display layer, Petitioner's RROD mappings fail to satisfy meet all features of claims 1, 22, and 58 and their respective dependents.

² Petitioner's continued reliance on the figure shown on page 59 of its Petition is misplaced. That figure, which does not appear in the Ramos Paper, Ramos Video or the Ording reference, is a fiction created by Petitioner based on its self-serving interpretations of the references and construction of a theoretical image overlaid by a Zlider, prepared with the benefit of hindsight. *See* POR, 10–12, 16–21, 33–35. Nowhere in any of these references is the working area or the Vernier of the Zlider shown as overlaying image contents.

C. When Image Content Is Zoomed, the “Zoom Operation Is Also Performed on the Zlider Markings

Independent claims 1, 22, and 58 require “perform[ing] a zoom operation on the at least portion of the contents of the first virtual display layer without performing the zoom operation on the plurality of markings in the second virtual display layer.” Petitioner tries to narrow this plain language into a formalistic rule that only the exact user-invoked “zoom operation” on image content counts as “zoom,” and any concurrent scaling of markings becomes a non-zoom “adapting of grid spacing.” Reply, 21–24. The claims do not support that interpretation, and neither do the record or common usage of “zoom.”

Ramos’ interface plainly scales the Vernier when the user zooms the image. EX1004, 3 (“the Vernier in our Zlider adapts its grid spacing depending on the widget’s current scale factor.”). The Ramos Video shows the same thing in action: as pressure increases, the content’s magnification increases and the Vernier’s markings spread apart, and on zoom-out, they move closer together. POR, 36–37 (citing EX1005, 0:20–0:23).



Patent Owner previously explained that this is the markings scaling in lockstep with the content. POR, 37; EX2012, ¶112.

Petitioner’s attempt to recharacterize this scaling fails. The claims preclude performing a zoom operation on the markings, but they do not narrowly specify the bounds of the zoom function. In context, “zoom” is used in its ordinary sense—enlarging or reducing scale. EX2009. Ramos itself uses “zoom” to describe manipulating scale via pressure. EX1004, 1. Thus when the Zlider’s “current scale factor” increases and the Vernier’s spacing changes accordingly, the system is performing the very scaling the claims exclude from the markings. The record screenshots and narration leave no doubt that the Vernier is being scaled/zoomed as part of the same interaction that zooms the image. EX1005, 0:14–0:27; 0:20–0:23; 3:07–3:32; *see also* POR, 36–38; EX2012, ¶¶111–117.

Petitioner argues that the Vernier lines remain the “same thickness,” so the “two-dimensional image magnification function” applied to the image is not applied to the Vernier. Pet., 69. Petitioner’s argument relies on an overly narrow *implied* construction of “zoom operation.” Petitioner provides no rationale for reading this claim so narrowly.

Instead, the claims plainly state that the zoom operation, such as the Zlider’s pressure-initiated zoom operation, is not performed on the markings. The Ramos Video clearly shows that, as the zoom function is performed on the Vernier, more (finer) markings become visible. The Petition also concedes that the Vernier “adapts its grid spacing depending on the ... scale factor.” Pet., 7; EX1004, 3. Changing the scale of the grid spacing is zooming into the markings in the ordinary sense because it zooms in on the Vernier while zooming in on the image content. As such, Ramos’ Zlider does not meet the “without performing the zoom operation on the plurality of markings” functionality recited in the claims.

D. A “Hover” is Not an “Aspect of a Touch”

The independent claims also require that “when an aspect of the touch is detected to surpass a threshold,” the system displays the plurality of markings in the second virtual display layer. In turn, each claim recites detecting “at least a portion of touch on the at least one user interface element” (e.g., the working area) before the threshold comparison is made. Petitioner argues that Ramos’ stylus “hover” near

the screen satisfies this by treating hover as an “aspect of a touch.” Reply, 24–28. That conflates proximity with touch and ignores the patent’s own definitions and structure.

First, the ’580 Patent defines a “touch event” as an event “in which an implement of interaction comes into contact with an interaction surface.” EX1001, 52:48–50. The claims repeatedly speak of detecting “at least a portion of touch” and then reacting “when an aspect of the touch” surpasses a threshold—language that presupposes contact. Petitioner cites the discussion of “touch states” (including a “no touch” state) and asserts the “lowest touch state may require some form of proximity,” but that does not transform “no touch” into “touch,” nor does it rewrite the issued claims’ requirement that the relevant threshold is an “aspect of the touch.” Reply, 24–26; *see also* EX1001, 47:36–38 (“lowest touch state” is “the touch state associated with the lowest contact pressures.”); EX1001, 16:14–17 (“contact pressure is . . . the pressure being exerted on an interaction surface.”).

Second, what Ramos actually does is display the Vernier in response to hover *before* contact. The Patent Owner Response explained that the Vernier appears when the stylus enters a tracking/hover region, not on touch. POR, 42.

