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

Inter Partes Review No.: IPR2024-00828

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

PETITIONERS' RESPONSE TO PATENT OWNER'S MOTION TO SUBMIT SUPPLEMENTAL INFORMATION

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I. INTRODUCTION

PO's motion to submit supplemental information largely duplicates its Offer of Proof (Paper No. 36). For the same reasons that the Board should reject PO's offer of proof (*see* Petitioners' Resp. to PO's Offer of Proof, Paper No. 38), so too should it deny PO's motion. To the extent the Board grants PO's motion, Petitioners respectfully request to submit the evidence attached hereto as EX1023 – EX1025, which show that it is PO and its expert, Dr. Wobbrock, who have taken inconsistent positions between the district court litigation and this IPR, not Petitioners.

II. DISCUSSION

A. PO's Motion Is Untimely and Improper.

For PO to submit Dr. Nielson's trial testimony in this IPR proceeding, it "must show: (1) why the supplemental information reasonably could not have been obtained earlier, and (2) that consideration of the supplemental information would be in the interests of justice." *Ultratec, Inc. v. CaptionCall*, LLC, 872 F.3d 1267, 1272 (Fed. Cir. 2017). PO fails to meet this standard.

First, the information is not new. The trial testimony PO seeks to introduce restates a noninfringement position that PO has known about since Petitioners served Dr. Nielson's expert report in the district court case on December 9, 2024, over a month before PO filed its POR on January 23, 2025. In that intervening month, PO deposed Dr. Nielson once for the district court litigation on December 20, 2024 and

once in these IPR proceedings on January 15, 2025 (EX2009). Dr. Nielson testified about this noninfringement issue in both depositions, yet PO never argued in its POR (or Sur-Reply) that Dr. Nielson had been inconsistent.

The long-time availability of PO's proffered information distinguishes the circumstances here from the case on which PO relies, *Ultratec*. PO's Mot. at 3 (citing *Ultratec*, 872 F.3d at 1272-73). Unlike in *Ultratec* (872 F.3d at 1272-73), Dr. Nielson's expert report and deposition testimony covered the exact topics that PO tries to highlight now, including the differences between registration on a fingerprint sensor in Rogers, and how a fingerprint sensor uses one mode and one algorithm to achieve one result, while Rogers and the '086 patent use discrete algorithmic structures to distinguish between touch inputs based on contact area. EX2009, 67:7 – 71:20.

Second, allowing PO to belatedly introduce this long-available information works against the interests of justice. PO could have raised this issue as early as its POR but chose not to, presumably because doing so would have harmed PO's infringement case in district court.[1] PO should not be permitted to raise this untimely argument now, at a time when Petitioners' expert will not be permitted to directly

[1] *See* Paper No. 38 at 3, fn.1 (discussing PO dropping a "modes" argument in IPR2024-00867 involving the same parties and same panel).

address the allegation at deposition or in a reply declaration. PO's failure to raise this alleged inconsistency in its POR should forfeit the argument. *See* Paper No. 10 at 9 ("arguments not raised in the response may be deemed forfeited or waived.")

The prejudice that will result to Petitioners here also distinguishes *Ultratec*. In *Ultratec*—unlike here—the alleged inconsistency dealt with identical issues in both proceedings, i.e., the inconsistent trial testimony addressed the same prior art reference from the IPR and involved the same issue regarding that same reference. *See Ultratec*, 872 F.3d at 1269-70. Dr. Nielson's trial testimony, in contrast, relates to his noninfringement opinion regarding an accused Samsung device and the algorithm that defines its operation during enrollment of a user's fingerprint. Dr. Nielson did not testify at trial about any prior art because Petitioners were precluded from offering such evidence pursuant to their *Sotera* stipulation. *See* Paper 8 (Petitioners' *Sotera* Stipulation). Although Dr. Nielson fully articulated his positions in his declaration and at his depositions—and as discussed below his opinions throughout are entirely consistent—it works against the interests of justice to deprive Petitioners of an opportunity to have their expert directly address the improper allegations that PO makes here. PO's motion should therefore be rejected.

B. Dr. Nielson's Trial Testimony Aligns with His IPR Opinions.

The May 2025 trial transcript (EX2017) includes Dr. Nielson's noninfringement theory for the accused fingerprint registration process in certain

Samsung phones. Referring to a Samsung technical document introduced at trial, Dr. Nielson explained the enrollment process for a fingerprint on a Samsung phone. Specifically, Dr. Nielson described to the jury how the Samsung phones enroll a fingerprint by (1) repeatedly touching a finger to a designated location on the device's sensor, (2) capturing an image of the finger after each successful touch, and (3) stitching together the captured images to create a template of the user's fingerprint for subsequent authentication. EX2017, 900:3 – 903:17.

