

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

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

Petitioners,

v.

MAXELL, LTD.,  
Patent Owner

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**Case: IPR2024-00828**

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

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**PATENT OWNER'S MOTION TO SUBMIT SUPPLEMENTAL  
INFORMATION**

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## TABLE OF CONTENTS

|             |                                                                                                                                                           |          |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| <b>I.</b>   | <b>INTRODUCTION .....</b>                                                                                                                                 | <b>1</b> |
| <b>II.</b>  | <b>LEGAL STANDARD .....</b>                                                                                                                               | <b>1</b> |
| <b>III.</b> | <b>PATENT OWNER’S EX2017 SATISFIES 37 C.F.R. § 42.123(B) .....</b>                                                                                        | <b>2</b> |
|             | <b>A. EX2017 Could Not Have Been Obtained Earlier .....</b>                                                                                               | <b>2</b> |
|             | <b>B. Consideration of EX2017 Is In The Interest of Justice .....</b>                                                                                     | <b>3</b> |
|             | <b>C. Granting Patent Owner’s Motion Does Not Prejudice<br/>Petitioner And Is Consistent With Petitioner’s Obligations<br/>Under 37 CFR § 42.11 .....</b> | <b>4</b> |
|             | <b>D. No Administrative Burden Exists .....</b>                                                                                                           | <b>5</b> |
| <b>IV.</b>  | <b>DR. NIELSON’S INCONSISTENT TESTIMONY .....</b>                                                                                                         | <b>5</b> |
|             | <b>A. Relevance of the Supplemental Information .....</b>                                                                                                 | <b>5</b> |
|             | <b>B. Dr. Nielson’s Inconsistent Trial Testimony .....</b>                                                                                                | <b>6</b> |

## 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 ( <a href="https://www.pcmag.com/encyclopedia/term/mode">https://www.pcmag.com/encyclopedia/term/mode</a> ) | 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        |
| Patent Owner's Hearing Demonstratives                                                                                                       | 2014        |
| June 13, 2025 Email from Board Denying Authorization to File Motion for Supplemental Information                                            | 2015        |
| August 12, 2025 Email from Board Denying Pre-hearing Conference Request                                                                     | 2016        |
| <b>May 23, 2025 Public Trial Transcript from <i>Maxell, Ltd. v. Samsung Electronics et al.</i></b>                                          | <b>2017</b> |
| August 25, 2025 Authorization for Offer of Proof                                                                                            | 2018        |
| Parties' Meet and Confer Communication regarding supplemental information                                                                   | 2019        |
| Parties' Meet and Confer Communication regarding pre-hearing conference                                                                     | 2020        |

## **I. INTRODUCTION**

Patent Owner respectfully moves to submit EX2017 (filed with Maxell’s Offer of Proof, Paper 36) as supplemental information pursuant to 37 C.F.R. § 42.123(b). EX2017 contains evidence that reasonably could not have been obtained earlier and consideration of the evidence would be in the interests-of-justice. More specifically, EX2017 contains evidence regarding Petitioner’s expert’s inconsistent positions taken regarding U.S. 8,982,086 (“the ’086 Patent”) in the district court litigation between Samsung and Maxell.

Patent Owner’s request was timely made, is directly related to a claim for which the trial was instituted, and if admitted, will demonstrate that Petitioner and its expert—Dr. Seth Nielson—were taking different positions in the district court litigation than it has taken during this IPR. *See Ultratec, Inc v. Captioncall, LLC*, 872 F.3d 1267 (Fed. Cir. 2017) (holding that the PTAB abused discretion when it refused to admit and consider an expert’s inconsistent trial testimony during an IPR).

## **II. LEGAL STANDARD**

A motion to submit supplemental information pursuant to 37 C.F.R. § 42.123(b) must show that: (1) the supplemental information reasonably could not have been obtained earlier; and (2) consideration of the supplemental information would be in the interests-of-justice. Both prongs are met here. There is no prejudice to Petitioner and Patent Owner’s motion meets “the very low threshold required to

show that the proposed supplemental information has relevance in this proceeding, that . . . [Patent Owner's] request is timely despite the advanced stage of this proceeding, and that it would be in the interested of justice to grant the motion." *See, e.g., Kingston Tech. Co., Inc. v. Spex Techs., Inc.*, IPR20217-01021, Paper 31, at 4-5 (PTAB May 29, 2018).

