

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

MAXELL, LTD.,	) (	
PLAINTIFF,	) (	CIVIL ACTION NO.
	) (	5:23-CV-92-RWS
VS.	) (	TEXARKANA, TEXAS
	) (	
SAMSUNG ELECTRONICS CO., LTD.,	) (	
and SAMSUNG ELECTRONICS	) (	MAY 23, 2025
AMERICA, INC.,	) (	8:51 A.M.
DEFENDANTS.	) (	

JURY TRIAL TRANSCRIPT

BEFORE THE HONORABLE ROBERT W. SCHROEDER III

UNITED STATES DISTRICT JUDGE

VOLUME 5

FOR PLAINTIFF:	Mr. Jamie B. Beaber
	Mr. Kfir B. Levy
	Mr. James A. (Tripp) Fussell, III
	Mr. Saqib J. Siddiqui
	Mr. Bryan C. Nese
	Mr. Michael L. Lindinger
	Ms. Tiffany A. Miller
	Mr. Tariq Javed
	Mr. Seth W. Bruneel
	Mr. Séké G. Godo
	Mayer Brown LLP
	1999 K Street NW
	Washington, DC 20006
	Mr. Geoffrey P. Culbertson
	Mr. Kelly B. Tidwell
	Patton Tidwell & Culbertson, LLP
	2800 Texas Boulevard
	Texarkana, TX 75503

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1 FOR DEFENDANTS:

Ms. Melissa R. Smith
Gillam & Smith, LLP
303 South Washington Avenue
Marshall, TX 75670

Mr. Mark D. Fowler
DLA Piper LLP (US)
3203 Hanover Street
Suite 100
Palo Alto, CA 94304

Mr. Sean C. Cunningham
Ms. Erin P. Gibson
Ms. Kathryn R. Grasso
DLA Piper LLP (US)
4365 Executive Drive
Suite 1100
San Diego, CA 92121

Ms. Paulina Starostka
DLA Piper LLP (US)
444 West Lake Street
Suite 900
Chicago, IL 60606

14 COURT REPORTER:

Ms. Shelly Holmes, CSR, TCRR
Official Court Reporter
Honorable Robert W. Schroeder III
United States District Judge
Eastern District of Texas
Texarkana Division
500 North State Line Avenue
Texarkana, TX 75501
(903) 794-1018
shelly_holmes@txed.uscourts.gov

(Proceedings recorded by mechanical stenography, transcript
produced on a CAT system.)

P R O C E E D I N G S

(Jury out.)

COURT SECURITY OFFICER: All rise.

THE COURT: Good morning, everyone.

I understand there are no overnight disputes; is that correct?

MR. FOWLER: That's correct.

THE COURT: Okay. As a reminder, we'll do a charge conference at the conclusion of the day today. Were the parties able to make any progress on an instruction regard being the IPRs?

MR. FOWLER: So the current status is, Your Honor, they provided us an instruction last night. We're going to be sending that over to them in a revised form within the next hour or so. We'll talk about it at lunch.

And then we have an added instruction that has to do with EcoFactor that we'd like the Court to considered, and we're also sending that over to them this morning.

We've also conferred about the remaining instructions. I think there are a couple that can drop out now. We don't -- they didn't put on a DOE case, and we're not going to put on a non-infringing alternatives case, so those likely can drop out. We're going to confer with the Plaintiffs about that as well.

THE COURT: Okay. Thank you, Mr. Fowler.

08:52:43 1 Mr. Fussell?

08:52:43 2 MR. FUSSELL: I agree with everything.

08:52:44 3 THE COURT: Agree with that? Okay.

08:52:47 4 Very good. Okay. We have the IT issue resolved?

08:52:55 5 THE INTERPRETER: Actually, I need one moment.

08:52:58 6 THE COURT: Okay. Okay. We will wait until we
08:52:59 7 get that resolved, and as soon as it is, we'll have the
08:53:03 8 jury brought down.

08:54:01 9 (Pause.)

08:54:01 10 THE COURT: Let's get the witness back on the
08:54:03 11 witness stand, and we'll have the jury brought down.

08:54:08 12 (Jury in.)

08:55:24 13 THE COURT: Please be seated.

08:55:49 14 Good morning, ladies and gentlemen of the jury,
08:55:55 15 and welcome back. I hope you all had a pleasant evening.

08:55:59 16 When we concluded the day yesterday, the witness
08:56:03 17 had, I think, completed his cross-examination.

08:56:06 18 So, at this time, Samsung may conduct its
08:56:09 19 redirect.

08:56:11 20 MS. GIBSON: Thank you, Your Honor. May it please
08:56:15 21 the Court. May I proceed?

08:56:17 22 THE COURT: You may.

08:56:18 23 MS. GIBSON: Thank you.

08:56:19 24 YOUNGHO KIM, DEFENDANTS' WITNESS, PREVIOUSLY SWORN

08:56:19 25 (INTERPRETED)

REDIRECT EXAMINATION

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BY MS. GIBSON:

Q. Good morning, Mr. Kim. How are you this morning?

A. I'm fine.

MS. GIBSON: Could I ask the translator to maybe move the microphone up? I'm sorry, I'm having trouble hearing.

THE INTERPRETER: Okay.

MS. GIBSON: Much better. Thank you.

Q. (By Ms. Gibson) I want to start where counsel left off.

MS. GIBSON: So let's have the slide from the USPTO on the screen. Can we have Slide 15, please? Here we are.

A. Yes.

Q. (By Ms. Gibson) Mr. Kim, do you remember being asking questions about this slide from a Patent Office presentation?

A. I do.

Q. Do you remember that Maxell's counsel suggested yesterday that your statistics were inaccurate?

A. Yes, he did.

Q. Can you remind the jury if these statistics on Slide 15 of the Patent Office presentation are the right statistics to be looking at?

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08:57:38 1 A. Yes. Actually, what we are looking at here is that --
08:58:29 2 the IPRs that have been requested for or asked for by the
08:58:36 3 petitioners. So we're talking about the entirety of the
08:58:41 4 petitioners asking for IPRs, and also the final
08:58:45 5 invalidation in that regard.

08:58:47 6 But in actuality, there are so many cases where
08:58:51 7 IPR is not started, is not instituted, in which case both
08:58:58 8 companies might settle. If that's the case, then for the
08:59:01 9 most part there will not be any final written decision
08:59:05 10 available.

08:59:05 11 So the data that we're looking at here, the
08:59:08 12 conditions or parameters are very different from what I was
08:59:13 13 discussing earlier.

08:59:14 14 Q. Can you remind the jury what your statistics showed
08:59:20 15 about how often the Patent Office invalidates patent claims
08:59:23 16 once they decide to institute -- review a patent again?

08:59:27 17 A. Sure. The data that I was referring to yesterday is in
09:00:23 18 a case where once an IPR is instituted -- once an IPR has
09:00:27 19 been applied for, when there is a decision to institute an
09:00:34 20 IPR, under that scenario, as to the final written decision,
09:00:41 21 whether the final decision -- written decision would render
09:00:43 22 the patents would be valid or invalid.

09:00:46 23 So I was talking about those -- that case under
09:00:49 24 that scenario. So if you're thinking about whether the
09:00:53 25 patent -- a patent would be invalidated or not, it is more

09:00:57 1 than -- it is about 80 percent probability that the patents
09:01:03 2 will be invalidated.

09:01:04 3 So the assumptions I was making, the scenario that
09:01:08 4 I was talking about was very different, totally different.

09:01:11 5 Q. Now, since this is Slide 15 of something, I had to find
09:01:14 6 the rest of the presentation last night on the Patent
09:01:21 7 Office site.

09:01:22 8 MS. GIBSON: Let's go to Slide 13.

09:01:32 9 A. Okay.

09:01:33 10 Q. (By Ms. Gibson) Now, counsel didn't show you this
09:01:35 11 slide, did he?

09:01:38 12 A. He didn't.

09:01:41 13 MS. GIBSON: Can we focus on the right-hand column
09:01:44 14 and the 30 and 49 percent language there? Blow up that
09:01:49 15 text. Yeah, the text.

09:01:52 16 Q. (By Ms. Gibson) And I'll read it for the record: 30
09:01:54 17 percent of challenged claims and 49 percent of instituted
09:01:58 18 claims were found unpatentable by a preponderance of the
09:02:01 19 evidence.

09:02:01 20 Do you see that, Mr. Kim?

09:02:03 21 A. I do.

09:02:16 22 Q. Now, I'm going to ask you to do some math right now.
09:02:20 23 What's 30 percent plus 49 percent?

09:02:23 24 A. It would be 79 percent.

09:02:32 25 Q. Does 79 percent agree with the statistics you were

09:02:37 1 talking about yesterday?

09:02:38 2 A. Yes, it does.

09:02:47 3 Q. Do these statistics directly from the Patent Office
09:02:50 4 support Samsung's good-faith belief that all three of
09:02:53 5 Maxell patents in this trial are invalid?

09:02:56 6 A. Yes, I believe so.

09:03:22 7 MS. GIBSON: Mr. Splansky, you can take that down.
09:03:23 8 Thank you.

09:03:24 9 Q. (By Ms. Gibson) Now, you were shown a portion of a
09:03:28 10 closing argument from a different case yesterday not
09:03:31 11 involving Maxell.

09:03:32 12 Do you recall that?

09:03:33 13 A. Yes.

09:03:50 14 MS. GIBSON: Can we have that on the screen,
09:03:52 15 please, Mr. Splansky? And can you blow up Line 16 through
09:03:56 16 20?

09:03:59 17 Q. (By Ms. Gibson) Do you recall being showed this,
09:04:02 18 Mr. Kim, about this \$158,000 for a '449 patent?

09:04:12 19 A. Yes, I do.

09:04:13 20 Q. And, here, Samsung's counsel, not -- not me, but
09:04:19 21 Samsung's counsel argued that \$158,000 would be a
09:04:23 22 reasonable amount for a video album patent.

09:04:26 23 Do you see that?

09:04:27 24 A. Yes.

09:04:48 25 MS. GIBSON: Okay. Let's keep those two lines of

09:04:52 1 testimony, and then have PDX-7.14 on the screen.

09:04:59 2 Q. (By Ms. Gibson) And I'll represent to you, Mr. Kim,
09:05:01 3 that the slide we'll see -- when we get it back up. Just a
09:05:05 4 minute. The slide on the right is from one of Maxell's
09:05:15 5 experts yesterday on the '815 patent.

09:05:17 6 Do you see where it says, videos, videos, videos?

09:05:29 7 A. I do.

09:05:30 8 Q. Is Maxell's expert conveying that the '815 patent is a
09:05:36 9 video album patent?

09:05:38 10 MR. CULBERTSON: Objection, Your Honor.

09:05:41 11 THE COURT: I'm sorry?

09:05:42 12 MR. CULBERTSON: I said objection, Your Honor. It
09:05:44 13 calls for speculation. She's also asking him to comment on
09:05:49 14 expert -- excuse me, render expert opinions.

09:05:53 15 THE COURT: Can you rephrase -- I'll sustain the
09:05:56 16 objection. Can you rephrase the question?

09:05:58 17 MS. GIBSON: Sure.

09:05:58 18 Q. (By Ms. Gibson) Mr. Kim, do you have an understanding
09:06:02 19 of whether the '815 patent relates at all to video albums?

09:06:16 20 A. Yes, that's my understanding.

09:06:19 21 MS. GIBSON: All right. Let's have PX-20 at
09:06:22 22 Page 18. There we are.

09:06:30 23 Q. (By Ms. Gibson) Mr. Kim, you were shown this portion
09:06:34 24 of that 32-page letter that Maxell sent Samsung July 7,
09:06:40 25 2021. Do you recall that?

09:06:42 1 A. Yes, I do.

09:06:46 2 Q. And this is the '086 patent in this trial; is that
09:06:48 3 right?

09:06:48 4 A. It is.

09:06:54 5 Q. Now, first of all, if you look at the left-hand column,
09:06:59 6 what number was the '086 patent on Maxell's list?

09:07:04 7 A. It's 89th.

09:07:17 8 Q. So we have -- next to that 89th number, we have a
09:07:23 9 patent, we have four claims listed, and a list of products.

09:07:26 10 Is that enough information, in your view, to
09:07:30 11 substitute for a claim chart?

09:07:31 12 A. No, it is not. I don't believe so. Because if you are
09:08:14 13 talking about those examples of Galaxy phones that we
09:08:19 14 looked at earlier yesterday, and if for every phone --
09:08:24 15 every phone would have thousands of functionalities
09:08:26 16 included in those phones.

09:08:29 17 So if you just put the number of the patents, in
09:08:34 18 actuality practically you would not be able to -- what
09:08:39 19 their claim would be in terms of their alleged
09:08:42 20 infringement. We wouldn't know.

09:08:44 21 Q. Now, you recall if counsel for Maxell asked you if
09:08:48 22 Samsung has access to all the source code for the
09:08:52 23 components in its products. Do you recall that?

09:08:55 24 A. Yes, I do.

09:09:13 25 Q. And -- and you answered "not necessarily." Can you

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09:09:16 1 explain that answer?

09:09:17 2 A. The reason why I say that is because in the case of
09:09:45 3 Samsung Electronics, we work with a lot of suppliers who
09:09:49 4 provide components for our products, and these suppliers
09:09:55 5 would have their own technology. They would have their
09:09:58 6 source codes. They would have technical information on
09:10:02 7 their own.

09:10:04 8 So in many cases, we don't have any access to
09:10:06 9 their technology. That's what I meant.

09:10:08 10 Q. So Qualcomm, for example, is a component supplier in
09:10:13 11 this trial. Does Qualcomm let Samsung see all of its
09:10:18 12 source code for its chips?

09:10:20 13 A. No, that's not the case at all. There's nothing that
09:10:39 14 they share with us.

09:10:43 15 MS. GIBSON: Now, let's go to the bottom of 31 and
09:10:46 16 top of Page 32.

09:10:47 17 Q. (By Ms. Gibson) Mr. Kim, do you recall being asked
09:10:49 18 questions about all the various litigations that Maxell has
09:10:52 19 been involved in on this page?

09:10:54 20 A. Yes, I do.

09:11:03 21 Q. As far as you know, did any of these lawsuits involve
09:11:06 22 Samsung products?

09:11:14 23 A. To the extent of my recollection, no, there isn't any.

09:11:22 24 Q. Now, counsel showed you a claim chart from a case
09:11:25 25 between Maxell and Apple. Do you recall that?

09:11:28 1 A. Yes.

09:11:37 2 Q. But it was about ASUS products. Do you recall that?

09:11:41 3 A. Yes, I do.

09:11:47 4 Q. Are ASUS phones the same as Samsung's smartphones?

09:11:51 5 A. No, they are not, because it is true that ASUS is also

09:12:26 6 an Android phone, but Android is actually just a framework.

09:12:31 7 It's just a platform. And Android is just OS. It's just a

09:12:37 8 frame.

09:12:38 9 So you can think of all the things, such as

09:12:41 10 software and everything. Those are manufactured and made

09:12:45 11 by various manufacturers, and those are the ones that would

09:12:49 12 fill those frames of Android. So ASUS and Samsung phones

09:12:54 13 are completely different products.

09:12:57 14 Q. What about the BLU product claim chart you were shown.

09:13:02 15 Are BLU phones and Samsung smartphones the same?

09:13:04 16 A. No, they are not. So if you're -- if I talk about

09:13:36 17 the -- the aspect of market -- and Samsung Electronics is

09:13:43 18 No. 1 in the market -- but as far as I understand, BLU does

09:13:47 19 not really have a great market share in the market. So

09:13:52 20 these are completely different. These are two different

09:13:56 21 phones.

09:13:59 22 MS. GIBSON: I'd like to go to the Day 1

09:14:05 23 transcript, Page 242:23 to 243:2.

09:14:15 24 Q. (By Ms. Gibson) Counsel showed you the section from

09:14:20 25 opening statement about the 87 permanent license patents.

09:14:24 1 Do you recall that?

09:14:33 2 A. Yes, I do.

09:14:34 3 Q. But he didn't show you another part of the opening.

09:14:38 4 MS. GIBSON: Let's go to 237, 3 through 9, and
09:14:42 5 highlight Rows 7 through 8.

09:14:45 6 Q. (By Ms. Gibson) When we're talking about a license, do
09:14:58 7 you understand if it's Samsung's position that they do not
09:15:01 8 use or need a license through the -- to the three patents
09:15:04 9 in this trial?

09:15:05 10 A. Yes, I do. Yes. Yes, I do. And that's correct.

09:15:26 11 Q. Thank you, Mr. Kim.

09:15:27 12 MS. GIBSON: Your Honor, I pass the witness.

09:15:29 13 THE COURT: Recross?

09:15:37 14 MR. CULBERTSON: Mr. Ebersole, could you pull up
09:15:41 15 the closing argument that we looked at yesterday?

09:15:44 16 RECROSS-EXAMINATION

09:15:48 17 BY MR. CULBERTSON:

09:15:48 18 Q. Good morning, Mr. Kim.

09:15:50 19 A. Good morning.

09:16:00 20 MR. CULBERTSON: Page 127, Line 21.

09:16:02 21 Q. (By Mr. Culbertson) Mr. Kim, do see here where it says
09:16:05 22 for the '449 patent, there's a non-infringing alternative?

09:16:14 23 A. Yes.

09:16:15 24 Q. Thank you.

09:16:16 25 MR. CULBERTSON: No further questions.

09:16:18 1 THE COURT: Anything else?

09:16:19 2 MS. GIBSON: Nothing further, Your Honor.

09:16:21 3 Thank you, Mr. Kim.

09:16:23 4 We release the witness.

09:16:24 5 THE COURT: All right. You may step down.

09:16:39 6 Call your next witness.

09:16:41 7 MR. CUNNINGHAM: Good morning, Your Honor.

09:16:41 8 THE COURT: Good morning.

09:16:42 9 MR. CUNNINGHAM: Samsung calls Dr. Seth Nielson.

09:16:57 10 Your Honor, may we approach with binders?

09:16:59 11 THE COURT: Of course.

09:17:38 12 Raise your right hand to be sworn.

09:17:43 13 (Witness sworn.)

09:17:50 14 THE COURT: Whenever you're ready.

09:17:52 15 MR. CUNNINGHAM: Thank you, Your Honor. May it

09:17:53 16 please the Court.

09:17:53 17 DR. SETH NIELSON, PH.D, DEFENDANTS' WITNESS, SWORN

09:17:53 18 DIRECT EXAMINATION

09:17:54 19 BY MR. CUNNINGHAM:

09:17:54 20 Q. Good morning, sir.

09:17:55 21 A. Good morning.

09:17:56 22 Q. Would you please introduce yourself to the jury?

09:17:57 23 A. Sure. My name is Dr. Seth James Nielson. I live in

09:18:03 24 Austin, Texas.

09:18:04 25 Q. And what brings you here today, sir?

09:18:06 1 A. I'm here to testify about the '086 patent.

09:18:10 2 Q. What do you do for a living?

09:18:12 3 A. I am the founder and chief scientist of Crimson Vista,
09:18:17 4 a cybersecurity and engineering company.

09:18:20 5 Q. What year did you found Crimson Vista?

09:18:28 6 A. 2016.

09:18:28 7 Q. And you said you were a chief scientist. What is that?

09:18:31 8 A. Basically, I lead all of our investigations and
09:18:34 9 research efforts.

09:18:35 10 Q. Okay. Can you explain a little more, sir, about what
09:18:37 11 you do for Crimson Vista on a day-to-day basis?

09:18:41 12 A. Sure. We work with companies to help their computer
09:18:47 13 systems be secure. We work with small, large -- if they're
09:18:51 14 a small company, they maybe don't have any computer
09:18:53 15 security people. So we provide that specialty.

09:18:57 16 But even if they're a larger company, they may
09:19:00 17 have security people, but they still need a specialist to
09:19:03 18 help fill in gaps or holes.

09:19:05 19 And then, finally, if something does go wrong,
09:19:09 20 we're brought in to figure out what happened, how it
09:19:12 21 happened, why it happened.

09:19:14 22 And so within the broad cybersecurity realm, I
09:19:19 23 work a lot in areas of cryptography. That's secret codes
09:19:24 24 for protecting data.

09:19:25 25 I work with user authentication. That's like how

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09:19:29 1 a person identifies themselves to the computer like with a
09:19:32 2 log-in or biometric.

09:19:35 3 And I do a lot of forensics, which are just
09:19:39 4 investigations about what happened and how.

09:19:40 5 Q. Okay. I want to -- I want to focus -- you've said
09:19:46 6 "cybersecurity" a couple of times. So can you give us a
09:19:50 7 couple of examples of projects, like specific projects
09:19:52 8 you've worked on in the area of cybersecurity?

09:19:56 9 A. Sure. So one project is -- there was a financial
09:20:00 10 institution with retirement accounts, and a number of
09:20:04 11 people had fraudsters steal retirement funds, log in and
09:20:12 12 steal retirement funds.

09:20:14 13 And I did an investigation and found that the
09:20:16 14 financial institution was not correctly handling the
09:20:22 15 multifactor authentication. That's where you have to do
09:20:24 16 both -- like a log-in with a password and a biometric or
09:20:29 17 use your phone.

09:20:30 18 And because they weren't handling this correctly,
09:20:33 19 the fraudsters were able to -- to get in and steal
09:20:37 20 information. And so that helped the people be able to get
09:20:41 21 some restitution from the -- the financial company that had
09:20:44 22 not adequately protected their data.

09:20:46 23 In another case, it was an insurance matter. A
09:20:50 24 person was older and passed away, and there had been a
09:20:53 25 question about whether or not he had seen certain life

09:20:59 1 insurance data before he passed.

09:21:01 2 And so I led the investigation where we got access
09:21:06 3 to all of his devices, phones, computers, et cetera. We do
09:21:10 4 a forensic investigation to get in and see what kind of
09:21:13 5 email he's looked at and -- and which files have been
09:21:16 6 accessed.

09:21:18 7 And then just another example of one we're working
09:21:21 8 on currently, it's a law firm that handles a lot of
09:21:25 9 bankruptcies. And as you might imagine, bankruptcy can
09:21:28 10 deal with a lot of very sensitive information. You --
09:21:32 11 the -- the people involved have to lay out a lot of very
09:21:35 12 sensitive information.

09:21:37 13 And this law firm has employees both in the United
09:21:41 14 States and in Latin America with laptops and phones that
09:21:46 15 are carrying this very sensitive information around. And
09:21:49 16 the law firm is concerned about what happens if one of
09:21:53 17 these phones gets stolen or what happens if an employee is
09:21:58 18 bribed or leaves the company, how do we protect this very
09:22:02 19 sensitive data?

09:22:03 20 And so we're currently working with them to better
09:22:08 21 manage how they are controlling their data and -- and
09:22:12 22 monitoring the uses from the employees.

09:22:15 23 Q. Thank you, sir.

09:22:16 24 Now, is -- you said you were from Austin. Is your
09:22:20 25 company headquartered there?

09:22:21 1 A. Yes.

09:22:21 2 Q. Why -- why Austin?

09:22:23 3 A. Well, I originally was in Maryland when I started
09:22:29 4 Crimson Vista, but I -- I lived in Texas a number of years
09:22:32 5 ago for my Ph.D. My wife had lived in Austin briefly in
09:22:38 6 the late '90s, and, you know, we wanted to move back to
09:22:41 7 Austin. So we relocated ourselves and -- and relocated
09:22:45 8 Crimson Vista.

09:22:45 9 Q. Thank you.

09:22:46 10 Now, you mentioned your Ph.D. What -- what
09:22:47 11 college and graduate degrees do you hold and from where?

09:22:51 12 A. Well, for my graduate degrees, I have my Ph.D. from --
09:22:55 13 in computer science from Rice University. I also have a
09:22:59 14 Bachelor's degree and a Master's degree in computer science
09:23:02 15 from Brigham Young University.

09:23:03 16 Q. And, briefly, computer science, just again is what?

09:23:08 17 A. Well, computer science is the study of algorithms
09:23:11 18 and -- and operations of computers and associated
09:23:15 19 subfields.

09:23:15 20 Q. And what -- you may have said this. What years did you
09:23:18 21 receive those degrees?

09:23:20 22 A. My bachelor's degree in 2000. My master's degree in
09:23:23 23 2004. And my Ph.D. in 2009.

09:23:26 24 Q. During your time in school at BYU and Rice, were you
09:23:31 25 involved in any research projects?

09:23:33 1 A. Yes. I started research even as an undergraduate. So
09:23:39 2 in my undergraduate, I contributed to research that had to
09:23:43 3 do with making computer networks faster.

09:23:45 4 Then in my master's program, I was studying how
09:23:49 5 programmers think about software and how they design and
09:23:53 6 maintain it.

09:23:54 7 And then in my Ph.D., of course, it was computer
09:23:59 8 security research. It was kind of neat. I got to even
09:24:03 9 involve some economic principles in there. But -- but more
09:24:06 10 of the traditional stuff, as well. Like, we found
09:24:09 11 vulnerabilities in something Google had a product of at the
09:24:13 12 time and got to publish research on that.

09:24:15 13 Q. Have you continued to do those kinds of research
09:24:19 14 projects at Crimson Vista?

09:24:20 15 A. Yes. I continue to do research at Crimson Vista. I
09:24:24 16 applied for and got a grant from the Department of Defense,
09:24:28 17 specifically the Army, to do some research on ransomware
09:24:38 18 recovery.

09:24:38 19 Ransomware, you may have heard of it. People lock
09:24:39 20 up your computer and charge money to give it back to you.
09:24:44 21 And we did research on how you could get the computer data
09:24:47 22 back without paying the ransom.

09:24:50 23 Q. Thank you.

09:24:51 24 Now, have you -- have you done teaching during
09:24:53 25 your career?

09:24:54 1 A. Yes. I taught my first class while I was still a Ph.D.
09:24:58 2 student. I taught the data structures and algorithms class
09:25:01 3 at Rice as a Ph.D. student.

09:25:04 4 And then while I was in Maryland, I started
09:25:08 5 teaching the undergraduate and graduate level computer
09:25:11 6 security courses at the Johns Hopkins University.

09:25:15 7 And then when we moved to Texas, I started
09:25:17 8 teaching the undergraduate course -- excuse me -- in
09:25:21 9 computer security.

09:25:23 10 And most recently, I've been teaching a
09:25:25 11 specialized course that's actually offered through the law
09:25:27 12 school where they wanted a technical course for the law
09:25:31 13 students to cover cybersecurity, but assuming that they had
09:25:35 14 no technical background.

09:25:36 15 Q. And you said the law school. What law school?

09:25:38 16 A. At UT Austin.

09:25:41 17 Q. All right. Thank you.

09:25:42 18 Do you hold patents in the field of cybersecurity?

09:25:46 19 A. Yes, I have four patents on which I'm a named inventor.

09:25:50 20 Q. Have you written any books or publications in your
09:25:53 21 field of expertise, sir?

09:25:54 22 A. Yes, a couple of published research papers related to
09:25:58 23 things like how do you attack a chemical reactor was one of
09:26:03 24 the more fun ones, but -- and then I've published a book on
09:26:07 25 cryptography, those secret codes I was mentioning earlier,

09:26:12 1 and a book that's on cybersecurity more generally.

09:26:15 2 Q. And are these your two books, sir?

09:26:17 3 A. Yes.

09:26:17 4 Q. And this is cryptography?

09:26:19 5 A. Yes.

09:26:20 6 Q. And this is called Discovering Cybersecurity?

09:26:23 7 A. Yes.

09:26:23 8 Q. What use has been made of this book, sir?

09:26:26 9 A. That -- I've been using that book as my textbook in my
09:26:30 10 course with my law students.

09:26:32 11 Q. Thank you.

09:26:32 12 Now, you've mentioned biometrics a couple of
09:26:35 13 times. Can you remind the jury what biometrics is?

09:26:38 14 A. Sure. A biometric is any kind of physical
09:26:45 15 characteristic that's unique enough to a person that a
09:26:47 16 person could be identified by it. So a fingerprint, a face
09:26:51 17 scan, that kind of thing.

09:26:52 18 Q. And has your work over the years dealt with mobile
09:26:57 19 device security and biometrics?

09:26:58 20 A. Yes.

09:26:59 21 Q. Do you consider yourself an expert in mobile device
09:27:04 22 security, biometrics, and user authentication?

09:27:06 23 A. Yes.

09:27:08 24 Q. Do you consider yourself specifically an expert in the
09:27:12 25 technology of the '086 patent?

09:27:14 1 A. I do.

09:27:16 2 Q. How does your background in cybersecurity make you
09:27:20 3 uniquely qualified to opine about the '086 patent?

