IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
TEXARKANA DIVISION

MAXELL, LTD.,	§	
	§	
Plaintiff,	§	
	§	
v.	§	CIVIL ACTION NO. 5:23-CV-92-RWS
	§	
SAMSUNG ELECTRONICS CO., LTD., and SAMSUNG ELECTRONICS AMERICA, INC.,	§	
	§	
Defendants.	§	

ORDER

Before the Court is Defendants Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc.'s ("Samsung") Motion for Judgment as a Matter of Law and Motion for a New Trial (Docket No. 390) and Plaintiff Maxell, Ltd.'s Motion for Entry of Judgment, Enhanced Damages, Pre-Judgment Interest, Post-Judgment Interest, and a Permanent Injunction (Docket No. 391) and Motion to Strike and Exclude Certain Arguments, Facts, and Opinions Offered in Support of Prosecution Laches (Docket No. 398). The motions are fully briefed. Docket Nos. 401, 402, 403, 409, 410, 412, 413, 421, 422.

On September 10, 2025, the Court heard oral argument on the motions. Docket Nos. 432, 433. For the reasons set forth below:

- Samsung's Motion for Judgment as a Matter of Law and Motion for a New Trial (Docket No. 390) is **GRANTED-IN-PART**, **DENIED-IN-PART**, and **CARRIED-IN-PART**;
- Maxell's Motion for Entry of Judgment, Enhanced Damages, Pre-Judgment Interest, Post-Judgment Interest, and a Permanent Injunction (Docket No. 391) is **DENIED**; and
- Maxell's Motion to Strike and Exclude Certain Arguments, Facts, and Opinions Offered in Support of Prosecution Laches (Docket No. 398) is **CARRIED** pending the parties' joint status report.

BACKGROUND

On May 19, 2025, the parties went to trial on U.S. Patent Nos. 8,982,086 ("the '086 Patent"), 10,176,848 ("the '848 Patent"), and 11,017,815 ("the '815 Patent"). Docket No. 354. The jury returned a unanimous verdict, finding that Samsung willfully infringed claim 1 of the '086 Patent, claims 11 and 12 of the '848 Patent, and claims 1, 21, and 24 of the '815 Patent. Docket No. 351 at 2–3. The jury awarded over $111 million in damages for the infringement. *Id.* at 5. The jury also found that claim 1 of the '086 Patent and claims 1, 21, and 24 of the '815 Patent are not invalid. *Id.* at 4.

LEGAL STANDARD

I. Judgment as a Matter of Law

Judgment as a matter of law ("JMOL") is only appropriate when "a reasonable jury would not have a legally sufficient evidentiary basis to find for the party on that issue." Fed. R. Civ. P. 50(a). "The grant or denial of a motion for judgment as a matter of law is a procedural issue not unique to patent law, reviewed under the law of the regional circuit in which the appeal from the district court would usually lie." *ACCO Brands, Inc. v. ABA Locks Mfrs. Co.*, 501 F.3d 1307, 1311 (Fed. Cir. 2007) (quoting *Summit Tech. Inc. v. Nidek Co.*, 363 F.3d 1219, 1223 (Fed. Cir. 2004)); *see Finisar Corp. v. DirecTV Grp., Inc.*, 523 F.3d 1323, 1328 (Fed. Cir. 2008). The Fifth Circuit "uses the same standard to review the verdict that the district court used in first passing on the motion." *Hiltgen v. Sumrall*, 47 F.3d 695, 699–700 (5th Cir. 1995).

Under Fifth Circuit law, courts are "especially deferential" to a jury's verdict and will not reverse jury findings that are supported by substantial evidence. *Baisden v. I'm Ready Prods., Inc.*, 693 F.3d 491, 499 (5th Cir. 2012). "Substantial evidence is defined as evidence of such quality and weight that reasonable and fair-minded men in the exercise of impartial judgment might reach different conclusions." *Threlkeld v. Total Petroleum, Inc.*, 211 F.3d 887, 891 (5th Cir. 2000).

Consequently, "[t]here must be more than a mere scintilla of evidence in the record to prevent judgment as a matter of law in favor of the movant." *Arismendez v. Nightingale Home Health Care, Inc.*, 493 F.3d 602, 606 (5th Cir. 2007). The Court is not obligated to uphold a jury verdict, however, when "facts and inferences point so strongly and so overwhelmingly in favor of one party that reasonable men could not arrive at any verdict to the contrary." *Cousin v. Trans Union Corp*., 246 F.3d 359, 366 (5th Cir. 2001); *see also Int'l Ins. Co. v. RSR Corp*., 426 F.3d 281, 296 (5th Cir. 2005).

In evaluating a motion for judgment as a matter of law, a court must "draw all reasonable inferences in the light most favorable to the verdict and cannot substitute other inferences that [the court] might regard as more reasonable." *E.E.O.C. v. Boh Bros. Const. Co., L.L.C*., 731 F.3d 444, 452 (5th Cir. 2013). Although a court must review the record as a whole, "it must disregard all evidence favorable to the moving party that the jury is not required to believe." *Ellis v. Weasler Eng'g Inc*., 258 F.3d 326, 337 (5th Cir. 2001). However, a court "may not make credibility determinations or weigh the evidence," as those are solely functions of the jury. *Id*. (citing *Reeves v. Sanderson Plumbing Prods., Inc*., 530 U.S. 133, 150–151 (2000)). The Court gives "credence to evidence supporting the moving party that is uncontradicted and unimpeached if that evidence comes from disinterested witnesses." *Arismendez*, 493 F.3d at 606.

II. New Trial

A new trial may be granted on all or some of the issues on which there has been a trial by jury for "any reason for which a new trial has heretofore been granted in an action at law in federal court." Fed. R. Civ. P. 59(a)(1)(A). The Federal Circuit applies the law of the regional circuit in considering a motion for a new trial. *z4 Techs., Inc. v. Microsoft Corp*., 507 F.3d 1340, 1347 (Fed. Cir. 2007). Notwithstanding the broad sweep of Rule 59, in the Fifth Circuit, "district courts 'do

not grant new trials unless it is reasonably clear that prejudicial error has crept into the record or that substantial justice has not been done, and the burden of showing harmful error rests on the party seeking the new trial.' " *Power Mosfet Techs., L.L.C. v. Siemens AG*, 378 F.3d 1396, 1410 (Fed. Cir. 2004) (quoting *Sibley v. Lemaire*, 184 F.3d 481, 487 (5th Cir. 1999)); *see also Core Wireless Licensing S.a.r.l. v. LG Elecs., Inc.*, 344 F. Supp. 3d 890, 894 (E.D. Tex. 2018). For example, a new trial may be granted "if the district court finds the verdict is against the weight of the evidence, the damages awarded are excessive, the trial was unfair, or prejudicial error was committed in its course." *Core Wireless*, 344 F. Supp. 3d at 894 (quoting *Smith v. Transworld Drilling Co*., 773 F.2d 610, 612–613 (5th Cir. 1985)).

DISCUSSION

I. JMOL of Noninfringement

To prove infringement under 35 U.S.C. § 271, a plaintiff must show the presence of every element, or its equivalent, in the accused product. *Lemelson v. United States*, 752 F.2d 1538, 1551 (Fed. Cir. 1985). First, the claim must be construed to determine its scope and meaning; and second, the construed claim must be compared to the accused device. *Absolute Software, Inc. v. Stealth Signal, Inc.*, 659 F.3d 1121, 1129 (Fed. Cir. 2011) (citing *Carroll Touch, Inc. v. Electro Mech. Sys., Inc.*, 15 F.3d 1573, 1576 (Fed. Cir. 1993)). "A determination of infringement is a question of fact that is reviewed for substantial evidence when tried to a jury." *ACCO Brands*, 501 F.3d at 1311.

A. '086 Patent

Samsung argues that it is entitled to JMOL of noninfringement of claim 1 of the '086 Patent. Docket No. 390 at 3. Limitations [1.f] and [1.g] of the '086 Patent require two different registering modes for inputting input information, one by a pad of the finger, and the other by an end of the finger:

> [I]n 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 information by **an end** of the finger . . . .

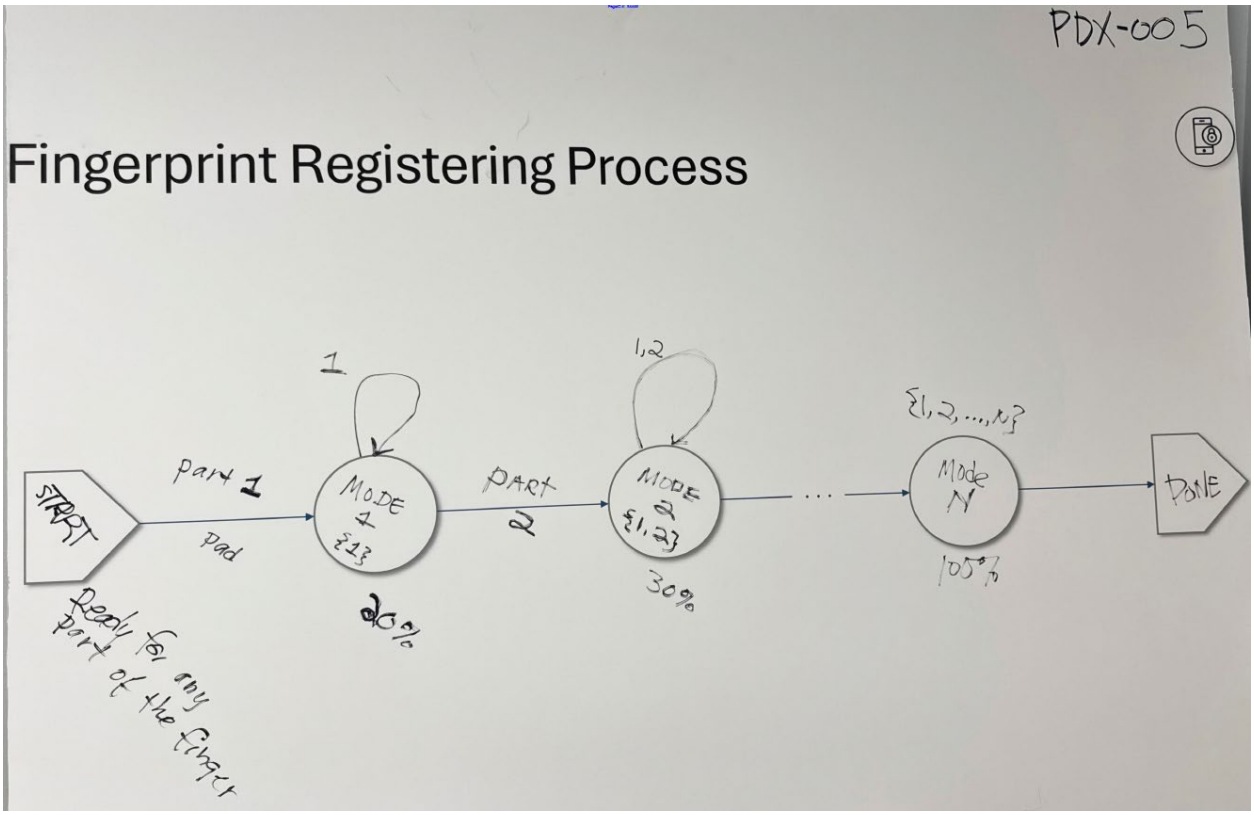
PX-003 ('086 Patent) at 8:54–57 (emphasis added). Samsung argues that Maxell failed to present sufficient evidence at trial that the representative Samsung accused product, the Galaxy S23, has two different registering modes. Docket No. 390 at 3–6. Samsung contends that Maxell only showed one fingerprint registering mode. *Id.* at 4. Samsung specifically argues that the Galaxy S23 does not have a mode for inputting information by "an end of the finger." *Id.* at 3–6.

