

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD**

SAMSUNG ELECTRONICS CO., LTD. AND
SAMSUNG ELECTRONICS AMERICA, INC.

Petitioners,

v.

MAXELL, LTD.,
Patent Owner

Case: IPR2024-00828

U.S. Patent No. 8,982,086

PATENT OWNER'S SUR-REPLY

Mail Stop **Patent Board**
Patent Trial and Appeal Board
U.S. Patent and Trademark Office
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PATENT OWNER'S EXHIBIT LIST

Description	Exhibit #
Declaration of Jacob O. Wobbrock, Ph.D.	2005
Handbook of Fingerprint Recognition (2nd ed.)	2006
Claim Construction Order	2007
Valdes-Perez, F.E. and Pallas-Areny, R. (2009) <i>Microcontrollers: Fundamentals and Applications with PIC</i> . Boca Raton, FL: CRC Press	2008
Deposition Transcript of Seth James Nielson, Ph.D. (January 15, 2025)	2009
Excerpts from Human-Computer Interaction, 3rd Ed., Dix et al. (2004)	2010
Definition of “mode” from PCMag (https://www.pcmag.com/encyclopedia/term/mode)	2011
McGraw-Hill Dictionary of Scientific and Technical Terms, 6th ed. (2003)	2012
Excerpts from the Deposition Transcript of Seth James Nielson, Ph.D. (December 20, 2024)	2013

I. INTRODUCTION

Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc. (collectively "Petitioner") offers no argument that its references invalidate U.S. Patent No. 8,982,086 ("the '086 Patent") under a proper reading of the claims.

Petitioner's attempts to discredit Dr. Wobbrock fall short. Instead, Patent Owner and Dr. Wobbrock have consistently and repeatedly maintained positions that highlight the validity of the claims and undermine Petitioner's arguments—which are largely a rehash of arguments previously made before the Office during reexamination of the '086 Patent. Petitioner has not shown that the challenged claims are unpatentable by a preponderance of the evidence.

II. CLAIM CONSTRUCTION

A. "first information necessary for identification of the user" and "second information relating to the identification of the user"

Having offered constructions of these terms in the Petition, Petitioner now backs away from the constructions and argues that "the issue is irrelevant to whether Petitioners' prior art invalidates the claims." Reply at 1. As set forth in the POR, these terms should be afforded their plain and ordinary meaning, including information about a user's fingerprint. No further construction is necessary in this proceeding. See Reply at 1-2.

B. “first registering mode for inputting input information by a pad of the finger” and “second registering mode for inputting input information by an end of the finger”

Patent Owner's proposed constructions of the term “first registering mode for inputting input information by a pad of the finger”¹ and of the term “second registering mode for inputting input information by an end of the finger”² were made “[i]n light of Petitioners' inconsistent and incorrect understanding of certain claim terms.” POR at 10. In other words, Patent Owner's proposed constructions are offered in response to Petitioner's incorrect reading of both the '086 Patent and the purported prior art. Patent Owner's constructions are consistent with how a POSITA understands the term mode. Accordingly, the Board should either adopt Patent Owner's proposed constructions or, alternatively, give the terms their plain and ordinary meaning as understood by a POSITA and within the context of the '086 Patent.

¹ Patent Owner proposes that the term “first registering mode for inputting input information by a pad of the finger” should be construed as “a first operational state for registering in which information is input by a pad of the finger.” POR at 10.

² Patent Owner proposes that the term “second registering mode for inputting input information by an end of the finger” should be construed as “a second operational state for registering in which information is input by an end of the finger, the first registering mode and the second registering mode being different operational states.” POR at 10.

First, Petitioner argues that no construction is necessary because “PO has never proposed to construe these terms in numerous prior proceedings.” Reply at 2. This is misdirection. Patent Owner’s arguments are timely and the Board may consider Patent Owner’s constructions to resolve the dispute between the parties. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (“[W]e need only construe terms ‘that are in controversy, and only to the extent necessary to resolve the controversy.’” (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999))). Moreover, the scope of the related district court case (*i.e.*, infringement) and this matter (*i.e.*, validity) are different, rendering claim construction in one but not the other appropriate.

Second, Petitioner acknowledges that the “first registering mode” and the “second registering mode” are “registering . . . mode[s] for inputting input information.” Reply at 2. Despite this acknowledgment, Petitioner argues that “[i]t would be improper to rewrite limitation [1f] to include an ‘operational states’ requirement.” *Id.* However, both the “first registering mode” and the “second registering mode” are sub-operating modes of the “said registering mode” and are thus differing operational states. *See* EX1001, 8:43-46 (referring to the identification mode and the registering mode as “two operating modes”).