09:27:23 4 A. Well, the '086 patent includes some elements like
09:27:30 5 passwords and identification of users, and that's primarily
09:27:34 6 security at its heart.

09:27:36 7 Q. Thank you, sir.

09:27:39 8 MR. CUNNINGHAM: Your Honor, at this time, Samsung
09:27:42 9 tenders Dr. Nielson as an expert in security of computing
09:27:45 10 and mobile devices, biometrics, and user authentication.

09:27:48 11 MR. NESE: No objection, Your Honor.

09:27:49 12 THE COURT: Very well.

09:27:50 13 Q. (By Mr. Cunningham) Sir, did you prepare a set of
09:27:53 14 demonstratives for your testimony today?

09:27:54 15 A. I did.

09:27:56 16 Q. All right.

09:27:56 17 MR. CUNNINGHAM: Let's have DDX-3.2.

09:28:02 18 Q. (By Mr. Cunningham) So, first of all, at just a very
09:28:05 19 high level, what were you asked to do in this case?

09:28:07 20 A. Well, I've got three assignments, and I'll try to
09:28:11 21 signpost them as we go along so that it's clear which one
09:28:14 22 I'm talking about.

09:28:15 23 The first one is no infringement. So this is my
09:28:24 24 analysis about the Samsung phone not infringing the patent.

09:28:27 25 I have a very short section in the middle about

09:28:30 1 something called comparable licenses where the technology
09:28:32 2 is compared to something else.

09:28:34 3 And, finally, related to invalidity of the patent,
09:28:38 4 based on no written description.

09:28:41 5 Q. Thank you.

09:28:42 6 Were you able to complete all three of those
09:28:44 7 assignments?

09:28:45 8 A. I was.

09:28:45 9 Q. All right. Turning to DDX-3.3, what materials did you
09:28:51 10 study for your work on this case?

09:28:53 11 A. Sure. I used all these -- a wide range of materials.
09:29:01 12 I started with the patent, some of its related
09:29:04 13 documentation, which is called file history. I'll be
09:29:06 14 coming back to that a little later.

09:29:09 15 Of course, instructions from the Court, Samsung
09:29:12 16 technical documents, Galaxy S23 source code, some tests of
09:29:18 17 the Galaxy S23, testimony of Samsung engineers.

09:29:22 18 I spoke with Yangsoo Lee directly.

09:29:25 19 And, finally, testimony and testing by Maxell's
09:29:28 20 expert, Dr. Wobbrock.

09:29:30 21 Q. Thank you.

09:29:31 22 Now, focusing on No. 4 on the list, the Galaxy S23
09:29:36 23 source code that you studied, did you have any trouble
09:29:39 24 understanding that source code?

09:29:40 25 A. No.

09:29:41 1 Q. And focusing on the tests that you ran on the Galaxy

09:29:48 2 S23, what -- at a high level, what tests did you run?

09:29:51 3 A. Largely testing the fingerprint registration process,

09:29:54 4 and I'm -- I'll do some of that actually for the jury here.

09:29:58 5 Q. All right. Thank you.

09:29:58 6 And was there anything -- we got a list of seven

09:30:02 7 categories of information. Was there anything that you

09:30:05 8 asked for in this case that you weren't given or didn't

09:30:08 9 have access to?

09:30:09 10 A. No.

09:30:09 11 Q. Now, I know you were in the courtroom the other day for

09:30:16 12 Dr. Wobbrock's testimony. Did you also consider what he

09:30:19 13 had to say?

09:30:19 14 A. I did.

09:30:20 15 Q. All right. I want to start with the thing at the top

09:30:23 16 of the list, and that's the '086 patent.

09:30:26 17 MR. CUNNINGHAM: So let's have PX-3, please.

09:30:29 18 Q. (By Mr. Cunningham) At a high level, sir, what is the

09:30:44 19 '086 patent about?

09:30:44 20 A. So the '086 patent is about being able to recognize

09:30:49 21 different types of touches, like a finger pad versus a

09:30:53 22 fingertip. And then using that information in -- in

09:30:58 23 various ways, like, for example, to make a password

09:31:02 24 stronger or multiple ways of using a password.

09:31:08 25 Q. Thank you.

09:31:08 1 So let's look at a -- just a couple of the figures
09:31:12 2 to orient ourselves on the patent.

09:31:14 3 MR. CUNNINGHAM: So let's start with Figure 11A,
09:31:17 4 please.

09:31:17 5 Q. (By Mr. Cunningham) How does Figure 11A relate to
09:31:20 6 what's described in the '086 patent?

09:31:22 7 A. So this is an example from the '086 of how you can use
09:31:26 8 a pad and tip. So what's shown here in 11A is a typical
09:31:33 9 touchscreen like you might have on a phone or mobile
09:31:36 10 device, and it's enabling someone to put in a passcode, but
09:31:42 11 each number will be associated with a different type of
09:31:45 12 touch, like pad or tip.

09:31:48 13 Q. I see. So where it says "input by fingertip or finger
09:31:53 14 pad," is that what you're referring to, sir?

09:31:55 15 A. Yes.

09:31:55 16 Q. All right. Now, let's -- this figure has four -- looks
09:31:59 17 like four boxes that are all blank at the top where it
09:32:02 18 says, "password registration."

09:32:05 19 MR. CUNNINGHAM: So let's look at Figure 11C,
09:32:08 20 please.

09:32:08 21 Q. (By Mr. Cunningham) And what -- what has -- what has
09:32:11 22 changed here between the figure we just saw and this one?

09:32:14 23 A. Sure. So here in 11C, it's showing the -- the first
09:32:20 24 number of the passcode being registered. So you -- you may
09:32:24 25 have, with your own phones, put in a passcode where you had

09:32:29 1 to say my passcode is whatever your passcode is.

09:32:32 2 Here, the passcode is being registered. The first
09:32:36 3 number is 0. But it's not just recording the number. It's
09:32:39 4 also recording that it was pressed by the tip, and that's
09:32:43 5 what's being shown in the visual diagram.

09:32:45 6 Q. All right. And now Figure 11B is the next one I want
09:32:52 7 you to look at.

09:32:53 8 So what has changed in -- between what -- the one
09:32:56 9 we just looked at and 11B?

09:32:58 10 A. So this is the second digit being put in of the
09:33:06 11 passcode, the digit 5, and the system is recording both the
09:33:10 12 5 and that it's being put in with the pad of the finger and
09:33:14 13 not just the tip -- or and not -- instead of the tip.

09:33:19 14 Q. All right. Now, thank you.

09:33:19 15 MR. CUNNINGHAM: Now, finally, we'll have Figure
09:33:22 16 12A, please. And just when you -- when you get there,
09:33:26 17 Mr. Splansky, please blow up the -- there you go. Thank
09:33:28 18 you.

09:33:28 19 Q. (By Mr. Cunningham) So Figure 12A, sir, in the patent,
09:33:32 20 how does this relate to what we just saw?

09:33:34 21 A. So this is showing what's been stored inside the
09:33:37 22 device, like what data it's -- it's collected. And so the
09:33:41 23 registered passcode was 0528, but that's only part of it.
09:33:46 24 Each number was also associated with either a fingertip or
09:33:50 25 a finger pad.

09:33:54 1 So to unlock the phone, you have to repeat it. It
09:33:57 2 would be 0 with a tip, 5 with the pad, 2 with the pad, and
09:34:03 3 8 with the pad.

09:34:04 4 Q. And, to be clear, sir, the input at the bottom, could
09:34:09 5 that be with any combination of tip or pad?

09:34:15 6 A. Correct.

09:34:15 7 Q. Okay. Now, when we look at that input method, a
09:34:16 8 fingertip or finger pad, is that the same thing as
09:34:18 9 identifying someone's fingerprint?

09:34:20 10 A. No, that's -- that's different, and -- and there's a --
09:34:24 11 it's different in a couple of ways, actually.

09:34:26 12 The first one is to identify the pad versus tip,
09:34:31 13 the patent -- the '086 patent uses size. If it's -- if
09:34:37 14 it's large, it's going to say that's the pad, the big flat
09:34:41 15 spot. And if it's narrow, that's the tip spot.

09:34:45 16 Another way it's different from -- from
09:34:48 17 fingerprint is a fingerprint identifies you from the
09:34:52 18 fingerprint.

09:34:53 19 In this case, what's identifying the user is the
09:34:57 20 passcode, the 0528 that the user is putting in. So in both
09:35:02 21 ways, this is different from fingerprint recognition.

09:35:05 22 Q. Okay. Thank you, sir.

09:35:07 23 And, to be clear, to do the kind of password input
09:35:13 24 we're looking at in Figure 12A, would a device need to be
09:35:18 25 able to read a fingerprint?

09:35:19 1 A. No.

09:35:20 2 Q. Does the '086 patent say anything at all about using
09:35:24 3 fingerprints to identify a user, as opposed to tip and pad?

09:35:27 4 A. No, fingerprint is not mentioned or even implied and in
09:35:32 5 some cases is incompatible with what's described in the
09:35:35 6 '086.

09:35:35 7 Q. All right. We're going to come back to that in a few
09:35:38 8 minutes.

09:35:40 9 MR. CUNNINGHAM: But let's have DDX-3.4.

09:35:42 10 Q. (By Mr. Cunningham) Are we now going to discuss your
09:35:43 11 analysis of why the Samsung Galaxy S23 does not infringe
09:35:48 12 Claim 1 of the '086 patent?

09:35:49 13 A. That's correct.

09:35:51 14 Q. All right.

09:35:56 15 MR. CUNNINGHAM: So turning to DDX-3.5.

09:35:58 16 Q. (By Mr. Cunningham) What are -- what are you showing
09:35:59 17 us, first of all?

09:36:00 18 A. So this is Claim 1 of the patent, and it's been broken
09:36:05 19 down by limitation or element.

09:36:07 20 Q. And is this similar to what we saw with Dr. Wobbrock?

09:36:10 21 A. It is.

09:36:12 22 Q. All right. Now, you've highlighted parts of Element
09:36:16 23 1[a], 1[b], 1[f], 1[g]. Why did you do that?

09:36:20 24 A. Well, as I said earlier, there's no mention of
09:36:23 25 fingerprints or implication of it. In the claims, it's

09:36:27 1 about contact of a finger and whether it's being touched
09:36:31 2 with the pad or the tip, and as -- those -- those are the
09:36:36 3 parts that I've highlighted here.

09:36:37 4 Q. Thank you.

09:36:38 5 MR. CUNNINGHAM: Now, let's have -- let's go to
09:36:41 6 the next one, DDX-3.6.

09:36:43 7 Q. (By Mr. Cunningham) So now you've -- you've
09:36:47 8 highlighted in two different colors portions of that
09:36:50 9 Element 1[f]/1[g]. Can you explain why?

09:36:54 10 A. Yes. In my analysis, I found that there were no first
09:36:59 11 registering mode for inputting information by a pad of a
09:37:02 12 finger and a second registering mode for inputting input
09:37:08 13 information by an end of the finger.

09:37:09 14 Q. Okay. Let's -- do you have water up there? Do you
09:37:15 15 want water?

09:37:15 16 A. I'm fine. Thank you.

09:37:17 17 Q. Okay. Let's step back. What are Elements 1[f] and
09:37:21 18 1[g] all about?

09:37:22 19 A. So as I was illustrating with the figure from the
09:37:27 20 patent, the patent has different registering modes in order
09:37:31 21 to record information about pad and tip. And so Limitation
09:37:37 22 1[f] and 1[g] is about providing these two modes for
09:37:43 23 this -- this input entry.

09:37:45 24 Q. Okay. So these two -- first registering mode and
09:37:49 25 second registering mode involving a pad of the finger and

09:37:55 1 an end of the finger -- and I'll get to that language in a
09:37:58 2 minute -- does the Samsung Galaxy S23 do anything like
09:38:02 3 this?

09:38:02 4 A. No. The Samsung Galaxy S23 has a single mode for
09:38:08 5 registering a fingerprint, as opposed to two modes -- two
09:38:13 6 registering modes for the pad of the finger and the tip of
09:38:16 7 the finger or end of the finger, as the language uses it
09:38:19 8 here.

09:38:19 9 Q. Okay. And, to be clear, sir, does Maxell point to any
09:38:24 10 feature in the S23 that involves using multiple parts of
09:38:27 11 your finger to create and enter a password?

09:38:31 12 A. No.

09:38:32 13 Q. What does Maxell point to instead?

09:38:35 14 A. They point to fingerprint registration as what
09:38:44 15 infringes these two limitations.

09:38:45 16 Q. And does it?

09:38:46 17 A. No.

09:38:46 18 Q. At a high level, how is fingerprint registration in the
09:38:52 19 Samsung phone different from what is in the '086 patent?

09:38:55 20 A. So what's different is it's a registration mode for
09:39:00 21 this biometric information, the fingerprint. There's a
09:39:04 22 single mode, and its registration is for a fingerprint.
09:39:09 23 And there's one mode, one algorithm, one result. A
09:39:13 24 fingerprint is registered at the end of it.

09:39:18 25 Q. All right. Now, is -- sir, is there an advantage to

09:39:20 1 Samsung using a single mode for fingerprint authentication
09:39:24 2 or registration on the Samsung devices?

09:39:26 3 A. Yes. Because it's a fingerprint registration, there's
09:39:31 4 no need for these two separate modes like pad and tip that
09:39:35 5 you would associate with some other kind of identification
09:39:38 6 information. The fingerprint itself is the identification
09:39:43 7 information, and -- and it's both more secure and faster
09:39:47 8 and efficient to do this way.

09:39:49 9 Q. Thank you.

09:39:49 10 Now, from a security standpoint, just the security
09:39:53 11 of your phone, how are passwords and fingerprints
09:39:58 12 different, if -- if at all?

09:40:00 13 A. They are different. We use them both, but they're
09:40:03 14 different.

09:40:03 15 A password is identifying somebody by showing they
09:40:06 16 know a secret, like open sesame; whereas a biometric is
09:40:12 17 identifying some unique characteristic about them.

09:40:16 18 Q. All right. Now, I want you to -- I believe you have a
09:40:20 19 Galaxy S23 there at the witness stand with you. I'd like
09:40:23 20 you to demonstrate for the jury how the single
09:40:27 21 registration -- fingerprint registration mode on an actual
09:40:30 22 phone works.

09:40:31 23 And so I think you have a document camera. I'm
09:40:33 24 going to ask you to pull it in front of you and demonstrate
09:40:36 25 it so they can see what you're doing on the screen.

09:40:39 1 A. Sure.

09:40:40 2 Q. And this --

09:40:42 3 MR. CUNNINGHAM: Your Honor, for the record, this
09:40:44 4 is Defendants' Physical Exhibit 4, the phone.

09:40:52 5 And, Your Honor, I should ask permission. May he
09:40:55 6 demonstrate on the document?

09:40:56 7 THE COURT: He may, yes.

09:41:04 8 MR. CUNNINGHAM: All right. Thank you.

09:41:04 9 Q. (By Mr. Cunningham) All right. So we're seeing what
09:41:06 10 you're seeing, Dr. Nielson, right?

09:41:08 11 A. Yes, we're all seeing that I have no future as a hand
09:41:12 12 model.

09:41:12 13 Q. Okay. Got it. Me neither.

09:41:14 14 So what is the first thing you do?

09:41:15 15 A. So we'll unlock the phone. It does require that a PIN
09:41:22 16 has already been created. I already created the PIN ahead
09:41:26 17 of time, and I selected the very, very secure 1234 PIN for
09:41:34 18 simplicity.

09:41:35 19 Q. Would that get you kicked out of cybersecurity class?

09:41:39 20 A. Absolutely. I would fail my students.

09:41:42 21 Q. Okay. What's next?

09:41:43 22 A. All right. Next we go to the settings. That's here.

09:41:45 23 Q. Okay.

09:41:49 24 A. Next, we go down to security and privacy, which is
09:41:53 25 here. And there is a biometrics tab where you may --

09:42:03 1 Q. Okay. Stop there.

09:42:04 2 A. Sure.

09:42:04 3 Q. Stop there. Pull the phone down a bit. I want to see
09:42:07 4 what's at the top there.

09:42:08 5 A. I'm sorry.

09:42:09 6 Q. There you go.

09:42:11 7 A. I don't have this centered quite right.

09:42:14 8 Q. No, no, that's okay. That's okay. So it says face
09:42:16 9 recognition and fingerprints. Are those different, I take
09:42:19 10 it, biometrics?

09:42:20 11 A. Correct.

09:42:21 12 Q. Okay. And you're going to select fingerprints?

09:42:23 13 A. Yes.

09:42:25 14 Q. All right.

09:42:25 15 A. So, again, I enter the very secure PIN. So the
09:42:35 16 instructions here are for registering the fingerprints, and
09:42:39 17 we press continue to move forward.

09:42:41 18 Would you like me to move forward?

09:42:44 19 Q. Please hit continue.

09:42:47 20 Okay. So, now, what does it start on the screen?
09:42:50 21 We're about to start the registration process.

09:42:52 22 A. And I apologize for the glare. See if I can have just
09:42:55 23 a little -- there we go. That's better, I think.

09:42:58 24 Q. Yeah.

09:42:59 25 A. All right. To get the best scan, press with the pad of

09:43:01 1 your finger inside the circle, then lift it when the circle
09:43:06 2 is fully highlighted. Repeat until you reach 100 percent.
09:43:09 3 Q. All right. Let's -- let's start the process. Hit
09:43:12 4 register, please.
09:43:14 5 Okay. So now press your finger inside the circle.
09:43:17 6 Okay. So what happened?
09:43:18 7 A. So I pressed inside the circle with my pad, and the --
09:43:24 8 the circle went all the way around to the top.
09:43:27 9 Q. Okay. Now, it says "lift it when the circle is fully
09:43:31 10 highlighted." So we saw that circle go around. Why do you
09:43:35 11 need to lift your finger?
09:43:36 12 A. So the sensor needs to be able to take multiple
09:43:40 13 measurements in order to get an accurate reading or
09:43:45 14 template of the fingerprint.
09:43:47 15 Q. And what is the -- what is the percentage indicator
09:43:50 16 there showing?
09:43:51 17 A. It's -- it's a representation of how complete that --
09:43:57 18 those readings are in order to get the full template.
09:44:00 19 Q. Okay. So put -- put your finger back down. What
09:44:03 20 happened?
09:44:04 21 A. So it went up to 30 percent on the second press.
09:44:07 22 Q. Okay. Now, from 0 to 20, 20 to 30, did -- did anything
09:44:13 23 change when you picked your finger up and put it back down?
09:44:16 24 A. In terms of the phone's operations, no.
09:44:19 25 Q. Okay. So what's next?

09:44:20 1 A. All right. We'll press it again.

09:44:24 2 Q. Okay. Went up to 39.

09:44:25 3 A. Yep.

09:44:26 4 Q. Okay. So let's press again. 47, making progress.

09:44:33 5 Press again.

09:44:36 6 Now, I notice that time it didn't read anything.

09:44:38 7 Right? You had to press it twice to get to 54 percent. So

09:44:43 8 please explain what happened there.

09:44:44 9 A. Yes. So the sensor is -- is checking whether or not it

09:44:46 10 thinks it has a good reading, and if doesn't think it has a

09:44:50 11 good reading, it doesn't advance.

09:44:52 12 Q. All right. Let's keep going. Thank you.

09:44:54 13 61 percent. 66 percent. 71 percent.

09:45:00 14 Now, you missed there.

09:45:02 15 A. I did.

09:45:02 16 Q. 76. 83. Almost there.

09:45:13 17 Okay. Fingerprint added. Add another, question

09:45:17 18 mark.

09:45:18 19 A. We'll just say done, I think.

09:45:19 20 Q. Let's say done.

09:45:21 21 So now you're at 100 percent. What has happened?

09:45:23 22 A. At the end of the entire process, it has created a

09:45:29 23 single fingerprint template. So each of the readings was

09:45:33 24 used to create one fingerprint template for -- for this

09:45:37 25 finger.

09:45:41 1 Q. And -- and why is that important, sir?

09:45:43 2 A. Well, there was a single mode of operation here. It
09:45:47 3 needed to register a fingerprint.

09:45:49 4 As data is read in, it -- it's being used to
09:45:49 5 combine for the full fingerprint registration.

09:45:55 6 But at the end, there was one algorithm, one mode,
09:45:57 7 and one fingerprint registration all the way through.

09:46:01 8 Q. All right. Now, speaking of sirens, is this similar to
09:46:05 9 or different from doing a fingerprint on ink, like you
09:46:12 10 would do, say, at, I don't know, the police station?

09:46:14 11 A. Yeah. I -- I did the Fingerprinting Merit Badge as a
09:46:16 12 Boy Scout. The -- when you do a fingerprint, you roll your
09:46:22 13 finger from side to side in order to get a more accurate
09:46:26 14 impression of the ridges in the fingerprint.

09:46:29 15 Part of the problem is we think of fingerprints as
09:46:32 16 two-dimensional, but they're three-dimensional. You have
09:46:36 17 microridges in the fingerprint. And so part of the reason
09:46:40 18 for needing the multiple touches is to get an accurate
09:46:44 19 analysis of that fingerprint data.

09:46:46 20 Q. Now, sir, you touched the screen, you lifted your
09:46:53 21 finger off and touched it again maybe eight or nine times.
09:46:57 22 Right?

09:46:57 23 A. That sounds about right.

09:46:58 24 Q. How many of those times did you touch with the pad of
09:47:02 25 your finger?

09:47:03 1 A. Every time.

09:47:03 2 Q. How many times did you touch with the tip of your
09:47:06 3 finger or the end of your finger?

09:47:07 4 A. I didn't.

09:47:08 5 Q. Dr. Wobbrock has said that the fingerprint registration
09:47:14 6 process on that phone that you just used requires somebody
09:47:19 7 to use an end of their finger. Is that true or false?

09:47:22 8 A. No. I just demonstrated that's not necessary.

09:47:24 9 Q. Okay. Now, thank you.

09:47:29 10 You said that the -- the phone creates a template
09:47:31 11 of your fingerprint, a template. What does the phone do
09:47:35 12 with that template?

09:47:36 13 A. Well, the template, which is the feature data that's
09:47:39 14 been extracted, is stored and then used later for
09:47:42 15 comparison for unlocking the phone with a fingerprint.

09:47:46 16 Q. Is it stored as data?

09:47:48 17 A. Yes.

09:47:48 18 Q. Now, Dr. Wobbrock also testified that when you lift
09:47:52 19 your finger up and put it back down during the process you
09:47:55 20 just showed, the phone has entered a different mode; is
09:47:58 21 that correct?

09:47:59 22 A. No.

09:47:59 23 Q. How do you know?

09:48:01 24 A. Well, again, it's doing the same sensor reading. Each
09:48:08 25 time it's looking for more data to get a more full and

09:48:12 1 accurate template. But -- but it's not going into a
09:48:16 2 different mode of operation or using a different algorithm.
09:48:20 3 Q. Okay. So let's -- you see -- we've seen the
09:48:23 4 demonstration, sir. So let's -- did you also determine
09:48:25 5 what's happening under the glass, under the hood?
09:48:28 6 A. I did.
09:48:28 7 Q. All right.
09:48:30 8 MR. CUNNINGHAM: So let's have DTX-142, please.
09:48:35 9 Q. (By Mr. Cunningham) This is the Samsung fingerprint
09:48:37 10 specification that we spent some time with, with
09:48:39 11 Dr. Wobbrock the other day.
09:48:40 12 Do you remember that?
09:48:41 13 A. I do.
09:48:42 14 Q. Okay.
09:48:43 15 MR. CUNNINGHAM: So let's -- let's go right to
09:48:45 16 Page 13.
09:48:46 17 Q. (By Mr. Cunningham) I want to get into this diagram.
09:48:51 18 MR. CUNNINGHAM: Please blow up Figure 9, Enroll
09:48:56 19 Diagram.
09:48:56 20 Q. (By Mr. Cunningham) Sir, you've studied this diagram?
09:48:58 21 A. I have.
09:48:58 22 Q. And -- and you've -- you've used the word "algorithm" a
09:49:01 23 few times. Can you just remind us what an algorithm means
09:49:06 24 to a software engineer like yourself?
09:49:07 25 A. Sure. So an algorithm is just a series of steps for

09:49:10 1 solving a problem or -- or computing a result. So when I
09:49:13 2 say there's an algorithm, there is an algorithm that is
09:49:18 3 used to compute the fingerprint template.

09:49:20 4 Q. All right. And does this diagram, this algorithm,
09:49:25 5 describe what's going on in the software when you register
09:49:27 6 your fingerprint, like you just did?

09:49:30 7 A. It does.

09:49:38 8 Q. Now, I covered some of this -- so we'll go through it
09:49:41 9 quickly. I covered some of this with Dr. Wobbrock. But
09:49:45 10 you see a set of numbers -- a set of steps, 1 through 14,
09:49:48 11 down the left-hand side. Are those the steps that the
09:49:51 12 software goes through when you do this fingerprint
09:49:54 13 registration process?

09:49:54 14 A. At this level, yes.

09:49:55 15 Q. Okay. And "at this level," meaning there are things
09:49:58 16 happening in the source code that this is describing?

09:50:01 17 A. Correct.

09:50:05 18 Q. All right. So Steps 1 and 2, what are those? Open
09:50:07 19 device, device power on.

09:50:08 20 A. So it may be a little confusing when it says device.
09:50:11 21 It's not the phone. It's talking about the fingerprint
09:50:14 22 sensor. So the fingerprint sensor kind of operates like a
09:50:21 23 little independent piece. So the first step is to get it
09:50:24 24 activated and ready to receive input.

09:50:26 25 Q. All right. Now, down to Step No. 5, it says:

09:50:33 1 Fingerprint -- finger down, excuse me, interrupt triggered.
09:50:37 2 Can you explain what that means?
09:50:39 3 A. Sure. "Interrupt" is another computer programming
09:50:43 4 term. The phone is doing things, and it needs to kind of
09:50:46 5 be interrupted to handle the fingerprint.
09:50:50 6 So when the finger comes down, it triggers an
09:50:55 7 interrupt to say: Hey, pay attention. We're going to
09:50:58 8 start collecting data.
09:50:59 9 Q. And so, to be clear, sir, is that the moment that you
09:51:01 10 place your finger on -- in that circle?
09:51:02 11 A. Yes.
09:51:03 12 Q. Okay. Now Steps 6 and 7 say CAPTURE_START and
09:51:12 13 CAPTURE_COMPLETED. So what's happening here?
09:51:14 14 A. So it starts to read the data. You'll notice it has a
09:51:18 15 word "loop" here. If it doesn't get a good read, that's
09:51:22 16 where it makes me pick up and do it again.
09:51:24 17 And once it has a good read, it gets to Step 7 and
09:51:28 18 says CAPTURE_COMPLETED.
09:51:31 19 Q. And so, to be clear, sir, is the CAPTURE_START step and
09:51:34 20 the CAPTURE_COMPLETED step, is that 0 to a hundred or 0 to
09:51:38 21 some interim percentage?
09:51:39 22 A. Yeah, so this is one of those moving it up 20 percent
09:51:43 23 or 10 percent or 9 percent.
09:51:45 24 Q. All right. Now, Steps 11 or 12, sort of down there at
09:51:49 25 the bottom, say waiting --

09:51:50 1 MR. CUNNINGHAM: 11 and 12, please.

09:51:52 2 Q. (By Mr. Cunningham) Waiting finger up interrupt and
09:51:56 3 finger up event triggered. What are these two?

09:51:59 4 A. So the waiting step is kind of obvious. It's while
09:52:03 5 you've got your finger still down, it's -- it's just
09:52:06 6 waiting.

09:52:07 7 It has -- it's not going to do anything further
09:52:09 8 until you pick up your finger, and that's what Step 12 is,
09:52:16 9 ah, the phone detects the finger has been picked up, so now
09:52:19 10 it can move on.

09:52:20 11 Q. Okay. And by moving on, we covered this -- this sort
09:52:23 12 of big orange, I don't know, almost square but kind of
09:52:29 13 rounded at the corner thing that says "loop" on it with
09:52:35 14 Dr. Wobbrock. Can you describe what that loop means?

09:52:37 15 A. Loop is another computer science term we use for when
09:52:40 16 we have a process that repeats. And so this is the process
09:52:43 17 of repeating to get the multiple touches until you get to a
09:52:48 18 hundred percent.

09:52:48 19 Q. Okay. Now, as an expert in computer science, sir, in
09:52:53 20 the software of mobile devices, when you see a loop like
09:52:57 21 this with these steps, how does that inform your opinion
09:53:03 22 that the registration mode -- the registration process,
09:53:07 23 excuse me, in the Galaxy S23 uses only one mode?