The Court agrees with Samsung. Maxell did not show the Galaxy S23 has two registering modes at trial and, therefore, Samsung does not infringe claim 1 of the '086 Patent. First, the parties do not dispute that the accused fingerprint registration process in the Galaxy S23 operates in accordance with the "enroll diagram" in the Samsung fingerprint authentication specification. PX-045 (Samsung Fingerprint Authentication Specification) at 13 (Fig. 9); Docket No. 358 (Day 3 Unsealed Trial Tr.) at 569:20–570:16; Docket No. 362 (Day 5 Unsealed Trial Tr.) at 904:18–905:7. But the parties disagree about whether the process this diagram captures involves one registering mode, or multiple.

All of the record evidence that Maxell's expert, Dr. Jacob Wobbrock, attempted to rely on at trial makes no mention of multiple registering modes. *See* Docket No. 401 at 5 (listing the evidence supporting infringement of the '086 Patent). On its face, the enroll diagram does not discuss any modes. PX-045 (Samsung Fingerprint Authentication Specification) at 13 (Fig. 9). Maxell claims that Dr. Wobbrock's testimony on the source code underlying the enroll diagram explains how limitations [1.f] and [1.g] are met. Docket No. 401 at 5 (citing Docket No. 359 (Day 3 Sealed Trial Tr.) at 9:16–13:24; Docket No. 401-4 (Wobbrock Demonstratives) at PDX004-68–70; PX-049 (source code)). But nothing about the source code itself indicates there are multiple

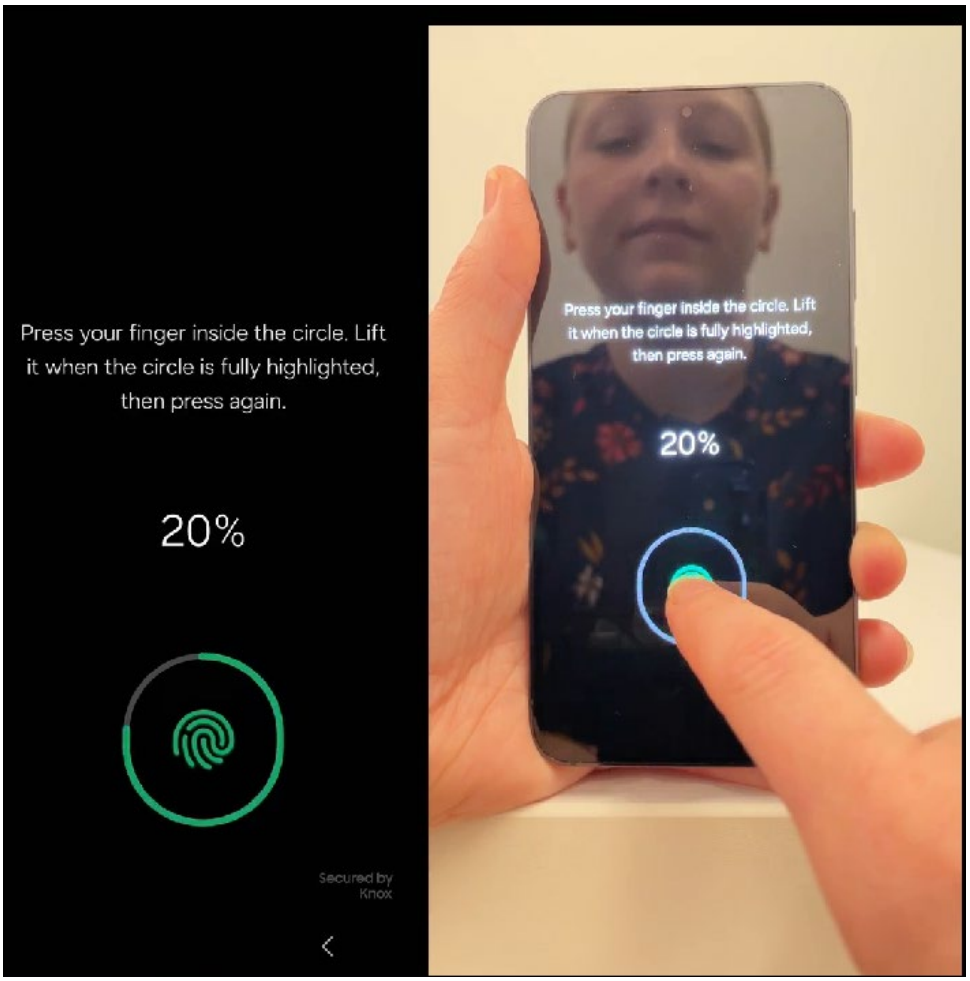
registering modes. Docket No. 401-4 (Wobbrock Demonstratives) at PDX004-68–70 (showing only that the Galaxy S23 has a fingerprint enrollment process, which calls for a user to place their finger on the fingerprint sensor, lift it off to get a full scan, and then for the user to "[r]eposition [their] finger each time to capture the edges of [their] fingerprint."). Dr. Wobbrock did not even mention multiple modes when testifying about the source code. Docket No. 359 (Day 3 Sealed Trial Tr.) at 9:16–13:24; *see id.* at 12:8–18 (explaining that a full scan may require between 8 and 16 touches but not discussing any modes). Similarly, the Samsung corporate witness testimony Dr. Wobbrock relied on explains only that a user puts their finger on the fingerprint sensor multiple times until the registration percentage reaches 100 percent—but again, with no reference to any modes. Docket No. 356 (Day 2 Unsealed Trial Tr.) at 424:18–425:2.

The only time that the jury heard about "modes" was during Dr. Wobbrock's retelling of the fingerprint registration process. Docket No. 401 at 5–6 (citing Docket No. 357 (Day 2 Sealed Trial Tr.) at 110:10–121:24; Docket No. 401-4 (Wobbrock Demonstratives) at PDX004-64, PDX005; Docket No. 359 (Day 3 Sealed Trial Tr.) at 13:25–21:23; PX-048c (videos of product testing)). Drawing on his own diagram of that process, Dr. Wobbrock testified that each touch of a new part of the finger resulted in the initiation of a new mode. Docket No. 357 (Day 2 Sealed Trial Tr.) at 119:13–23 ("And the mode question is, have we seen that part of the finger before or not?").



Docket No. 401-4 (Wobbrock Demonstratives) at PDX005. In presenting this demonstrative to the jury, Dr. Wobbrock did not cite the record at all. Docket No. 357 (Day 2 Sealed Trial Tr.) at 116:20–121:14.

Dr. Wobbrock's arbitrary labeling of "modes" did not stop there. During trial, he presented videos of the product testing he had conducted, which showed a user completing fingerprint registration with multiple touches. Docket No. 359 (Day 3 Sealed Trial Tr.) at 14:21–17:19; PX-048c (videos of product testing). In his description of the videos, he characterized each percentage increase in registration as "mov[ing] [] to the next mode." Docket No. 359 (Day 3 Sealed Trial Tr.) at 16:17–17:6. But in the videos, the phone screens do not show any indication of a new mode initiating.



PX-048c (videos of product testing) at 2:43.

Dr. Wobbrock justified his testimony, explaining that "the user interface [does not have] to tell you what mode you're in. The device knows what mode it's in." Docket No. 359 (Day 3 Sealed Trial Tr.) at 18:23–24. But no one at trial saw any record evidence showing that the device even knows that it is in a mode.

Finally, Dr. Wobbrock attempted to apply his view of a moded world to the enroll diagram. He testified that when finger capture is successful, "[the device is] transitioning across these multiple modes from these multiple touches." *Id.* at 9:10–15. When finger capture fails, the device "stay[s] in the mode that [it's] already in." *Id.* But, as described above, nothing on the face of the enroll diagram suggests the existence of any modes. It only shows a looping of the same enrollment

process. *Id.* at 9:2–15 (acknowledging looping in enroll diagram); PX-045 (Samsung Fingerprint Authentication Specification) at 13 (Fig. 9). There was no evidence presented at trial on how looping of the same process can constitute multiple modes.

All of this is merely Dr. Wobbrock's *ipse dixit*. His conclusory testimony is insufficient evidence to support a jury verdict. *See, e.g.*, *Vocalife LLC v. Amazon.com, Inc.*, 2022 WL 2986786, at *2 (Fed. Cir. July 28, 2022) (reversing denial of JMOL of noninfringement where patentee's expert offered only "conclusory, unsupported testimony"). None of the record evidence, aside from Dr. Wobbrock's conclusory testimony, describes multiple registering modes. This is the case even when viewing the evidence in the light most favorable to Maxell.