Samsung phones executing this fingerprint registration process loop through the same single algorithm every time the user successfully touches the device screen. EX2017, 903:18 – 907:18. The algorithm does not recognize any difference between the user's touch inputs—e.g., it cannot determine if a user touched the screen with a finger tip, a finger pad, or even a finger at all—nor does the algorithm include any different steps depending on the type of touch input. EX2017, 907:19 – 910:6. In short, the Samsung phones execute the same lines of code for every single successful touch input, ultimately generating a single template of a single user fingerprint.

Dr. Nielson opined at trial that this method of operation does not meet the '086 patent's two input "registering modes" requirement because the Samsung phone executes the same lines of code every single time the user touches the screen.

> **Dr. Nielson:** [T]here was a single mode of operation here. [The Samsung phone] needed to register a fingerprint. As

> data is read in, it -- it's being used to combine for the full fingerprint registration. But at the end, there was one algorithm, one mode, and one fingerprint registration all the way through. [¶] [I]t's doing the same sensor reading. Each time it's looking for more data to get a more full and accurate template. But -- it's not going into a different mode of operation or using a different algorithm.

EX2017, 902:2 – 902:7, 903:24 – 904:2 (condensed by Petitioners).

Dr. Nielson told the jury the claims require a device with multiple touch input modes, which a POSITA would expect, for example, to be executing different algorithmic steps to arrive at different outcomes for each mode. A device with two "registering modes" as the claims require would not—as the Samsung phones do—loop through identical algorithmic steps because that would be a repeated execution of a single mode. EX2017, 907:19 – 908:7. An infringing device would "need two algorithms for two different modes." EX2017, 908:25 – 909:11.

Importantly, Dr. Nielson also explained what a "second algorithm" would look like in the context of the claim language.

> **Dr. Nielson:** Well, there's one mode [in the Samsung phone] that gets us to a result. This entire process is -- is -- even with the loop, is a sequence of algorithms that gets us down to a fingerprint registration with one template. [¶] If there were multiple modes, there would be branching or some kind of way of showing the -- the way you take two

> paths -- kind of like how in the patent it showed you could end with a pad or a tip that's different routes out, this only has one route to one conclusion. [¶] [I]n the '086 patent, they have a mode, an algorithm for detecting there's a pad. And that algorithm is, is it a wide area? And if it is, then you have a registration mode, and you register a pad. And it's got a second algorithm. Is it a small area? And if it's a small area, then oh, it's a tip, and it registers a tip. Two algorithms, two outcomes.

EX2017, 907:24 – 908:7, 909:4 – 909:11 (condensed by Petitioners).

This '086 patent comparison is significant because in Dr. Nielson's previous testimony in this IPR, he explained how Rogers discloses a device that operates similarly to the '086 patent claims (i.e., using two different algorithms in two separate touch input registering modes). EX2009, 66:21 – 68:7. He also contrasted the disclosures in the '086 patent and Rogers with the registration process for fingerprint enrollment such as the one in the accused Samsung phones:

> **Dr. Nielson:** In the process [of smartphone fingerprint registration] internally what's happening is it's being aggregated into a single template from which all other inputs will be compared. So if it asks you to touch it multiple times, it's trying to get a more accurate and complete image of the fingerprint so that when you touch it, it doesn't have to be exactly like you touched it before. [¶] That's different from what's described both in the '086

> and here in Rogers where we do need narrow, if that's how the graphical passcode is inputted. So there is a single template here as it's described in Rogers, but that single template has multiple independent pieces that need to be identified, just like in the '086 you might have multiple digits in a passcode that need to be identified with individual registration information.

EX2009, 66:21 – 68:7 (condensed by Petitioners).

Dr. Nielson's deposition testimony matches not only the statements from trial, but also the statements in his IPR declaration. For example, Dr. Nielson's declaration explains that "Rogers discloses that the registration of a graphical passcode can discriminate between smaller and larger contact areas of the user's finger as well as different positions on the touch screens," and concludes that "Rogers' disclosure of registering a graphical password that distinguishes between small and large contact areas corresponds to the first and second registering modes." EX1003 ¶¶ 121, 123.

Comparing Rogers to the '086 patent, Dr. Nielson's declaration explains that "Rogers' disclosures are virtually identical to the 'modes' of the '086 patent's preferred embodiment." EX1003 ¶ 124. Like the '086 patent—which distinguishes "finger pad input from finger tip input based on differences in measurements between a small contact range and a wider contact range"—Rogers discloses "discriminating between a small contact area or line width and a large contact area

or line width." *Id.* In short, the first and second registering modes in Rogers resemble those in the '086 patent because both employ different algorithmic steps depending on the touch input mode. This, too, matches Dr. Nielson's trial testimony. PO's accusations of Dr. Nielson's and Petitioners' inconsistency are therefore meritless.