09:53:10 24 A. Well, there's one mode that gets us to a result. This
09:53:15 25 entire process is -- is -- even with the loop, is a

09:53:19 1 sequence of algorithms that gets us down to a fingerprint
09:53:23 2 registration with one template.

09:53:25 3 If there were multiple modes, there would be
09:53:29 4 branching or some kind of way of showing the -- the way you
09:53:38 5 take two paths -- kind of like how in the patent it showed
09:53:43 6 you could end with a pad or a tip that's two different
09:53:48 7 routes out, this only has one route to one conclusion.

09:53:52 8 Q. I see. Now, you mentioned branching. Were you in the
09:53:56 9 courtroom yesterday -- I believe it was yesterday, maybe
09:53:57 10 I'm losing track -- when Maxell's expert, Dr. Balakrishnan,
09:54:01 11 was answering questions about the '848 patent?

09:54:04 12 A. Yes.

09:54:04 13 MR. CUNNINGHAM: Okay. Let's have Page 665 of the
09:54:07 14 trial transcript, and I believe it's Line 7 through 15.

09:54:18 15 Q. (By Mr. Cunningham) This is Dr. Balakrishnan's
09:54:20 16 testimony, and he was asked: And at the highest level, in
09:54:23 17 order for the two modes to be different, they have to be
09:54:26 18 running different algorithms, right?

09:54:28 19 There's an answer. There's an: Uh-huh.

09:54:30 20 And then he says "yes" on Line 12.

09:54:33 21 He's asked: Yes, right? You agree with that?

09:54:37 22 Yes.

09:54:39 23 Do you remember that testimony, sir?

09:54:41 24 A. I do.

09:54:41 25 Q. Do you agree with Dr. Balakrishnan?

09:54:43 1 A. I do. You need two algorithms for two different modes.
09:54:46 2 Q. Okay. Can you explain what you mean by two algorithms
09:54:49 3 for two different modes?
09:54:50 4 A. Sure. So, again, going back to the '086 patent, in the
09:54:56 5 '086 patent, they have a mode, an algorithm for detecting.
09:54:59 6 There's a pad. And that algorithm is, is it a wide area?
09:55:05 7 And if it is, then you have a registration mode, and you
09:55:08 8 register a pad.
09:55:10 9 And it's got a second algorithm. Is it a small
09:55:12 10 area? And if it's a small area, then, oh, it's a tip, and
09:55:16 11 it registers a tip. Two algorithms, two outcomes.
09:55:18 12 Q. Thank you.
09:55:20 13 MR. CUNNINGHAM: And you can take that down,
09:55:22 14 Mr. Splansky.
09:55:23 15 Q. (By Mr. Cunningham) Now, Dr. Wobbrock also testified
09:55:26 16 that he reviewed the source code, the actual software that
09:55:29 17 runs on the S23 that you've got there at the witness stand
09:55:34 18 that does the fingerprint registration process. Did you
09:55:37 19 also study that source code?
09:55:38 20 A. I did.
09:55:38 21 Q. Were you able to understand it?
09:55:40 22 A. Yes.
09:55:41 23 Q. Does the source code support Dr. Wobbrock's two-mode
09:55:46 24 theory?
09:55:47 25 A. No.

09:55:47 1 Q. Why do you say that?

09:55:48 2 A. Because, again, the source code -- the source code
09:55:53 3 demonstrates what we were just talking about with the --
09:55:58 4 what's shown in the technical diagram, which is there's a
09:56:01 5 single mode to get you through to a fingerprint
09:56:06 6 registration.

09:56:06 7 Q. Thank you.

09:56:07 8 MR. CUNNINGHAM: Now, let's go back to DDX-3.6.

09:56:10 9 Q. (By Mr. Cunningham) I want to go back to the - to the
09:56:12 10 claim language, and in particular the language you have
09:56:15 11 highlighted in 1[f] and 1[g].

09:56:20 12 Because you've shown us, sir, that the Galaxy S23
09:56:24 13 uses one mode for registering a fingerprint, what impact
09:56:29 14 does that have on your analysis of Claim 1?

09:56:30 15 A. So what I've shown is that there are not two
09:56:37 16 registering modes in the Samsung Galaxy S23, and,
09:56:41 17 therefore, this limitation is not met. And, therefore, the
09:56:50 18 Galaxy S23 does not infringe Claim 1.

09:56:52 19 Q. Now, to be clear, sir, is that -- is finding one
09:56:56 20 element missing in a claim, when you're looking at a
09:56:59 21 product and you're looking at a patent claim, is finding
09:57:02 22 one element missing in a claim enough to say no
09:57:04 23 infringement?

09:57:05 24 A. Correct.

09:57:06 25 Q. Okay.

09:57:08 1 MR. CUNNINGHAM: So let's turn to DDX-3.7.

09:57:11 2 Q. (By Mr. Cunningham) Is it appropriate, then, for you
09:57:14 3 to put a red X out to the side of these claim elements?

09:57:17 4 A. Yes, this claim is not performed by the -- the Galaxy
09:57:24 5 S23.

09:57:24 6 Q. And are you certain of that conclusion?

09:57:27 7 A. Yes.

09:57:32 8 Q. All right. Dr. Nielson, I -- you've now explained
09:57:35 9 the -- the single mode issue.

09:57:37 10 Do you have a second reason why the Galaxy S23
09:57:43 11 does not infringe Claim 1?

09:57:44 12 A. I do.

09:57:45 13 Q. What is that?

09:57:46 14 A. So I've emphasized that there are not two registration
09:57:51 15 modes, but I also will show that there isn't a registration
09:58:00 16 mode for inputting input information by the end of the
09:58:03 17 finger.

09:58:03 18 Q. Right. So -- so the -- the language you just were
09:58:06 19 reading from is here highlighted in green, and let's just
09:58:09 20 be clear, second registering mode for inputting input
09:58:13 21 information by an end of the finger.

09:58:16 22 Right? I read that right?

09:58:19 23 A. Correct.

09:58:19 24 Q. Okay. So focusing on that language, "an end of the
09:58:25 25 finger." Okay? You with me?

09:58:26 1 A. Yes.

09:58:26 2 Q. All right. So let's have -- let's -- we're just going
09:58:28 3 to start with a little terminology here.

09:58:30 4 MR. CUNNINGHAM: Let's have DDX-8 on the screen.

09:58:34 5 Q. (By Mr. Cunningham) Were you here, sir, when I had a
09:58:36 6 fairly lengthy discussion with Dr. Wobbrock about the
09:58:39 7 meaning of the words "an end of the finger" in Claim 1?

09:58:44 8 A. Yes.

09:58:44 9 Q. And so the first question I have for you, sir, is -- is
09:58:47 10 really simple. Do you agree with Dr. Wobbrock's view of
09:58:52 11 what an end of the finger means in Claim 1?

09:58:56 12 A. I don't.

09:58:58 13 Q. When the claim says "an end of the finger," how do you
09:59:03 14 interpret that?

09:59:04 15 A. I believe a person of ordinary skill in the art at the
09:59:07 16 time of the patent would have only understood that to be
09:59:10 17 the tip of the finger. The -- the end of the finger, I
09:59:16 18 don't know how to describe it other than to say "at the end
09:59:18 19 of the finger."

09:59:19 20 MR. CUNNINGHAM: Mr. Splansky, would you put a
09:59:21 21 green circle the end at the tip -- the word "end" and "the
09:59:28 22 tip of the finger," please. Keep going. There. Stop.

09:59:33 23 Q. (By Mr. Cunningham) So right there, did I -- did we
09:59:34 24 draw that circle correctly?

09:59:36 25 A. Yes.

09:59:36 1 Q. All right. And -- and does the words in the claim, "an
09:59:40 2 end of the finger," include the line out to the left, what
09:59:44 3 he called the left end of the finger, the line out to the
09:59:48 4 right, the right end of the finger, or the one at the --
09:59:52 5 sort of at the first knuckle that we were talking about
09:59:55 6 being a -- the back end of the finger? Does -- do the
09:59:58 7 words in the claim include any of those places?

10:00:00 8 A. No.

10:00:01 9 Q. Is there any question, as a person of skill in the art,
10:00:05 10 in your mind, about your conclusion as to what "an end of
10:00:08 11 the finger" means?

10:00:09 12 A. None whatsoever.

10:00:10 13 Q. Now, to be clear, sir, were you a person of ordinary
10:00:23 14 skill in the art in 2011 when Maxell filed a claim with the
10:00:27 15 Patent Office that says "an end of the finger"?

10:00:31 16 A. I was.

10:00:36 17 MR. CUNNINGHAM: All right. Let's take that down,
10:00:38 18 please. And go back to the second reason the Galaxy S23
10:00:42 19 does not infringe Claim 1.

10:00:44 20 Let's have DDX-3.8.

10:00:46 21 Q. (By Mr. Cunningham) Sir, this is something that we
10:00:49 22 just looked at during your demonstration, and I just want
10:00:54 23 to -- to clarify for you, how does the -- the instructions
10:00:56 24 that you see on the screen when you're registering your
10:01:00 25 fingerprint inform your opinion about the language "input

10:01:05 1 information by an end of the finger"?

10:01:10 2 A. Yes. So I know we've seen this a couple of times, but
10:01:13 3 indulge me again to -- to point it out again. The -- the
10:01:15 4 instructions are to press with the pad of the finger.
10:01:18 5 There are no instructions to press with the tip or end of
10:01:22 6 the finger.

10:01:24 7 Q. Okay. Now, I had some difficulty with Dr. Wobbrock on
10:01:29 8 this issue, sir. So -- so say it again. Is there ever an
10:01:32 9 instruction on the phone to use the tip of your finger to
10:01:38 10 register a fingerprint?

10:01:41 11 A. No.

10:01:43 12 MR. CUNNINGHAM: Let's have PX-56.

10:01:46 13 Q. (By Mr. Cunningham) This is another piece of evidence
10:01:48 14 that I covered with Dr. Wobbrock, the user manual for this
10:01:51 15 phone.

10:01:53 16 Did you study this, sir?

10:01:55 17 A. I did.

10:01:56 18 Q. All right.

10:01:56 19 MR. CUNNINGHAM: Now, if we could just put up the
10:01:58 20 bottom of Page 149, which is -- this is the part I went
10:02:03 21 through with him. The bottom of Page 149 with the top
10:02:07 22 about two-thirds of the page -- Page 150. I want it all
10:02:14 23 together if we can -- if we can read it that way,
10:02:16 24 Mr. Splansky.

10:02:16 25 Q. (By Mr. Cunningham) All right. You reviewed these

10:02:32 1 pages, sir?

10:02:33 2 A. I did.

10:02:34 3 Q. Okay. Now, there's a section that begins at the top
10:02:36 4 that says "better fingerprint recognition."

10:02:39 5 You see that?

10:02:40 6 A. Yes.

10:02:40 7 Q. And then there's a section, the middle section,
10:02:42 8 "registering fingerprints," correct?

10:02:44 9 A. Yes.

10:02:45 10 Q. And, finally, unlocking the screen with your
10:02:49 11 fingerprints. So three sections here.

10:02:54 12 MR. CUNNINGHAM: The bullet right above the
10:02:55 13 registering fingerprints, if you could highlight that,
10:02:58 14 Mr. Splansky, that begins: If you bend your finger and use
10:03:02 15 a fingertip.

10:03:04 16 Q. (By Mr. Cunningham) How does this inform your opinion
10:03:08 17 about whether the Samsung device infringes Claim 1 of the
10:03:12 18 '086 patent?

10:03:12 19 A. So as it's explaining here, this device is not really
10:03:17 20 designed to use a fingertip. And it says that you get
10:03:20 21 better fingerprint recognition when you do not use a tip.

10:03:28 22 And so, again, this supports my opinion that there
10:03:30 23 is no registration mode for receiving input information by
10:03:37 24 the end of a finger.

10:03:38 25 Q. Okay. Now -- now, to be clear, sir, Dr. Wobbrock tried

10:03:43 1 to say that that bullet point you've got highlighted, that
10:03:47 2 if you bend your finger or use a fingertip bullet point,
10:03:51 3 only relates to after you've registered your fingerprint,
10:03:54 4 and you're trying to identify yourself with your
10:03:56 5 fingerprint. Is that true?

10:03:57 6 A. No. There is a section for registering fingerprints
10:04:04 7 here. There's a section for unlocking the screen with
10:04:08 8 fingerprints here. This instruction comes before both
10:04:15 9 under a separate section that is for better fingerprint
10:04:17 10 recognition. So it's not just for unlocking. It's for the
10:04:20 11 registration, as well.

10:04:21 12 Q. All right.

10:04:23 13 MR. CUNNINGHAM: Now, you can take that down, sir.

10:04:25 14 Q. (By Mr. Cunningham) Did you speak to Mr. Lee --
10:04:28 15 Yangsoo Lee, the Samsung engineer, about this issue also?

10:04:31 16 A. I did.

10:04:31 17 Q. And what did he tell you?

10:04:33 18 A. He also said that the system was not designed to read
10:04:37 19 from a tip.

10:04:38 20 Q. Did you also test for this no fingertip issue?

10:04:45 21 A. I did.

10:04:45 22 Q. What test did you run?

10:04:46 23 A. I also tested to try and do a registration with the
10:04:55 24 tip. In my test, I only ever got the tip to work if there
10:05:01 25 was more press that started bringing in some of the pad. I

10:05:04 1 never got a pure tip to work.

10:05:06 2 Q. Okay. And so based on your testing, sir, is using your
10:05:10 3 fingertip ever necessary to register a fingerprint on the
10:05:14 4 Samsung phone?

10:05:14 5 A. No.

10:05:14 6 Q. Now, you were in the courtroom when Dr. Wobbrock spoke
10:05:20 7 about the test that he supervised, right?

10:05:22 8 A. Yes.

10:05:23 9 Q. And you were in the courtroom when I went through with
10:05:28 10 Dr. Wobbrock the video of the test, including that -- that
10:05:32 11 30-second piece that he didn't show the jury, right?

10:05:35 12 A. Yes.

10:05:36 13 Q. Have you carefully studied that video?

10:05:38 14 A. I have.

10:05:39 15 Q. All right. In the interest of time, I'm not going to
10:05:41 16 go through the whole 30-second span.

10:05:45 17 MR. CUNNINGHAM: But let's have PTX-48 stopped at
10:05:48 18 the 2:33 mark, just to get a still image up.

10:05:53 19 Q. (By Mr. Cunningham) Now, this is part of that
10:05:56 20 30-second gap that I showed him; is that true?

10:05:59 21 A. Yes.

10:05:59 22 Q. What did we all see happening, sir, in that 30-second
10:06:04 23 sequence?

10:06:05 24 A. Repeatedly tried to register with a tip that didn't
10:06:08 25 work. And, again, we saw when I did my registration, that

10:06:15 1 it is normal to have a reading or two that the sensor, for
10:06:18 2 whatever reason, doesn't like.

10:06:23 3 But, in this case, I believe we had over 10 -- 13
10:06:26 4 or so different attempts with the tip that did not work, in
10:06:29 5 a row.

10:06:30 6 Q. And is that significant to your analysis?

10:06:33 7 A. Yes. Again, it supports my analysis that there isn't a
10:06:39 8 registration mode for receiving input from a tip.

10:06:45 9 Q. All right. So let's show one -- very short piece of
10:06:50 10 this video at the end of that 30-second run.

10:06:55 11 MR. CUNNINGHAM: So let's have 2:53 through 2:55.
10:07:00 12 I went through this with Dr. Wobbrock. I want you to
10:07:04 13 comment on it, as well.

10:07:06 14 Q. (By Mr. Cunningham) Okay. You want to see it again or
10:07:09 15 did you catch it?

10:07:10 16 A. I caught it.

10:07:11 17 Q. All right. Now, Dr. Wobbrock tried to say that when
10:07:15 18 she touched that phone to make it go from 20 percent to 30
10:07:21 19 percent, I think he tried to say that she was using her
10:07:26 20 fingertip. Do you agree?

10:07:27 21 A. I don't.

10:07:27 22 Q. What are you seeing here, sir?

10:07:29 23 A. I mean, it looks to me like a pad. I wasn't there
10:07:34 24 either to, you know, feel it out. But it -- from this
10:07:38 25 top-down view, it looks like a pad to me.

10:07:41 1 Q. Okay. So now, does Dr. Wobbrock's -- the videos of the
10:07:44 2 testing that he supervised, does his own testing inform
10:07:49 3 your opinion about whether Claim 1 of the '086 patent is
10:07:53 4 infringed by the Samsung phone that we're seeing on the
10:07:56 5 screen?

10:07:56 6 A. Yes, I think his testing, again, illustrates how there
10:08:02 7 is not a registration mode that is for receiving input by
10:08:08 8 the end or tip of a finger.

10:08:10 9 Q. All right. Thank you.

10:08:11 10 MR. CUNNINGHAM: Now, let's go back, Mr. Splansky,
10:08:14 11 to DDX-3.9.

10:08:23 12 Q. (By Mr. Cunningham) I see you've added a second X out
10:08:27 13 to the side next to this Element 1[f]/1[g]. What
10:08:31 14 conclusion do we draw from that?

10:08:33 15 A. So this is just a second reason why this limitation is
10:08:36 16 not performed by the S23. So a second reason why the S23
10:08:40 17 does not infringe Claim 1 of the '086 patent.

10:08:44 18 Q. All right. Now, focusing on the green language, second
10:08:48 19 registering mode for inputting input -- input information
10:08:52 20 by an end of the finger, does Samsung even want to do that
10:08:58 21 limitation of the claim?

10:08:59 22 A. Well, no. Fingerprint is about collecting a lot of
10:09:05 23 fingerprint data so that it's a good reading and a good
10:09:09 24 template. And having a registration mode where you would
10:09:13 25 focus on collecting data from the tip where there's the

10:09:16 1 least amount of available fingerprint information is not
10:09:20 2 useful for a fingerprint registration.

10:09:23 3 Q. And so what would happen on the Galaxy S23 if users
10:09:26 4 were instructed, use your fingertip every so often? What
10:09:31 5 would happen?

10:09:32 6 A. I mean, I think it would lead to a lot of frustration
10:09:35 7 from -- from things that are not recognized. And maybe to
10:09:41 8 inaccurate fingerprint results, as well.

10:09:45 9 Q. Thank you.

10:09:46 10 Now, does that, sir, conclude your opinions about
10:09:50 11 why Samsung does not use Claim 1 of the '086 patent?

10:09:52 12 A. Yes.

10:09:57 13 Q. All right.

10:09:57 14 MR. CUNNINGHAM: So let's -- let's turn to
10:10:02 15 DDX-3.10, please.

10:10:02 16 Q. (By Mr. Cunningham) So we're moving to your second
10:10:04 17 topic, which is, as we see on the screen, comparable
10:10:07 18 license.

10:10:07 19 So in your work on this case, sir, did you review
10:10:10 20 a Samsung license agreement?

10:10:11 21 A. I did.

10:10:11 22 MR. CUNNINGHAM: And turning to DDX-3.11.

10:10:16 23 Q. (By Mr. Cunningham) What Samsung agreement did you
10:10:18 24 review?

10:10:18 25 A. This is called the 2022 Lonestar Agreement.

10:10:24 1 MR. CUNNINGHAM: And for the record, Your Honor,
10:10:25 2 that is DTX-173.

10:10:29 3 Q. (By Mr. Cunningham) So, sir, what -- what exactly did
10:10:32 4 you do to review this license?

10:10:34 5 A. So I looked at some patents that were part of this
10:10:37 6 license agreement, different patents. This is the
10:10:43 7 9,241,082 and the 9,560,293 that were part of a different
10:10:48 8 licensing agreement. And did an analysis as to whether
10:10:53 9 those patents were technically comparable to the '086.

10:10:57 10 Q. And as a result, sir, of your analysis of the agreement
10:11:02 11 and the two patents that you just described, did you
10:11:05 12 conclude that this Lonestar agreement is -- from a
10:11:09 13 technical perspective is technically comparable to the '086
10:11:12 14 patent?

10:11:12 15 A. I did.

10:11:14 16 Q. All right. Thank you.

10:11:14 17 We knew that was going to be quick.

10:11:18 18 MR. CUNNINGHAM: So let's have 3.12, please,
10:11:26 19 DDX-3.12.

10:11:28 20 Q. (By Mr. Cunningham) We're turning to the third and
10:11:29 21 final topic, no written description.

10:11:31 22 So can you describe your overall conclusion on the
10:11:34 23 topic of no written description?

10:11:35 24 A. Sure. So this is a slightly different analysis. We're
10:11:38 25 back to the '086 patent. And my analysis is that the '086

10:11:43 1 patent, Claim 1, is invalid for not having sufficient
10:11:48 2 written description.

10:11:51 3 Q. All right. Thank you.

10:11:52 4 Now, before we go further, the jury has heard
10:11:55 5 evidence about certain Patent Office reviews that are going
10:11:58 6 on right now, including on the '086 patent.

10:12:03 7 So just at a high level, are you involved in the
10:12:06 8 Patent Office review of the '086 patent?

10:12:08 9 A. I am.

10:12:09 10 Q. How so?

10:12:10 11 A. I have submitted a declaration about prior art, showing
10:12:20 12 systems before the '086 that did what the '086 claims, in
10:12:24 13 order to show that it's -- it's not novel.

10:12:26 14 Q. I see. Now, I'm not going to show you the institution
10:12:29 15 decision. I think the jury has seen it enough. But in
10:12:34 16 the -- in the decision to take the '086 patent into further
10:12:38 17 review at the Patent Office, does the Patent Office
10:12:42 18 decision cite your testimony, your declaration?

10:12:44 19 A. It does.

10:12:47 20 Q. And you said the Patent Office is reviewing the '086
10:12:50 21 patent based on certain prior art patents. Is that prior
10:12:55 22 art that Samsung located after it was sued in this case?

10:12:59 23 A. Yes.

10:13:02 24 Q. So if the Patent Office is reviewing the validity of
10:13:07 25 the '086 patent based on prior art patents, why are you

10:13:11 1 here talking about written description invalidity?

10:13:16 2 A. So the IPR that the jury has heard about does not take
10:13:21 3 into consideration written description. So that is an
10:13:26 4 issue that is being presented here.

10:13:28 5 Q. Okay. Thank you.

10:13:29 6 Now, when you say the '086 patent lacks written
10:13:32 7 description, what do you mean?

10:13:37 8 A. So I'm not an attorney, but the understanding that I
10:13:39 9 was given to work with for my analysis is that a patent has
10:13:42 10 to provide sufficient written description in its
10:13:48 11 specification and figures that a person of skill in the art
10:13:51 12 at the time of the patent would know that the inventor
10:13:57 13 invented what they claimed.

10:13:58 14 So the -- it has to -- it has to provide the scope
10:14:03 15 of the claimed invention.

10:14:06 16 Q. Thank you.

10:14:07 17 Now, I asked you this before, are you a person of
10:14:09 18 ordinary skill in the art?

10:14:11 19 A. Yes.

10:14:11 20 Q. Were you at the time that the patent was filed in 2011?

10:14:14 21 A. Yes.

10:14:15 22 Q. Are you -- and I'm not trying to embarrass you, but are
10:14:20 23 you actually of greater skill than a person of ordinary
10:14:23 24 skill in the art?

10:14:23 25 A. I am.

10:14:24 1 Q. And were you at the time?

10:14:25 2 A. Yes.

10:14:28 3 MR. CUNNINGHAM: All right. Let's have DDX-3.13.

10:14:31 4 Q. (By Mr. Cunningham) Just to set the table. What parts
10:14:34 5 of the claim does this written description issue relate to?

10:14:37 6 A. Sure. I've left up on the screen in this demonstrative
10:14:42 7 the -- the orange and green from the non-infringement, but
10:14:46 8 that's not what I'm talking about here. I just left that
10:14:48 9 up there to not remove it.

10:14:51 10 But what I'm talking about for written description
10:14:53 11 is in Limitations 1[b] and 1[d], and relates to the
10:14:59 12 information necessary or relating to the identification of
10:15:04 13 the user.

10:15:05 14 Q. All right. So first information necessary for an
10:15:09 15 identification of the user in 1[b], and second information
10:15:13 16 relating to the identification of the user in 1[d].

10:15:19 17 Why -- why are those claim elements involved in
10:15:22 18 this written description issue?

10:15:23 19 A. So Maxell has taken -- has -- has stated that this
10:15:31 20 information is -- is fingerprints, the -- the information
10:15:37 21 that's identifying the user is fingerprints, and there's no
10:15:44 22 written description support in the patent for fingerprints
10:15:47 23 to be this -- this information.

10:15:48 24 Q. I see. Now, to be clear, does this written description
10:15:51 25 opinion have any impact on your conclusions on

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10:15:54 1 non-infringement?

10:15:54 2 A. No, these are -- these are two separate opinions. I
10:16:00 3 gave an opinion that the S23 does not infringe. This is a
10:16:03 4 separate opinion that this claim does not have sufficient
10:16:07 5 written description for -- for these -- these terms.

10:16:11 6 Q. All right. Now, we saw at the beginning of our
10:16:16 7 discussion that the claim uses finger of the user and
10:16:18 8 finger in various ways.

10:16:20 9 Does this claim ever use the word "fingerprint"?

10:16:26 10 A. No.

10:16:26 11 Q. Does -- take the whole patent, the whole thing from
10:16:29 12 start to finish, does it ever use the word "fingerprint"?

10:16:34 13 A. Never.

10:16:35 14 Q. Does the patent use this phrase "information for
10:16:37 15 identification of the user"?

10:16:39 16 A. It does.

10:16:40 17 Q. All right. So let's -- let's look at the first of
10:16:42 18 those places.

10:16:43 19 MR. CUNNINGHAM: So let's have DDX-3.14, please?

10:16:48 20 Q. (By Mr. Cunningham) Now, this is the abstract of the
10:16:53 21 patent. So, first of all, just tell us what an abstract is
10:16:56 22 in a patent?

10:16:57 23 A. An abstract is just a short intro at the beginning that
10:17:02 24 provides an overview of the patent.

10:17:04 25 Q. All right. So, now, we see reference to identification

10:17:11 1 information on the second line. Do you see those two
10:17:13 2 words?

10:17:13 3 A. I do.

10:17:14 4 Q. All right. Now, can you describe, please, what the
10:17:16 5 abstract is getting across in the sentence you've got
10:17:19 6 highlighted?

10:17:19 7 A. Yes. So the identification information here is what I
10:17:24 8 was talking about toward the beginning of my examination.
10:17:28 9 It's -- it's information that's displayed on the screen
10:17:32 10 like the numbers from the passcode, and that is information
10:17:37 11 that can be used to identify the user, just like any
10:17:41 12 password can be used to identify a user.

10:17:44 13 Q. Thank you.

10:17:46 14 Now, in the abstract as a whole -- don't just
10:17:49 15 focus on that -- that first highlighted sentence -- is
10:17:53 16 there any reference to or suggestion of fingerprints here?

10:17:56 17 A. None.

10:17:57 18 Q. Now, Dr. Wobbrock has taken the position that this
10:18:01 19 reference to letters, figures, and symbols refers to
10:18:05 20 fingerprint information. Do you agree?

10:18:08 21 A. I don't.

10:18:09 22 Q. Why not?

10:18:09 23 A. Well, first of all, it's information that is displayed.
10:18:14 24 So the user selects with touch the display information.
10:18:19 25 That's -- that's not fingerprint. That's not how

10:18:21 1 fingerprint is used.

10:18:23 2 Even if I agreed with him, and I don't, but the
10:18:28 3 idea that -- saying that symbols sometimes -- somehow
10:18:36 4 captures fingerprint information is -- is not accurate
10:18:39 5 because the data could be any number of things. It doesn't
10:18:42 6 identify fingerprints in any way.

10:18:44 7 Q. I see. Now, we don't have it underlined, but the --
10:18:49 8 the last part of the highlighted phrase is: Detects a
10:18:53 9 contact of the panel with a finger of a user or other
10:18:57 10 object.

10:18:57 11 Do you see that?

10:18:59 12 A. Yes.

10:18:59 13 Q. What do you take from that "or other object" language?

10:19:02 14 A. So it's not even requiring a finger. It -- it's
10:19:07 15 anything that the sensor could pick up. It could be an
10:19:11 16 elbow. It could be -- it could be a palm. It's not even
10:19:14 17 requiring that the selection be made with a finger, further
10:19:20 18 emphasizing that this isn't about fingerprints.

10:19:21 19 Q. All right. Thank you.

10:19:23 20 MR. CUNNINGHAM: Now, let's have DDX-3.15.