The parties in their post-trial briefing debate whether the Galaxy S23 uses multiple algorithms during fingerprint registration, whether that evidence was presented during trial, and whether resolving that issue is dispositive of infringement. *See, e.g.*, Docket No. 390 at 3–6; Docket No. 401 at 4–7. The trial record is clear: Dr. Wobbrock admitted the enrollment diagram is representative of just *one* fingerprint template and only *one* algorithm. Docket No. 358 (Day 3 Unsealed Trial Tr.) at 573:16–18, 574:10–15. Dr. Seth Nielson explained that the enroll diagram would have shown "branching" of two algorithm paths if there were multiple modes, but that instead, the diagram was sequential, even with the loop. Docket No. 362 (Day 5 Unsealed Trial Tr.) at 907:24–908:7. Indeed, Maxell's counsel at the post-trial hearing admitted that "the word 'subalgorithm' might not have been explicitly stated [by Dr. Wobbrock] . . . ." Docket No. 432 (Post-Trial Unsealed Tr.) at 73:2–3. Dr. Wobbrock's conclusory testimony was already insufficient—but his admission that there is only a single algorithm further supports the Court's conclusion that a reasonable jury would not have a legally sufficient evidentiary basis to find for Maxell on this issue.

For the above reasons, the Court **GRANTS** Samsung's motion for judgment as a matter of law with respect to noninfringement of claim 1 of the '086 Patent. *See* Docket No. 390.

B. '815 Patent

Samsung argues that it is entitled to JMOL of noninfringement of claims 1, 21, and 24 of the '815 Patent. *See, e.g.*, Docket No. 390 at 10, 17.

1. Claim 1

Specifically, Samsung argues that Maxell failed to present sufficient evidence that limitations [1.j] and [1.k] are implemented in the Gallery app on the Galaxy S23. Docket No. 390 at 10. Limitations [1.j] and [1.k] are reproduced below.

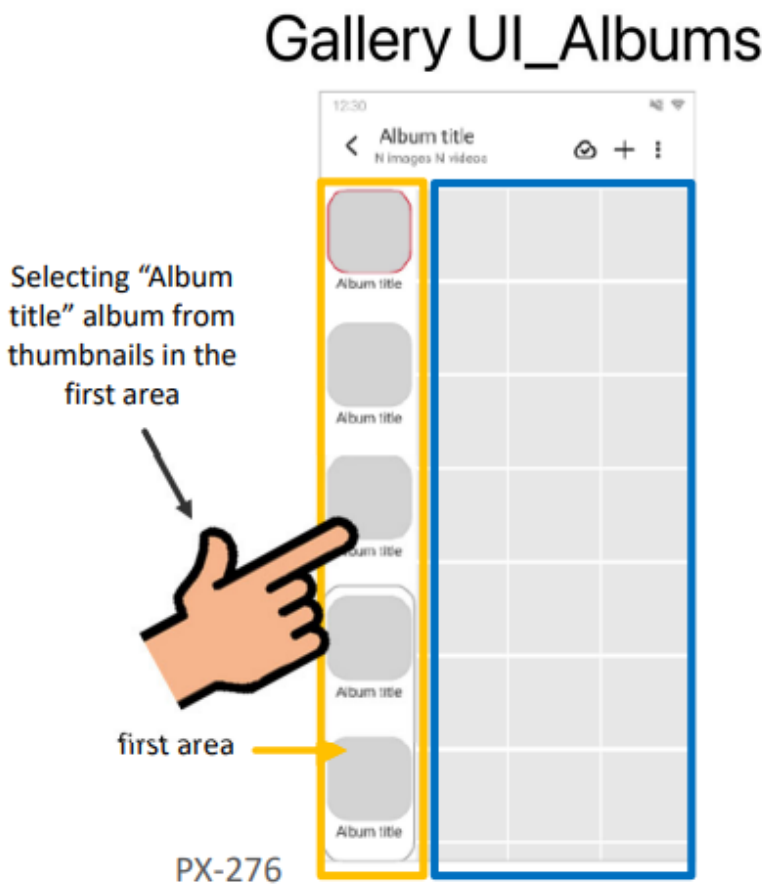
> [1.j] wherein user selection of the **first character** enables the display of a first group of thumbnails corresponding to the first group of video information in the second area,
>
> [1.k] wherein user selection of the **second character** enables the display of a second group of thumbnails corresponding to the second group of video information in the second area,

PX-006 ('815 Patent) at 9:4–10 (emphasis added). The Court construed "character" as "a letter, number, punctuation mark, or other symbol or control code that is represented to a computer by one unit of information." Docket No. 107 at 10–11. Samsung contends that Maxell never showed at trial a character being selected in the Gallery app of the Galaxy S23 that would enable the display of a group of thumbnails corresponding to video information in a second area of the screen. Docket No. 390 at 12, 15. At most, Maxell only showed an area of a display being selected, or an album title, but those do not constitute a character under the Court's construction. *See, e.g.*, *id.* at 14–15; Docket No. 412 at 7–8; Docket No. 360 (Day 4 Unsealed Trial Tr.) at 745:6–13 (Maxell expert Dr. Karan Singh acknowledging that a thumbnail is not a character because it "is not represented by a unit of information"); 750:20–23 (Dr. Singh acknowledging that the album title "Favorites" constitutes nine units of information).

The Court agrees with Samsung. Maxell attempts to defend against Samsung's JMOL by citing Dr. Singh's testimony as showing "a user using Samsung's representative product (the S23) would select a character (such as 'F') to open a gallery display (such as 'Favorites')." Docket No. 401 at 15 (citing Docket No. 359 (Day 3 Sealed Trial Tr.) at 100:19–101:21, 106:8–107:1). But Dr. Singh's testimony does not go so far. The extent of what Dr. Singh said in Maxell's first citation (Docket No. 359 (Day 3 Sealed Trial Tr.) at 100:19–101:21) is that the "letter F in favorites and C in camera [] are part of a string of characters that form the album titles." What is missing is the user selection of any individual character in that string that could open a gallery display.

Dr. Singh's testimony in Maxell's second citation (Docket No. 359 (Day 3 Sealed Trial Tr.) at 106:8–107:1) is similarly lacking. Although he acknowledges that "selecting that first character, the F in favorites" would constitute infringement, he only shows the jury selection of the favorites *album*. *Id.* ("If you can see, upon selection of the favorites *album*, now all the videos that have been favorited . . . their thumbnails show up in the second area.") (emphasis added); Docket No. 360 (Day 4 Unsealed Trial Tr.) at 780:22–781:1 (describing the "album [a]s the thumbnails"), 781:18–22.

The record evidence that Maxell presented instead supports Samsung. For example, Dr. Singh's own demonstrative characterizes the Gallery Design Guide (PX-276) as involving the "[s]election [of] '*Album title*' album from thumbnails in the first area." Docket No. 401-5 (Singh Demonstratives) at PDX007-44–45 (emphasis added).



Id. at 44–45 (excerpted).

Maxell's remaining citations to Dr. Singh's testimony cannot save it. Docket No. 401 at 15–16 (citing Docket No. 359 (Day 3 Sealed Trial Tr.) at 106:2–107:11; Docket No. 360 (Day 4 Unsealed Trial Tr.) at 752:17–755:20, 771:18–775:8). The first of these citations (Docket No. 359 (Day 3 Sealed Trial Tr.) at 106:2–107:11) adds nothing to Maxell's previously discussed citations to Dr. Singh's testimony. Without addressing or showing user selection of any individual character, in Maxell's next citation, Dr. Singh parrots his previous assertion that "album *titles* were represented as strings of characters." Docket No. 360 (Day 4 Unsealed Trial Tr.) at 752:17–755:20 (emphasis added). As to the third of these citations, Dr. Singh quotes his expert report (Docket No. 360 (Day 4 Unsealed Trial Tr.) at 771:18–775:8), but his recitation only belies his opinion that "a user selecting the favorites *album*" meets the limitation of "a user selection of the first character."

Id. at 773:6–7 (emphasis added). As discussed above, Maxell never presented any evidence on how the album title—or even the area where the album is displayed—is a single unit of information. It only presented evidence to the contrary. *See, e.g.*, Docket No. 360 (Day 4 Unsealed Trial Tr.) at 750:20–23 (agreeing that instead of "the user [just] looking for the [letter] F," "if the user is [] looking for the entire word ["Favorites"], that's nine units of information").

Maxell's final citation to Dr. Singh's testimony is illustrative of his broad and inaccurate characterizations of the evidence. As part of Dr. Singh's testimony "confirm[ing] the behavior of the accused products," he stated that "it's a touch screen. If you touch it, you have to touch it to select *anything*. And when you touch it, what you're selecting is what is underneath that -- what is displayed there." Docket No. 401 at 16 (quoting Docket No. 360 (Day 4 Unsealed Trial Tr.) at 755:25–756:7) (emphasis added). Selecting "anything" is not exactly user selection of a character. And what continues to be absent is Dr. Singh's testimony that "anything"—regardless of whether it is "what is underneath that" or "what is displayed there"—is one unit of information.

Because the Court has already concluded that Dr. Singh's opinions were insufficient evidence, it need not consider Samsung's additional arguments that Dr. Singh did not properly ground his testimony in the source code. *See, e.g.*, Docket No. 390 at 11–17. Even so, it appears that Dr. Singh did not support his testimony on limitations [1.j] and [1.k] with source code and therefore did not rebut Dr. Omid Kia's testimony on source code. Docket No. 362 (Day 5 Unsealed Trial Tr.) at 1003:22–1004:2, 1006:11–1008:22; Docket No. 363 (Day 5 Sealed Trial Tr.) at 3:4–6:11. Maxell attempts to use its post-trial briefing as an opportunity to rebut Dr. Kia's source code analysis with attorney argument. Docket No. 401 at 18; Docket No. 422 at 7; *see also* Docket No. 432 (Post-Trial Unsealed Tr.) at 120:1–5. Tellingly, none of Maxell's citations to Dr. Singh's testimony in its briefing has anything to do with his affirmative opinions on the source code. *See*

Docket No. 401 at 18; Docket No. 422 at 7. Instead, at trial, Dr. Singh relied on "common knowledge" and the concept that an individual character must be selected because "you're touching an area of the screen." Docket No. 360 (Day 4 Unsealed Trial Tr.) at 756:6–22. This is conclusory expert testimony that cannot constitute substantial evidence. *Dominion Energy, Inc. v. Alstom Grid LLC*, 725 F. App'x 980, 986 (Fed. Cir. 2018).

Finally, Maxell's arguments regarding Dr. Kia's testimony on the iPhone 8 and how it meets limitations [1.j] and [1.k] are inapposite. *See* Docket No. 401 at 17 (citing Docket No. 362 (Day 5 Unsealed Trial Tr.) at 1040:18–1042:14; Docket No. 401-6 (Kia Demonstrative) at DDX004.51–52. As Dr. Singh testified, the Galaxy S23 and iPhone 8 are different products. Docket No. 362 (Day 5 Unsealed Trial Tr.) at 1087:12–15. There was no iPhone 8 source code available for the relevant infringement analysis. *Id.* at 1041:9–11. And it was the Galaxy S23 source code that revealed an area was being selected, rather than a "character." *Id.* at 1087:12–15.