Petitioner further relies on distinguishable case law to opine that “[i]t would be improper to rewrite limitation [1f] to include an ‘operational states’ requirement

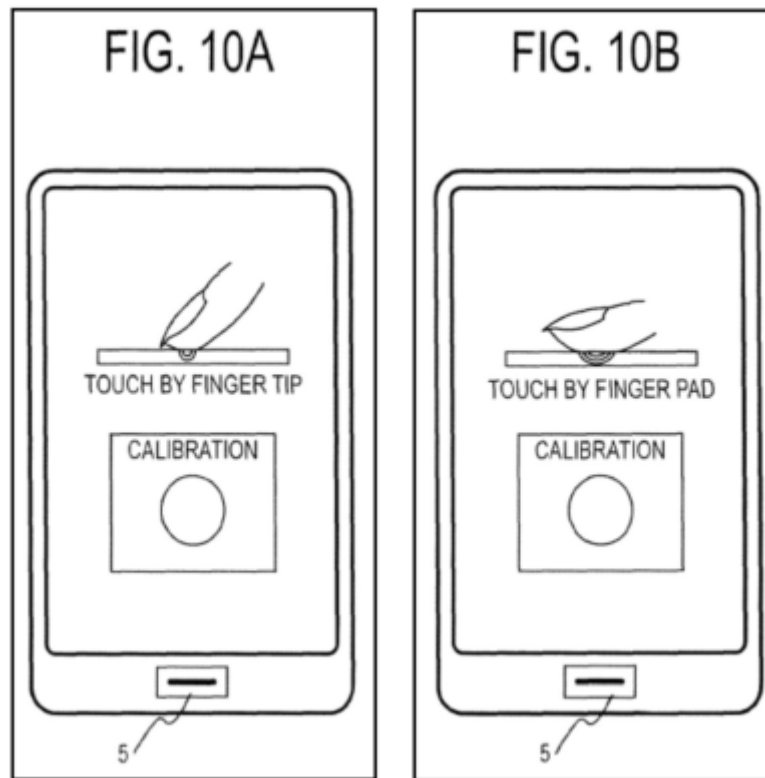
that the patentee knew how to apply but purposely omitted.” (Reply at 3). For example, in *Wasica Finance GmbH v. Continental Automotive Systems, Inc.*, the court explained:

Claim 9 recites transmitting “at least a 4 bit sequence” having four component “bit sequence[s].” Because none of the component bit sequences may be empty, the only way to fit four of them into ‘a 4 bit sequence’ is for each constituent bit sequence to comprise a single bit. Thus, a ‘bit sequence’ in the context of claim 9 must be broad enough to include sing-bit sequences. [Accordingly,] [t]he Board’s construction of ‘bit sequence’ as ‘two or more bits’ conflicts with the plain import of claim 9.

853 F.3d 1272, 1288 (Fed. Cir. 2017). Based on this context, the court held that it “is highly disfavored to construe terms in a way that renders them void, meaningless, or superfluous.” *Id.* at 1288 n.10. In this case, construing the term “mode” as “operational state” does not render “operating modes” void, meaningless, or superfluous; rather, it clarifies the scope of the claimed invention as understood by a POSITA. POR at 10-21.

Third, Petitioner’s argument that “Figures 10A and 10B are . . . [only] ‘screen image[s] displayed during calibration’ to generate [a threshold value that is used for determining a contract range],” ignores that calibration is part of the “process for password registration,” *i.e.*, the claimed “registering mode.” See EX1001, 6:28-36.

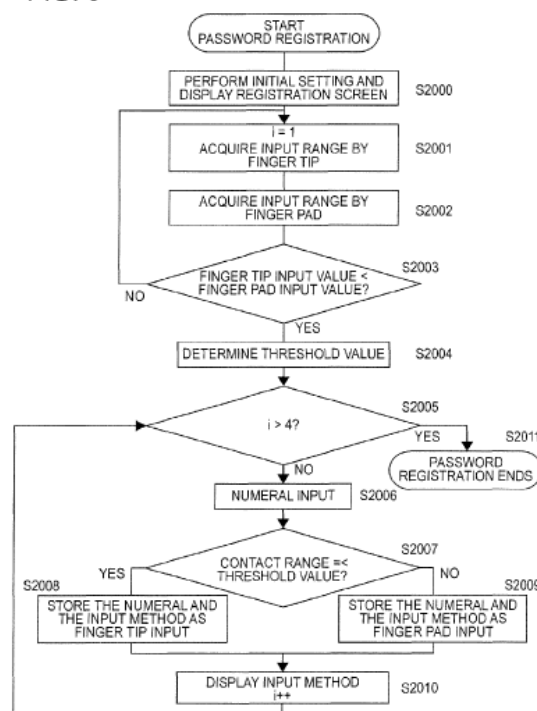
Specifically, “an image shown in [FIG. 10A/10B] is displayed to prompt the user to make a [fingertip/finger pad] contact.” EX1001, 6:30-35.