10:19:27 21 Q. (By Mr. Cunningham) This is another section of the
10:19:28 22 patent called the Summary of the Invention. Can you
10:19:30 23 describe what you've got on the screen here?

10:19:32 24 A. Yes. So once you get past the abstract, further into
10:19:39 25 the patent, it starts to summarize the invention. And in

10:19:42 1 this text at the beginning of that section, it provides
10:19:45 2 a -- a similar description of the identification
10:19:49 3 information.

10:19:50 4 Q. All right, sir. You've looked at a lot of patents.

10:19:54 5 Would you expect to see some reference to
10:19:57 6 fingerprint information in the Summary of the Invention if
10:20:00 7 that were indeed part of the invention?

10:20:02 8 A. I would expect to see fingerprint or at least some
10:20:07 9 suggestion or some implication that it would -- it would be
10:20:10 10 used or appropriate to be used, and that isn't the case
10:20:13 11 here.

10:20:13 12 Q. All right. Thank you.

10:20:15 13 MR. CUNNINGHAM: Now, let's have the actual
10:20:16 14 patent, PX-3. And I want to highlight Columns -- Column 7,
10:20:22 15 Line 64, through about Column 8, Line 1. So down very far
10:20:27 16 at the bottom. There we go.

10:20:29 17 Q. (By Mr. Cunningham) So this is -- this is a second
10:20:31 18 embodiment of the invention, and you see that there's a
10:20:33 19 reference to: The password may be comprised of alphabets,
10:20:39 20 symbols, figures, patterns, colors, or other elements, or
10:20:43 21 combinations thereof.

10:20:45 22 So focusing first on the word "patterns," we've
10:20:49 23 heard a suggestion that that word "pattern" means
10:20:51 24 fingerprint. Do you agree?

10:20:52 25 A. No.

10:20:53 1 Q. Why not?

10:20:54 2 A. Well, again, this -- this is information that's being
10:20:59 3 displayed to the user that they're going to select with a
10:21:01 4 touch. So that's different from fingerprint recognition
10:21:04 5 and how fingerprint recognition works.

10:21:05 6 Q. All right. So now -- thank you.

10:21:08 7 MR. CUNNINGHAM: So now let's go just above that,
10:21:12 8 Column 7, Lines 60 to 63.

10:21:14 9 Q. (By Mr. Cunningham) So beginning with that sentence:
10:21:24 10 It is also advantageous.

10:21:26 11 Do you see that?

10:21:27 12 A. I do.

10:21:27 13 Q. Can you tell us what the patentees are describing in
10:21:30 14 that sentence?

10:21:30 15 A. Yes. So backing up just a little bit to the example I
10:21:34 16 used that's from the patent -- from the '086 patent, of
10:21:39 17 creating a password with pad and tip, what's being
10:21:42 18 communicated here in this sentence is that you can still
10:21:46 19 share that password.

10:21:47 20 Like, if you needed somebody else to unlock your
10:21:51 21 device, you could tell the somebody else, hey, the pass
10:21:54 22 number is 0528, but put in 0 with the tip and 5 with the
10:21:59 23 pad and so forth. And they can still unlock the phone.

10:22:03 24 That's obviously different from biometrics where
10:22:05 25 you are the only person who can unlock your phone.

1 And so this example couldn't even work with
2 fingerprints. It's -- it's just incompatible with it.

3 Q. All right. Thank you.

4 MR. CUNNINGHAM: So let's have DDX-3.16.

5 Q. (By Mr. Cunningham) Now, we've got on the -- just to
6 orient us, we've got on the left side of the screen, we've
7 got four figures from the patent, Figure 1A, 1B, 5A, 5B,
8 and then a range of text that appears to be describing
9 Figure 1A and 1B.

10 So starting with the figures, can you explain
11 what -- why you've got this assembly here?

12 A. Yes. So the way the patent describes being able to
13 detect the difference between a pad or a tip is literally
14 just based on the size of the contact.

15 So to -- to identify the tip, it calls this --
16 this space the contact range, there in the highlighted
17 section. And it says, okay. The tip is going to be
18 detected when that contact range is small. And then the
19 pad will be detected when the contact range is large.

20 So Figures 5A and 5B illustrate that, where you
21 can see this is the sensor. It's showing how much of the
22 sensor is being contacted by the finger.

23 So in 5A, it's just four boxes, and -- and those
24 four boxes are a small number, and that's -- that's going
25 to be detected as a tip.

10:23:42 1 And then in 5B, it's 12 boxes. It's a larger
10:23:48 2 range. And that's being -- that's -- that contact range is
10:23:51 3 being detected as a pad.

10:23:55 4 Q. All right. Thank you.

10:23:55 5 Now, why does the patent disclose this sort of
10:24:01 6 difference in size to read a fingertip, as opposed -- as
10:24:06 7 opposed to a finger pad?

10:24:08 8 A. It's a -- it's a straightforward way that it's -- it's
10:24:13 9 disclosing for how it wants to detect pad and tip for
10:24:18 10 purposes of -- of recording that -- that input method.

10:24:22 11 Q. All right, sir.

10:24:23 12 So in your expert opinion, would a person of
10:24:27 13 ordinary skill in the art at the time of the invention of
10:24:31 14 the '086 patent, so 2011, have understood that detecting
10:24:36 15 touches by a fingertip, like we see in Figure 5A, or a
10:24:40 16 finger pad, like we see in Figure 5B, based on the contact
10:24:46 17 range, would they consider that to be the same as detecting
10:24:49 18 fingerprints?

10:24:49 19 A. Not at all.

10:24:51 20 Q. Okay. Why do you say that?

10:24:53 21 A. To detect a fingerprint requires a much -- much more
10:25:00 22 fine-grained sensor. The sensor has to be able to detect
10:25:06 23 the ridges. It has to be able to detect the loops and
10:25:09 24 whorls that are in a fingerprint.

10:25:11 25 These sensors are much less -- much less

10:25:14 1 fine-tuned and are directed to detecting large-size contact
10:25:20 2 ranges in comparison to a fingertip.

10:25:22 3 Q. All right. Now, thank you, sir.

10:25:26 4 So -- so Dr. Wobbrock has said that there is
10:25:28 5 written description support in -- for fingerprints in the
10:25:33 6 '086 patent because the patent discloses using capacitive
10:25:37 7 sensors like we see on Figure 5A and 5B.

10:25:40 8 Do you agree with him?

10:25:41 9 A. No.

10:25:42 10 Q. First of all, what is a capacitive sensor?

10:25:46 11 A. A capacitive sensor, it's a type of touch sensor, and
10:25:51 12 it detects changes in electrical signal and uses that to
10:25:56 13 identify touch.

10:25:56 14 Q. Thank you.

10:25:57 15 Do -- what do the capacitive sensors do in the
10:26:00 16 '086 patent?

10:26:00 17 A. Again, in the '086 patent, they're used for detecting
10:26:04 18 contact and the size of the contact.

10:26:07 19 Q. And -- and is that the same as capacitive sensors that
10:26:11 20 can detect fingerprints?

10:26:12 21 A. No.

10:26:13 22 Q. Why do you say that?

10:26:14 23 A. Well, for one thing, capacitive sensors are used for
10:26:21 24 all kinds of touch. Not every capacitive sensor is for
10:26:26 25 fingerprint. And so there's -- it's a specialized type of

10:26:31 1 sensor that is capable of -- of detecting a fingerprint
10:26:35 2 information.

10:26:36 3 Q. Okay. Now, to be very clear, Dr. Wobbrock has said
10:26:39 4 that all capacitive sensors detect the ridges and valleys,
10:26:45 5 those ridges and valleys of your fingerprint, when you
10:26:49 6 touch it. Is he right?

10:26:51 7 A. No.

10:26:51 8 Q. Why do you say that?

10:26:54 9 A. Well, again, it's -- it has to do with the granularity
10:26:57 10 of the sensor. If a sensor isn't designed for that level
10:27:01 11 of granularity, it's not going to pick up that amount of
10:27:03 12 detail.

10:27:04 13 Q. Okay. Now, sir, you have the S23 up there, DTX-4.
10:27:12 14 Please hold it up. Just -- you don't need to use the
10:27:14 15 document camera. Just hold it up.

10:27:16 16 Is that entire touchscreen, the -- the glass part,
10:27:19 17 is that all a capacitive sensor?

10:27:23 18 A. Yes.

10:27:23 19 Q. And what portion of the screen is a fingerprint reader?

10:27:28 20 A. Well, it doesn't pick up fingerprint everywhere. It
10:27:31 21 has one very specific point in the lower center, that point
10:27:34 22 right there, that detects a fingerprint.

10:27:38 23 So the capacitive sensor for the whole thing does
10:27:41 24 not detect fingerprints.

10:27:43 25 Q. I see. And is that -- the fingerprint reader, the part

10:27:48 1 you just pointed to, is that a capacitive sensor on the
10:27:51 2 Samsung phone?

10:27:52 3 A. Actually, no. The fingerprint sensor on the Samsung
10:27:56 4 phone isn't even a capacitive sensor.

10:27:58 5 Q. What is it?

10:27:58 6 A. I believe Dr. Wobbrock described it as a sonic
10:28:04 7 transducer, ultrasonic transducer.

10:28:08 8 Q. All right. And so --

10:28:09 9 THE COURT: Hold on.

10:28:09 10 MR. NESE: Your Honor, may we approach?

10:28:11 11 THE COURT: I'm sorry.

10:28:18 12 MR. NESE: May we approach?

10:28:19 13 THE COURT: Of course.

10:28:20 14 MR. NESE: I apologize.

10:28:21 15 THE COURT: No, that's all right.

10:28:23 16 (Bench conference.)

10:28:25 17 THE COURT: Yes, sir.

10:28:25 18 MR. NESE: I don't know how much longer
10:28:28 19 Mr. Cunningham is going to go here, but I have two concerns
10:28:30 20 with this line of questioning. The first being, it seems
10:28:33 21 like we're getting into non-infringement again, and it's --
10:28:35 22 might be some confusion about blending the two.

10:28:38 23 The second concern I have is this witness in his
10:28:41 24 expert reports did not have any opinions about the
10:28:44 25 ultrasonic transducer, and now it seems like we're going to

10:28:49 1 be hearing some for the first time. So it's an
10:28:51 2 outside-of-the scope objection.

10:28:53 3 MR. CUNNINGHAM: And I've asked my last question
10:28:57 4 on this topic.

10:28:57 5 MR. NESE: With that understanding, we can move
10:28:57 6 on.

10:28:57 7 THE COURT: Good.

10:29:01 8 MR. CUNNINGHAM: Thank you.

10:29:01 9 THE COURT: And we need to take a break.

10:29:05 10 MR. CUNNINGHAM: Now is fine.

10:29:06 11 (Bench conference concluded.)

10:29:07 12 THE COURT: Ladies and gentlemen of the jury, I
10:29:08 13 think now is a good time for our morning break, so we will
10:29:11 14 be in recess about 15 minutes.

10:29:14 15 COURT SECURITY OFFICER: All rise.

10:29:15 16 (Jury out.)

10:29:16 17 THE COURT: You can step down.

10:31:13 18 (Recess.)

10:50:06 19 (Jury out.)

10:50:06 20 COURT SECURITY OFFICER: All rise.

10:50:50 21 THE COURT: Mr. Savage, if you would have the jury
10:50:56 22 brought down.

10:51:02 23 (Jury in.)

10:51:53 24 THE COURT: Please be seated.

10:51:53 25 Mr. Cunningham, you may continue.

10:51:57 1 MR. CUNNINGHAM: Thank you, Your Honor.

10:51:58 2 Q. (By Mr. Cunningham) Dr. Nielson, when we left off, we
10:52:01 3 were discussing your opinions about no written description,
10:52:03 4 so I want to pick up right where we left off.

10:52:06 5 Besides the patent itself, did you also consider
10:52:10 6 the back and forth between Maxell and the Patent Office
10:52:13 7 during prosecution of a patent in the same patent family?

10:52:16 8 A. I did.

10:52:18 9 Q. And can you remind us what that back and forth with the
10:52:21 10 Patent Office is called?

10:52:22 11 A. Yes, that's called the file history.

10:52:24 12 Q. And I have at my podium the back and forth that we're
10:52:31 13 talking about. This is DTX-94. And you have a copy up
10:52:35 14 there.

10:52:35 15 This is that back and forth, this is that file
10:52:38 16 history?

10:52:39 17 A. It is.

10:52:39 18 Q. All right. So pretty thick document. Did you -- did
10:52:43 19 you review this?

10:52:43 20 A. I did.

10:52:44 21 Q. All right. Now, let's look at one -- I'm not going to
10:52:50 22 obviously go through this entire back and forth.

10:52:52 23 MR. CUNNINGHAM: But let's look at one page of
10:52:54 24 this on DDX-3.17.

10:52:59 25 Q. (By Mr. Cunningham) Let's first sort of set the stage

10:53:00 1 here. So this says: Patent examiner's finding. And then
10:53:05 2 there's a date of 2020. So what are we looking at here,
10:53:08 3 sir?

10:53:08 4 A. Well, again, the '086 was filed for in 2011, and so
10:53:13 5 this is a patent examiner's findings a number of years
10:53:20 6 later in a related matter.

10:53:21 7 Q. Okay. And when you say "related matter," what do you
10:53:24 8 mean?

10:53:24 9 A. Well, it's -- it's a patent that's in the same family.
10:53:27 10 It has the same specification and the same figures.

10:53:31 11 Q. Okay. And so you've got something highlighted here and
10:53:35 12 red underlined. What is the examiner conveying to Maxell
10:53:40 13 in this page of the document?

10:53:41 14 A. That there is no support in the specification or
10:53:47 15 figures for using a fingerprint.

10:53:48 16 Q. I see. Okay. So let's -- let's step back.

10:53:56 17 MR. CUNNINGHAM: So let's turn to DDX-3.18, and
10:54:00 18 this is DTX-94 at Pages 876 and 877.

10:54:03 19 Q. (By Mr. Cunningham) So this is nearly 900 or so pages
10:54:06 20 of material that went back and forth between Maxell and the
10:54:09 21 Patent Office. So this says: Proposed new Claims 8 and 15
10:54:17 22 (sic) filed 2019.

10:54:20 23 So can you explain what we're looking at here?

10:54:23 24 A. Yes. So, here, a number of years later, Maxell asked
10:54:26 25 for new claims, new patent claims, using the same

10:54:29 1 specification. That's common. Same specification and
10:54:31 2 figures. And these were the new claims that they were
10:54:35 3 asking for.

10:54:36 4 Q. Okay. And -- and so everything after 8 new and 14 new
10:54:41 5 is underlined. What does that mean?

10:54:43 6 A. It represents something new that's being asked for.

10:54:47 7 Q. Okay. And then you've got highlighted at the bottom of
10:54:50 8 Claim 8: The first information corresponding to a
10:54:53 9 fingerprint of the user.

10:54:54 10 What -- why do you have that called out?

10:54:57 11 A. Well, as I've said, in the '086, there is no reference
10:55:01 12 to fingerprints either in the specification or the claims.
10:55:04 13 Here, same specification but asking for new claims that
10:55:08 14 specifically include the use of fingerprint.

10:55:12 15 Q. Okay. So before 2019, before these claims we're
10:55:16 16 looking at, had Maxell ever tried to get claims from the
10:55:21 17 Patent Office that have the word "fingerprint," that
10:55:25 18 specifically talk about using fingerprints?

10:55:26 19 A. For this patent family, no.

10:55:28 20 Q. Okay.

10:55:32 21 MR. CUNNINGHAM: All right. So let's have
10:55:37 22 DDX-3.19, and see what the examiner did.

10:55:38 23 Q. (By Mr. Cunningham) These are the patent examiner's
10:55:40 24 findings in 2020. And so what's he -- what's the examiner
10:55:43 25 saying in that first highlighted text?

10:55:46 1 A. So Claims 8 and 14 -- those were the two new ones that
10:55:50 2 I was just showing -- fail because they do not have written
10:55:54 3 description.

10:55:56 4 Q. Okay. And then at the bottom, it looks like the
10:55:58 5 examiner is addressing that -- that new Claim 8 and another
10:56:02 6 Claim 21. What is the examiner concluding here?

10:56:05 7 A. Well, the examiner explains in more detail that there's
10:56:08 8 no written description support for storing information
10:56:12 9 related to a fingerprint. The specification is only
10:56:15 10 disclosing storing information about fingertip or finger
10:56:19 11 pad.

10:56:19 12 Q. Okay. And so this finding by the patent examiner, do
10:56:24 13 you agree with the patent examiner here?

10:56:27 14 A. I do.

10:56:27 15 Q. And how is that significant, sir, to your analysis of
10:56:35 16 the written description requirement?

10:56:37 17 A. Well, it supports my analysis that there is no
10:56:39 18 reference to fingerprint in the '086 specification.
10:56:42 19 There's no suggestion of it. It's -- it's -- there's no
10:56:47 20 support for it.

10:56:47 21 Q. I see. Now, we've talked about Claim 8, and there's
10:56:50 22 a -- obviously, the other new claim that we were focused on
10:56:54 23 is Claim 14.

10:56:55 24 MR. CUNNINGHAM: Let's have DDX-3.20.

10:56:57 25 Q. (By Mr. Cunningham) This is the next page of the file

10:57:04 1 history, DTX-94, Page 562. And we've got Claim 14 circled
10:57:09 2 there. So what is the examiner saying to Maxell here?
10:57:12 3 A. Yes. Again, for Claim 14, the examiner is saying
10:57:15 4 there's no support, no written description support for
10:57:19 5 displaying images of the portion of the fingerprint
10:57:22 6 detected because there's just no support for using a
10:57:25 7 fingerprint.

10:57:25 8 Q. Okay. Now, this is in 2020. These patent examiner's
10:57:32 9 findings occurred in 2020. The '086 patent was applied for
10:57:32 10 back 11 years before that. Or excuse me, 9 years --
10:57:41 11 terrible at math -- 9 years before that in 2011. So is
10:57:42 12 this the same patent examiner who looked at the '086 patent
10:57:46 13 originally?

10:57:47 14 A. No. My understanding is a different -- different
10:57:49 15 examiner.

10:57:50 16 Q. All right. So -- so Maxell gets told this by the
10:57:55 17 examiner in 2020. What did Maxell do to -- with respect to
10:58:02 18 Claims 8 and 14 that talk about fingerprints?

10:58:06 19 A. They -- they canceled them, meaning they -- they no
10:58:08 20 longer were applying for them.

10:58:10 21 Q. Okay. So did -- to be clear, sir, did Maxell try to
10:58:15 22 convince the patent examiner in 2020, no, no, no, our --
10:58:20 23 our patent specification does, in fact, disclose using
10:58:23 24 fingerprints?

10:58:25 25 A. I believe that they -- they had some objections, but

10:58:28 1 they were general. They did not provide specific
10:58:32 2 disagreements on -- on this point.

10:58:34 3 Q. Okay. And -- and did -- did Maxell argue to this
10:58:36 4 patent examiner in 2020 what Dr. Wobbrock is saying about,
10:58:42 5 well, there's capacitive sensors disclosed in the
10:58:46 6 specification, and, therefore, we can get claims that talk
10:58:48 7 about fingerprints?

10:58:49 8 A. No.

10:58:50 9 Q. Did Maxell ever get claims from the Patent Office in
10:58:56 10 any of these patents that recite fingerprint information?

10:59:00 11 A. My understanding is they did not.

10:59:02 12 Q. Okay. And, again, what is the significance of that to
10:59:05 13 your analysis of the written description issue?

10:59:08 14 A. Well, again, my analysis, I did it independently, which
10:59:14 15 is looking at the specification and the figures, there's no
10:59:17 16 support for fingerprints.

10:59:18 17 But, in this case, the -- a patent examiner,
10:59:22 18 looking at a very similar question, agreed and said, I -- I
10:59:27 19 do not see written description support for fingerprints in
10:59:29 20 this specification or figures.

10:59:31 21 Q. All right, sir. So to wrap up, is -- in your expert
10:59:36 22 opinion, is Claim 1 invalid for lack of written description
10:59:40 23 in addition to being something that Samsung does not
10:59:43 24 infringe?

10:59:43 25 A. Yes.

10:59:44 1 Q. And are you certain about those opinions, sir?

10:59:47 2 A. Yes.

10:59:48 3 Q. All right.

10:59:48 4 MR. CUNNINGHAM: I have no further questions.

10:59:50 5 Thank you, Your Honor.

10:59:51 6 THE COURT: Cross-examination?

10:59:53 7 MR. NESE: Yes, Your Honor.

11:00:23 8 CROSS-EXAMINATION

11:00:24 9 BY MR. NESE:

11:00:24 10 Q. Good afternoon, Dr. Nielson.

11:00:27 11 A. Good morning.

11:00:27 12 Q. Good morning.

11:00:30 13 A. I have the advantage, I have a clock.

11:00:31 14 Q. I'm trying to rush ahead. And I apologize for that.

11:00:35 15 It's nice to see you again, sir. We met at your
11:00:38 16 deposition, correct?

11:00:39 17 A. Yes.

11:00:40 18 Q. I have some questions about the testimony you just
11:00:43 19 gave. Most of these are fairly simple yes or no. I'll do
11:00:45 20 my best to keep these to yes-or-no questions. Will you do
11:00:46 21 your best to give me yes-or-no answers this morning?

11:00:48 22 A. If I can, yes.

11:00:50 23 Q. Thank you for that. Let's begin.

11:00:53 24 The field of art for the '086 patent, in your
11:00:55 25 opinion, is computing and mobile devices with touch

11:00:59 1 interfaces, as well as the biometrics and user
11:01:03 2 authentication functions of those devices.

11:01:06 3 Correct, sir?

11:01:08 4 A. I would not agree that it's necessarily biometrics.

11:01:20 5 Q. Okay. Can we go to your deposition, please? You have
11:01:25 6 that in front of you, correct, sir, in one of your binders?

11:01:28 7 THE COURT: Do you have a copy for me, Mr. Nese?

11:01:31 8 MR. NESE: Of the deposition?

11:01:33 9 THE COURT: Correct.

11:01:33 10 MR. NESE: We can get that, Your Honor, certainly.
11:01:36 11 It should be in his direct examination binders, as well, if
11:01:40 12 you have those, Your Honor. If not, there's a copy.

11:01:51 13 THE COURT: Oh, thank you.

11:01:51 14 Q. (By Mr. Nese) Okay. Would you turn with me page --
11:01:55 15 please, sir, to Page 147 in your deposition?

11:01:58 16 A. Sure.

11:01:59 17 Q. And you took an oath to tell the truth at that
11:02:02 18 deposition, correct, sir?

11:02:03 19 A. I did.

11:02:05 20 Q. And you did, in fact, tell the truth at that
11:02:06 21 deposition, correct, sir?

11:02:06 22 A. To the best of my abilities, yes.

11:02:08 23 Q. Okay. So please have a look at my question to you at
11:02:10 24 Lines 7 through 16, and I'll read my question again to you.

11:02:12 25 The field of the art pertinent to the subject

11:02:15 1 matter --

11:02:16 2 MR. NESE: Let's not publish just yet, please,
11:02:18 3 Mr. Ebersole. Thank you.

11:02:12 4 Q. (By Mr. Nese) In the field of art pertinent to the
11:02:15 5 subject matter of the '086 patent in your opinion is as
11:02:22 6 follows: Computing and mobile devices with touch
11:02:25 7 interfaces and touch surface technology, as well as the
11:02:29 8 biometrics and user authentication functions of those
11:02:32 9 devices.

11:02:32 10 And would you read your answer to me, sir?

11:02:35 11 A. Well, there's another part of the question.

11:02:38 12 Q. I didn't mean to leave that out.

11:02:41 13 Have I articulated that correctly?

11:02:43 14 A. Yes. You read those words correctly, yes.

11:02:45 15 Q. And that was truthful testimony, correct, sir?

11:02:49 16 A. The words that you read were correct.

11:02:53 17 Q. Okay. And do you disagree with any of those words as
11:02:55 18 they were read just then?

11:02:58 19 A. I need a minute to see what's being cited here. I
11:03:01 20 don't know what's being quoted.

11:03:02 21 Q. Okay. Let's move on then.

11:03:03 22 You're a fairly experienced technical expert in
11:03:06 23 court cases, aren't you, sir?

11:03:08 24 A. I have some experience giving expert testimony, yes.

11:03:11 25 Q. You've been hired for over 50 court cases, correct,

11:03:14 1 sir?

11:03:14 2 A. I don't have a full number.

11:03:16 3 Q. Does that number sound correct to you?

11:03:19 4 A. Sounds reasonable.

11:03:20 5 Q. Okay. And many of those 50 court cases for which
11:03:23 6 you've been hired as an expert, those were patent cases,
11:03:27 7 correct, sir?

11:03:27 8 A. Some percentage of them have been patent cases,
11:03:30 9 probably about 50 percent.

11:03:31 10 Q. About half of them, okay.

11:03:33 11 And so prior to this case also, you've been hired
11:03:36 12 by Samsung for court cases, correct, sir?

11:03:38 13 A. Yes.

11:03:40 14 Q. And as a witness who works on patent cases, over 50 of
11:03:45 15 them -- well, at least 25, you said about 50 percent -- you
11:03:49 16 understand that patent claims aren't limited by the
11:03:52 17 specification of the patent. Isn't that true, sir?

11:03:55 18 A. I believe that is the correct legal description. I
11:03:59 19 believe that's the case, yes.

11:04:01 20 Q. Okay. And so the Figure 11A that you showed this jury
11:04:04 21 earlier, Figure 12A that you showed this jury earlier, the
11:04:08 22 patent isn't limited to those specific examples. Isn't
11:04:12 23 that true?

11:04:12 24 A. The patent claims are not limited to one example in the
11:04:16 25 specification, that's correct.

11:04:17 1 Q. Right. And, in fact, it's the claims and only the
11:04:20 2 claims of the patent that limit the invention of the '086
11:04:24 3 patent. Isn't that true?

11:04:25 4 A. That provide the limits -- the legal limits, yes.

11:04:31 5 Q. So let's talk about the '086 patent's claims.

11:04:33 6 MR. NESE: Mr. Ebersole, would you please bring up
11:04:35 7 Claim 1 of the '086 patent? That's at Column 8, Lines 36
11:04:39 8 through 60. This is Plaintiff's Exhibit 3.

11:04:42 9 Q. (By Mr. Nese) You see Claim 1 on the screen here,
11:04:45 10 Dr. Nielson?

11:04:45 11 A. I do. Thank you.

11:04:46 12 Q. Thank you.

11:04:47 13 Now, Claim 1 of the '086 patent doesn't use the
11:04:50 14 words -- doesn't require the user to know which mode the
11:04:55 15 device is in, true?

11:04:56 16 A. It does not require that.

11:04:58 17 Q. Claim 1 doesn't require any specific kind of user
11:05:01 18 instruction, does it?

11:05:03 19 A. No, it doesn't say anything about instructions.

11:05:05 20 Q. No requirement that the claim -- in our claim that the
11:05:10 21 device says now input the end of your finger, now input the
11:05:15 22 pad of your finger. Right, sir?

11:05:17 23 A. Correct.

11:05:18 24 Q. And the claims don't even require an instruction to --
11:05:21 25 pardon me, let me rephrase that.

11:05:23 1 There's nothing in the claim about the user
11:05:25 2 knowing which mode the device is in; isn't that true, sir?
11:05:30 3 A. That's true.
11:05:31 4 Q. There's nothing in the claims about sensor reading,
11:05:33 5 correct? The word "sensor readings" does not appear in the
11:05:36 6 claim --
11:05:36 7 A. Correct.
11:05:36 8 Q. -- of the '086 patent?
11:05:38 9 Thank you.
11:05:38 10 There is no term in the claim that says multiple
11:05:42 11 templates, correct, sir?
11:05:43 12 A. No.
11:05:44 13 Q. There's nothing in the claim that talks about an
11:05:48 14 algorithm, correct? That word "algorithm" doesn't appear
11:05:51 15 in the claims?
11:05:51 16 A. No.
11:05:52 17 Q. Okay. And I'd like to direct your attention also --
11:05:58 18 MR. NESE: If you can move down slightly,
11:06:00 19 Mr. Ebersole, we can see the bottom of Claim 1 of the '086
11:06:04 20 patent, that last limitation. Just highlight on where it
11:06:06 21 says "in said registering mode," please. Start there.
11:06:10 22 Perfect.
11:06:11 23 Q. (By Mr. Nese) If you direct your attention,
11:06:14 24 Dr. Nielson, to the bottom part of this claim, it starts
11:06:18 25 around Line 57. I'll read it to you.

11:06:23 1 It says: Said second information relating to the
11:06:26 2 identification of the user is produced upon basis of the
11:06:30 3 input information, which is inputted at least in the first
11:06:35 4 or second mode.