Maxell never presented substantial evidence—or any evidence—that when a user selected a character containing one unit of information in the Gallery app of the Galaxy S23, that would enable a display of a group of thumbnails corresponding to video information in a second area of the screen. Therefore, the Court finds that a reasonable jury could not have come to that conclusion, even while viewing the evidence in the light most favorable to Maxell. For the above reasons, the Court **GRANTS** Samsung's motion for judgment as a matter of law with respect to noninfringement of claim 1 of the '815 Patent. *See* Docket No. 390.

2. Claims 21 and 24

Samsung argues that Maxell failed to present sufficient evidence that claims 21 and 24 are implemented in the Netflix app on the Galaxy S23. Docket No. 390 at 17. Claim 24 depends on claim 21. Limitation [21.f] requires, among other things:

> [21.f] [I]n response to the selection of the first user profile, the display displays a second user interface for a user to select desired video information to be reproduced from among the first video information, the second user interface being associated with the first user profile and displaying the **first character**, the first character associated with a first group of video information and indicating an identity of the user which the first user profile is associated with . . . .

PX-006 ('815 Patent) at 13:24–34 (emphasis added). Samsung contends that Maxell never showed at trial a character being selected in the Netflix app of the Galaxy S23 that would satisfy the Court's construction of "character." Docket No. 390 at 17–18; *see supra* § I.B.1 (describing the Court's construction of "character").

As an initial matter, the Court finds that Maxell presented sufficient evidence for a reasonable jury to conclude that Netflix comes pre-installed on the Galaxy S23. Docket No. 363 (Day 5 Sealed Trial Tr.) at 16:4–18; Docket No. 359 (Day 3 Sealed Trial Tr.) at 116:5–118:16; PX-318 (Samsung's 2nd Supp. Resp. to Maxell's 2nd Rogs (Nos. 23–26)) at .0013 ("Product models released after March 2019 had Netflix functionality [redacted] . . . ."), .0040–.0041; PX-408 (Samsung-Netflix [redacted]) at .0011 [redacted]). The fact that Samsung's expert Dr. Kia testified that the Galaxy S23 did not have Netflix pre-installed does not negate the weight of the substantial evidence against it. *See* Docket No. 362 (Day 5 Unsealed Trial Tr.) at 1015:1–22, 1016:19–1017:2 (explaining that Netflix was "downloaded from Google Play Store" on the phone Dr. Singh analyzed); *see also id.* at 1083:22–1084:16 (showing, in addition to Netflix, default apps such as Galaxy Store and Calculator were also listed as being downloaded from Galaxy Store or Google Play Store).

However, Maxell presented very limited evidence on direct concerning infringement of limitation [21.f] of the '815 Patent, essentially only identifying the Miyagi-Do Karate icon in the

Netflix app as the alleged first character. Docket No. 359 (Day 3 Sealed Trial Tr.) at 127:8–19. On cross, Dr. Singh admitted that the Miyagi-Do icon is a single integrated graphical image composed of 455 pixels, each stored as three bytes of information, and the icon would therefore total more than a thousand bytes. Docket No. 360 (Day 4 Unsealed Trial Tr.) at 769:21–771:5. On redirect, Dr. Singh testified that the Miyagi-Do icon has the letter "M" in it, and that "M" is a letter per the Court's construction of "character," but crucially, failed to testify that the Miyagi-Do icon it identified as the first character, or any part of it, is represented to the computer as a single unit of information. *Id.* at 776:10–18. Reinforcing the idea that the image functions as a unified graphical object, he admitted on re-cross that the entire icon, not just an individual letter or portion, responds to user interaction. *Id.* at 782:16–19.

Maxell argues that Dr. Singh provided testimony explaining that the "M" in "Miyagi-Do" is no different from Figure 6 of the patent that shows the "M" in Mother and "F" in Father, which are embedded in an image of a folder tab. Docket No. 401 at 22 (citing Docket No. 358 (Day 3 Unsealed Trial Tr.) at 688:9–25; PX-006 ('815 Patent) at Figs. 6–7). Even taking that as true, Dr. Singh's testimony at trial identified the entire Miyagi-Do Karate icon as the first character representing one unit of information—not just the "M." Docket No. 359 (Day 3 Sealed Trial Tr.) at 127:8–19. Maxell cannot accuse the Miyagi-Do icon as the first character for some limitations and then drop that argument when it is inconvenient.

Further, Maxell failed to present evidence for its "continue watching" theory. Maxell contends Dr. Singh presented evidence that the "continue watching" feature of the S23 accused product meets the character limitation [21.f]. Docket No. 401 at 20. This is not true. Dr. Singh's testimony only explains that the "continue watching" feature exists—not that it infringes. *See* Docket No. 359 (Day 3 Sealed Trial Tr.) at 124:17–22 ("There are many other such playlists,

things like continue watching for Miyagi-Do, continue watching for Kids, and so on as part of video information that is specific to each user."). What is worse, this portion of Dr. Singh's testimony relates to a different limitation [21.b], which concerns a first user interface and not the second user interface from [21.f]. *See id.* at 123:1–13. Maxell also claims that Samsung's expert, Dr. Kia, admitted the Galaxy S23 "potentially infringes" limitation [21.f] through the "continue watching" feature. Docket No. 401 at 20 (citing Docket No. 362 (Day 5 Unsealed Trial Tr.) at 1085:13–24). But this admission on its own is conclusory because Dr. Kia never actually performed an analysis of the "continue watching" feature for invalidity or infringement. *See* Docket No. 432 (Post-Trial Unsealed Tr.) at 118:3–7.

Maxell argues that, regardless, Dr. Singh did not just rely on the "M" in Miyagi-Do to meet the character limitation via product testing, and that he testified there is "an index or a number used to identify profile, letter, symbols, icons used by the Netflix application that are represented to a computer as one unit of information." Docket No. 359 (Day 3 Sealed Trial Tr.) at 125:4–7; *see id.* at 125:8–20 (describing a common character set on the Internet called Unicode). As support, Dr. Singh cited two documents on Unicode—PX-311 and PX-312—testifying that they "provide evidence [] that, in fact, characters are represented by units of code" and that "the goal of Unicode is . . . to assign each character in the world a number or an index by which it can be identified." Docket No. 359 (Day 3 Sealed Trial Tr.) at 125:12–17. Crucially, however, Dr. Singh never testified as to whether the accused Netflix app uses Unicode. *See id.* at 125:12–20. He never testified that the Netflix app's UI elements are represented as Unicode characters. *See id.* And he did not even come close to testifying that the Miyagi-Do icon or any Netflix profile icon is represented by Unicode. *See id.* Indeed, on cross, Dr. Singh admitted that the only record evidence he cited as support for his assertion—PX-311 and PX-312—does not mention the Netflix app at

all and is not even evidence from Netflix or Samsung. Docket No. 360 (Day 4 Unsealed Trial Tr.) at 765:13–766:10.

For the above reasons, the Court **GRANTS** Samsung's motion for judgment as a matter of law with respect to noninfringement of claims 21 and 24 of the '815 Patent. *See* Docket No. 390.

C. '848 Patent

Samsung argues that it is entitled to JMOL of noninfringement of claims 11 and 12 of the '848 Patent. Docket No. 390 at 30. Claims 11 and 12 of the '848 Patent depend on claim 8. *See* PX-005 ('848 Patent) at 16:23–49. The disputed limitations of claim 8, reproduced below, require two setting modes for registering a person in the image information as a specific person. *Id.*

> [8.g] register a person in the image information as a specific person in a mode selected from a first setting mode and a second setting mode, wherein, when the **first** setting mode is selected, a person with a face is obtained by **newly photographing the person in a photographing mode** and thereafter registered as the specific person,
>
> [8.h] and, when the **second** setting mode is selected, a person with a face in the image information is **selected from a plurality of faces in the image information recorded in the recording medium** and thereafter registered as the specific person;

PX-005 ('848 Patent) at 15:51–16:9 (emphasis added).

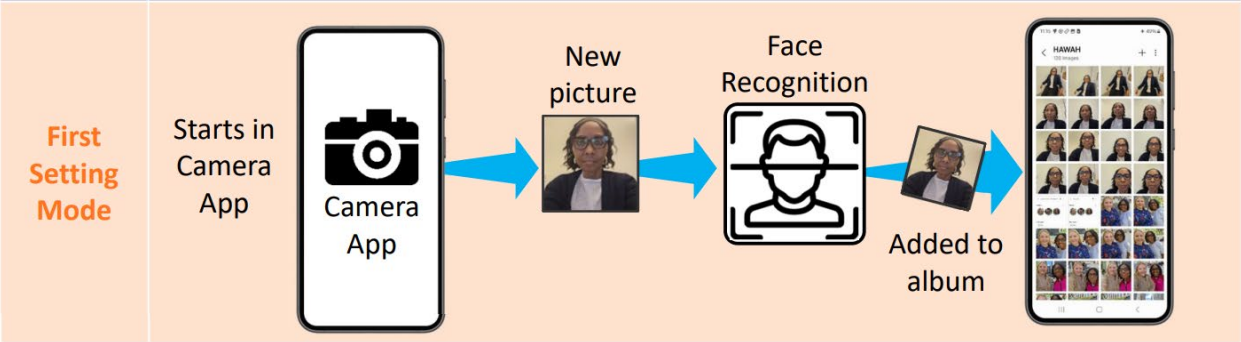
The parties do not dispute that the second setting mode is met because a person is "registered as the specific person" when they get an auto-updating album created in their name in the Gallery application. *See, e.g.*, Docket No. 359 (Day 3 Sealed Trial Tr.) at 88:1–13 ("[T]his is the second setting mode[:] . . . I create an auto-updating album by naming it and selecting a person—in this case Hawah—from a plurality of people . . . then [she] gets **registered as the specific person**, and the image information gets recorded accordingly . . . in the auto-updating

album for Hawah.") (emphasis added); Docket No. 358 (Day 3 Unsealed Trial Tr.) at 655:18–656:1; Docket No. 390 at 30–34 (containing no challenge of the second setting mode).