EX1001, FIGs. 10A, 10B. These contacts are recorded by a control unit to determine the range of a fingertip input and a finger pad input. EX1001, 6:31-36. In one embodiment, this registration of inputs enables the claimed invention to determine whether the first/second registering mode for inputting information by a pad/end of the finger is being used. EX1001, 6:52-59. Thus, where the first and second registering modes “are provided” (as claimed), the claims refer to the capabilities of the *device* for receiving the input rather than referring to specific actions taken by the user. Precisely because Figures 10A and 10B are two different registering modes,

the result of the same action, *e.g.*, touching the screen in each mode with, for example, the finger tip, results in a different outcome. Thus, the system (its “operational state”) is expecting something different in each mode. When it doesn’t get it (*e.g.*, when the tip size is greater than the pad size), the result is different: it doesn’t update its “tip” threshold, a touch with the tip must again occur. This is further seen in Fig. 9, step S2003, where such as decision is only possible because of the mode:

FIG. 9



Fourth, Petitioner’s attempts to discredit the extrinsic evidence demonstrating that the first and second registering modes are operational states of a system or device fall short. Reply at 6. Specifically, Petitioner argues that “PO’s reliance on a

PCMag definition of “mode” (EX2011) is misplaced” because the “webpage is dated ‘1/21/25.’” *Id.* This argument does nothing to rebut the knowledge of a POSITA at the time of the '086 Patent. *See* EX2005, ¶91; EX2012 at 3; EX2010 at 5. In fact, Petitioner attempts to dismiss Dr. Wobbrock's reliance on the McGraw-Hill Dictionary—which predates the 2011 priority date of the '086 Patent—as failing to consider “the broader definitions of ‘mode.’” Reply at 7. The record is clear Patent Owner considered all the definitions of mode in the cited evidence. POR at 16. Other than complaining about the various definitions proposed by Patent Owner, Petitioner never explains why any particular definition is incorrect or how the proposed construction deviates from the plain and ordinary meaning proposed by Patent Owner.

Finally, Petitioner argues that “PO distinguishes Rogers’ modes because they lack ‘different UIs’ (POR 40-41), but presents no evidence that ‘operational states’ must have different UIs to be distinct.” Reply at 7. This argument, however, ignores that the '086 Patent discloses examples of different UIs for different operational states based on a predetermined threshold value. *See, e.g.*, EX1001, 6:55-64 (explaining that input numerals are associated with a fingertip input or a finger pad input based on a predetermined threshold value); FIGs. 10A, 10B; *see also* EX1004 at 29; EX2005, ¶88.

These operational states are analogous to the selection of letter on a keyboard with caps lock on and the selection of the same letter with caps lock off. Depending upon the mode, the same action results in different results. See EX2005, ¶130. Petitioner fails to grasp this basic example confusing the user's action (touching the screen) with the device's operational state (first registering mode or second registering mode). Even during the calibration example in the specification, the part of the finger registered or calibrated depends upon the operational state of the device. EX1001, 6:32-36; see EX2005, ¶131. If, as the Petitioner notes, the user presents the same portion of the finger in both the first and second registering mode, in that embodiment the device compares the *results* of the two modes as part of the overall "said registering mode." As explained in the specification, "the contact range of the finger pad **input**"—which is the result of the claimed first registering mode—is compared to "the finger tip **input**"—which is the result of the claimed second registering mode. EX1001, 6:38-41. This demonstrates Petitioner's flawed reading of the claim where a user's decision is within the scope of the claims. Such interpretation shoves aside the entire specification describing the operations of "information processing apparatuses." See, e.g., EX1001, 1:14-15.

In short, the Board should apply the terms' actual plain and ordinary meanings (as set forth in the POR) and reject Petitioner's self-serving reading of the '086 Patent and interpretation of the claims. Patent Owner's proposed constructions are

consistent with the intrinsic evidence and a POSITA's understanding. *See* EX2005, ¶¶83-91.