11:06:35 5 Did I read that correctly?

11:06:36 6 A. You did.

11:06:36 7 Q. Okay. So we don't need to input information from both
11:06:38 8 the first and the second mode. That's not what the claim
11:06:39 9 says, right, sir?

11:06:40 10 A. It does not require that, no.

11:06:42 11 Q. Okay.

11:06:42 12 MR. NESE: You can put that down, Mr. Ebersole.

11:06:49 13 Q. (By Mr. Nese) I heard you talk about mode and
11:06:51 14 algorithms, and it seemed like you were equating the two.
11:06:54 15 Did I misunderstand your testimony?

11:06:56 16 A. Well, I don't know that I equated the two. I said that
11:06:58 17 you would have a different algorithm and a different mode.

11:07:01 18 Q. I see. Did you study anything in the course of this
11:07:04 19 case that told you what a mode means?

11:07:06 20 A. I looked at mode from a number of different
11:07:10 21 definitions.

11:07:12 22 Q. Any evidence that you saw that showed you what a mode
11:07:15 23 means?

11:07:20 24 A. I probably did. As I sit here, I don't recall if
11:07:24 25 that's something I specifically cited to, but I'd have to

11:07:27 1 go back and look.

11:07:27 2 Q. Let's see if we can find something for you?

11:07:31 3 MR. NESE: Mr. Ebersole, would you please bring up

11:07:33 4 PX-70, Plaintiff's Exhibit 70? Thank you, sir.

11:07:37 5 Q. (By Mr. Nese) You see this is a text called:

11:07:40 6 Human-computer interaction.

11:07:40 7 Do you see that, Dr. Nielson?

11:07:41 8 A. I do.

11:07:42 9 Q. This is Professor Wobbrock's field, correct, sir?

11:07:45 10 A. I believe that's what he identified his field as, yes.

11:07:48 11 MR. NESE: Can we please go to Page 234 of

11:07:51 12 Exhibit 70, please? And, Mr. Ebersole, can you highlight

11:07:53 13 for us the first, say, four or five lines of this page?

11:07:56 14 Thank you.

11:07:56 15 Q. (By Mr. Nese) This text says: Special care has to be

11:08:00 16 taken if the same command or button press means something

11:08:04 17 different in different contexts. These different contexts

11:08:08 18 that change the interpretation of commands are called

11:08:11 19 modes.

11:08:11 20 Do you see that, sir?

11:08:12 21 A. I do.

11:08:13 22 Q. Okay. Thank you.

11:08:14 23 MR. NESE: You can take that down, Mr. Ebersole.

11:08:17 24 Q. (By Mr. Nese) Now, Claim 1 of the '086 patent provides

11:08:20 25 for two registering modes, correct?

11:08:24 1 A. It does.

11:08:24 2 Q. One mode inputs by the pad of the finger, correct, sir?

11:08:29 3 A. Yes.

11:08:31 4 Q. And the other input -- the other mode accepts input

11:08:34 5 from the tip, or the end of the finger; is that right,

11:08:38 6 Dr. Nielson?

11:08:38 7 A. I don't know that I agree with your characterization

11:08:41 8 there.

11:08:41 9 Q. What was problematic about my characterization?

11:08:45 10 A. Well, you said "accept." The claim doesn't say whether

11:08:49 11 or not it accepts that type of input. It says it is a

11:08:54 12 registering mode for that type of input.

11:08:56 13 Q. Ah. So you need to be -- it's for inputting

11:08:59 14 information with the tip of my finger, correct, sir?

11:09:02 15 A. I believe so. I -- if we had the claim, I could get an

11:09:06 16 exact wording. But I just am being careful with that.

11:09:08 17 Q. I appreciate that caution.

11:09:09 18 Maybe we could go to the patent. That would help.

11:09:14 19 MR. NESE: Mr. Ebersole, could you bring up

11:09:17 20 Plaintiff's Exhibit 3 again, the '086 patent? And let's

11:09:20 21 have a look at Figure 1B of the '086 patent.

11:09:27 22 Q. (By Mr. Nese) And I think you showed this to the jury

11:09:29 23 earlier, correct, sir?

11:09:30 24 A. I did.

11:09:35 25 MR. NESE: Figure 1B, please. Thank you.

11:09:58 1 Actually, Mr. Ebersole, why don't you leave both
11:10:00 2 of those up for us?

11:10:04 3 Q. (By Mr. Nese) All right. So Figure 1B of the patent
11:10:06 4 is for -- is an example of a user using the pad of the
11:10:11 5 finger for inputting information, agreed?

11:10:14 6 A. Yes.

11:10:15 7 Q. Okay.

11:10:17 8 MR. NESE: And let's have Figure 1A, please,
11:10:19 9 Mr. Ebersole.

11:10:21 10 Q. (By Mr. Nese) Figure 1A of the '086 patent is showing
11:10:24 11 a user inputting information with the end or the tip of the
11:10:29 12 finger, correct, sir?

11:10:30 13 A. Yes.

11:10:30 14 Q. And I'm not certain, but it looks to me like in Figure
11:10:35 15 1A, we're at about a 45 degree angle relative to that to
11:10:40 16 touch panel 1; is that correct?

11:10:41 17 A. That's how it's illustrated here.

11:10:43 18 Q. Okay. And so Figure 1A shows that example.

11:10:47 19 MR. NESE: And you can take that down,
11:10:49 20 Mr. Ebersole.

11:10:50 21 Q. (By Mr. Nese) In the S23 device that you tested, did
11:10:53 22 you try inputting information to the S23 device with your
11:10:59 23 finger at approximately that 45-degree angle?

11:11:05 24 A. I did.

11:11:05 25 Q. Okay. Well, let's try that again here to make sure we

11:11:09 1 get it right. And I'm going to use the document cam.

11:11:38 2 MR. NESE: With the Court's indulgence, please.

11:12:02 3 I think I can do this a different way, Your Honor.

11:12:05 4 May I approach the witness so that he can see?

11:12:07 5 THE COURT: Yes.

11:12:08 6 MR. NESE: Thank you very much.

11:12:14 7 Q. (By Mr. Nese) Is this okay, Dr. Nielson? I don't want
11:12:17 8 to get too close.

11:12:18 9 A. Yes.

11:12:18 10 Q. Okay. Can you see the screen okay, sir?

11:12:18 11 A. Yes.

11:12:18 12 Q. Thank you.

11:12:19 13 I have here Plaintiff's Exhibit --

11:12:19 14 THE COURT: Hold on just a moment.

11:12:21 15 MR. CUNNINGHAM: May I come around?

11:12:22 16 THE COURT: Of course, yes, uh-huh.

11:12:24 17 MR. CUNNINGHAM: Thank you.

11:12:25 18 Q. (By Mr. Nese) Dr. Nielson, I have here Plaintiff's
11:12:28 19 Exhibit 41.

11:12:28 20 Do you see that?

11:12:29 21 A. I do.

11:12:30 22 Q. Okay. This is the S23 sample that Professor Wobbrock
11:12:34 23 was using in his demonstrations?

11:12:36 24 A. That's my understanding.

11:12:37 25 Q. Okay. And here I am on the biometric screen of the S23

11:12:40 1 device, agreed?

11:12:41 2 A. Yes.

11:12:42 3 Q. Okay. And I'm going into the fingerprint settings. I
11:12:46 4 have a password prompt -- and miraculously, my password is
11:12:51 5 the same as yours. It's 1234. Neither of us have a very
11:12:55 6 secure phone; would you agree, sir?

11:12:57 7 A. Yes.

11:12:58 8 Q. Okay. So let's see if we can't make this phone a
11:13:01 9 little bit more secure and register a fingerprint.

11:13:03 10 So I go to add a fingerprint. I'm in that same
11:13:06 11 registration screen we've been seeing, correct, sir?

11:13:08 12 A. Yes.

11:13:09 13 Q. Okay. I'm clicking on register, and now we're at 0
11:13:13 14 percent. We're start -- we're at the start of that
11:13:16 15 registering process or that registering mode, correct, sir?

11:13:19 16 A. Yes.

11:13:19 17 Q. Okay. And I'm going to hold the phone at about this
11:13:22 18 angle here, and I'm going to put my finger in at about a
11:13:25 19 45-degree angle.

11:13:26 20 Do you see that, sir?

11:13:28 21 A. Yes.

11:13:28 22 Q. And I'm going to touch the sensor of the device, that
11:13:30 23 same 45-degree angle we just saw. And what happened?

11:13:34 24 A. Says 20 percent.

11:13:36 25 Q. Okay. Now, earlier you mentioned that when -- when we

11:13:39 1 would give our fingerprints using ink, you'd have to roll
11:13:44 2 along the ends and the edges and the tips and all around to
11:13:47 3 get a complete map?
11:13:48 4 A. No.
11:13:48 5 Q. No? What did you tell us?
11:13:50 6 A. For physical fingerprinting, you roll left to right.
11:13:54 7 Q. Okay. So let's see if the sensor will accept input
11:13:58 8 from the left and right edges of the finger.
11:14:01 9 So, here, I'm putting my right edge on the sensor
11:14:05 10 of the finger. And what happens, sir?
11:14:07 11 A. It advanced.
11:14:07 12 Q. To 30 percent?
11:14:09 13 A. Yes.
11:14:09 14 Q. And I'm going to put my left edge, my left end of the
11:14:13 15 finger on the sensor.
11:14:17 16 And I'm a little nervous, so it's taking a couple
11:14:21 17 tries here. Let me wipe that off.
11:14:25 18 We've advanced now to what percentage, sir?
11:14:26 19 A. 39 percent.
11:14:29 20 Q. Okay. And Mr. Cunningham in his examination of
11:14:33 21 Professor Wobbrock, he showed this kind of lower end of the
11:14:36 22 finger that's just below the knuckle on this side. It's
11:14:40 23 clearly below the pad of the finger.
11:14:42 24 Do you recall that?
11:14:42 25 A. Yes.

11:14:43 1 Q. Did you try touching the sensor with that part of the
11:14:47 2 finger?

11:14:47 3 A. I don't know that I ever tried that specifically.

11:14:50 4 Q. Let's do that experiment now, shall we? I'm touching
11:14:52 5 now with the lower part of the finger. You can see my pad
11:14:55 6 is clearly not on the detector of the S23. I'm putting it
11:15:00 7 down. What happened, sir?

11:15:02 8 A. 47 percent.

11:15:02 9 Q. Okay. We've advanced, as well?

11:15:04 10 Now, earlier in your testimony also you mentioned
11:15:08 11 that this S23 device was only designed really to accept the
11:15:11 12 input from the pad of the finger; is that correct?

11:15:14 13 A. I think I more specifically said it is not designed to
11:15:19 14 receive input from the end of a finger.

11:15:22 15 Q. Okay. You also mentioned that -- you know, if you
11:15:25 16 tried to touch this with some other part of the body, like
11:15:28 17 an elbow or a palm, it wouldn't work, something to that
11:15:30 18 effect, right, sir?

11:15:32 19 A. No, I didn't say that.

11:15:34 20 Q. Okay. Well, maybe I misremembering. But this sensor
11:15:37 21 will, in fact, accept inputs from -- it will accept the
11:15:40 22 touch from whatever you give it that has some capacitance;
11:15:40 23 isn't that true?

11:15:45 24 A. I haven't tested that myself.

11:15:47 25 Q. Okay. So let's try it with something that is clearly

11:15:48 1 not a finger, like, say, my nose. It's a little silly, but
11:15:53 2 let's try it. If I touch my nose to the sensor, what do
11:15:57 3 you think is going to happen?

11:15:57 4 A. I actually don't know.

11:15:59 5 Q. Let's do that experiment now. It's at 47 percent,
11:16:04 6 correct, sir?

11:16:04 7 A. Yes.

11:16:05 8 Q. And I'm talking the detector with my nose. We've moved
11:16:14 9 to what now, sir?

11:16:14 10 A. It says 54 percent.

11:16:19 11 MR. NESE: No further questions, Your Honor.

11:16:22 12 Thank you.

11:16:23 13 THE COURT: Redirect?

11:16:32 14 MR. CUNNINGHAM: Just briefly, Your Honor.

11:16:33 15 Briefly, Your Honor.

11:16:40 16 Let's have DDX-3.6, please. Let's get back to the
11:16:47 17 claim language.

11:16:49 18 REDIRECT EXAMINATION

11:16:51 19 BY MR. CUNNINGHAM:

11:16:51 20 Q. First registering mode for inputting information by a
11:16:52 21 pad of the finger. Do you see that, sir?

11:16:52 22 A. I do.

11:16:52 23 Q. Second registering mode for inputting input information
11:16:57 24 by an end of the finger. Do you see that?

11:16:58 25 A. I do.

11:16:59 1 Q. You were asked questions about right edge. Do you
11:17:05 2 remember that?

11:17:05 3 A. Yes.

11:17:06 4 Q. Do the words "right edge" appear in the claim?

11:17:09 5 A. No.

11:17:11 6 Q. You were asked questions about left edge of the finger.

11:17:16 7 Do the words "left edge" appear in the claim?

11:17:19 8 A. No.

11:17:21 9 Q. You were asked questions about the lower end. Now

11:17:25 10 we're talking about -- it was back end before, now we're

11:17:29 11 talking about the lower end of the finger right behind

11:17:32 12 somebody's first knuckle.

11:17:34 13 Do the words "lower end" or "back end," for that
11:17:37 14 matter, appear in this claim, sir?

11:17:40 15 A. No.

11:17:40 16 Q. And how about nose, does nose appear in the claim?

11:17:45 17 A. No.

11:17:45 18 Q. So when it says "an end of the finger," what would a
11:17:49 19 person of ordinary skill in the art reading this patent in
11:17:53 20 2011 conclude?

11:17:54 21 A. That it's referring to the end or tip of the finger.

11:17:57 22 MR. CUNNINGHAM: No further questions.

11:17:59 23 THE COURT: Any recross?

11:18:01 24 MR. NESE: No recross, Your Honor.

11:18:02 25 THE COURT: All right. You may step down.

11:18:07 1 Samsung may call its next witness.

11:18:44 2 MR. FOWLER: Thank you. Samsung calls Dr. Kia.

11:18:50 3 May we pass out binders?

11:18:55 4 THE COURT: Of course.

11:18:55 5 MR. FOWLER: And, Your Honor, may I go grab one of

11:18:55 6 those microphones?

11:19:00 7 THE COURT: Yes.

11:19:00 8 If you would, just pause right there and raise

11:19:02 9 your right hand.

11:19:03 10 (Witness sworn.)

11:19:04 11 MR. FOWLER: May I proceed, Your Honor?

11:19:05 12 THE COURT: You may.

11:19:06 13 OMID KIA, PH.D., DEFENDANTS' WITNESS, SWORN

11:19:06 14 DIRECT EXAMINATION

11:19:07 15 BY MR. FOWLER:

11:19:07 16 Q. Good morning, Dr. Kia.

11:19:09 17 A. Good morning, sir.

11:19:09 18 Q. How are you doing?

11:19:11 19 A. I'm doing great. Thank you. How are you?

11:19:11 20 Q. I'm doing great.

11:19:12 21 Can you please introduce yourself to the jury?

11:19:14 22 A. Absolutely. My name is Omid Kia. I'm a resident of

11:19:18 23 the state of Maryland, and I've been living there since

11:19:22 24 1985.

11:19:23 25 Q. And what brings you from Maryland here today?

11:19:25 1 A. To provide testimony -- expert testimony for the '848
11:19:30 2 and the '815 patents.

11:19:31 3 Q. And can you please tell the jury what you currently do
11:19:34 4 for a living?

11:19:35 5 A. I'm a subject matter expert, providing R&D and expert
11:19:40 6 testimony in various venues.

11:19:45 7 Q. Can you tell us what kind of consulting services you
11:19:47 8 provide?

11:19:48 9 A. In the technical fields, image science, data science,
11:19:52 10 signal processing, computer programming, which always
11:19:56 11 includes graphical user interfaces.

11:19:56 12 Q. And how long have you been providing consulting
11:19:59 13 services in those fields?

11:20:00 14 A. More than a decade.

11:20:01 15 Q. And at least during the last decade, would we recognize
11:20:05 16 some of the names of the companies you've worked for?

11:20:07 17 A. Absolutely. It'll be companies such as IBM, Honeywell,
11:20:12 18 Motorola, things like that.

11:20:16 19 Q. We've also heard during this case about a company
11:20:19 20 called Lenovo. Have you done work for them?

11:20:21 21 A. Yes, I have.

11:20:22 22 Q. What about Nokia?

11:20:24 23 A. Yes, I have.

11:20:24 24 Q. And, again, in what technical fields have you provided
11:20:27 25 consulting services for these companies?

11:20:29 1 A. So same field, image science, data science, signal
11:20:33 2 processing, computer programming, and graphical user
11:20:36 3 interfaces.

11:20:36 4 Q. Okay. So let's pick a couple of those things. Let's
11:20:41 5 start with image processing.

11:20:42 6 Can you give the jury just one example of
11:20:44 7 consulting work that you've done in this field in the last
11:20:47 8 10 years?

11:20:47 9 A. Yes. So I've developed a system for UAVs for -- to
11:20:52 10 support the war fighter using a infrared camera. And
11:20:57 11 usually infrared cameras have a very small field of view.

11:21:02 12 So we used a mirror to scan the area to expand the
11:21:06 13 field of view. So instead of having one square, we would
11:21:08 14 have a three-by-three square.

11:21:10 15 And this system would have to ride on a UAV, which
11:21:10 16 has limited power, limited weight, so you cannot put a
11:21:10 17 supercomputer on a UAV.

11:21:19 18 So I had to develop an algorithm that could
11:21:21 19 generate an image. And infrared, remember, it's heat. So
11:21:26 20 the image is very uneven.

11:21:28 21 To be able to put the images together, to stitch
11:21:30 22 them together and -- and motion compensate them, I had to
11:21:37 23 develop an algorithm that would be very efficient, that
11:21:39 24 would stand in the UAV, and to stream that data to the war
11:21:45 25 fighter. It's a very, very big images. So the war fighter

11:21:48 1 would be able to interact with it and get the data that
11:21:51 2 they needed.

11:21:51 3 Q. So you mentioned war fighter. Was this work that you
11:21:54 4 were doing for the United States Army?

11:21:56 5 A. Yes, sir, that was.

11:21:57 6 Q. Okay. You also mentioned that you do work for
11:22:01 7 graphical user interfaces. Can you give the jury just one
11:22:04 8 example of consulting work in that area?

11:22:05 9 A. Absolutely. So I designed a algorithm -- if you ever
11:22:10 10 go to a dentist office, you get what's called a panoramic
11:22:15 11 image. You bite on that thing, and you have to align.
11:22:18 12 There's laser lights. If the alignment is not right, the
11:22:21 13 image doesn't come out right.

11:22:23 14 So in my work in making a head and neck CT for
11:22:26 15 dental implants, I developed an algorithm that used the
11:22:29 16 same sensor to generate a panoramic image using individual
11:22:36 17 frames.

11:22:37 18 Now, what this did is that after the scan, you can
11:22:41 19 actually go and change the focus of the image.

11:22:46 20 Remember, the focus is your dentures. Everybody
11:22:49 21 is different. A wide trough, narrow trough, sometimes you
11:22:53 22 have an overbite, you have an underbite.

11:22:56 23 So after the scan, I had to provide graphical user
11:22:59 24 interface for the user to change those troughs, being able
11:23:02 25 to take it front and back and focus the image.

11:23:06 1 Q. Okay. So we talked a little bit about your consulting
11:23:10 2 work. Did you provide or create slides to assist in your
11:23:13 3 testimony today?

11:23:14 4 A. Yes, sir, I did.

11:23:19 5 MR. FOWLER: So if we could pull up the first
11:23:21 6 slide, please.

11:23:21 7 Q. (By Mr. Fowler) So can you tell the jury what degrees
11:23:25 8 you hold and where you obtained them from?

11:23:28 9 A. Sure. I received a Bachelor's in electrical
11:23:32 10 engineering from the Catholic University of America in
11:23:34 11 Washington D.C. in 1987.

11:23:35 12 I completed a Master's in electrical engineering,
11:23:39 13 as well, at the University of Illinois in Chicago in 1989.

11:23:42 14 And I completed my Ph.D. in electrical
11:23:46 15 engineering, as well, from the University of Maryland in
11:23:50 16 College Park in 1997.

11:23:51 17 Q. When you obtained your Ph.D., did you have a particular
11:23:54 18 area of study that you focused on?

11:23:56 19 A. Yes. My areas were in the general area of control
11:24:00 20 theory, which is a lot of math, communication theory, which
11:24:04 21 included things like image processing, detection,
11:24:09 22 estimation, pattern recognition, and a lot of programming
11:24:11 23 and graphical user interface so I would be able to
11:24:14 24 demonstrate my results.

11:24:16 25 Q. Okay. So it says here on the slide you have 40 years

11:24:19 1 of industry experience. We're not going to walk through
11:24:21 2 all those jobs, or we'd be here for a while. But let's do
11:24:25 3 at least a few.

11:24:27 4 After you got your Ph.D., what was your first job
11:24:29 5 in industry?

11:24:30 6 A. So I first entered the National Institute of Standard
11:24:35 7 and Technology in a group called multi-media and digital
11:24:37 8 video. And I was actually a U.S. ambassador to the MPEG
11:24:45 9 Standardization Group. So I represented the United States
11:24:46 10 in those meetings so that the U.S. commerce would represent
11:24:49 11 the U.S. interests.

11:24:51 12 Q. Okay. And what did you do after you worked at the
11:24:55 13 National Institute of Standards and Technology?

11:24:57 14 A. I accepted the position at an imaging company, was
11:25:00 15 actually called ImaCom, standing for imaging company, as
11:25:05 16 the chief technical officer. And in this company, we made
11:25:09 17 imaging systems for various things; all of it X-ray.

11:25:12 18 So if you ever go and you have a heart problem,
11:25:15 19 they put you on a bed and they take X-rays of you. So that
11:25:19 20 would be a cardiography system that we made that -- that
11:25:24 21 captures what's called cine, which is like of just video.

11:25:29 22 Digital subtraction angiography, which is if you
11:25:32 23 put contrast in your arm and legs and see where the blood
11:25:36 24 vessels are blocked. And also abdomen.

11:25:40 25 So there's a matching of the cameras and the

11:25:42 1 detectors. We capture the images. And our software would
11:25:46 2 manage all of that software, provide tools to the end user
11:25:50 3 to measure things and also to communicate with the server
11:25:54 4 to store it.

11:25:55 5 Q. Okay. One more specific job. What did you do after
11:26:02 6 ImaCom?

11:26:02 7 A. So I accept a position as a senior vice president in
11:26:06 8 charge of technology for a startup company. The company
11:26:08 9 was developing a collaborative knowledge management system.

11:26:12 10 And the purpose was that multiple people can work
11:26:17 11 on a document, but more yet, as you source different --
11:26:21 12 different things from the outside, it would capture that
11:26:25 13 source. And then if the source changed content, it would
11:26:28 14 flag you.

11:26:29 15 So this required a lot of graphical user interface
11:26:32 16 to inform the -- the user that somebody else is working on
11:26:38 17 a document, this content changed, et cetera.

11:26:40 18 Q. Okay. So we touched kind of the beginning of your
11:26:43 19 career after you got your doctorate, and you've told us
11:26:47 20 what you've done in the last ten years. Can you at a high
11:26:51 21 level, without going through job through job, what you did
11:26:55 22 for those many years, 15 or 20 years in between?

11:26:57 23 A. Absolutely. So I held various positions as chief
11:27:01 24 scientist, chief engineer, computer vision scientist, all
11:27:04 25 of them in lead roles to get things done that never has

11:27:08 1 done before. These are always new algorithms, new ways of
11:27:13 2 doing things.

11:27:14 3 Q. Can you name a few of the companies that you worked for
11:27:16 4 during that period?

11:27:17 5 A. Absolutely. Imaging Sciences was one; ITT, which is
11:27:23 6 now L3 Harris is another one; Coastal Communication
11:27:32 7 Consultants, which I'm currently at right now.

11:27:35 8 Q. Okay. Shifting focus a little bit, do you have any
11:27:37 9 United States patents where you're a named inventor?

11:27:37 10 A. Yes, sir, I do. I have 16 U.S. patents.

11:27:40 11 Q. And do any of those patents involve either image
11:27:43 12 processing or graphical user interfaces?

11:27:45 13 A. Yes, sir, they do. Just like the infrared camera that
11:27:51 14 I explained earlier, that became a patent. Another one is
11:27:54 15 a super resolution of LiDAR.

11:27:58 16 So LiDAR is a system that scans the area in 3D
11:28:04 17 point cloud, and it's very coarse. Whenever you get a
11:28:09 18 point cloud, the bubble around it that you're not sure
11:28:13 19 where the point is varies, actually. So if you take
11:28:16 20 multiple pictures, I came up with a unique algorithm that
11:28:20 21 super resolves that, shrinks that bubble so you get a more
11:28:22 22 accurate reading.

11:28:23 23 Q. Have you published any papers -- industry papers
11:28:26 24 relating to either image processing or graphical user
11:28:28 25 interfaces?

11:28:29 1 A. Yes, sir, I have. The infrared camera was a
11:28:33 2 publication. There was a number of other ones that are in
11:28:38 3 image processing and video, as well.

11:28:39 4 Q. Okay. So, in this case that we're here for today, the
11:28:44 5 '848 patent is directed to digital video cameras that use
11:28:49 6 face recognition to organize captured image information.

11:28:53 7 Do you have expertise in that area?

11:28:54 8 A. Yes, sir. Actually, the first time I considered facial
11:29:03 9 recognition, I remember the day, was 1980 -- 1990. Yes,
11:29:08 10 that's when the first ident faces came out of MIT.

11:29:13 11 And since then, I've -- I've been very curious
11:29:15 12 about that. I've actually looked at using facial
11:29:19 13 recognition with infrared cameras where it looks at the
11:29:23 14 blood flow.

11:29:24 15 And also with LiDAR, it detects the 3D, how deep
11:29:28 16 is your eyes, where are your ears. So 3D position to help
11:29:33 17 identify a face.

11:29:34 18 Q. So just to be clear, this goes beyond curiosity. It's
11:29:39 19 what you do for a living; is that right?

11:29:40 20 A. That's right.

11:29:41 21 Q. So the '815 patent, the other patent that you're here
11:29:44 22 to talk about today, is directed to graphical user
11:29:47 23 interface for video management.

11:29:48 24 Do you have expertise in this area?

11:29:50 25 A. Yes, sir, I do. As I said, at ImaCom, our image

11:29:55 1 management system included both photo and video management.

11:29:59 2 Q. Okay. Now, based on your education, your work

11:30:03 3 experience for the last 40 years, do you consider yourself

11:30:05 4 an expert in the fields of image processing and analysis

11:30:08 5 and video and image graphical user interfaces?

11:30:11 6 A. Yes, sir, I do.

11:30:14 7 MR. FOWLER: Your Honor, at this time, Samsung

11:30:16 8 tenders Dr. Kia as an expert in the field of image

11:30:21 9 processing and analysis and video and image graphical user

11:30:22 10 interfaces.

11:30:22 11 MR. SIDDIQUI: No objection, Your Honor.

11:30:24 12 THE COURT: Very well.

11:30:26 13 MR. FOWLER: Thank you.

11:30:28 14 So if we can go to the next slide, please?

11:30:30 15 Q. (By Mr. Fowler) Can you please tell the jury what work

11:30:32 16 you were asked to do in this case?

11:30:33 17 A. Yes. I was asked to determine whether the '848 patent

11:30:40 18 is infringed for Claims 11 and 12.

11:30:42 19 I was asked whether the '815 patent is infringed

11:30:46 20 by Claims 1, 21, and 24.

11:30:51 21 I was also asked to determine whether the '815

11:30:54 22 patent is valid for Claims 1, 21, and 24.

11:31:00 23 I was also asked to evaluate the technical

11:31:02 24 comparability of patents and license agreements.

11:31:07 25 Q. Okay. Did you, in fact, perform all of this analysis?

11:31:10 1 A. Yes, sir, I did.

11:31:11 2 Q. And did you reach any conclusions on these points,
11:31:15 3 starting with the first and second points?

11:31:17 4 A. Yes, sir. I concluded that the accused Samsung
11:31:22 5 products do not infringe Claims 11 and 12 of the '848
11:31:26 6 patent; and the accused Samsung products do not infringe
11:31:30 7 Claims 1, 21, and 24 of the '815 patent.