However, Samsung contends there was insufficient evidence for the jury to find infringement because the representative Samsung products, the Galaxy S23 and Galaxy S23 Ultra, do not have a first setting mode for registering a person as a specific person. Docket No. 390 at 30–31. The Court agrees. What Maxell presented at trial to show registration of a specific person for the first setting mode hardly amounted to substantial evidence.

Maxell's infringement theory for the first setting mode relies on a specific person being registered in the second setting mode first. *See, e.g.*, Docket No. 358 (Day 3 Unsealed Trial Tr.) at 660:19–20 ("The [auto-updating] album was originally created in the second setting mode."); 660:8–13 (agreeing that "you could not add a new picture of Hawah to this album [for the first setting mode] unless it already existed. You would have to create that auto-updating album in the second setting mode in order to add a picture of her.").

At trial, Maxell's expert, Dr. Ravin Balakrishnan testified that registration of a specific person in the first setting mode was achieved through a facial recognition process that recognizes a person's face and puts newly captured photographs in that person's auto-updating album created in the second setting mode. Docket No. 359 (Day 3 Sealed Trial Tr.) at 84:18–23 ("**[T]he face recognition process is going to do its thing**, go and process through all these newly taken images. And when it recognizes . . . Hawah's face in there, **it is then going to register her** as Hawah and put her into the Hawah auto-updating album.") (emphasis added).



Docket No. 401-7 (Balakrishnan Demonstratives) at PDX006-54 (emphasizing face recognition). Dr. Balakrishnan specifically testified that the first setting mode of [8.g] is satisfied because "a person with a face is obtained by newly photographing the person. . . . And thereafter, that person is **registered as the specific person through this face recognition process**." Docket No. 359 (Day 3 Sealed Trial Tr.) at 85:11–16 (emphasis added); *id.* at 86:3–6 (explaining that his analysis for the S23 Ultra is similar); *see also* Docket No. 358 (Day 3 Unsealed Trial Tr.) at 661:1–7. Indeed, Dr. Balakrishnan appeared to use "recognized" and "registered" interchangeably when he described the facial recognition process as adding to the auto-updating album "additional images that are **recognized** as being that **specific person**." Docket No. 359 (Day 3 Sealed Trial Tr.) at 85:3–4.

On cross, Dr. Balakrishnan proceeded to negate his definition of "registered as the specific person" in the first setting mode. When Dr. Balakrishnan was asked whether "recognizing the face and registering is the same thing," he inexplicably said "[n]o." Docket No. 358 (Day 3 Unsealed Trial Tr.) at 662:3–7. He said "you have to recognize the face, and then you have to register the face **as belonging to a particular album**." *Id.* Not only does that description stray from the original claim term "registered as the specific person," but it is not the intertwined meaning he provided before. Maxell continued to muddy the waters during closing argument when it conflated face recognition and registration of a specific person, explaining that, in order to sort a person into

an auto-updating album, "[t]he photo must be processed for **facial recognition *through* that registration process**." Docket No. 364 (Day 6 Unsealed Trial Tr.) at 1321:21–24 (emphasis added). And finally, during the post-trial hearing, Maxell argued the first setting mode was met because "the new picture is taken, **the facial recognition occurs**, and then it is added to the album"—with no reference to registration of a specific person. Docket No. 432 (Post-Trial Unsealed Tr.) at 103:17–21.

To be fair, neither party asked for claim construction of any term in the '848 Patent. *See, e.g.*, Docket Nos. 80, 107, 285. Consequently, the Court never construed any term in the '848 Patent. Docket Nos. 107, 285. And at trial, the Court instructed to the jury to apply plain and ordinary meaning to the limitations in claim 8 of the '848 Patent, which include "registered as the specific person." *See* Docket No. 364 (Day 6 Unsealed Trial Tr.) at 1287:3–8. The jury was welcome to weigh the credibility of Dr. Balakrishnan's testimony on the plain and ordinary meaning. But it does not appear to the Court that Maxell advanced evidence showing registration of a specific person in the first setting mode under any specific meaning of the term, much less a plain and ordinary one. It appears that Dr. Balakrishnan was just repeating the claim term "registered" without any regard to a consistent meaning. *See, e.g.*, Docket No. 358 (Day 3 Unsealed Trial Tr.) at 655:12–656:1, 661:1–662:2. This kind of conclusory and self-contradictory testimony is not substantial evidence. *ParkerVision, Inc. v. Qualcomm Inc.*, 621 F. App'x 1009, 1014 (Fed. Cir. 2015) (affirming grant of JMOL of noninfringement because no reasonable jury could be satisfied with the inconsistent testimony from the expert). And besides, the claims already contain a separate limitation for face recognition. PX-005 ('848 Patent) at 15:60–61 (reciting at [8.e] "execute a face-recognizing process on the image information to recognize a face").

Without Dr. Balakrishnan's conclusory testimony and product testing, Maxell has nothing to support the jury's verdict of infringement. At trial, Maxell presented no other record evidence or citations to source code. *See* Docket No. 401 at 29–31 (citing only Docket No. 359 (Day 3 Sealed Trial Tr.) at 84:1–89:13; PX-245 (S23 and S23 Ultra Testing Images and Videos); Docket No. 401-7 (PDX006-52–54 (Balakrishnan Demonstratives)); *see also id.* (citing broadly PX-242 (S23 Ultra physical device); PX-243 (S23 physical device)). And there is nothing that parses out how Samsung's accused products perform a registration step after a person's face is recognized and before the newly captured photographs are sorted into the auto-updating album, if that may be the case. The Supreme Court has made clear that "[w]hen an expert opinion is not supported by sufficient facts to validate it in the eyes of the law, or when indisputable record facts contradict or otherwise render the opinion unreasonable, it cannot support a jury's verdict." *Brooke Grp. Ltd v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209, 242 (1993); *see also Dominion Energy*, 725 F. App'x at 986. Even viewing the evidence in the light most favorable to Maxell, the Court finds that a reasonable jury could not have concluded that a specific person was registered in the first setting mode based on the sparse and conclusory evidence presented at trial.

The Court notes that it did consider a similar issue on the first setting mode when denying Samsung's motion for summary judgment of noninfringement of the '848 Patent (Docket No. 122). Docket No. 285 at 66–67. But there, the Court found there was a genuine dispute of material fact due to Dr. Balakrishnan's deposition testimony that "once a **tag** for a specific person is set up under the second setting mode, then a new photo taken under the first setting mode is **assigned the same tag**, and as a result, is registered as the same person." *Id.* at 67 (citing Docket No. 181-3 (Balakrishnan Tr.) at 71:3–13, 73:6–74:7) (emphasis added) (cleaned up). At trial, however, Maxell did not advance an infringement theory based on tagging but rather focused its presentation

on face recognition. *See, e.g.*, Docket No. 359 (Day 3 Sealed Trial Tr.) at 85:11–16 ("[W]hen the first setting mode is selected, . . . that person is registered as the specific person through this facial recognition process."); Docket No. 401-7 (Balakrishnan Demonstratives) at PDX006-54 (showing "Face Recognition" is how the first setting mode is allegedly met). Dr. Balakrishnan explained during his deposition that tagging and facial recognition are different. Docket No. 181-3 (Balakrishnan Tr.) at 71:16–23 ("[E]ven if it is not tagged, even if I hadn't [] done the tagging of Hawah, the face recognizer would still [have] grouped these as all the same person. . . . So that, in some sense, is registering the person, even when I take the photo without tagging it."). Therefore, granting JMOL of noninfringement for the '848 Patent is not inconsistent with the Court's ruling during summary judgment.

For the above reasons, the Court **GRANTS** Samsung's motion for judgment as a matter of law with respect to noninfringement of claims 11 and 12 of the '848 Patent. *See* Docket No. 390.

II. JMOL of Invalidity

Despite granting JMOL of noninfringement for the '086, '815, and '848 Patents, the Court must still address the jury's verdict that the '086 and '815 Patents are not invalid because Samsung asserted their invalidity as counterclaims and not merely as affirmative defenses. Docket No. 110 at Counterclaims, Counts 4, 10; *Solomon Techs., Inc. v. Int'l Trade Comm'n*, 524 F.3d 1310, 1319 (Fed. Cir. 2008) (citing *Cardinal Chem. Co. v. Morton Int'l, Inc.,* 508 U.S. 83, 96 (1993)).

First, the Court addresses Maxell's argument that Samsung waived any JMOL of invalidity of the asserted claims of the '086 and '815 Patents because it did not move on invalidity under Federal Rule of Civil Procedure 50(a). Docket No. 401 at 9–11, 24–25. It is true that when making its Rule 50(a) argument, Samsung focused on "infringement, willful infringement, [and] damages." Docket No. 364 (Day 6 Unsealed Trial Tr.) at 1234:24–1235:5. But Samsung did make an argument on invalidity when it rebutted Maxell's Rule 50(a) motion. *See id.* at 1263:12–1266:5.

Samsung also addressed testimony on validity from Maxell's experts, Drs. Wobbrock and Singh. *See id.* In doing so, Samsung properly alerted Maxell to the insufficiency of Maxell's rebuttal to Samsung's invalidity case before the case was submitted to the jury. The Court was also alerted that it would need to address a motion for judgment as a matter of law on the sufficiency of evidence as to invalidity *or* validity, depending on the jury's verdict. As a result, Samsung made only a de minimis departure from Rule 50(b). *Polanco v. City of Austin*, 78 F.3d 968, 974–75 (5th Cir. 1996) (finding no waiver when the purpose of Rule 50 was satisfied, and the court and opposing party were put on notice of the insufficiency of the evidence); *Taylor Pub. Co. v. Jostens, Inc.*, 216 F.3d 465, 471–473 (5th Cir. 2000) (same); *W. Union Co. v. MoneyGram Payment Sys., Inc.*, 626 F.3d 1361, 1367 (Fed. Cir. 2010) ("We have held that even a cursory motion suffices to preserve an issue on JMOL so long as it 'serves the purposes of Rule 50(a), *i.e.*, to alert the court to the party's legal position and to put the opposing party on notice of the moving party's position as to the insufficiency of the evidence.' " (quoting *Blackboard, Inc. v. Desire2Learn, Inc.*, 574 F.3d 1371, 1379–80 (Fed. Cir. 2009)). Samsung's JMOL of invalidity is not waived.