PO asserts that "[t]here is zero evidence… that there are two algorithms in Rogers meeting the two registration modes of the '086 Patent." (Mot. 8), but the evidence shows otherwise. PO also argues that Figure 4 of Rogers is "just like" the non-infringing Samsung phone algorithm (Mot. 9), but Step 102 in Rogers Figure 4 includes a "[u]ser input[ting] desired passcode on device touchscreen," which Dr. Nielson's testimony above explains can be done in multiple input modes (e.g., with different algorithms for larger and smaller contact areas) because Rogers distinguishes between touch input types. EX2009, 66:21 – 68:7; EX1003 ¶¶ 123-24.

C. PO and Its Expert Have Taken Inconsistent Positions.

PO's motion exposes that it is PO and Dr. Wobbrock that have taken numerous inconsistent positions. For example, Dr. Wobbrock—who testified in both the district court and IPR proceedings—has repeatedly contradicted himself regarding the "controller" limitations of Challenged Claim 1. Petitioners' Reply previously highlighted these inconsistent opinions. *See* Petitioners' Reply at 10-15. At trial, Dr. Wobbrock proved Petitioners' point. His trial testimony, shown below, directly contradicts the opinion he submitted in this IPR proceeding.

Date	Forum	Quote
Jan. 23, 2025	IPR Sworn Declaration (EX2005)	"A POSITA would not equate any type of processor to a controller."
May 20, 2025	District Court Trial Testimony (EX1023)	"For our purposes, controller, processor, they're -- they're the same."

EX2005 ¶ 111; EX1023 at 2; *see also* POR at 24 ("A Processor Is Not a Controller"). Dr. Wobbrock's testimony here should be afforded little to no weight.

PO's motion also demonstrates the inconsistent positions that PO itself has taken with respect to "modes" in the district court and IPR proceedings. In finding for PO in district court, the jury adopted the infringement theory PO and Dr. Wobbrock offered, i.e., that a fingerprint sensor executing a single template for a single fingerprint using a single, unbranching algorithm comprises *at least* two registering modes as required by limitation [1f] because each time a user touches a finger to the sensor it constitutes a "registration mode." *See* EX1024, 569:7 – 574:15 (Dr. Wobbrock confirming the fingerprint enrollment process "loops until the phone has a complete template of somebody's fingerprint" and consists of "a single algorithm, 14 steps, to make one template for one fingerprint").

This infringement position contradicts everything that PO has argued about "modes" in this IPR and another involving the same parties (IPR2024-00867). In both IPRs, PO argues that a "mode" must be a distinct "operational state." POR at 10; IPR2024-00867, POR at 13. Indeed, PO's primary distinction between the prior

art and claims in both IPRs is that the modes Petitioners identify in the prior art are not different enough to be considered the discrete "modes" the claims require. *See* POR 32 ("While Rogers for example, discusses 'large fingertip' and a small stylus tip to provide input during the 'registration process,' these inputs are not treated as nor do they disclose two separate registering modes as claim element [1f] requires.") (emphasis added); *and* IPR2024-00867, POR at 26 (arguing that "the different filters in Haitani are not two separate modes"), 28 (arguing that different modes must have "wholly different processing operations"), 29 (arguing that "the '848 Patent conveys that a user selects different modes that yield different operations") (emphasis added).

These IPR positions are untenable in view of the infringement arguments that PO and its experts made in the district court. If a single algorithm that produces a single result can be considered multiple modes under PO's infringement theory in district court, then certainly the discrete modes Petitioners identify in these IPR proceedings disclose those claim elements as well. *See 01 Communique Lab., Inc. v. Citrix Sys.*, 889 F.3d 735, 743 (Fed. Cir. 2018) ("[C]laim terms must be 'construed the same way for both invalidity and infringement.'").

III. CONCLUSION

For the foregoing reasons, PO's motion should be rejected or, at a minimum, given little to no weight. To the extent the Board considers PO's new evidence, Petitioners respectfully request that EX1023 – EX1025 also be considered.

Date: September 22, 2025

Respectfully submitted,

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CERTIFICATE OF PAGE LIMIT COMPLIANCE

Petitioners certify that this Response complies with the 10-page limit set by the Board, as measured by Microsoft Word, exclusive of the table of contents, exhibit listing, and certificates of page limit compliance and service.

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CERTIFICATE OF SERVICE

The undersigned certifies pursuant to 37 C.F.R. §§ 42.6(e) and 42.105 that on September 22, 2025, a true and correct copy of the Petitioners' Response to PO's Motion to Submit Supplemental Information was served by emailing a copy of same (by agreement) to the following attorneys for the Patent Owner:

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