11:31:33 8 Q. So, Dr. Kia, we're going to get into your detailed
11:31:36 9 analysis later, but in your view, is -- is this a close
11:31:40 10 call for either patent in terms of whether there's
11:31:43 11 infringement?

11:31:44 12 A. No, sir, not at all.

11:31:45 13 Q. Okay. So what conclusions did you reach regarding
11:31:48 14 No. 3?

11:31:51 15 A. I concluded that the '815 patent is invalid for
11:31:57 16 Claims 1, 21, and 24.

11:31:59 17 Q. Now, you understand, or maybe you don't, that the
11:32:03 18 jury's heard about proceedings in the Patent Office about
11:32:05 19 these two patents. Are you going to be talking about that
11:32:08 20 prior art here at trial?

11:32:09 21 A. No, sir, I'm not.

11:32:10 22 Q. You're going to be talking about prior art that's not
11:32:12 23 before the Patent Office right now; is that correct?

11:32:15 24 A. Yes, sir, that's correct.

11:32:16 25 Q. Okay. So what about the fourth point, what conclusions

11:32:21 1 did you reach in your analysis there?

11:32:23 2 A. I concluded that the -- the technical portion of the
11:32:27 3 licenses is that the patents that are covered in the
11:32:31 4 licenses are technically comparable to the subject matter
11:32:34 5 of the '848 and '815 patents.

11:32:38 6 MR. FOWLER: Can we take this slide down, please,
11:32:41 7 Mr. Splansky?

11:32:42 8 Q. (By Mr. Fowler) Okay. So let's start digging in on
11:32:44 9 your non-infringement opinions, and let's start with the
11:32:48 10 '848 patent. Is that okay?

11:32:49 11 A. Yes, sir.

11:32:49 12 Q. Can you please briefly describe for the jury what the
11:32:52 13 subject matter of the '848 patent is?

11:32:54 14 A. Yes. The '848 patent is directed to using face
11:32:57 15 recognition to reproduce photos and videos to the user.

11:33:01 16 Q. And what do you mean by image information?

11:33:04 17 A. Well, these are the data that is stored as part of the
11:33:08 18 photographs that are -- that are taken.

11:33:11 19 Q. Okay. What are the claims of the '848 patent that
11:33:15 20 Maxell is asserting against Samsung in this case?

11:33:17 21 A. Those are Claims 11 and 12.

11:33:20 22 Q. Okay. Now, again, we're going to be digging in here,
11:33:23 23 but at a very high level, can you tell the jury why you
11:33:27 24 conclude Samsung does not infringe Claims 11 and 12?

11:33:30 25 A. Yes, sir. So at a very high level, Claims 11 and 12

1 require that there be a first setting mode for registering
2 a person, and that is what is not present in the Samsung
3 phones.

4 MR. FOWLER: Could we please pull up the next
5 slide?

6 Q. (By Mr. Fowler) So can you tell the jury what
7 information you reviewed before you came to your conclusion
8 on non-infringement for the '848 patent?

9 A. Yes, sir. So I reviewed the patent and its file
10 history.

11 I reviewed the technical documentations for the
12 Samsung phones.

13 I reviewed Dr. Balakrishnan's report.

14 I reviewed the deposition testimonies of Samsung
15 engineers.

16 I also reviewed the source code and actually the
17 physical device to come to that conclusion.

18 Q. Were you here in the courtroom when Dr. Balakrishnan
19 testified?

20 A. Yes, sir, I was.

21 Q. Have you taken that testimony into account, as well?

22 A. Yes, sir, I have.

23 Q. Okay. Now, before we go into the specifics of why
24 Samsung doesn't infringe, what are the Samsung products
25 that you reviewed in reaching your conclusions?

11:34:32 1 A. So I reviewed the Samsung Galaxy S23 and the S -- and
11:34:36 2 the S23 Ultra.

11:34:37 3 Q. Why did you pick those two products?

11:34:39 4 A. That's because the parties agreed that those two are
11:34:45 5 representative of all of the accused Samsung products.

11:34:48 6 Q. Okay.

11:34:49 7 MR. FOWLER: So we can bring down that slide,
11:34:53 8 please.

11:34:53 9 Q. (By Mr. Fowler) Now, you earlier side said that the
11:34:57 10 Samsung phones don't infringe the '848 patent because they
11:34:59 11 don't have what the patent claims as a first setting mode
11:35:03 12 for registering a person.

11:35:05 13 What do you mean by "registering a person"?

11:35:08 14 A. Well, that's enrolling a person as a specific person so
11:35:11 15 when the device recognizes a person, it can present it as
11:35:15 16 that specified person to the end user.

11:35:18 17 Q. Can you give us an example of that?

11:35:19 18 A. Yes. So if I have pictures of my kids, for example,
11:35:27 19 and the phone has already recognized their face as
11:35:30 20 individual persons, I would like to register one child as
11:35:36 21 Camilia and the other child as Colin.

11:35:38 22 And I would like the phone to represent, reproduce
11:35:43 23 Camilia's pictures separate from Colin's pictures. I would
11:35:49 24 like the -- the device to tell me these are my individual
11:35:53 25 children's photos.

11:35:54 1 Q. Okay.

11:35:54 2 MR. FOWLER: So if we can bring up the next slide.

11:35:57 3 Q. (By Mr. Fowler) This is Figure 14 from the '848

11:36:01 4 patent. Now, you've added some coloring to it. But can

11:36:04 5 you confirm this is Figure 14 from the patent?

11:36:07 6 A. Yes, sir. This is Figure 14 of the '848 patent.

11:36:10 7 Q. Okay. Does this Figure 14 give an example of

11:36:15 8 registering using setting modes?

11:36:17 9 A. Yes, sir, it does. And the way it is done, I've

11:36:20 10 highlighted in yellow as the indication of the system is to

11:36:25 11 register a person from the following methods, which is just

11:36:30 12 below.

11:36:31 13 One method, which I've highlighted in pink, it's

11:36:35 14 Photograph Now. And the second method is Select From the

11:36:39 15 List.

11:36:40 16 Q. Okay. Now, this figure, for whatever reason, says how

11:36:44 17 to decide VIP, that's very important person, right?

11:36:48 18 A. That's correct.

11:36:48 19 Q. For purposes of what we're doing, that could be how to

11:36:52 20 decide Bob or Sue, right, someone's name?

11:36:58 21 A. Exactly. How to decide Bob or how to decide Sue from a

11:37:00 22 Photograph Now or Select From a List.

11:37:02 23 Q. Okay. So what in this figure is the purpose of the

11:37:05 24 yellow box?

11:37:06 25 A. It's to inform the user that is registering a person,

11:37:13 1 and to register a person, it is to proceed with one of
11:37:16 2 these two methods.

11:37:17 3 Q. Okay. So let's look at the method on the left where it
11:37:19 4 says 71, Photograph Now. What is that?

11:37:28 5 A. Next slide? Or is it --

11:37:30 6 Q. Would you like to -- on this slide. Let's stick on
11:37:36 7 this slide right now.

11:37:38 8 So Figure 71, what is the Photograph Now option?

11:37:40 9 A. So the Photograph Now option is when you're registering
11:37:43 10 a person, you take a new photograph, and then you register
11:37:46 11 the person on that photograph.

11:37:47 12 Q. Okay. And what's -- what's on the left, 72, Select
11:37:50 13 From List, what's that about?

11:37:52 14 A. So you register a person from the photographs that's
11:37:56 15 already stored on the phone. It is -- the faces are
11:37:59 16 already there, you select from a -- one of a plurality.

11:38:03 17 Or if you have one person that is register -- that
11:38:05 18 is recognized, there'll be one. But if there's multiple
11:38:10 19 people, you select from that.

11:38:12 20 Q. Okay.

11:38:12 21 MR. FOWLER: So let's go to Figure 15, which I
11:38:14 22 believe is on the next slide.

11:38:16 23 Q. (By Mr. Fowler) Okay. So this says Photograph Now at
11:38:18 24 the top. Can you verify for the jury this is Figure 15
11:38:21 25 from the patent where you've added some color?

11:38:26 1 A. Yes, sir. This is Figure 15 from the '848 patent.

11:38:30 2 Q. So what is Figure 15 representing?

11:38:32 3 A. This is an example how the Photograph Now registration
11:38:35 4 works. So what it's depicting is that the user is taking a
11:38:38 5 new photo and is using that photograph to register this
11:38:42 6 person.

11:38:44 7 MR. FOWLER: Let's go to the next slide, please.

11:38:46 8 Q. (By Mr. Fowler) So this is Figure 7 from the patent;
11:38:50 9 is that correct?

11:38:50 10 A. Yes, sir. This is from Figure 7 of the '848 patent.

11:38:53 11 Q. And can you please tell the jury what Figure 7 is
11:38:56 12 depicting?

11:38:57 13 A. Yeah. This is the second method, which is Select From
11:39:01 14 List.

11:39:01 15 And as you can see, it is presented with the
11:39:07 16 existing faces. These are already stored on the device.
11:39:10 17 So the user is to select one of the persons that's already
11:39:15 18 been recognized to be registered.

11:39:17 19 Q. So we -- we've heard the Photograph Now and Select From
11:39:21 20 the List. Are those, as the patent would describe them,
11:39:24 21 two separate modes for registering?

11:39:26 22 A. Yes, there's two separate modes.

11:39:28 23 Q. Okay. Now, do the claims of the '848 patent require
11:39:32 24 that you have both types of modes?

11:39:36 25 A. Yes. Both modes are required in the claims.

11:39:41 1 Q. So we'll get to the claim in a minute. But if you
11:39:44 2 don't have one of the two modes, can there be infringement?
11:39:47 3 A. No, sir, it cannot.
11:39:48 4 Q. Okay. So let's look at Claim 8 itself, which is the
11:39:52 5 asserted claim here at this trial.
11:39:54 6 MR. FOWLER: If we can bring up the next slide,
11:39:58 7 please.
11:39:58 8 Q. (By Mr. Fowler) So I want to do this in stages, so
11:40:00 9 we'll do it in little bits and bites. But we're looking at
11:40:05 10 Claim 8; is that correct?
11:40:07 11 A. Yes, sir. This is Claim 8 of the '848 patent.
11:40:09 12 Q. That's the claim that Maxell says that Samsung
11:40:09 13 infringes; is that correct?
11:40:10 14 A. No, that's Claims 11 and 12, which depends on Claim 8.
11:40:13 15 Q. That's why you're the expert and I'm standing here.
11:40:16 16 So can you explain to the jury why we're looking
11:40:20 17 at Claim 8?
11:40:20 18 A. Yes, sir. So Claim 8 is the independent claim. It's
11:40:23 19 not being asserted. But Claims 11 is dependent on this
11:40:29 20 claim.
11:40:29 21 So what that means, and I know this has been
11:40:32 22 discussed here before, is that all of the limitations of
11:40:34 23 Claim 8 goes into Claim 11, plus the additional limitation
11:40:39 24 of Claim 11.
11:40:40 25 And Claim 12 takes all the limitations of Claim

11:40:44 1 11, which includes Claim 8, and adds to that as well. So
11:40:48 2 Claim 8, these elements are required to be present to
11:40:53 3 infringe Claim 11 or Claim 12.

11:40:55 4 Q. Okay. Thank you for clarifying that.

11:40:56 5 So let's start with the yellow, which we have an
11:41:00 6 indicator there as being Claim Limitation 8[g]. Can you
11:41:05 7 explain to the jury what that is?

11:41:08 8 A. Yes, sir. So this corresponds to how to decide a VIP.

11:41:08 9 And it says to: Register a person in the image
11:41:15 10 information as a specific person in a mode selected from a
11:41:19 11 first setting mode and a second setting mode.

11:41:21 12 So it's just instructing that the registration
11:41:23 13 uses a first setting mode and a second setting mode.

11:41:28 14 Q. So does that mean the phone, in order to practice this
11:41:31 15 claim, would have to be able to present to the user two
11:41:33 16 different modes?

11:41:34 17 A. Yes, sir, both functionalities need to be present.

11:41:37 18 Q. Okay. So then can you tell us what's in orange, and
11:41:41 19 then can you also explain to the jury what you have on the
11:41:44 20 right there, the Photograph Now?

11:41:46 21 A. Yes. So the Photograph Now -- highlighted what I see
11:41:50 22 in pink -- is the first setting mode requirements. Okay.
11:41:56 23 So it says that the first setting mode is for newly
11:42:04 24 photographing the person, and then register it as the
11:42:08 25 specific person.

11:42:08 1 Q. And how did that correspond to Photograph Now in the
11:42:12 2 examples we saw in the specification?

11:42:12 3 A. So that is the requirement for Photograph Now is that
11:42:15 4 in the figure that I showed earlier, the user takes a new
11:42:19 5 photograph and registers that person.

11:42:21 6 Q. We're going to get to this later, and I didn't
11:42:24 7 underline this, but in that pink section, you'll see in the
11:42:27 8 third line, it says: Newly photographing the person in a
11:42:31 9 photographing mode and thereafter registering them as a --
11:42:35 10 or registered as a specific person.

11:42:37 11 Can you tell the jury whether that timing is
11:42:40 12 important here?

11:42:41 13 A. Yes, sir. So that timing is important because before
11:42:45 14 taking the photograph, the person is not registered. You
11:42:49 15 use first setting mode to take a photograph and thereafter
11:42:56 16 register it.

11:42:57 17 Q. Is that important to your analysis when we get to the
11:43:00 18 details later?

11:43:01 19 A. Yes, sir, that's very important.

11:43:02 20 Q. Okay. So let's look at the blue language.

11:43:04 21 Can you explain to the jury what this claim
11:43:06 22 language is discussing, and then explain how that
11:43:07 23 corresponds to the Select From List example in the
11:43:10 24 specification?

11:43:11 25 A. Yes, sir. So the -- what is highlighted in blue is

11:43:14 1 that second setting mode. So you're registering a person
11:43:22 2 selected from a plurality of faces that are already
11:43:25 3 recorded.

11:43:26 4 So image information recorded means that those
11:43:29 5 photographs are already in the device. You're selecting
11:43:33 6 from -- from photographs that have already been taken
11:43:37 7 before. So you're taking it from a list, and that
11:43:42 8 corresponds to what I showed earlier when you had a
11:43:45 9 selection of faces that you could pick from.

11:43:47 10 So this is the second setting mode.

11:43:49 11 Q. Are both these first and second setting modes used to
11:43:52 12 register a person as a specific person?

11:43:55 13 A. Yes, sir, they do.

11:43:56 14 Q. Is there anything in these claims about registering a
11:44:00 15 photograph, as opposed to a person?

11:44:01 16 A. No, sir.

11:44:03 17 Q. Okay. Now, if both of these modes are required for
11:44:09 18 registering a person, is the patent infringed -- is this
11:44:13 19 claim infringed if only one setting mode is used in a
11:44:18 20 product?

11:44:18 21 A. No, the device would not infringe because both modes
11:44:22 22 are required to be present. Both the first setting mode
11:44:24 23 and the second setting mode are required to be present for
11:44:28 24 a product to infringe.

11:44:30 25 Q. Okay.

11:44:31 1 MR. FOWLER: Let's go to the next slide.

11:44:33 2 Q. (By Mr. Fowler) I think you already explained this
11:44:36 3 that -- just to short-circuit this, Claim 8 is part of both
11:44:41 4 Claims 11 and 12. Is that what you were explaining to the
11:44:43 5 jury before?

11:44:44 6 A. Yes, sir, that's correct.

11:44:45 7 Q. Okay. So if the elements or requirements of Claim 8
11:44:48 8 are not practiced, are Claims 11 or 12 infringed?

11:44:52 9 A. That's correct.

11:44:52 10 Q. Are they infringed if Claim 8 is not practiced?

11:44:56 11 A. No. If elements of Claim 8 are not infringed, Claim 11
11:45:03 12 and 12 are not infringed.

11:45:05 13 Q. Okay.

11:45:05 14 MR. FOWLER: Okay. So let's bring that down.

11:45:10 15 Q. (By Mr. Fowler) Now, earlier you talked about the two
11:45:12 16 representative products, which I think you said are the
11:45:16 17 Galaxy S23 and the Galaxy S23 Ultra.

11:45:19 18 Do those phones have the capability to register a
11:45:23 19 person in both the first mode and the second mode as
11:45:25 20 required by the claims?

11:45:26 21 A. No, sir, those phones do not have that capability.

11:45:29 22 Q. Okay.

11:45:29 23 MR. FOWLER: So let's bring up Claim 8 again on
11:45:32 24 the next slide.

11:45:32 25 Q. (By Mr. Fowler) So what is missing in the Samsung

11:45:41 1 devices from Claim 8?

11:45:43 2 A. What is missing is part of Claim Element 8[g], what is
11:45:48 3 highlighted and is in pink, the first setting mode where
11:45:52 4 the newly photograph is used to register a person. That is
11:45:57 5 missing.

11:45:59 6 Q. Okay. If -- if the phones don't use 8[g], what method
11:46:06 7 does the Samsung phones use to register a person as a
11:46:10 8 specific person?

11:46:11 9 A. The Samsung phones use the second setting mode. The
11:46:17 10 pictures are already stored. They're selecting from what
11:46:23 11 is already recognized as persons. And then you register
11:46:26 12 that person. It's already in the device. It's not newly
11:46:29 13 photographed.

11:46:29 14 Q. Now, do you have a video that you can show to the jury
11:46:33 15 that shows how this registration process works in the
11:46:37 16 Samsung phones?

11:46:38 17 A. Yes, sir, I do. It's actually Dr. Balakrishnan's video
11:46:42 18 that he provided in his report.

11:46:44 19 Q. So just to make this clear, this is not a video that
11:46:46 20 you slapped together to show to the jury to support your
11:46:49 21 position?

11:46:50 22 A. Yes, sir. This is not my video.

11:46:52 23 Q. We're using Maxell's own expert's video to prove your
11:46:56 24 point; is that right?

11:46:57 25 A. Yes, sir.

11:47:00 1 Q. Okay.

11:47:01 2 MR. FOWLER: So if we could pull up the video, and
11:47:04 3 before we start playing it, let's just get it on the
11:47:06 4 screen.

11:47:07 5 Q. (By Mr. Fowler) What we're going to do here is we're
11:47:09 6 going to run Dr. Balakrishnan's video, and I'd like you, as
11:47:11 7 we go through it, to tell the jury what they're seeing. Is
11:47:14 8 that okay?

11:47:15 9 A. Yes, sir.

11:47:15 10 Q. And a couple of times, we'll pause so that you can keep
11:47:19 11 up with what Dr. Balakrishnan is showing; is that okay?

11:47:22 12 A. Yes, sir, understood.

11:47:23 13 Q. Okay. So let's start with -- before we start playing
11:47:26 14 the video, what are we looking at right now?

11:47:30 15 A. So this is the phone once you power it on, and you get
11:47:34 16 to the first screen, you get this screen. And as you can
11:47:37 17 see, there's the Gallery icon which the user is going to
11:47:41 18 press to start.

11:47:42 19 MR. FOWLER: Okay. So let's start the video.

11:47:44 20 Q. (By Mr. Fowler) And then please tell us what we're
11:47:45 21 seeing.

11:47:46 22 A. Okay. We're going to see the user press the Gallery
11:47:50 23 icon, and -- and there's the Gallery application with the
11:47:54 24 photos.

11:47:54 25 At the very bottom, you see the albums and the

11:48:01 1 pictures, showing the pictures.

11:48:06 2 Q. So right now the user is scrolling through the
11:48:10 3 pictures; is that correct?

11:48:11 4 A. That's correct, yes.

11:48:25 5 Yeah. Let's start that again.

11:48:26 6 Okay. So that's the Gallery app. And at the very
11:48:30 7 bottom they select the albums button. And what is shown is
11:48:33 8 the current albums that are available in the device.

11:48:37 9 The user is going to go up and press that plus
11:48:40 10 sign. It means that they're going to add a type of album.

11:48:43 11 Q. That's at the very top of the screen, the plus sign?

11:48:46 12 A. That's correct.

11:48:46 13 Q. Okay.

11:48:53 14 A. So the system, once it's pressed with the plus sign,
11:48:57 15 this presents to the user another interface.

11:48:59 16 The second item in that auto -- interface is the
11:49:02 17 auto-updating album, and that's the one that the user is
11:49:05 18 going to select.

11:49:09 19 So once the user selects the auto-updating album,
11:49:14 20 it's presented with a dialog to name that album. It's
11:49:18 21 going to -- the user is going to type Hawah and press
11:49:21 22 create.

11:49:22 23 And then the system is presented with the faces
11:49:25 24 that it has already recognized so it can choose which
11:49:29 25 person they're going to name -- they're going to use for

11:49:33 1 this named auto-updating album.

11:49:35 2 So the user chose the very right one, it's a
11:49:37 3 picture of Hawah. And once press done, it returns back to
11:49:47 4 the album's view, and you notice that there's a new folder.
11:49:50 5 It's called the Hawah folder. And on the bottom left of
11:49:54 6 that folder, you see a circle with the A. It means that
11:50:02 7 it's an auto-updating album.

11:50:04 8 Q. Okay. Thank you.

11:50:08 9 So just to recap part of this, as part of the
11:50:12 10 registration mode using this auto-updating album, the user
11:50:14 11 types in the person's name; is that correct?

11:50:16 12 A. That's correct.

11:50:17 13 Q. And, in this case, Dr. Balakrishnan picked the name
11:50:20 14 Hawah for the person?

11:50:21 15 A. That's correct.

11:50:23 16 Q. Okay. And then after typing in that name, the person
11:50:29 17 picks an example picture of Hawah; is that correct?

11:50:32 18 A. That's correct.

11:50:32 19 Q. And then the camera -- or the Gallery application then
11:50:36 20 scours all of the pictures looking for all of the pictures
11:50:39 21 of Hawah and puts them together as an album?

11:50:42 22 A. That's correct.

11:50:43 23 Q. Okay. Now, at that point in time, and let's just focus
11:50:46 24 on Hawah, has the registration of Hawah been completed on
11:50:52 25 the Samsung phone?

11:50:52 1 A. Yes. So, at that time, registration is complete. The
11:50:55 2 pictures in the auto-updating album are Hawah pictures.
11:50:58 3 Q. And is there anything else that the user ever has to do
11:51:02 4 to register Hawah on the phone?
11:51:06 5 A. No, sir. There's not anything else to do.
11:51:09 6 Q. Okay. Is this -- what we just saw, is this a setting
11:51:12 7 mode as recited in Claim 8 of the patent?
11:51:15 8 A. Yes, sir. So this is the second setting mode. The
11:51:19 9 pictures were already stored on the phone. The user
11:51:24 10 selected the person and registered it to the Hawah album,
11:51:27 11 so all of the elements in the album are -- have Hawah in
11:51:30 12 it.
11:51:30 13 Q. And can we call this second mode in the phone the
11:51:33 14 auto-updating album mode, or words to that effect?
11:51:38 15 A. Yes, sir, I can.
11:51:40 16 Q. Okay. Now, why is what we just saw here a second
11:51:44 17 setting mode and not a first setting mode under the claims?
11:51:48 18 A. Yes, sir. So the process -- simply process the already
11:51:57 19 photographed elements that are already stored.
11:51:58 20 We never went through photograph a new person.
11:52:03 21 Everything was already stored. And the system simply
11:52:07 22 recognized the different people and named the person of --
11:52:13 23 that they wanted to specify.
11:52:15 24 Q. So does this auto-updating process that we looked at
11:52:18 25 involve registering a person using a newly taken

11:52:23 1 photograph?

11:52:23 2 A. No, sir. That's not at all...

11:52:26 3 Q. Is that what would be required for the first setting
11:52:29 4 mode in the claims?

11:52:30 5 A. Yes, sir. You need to photograph someone for a new
11:52:34 6 photograph.

11:52:34 7 Q. So you said you were here when Dr. Balakrishnan
11:52:37 8 testified, correct?

11:52:38 9 A. Yes, sir, I was.

11:52:39 10 Q. Do he and you both agree that this auto-updating album
11:52:43 11 process a second setting mode?

11:52:47 12 A. Yes, we both agree.

11:52:49 13 Q. Okay. And do you both also agree that the
11:52:51 14 auto-updating process is not a first setting mode?

11:52:56 15 A. Yes, sir, we agree on that, as well.

11:52:57 16 Q. You heard him admit to that in examination, correct?

11:53:01 17 A. That's correct, I was here.

11:53:03 18 Q. Okay.

11:53:04 19 MR. FOWLER: So let's go to the next slide.

11:53:06 20 Q. (By Mr. Fowler) So is this something you created?

11:53:11 21 A. Yes, sir, this is an overview of what just happened.

11:53:15 22 Q. So this is an overview and slide format of what we saw
11:53:19 23 on the video; is that right?

11:53:21 24 A. That's correct.

11:53:21 25 Q. So can you just briefly run through us -- again, using

11:53:24 1 this slide -- the auto-updating process?

11:53:27 2 A. Absolutely. So on the high levels on the very left,
11:53:32 3 have the albums's view. Press the plus button to create a
11:53:36 4 new album --

11:53:36 5 Q. May I interrupt you, sir?

11:53:38 6 What application on the phone are we in? I see
11:53:41 7 that little star on the -- whatever it is, asterisk. What
11:53:43 8 application are we in?

11:53:44 9 A. This is the Gallery application. Same Gallery
11:53:48 10 application that -- in Dr. Balakrishnan's videos got
11:53:52 11 started.

11:53:52 12 Q. Are we in the camera application here?

11:53:54 13 A. No, sir.

11:53:54 14 Q. Okay. Please proceed.

11:53:59 15 A. Okay. So in the album's view, we press the plus, and I
11:54:03 16 believe Dr. Balakrishnan pressed the three dots and said
11:54:06 17 "Create." It's the same thing. And selected the create
11:54:09 18 auto-updating album, named the album, and then selected a
11:54:13 19 recognized face to assign to this album. And then the
11:54:17 20 album was created with the name Hawah, which is -- now that
11:54:21 21 album is registered to Hawah. It contains photographs of
11:54:27 22 Hawah.

11:54:29 23 Q. Okay. Now, you heard Dr. Balakrishnan say earlier
11:54:31 24 during his testimony that there is somehow a first setting
11:54:36 25 mode in the accused Samsung products? Did you hear that?

11:54:39 1 A. I was here for that. I heard him.

11:54:41 2 Q. Is he correct?

11:54:41 3 A. No, sir, he's not.

11:54:42 4 Q. Why not?

11:54:43 5 A. Well, that's because he is pointing to an already
11:54:49 6 created Hawah auto-updating album.

11:54:53 7 Q. Okay. Now, is registering a person, like we see here
11:55:00 8 where you put in the name -- is registering a person a
11:55:03 9 requirement of the first setting mode, too?

11:55:06 10 A. Yes, it is.

11:55:07 11 Q. Okay. So let's -- we'll come back to your slide in a
11:55:11 12 minute, but let's go to the slide that Dr. Balakrishnan
11:55:17 13 used.

11:55:18 14 MR. FOWLER: So if we could pull that up, please.

11:55:20 15 Well, I'm sorry, go to the next slide. I'm ahead of
11:55:25 16 myself. Let's go to the next slide. We'll stick with your
11:55:28 17 slide for a minute.

11:55:29 18 Q. (By Mr. Fowler) So what is being represented here on
11:55:31 19 your slide?

11:55:32 20 A. What I'm showing here is a different application. This
11:55:34 21 is the camera application where it is used to take the new
11:55:38 22 photo, and that's something that I heard Dr. Balakrishnan
11:55:43 23 also use.

11:55:43 24 Q. Okay. So is -- to be clear, in Dr. Balakrishnan's
11:55:47 25 analysis, what application does he start with?

11:55:49 1 A. He starts with the camera application, the Galaxy S23
11:55:55 2 camera application.

11:55:56 3 Q. So let's -- important question here. Is it possible in
11:56:00 4 any way in the Samsung Galaxy S23 to use the camera
11:56:06 5 application to register a person?

11:56:07 6 A. No, sir, that is not possible.

11:56:09 7 Q. And did you -- were you here when Dr. Balakrishnan
11:56:12 8 acknowledged that that was true, that you can't register a
11:56:16 9 person using the camera application?

11:56:18 10 A. Yes, sir, I was here for that. I heard him.

11:56:21 11 Q. Okay. Now, for the sake of argument, let's just say
11:56:26 12 that Hawah has never had any pictures taken of her before,
11:56:30 13 right? So you're starting with a phone with no pictures of
11:56:37 14 Hawah on the phone.

11:56:38 15 How would I go about registering Hawah on the
11:56:41 16 phone?

11:56:42 17 A. Well, the first step, you have to go to the Gallery
11:56:45 18 application to register her.