### **III. PATENT OWNER'S EX2017 SATISFIES 37 C.F.R. § 42.123(b)**

#### **A. EX2017 Could Not Have Been Obtained Earlier**

Patent Owner's motion is timely because the information could not reasonably have been obtained earlier. The '086 Patent was asserted in *Maxell, Ltd. v. Samsung Electronics Co. Ltd. and Samsung Electronics America, Inc.*, 5:23-cv-00092-RWS (E.D. Tex.). Paper 7, at 1. The jury trial in this case occurred on May 19-May 28, 2025. 5:23-cv-00092-RWS (E.D. Tex.), Dkt. Nos. 319, 322-323, 331, 335, 344, 346. After the trial concluded, Patent Owner sent an email on June 5, 2025 requesting authorization to file motions to submit supplemental information. EX2015.

Dr. Nielson's "trial testimony did not exist at the time Patent Owner filed its Patent Owner Response. Thus Patent Owner could not have submitted it then."<sup>1</sup> *PNC Bank, N.A., United Services Automobile Ass'n*, IPR2021-01070, Paper 52, at 4

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<sup>1</sup> The trial transcript also did not exist at the time Patent Owner filed its sur-reply but regardless, new evidence is not permitted with a sur-reply.

(PTAB Sept. 14, 2022) (granting similar motion citing *Ultratec, Inc. v. CaptionCall, LLC*, 872 F.3d 1267, 1272 (Fed. Cir. 2017) (“That inconsistent testimony did not exist sooner and thus could not have been preferred to the Board sooner.”)).

**B. Consideration of EX2017 Is In The Interest of Justice**

Inconsistent statements made by Petitioner’s expert are germane to all asserted Grounds with respect to Rogers not disclosing two registration modes required by limitation [1f]. Thus, consideration of EX2017 is in the interest of justice because it involves inconsistent testimony given on the **same** patent by the **same** expert regarding the **same** limitation at issue in this IPR. “This information has the potential to be highly relevant.” *PNC Bank*, Paper 52, at 6 (quoting *Ultratec*, 872 F.3d at 1273 (“If Mr. Occhiogrosso gave conflicting testimony on cross-examination, this would be highly relevant to both the Board’s analysis of the specific issues on which he gave inconsistent testimony and to the Board’s overall view of his credibility.”)).

In *Ultratec*, the Federal Circuit held that the Board abused its discretion by refusing to admit and consider an expert’s inconsistent trial testimony during an IPR. 872 F.3d at 1272-73. The facts of this case are highly similar. In *Ultratec*, CaptionCall retained the same invalidity expert in the district court litigation and the IPRs—**just like Samsung has done here**. In some instances, CaptionCall’s expert testified about similar issues in both proceedings—**just like Samsung’s expert has done here**. Ultratec sought to introduce the trial testimony into the IPRs (just like

Maxell), alleging that the expert's trial testimony conflicted with written declarations he made in the IPRs. *Id.* at 1270. And, the Federal Circuit determined that a "reasonable adjudicator would have wanted to review this evidence." *Id.*

Thus, allowing introduction of these inconsistencies would be in the interest of justice here, like it was in *Ultratec*.

**C. Granting Patent Owner's Motion Does Not Prejudice Petitioner And Is Consistent With Petitioner's Obligations Under 37 CFR § 42.11**

Petitioner is not prejudiced by admission of this information. Petitioner knew what type of trial testimony it planned to elicit from its own expert and thus has been aware of this inconsistency from at least the time the testimony was given, if not earlier. Any claim of prejudice is of Petitioner's own making and any "concerns are outweighed by the relevance of potentially inconsistent testimony." *SZ DJI Tech. Co., Ltd., Autel Robotics USA LLC*, IPR2019-00343, Paper 30, at 5 (PTAB Jan. 16, 2020). Indeed, this material information includes Petitioner's expert's characterization of specific functionality that does **not** meet certain claim element [1.f] and includes his claim interpretation when mapping the claims to particular functionality. Thus, under 37 CFR § 42.11, Samsung itself has a duty to disclose this material to patentability information to the PTAB. Instead, Petitioner continues to exert every effort to exclude such information. But creation of conflicting records is precisely the outcome that *Fintiv* seeks to prevent. Paper 7 at 15.