"An issued patent is presumed valid." *Fox Grp., Inc. v. Cree, Inc.*, 700 F.3d 1300, 1304 (Fed. Cir. 2012). Samsung has the burden to overcome this presumption with clear and convincing evidence. *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1354 (Fed. Cir. 2010) (en banc). Section 112(a) of the Patent Act requires that the specification of a patent "contain a written description of the invention." 35 U.S.C. § 112(a). To satisfy this requirement, a patent's written description must "reasonably convey[] to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date." *Ariad*, 598 F.3d at 1351. "Accordingly, claims added during prosecution must find support sufficient to satisfy § 112 in the written description of the original priority application." *Novozymes A/S v. DuPont Nutrition Biosciences APS*, 723 F.3d

1336, 1344 (Fed. Cir. 2013). Ultimately, the patent's specification must "clearly allow persons of ordinary skill in the art to recognize that [the inventor] invented what is claimed." *Ariad*, 598 F.3d at 1351 (quoting *Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1563 (Fed. Cir. 1991)).

"This inquiry . . . is a question of fact." *Id.* And "determining whether a patent complies with the written description requirement will necessarily vary depending on the context." *Id.* The description can be made using "words, structures, figures, diagrams, formulas, etc." *Lockwood v. Am. Airlines, Inc.*, 107 F.3d 1565, 1572 (Fed. Cir. 1997). And the patentee can also "rely on information that is 'well-known in the art' to satisfy written description." *Streck, Inc. v. Rsch. & Diagnostic Sys., Inc.*, 665 F.3d 1269, 1285 (Fed. Cir. 2012) (citation omitted). But a " 'mere wish or plan' for obtaining the claimed invention does not satisfy the written description requirement." *Novozymes*, 723 F.3d at 1344 (quoting *Regents of the Univ. of Cal. v. Eli Lilly & Co.*, 119 F.3d 1559, 1566 (Fed. Cir. 1997)).

"[S]ometimes the patent itself is clear enough that it establishes inadequacy of support in the written description for the full scope of the claimed invention *unless there is contrary evidence*." *Mondis Tech. Ltd. v. LG Elecs. Inc.*, 2025 WL 2264077, at *4 (Fed. Cir. Aug. 8, 2025) (concluding there was insufficient contrary evidence from plaintiff to survive JMOL when it was "undisputed that the patent does not expressly disclose the [relevant] limitation.") (citing *Centocor Ortho Biotech, Inc. v. Abbott Lab'ys*, 636 F.3d 1341, 1347 (Fed. Cir. 2011), *PIN/NIP, Inc. v. Platte Chem. Co.*, 304 F.3d 1235, 1247–1248 (Fed. Cir. 2002)).

But "under a narrow set of circumstances, the written description requirement may be satisfied without an explicit disclosure if the claimed features are necessarily inherent in what is expressly described." *Nuvo Pharms. (Ireland) Designated Activity Co. v. Dr. Reddy's Lab'ys Inc.*, 923 F.3d 1368, 1382–83 (Fed. Cir. 2019) (citing *Allergan, Inc. v. Sandoz Inc.*, 796 F.3d 1293,

1309 (Fed. Cir. 2015)); Manual of Patent Examining Procedure § 2163 (9th ed. Rev. 3, Jan. 2018) (citing *In re Robertson*, 169 F.3d 743, 745 (Fed. Cir. 1999) ("To establish inherency, the extrinsic evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.") (internal quotation marks omitted)). That the claimed invention is an obvious variant of what is disclosed in the specification is insufficient to satisfy written description. *TurboCare Div. of Demag Delaval Turbomachinery Corp. v. Gen. Elec. Co.*, 264 F.3d 1111, 1119 (Fed. Cir. 2001) (quoting *Lockwood*, 107 F.3d at 1572).

A. '086 Patent

Samsung argues that it is entitled to JMOL of invalidity of claim 1 of the '086 Patent. Docket No. 390 at 6–7. The relevant claim elements are "first information" and "second information" from limitations [1.b] and [1.d], which are reproduced below:

> [1.b] a detector configured to detect **first information necessary for an identification of the user** when the contact is detected between the touch panel and the finger of the user;
>
> [1.d] memory that is configured to store **second information relating to the identification of the user**, which is stored in advance;

PX-003 ('086 Patent) at 8:39–42, 47–49 (emphasis added). During claim construction, the Court held that the "first information" and "second information" terms should be given their plain and ordinary meaning, which includes "fingerprint information." Docket No. 107 at 23–27. Samsung argued that Maxell had disavowed that the first and second information could "correspond[] to a fingerprint of a user" when it canceled similar claims using such language during prosecution of a

parent application. *Id.* at 24–27. The Court disagreed. *Id.* at 26. It explained that, "[a]t most, Maxell conceded the patent did not meet the written-description requirement." *Id.*

During summary judgment, Samsung moved for invalidity of the '086 Patent due to lack of written description. Docket No. 124. It raised again that the examiner of the '086 Patent's parent patent, RE48,830 ("RE'830"), had rejected proposed claims that recited storing information "corresponding to a fingerprint of the user" for lack of written description. Docket No. 124 at 6. The examiner found that "[t]here is no support for storing information related to a fingerprint, as the specification discloses storing information as to the fingertip or the finger pad." *Id.* (citing Docket No. 124-2 (Non-Final Rejection) at 5). Samsung noted that the specifications of the RE'830 Patent and the '086 Patent are the same. *Id.* Finding that there was a genuine dispute of material fact, the Court denied Samsung's motion. Docket No. 285 at 72 (relying on Dr. Wobbrock's opinion that a POSITA at the time of the invention "would understand that capacitive sensors of the kind disclosed in the '086 Patent would be capable of detecting a fingerprint.") (quoting Docket No. 173-2 (Wobbrock Report) at ¶¶ 138–141).

Now, Samsung argues, and the Court agrees, that no reasonable jury could find, based on the evidence presented at trial, that the '086 Patent's written description sufficiently demonstrates that the inventors possessed the claimed invention. Docket No. 390 at 6–10. First, it is undisputed that the claims and specification of the '086 Patent do not use the word "fingerprint." Docket No. 362 (Day 5 Unsealed Trial Tr.) at 925:9–13; Docket No. 364 (Day 6 Unsealed Trial Tr.) at 1178:3–14. Despite this, Maxell argues that Dr. Wobbrock presented evidence at trial that there is written description to support fingerprint information at the Abstract, 1:53–56, 3:14–20, 3:30–35, 4:42–44, 5:4–6, and Figures 2, 8, and 12A of the '086 Patent, as well as the Handbook of Fingerprint Recognition (PX-040) at PX040.0083, PX040.0206, and PX040.0259. Docket No. 401 at 13

(citing Docket No. 364 (Day 6 Unsealed Trial Tr.) at 1164:8–1175:2; Docket No. 401-4 (Wobbrock Demonstratives) at PDX015-2); Docket No. 364 (Day 6 Unsealed Trial Tr.) at 1178:14–18.

At trial, Dr. Wobbrock relied on the abstract of the ’086 Patent as the basis for his assertion that the specification discloses fingerprint information. *See* Docket No. 364 (Day 6 Unsealed Trial Tr.) at 1164:22–1165:6, 1171:1–1174:1. The abstract describes the invention as “a touch panel which displays pieces of identification information including letters, figures, and symbols.” PX-003 (’086 Patent) at Abstract. Dr. Wobbrock testified fingerprint information can be identification information because, based on the Handbook of Fingerprint Recognition, “letters, figures, and symbols have been ways that fingerprint information has been encoded for a long time.” Docket No. 364 (Day 6 Unsealed Trial Tr.) at 1166:9–16. Dr. Nielson, on the other hand, testified that where the patent refers to “identification information,” it is in the context of a passcode that can consist of numbers, letters, figures, and/or symbols in combination with touch inputs that are distinguished entirely on the basis of the size of the input—like a small or large touch—rather than fingerprints. Docket No. 362 (Day 5 Unsealed Trial Tr.) at 925:14–931:19; PX-003 (’086 Patent) at Figs. 1A, 1B, 5A, 5B, Abstract, 1:38–46, 3:1–13.

Dr. Wobbrock’s testimony tying “pieces of identification information including letters, figures, and symbols” to fingerprint information is untethered from the specification. It ignores that the specification only describes touch inputs from a fingertip or pad, as opposed to fingerprints. *See, e.g.*, PX-003 (’086 Patent) at 3:1–13; Docket No. 362 (Day 5 Unsealed Trial Tr.) at 891:5–894:8 (describing Figures 11A, 11B, 11C, and 12A as only referencing the fingertip or pad). It relies heavily on information from the Handbook to gap-fill written description of fingerprints through mere reference to “letters, figures, and symbols.” Docket No. 364 (Day 6

Unsealed Trial Tr.) at 1164:22–1165:6, 1171:1–13, 1173:11–17. Certainly, a "patentee may rely on information that is 'well-known in the art' for purposes of meeting the written description requirement." *Bos. Sci. Corp. v. Johnson & Johnson*, 647 F.3d 1353, 1366 (Fed. Cir. 2011) (citing *Falko-Gunter Falkner v. Inglis*, 448 F.3d 1357, 1366–1368 (Fed. Cir. 2006)). But "[r]eliance on such testimony, untethered to the inventors' own description of the invention, would improperly take the written description inquiry outside the four corners of the specification." *Allergan USA, Inc. v. MSN Lab'ys Priv. Ltd.*, 111 F.4th 1358, 1376 (Fed. Cir. 2024).

Dr. Wobbrock's testimony was also inconsistent. In reference to Figure 12A, Dr. Wobbrock testified that "identification information, including letters, figures, and symbols" which is not touch input, is *displayed* on the apparatus. Docket No. 364 (Day 6 Unsealed Trial Tr.) at 1165:22–1166:8. He then testified that "other pieces [of identification information] come from the user's finger," but admitted these other types of information, such as touch input and fingerprint information, "would *not be displayed* . . . ." *Id.* at 1165:18–1166:8.

FIG. 12A

DIGIT	1	2	3	4
PASSWORD	0	5	2	8
INPUT METHOD	FINGER TIP	FINGER PAD	FINGER PAD	FINGER PAD

PX-003 ('086 Patent) at Figure 12A. There are multiple issues here. First, because Dr. Wobbrock conceded that information from a user's finger would not be displayed, the disclosures in the specification about "a touch panel which **displays** pieces of identification information" cannot support his opinion. PX-003 ('086 Patent) at Abstract (emphasis added). Second, because Dr. Wobbrock admitted that "letters, figures, and symbols" are separate from the other pieces of

identification information that come from the user's finger, the rest of his opinion based on that assertion is unsupported. This type of inconsistent expert testimony, concerning matters that are at the heart of the parties' dispute, cannot provide a substantial basis for finding written description. *See ParkerVision*, 621 F. App'x at 1014 (affirming grant of JMOL of noninfringement because no reasonable jury could be satisfied with the inconsistent testimony from the expert).