11:56:47 19 Q. And what mode would you use in the Gallery application
11:56:51 20 to register her?

11:56:55 21 A. It would be the same exact process that I just
11:56:57 22 described, creating a new album, auto-updating album, and
11:57:01 23 if Hawah was not photographed before, wait until the system
11:57:06 24 recognizes Hawah as a person so it would have that icon to
11:57:10 25 select from.

11:57:10 1 Q. So is that the second setting mode?

11:57:13 2 A. That's still the second setting mode.

11:57:14 3 Q. Is there any other way -- again, let's just step back,
11:57:20 4 and Dr. Balakrishnan never even used this as an example,
11:57:23 5 but if you have a phone, there's no pictures of Hawah on
11:57:25 6 there before, you take a new picture with the camera
11:57:29 7 application, is there any way to register her other than
11:57:32 8 using the second setting mode?

11:57:36 9 A. No, sir, there's no other way.

11:57:37 10 Q. Okay. So now let's look at what Dr. Balakrishnan
11:57:41 11 showed to the jury.

11:57:43 12 MR. FOWLER: So if we can bring up PDX-6.54.

11:57:49 13 Q. (By Mr. Fowler) Now, do you recognize this as the
11:57:52 14 slide that Dr. Balakrishnan showed to the jury to try to
11:57:54 15 explain to them how there are both a first and second
11:57:59 16 setting mode in the Samsung phones?

11:57:59 17 A. Yes, sir, I was here for that. I saw this slide.

11:58:02 18 Q. Okay. So let's just focus first on the top half of the
11:58:05 19 slide, the part that's in purple.

11:58:07 20 Do you and Dr. Balakrishnan agree on what's in
11:58:12 21 purple?

11:58:12 22 A. Yes, sir, we both agree.

11:58:14 23 Q. And that's the second setting mode?

11:58:16 24 A. Yes, sir, that's true.

11:58:17 25 Q. That's the auto-updating album part of this, right?

11:58:20 1 A. That's correct.

11:58:21 2 Q. Okay. Now, according to what Dr. Balakrishnan said, is
11:58:30 3 the second setting mode, does that happen before the first
11:58:33 4 setting mode?

11:58:33 5 A. Yes, sir. So he performed the auto-updating album,
11:58:36 6 creating it before he used the first setting mode.

11:58:41 7 Q. Okay. So if we just were to focus on the bottom in the
11:58:44 8 yellow, according to the way Dr. Balakrishnan did this,
11:58:47 9 would it be possible to do what's in yellow without having
11:58:50 10 done what's in purple first?

11:58:53 11 A. No, sir, it would not be possible.

11:58:54 12 Q. Why not?

11:58:56 13 A. Well, that's because at the very last step where he
11:58:59 14 shows that the newly photographed Hawah is in that folder
11:59:03 15 would not be present. That auto-updating album would not
11:59:08 16 be there.

11:59:09 17 Q. Okay. So let's -- let's slow down here and take this
11:59:12 18 apart a little bit.

11:59:14 19 So we have on the right side of this PTX-6.54 two
11:59:21 20 images with a bunch of pictures on them. One on the top
11:59:24 21 and one on the bottom.

11:59:26 22 Do you see that?

11:59:26 23 A. Yes, sir, I do.

11:59:27 24 Q. Are those different albums or are they the same album?

11:59:32 25 A. Those are the same album.

11:59:33 1 Q. And were you here when Dr. Balakrishnan admitted on
11:59:36 2 cross-examination that those are the same album?
11:59:37 3 A. Yes, sir, I was here. I heard him say that.
11:59:40 4 Q. So not the same type of album, but literally the same
11:59:44 5 album?
11:59:45 6 A. Yeah, exactly. The same album, auto-updated album.
11:59:48 7 Q. So would it have been more accurate for
11:59:52 8 Dr. Balakrishnan to perhaps put just one album in the
11:59:55 9 middle and then perhaps have two arrows that would be
11:59:58 10 pointing to the same album?
12:00:00 11 A. That's correct.
12:00:00 12 Q. Okay. Now, focusing again down at the bottom on the
12:00:04 13 yellow, he starts with the camera application. And, again,
12:00:07 14 can you register a person using the camera application?
12:00:10 15 A. No, sir. The camera application does not have that
12:00:13 16 capability.
12:00:13 17 Q. Is there any dispute in this case that that's the case?
12:00:16 18 A. No, sir, there's no dispute.
12:00:18 19 Q. Okay. So then the other thing I asked
12:00:23 20 Dr. Balakrishnan --
12:00:24 21 MR. FOWLER: If -- Mr. Splansky, if you could put
12:00:26 22 a red box around face recognition and added to album.
12:00:32 23 Q. (By Mr. Fowler) Now, at that point and what
12:00:34 24 Dr. Balakrishnan is pointing to, are you still in the
12:00:37 25 camera application?

12:00:37 1 A. No, sir. That face recognition and added to album gets
12:00:43 2 performed in the Gallery application.

12:00:44 3 Q. Now, again, when I was examining Dr. Balakrishnan, did
12:00:47 4 he agree that this is happening in the Gallery application?

12:00:49 5 A. Yes, sir, he did.

12:00:50 6 Q. Okay. Now, at this point in time --

12:00:54 7 MR. FOWLER: You can take down the red box,
12:00:56 8 Mr. Splansky.

12:00:57 9 Q. (By Mr. Fowler) At the time that we're looking at
12:01:00 10 what's in yellow, has Huawei, even before the picture's
12:01:04 11 been taken, has she already been registered on that phone?

12:01:07 12 A. Yes, sir. She has already been registered.

12:01:11 13 Q. Would there be any reason to register her again?

12:01:15 14 A. No reason at all.

12:01:16 15 Q. Okay. And, again, before the camera even took her
12:01:20 16 picture, was that album, that auto-updating album, did it
12:01:26 17 already exist?

12:01:26 18 A. Yes, sir. It already existed before you took the
12:01:29 19 picture.

12:01:31 20 Q. Okay. So if -- if she's already been registered up
12:01:37 21 above and the auto-updating album already exists, what the
12:01:40 22 heck is happening down here in the yellow area?

12:01:43 23 A. It's just the Gallery application sorting a new image
12:01:47 24 based on the already registered person.

12:01:49 25 Q. So you're taking an already registered person, Hawah,

12:01:54 1 and you're taking a picture of her and adding it to the
12:01:57 2 already existing auto-updating album; is that right?
12:02:00 3 A. That's correct.
12:02:00 4 Q. So when he says "added to album," that part's correct,
12:02:09 5 right?
12:02:09 6 A. That's correct, yes.
12:02:10 7 Q. Is there any registration going on here down at the
12:02:13 8 bottom?
12:02:13 9 A. No, sir. There's no registration at the bottom.
12:02:17 10 Q. So is what's described at the bottom a registration
12:02:25 11 mode at all?
12:02:26 12 A. No, sir. That's not registration at all.
12:02:30 13 Q. Okay. So let's go back -- and just to be clear, so
12:02:35 14 does placing a new photo of an already registered person to
12:02:39 15 an already existing auto-updating album for that person
12:02:44 16 constitute a first setting mode under Claim 8?
12:02:47 17 A. No, sir, it does not.
12:02:48 18 Q. And how certain of you are that -- are you of that?
12:02:50 19 A. I'm extremely certain of that.
12:02:51 20 Q. Any doubt in your mind?
12:02:53 21 A. No, sir, no doubt.
12:02:54 22 Q. And did Dr. Balakrishnan point to any evidence that any
12:02:57 23 actual registration was going on in here other than him
12:03:00 24 saying constantly the word "registration"?
12:03:03 25 A. There's no evidence.

12:03:04 1 Q. Did he point to any source code that showed that there
12:03:06 2 was any registration going on?
12:03:08 3 A. No, sir.
12:03:09 4 Q. Did he point to any Samsung technical documents showing
12:03:12 5 that there was any registration going on?
12:03:13 6 A. No, sir, he did not.
12:03:14 7 Q. Did he point to anything on the phone itself showing
12:03:17 8 that there was any registration going on?
12:03:19 9 A. No, sir. I did not see that.
12:03:21 10 Q. Was it just his word for it, then?
12:03:24 11 A. That's correct.
12:03:25 12 Q. Okay. So let's -- let's go back to your demonstrative.
12:03:30 13 MR. FOWLER: And go to the -- so we're back up to
12:03:33 14 DDX-4.14, I think. Could we pull that up, please?
12:03:39 15 Q. (By Mr. Fowler) Okay. So can you tell -- we've
12:03:42 16 already seen the left part in blue, the second setting
12:03:44 17 mode. Can you tell us what you're describing here on the
12:03:47 18 right side?
12:03:47 19 A. Yes. So after taking the picture, the newly
12:03:54 20 photographed photograph is in the Gallery application.
12:03:57 21 So what happens when that new photo goes in the
12:04:01 22 Hawah auto-updating album, that's a process of sorting.
12:04:06 23 Face recognition takes place, it sorts it. It knows that
12:04:10 24 this particular face, which is recognized, belongs in the
12:04:14 25 Hawah folder.

12:04:15 1 Q. Okay. Is there any, for example, typing in of her name
12:04:20 2 a second time?

12:04:20 3 A. No, sir.

12:04:21 4 Q. Is there -- is the user doing anything to designate
12:04:24 5 that they're registering Hawah a second time?

12:04:27 6 A. No, sir.

12:04:28 7 Q. Okay. And I think Dr. Balakrishnan and you agree on
12:04:32 8 this, how long does this sorting process take or how long
12:04:36 9 can it take?

12:04:37 10 A. It -- quite long, up to 24 hours, up to a day for this
12:04:41 11 process to take place.

12:04:44 12 MR. FOWLER: So if we could go to the next slide,
12:04:48 13 please.

12:04:48 14 Q. (By Mr. Fowler) So what is missing, again, in the
12:04:51 15 Samsung camera that makes it not infringe?

12:04:54 16 A. What is missing is the first setting mode, the
12:04:57 17 requirement for photographing a new picture, a new photo,
12:05:05 18 and using that to register a person.

12:05:07 19 Q. So, here, I did underline this language. We have the
12:05:11 20 new photograph. And it says: Thereafter registering as a
12:05:16 21 specific person.

12:05:16 22 Why is Dr. Balakrishnan's theory wrong, or at
12:05:19 23 least what's one reason why it's wrong?

12:05:22 24 A. It's because when he performed the new photograph, the
12:05:25 25 person was already registered. He did not use that

12:05:29 1 photograph to register a person. So the requirement for
12:05:36 2 this Element 8[g], thereafter registered as a person, is
12:05:40 3 not met. He photographed it but didn't use it for
12:05:43 4 registering the person.

12:05:44 5 Q. So, Dr. Kia, can you please summarize for the jury your
12:05:50 6 non-infringement position with respect to Claims 11 and 12
12:05:54 7 as they incorporate Claim 8 of the '848 patent?

12:05:57 8 A. Absolutely. Because of the reasons I just discussed,
12:06:01 9 it is my opinion that Claim 8 of the '848 patent, the
12:06:09 10 limits are not met. And because of that, Claims 11 and 12
12:06:12 11 are not met. And it's my opinion that the accused Samsung
12:06:16 12 products do not infringe Claims 11 and 12 of the '848
12:06:20 13 patent.

12:06:20 14 Q. Thank you.

12:06:22 15 MR. FOWLER: Your Honor, I'm about to go to the
12:06:24 16 '815 patent. Would this be --

12:06:26 17 THE COURT: I think now is a good time for us to
12:06:28 18 break for lunch.

12:06:29 19 Ladies and gentlemen, we will recess until about
12:06:31 20 1:15.

12:06:32 21 As a reminder, don't discuss the case among
12:06:35 22 yourselves. Don't let it be discussed in your presence.
12:06:38 23 Don't do any independent research or investigation into any
12:06:41 24 matters associated with the case. And, finally, don't post
12:06:43 25 anything about your involvement as a juror on any social

12:06:48 1 media website or app. We'll see you at 1:15.

12:06:52 2 COURT SECURITY OFFICER: All rise.

12:06:53 3 (Jury out.)

12:07:13 4 THE COURT: You may step down.

12:07:16 5 See y'all at 1:15.

12:07:23 6 (Recess.)

12:57:13 7 (Jury out.)

01:18:22 8 COURT SECURITY OFFICER: All rise.

01:18:23 9 THE COURT: Mr. Beaber, can I see you and

01:18:31 10 Mr. Fowler at the bench, please?

01:18:33 11 (Bench conference.)

01:18:37 12 THE COURT: So we've had an inquiry from one of

01:18:40 13 the jurors about a work scheduling issue for Wednesday.

01:18:44 14 And the question I've got is, no pressure, but do you all

01:18:49 15 have any sense, strong or not, about whether we'll get this

01:18:56 16 to the jury on Tuesday?

01:18:57 17 MR. FOWLER: Absolutely.

01:18:59 18 THE COURT: You feel sure you will?

01:19:00 19 MR. BEABER: Yes.

01:19:01 20 MR. FOWLER: Yeah, I think if we have more than an

01:19:05 21 hour or hour and a half of evidence on Tuesday, I'd be

01:19:09 22 shocked.

01:19:09 23 THE COURT: Okay. I'm guessing -- I mean, I can

01:19:10 24 tell you're moving along pretty quickly. I know you've got

01:19:11 25 some rebuttal.

01:19:13 1 MR. BEABER: Very little.

01:19:14 2 THE COURT: But I'm guessing maybe Tuesday morning
01:19:17 3 we may have a little bit of testimony, but we'll get it to
01:19:20 4 the jury on Tuesday.

01:19:21 5 With y'all's agreement, I'm going to tell them
01:19:23 6 that he, you know, can expect that you'll get it to the
01:19:35 7 jury on Tuesday, and assuming they reach a verdict, he
01:19:41 8 would be able to work on Wednesday.

01:19:44 9 MR. FOWLER: Right.

01:19:46 10 MR. BEABER: Thank you, Your Honor.

01:19:52 11 (Bench conference concluded.)

01:19:53 12 THE COURT: All right. If we could have the jury
01:20:08 13 brought down.

01:20:14 14 COURT SECURITY OFFICER: Please stand for the
01:20:16 15 jury.

01:20:16 16 (Jury in.)

01:20:19 17 THE COURT: Please be seated.

01:20:44 18 Welcome back, ladies and gentlemen. I hope you
01:20:49 19 enjoyed your lunch. Before we resume with the testimony, I
01:20:53 20 know that one of you had inquired about sort of my
01:20:59 21 expectation and the parties' expectation at this point,
01:21:05 22 given the amount of time that I have given the parties to
01:21:10 23 present their cases and what the remaining expected
01:21:13 24 testimony is going to be and how long it will take, whether
01:21:17 25 we will finish this case on Tuesday.

01:21:21 1 I have visited with the attorneys, and we are
01:21:26 2 fairly confident this case will be submitted to you for
01:21:31 3 your deliberations on Tuesday.

01:21:34 4 There may be a little bit of testimony on Tuesday
01:21:38 5 morning, and there will be some work that we have to do in
01:21:43 6 the courtroom without you in here before we transition into
01:21:50 7 final jury instructions and closing arguments. But we'll
01:21:56 8 get those presented to you, I would say, hopefully in the
01:22:00 9 early afternoon on Tuesday.

01:22:03 10 And so after that, it's really kind of up to the
01:22:08 11 jury. So it depends on how long you all deliberate. But
01:22:12 12 we do expect to -- expect it to be in your hands by Tuesday
01:22:17 13 afternoon.

01:22:17 14 So with those comments, I hope that is helpful to
01:22:21 15 you.

01:22:22 16 At this time, Mr. Fowler, you may continue your
01:22:26 17 direct examination.

01:22:27 18 MR. FOWLER: Thank you very much, Your Honor.

01:22:29 19 Q. (By Mr. Fowler) Good afternoon, Dr. Kia. How are you?

01:22:31 20 A. Good afternoon, sir. I'm well. Thank you.

01:22:34 21 Q. So when we left off, we had just finished your
01:22:36 22 non-infringement opinion of the '848. We're about to start
01:22:39 23 your non-infringement opinion on the '815. Have I got that
01:22:42 24 right?

01:22:42 25 A. Yes, sir, you did.

01:22:43 1 Q. Okay. So can you please remind the jury of your
01:22:47 2 conclusions on the '815 patent?

01:22:48 3 A. My conclusion is that the accused Samsung products do
01:22:53 4 not infringe Claims 1, 21, and 24 of the '815 patent and
01:22:59 5 that also Claims 1, 21, and 24 are invalid.

01:23:03 6 Q. So let's start with your non-infringement analysis.

01:23:07 7 MR. FOWLER: Could we please put up the next
01:23:09 8 slide?

01:23:10 9 Q. (By Mr. Fowler) Okay. Can you tell us what
01:23:12 10 information you reviewed before you came to your
01:23:15 11 conclusions on non-infringement of the '815 patent?

01:23:18 12 A. Yes, sir. So I reviewed the patent and the file
01:23:21 13 history, technical documentation for the Samsung products.

01:23:25 14 I also reviewed Dr. Singh's report and the
01:23:28 15 deposition testimonies of Samsung engineers.

01:23:31 16 I looked at the source code and the physical
01:23:33 17 testing of the Samsung Galaxy S23 itself.

01:23:38 18 I also looked at the source code and testing of
01:23:46 19 the Netflix app.

01:23:46 20 Q. Were you also here when Maxell's expert Dr. Singh
01:23:49 21 testified at trial?

01:23:49 22 A. Yes, sir, I was here.

01:23:51 23 Q. Have you taken that testimony into account as well?

01:23:53 24 A. Yes, sir, I have.

01:23:54 25 Q. And do you agree with Dr. Singh's infringement

01:23:56 1 analysis?

01:23:57 2 A. No, sir, I do not.

01:24:01 3 Q. Okay.

01:24:01 4 MR. FOWLER: So let's go to the next slide.

01:24:02 5 Q. (By Mr. Fowler) Can you please summarize, at a high
01:24:05 6 level -- we'll get to the details in a minute -- but at a
01:24:08 7 high level, what your non-infringement opinion is with
01:24:10 8 respect to the '815 patent?

01:24:11 9 A. Yes, sir. So my opinion is that the Samsung Gallery
01:24:14 10 app running on the Galaxy S23 does not infringe Claim 1
01:24:20 11 because the user selects an area of the screen rather than
01:24:24 12 characters under the Court's construction.

01:24:27 13 And also the Netflix app running on the Galaxy S23
01:24:31 14 does not infringe Claim 21 and 24 because there's no first
01:24:38 15 character that's indicating an identity of the user on the
01:24:43 16 second interface. This is the Netflix home screen.

01:24:46 17 Q. Okay. Just to make sure we're all on the same page, so
01:24:50 18 Maxell's infringement theory for Claim 1 pertains to the --
01:24:53 19 Samsung's own Gallery application; is that right?

01:24:55 20 A. That's correct.

01:24:55 21 Q. And Maxell's infringement theory for Claims 21 and 24,
01:25:00 22 they rely on this Netflix app that is potentially
01:25:04 23 downloaded on Samsung's phone?

01:25:06 24 A. That's correct.

01:25:07 25 Q. Okay. So let's turn to your more detailed analysis

01:25:10 1 starting with Claim 1.

01:25:12 2 Did the Court construe any terms in Claim 1 that
01:25:19 3 are important to your analysis?

01:25:20 4 A. Yes, sir. The Court construed the word "character."

01:25:24 5 MR. FOWLER: So let's put that up on the screen.

01:25:27 6 Q. (By Mr. Fowler) So can you tell us how the Court
01:25:30 7 construed the term "character"?

01:25:32 8 A. Yes, sir. The Court construed the character to mean:

01:25:34 9 A letter, number, punctuation mark, or other symbol or
01:25:39 10 control code that is represented to a computer by one unit
01:25:42 11 of information.

01:25:43 12 Q. Did you apply this construction in your analysis both
01:25:46 13 of Claim 1 and Claim 21?

01:25:48 14 A. Yes, sir, I did.

01:25:49 15 Q. Now, we'll get to the details later, but is this
01:25:52 16 construction important to your analysis?

01:25:55 17 A. Yes, sir, it is. It's fundamental.

01:25:58 18 MR. FOWLER: Now, let's go to the next slide, if
01:26:01 19 we could.

01:26:01 20 Q. (By Mr. Fowler) So what specific claim limitations of
01:26:04 21 Claim 1 are not present in the Galaxy S23?

01:26:09 22 A. Yes. The claim elements is what I'm showing here in
01:26:12 23 the slide. It's Claim Element 1[j] where the user
01:26:17 24 selection of the first character enables the display of
01:26:21 25 first group of thumbnails.

01:26:23 1 And then Claim Element 1[k], user selection of a
01:26:27 2 second character enables the display of a second group of
01:26:31 3 thumbnails.

01:26:33 4 Q. So can you explain at a high level to the jury what
01:26:36 5 these two claim requirements require?

01:26:39 6 A. Absolutely. So a user running the Gallery app, when
01:26:45 7 the user selects an album, a -- a first character is
01:26:52 8 supposed to be there. And once you press the album, the
01:26:55 9 thumbnails of what's inside the album are displayed. So
01:26:58 10 that would be the display of a first group of thumbnails.

01:27:01 11 You press on a different album, if a character is
01:27:05 12 chosen, you display a second group of thumbnails, a
01:27:09 13 different set of photos that are in the second -- second
01:27:14 14 album.

01:27:14 15 Q. So the characters that you would press would need to be
01:27:18 16 the letter, number, punctuation mark, or so forth, right?

01:27:23 17 A. That's correct.

01:27:23 18 Q. Okay. So under the Court's construction, how many
01:27:26 19 units of information must be represented in order for it to
01:27:29 20 qualify?

01:27:30 21 A. It is required that one unit of information be used.

01:27:33 22 Q. So why does a user selection on a Galaxy S23 fail to
01:27:39 23 meet the Court's construction of character?

01:27:41 24 A. Because the Galaxy app, when the user selects an album,
01:27:46 25 it's selecting an area. It is not selecting a character or

01:27:50 1 a letter or a punctuation mark, other symbols, and
01:27:53 2 certainly not one unit of information.

01:27:56 3 Q. Okay.

01:27:57 4 MR. FOWLER: So let's go to the next slide.

01:28:02 5 Q. (By Mr. Fowler) Now, can you tell us what we're
01:28:03 6 looking at here?

01:28:04 7 A. Yes, sir. So on the left side, this is the pane view.
01:28:12 8 We saw it a little earlier when you entered the Gallery app
01:28:14 9 and you press the albums. You see a list of albums that's
01:28:18 10 stored in the Gallery app. So each one of those icons that
01:28:22 11 you see is individual albums.

01:28:24 12 And on the right side, if you select one of those
01:28:27 13 albums, the thumbnails are shown, but also the list of
01:28:32 14 albums in the sliding pane is also shown on the left side,
01:28:36 15 which I've demarked in a yellow box.

01:28:39 16 Q. What exhibit are we looking at here?

01:28:41 17 A. This is DPX-4b, the actual physical device.

01:28:50 18 Q. Okay. Now, I'm going to just step back a little bit.

01:28:52 19 You were here when Dr. Singh testified, correct?

01:28:55 20 A. Yes, sir, I was.

01:28:55 21 Q. And so we saw on one of his slides something that looks
01:28:55 22 like what's on the right side of this image.

01:28:59 23 Do you recall that?

01:28:59 24 A. I do recall that.

01:29:00 25 Q. And do you recall my questioning to Dr. Singh about

01:29:05 1 whether pressing the thumbnail would infringe or not?

01:29:11 2 A. Yes, I remember that.

01:29:12 3 Q. And do you recall Dr. Singh admitting that pressing the

01:29:16 4 thumbnail would not be infringement?

01:29:17 5 A. That's correct, I remember that.

01:29:19 6 Q. And do you recall me asking him about the term

01:29:22 7 "favorites," if -- that if a person was trying to pick the

01:29:25 8 word "favorites," whether that would infringe?

01:29:27 9 A. Yes, I remember you talking about that.

01:29:28 10 Q. And do you recall him acknowledging that the term

01:29:32 11 "favorites" can't be the character because it has more than

01:29:35 12 one unit of information?

01:29:37 13 A. That's correct.

01:29:37 14 Q. And do you recall that what he was focusing on is the

01:29:42 15 user somehow looking for, like, the letter "F"?

01:29:42 16 A. That's correct.

01:29:46 17 Q. You understand that's his infringement theory?

01:29:47 18 A. That's correct. That's what I understand he proposed

01:29:52 19 as the infringement theory.

01:29:53 20 Q. Okay. Do you see any characters on the screen here?

01:29:59 21 A. Yes. I actually marked it in the red box. "Favorites"

01:30:08 22 on the left constitute composition of characters.

01:30:12 23 "Favorites" on the right, also composed of characters.

01:30:12 24 Q. Did you say "composition of characters"?

01:30:14 25 A. Yes.

01:30:14 1 Q. So in the "favorites" box, how many characters are in
01:30:18 2 there?
01:30:19 3 A. Let's see, nine characters.
01:30:22 4 Q. Right. So each one of those is a character?
01:30:24 5 A. That's correct.
01:30:26 6 Q. Okay. And was -- was Dr. Singh correct, that each one
01:30:29 7 of those would be represented by one unit of information so
01:30:32 8 that the whole word is nine?
01:30:35 9 A. So each character would be one unit of information, but
01:30:38 10 the whole would be nine.
01:30:40 11 Q. Okay. Does the user select any character on the screen
01:30:46 12 in order to select the albums on the right?
01:30:48 13 A. No, sir.
01:30:49 14 Q. What happens, instead, in the phone? What actually
01:30:53 15 happens?
01:30:53 16 A. What actually happens in the phone is that the user
01:30:57 17 selects the area, and this is by testing, and also I have
01:31:02 18 source code that I looked at that confirms that.
01:31:05 19 Q. Have you heard of something called a dynamically
01:31:08 20 defined area?
01:31:09 21 A. Yes, sir.
01:31:09 22 Q. Can you explain to the jury what that is?
01:31:12 23 A. So part of the graphical user interface, to make the
01:31:18 24 user interface pleasant, is the system takes into account
01:31:24 25 the size.

01:31:25 1 So if you don't have much size, you put, for
01:31:29 2 example, two thumbnails. If you've got the bigger phone
01:31:32 3 and maybe you can shrink the thumbnails a little bit more,
01:31:37 4 maybe you put three columns there.

01:31:39 5 So based on the real estate, the graphical real
01:31:42 6 estate that you have, the system distributes these buttons
01:31:45 7 accordingly. And if it cannot find it as an example of
01:31:48 8 this slide view, it provides a scrolling mechanism, so you
01:31:52 9 can go through the various items.

01:31:54 10 Q. Now, we're going to look at the source code in just a
01:31:56 11 few minutes. But does the source code describe selecting a
01:32:01 12 character as construed by the Court?

01:32:04 13 A. No, sir. The source code does not do that.

01:32:08 14 Q. Is the source code ever wrong?

01:32:10 15 A. No, sir.

01:32:10 16 Q. If -- if the source code or the software was set up to
01:32:14 17 recognize a character, would it be in the source code
01:32:16 18 somewhere?

01:32:16 19 A. Absolutely. The clicking of the item would clearly be
01:32:21 20 shown.

01:32:22 21 Q. And if it's not in the source code, what does that
01:32:24 22 mean?

01:32:25 23 A. That means it's not present in the accused products.

01:32:27 24 Q. Did Dr. Singh show the jury any source code at all for
01:32:30 25 this claim limitation?

01:32:32 1 A. No, sir, he did not.

01:32:33 2 Q. Are you going to?

01:32:36 3 A. Yes, sir, I am.

01:32:37 4 Q. Okay. Now, if that's the case, why are these -- why
01:32:40 5 are these characters even on the screen, you know, even as
01:32:44 6 a word? What's the purpose of having them on there?

01:32:46 7 A. So the purpose is that this gives a guide to the user
01:32:50 8 so that they would know that whatever they created -- as an
01:32:53 9 example, most of the icons in the album are from the
01:32:57 10 pictures that are in the album itself. These are guides.
01:33:02 11 And the user can name an album, again, user selection.
01:33:07 12 It's a guide for them to remember where is it in the album
01:33:11 13 structure that they want to go to see the pictures they
01:33:13 14 like.

01:33:14 15 MR. FOWLER: Your Honor, I'm going to need to
01:33:16 16 briefly seal the court while we look at some source code.

01:33:21 17 THE COURT: All right. The courtroom will be
01:33:23 18 sealed at this time.

01:33:24 19 (Courtroom sealed.)

01:33:24 20 (This portion of the transcript is sealed
01:33:24 21 and filed under separate cover as
01:33:24 22 Sealed Portion No. 14.)