**D. No Administrative Burden Exists**

Furthermore, the supplemental information is focused on testimony concerning one claim limitation and amounts to no more than a few excerpts of trial testimony from the same expert. *See PNC Bank*, Paper 52, at 7 (finding the supplemental information sought to be introduced was focused and concise). Indeed, *Ultratec* noted that “[t]here would have been very little administrative burden to reviewing more on-point testimony **from the same expert on the same exact issues**. Had the testimony been inconsistent, a reasonable fact finder would consider the inconsistencies..” *Ultratec*, 872 F.3d at 1273 (emphasis added); *see also SZ DKI Tech*, Paper 30, at 5 (additional burden is “minimal”).

**IV. DR. NIELSON’S INCONSISTENT TESTIMONY**

**A. Relevance of the Supplemental Information**

EX2017 highlights inconsistent testimony by Dr. Nielson in this proceeding and at trial. This inconsistent testimony is highly relevant because it demonstrates why Petitioner has not shown that Rogers discloses or renders obvious limitation [1f] in every Ground of the Petition. Limitation [1f] recites “in said registering mode, there are provided **a first registering mode** for inputting input information by a pad of the finger, and **a second registering mode** for inputting input information by an end of the finger....” In the district court, Dr. Nielson testified that the two registering modes require showing two different algorithms. Here, however, Dr. Nielson only

requires the prior art to disclose one process with one result and fails to even identify any “algorithms” in Rogers. Dr. Nielson’s trial testimony regarding the claimed “modes” is highly relevant to the weight given to Dr. Nielson’s testimony in this proceeding, Dr. Nielson’s credibility, and whether the claims are unpatentable.

**B. Dr. Nielson’s Inconsistent Trial Testimony**

Here, Dr. Nielson alleges that the single registration process of Rogers discloses both the claimed registering modes, but at trial he testified that an alleged single registration process did not meet the claims. For example, on May 23, 2025, Dr. Nielson testified that element [1f] of the ’086 Patent is not met because, unlike [1f], the accused product allegedly had “one mode, one algorithm, one result”:

Q. At a high level, how is fingerprint registration in the Samsung phone different from what is in the '086 patent?

A. So what's different is it's a registration mode for this biometric information, the fingerprint. There's a single mode, and its registration is for a fingerprint. And there's **one mode, one algorithm, one result**. A fingerprint is registered at the end of it.

EX2017 at 896:18-24 (emphasis added).

Dr. Nielson clearly testifies that “a single mode, and its registration is for a fingerprint” and such a mode **does not** meet the claim because two modes require two algorithms and two results. *Id.* In this proceeding, Dr. Nielson characterizes the

single registration process of Rogers as meeting [1f] for all Grounds without ever making any reference to requiring multiple algorithms or multiple results. EX2009, 89:19-22. On the one hand, Dr. Nielson testified to the jury that when “there’s one mode, one algorithm, one result,” limitation [1f] is not met. On the other hand, when analyzing the prior art he concludes the opposite without identifying any evidence that Rogers discloses two algorithms and two results to establish that Rogers discloses or renders obvious two registration modes of [1f]. EX1003, ¶124.

At trial Dr. Nielson testified further how limitation [1f] is not met when “there was a single mode of operation needed to register a fingerprint” as this means that “there was one algorithm, one mode, and one fingerprint registration all the way through,” just like a single registration process of Rogers. EX2017, at 901:20-902:7.

Q. So now you’re at 100 percent. What has happened?

A. At the end of the entire process, it has created a single fingerprint template. So each of the readings was used to create one fingerprint template for -- for this finger

Q. And -- and why is that important, sir?

A. Well, there was a single mode of operation here. It 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.**

*Id.* (emphasis added). Yet, in this proceeding Dr. Nielson asserts the opposite, namely, that a **single** registration process of Rogers creating a **single** template *can* meet both registering modes in limitation [1f]. EX1003, ¶¶103, 124.

Neither the Petition nor Dr. Nielson (in this proceeding) identify two different algorithms to meet limitation [1f]. In fact, none of the secondary references relate to a “registration process.” The only reference relied upon for registration is Rogers. But there is **zero** evidence presented by Dr. Nielson or Petitioner that there are **two algorithms** in Rogers meeting the two registration modes of the '086 Patent.

At trial, Dr. Nielson also testified that the registration process allegedly only uses one mode when the finger is lifted and put back down because “it’s doing the same sensor reading to get a more full and accurate template” using the **same** algorithm to build the template rather than using two different algorithms.

Q. Now, Dr. Wobbrock also testified that when you lift your finger up and put it back down during the process you just showed, the phone has entered a different mode; is that correct?