Third, Petitioner’s Reply leans on capacitive sensing to argue that “a POSITA would have understood that a capacitive touch sensor has no knowledge of physical contact” and therefore “an aspect of a touch” can be proximity. Reply, 25–26. But a

sensor does not “know” anything; it simply measures a parameter. Yet neither Petitioner nor its expert contend that such a parameter would not have a value that corresponds to the point of physical contact. Accordingly, the ’580 Patent distinguishes between proximity and touch and then defines “touch event” with contact. EX1001, 52:48–50. The claims track that distinction by requiring detection “of at least a portion of touch” on the working area before any thresholded “aspect of the touch” is evaluated—a structure Petitioner’s proximity-trigger theory cannot satisfy.

Consistent with the specification’s explanation of a *no-touch* “touch state,” the claims require that the threshold be applied to “an aspect of the touch”—not to a state without touch. Ramos’ hover-triggered display therefore does not disclose “when an aspect of the touch is detected to surpass a threshold,” and the RROD mapping fails for Limitations [1h], [22d], and [58c].

E. Petitioner’s Shifting Mapping Confirms its Flaws

Petitioner’s Reply dismisses Patent Owner’s criticisms as “confusion,” pointing to the institution decision’s preliminary summary of the Petition and that Patent Owner responded. Reply, 28–29. That framing misses the point. Patent Owner responded by, among other things, identifying concrete, unresolved inconsistencies in how the Petition maps “displaying, via the touch screen, a plurality of markings in a second virtual display layer,” particularly after inserting Ording’s

semitransparent overlay into Ramos' Zlider interface. POR, 42–43. Those criticisms are not rhetorical—they go to whether Petitioner ever provided a clear, element-by-element mapping of Limitations [1h]–[1i] and their counterparts in claims 22 and 58.

The Institution Decision set this trial in motion under the reasonable-likelihood standard, but that does not bless Petitioner's shifting theories. Ultimately, Petitioner has not carried its burden with a consistent, particularized showing for each limitation. Petitioner's mapping instead toggles which elements occupy which "virtual display layer," and alternates between adjacency and overlay depending on the claim element.

Petitioner's own adjustments confirm the problems with its original theories. In one place, the pressure cursor is treated as part of the Zlider "second virtual display layer," while elsewhere, the Zlider itself is relocated to an overlay to manufacture translucency. Reply, 11–12, 13–15. Patent Owner did its best to play whack-a-mole with these alternatives and respond to each—not because the mapping was clear, but because it was not. Because Petitioner left Patent Owner and the Board to infer how the art allegedly meets the claims, the Petition lacks required particularity is missing.

F. Ramos Does Not Teach a “Single Continuous Gesture in Constant Contact”

Claims 29 and 65 (and their dependents) require that the touch movement that causes the zoom (or other action) is part of “a single continuous gesture with constant contact” with the device. Petitioner mapped this requirement to the user’s interaction with the Zlider by describing a “first touch” and a “second touch,” purportedly for exposition. Pet. 59–62, 88, 92. The Petition identified two separate inputs—an initial input to bring up the Vernier and a subsequent input to manipulate it—which is not “constant contact.” POR, 48–49. In Reply, Petitioner now insists both the “first touch” and “second touch” are facets of one unbroken gesture and that the stylus never leaves the screen. Reply, 40–41. This explanation does not cure the deficiency. It either contradicts Petitioner’s own hover theory or rests on assumptions not supported by Ramos.

The parts of the record Petitioner chose to emphasize only compound the ambiguity. In the Petition and again in Reply, Petitioner leaned heavily on Ramos’ “hover” behavior to explain how the Vernier appears and how users interact with Zlider at very high precision. Reply, 24–28; *see, e.g.*, EX1005, 2:00–2:45. Those demonstrations are flatly inconsistent with “constant contact.” Disclosing that users lift the stylus (i.e., no contact) to operate the control and subsequently re-engage does not disclose a single, continuous contact. Petitioner cannot have it both ways:

either hover (no contact) is part of the interaction, defeating constant contact, or the interaction is a continuous touch—an account that is not what Ramos shows or touts.

Even putting aside what the claim requires, Petitioner’s revised theory is undermined by Ramos itself. Ramos neither states nor depicts that the Zlider is designed to be used in a single unbroken press from Vernier invocation through parameter manipulation. The paper and video emphasize pressure-modulated precision, clutching, and hover-assisted maneuvers, which are features that presuppose breaks in contact or at least interleaving of contact and non-contact phases. EX1004, 3 (clutching outside the working rectangle); EX1005, 2:00–2:45 (hover “hold,” “lifting the stylus,” and re-entering). It was Petitioner’s burden to show, in the Petition, why Ramos disclosed a single, continuous contact. The Petition did not. The Reply instead offers a new opinion that the first and second “touches” are “part of the same ‘single continuous gesture with constant contact.’” Reply, 31. That is both untimely and not disclosed in the prior art.