Finally, Dr. Wobbrock's testimony on capacitive sensors, even viewed in the light most favorable to Maxell, cannot save written description. Dr. Wobbrock testified that the '086 Patent covers fingerprint information because it discloses capacitive touch-sensing grids. Docket No. 364 (Day 6 Unsealed Trial Tr.) at 1167:7–18 (citing PX-003 ('086 Patent) at 3:17–20, 3:30–32 ("When the user's finger contacts with the touch panel, capacitance of the sensor 4 changes and the sensor 4 outputs a signal according to the change.")). Again, he bases his testimony that "capacitive touch-sensing grids have been used to sense fingerprint information for a long time" on the Handbook of Fingerprint Recognition, which the Court earlier discounted as being untethered from the specification. *Id.* at 1168:2–7.

It is not enough that it would have been obvious to a person of ordinary skill that a capacitive sensor can be used to detect fingerprints. The fact that a capacitive sensor allows for fingerprint information to be detected does not answer the question of whether there is written description for fingerprint information. The Court views *Rivera* as an analogous case. *Rivera v. Int'l Trade Comm'n*, 857 F.3d 1315, 1319–1323 (Fed. Cir. 2017). The specification in that case indicated that a "pod" is distinct from the receptacle (*i.e.*, cartridge). *Id.* at 1320–1321. However, for the claimed integral filter cartridge to be supported by written description, it had to act as both a pod and receptacle. *Id.* at 1319, 1321. Plaintiff attempted to offer expert testimony that ordinary artisans recognized the need for a cartridge to have some type of filter, they were aware of the

availability of an integrated filter, and nothing in the patent limited that possibility. *Id.* at 1322. The court in *Rivera* concluded that even if "ordinary artisans may have understood that the filter could be incorporated into the cartridge[,] [that] does not save the claims." *Id.* at 1323 (citing *ICU Med., Inc. v. Alaris Med. Sys., Inc.*, 558 F.3d 1368, 1377 (Fed. Cir. 2009)). Because the specification described the "pod" as distinct from the other components, ordinary artisans would not have understood that Rivera had possession of an integrated filter system. *Id.* Similarly, here, an ordinary artisan is limited by what is already disclosed in the specification, which is a capacitive sensor used for detecting contact and the size of that contact. Docket No. 362 (Day 5 Unsealed Trial Tr.) at 932:15–18; *see id.* at 930:4–933:12 (describing detection of contact range) (citing PX-003 ('086 Patent) at Figs. 1A, 1B, 5A, 5B). That does not include fingerprint information. Indeed, Dr. Nielson testified—and Dr. Wobbrock did not refute—that not all capacitive sensors can detect fingerprints. Docket No. 362 (Day 5 Unsealed Trial Tr.) at 932:3–934:7.

Because there was no testimony from which a skilled artisan would have concluded that fingerprint information is disclosed or suggested in the patent itself, and nothing in the patent describing fingerprint information, there is no substantial evidence to support the jury's finding on validity. *See Mondis*, 2025 WL 2264077, at *7–8. This is at least because Dr. Wobbrock's testimony and reliance on the Handbook is untethered from the specification of the '086 Patent, and cannot be credited by a reasonable jury. Although the Court found that a genuine dispute of material fact existed at summary judgment, the Court did not determine at summary judgment whether Dr. Wobbrock's citations to the Handbook were inappropriate. *See* Docket No. 285 at 71–73. It does so now.

For the above reasons, the Court **GRANTS** Samsung's motion for judgment as a matter of law with respect to invalidity of claim 1 of the '086 Patent. *See* Docket No. 390.

B. ’815 Patent

1. Claim 1

Samsung argues that it is entitled to JMOL of invalidity of claim 1 of the ’815 Patent. Docket No. 390 at 22–26. Dr. Kia testified that the Apple iPhone 8 was on sale and in public use on September 22, 2017. Docket No. 362 (Day 5 Unsealed Trial Tr.) at 1031:11–17. Maxell did not rebut Dr. Kia’s testimony that each limitation of claim 1 is either disclosed or rendered obvious in view of the iPhone 8. *Id.* at 1032:2–1044:25; Docket No. 364 (Day 6 Unsealed Trial Tr.) at 1204:25–1205:10.

The only dispute at trial with respect to the invalidity of claim 1 was whether the iPhone 8 constitutes prior art—specifically, whether claim 1 is entitled to a priority date earlier than November 9, 2017. Docket No. 364 (Day 6 Unsealed Trial Tr.) at 1206:1–23. The Court concludes that no reasonable jury could find that claim 1 of the ’815 Patent is entitled to any earlier priority date because Maxell did not present sufficient evidence of express or inherent disclosure of the “No Deletion” limitation.

The No Deletion limitation appeared as an original claim in the grandparent application, U.S. Pat. App. No. 15/808,175, filed on November 9, 2017. The No Deletion limitation is reproduced below:

> [U]pon one video information stored on the recording medium included in both the first group of video information and the second group of video information **being deleted from the first group of video information**, the one video information **continues to be included** in the second group of video information and the processor controls the display to display a thumbnail corresponding to the one video information as one of the second group of thumbnails when the second character is selected.

PX-006 (’815 Patent) at 9:11–20 (emphasis added). The Court construed “being deleted from the first group of video information” to mean “being removed from the first group of video

information." Docket No. 107 at 12–13, 31; *see* Docket No. 364 (Day 6 Unsealed Trial Tr.) at 1193:12–17 (describing the Court's construction being shown to the jury).

The parties dispute whether the great-grandparent application, U.S. Application No. 15/176,435, filed on June 8, 2016, satisfies the written description requirement for the No Deletion limitation. Docket No. 390 at 23. Dr. Singh claimed that there was written description support for the No Deletion limitation as early as August 11, 2005, the date of the earliest U.S. application in the U.S. family. Docket No. 364 (Day 6 Unsealed Trial Tr.) at 1193:7–1197:1, 1215:5–1217:17. He testified that column 6, lines 19–40, and Figures 6 and 7 of the '815 Patent provide written description support for that limitation. *Id.* at 1193:7–1197:1.

Although Maxell attempts to inject additional written description support in its post-trial briefing—arguing that the No Deletion limitation is supported by the Abstract; column 6, lines 19–40; and Figures 1, 6, 7, 9, and 12 of the '815 Patent (Docket No. 401 at 25)—the crux of the parties' written description dispute for claim 1 only involves column 6, lines 19–40 and Figures 6 and 7 of the '815 Patent. Docket No. 364 (Day 6 Unsealed Trial Tr.) at 1193:7–1197:1 (referencing only Figures 6 and 7 and column 6, lines 19–40), 1216:25–1217:5 (admitting that he did not show the jury the Summary of the Invention and Figures 9 and 12), 1216:12–14 (offering only broad and conclusory testimony that "[i]f you look at Figure 1, the patent has designed a complete data structure to essentially provide that kind of independence"). And the dispute really centers around column 6, lines 19–40; at trial, Dr. Singh conceded that Figures 6 and 7 on their own do not disclose the No Deletion limitation or what happens to video information in one folder if it is deleted from another folder. *Id.* at 1214:2–19.

Dr. Singh testified the passage at column 6, lines 19–40 is an express disclosure of the No Deletion limitation. *Id.* at 1215:24–1216:2. However, that passage does not go so far as to state

what will happen in the Father folder when an item is deleted from the Mother folder, as claimed. That passage only describes that "[t]he 'mother' [of Figure 6] can use the menu display tag for mother 601 as a folder dedicated to herself, and freely register and delete data to be reproduced," and "the 'father' [of Figure 7] can use the menu display tag for father 701 as a folder dedicated to himself, and freely register and delete data to be reproduced." PX-006 ('815 Patent) at 6:19–40. Therefore, Dr. Singh's testimony on express disclosure cannot serve as sufficient evidence to support written description. *Novartis Pharms. Corp. v. Accord Healthcare, Inc.*, 38 F.4th 1013, 1018 (Fed. Cir. 2022) ("The contrary testimony of Novartis' second physician expert, Dr. Steinman, is inconsistent with the plain text of the specification and therefore carries no weight."); *Dominion Energy*, 725 F. App'x at 986 (finding no "substantial evidence to support the jury's verdict because [expert's] testimony was conclusory, unsupported, [and] contrary to the evidence in the case"). Indeed, Dr. Singh later admitted that while the passage describes users managing their own content, it does not state that users can interact "without interfering with each other," which is what the claims require. *Id.* at 1217:6–1218:7. This is fatal to his assertion of express disclosure.

Giving Maxell the benefit of the doubt, the Court also evaluates whether the No Deletion limitation is inherently disclosed. There cannot be inherent disclosure when the Mother and Father folders perform only the independent management described in the passage at column 6, lines 19–40 because what is claimed—groups of video information where a video continues to be included in one of the groups after deletion in another—is not *necessarily* present. In fact, even if the folders have independent management, there could still be systems where (1) a video is deleted from the Mother folder, and it gets deleted from the Father folder; (2) a video gets deleted from the Mother folder, and it does not get deleted from the Father folder; and (3) a video gets deleted from the

Mother folder, and a query is sent asking whether to delete it from the Father folder. Docket No. 432 (Post-Trial Unsealed Tr.) at 138:11–22. There is no inherent disclosure when a claimed invention is merely an obvious variant of that which is disclosed in the specification. *See TurboCare*, 264 F.3d at 1119.

For the above reasons, the Court **GRANTS** Samsung's motion for judgment as a matter of law with respect to invalidity of claim 1 of the '815 Patent. *See* Docket No. 390.

2. Claims 21 and 24

Samsung also argues that it is entitled to JMOL of invalidity of claims 21 and 24 of the '815 Patent. Docket No. 390 at 26–30. Dr. Kia testified that the Galaxy S10 and Netflix app were in public use prior to May 26, 2020. Docket No. 362 (Day 5 Unsealed Trial Tr.) at 1050:19–24, 1051:9–19. Maxell did not rebut Dr. Kia's testimony at trial that the Galaxy S10 running the Netflix app renders obvious all limitations of claims 21 and 24. *Id.* at 1051:20–1065:1; Docket No. 364 (Day 6 Unsealed Trial Tr.) at 1204:10–18, 1205:11–25.