III. GROUND 1: PETITIONER HAS FAILED TO ESTABLISH THAT CLAIMS 1, 2, AND 4-7 ARE RENDERED OBVIOUS BY THE COMBINATION OF ROGERS AND ROSENBERG

A. The Combination of Rogers and Rosenberg Fails to Disclose Limitation [1e]

Petitioner attempts to rebut Patent Owner's arguments by mischaracterizing the POR and statements made in previous disputes. *See* Reply at 9-15. For example, Petitioner argues that "PO has never before disputed that a processor can constitute either 'controller' of the '086 patent limitations" and that "[t]he POPR did not dispute that Rogers discloses or renders obvious either 'controller' limitation." Reply at 9. Even assuming this argument is correct, Petitioner provides no case law that indicates that Patent Owner is precluded at this stage in arguing that a processor is not a controller. *See, e.g.*, 37 C.F.R. § 42.107 and 37 C.F.R. § 42.120 (both notably not limiting a patent owner from raising new arguments that were not raised in a preliminary response); *Corephotonics, Ltd. v. Apple Inc.*, 84 F.4th 990, 1008 (Fed. Cir. 2023) (limiting a petitioner's reply to arguments and evidence that are "responsive to the patent owner's contentions or the Board's institution decision" and expressly restricting a petitioner's reply from raising "new theor[ies] of unpatentability"). Petitioner's argument that "PO has never before disputed that a processor can constitute either 'controller' of the '086 patent limitations" is an

improper attempt to circumvent its burden of proof. *See* 35 U.S.C. § 316(e) (“In an inter partes review instituted under this chapter, the petitioner shall have the burden of proving a proposition of unpatentability by a preponderance of the evidence.”).

Next, Petitioner asserts that during ITC proceedings “PO argued that a controller ‘could include, for example, a microcontroller, a CPU, **and/or one or more processors** as were being used in portable terminals in or around 2011.’” Reply at 10 (quoting EX1020, 6-7) (emphasis added by Petitioner). This argument, however, was made in response to Respondent’s proposed construction that invoked 35 U.S.C. § 112, ¶ 6. *See* EX1020, 4-5. Specifically, in the ITC proceeding Patent Owner argued that limitations [1c] and [1e] were not means-plus-function terms. However, if they were construed as such, “both the claim language and the specification confirm that that the claimed ‘first controller’ and ‘second controller’ correspond to known structures consistent with the plain and ordinary meaning of the term[s].” EX1020, 7.

Notably, during the ITC proceedings Patent Owner never argued that a single processor was equivalent to two controllers. In fact, Petitioner argues that during the ITC proceedings “PO . . . cited approvingly to an opposing expert’s mapping of a prior art ‘processor’ to the ’086 patent controller terms, and **identified two processors** that could be considered to fulfill the role of both the first and second controllers.” Reply at 10 (citing EX1013, 3-5) (emphasis added). While Patent

Owner disagrees with Petitioner's characterization of its arguments in the ITC proceedings, Petitioner's emphasis on the need for two processors reinforces Patent Owner's argument that Petitioner has failed to identify the required first and second controllers of limitations [1c] and [1e]. *See* POR at 29.

Petitioner further argues that Patent Owner—during the ITC proceedings—“argued that the patent uses the term controller ‘broadly’ and that it should not be limited to the structural elements of ‘control unit 3.’” Reply at 12 (citing EX1020, 6-7; EX1014, ¶56). Again, Petitioner's arguments were made in response to Respondent's proposed means-plus-function construction and to rebut Respondent's attempts to narrowly limit the claimed controller to a specific structure. EX1014, ¶56 (“While the specification provides this disclosure, there is no explanation in the specification that the claimed controller must be limited to this structure.”). Moreover, while the term “controller” should not be limited to the structural elements of “control unit 3” as described in the specification, any purported disclosure of a controller must disclose at least certain structural elements. Otherwise, there can be no equivalence. For example, as Dr. Wobbrock states: “A POSITA would recognize that the control unit disclosed in the '086 Patent corresponds to, for example, a microcontroller as disclosed in [EX2008]. The description of a microcontroller is consistent with the structure of ‘control unit 3,’ disclosed in the '086 Patent.” EX2005, ¶108.

Petitioner mischaracterizes Dr. Wobbrock's opinions when arguing "he opines that a 'processor' is not a 'controller' (EX2005, ¶111)...." Reply at 11. In fact, Dr. Wobbrock states:

Petitioners have not explained how the "processor" or "processing element" of Rogers corresponds to the claimed "first controller" and "second controller." Specifically, Petitioners just appear to provide a conclusory analysis equating the processor of Rogers to the claimed "first controller" and "second controller." See Pet. at 20. **But a POSITA would not equate any type of processor to a controller.** In particular, as explained above, controllers are different hardware components that include additional components (*e.g.*, CPU, memory, and I/O components).

EX2005, ¶111 (emphasis added).

Finally, Petitioner again mischaracterizes Dr. Wobbrock's opinions when asserting that "a POSITA would have been well aware that single processor could simultaneously serve as both the first and second controllers if provided with 'a first configuration' according to limitation [1c] and 'a second configuration' according to limitation [1e]." Reply at 12-13 (citing EX1017, ¶¶56-57, 63-64, 66). In fact, Dr. Wobbrock stated, consistent with his opinions in this proceeding (EX2005, ¶¶105-119):

While the above comparison between the intrinsic evidence and extrinsic evidence confirms my opinion that the inventors of the '086

Patent did not invoke 35 U.S.C. §112 ¶ 6 when reciting “second controller,” but simply recited a known structure of a microcontroller that includes, for example, a processor (e.g., CPU) and additional components for performing various processes, such as the claimed specified process, the following additional evidence also supports my opinions.