A. No.

Q. How do you know?

A. Well, again, it's doing the same sensor reading. Each time it's looking for more data to get a more full and accurate template. But -- but it’s not going into a **different mode** of operation or **using a different algorithm**

EX2017 at 903:18-904:2 (emphasis added). Yet, in this proceeding, Dr. Nielson testified that a similar training process in Rogers meets limitation [1f]. *See, e.g.*, EX1003, ¶122; EX2009, 68:1-14, 70:5-17.

At trial, Dr. Nielson also testified that an algorithm is a series of steps for computing a result like the fingerprint template:

Q. [A]nd you've used the word "algorithm" a few times. Can you just remind us what an algorithm means to a software engineer like yourself?

A. Sure. So an algorithm is just a series of steps for solving a problem or -- or computing a result. So when I say there's an algorithm, there is an algorithm that is used to compute the fingerprint template.

EX2017, at 904:22-905:3. This is just like Fig. 4 of Rogers. EX1006, at Fig. 4, 8:42-67; Paper 16, at 31-35; Paper 25, 14-17. In this proceeding, however, Dr. Nielson equates the same process of Rogers to the claimed two modes without ever identifying two different "series of steps." EX1003, ¶¶103, 124; EX2009, 49:1-7.

At trial, Dr. Nielson **repeatedly** emphasized, two modes equals two algorithms plus two different outcomes:

Q. Okay. Let's have Page 665 of the trial transcript, and I believe it's Line 7 through 15. This is Dr. Balakrishnan's testimony, and he was asked: And at the highest level, **in order for the two modes to be different, they have to be running different algorithms**, right? There's an answer. There's an: Uh-

huh. And then he says “yes” on Line 12. He's asked: Yes, right? You agree with that? **Yes.** Do you remember that testimony, sir?

A. I do.

Q. Do you agree with Dr. Balakrishnan?

A. I do. You **need two algorithms for two different modes.**

Q. Okay. Can you explain what you mean by **two algorithms for two different modes?**

A. Sure. So, again, going back to the '086 patent, in 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, at 908:25-909:11 (emphasis added). In this proceeding, Dr. Nielson fails to ever identify two algorithms plus two outcomes in Rogers for two different registration modes. *See, e.g.,* EX1003, ¶¶115-125.

In sum, for the same reasons as argued at the PTAB Hearing, Rogers does not disclose or render obvious two registration modes because it only teaches a single registration process, and Samsung's own expert testified in front of a jury that two algorithms plus two outcomes are needed to satisfy this claim. Paper 16, at 31-48, 52-54; Paper 25, at 2-8, 14-18, 21-23. In view of the foregoing, Dr. Nielson's opinions should be afforded little weight, which is the sole basis for Petitioner's obviousness rationale and find the claims patentable.

IPR2024-00828  
U.S. 8,982,086

Dated: September 15, 2025

Respectfully submitted,

/Robert G. Pluta /  
Robert G. Pluta (Reg. No. 50,970)  
MAYER BROWN LLP  
71 S. Wacker Drive  
Chicago, IL 60606  
Telephone: (312) 701-8641  
[rpluta@mayerbrown.com](mailto:rpluta@mayerbrown.com)

Saqib J. Siddiqui (Reg. No. 68,626)  
MAYER BROWN LLP  
1999 K Street NW  
Washington, D.C., 20006  
[ssiddiqui@mayerbrown.com](mailto:ssiddiqui@mayerbrown.com)

*Counsel for Maxell, Ltd.*

**CERTIFICATE OF SERVICE**

I hereby certify that on this 15th day of September, 2025, a copy of the attached PATENT OWNER'S MOTION TO SUBMIT SUPPLEMENTAL INFORMATION together with all exhibits was served by electronic mail to the attorneys of record, at the following addresses:

James Heintz  
[Jim.Heintz@us.dlapiper.com](mailto:Jim.Heintz@us.dlapiper.com)

Gianni Minutoli  
[Gianni.Minutoli@us.dlapiper.com](mailto:Gianni.Minutoli@us.dlapiper.com)

With a courtesy copy by electronic mail to:

[dla-samsung-maxell@us.dlapiper.com](mailto:dla-samsung-maxell@us.dlapiper.com)

Respectfully submitted,

Date: September 15, 2025

By: /Robert G Pluta Reg No 50970/  
Robert G. Pluta (Reg. No. 50,970)

*Counsel for Maxell, Ltd.*