The only dispute at trial with respect to the invalidity of claims 21 and 24 was whether the Galaxy S10 running the Netflix app constitutes prior art—specifically, whether claims 21 and 24 are entitled to a priority date earlier than May 26, 2020, the date the '815 Patent was filed. *See* Docket No. 364 (Day 6 Unsealed Trial Tr.) at 1206:1–23. The Court concludes that no reasonable jury could find that claims 21 and 24 of the '815 Patent are entitled to any earlier priority date because Maxell did not present sufficient evidence of express or inherent disclosure of the "Encrypted" limitation.

The "Encrypted" limitation appeared for the first time in the claims of the '815 Application, filed on May 26, 2020, and is reproduced below:

> [R]eceiving first video information wirelessly from a device **external** to the information processing apparatus, the first

> video information being received including second video information that is **encrypted** . . . .

PX-006 ('815 Patent) at 13:6–10 (emphasis added). The Court construed this limitation to require that "the second video information is in encrypted form at the time it is received." Docket No. 107 at 11–12, 31; Docket No. 362 (Day 5 Unsealed Trial Tr.) at 1046:11–25.

Dr. Singh claimed there was written description support for the Encrypted limitation as early as August 11, 2005, the earliest filing date of a U.S. patent application related to the '815 Patent. Docket No. 364 (Day 6 Unsealed Trial Tr.) at 1200:14–24. However, during trial, Dr. Singh could not identify any express disclosure of receiving encrypted video information in the specification, instead relying on (1) general references to "digital broadcast" at column 1, lines 46 to 50 and column 6, lines 57 to 65 of the '815 Patent; and (2) the presence of encryption and decryption modules in Figure 3 of the '815 Patent. Docket No. 364 (Day 6 Unsealed Trial Tr.) at 1198:11–1201:12, 1221:5–20.

Dr. Singh admitted that the only explicit discussion of encryption in the '815 Patent relates to element 331 in Figure 3. *Id.* at 1220:18–1221:4. However, Dr. Kia presented evidence at trial that element 331 and anything else inside the dotted line of Figure 3 is an *internal* component of the phone that cannot encrypt any signal *before* it is received. Docket No. 362 (Day 5 Unsealed Trial Tr.) at 1047:10–18, 1048:2–18. This is contrary to the claim's requirement that the video information is already encrypted before it is received. Notably, Dr. Singh did not disagree with Dr. Kia, also testifying that element 331 is an internal component. Docket No. 364 (Day 6 Unsealed Trial Tr.) at 1222:17–1223:4. The nail in the coffin was Dr. Singh's concession that there can be no inherent disclosure of video being received in encrypted form, as it is possible for video to be received in unencrypted form. *Id.* at 1223:17–21, 1225:11–1226:8.

For the above reasons, the Court **GRANTS** Samsung's motion for judgment as a matter of law with respect to invalidity of claims 21 and 24 of the '815 Patent. *See* Docket No. 390.

III. New Trial on Noninfringement and Invalidity

Federal Rule of Civil Procedure 50(c)(1) provides that "[i]f the court grants a renewed motion for judgment as a matter of law, it must also conditionally rule on any motion for a new trial by determining whether a new trial should be granted if the judgment is later vacated or reversed." If the Federal Circuit were to vacate or reverse the Court's decision granting JMOL of noninfringement of the asserted claims of the '086, '815, and '848 Patents, it would only be because the Court should have determined that there was sufficient proof for a reasonable jury to find that the accused products did infringe those patents. Accordingly, the portion of Samsung's motion concerning a new trial on noninfringement is therefore **CONDITIONALLY DENIED**.

However, if the Federal Circuit were to vacate or reverse the Court's decision granting JMOL of invalidity of the asserted claims of the '086 and '815 Patents, it could be because the Court should have determined that Samsung's JMOL of invalidity was waived. In that case, a new trial regarding the issues of validity would be warranted. Indeed, Samsung argued its motion on invalidity with an emphasis for a new trial. *See, e.g.*, Docket No. 412 at 10–12; Docket No. 432 (Post-Trial Unsealed Tr.) at 136:4–14. Specifically, it argues that the jury's verdict on validity was against the great weight of the evidence. *Id.*; *see Smith v. Transworld Drilling Co.*, 773 F.2d 610 (5th Cir. 1985). The Court agrees.

For the '086 Patent, there was no express disclosure of fingerprint information in the specification to support claim 1. *See supra* § II.A. Any testimony from Dr. Wobbrock on the Handbook and capacitive sensors was untethered from the specification. *Id.* On the other hand, Dr. Kia testified that not all capacitive sensors could detect fingerprint information. *Id.*

For the ’815 Patent, there was also no express disclosure of the disputed limitations in the patent. *See supra* § II.B.1–II.B.2. Nor were there any inherent disclosures because the limitations were not necessarily present. *Id.* (describing the possibility of different variations of Mother and Father systems, as well as the possibility of receiving unencrypted information—all of which were not claimed). And Maxell did not even rebut Dr. Kia’s testimony that the iPhone 8 and Galaxy S10 render obvious the No Deletion and Encrypted limitations in claims 1, 21, and 24. *Id.*

Accordingly, the portion of Samsung’s motion concerning a new trial on invalidity is therefore **CONDITIONALLY GRANTED**.

IV. Other Issues

In light of the Court’s conclusions on judgment as a matter of law of noninfringement and invalidity of the asserted claims of the ’086, ’815, and ’848 Patents, the Court need not and does not address the issues regarding damages and willful infringement in Samsung’s Motion for Judgment as a Matter of Law and Motion for a New Trial (Docket No. 390). However, Samsung is not precluded from re-urging the issues of damages and willful infringement in its motion (Docket No. 390) after the conclusion of any appeal of the Court’s decision granting judgment as a matter of law of noninfringement and invalidity. *See Conway v. Chem. Leaman Tank Lines, Inc.*, 644 F.2d 1059, 1062 (5th Cir. 1981) (affirming district court’s grant of new trial because alternative grounds for a new trial that district and appellate court did not initially decide were not abandoned and were not precluded by the “law of the case”); *Steuben Foods, Inc. v. Shibuya Hoppmann Corp.*, 127 F.4th 348, 363 (Fed. Cir. 2025) (vacating and remanding for further proceedings—but not reversing—conditional grant of new trial for invalidity and damages grounds where JMOL of those issues was not decided on the merits and no rationale was provided for grant of new trial); *see also Arenson v. S. Univ. L. Ctr.*, 43 F.3d 194, 197 (5th Cir.), *decision clarified on reh’g*, 53 F.3d 80 (5th Cir. 1995) (holding district court had erred in granting new trial but

distinguishing *Conway*, 644 F.2d at 1062, because the court in *Conway* "did not reach all grounds asserted by the party who sought a new trial" before granting the new trial on those grounds, and therefore the parties were still in compliance with Rule 50(c)(1)). In particular, the issue of damages will be relevant if the Federal Circuit vacates or reverses the Court's grant of JMOL of noninfringement and invalidity, given that the Federal Circuit decided *EcoFactor, Inc. v. Google LLC*, 137 F.4th 1333 (Fed. Cir. May 21, 2025), during the jury trial in this case. The Court will carry the issues of damages and willful infringement from Samsung's motion (Docket No. 390) pending the conclusion of any potential appeal. Accordingly, the portions of Samsung's Motion for Judgment as a Matter of Law and Motion for a New Trial (Docket No. 390) that pertain to damages and willful infringement are **CARRIED**.

In light of the Court's above conclusions, it also determines that Maxell's Motion for Entry of Judgment, Enhanced Damages, Pre-Judgment Interest, Post-Judgment Interest, and a Permanent Injunction (Docket No. 391) should be denied. Accordingly, Maxell's Motion for Entry of Judgment, Enhanced Damages, Pre-Judgment Interest, Post-Judgment Interest, and a Permanent Injunction (Docket No. 391) is **DENIED**.

CONCLUSION

For the reasons above, the Court rules as follows:

- Samsung's Motion for Judgment as a Matter of Law and Motion for a New Trial (Docket No. 390) is **GRANTED-IN-PART**, **DENIED-IN-PART**, and **CARRIED-IN-PART**;
    - With respect to JMOL of noninfringement of the asserted claims of the '086 Patent, the motion (Docket No. 390) is **GRANTED**;
    - With respect to JMOL of noninfringement of the asserted claims of the '815 Patent, the motion (Docket No. 390) is **GRANTED**;
    - With respect to JMOL of noninfringement of the asserted claims of the '848 Patent, the motion (Docket No. 390) is **GRANTED**;

- With respect to JMOL of invalidity of the asserted claims of the ’086 Patent, the motion (Docket No. 390) is **GRANTED**;
- With respect to JMOL of invalidity of the asserted claims of the ’815 Patent, the motion (Docket No. 390) is **GRANTED**;
- With respect to a new trial on noninfringement of the asserted claims of the ’086, ’815, and ’848 Patents, the motion (Docket No. 390) is **CONDITIONALLY DENIED**;
- With respect to a new trial on invalidity of the asserted claims of the ’086 and ’815 Patents, the motion (Docket No. 390) is **CONDITIONALLY GRANTED**;
- With respect to damages, the motion (Docket No. 390) is **CARRIED** pending conclusion of a potential appeal on the issues of noninfringement and invalidity;
- With respect to willful infringement, the motion (Docket No. 390) is **CARRIED** pending conclusion of a potential appeal on the issues of noninfringement and invalidity; and

- Maxell’s Motion for Entry of Judgment, Enhanced Damages, Pre-Judgment Interest, Post-Judgment Interest, and a Permanent Injunction (Docket No. 391) is **DENIED**.

Finally, Samsung’s prosecution laches defense may also be moot in light of the Court’s rulings on Samsung’s JMOL (Docket No. 390). As a result, Maxell’s motion to strike (Docket No. 398) may be moot. Within **seven (7) days** of this Order’s entry, the parties **SHALL** file a joint status report regarding whether Samsung still needs to be heard on its prosecution laches defense, whether it is moot, or whether the defense is withdrawn. Accordingly, it is **ORDERED** that

- Maxell’s Motion to Strike and Exclude Certain Arguments, Facts, and Opinions Offered in Support of Prosecution Laches (Docket No. 398) is **CARRIED** pending the parties’ joint status report.

So ORDERED and SIGNED this 18th day of September, 2025.

Robert W Schroeder III

ROBERT W. SCHROEDER III
UNITED STATES DISTRICT JUDGE