For example, the specification of the '086 Patent provides numerous exemplary disclosures that show that the inventor of the '086 Patent used the term “controller” consistent with the above described plain and ordinary meaning by explaining that the control unit 3 can execute various processes by using components such as a CPU, memory, counter, and/or additional logic

In view of these teachings in the specification, a POSITA would have interpreted the claimed “second controller” to connote structure in the form of hardware and/or software solutions available in or around 2011, as referenced above in reference to the textbook. *See* Microcontrollers: Fundamentals and Applications with PIC (Ex. 11) at 12-14.

EX1017, ¶¶ 57, 58, 63.

Petitioner's efforts to mischaracterize Patent Owner and Dr. Wobbrock's positions ignores that Rogers fails to disclose any alleged second controller. *See* Pet. at 29 (conceding that “a second controller is not explicitly disclosed by Rogers”); EX2005, ¶101 (“Rogers does not disclose a second controller, as claimed.”). Petitioner attempts to cure this deficiency by arguing that Rogers “at least renders

obvious limitation [1e],” but fails to adequately explain why a POSITA would expand Rogers to include an additional controller/processor. In fact, Petitioner fails to point to any disclosure in Rogers that would render the proposed modifications tenable or desirable. *See* EX2005, ¶105. There is no reason to assume Rogers had two controllers at work. Nothing in Rogers suggest the coordination necessary for running two (or more) controllers. *Id.*, ¶¶111-115 Rogers’ passing mention of “processing elements” does not constitute two controllers. Accordingly, as explained by Dr. Wobbrock, “there is no clear motivation a POSITA would have to make all of [the] modifications” required to expand Rogers to “add an additional controller/processor.” *Id.*, ¶105.

In short, Petitioner has not shown by a preponderance of the evidence that Rogers in view of Rosenberg renders obvious limitation [1e] of the ’086 Patent.

B. The Combination of Rogers and Rosenberg Fails to Disclose Limitation [1f]

Petitioner asserts that “Rogers discloses a registration process, including first and second registering modes within that process, that is similar to the ’086 patent.” Reply at 15. This is incorrect. Nothing in Rogers discloses or informs a POSITA of “a [first/second] registering mode for inputting input information by a [pad/end] of the finger,” as required by limitation [1f]. Regardless of how the Board construes limitation [1f], Petitioner has failed to show by a preponderance of the evidence that

Rogers in view of Rosenberg renders obvious this limitation.

While Rogers discusses the use of a “large fingertip” and a small stylus tip to provide *inputs* that are of different sizes during a “registration process,” these inputs are not separate registering modes, but rather a single “registering process.” See EX1006, 8:42-67. Notably, during cross-examination Dr. Nielson explained that Rogers has “just **one registration mode** that is either going to have an identification that there’s finger pad or an identification that there’s fingertip and it’s one or the other and that’s it” (EX2009, 89:19-22 (emphasis added)), and acknowledged that “the ’086 is describing the ability to identify and record **multiple registration modes** during the registration process.” *Id.* at 90:3-6 (emphasis added). This testimony by Petitioner’s own expert undermines its arguments that Rogers discloses the required “first registering mode” and “second registering mode” of limitation [1f].

In light of these deficiencies, Petitioner argues that “distinguishing between two input methods during registration does not constitute separate ‘modes’ because allegedly “(1) the claims, which purposely do ***not*** refer to the first and second registering modes in [1f] as ‘operating modes’; [and] (2) the specification, which discloses that a user’s identification information (password) may be inputted in a finger tip input mode or finger pad input mode . . .” Reply at 17 (emphasis in original). Petitioner further argues that “distinguishing between two input methods

during registration does not constitute separate 'modes' because "the extrinsic evidence, which defines 'mode' more broadly than PO proposes," and "common sense, which counsels against adopting an ambiguous definition of 'mode' that PO itself cannot apply consistently." Reply at 17-18.

These arguments, however, are nothing more than unsupported attorney argument. Petitioner fails to identify specific broad definitions of the term "mode" and merely alleges "common sense" without offering any context or support. Additionally, the claims do refer to the first and second registering modes as "operating modes." For example, limitation [1d] refers to the identification mode and the registering mode as "two operating modes" (EX1001, 8:43-46) and limitation [1f] further explains that the registering mode includes two sub-operating modes (*i.e.*, the first registering mode and the second registering mode). EX1001, 8:54-60. Petitioner's second point is flawed in that it acknowledges that the '086 Patent expressly requires two sub-operating modes (*i.e.*, a finger tip input mode and a finger pad input mode) that are "provided for" by the claimed apparatus.