To the extent Petitioner now suggests that a POSITA could have used the Zlider in one continuous press, that is a different theory—and still not enough. The claims recite more than mere theoretical possibility. *See, e.g.*, Claim 29 (reciting actual performance of the single, continuous contact as part of the claimed method).

In sum, the Petition did not clearly map “a single continuous gesture with constant contact” to Ramos, and the Reply’s new interpretation either contradicts

Petitioner's hover-based theory or relies on attorney and expert gloss untethered to the cited disclosures. On this record, Petitioner has not shown that Ramos (alone or in the RROD combination) teaches or suggests the claimed "single continuous gesture with constant contact." Petitioner thus fails to establish obviousness of claims 29 and 65.

G. Lack of Motivation to Incorporate a Duration Threshold

Claims 9, 32, and 69 add that the aspect of the touch includes a duration aspect, with a threshold duration magnitude. Patent Owner explained that Petitioner never identified a contemporaneous reason a POSITA would alter Ramos' Zlider to add a duration threshold because Ramos triggers without using time as a discriminator. POR, 52–53. In Reply, Petitioner leans on generalized teachings that touch systems may ignore very short contacts, then asserts it would have been "obvious" to graft a duration magnitude threshold into RROD. EX1003, ¶84; Reply, 32–33. That is not a motivation grounded in Ramos; it is a hindsight attempt to patch a defective theory.

Ramos' stylus interaction is deliberate and pressure-centric. The Zlider uses its Vernier without any described time gating. Nothing in Ramos suggests accidental taps or noise that a duration threshold would remedy, and Petitioner identifies no user-experience problem that a time threshold would solve in this interface. POR, 52–53.

Ording is no help. Even if Ording describes rejecting brief, unintentional touches on a smartphone UI, that is a generic safeguard, not a pointer to modify Ramos’ purpose-built pressure and position control to impose a time-based trigger. EX1006. A bare appeal to “well-known” limits cannot substitute for a specific reason to change how Ramos’ Zlider is invoked or operated.

The claims here expressly recite a “duration magnitude threshold.” If Petitioner believes it would have been obvious to add that to Ramos, it must show why a POSITA, in 2011, would have perceived a need specific to Ramos and chosen that specific modification in RROD—not merely that time filters existed somewhere in the art. This is another example of Petitioner’s hindsight focus. The claim calls for a duration threshold, so Petitioner retrospectively borrows duration threshold concepts from other references and declares them “obvious” to add. That is legally insufficient and fails to carry Petitioner’s burden.

III. GROUND 1B: THE RAMOS PAPER-RAMOS VIDEO-ORDING-HAYWARD COMBINATION DOES NOT RENDER OBVIOUS CLAIM 48

Petitioner’s Ground 1B relies on bolting Hayward onto the RROD combination to meet additional claim features. Pet, 96–102. The Reply asserts that the scenarios described in Hayward provide “the motivation for extending the use of the Zlider to further graphic applications, such as the image-capturing related parameters disclosed in Hayward.” Reply, 33–34. That rationale is unpersuasive

because Hayward addresses a different design problem and offers no contemporaneous reason to alter Ramos's Zlider widget in the manner Petitioner proposes.

Hayward describes a programmatic layer that maps touch gestures to image processing techniques. POR, 55; EX2012, ¶152. Petitioner alleges that a POSITA would have mined Hayward's scenarios for generic gesture ideas and grafted them onto the Zlider in RROD. Reply, 34. But Petitioner never identifies a shortcoming in Ramos that Hayward solves. Ramos' interface already provides continuous, precise manipulation using the Zlider working area and Vernier markings in a widget separate from the image content. Hayward's gestures operate directly on the image, without being restricted to operating within the boundaries of a widget:

In FIG. 10A, the finger of user 300 initiates a touch gesture with the left hand side of touch screen 210. As FIGS. 10A-10C are meant to illustrate a relative gesture, *the location that the user 300 selects for his or her initial contact with the touch screen is not important* to the determination of the value that will ultimately be sent to the input parameter of the selected image contrast image filer.

EX1016, [0067] (emphasis added); *see also* Pet., 95 (citing same). Substituting a location-independent gesture translation for Zliding would change the very mode of interaction, not optimize it.

Petitioner's motivation theory is therefore backward. It starts from the claim requirements and then picks features from Hayward to fill perceived gaps, rather than pointing to a reason to retrofit Ramos's pressure-based Zliding widget control with Hayward's gesture-mapping framework. Generalized assertions that gestures and filters were known do not supply that reason here.

Because Hayward neither addresses an identified problem in Ramos nor provides a specific, credible benefit for modifying the Zlider as claimed, Petitioner fails to carry its burden on Ground 1B.

IV. CONCLUSION

For the reasons explained above, the challenged claims should be upheld.

Dated: October 2, 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 5,325 words. The undersigned relies upon the word count generated by Microsoft Word.

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

CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e), the undersigned certifies that on October 2, 2025, a complete copy of this Patent Owner Sur-Reply was served on Petitioner via email (by consent), at the following email address(s):

IPR50095-0165IP1@fr.com

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