Yet, even assuming Petitioner's arguments are correct—which they are not—Rogers still fails to disclose the required first registering mode and second registering mode. For example, Rogers explains that "[i]n some embodiments, authentication of the subsequently inputted graphical passcode may employ a measurement of a size (*i.e.*, area) of the object or fingertip applied to the touch

surface” and that “the touch surface may discriminate between a large fingertip and a small stylus tip.” EX1006, 7:56-60. In this example, “[a]uthentication may require a measured contact area greater than or less than a certain size, or within a certain size range.” *Id.* at 7:63-64. However, the labels assigned to different inputs by Rogers during authentication do not provide for a first registration mode and a second registration mode within the overall “said registering mode,” as set forth in claim 1.

Petitioner appears to next argue that Rogers’s use of a “‘measured contact area’ [that] may be required to be ‘greater than or less than a certain size’” when training a “device to distinguish the contact range of finger tip and stylus input” is sufficient to disclose the first registering mode and the second registering mode. Reply at 18. This argument, however, misses the point of Patent Owner’s initial argument that “receiving input from objects of varying widths has nothing to do with Rogers receiving input *in* separate registering modes.” POR at 41. While Rogers discloses the use of a “size requirement” (EX1006, 7:65), this use is not in the context of two different input modes as required by the ’086 Patent. Rather, Rogers categorizes a user’s input where the claims require the device to provide for the claimed first registering mode and second registering mode. In fact, Rogers’s use of the “size requirement” is independent of any specific mode or operational state of the device.

Finally, Petitioner argues that “a ‘mode’ can be categorized as a ‘passive mode’ or an ‘active mode,’ wherein the former is similar to pressing the Caps Lock key *before* providing user input, and the latter is similar to pressing the Shift key *while* providing user input.” Reply at 19 (emphasis in original). Where “[b]oth types of ‘modes’ are distinct operational states” and “Rogers can be understood to be describing ‘active’ first and second registration modes wherein the same user action (e.g., tapping the screen) produces a different result based on the mode state....” Reply at 19-20. Petitioner never argues what this “different result” might be. In any event, this argument is also flawed in that it again relies on Petitioner’s misguided interpretation of “mode” being the method of input selected by the user rather than the operational state. Whether passive or active, Rogers only discloses a single registering mode because the device is always in the same operation state irrespective of the manner of the user’s input. See EX2005, ¶¶122, 126, 134. Moreover, this argument is also a distraction from the actual claim language, which makes no reference to “passive” or “active” modes.

In short, Petitioner has not shown by a preponderance of the evidence that Rogers in view of Rosenberg renders obvious limitation [1f] of the ’086 Patent.

C. The Combination of Rogers and Rosenberg Fails to Disclose [1d]

For at least the same reasons that Rogers in view of Rosenberg does not disclose element [1f], Rogers in view of Rosenberg does not disclose the claimed

second information in element [1d].

D. The Combination of Rogers and Rosenberg Fails to Disclose Claim 5

Limitation 5 requires “a display screen configured to display a first image and first descriptive text associated with the first registering mode and a second image and second descriptive text associated with the second registering mode.” EX1004, 1:19-23. In its Reply, Petitioner argues that Rogers discloses “‘an exemplary graphical passcode’ registered by a user,” as illustrated by Figures 2A, 6A, 7A, and 8A. Reply at 20 (citing EX1006, 2:20-43).

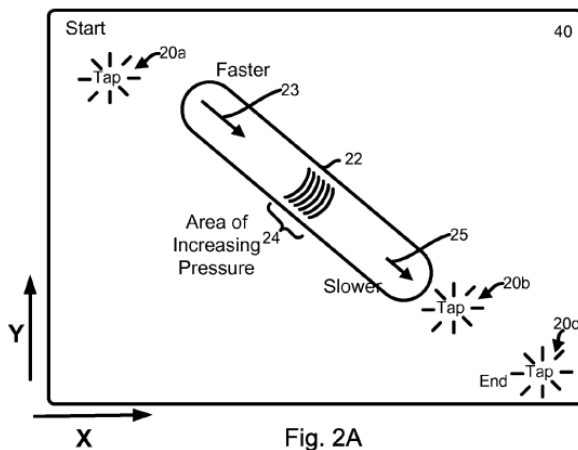


Fig. 2A

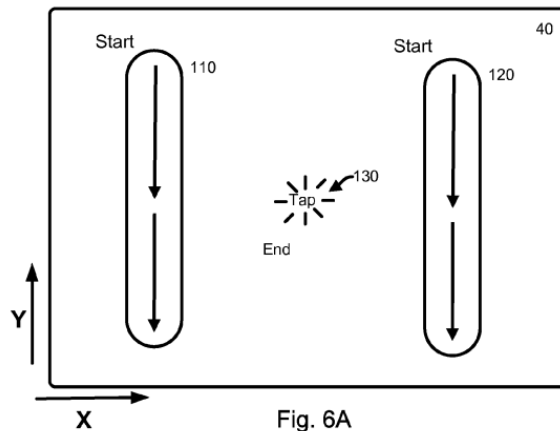


Fig. 6A

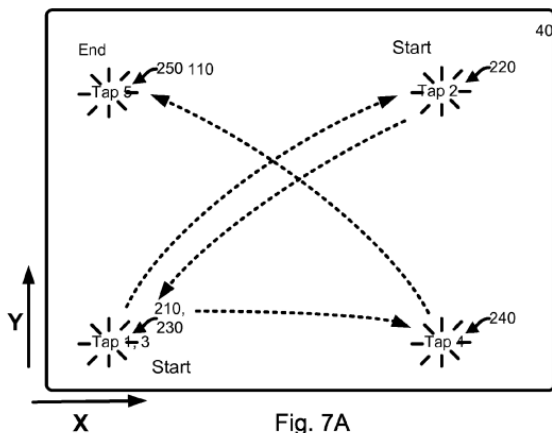


Fig. 7A

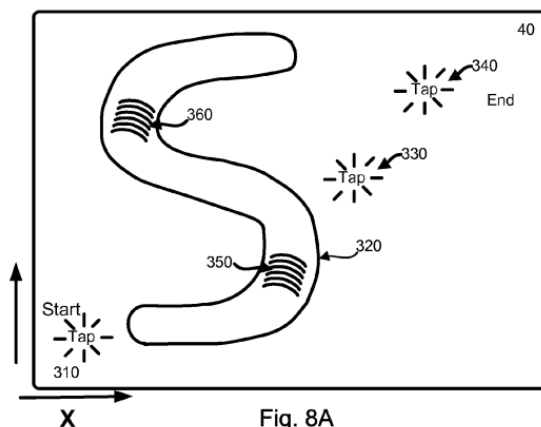


Fig. 8A

EX1006, FIGs. 2A, 6A, 7A, 8A. These illustrations, however, merely show “an exemplary graphical passcode” (*i.e.*, actions taken by a user in interacting with a device). EX1006, 5:49. Nothing in these illustrations relate to the display of a first image and first descriptive text associated with a first registering mode or the display of a second image and second descriptive text associated with a second registering mode.

Moreover, Rosenberg fails to cure the deficiencies of Rogers. For example, Rosenberg does not disclose the required first and second registering modes and Petitioner does not make any such allegations. *See* Pet. at 40-43; EX2005, ¶157.

In short, Petitioner has not shown by a preponderance of the evidence that Rogers in view of Rosenberg renders obvious limitation 5 of the '086 Patent.

II. GROUND 2: PETITIONER HAS FAILED TO ESTABLISH THAT CLAIMS 9-14 ARE RENDERED OBVIOUS BY THE COMBINATION OF ROGERS, ROSENBERG, AND MIYAZAWA

Ground 2 challenges claims 9-14, which depend from claim 1. Petitioner does not rely on Miyazawa to cure any of the deficiencies of the Roger-Rosenberg combination with respect to claim 1. As such, due to at least the reasons set forth above with respect to Ground 1, Petitioner has similarly failed to establish that claims 9-14 are rendered obvious by the combination of Rogers, Rosenberg, and Miyazawa. EX2005, ¶161.

III. GROUND 3: PETITIONER HAS FAILED TO ESTABLISH THAT CLAIMS 1, 2, AND 4-7 ARE RENDERED OBVIOUS BY THE COMBINATION OF ROGERS AND REKIMOTO

A. The Combination of Rogers and Rekimoto Fails to Disclose Limitation [1e]

In Ground 3, Petitions do not advance any new arguments that Rogers or the Rogers-Rekimoto discloses the claimed “second controller.” Indeed, Dr. Nielson confirmed that Petitioner does not allege that Rekimoto discloses a “second controller.” See EX2009 at 103:14-16 at 104:4-6 (“Q: And you don’t rely on Rekimoto as disclosing a second processor, do you? A: No.”). As such, Rogers and the Rogers-Rekimoto combination do not disclose limitation [1e] for the same reasons set forth above in Section IV(A). EX2005, ¶¶163-164.

B. The Combination of Rogers and Rekimoto Fails to Disclose Limitation [1f]

Petitioner asserts that “PO relies primarily on arguments made in Ground 1 to dispute Rogers’ disclosure of the first and second registering modes of limitation [1f]” and concludes that “PO’s arguments fail for reasons already discussed.” Reply at 24. While Patent Owner disagrees with Petitioner’s characterization of its arguments, for at least the reasons discussed above Petitioner has not shown by a preponderance of the evidence that Rogers in view of Rekimoto renders obvious

limitation [1f] of the '086 Patent.³

Next, Petitioner argues that “Rekimoto’s input methods would disclose limitation [1f] because they constitute “‘active’ input modes—similar to pressing the shift key along with the touch input.” Reply at 25. This is incorrect. For example, Rekimoto explains that with a fingertip a “user can perform first processing for zooming in on an image in response to the pressing force,” and that with a fingerpad the “user can perform second processing for zooming out on the image in response to the pressing force.” EX1010, 5:31-37. However, the mere use of different inputs does not, on its own, result in the use of different operational states or modes. Here, the '086 Patent requires “a first registering mode” and “a second registering mode,” which is not disclosed by Rekimoto. The capability of Rekimoto to respond differently to different inputs does not teach or suggest the claimed first registering mode and second registering mode. Petitioner’s attempt to conflate “first processing for zooming in” and “second processing for zooming out” (EX1010, 5:31-37) with the claimed first registering mode and second registering mode should be rejected. Neither the first or second “processing” in Rekimoto disclosed the claimed

³ Petitioner further asserts—without support—that “PO [allegedly] concedes the obviousness of combining Rekimoto with Rogers to achieve a graphical passcode registration process that relies on finger tip and finger pad inputs.” Reply at 24. This is incorrect, Patent Owner has made no such concessions.

registering modes. Neither zooming in or zooming out results in any sort of data being stored and later compared (*e.g.*, during identification or authentication). Further, reacting differently to different inputs demonstrates something other than a mode, which can result in a different reaction to the same input. Moreover, Petitioner's reference to passive and active modes is pure distraction where the actual claim language makes no reference to "passive" or "active" modes.

Finally, Petitioner argues that Patent Owner allegedly "overlooks that the '086 patent discloses an identical method for distinguishing finger pad and tip inputs." Reply at 25. This argument, however, is not tied to any specific claim or element but rather an improper comparison of Rekimoto and the '086 Patent at large. Nothing **in the claims** requires "distinguishing finger pad and tip inputs." See Reply at 25. Accordingly, Petitioner's improper comparison underscores the absence of the overall registering mode that further provides for a first registering mode and a second registering mode in Rekimoto.

In short, Petitioner has not shown by a preponderance of the evidence that Rogers in view of Rekimoto renders obvious limitation [1f] of the '086 Patent.

C. The Combination of Rogers and Rekimoto Fails to Disclose Claim 5

Petitioner asserts that "PO relies on the same arguments made in Ground 1 to dispute the obviousness of claim 5 in view of Rogers and Rekimoto" and concludes

that "PO's arguments [allegedly] fail for reasons already discussed." Reply at 25. While Patent Owner disagrees with Petitioner's characterization of its arguments, for at least the reasons discussed above Petitioner has not shown by a preponderance of the evidence that Rogers in view of Rekimoto renders obvious limitation 5 of the '086 Patent.

IV. GROUND 4: PETITIONER HAS FAILED TO ESTABLISH THAT CLAIMS 9-14 ARE RENDERED OBVIOUS BY THE COMBINATION OF ROGERS, REKIMOTO, AND MIYAZAWA

Ground 4 challenges claims 9-14, which depend from claim 1. Petitioner does not rely on Miyazawa to cure any of the deficiencies of the Roger-Rekimoto combination with respect to claim 1. As such, due to at least the reasons set forth above with respect to Ground 3, Petitioner has similarly failed to establish that claims 9-14 are rendered obvious by the combination of Rogers, Rekimoto, and Miyazawa. EX2004, ¶184.

IV. CONCLUSION

For at least the foregoing reasons, the Board should confirm the patentability of Claims 1, 2, 4-7, and 9-14.

Patent No. 8,982,086
Patent Owner's Sur-Reply

Dated: May 29, 2025

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on this 29th day of May, 2025, a copy of the attached PATENT OWNER SUR-REPLY, together with all exhibits was served by electronic mail to the attorneys of record, at the following addresses:

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Respectfully submitted,

Date: May 29, 2025

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CERTIFICATION PURSUANT TO 37 C.F.R. § 42.24(d)

Pursuant 37 CFR 42.24(d), the undersigned certifies that this Preliminary Response and complies with the type-volume limitation of 37 CFR §42.24(a). The word count application of the word processing program used to prepare this Preliminary Response indicates that the Preliminary Response contains 5,119 words, excluding the parts of the brief exempted by 37 C.F.R. § 42.24(a).

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