01:37:46 23 (Courtroom unsealed.)

01:37:46 24 MR. FOWLER: Would you like me to wait, or should
01:37:48 25 I proceed?

01:37:49 1 THE COURT: You can proceed. I'm a little
01:37:51 2 concerned about that microphone.

01:37:53 3 Can the jury hear? Okay. Not great?

01:37:54 4 Maybe let's try to swap out the microphones.

01:38:00 5 Mr. Siddiqui has one there.

01:38:10 6 MR. FOWLER: How about that?

01:38:11 7 THE COURT: A little better.

01:38:13 8 MR. FOWLER: Thank you.

01:38:14 9 Q. (By Mr. Fowler) Now, we talked about your review of
01:38:16 10 the source code, but did you confirm what you saw on the
01:38:19 11 source code by your own testing?

01:38:24 12 A. Yes, sir, I did.

01:38:25 13 Q. Are you prepared to demonstrate some of your testing
01:38:28 14 for the jury using the overhead camera that we have up
01:38:31 15 there on the witness stand?

01:38:32 16 A. Yes, sir, I am.

01:38:33 17 Q. Okay. Can you, using the overhead camera, which
01:38:36 18 hopefully we can turn on now?

01:38:45 19 Are you ready, Dr. Kia?

01:38:47 20 A. No, this is too much zoomed in. Let me zoom out a
01:38:51 21 little. I think when it turns on, it gets better.

01:39:00 22 Okay. Yes, I'm ready.

01:39:00 23 Q. Okay. Can you -- using the overhead camera -- and let
01:39:04 24 me step back.

01:39:04 25 What is that -- what is that that you've put there

01:39:06 1 on the pad?

01:39:07 2 A. It is the DPX-4b. It is a Samsung Galaxy S23 device.

01:39:13 3 Q. Okay. Using the S23 exhibit device and the overhead
01:39:18 4 camera, can you please demonstrate for the jury your
01:39:23 5 testing?

01:39:24 6 A. Yes, sir. Wait until this catches up. Waiting for
01:39:40 7 connection. There we go.

01:39:44 8 Okay. I'm ready.

01:39:47 9 Q. Please proceed.

01:39:48 10 A. Okay. So once you turn on the device, it goes to the
01:39:52 11 home screen that we saw earlier. So I'm going to find the
01:39:56 12 Gallery app. This is the Gallery app.

01:40:00 13 Oh, this is upside down.

01:40:02 14 Q. Just turn it around, sir.

01:40:04 15 A. I'll do it like this.

01:40:07 16 Okay. So we get to the pictures pane, and when we
01:40:12 17 go to the albums pane, you get all of the albums that we've
01:40:16 18 seen before. Okay?

01:40:17 19 So I'm going to go to the banana album, and you
01:40:21 20 see that these are the various folders that are available.
01:40:28 21 Okay.

01:40:28 22 Q. You're pointing -- just for the record, you're pointing
01:40:30 23 to the folders on the left of the screen?

01:40:33 24 A. That's correct.

01:40:34 25 So when I go to a different folder, it shows this

01:40:39 1 one. It has a different content. Okay?

01:40:43 2 So when I go back to the banana folder, when I

01:40:48 3 select --

01:40:48 4 Q. Well -- I'm sorry, just -- because I can't at least see

01:40:51 5 it on the screen here because of the resolution. You're

01:40:54 6 looking at something that looks like a piece of tile; is

01:40:58 7 that right?

01:40:58 8 A. Yes.

01:40:58 9 Q. And are there words under it? I can't really quite see

01:41:03 10 it. Are there words under it on the screen?

01:41:05 11 A. Maybe I can reduce the exposure. Maybe it'll get

01:41:10 12 better.

01:41:17 13 Q. Very good. Thank you.

01:41:20 14 So what does it say -- what's the word below --

01:41:24 15 below that tile or the thumbnail?

01:41:26 16 A. It says "bananas."

01:41:28 17 Q. Okay. Please proceed.

01:41:31 18 A. Okay. So in this icon here -- I'm going to try to do

01:41:34 19 it so you can see where I touch -- is the carpets folder.

01:41:40 20 Okay? So I press even on the carpets icon, and it changes.

01:41:40 21 It selects that album.

01:41:41 22 Q. So let's just stop there. According to Dr. Singh and

01:41:44 23 you, does that infringe?

01:41:45 24 A. No, sir, it does not.

01:41:47 25 Q. Because you're clicking on a thumbnail; is that right?

01:41:50 1 A. That's correct.

01:41:50 2 Q. Okay. Please proceed.

01:41:52 3 A. Okay. So I go back to that banana, and I'm going to --

01:41:57 4 let's see -- I'm going to move -- I'm going to move the

01:42:04 5 slide bar so that the carpets' text is removed. So all you

01:42:11 6 see is the icon now.

01:42:12 7 Q. So, just for the record, what we're looking at is the

01:42:15 8 top two-thirds of the carpets' thumbnail, but the text,

01:42:20 9 carpets, below it, is no longer on the screen. Is that

01:42:24 10 right?

01:42:24 11 A. That's correct.

01:42:24 12 Q. Okay. Please proceed.

01:42:26 13 A. So when I press what is remaining, it selects the

01:42:29 14 album. It still does what it did before, okay?

01:42:32 15 So when I go back to the album and I remove it

01:42:35 16 all -- only for a sliver, the small part of the icon is

01:42:39 17 there.

01:42:40 18 Q. Again, just for the record, so now we're seeing the

01:42:43 19 very top of the carpets icon, and, again, the letters that

01:42:47 20 form carpets are no longer seen, correct?

01:42:50 21 A. That's correct.

01:42:50 22 Q. Okay. Please proceed.

01:42:53 23 A. So when I select that sliver, it still changes, okay?

01:43:00 24 And for the last step, if I remove the icon

01:43:01 25 completely, it's not there anymore, and I select that

01:43:05 1 sliver of an area underneath, it's still selected. And
01:43:09 2 that is because the area that is defined for that album,
01:43:14 3 it's still visible, even though you don't see anything.
01:43:18 4 Q. So what is -- what we just saw, how does that inform
01:43:22 5 your opinion as to why there's infringement or not?
01:43:24 6 A. Because a character is not selected. This confirms my
01:43:31 7 opinion that the area is defined as I saw in the source
01:43:35 8 code.
01:43:35 9 Q. And, in fact, in the last three of the four examples
01:43:38 10 you showed, character is not even on the screen anymore,
01:43:48 11 right?
01:43:48 12 A. That's correct.
01:43:48 13 Q. So is -- in that situation, what does that tell you
01:43:50 14 about whether a user of the Galaxy S23 is selecting a
01:43:55 15 character to open the albums?
01:43:56 16 A. Yeah, it tells me that the Galaxy S23, the user is not
01:43:59 17 selecting a character. Instead, it's selecting an area.
01:44:02 18 Q. How sure are you of that?
01:44:05 19 A. I am completely sure about that.
01:44:07 20 Q. Okay. Now, did Dr. Singh demonstrate this claim
01:44:11 21 limitation to the jury using a phone?
01:44:12 22 A. No, sir, he did not.
01:44:14 23 Q. Okay. So what did your review of the Samsung source
01:44:18 24 code, together with your own independent testing of the
01:44:22 25 Galaxy S23, lead you to conclude?

01:44:24 1 A. It led me to conclude that because the limitation for
01:44:29 2 character is not met, that Claim 1 of the '815 patent is
01:44:36 3 not infringed by the Samsung products.

01:44:39 4 Q. So let's go to your next slide.

01:44:41 5 So can you give us a brief summary of your opinion
01:44:50 6 regarding Claim 1?

01:44:52 7 A. Yes. So in summary, the limitations in Claim 1, 1[j]
01:44:58 8 and 1[k], user selection of the first character enables
01:45:02 9 display of a first group of thumbnails, and user selection
01:45:06 10 of the second character enables the display of a second
01:45:09 11 group of thumbnails are not present in the accused Samsung
01:45:12 12 products.

01:45:13 13 Q. Okay. Does that conclude your presentation on
01:45:16 14 non-infringement of Claim 1?

01:45:17 15 A. Yes, sir, that does.

01:45:19 16 Q. So why don't we turn to Claim 21 in the Netflix app?

01:45:23 17 MR. FOWLER: Can we put up that slide?

01:45:26 18 Q. (By Mr. Fowler) Okay. So please remind us what
01:45:29 19 Dr. Singh relies upon for Claim 21.

01:45:32 20 A. Dr. Singh relies upon the app Netflix running on a
01:45:37 21 Samsung Galaxy S23.

01:45:40 22 Q. Now, does Dr. Singh say that a Samsung phone that
01:45:45 23 Samsung sells that does not have the Netflix app on it
01:45:50 24 pre-installed, does it infringe Claim 21?

01:45:53 25 A. No. He does not say that, no.

01:45:55 1 Q. Okay. Now, did you personally purchase a Galaxy S23
01:45:59 2 device to analyze to see whether the Netflix app was
01:46:02 3 pre-installed?

01:46:03 4 A. Yes, sir, I actually purchased two, and both devices
01:46:06 5 did not have Netflix installed.

01:46:08 6 Q. So what did you have to do to install the Netflix
01:46:13 7 application on your phone?

01:46:14 8 A. In one device, I had to download it from the Galaxy App
01:46:20 9 Store, and another one from the Google App Store.

01:46:23 10 Q. Okay. When you purchased your phones, did Samsung
01:46:26 11 require you to download the Netflix app on your phone?

01:46:30 12 A. No, sir, they did not.

01:46:32 13 Q. Now, were you here when Dr. Singh testified about the
01:46:36 14 one phone that he purchased?

01:46:38 15 A. Yes, sir, I was here.

01:46:39 16 Q. Now, do you recall that he said he thought that the
01:46:44 17 Netflix app was pre-installed?

01:46:46 18 A. Yes, sir, I remember him saying that.

01:46:49 19 Q. Did you actually have an opportunity to inspect the
01:46:54 20 Galaxy S23 phone that Dr. Singh purchased and based his
01:46:58 21 testimony on?

01:46:59 22 A. Yes, sir, I did inspect it -- that phone.

01:47:02 23 MR. FOWLER: Can we put up the next slide, please?

01:47:07 24 Q. (By Mr. Fowler) Were you able to determine whether the
01:47:08 25 phone that Dr. Singh purchased and analyzed was sold with

01:47:14 1 the Netflix app pre-installed on it?

01:47:15 2 A. Yes. It was not pre-installed; it was downloaded.

01:47:19 3 Q. So can you tell us, looking at the slide, what are the
01:47:23 4 two images that we see on the far left?

01:47:26 5 A. The two far left images are the actual physical phones.
01:47:29 6 These are the phones that Dr. Singh had, and I was able to
01:47:32 7 test it.

01:47:32 8 Q. So what we're looking at here is the back of the phone
01:47:35 9 and the front of the phone; is that right?

01:47:36 10 A. That's correct.

01:47:37 11 Q. Okay. So what is in the middle screen?

01:47:41 12 A. So the middle screen is what is called on the top app
01:47:47 13 info.

01:47:47 14 The way you get to it is if you go to the settings
01:47:51 15 page, there is a part that you can go and see all the apps.
01:47:55 16 Once you scroll down to where Netflix is and you enter --
01:47:58 17 you press on the Netflix icon, this is the display that is
01:48:02 18 shown.

01:48:04 19 And if you scroll all the way down to the bottom,
01:48:07 20 there's a section that says "app details in store." And in
01:48:11 21 that section, it says that the app downloaded from Google
01:48:17 22 Play Store.

01:48:18 23 Q. So what does that tell you in terms of whether the
01:48:21 24 phone that Dr. Singh analyzed had the Netflix app
01:48:27 25 downloaded -- or was pre-installed?

01:48:29 1 A. Yeah, that tells me that it was not pre-installed, that
01:48:35 2 it had to be downloaded.

01:48:36 3 Q. So the only three phones that are being shown to the
01:48:40 4 jury in this trial, or at least discussed, the two you
01:48:41 5 bought and the one that Dr. Singh bought, were any of them
01:48:44 6 pre-installed with the Netflix app?

01:48:46 7 A. No, sir. Not that I know of.

01:48:48 8 Q. So would any of those three phones infringe?

01:48:50 9 A. No, sir, they would not.

01:48:52 10 Q. Okay. So let's go to the next part of your analysis.

01:48:55 11 MR. FOWLER: The next slides, please.

01:48:58 12 Q. (By Mr. Fowler) We're looking at part of Claim 21.

01:48:59 13 Can you tell us what we're looking at and why it's
01:49:03 14 significant to your opinion?

01:49:04 15 A. Yes, sir. So this is Claim Element 21[f], and what it
01:49:08 16 requires is a second user interface displaying the first
01:49:11 17 character.

01:49:14 18 Q. Okay. And why is that yellow language significant in
01:49:17 19 your analysis?

01:49:18 20 A. Because that is not present in the Samsung accused
01:49:24 21 products.

01:49:24 22 Q. Okay. Now, for the --

01:49:26 23 MR. FOWLER: Let's go to the next slide.

01:49:27 24 Q. (By Mr. Fowler) What did Dr. Singh, in his trial
01:49:32 25 testimony, I guess it was yesterday, say was the first

01:49:37 1 character in the Galaxy phone using the Netflix app?

01:49:40 2 A. Well, I heard him say a few things, but he pointed to

01:49:45 3 the Miyagi-Do icon that is present when you select a user

01:49:53 4 profile in Netflix, and you enter the second display,

01:49:59 5 there -- as I've shown here on the right, the user profile

01:50:04 6 icon is displayed and is pointing to that as the

01:50:08 7 character -- first character.

01:50:09 8 Q. So, is, in fact, this Miyagi-Do Karate icon a first

01:50:14 9 character as the Court has construed that term?

01:50:16 10 A. No, sir, it's not.

01:50:17 11 Q. Why not?

01:50:19 12 A. Well, that's because that's an image, it's an icon,

01:50:22 13 it's composed of pixels, many, many pixels, hundreds to

01:50:27 14 thousands of pixels, each containing multiple numbers. It

01:50:31 15 cannot be -- it cannot be meant to be one unit of

01:50:34 16 information.

01:50:34 17 Q. Were you here when Dr. Singh acknowledged to me that if

01:50:41 18 a user pressed on the blue area, it would -- it would open

01:50:44 19 the -- the folder?

01:50:46 20 A. That's correct.

01:50:46 21 Q. And if you -- he pressed on the, like, dark half moon

01:50:51 22 part at the top of the brown area, that would open the

01:50:54 23 character -- or open the folder?

01:50:56 24 A. Yes, I remember you asking him that.

01:50:58 25 Q. And if he happened to touch his finger on the M, that

01:51:02 1 that would open the folder?

01:51:03 2 A. That's correct.

01:51:04 3 Q. So what does that tell you?

01:51:05 4 A. Well, that tells me that this is an icon. The -- the
01:51:08 5 entire icon is composed of the element that does the
01:51:12 6 selection. It's the whole icon does the selection, not any
01:51:16 7 one character.

01:51:17 8 Q. And how many units of -- units of information are
01:51:20 9 represented to the computer by this icon?

01:51:24 10 A. It's -- it would be hundreds of thousands.

01:51:28 11 Q. Okay. Now, let's focus on the individual letters. Are
01:51:30 12 those letters like letters that you would type into a word
01:51:34 13 processing document?

01:51:38 14 A. No, sir, those are not.

01:51:39 15 Q. What are they instead?

01:51:41 16 A. So these letters are actually pixels. Each pixel is
01:51:46 17 distributed with its brightness and color values so that
01:51:49 18 that distribution mimics a sort of character that's
01:51:53 19 displayed. But underneath it, those are just fixed pixels.

01:51:57 20 Q. And although I think you've already said that this just
01:52:03 21 one integrated image, if you were to pick like the letter
01:52:06 22 M, how many pixels would be involved in that?

01:52:09 23 A. Yeah, that -- the letter M by itself would be tens to
01:52:12 24 hundreds of pixels.

01:52:14 25 Q. So is the letter M an icon and the icon a character

01:52:23 1 under the Court's construction?

01:52:24 2 A. No, sir, it's not.

01:52:25 3 Q. Can you please summarize your opinion regarding Claim
01:52:29 4 21 to the jury?

01:52:31 5 A. Yeah. Because of all the reasons I just mentioned
01:52:34 6 about the claim term limitation, it is my opinion that
01:52:40 7 Samsung Galaxy S23 running the Netflix app does not
01:52:43 8 infringe asserted Claims 21 and 24 of the '815 patent.

01:52:48 9 Q. And is the icon -- just to put a sharpened point on
01:52:53 10 that, is the icon, the Miyagi-Do icon that Dr. Singh is
01:52:57 11 relying on, is that a character as construed by the Court?

01:53:00 12 A. No, sir, it's not.

01:53:00 13 Q. Okay. So we've just covered your non-infringement
01:53:03 14 opinion on Claim 21.

01:53:04 15 What about Claim 24?

01:53:06 16 A. Yeah. So Claim 24 is dependent on Claim 21. So if
01:53:11 17 Claim 21 is not infringed, Claim 24 cannot be infringed.

01:53:14 18 Q. Is there any dispute about that point?

01:53:16 19 A. No, sir, no dispute.

01:53:18 20 Q. Okay. So have we now completed your non-infringement
01:53:21 21 opinion regarding the '815 patent?

01:53:24 22 A. That's correct.

01:53:25 23 Q. Okay.

01:53:27 24 MR. FOWLER: So let's go to the next slide.

01:53:29 25 Q. (By Mr. Fowler) And turn to the third part of your

01:53:31 1 opinions regarding invalidity.

01:53:33 2 Can you please summarize for the jury what your
01:53:40 3 top-line conclusions are regarding invalidity?

01:53:42 4 A. Yes, my conclusion is the Apple iPhone 8 renders the
01:53:48 5 asserted Claim 1 of the '815 patent obvious.

01:53:53 6 And it's also my opinion that the Netflix app
01:53:56 7 running on the Samsung Galaxy S23 renders asserted Claims
01:53:59 8 21 and 24 of the '815 patent obvious.

01:54:02 9 Q. Now, these are both what you call product prior art; is
01:54:09 10 that right?

01:54:09 11 A. That's correct.

01:54:09 12 Q. Are -- are either one of these the prior art that's
01:54:15 13 before the Patent Office right now in these inter partes
01:54:18 14 reviews petitions that we've been filing?

01:54:20 15 A. No, sir, they're not.

01:54:21 16 Q. Those are patents, right?

01:54:22 17 A. Yes, they are.

01:54:23 18 Q. So what the jury is being asked to look at here is
01:54:27 19 different than what the Patent Office is looking at?

01:54:29 20 A. That's correct, yes.

01:54:30 21 Q. Okay.

01:54:31 22 MR. FOWLER: So before we dig into the details,
01:54:35 23 let's go to the next slide.

01:54:36 24 Q. (By Mr. Fowler) Can you please tell the jury what the
01:54:38 25 level of ordinary skill in the art would be to implement

01:54:43 1 systems described in the '815 patent as of December 2004?

01:54:44 2 A. Yes, sir. In my opinion, a person of ordinary skill in
01:54:48 3 the art would have a bachelor's degree in computer science,
01:54:52 4 electrical engineering, or computer engineering, with two
01:54:55 5 years of experience in digital data management field.

01:55:00 6 Q. Are you qualified to render opinions under this
01:55:03 7 standard?

01:55:05 8 A. Yes, sir. As of the time, I had had my Ph.D. in
01:55:09 9 electrical engineering. I've done programming, and I've
01:55:11 10 done data management, very, very similar to this, and also
01:55:15 11 I've worked with individuals with this level of experience,
01:55:20 12 and I know their capability.

01:55:22 13 Q. Okay. Thank you.

01:55:23 14 MR. FOWLER: We can take down this slide.

01:55:26 15 Q. (By Mr. Fowler) So, again, just -- let's focus on
01:55:28 16 Claim 1 first and the iPhone -- iPhone 8. Does Dr. Singh
01:55:35 17 agree with you that this claim is invalid?

01:55:37 18 A. No, he does not.

01:55:39 19 Q. Are there areas where he does not disagree with you?

01:55:42 20 A. Yes, there are large area.

01:55:45 21 Q. Where -- what does he agree with you on or what does he
01:55:50 22 not disagree with you on, in any event?

01:55:52 23 A. He does not disagree that every element of Claim 1 is
01:55:56 24 present in iPhone 8.

01:55:58 25 Q. So let's make sure we understand this. We have a long

01:56:01 1 list of requirements in Claim 1. We've seen them before.
01:56:05 2 He does not disagree with you that every single one of them
01:56:09 3 is present in the iPhone 8?
01:56:10 4 A. That's correct. He does not disagree.
01:56:14 5 Q. Well, if he doesn't disagree with that, what's the
01:56:18 6 basis for him saying that this claim is valid?
01:56:20 7 A. He says that the iPhone 8 came too late, that it is not
01:56:25 8 prior art.
01:56:25 9 Q. Okay.
01:56:26 10 MR. FOWLER: So let's bring up the next slide.
01:56:29 11 Q. (By Mr. Fowler) What are we looking at here?
01:56:34 12 A. What I'm showing here is on the left is the iPhone 8,
01:56:38 13 and that it was available as of September 22nd, 2017.
01:56:43 14 Q. What's the exhibit number of the iPhone 8, for the
01:56:46 15 jury?
01:56:46 16 A. This is DTX-9 (sic).
01:56:47 17 Q. That's an actual physical phone?
01:56:49 18 A. Yes, sir.
01:56:50 19 Q. Do you have it up there with you?
01:56:52 20 A. It's this one.
01:56:53 21 Q. Okay. Thank you.
01:56:54 22 A. Yes.
01:56:54 23 Q. Please proceed.
01:56:56 24 A. And what's on the right, this is a part of what is
01:57:00 25 published in the patent itself. It's part of the first and

01:57:04 1 I think the second page, which shows all of the
01:57:09 2 applications that were filed leading up to this patent.

01:57:13 3 As you can see, the very first one at the very
01:57:15 4 bottom, that's the oldest application. It is August 11th,
01:57:20 5 2005. It was original application that was filed.

01:57:23 6 And what I have highlighted here in November 9th,
01:57:26 7 2017, that is when all of the limitations that is in
01:57:32 8 Claim 1 was first disclosed to the Patent Office for the
01:57:36 9 very first time.

01:57:38 10 Q. Okay. And just for the record, you're talking about
01:57:40 11 the first two pages of the '815 patent, correct?

01:57:43 12 A. That's correct.

01:57:44 13 Q. Okay. Now, I know you're not a lawyer, Dr. Kia, but
01:57:49 14 can you tell us for purpose of the analysis you performed,
01:57:53 15 what's a priority date?

01:57:54 16 A. So, yes, I am not a lawyer, but I understand the
01:58:00 17 priority date is to set a date whereby the patent enjoys
01:58:07 18 the power to enforce its claims.

01:58:10 19 Q. Is that the date that you compare to prior art, like
01:58:14 20 the iPhone 8, to see if the iPhone 8 is prior art?

01:58:18 21 A. Absolutely. So if -- iPhone 8, that was available
01:58:22 22 September 22nd, 2017, is before November 9th, 2017.

01:58:28 23 Q. And, again, I know you're not a lawyer, but what is
01:58:32 24 your understanding of how you determine what the priority
01:58:36 25 date is?

01:58:36 1 A. So my understanding is that it's -- the priority date
01:58:42 2 is the first time that all of the elements of that claim,
01:58:46 3 Claim 1, was first disclosed to the Patent Office.

01:58:54 4 Q. Okay.

01:58:54 5 MR. FOWLER: Let's go to the next slide.

01:58:58 6 Q. (By Mr. Fowler) What does this slide tell the jury?

01:59:02 7 A. Yeah, so these are the requirements for how the
01:59:05 8 priority date is determined.

01:59:08 9 So the first element is that the priority date is
01:59:13 10 determined on a claim-by-claim basis.

01:59:16 11 Q. Does that mean, for example, that Claim 1 could have a
01:59:21 12 different priority date than Claim 21?

01:59:23 13 A. Yes, sir, because they disclose different items,
01:59:26 14 different things.

01:59:26 15 Q. And, again, you're not a lawyer, but this is your
01:59:29 16 understanding of the law that possibly will be presented to
01:59:32 17 the jury later?

01:59:33 18 A. Yes, sir.

01:59:33 19 Q. Okay. So what's the second requirement?

01:59:35 20 A. So that every limitation of the claim must be disclosed
01:59:39 21 to the Patent Office.

01:59:40 22 Q. And disclosed where?

01:59:41 23 A. In the written body. This is in the disclosure. This
01:59:49 24 is in the figures and the paragraphs that follow it.

01:59:51 25 Q. Okay. And what is your third understanding of the

01:59:53 1 requirements?

01:59:53 2 A. So the disclosure of each element limitation must be
01:59:58 3 either in form of express or inherent.

02:00:01 4 Q. So what do you understand express to mean?

02:00:04 5 A. Express means that the limitations that disclosed as
02:00:10 6 part of the claim must be explained in a way that -- in a
02:00:14 7 way that is expressed. It is written down. It is present.

02:00:18 8 And one of ordinary skill in the art looking at
02:00:20 9 that claim element and reading the disclosure would
02:00:23 10 understand what they mean.

02:00:25 11 Q. Okay. And what does inherent mean?

02:00:27 12 A. Inherent is when there is no disclosure in the written
02:00:33 13 description. Inherent means that's the only way that it
02:00:37 14 can be done, that there's no two ways. It necessarily has
02:00:41 15 to be one way that that limitation can be achieved.

02:00:44 16 Q. So if you had a claim limitation and there were three
02:00:47 17 different ways that you could do it, the fact that one of
02:00:50 18 them is what the Plaintiff wants, would that be enough?

02:00:55 19 A. No, sir, that's not.

02:00:56 20 Q. Okay. What about the last point on your slide?

02:00:58 21 A. So if a limitation is just obvious, one of ordinary
02:01:02 22 skill in the art would understand what it is, that's not
02:01:06 23 sufficient.

02:01:06 24 Q. It's got to actually be expressed?

02:01:09 25 A. It's got to be expressed or inherent.

02:01:11 1 Q. Okay.

02:01:12 2 MR. FOWLER: So let's turn back to the actual
02:01:14 3 claim here, Claim 1. Let's go to the next slide.

02:01:17 4 Q. (By Mr. Fowler) What's your opinion based on in terms
02:01:19 5 of the priority date for Claim 1?

02:01:21 6 A. Yeah. So Claim 1 has a priority date of November 9th,
02:01:26 7 2017, because that was the first time the disclosure of
02:01:31 8 what I call the "no deletion limitation" was disclosed to
02:01:35 9 the Patent Office.

02:01:36 10 Q. And is the no deletion limitation something in Claim 1?

02:01:40 11 A. Yes, sir, it is.

02:01:45 12 Q. Okay.

02:01:45 13 MR. FOWLER: Let's go to the next slide.

02:01:46 14 Q. (By Mr. Fowler) Can you explain to the jury what we're
02:01:48 15 looking at here and tell them what the no deletion
02:01:51 16 limitation is?

02:01:51 17 A. So this is part of the Claim 1 of the '815 patent is
02:01:57 18 what I'm showing you. And very simply, the no deletion
02:02:01 19 limitation is removing -- is to being removed, an item, but
02:02:06 20 that item continues to display elsewhere. So it's not
02:02:11 21 permanently removed across everywhere. You delete it one
02:02:14 22 place, it still continues another place.

02:02:16 23 Q. So if you had a -- a video in your folder for -- in the
02:02:21 24 mom's folder and it was deleted, it would stay in the dad's
02:02:25 25 folder?

02:02:25 1 A. That's correct.

02:02:26 2 Q. Okay. Is the no deletion limitation part of Claim 1?

02:02:33 3 A. Yes, sir, it is.

02:02:34 4 Q. Okay.

02:02:35 5 MR. FOWLER: So let's go to the next slide.

02:02:38 6 Q. (By Mr. Fowler) And perhaps you could use -- tell us
02:02:40 7 what we're looking at here and explain maybe further what
02:02:43 8 the no deletion requirement is?

02:02:44 9 A. Yes, sir. So these are figures directly from the
02:02:50 10 patent, Figure 6 and 7. It's -- it's an example of what a
02:02:55 11 mother album and a father album would be. And each album
02:02:59 12 has two items in it. And one of the items, Item 502, is
02:03:03 13 the same item. Okay?

02:03:06 14 So the no deletion limitation would be that if the
02:03:11 15 mother removes the 502 item, that the 502 item in the
02:03:16 16 father would remain. And vice versa. If you delete the
02:03:22 17 Item 502 from the father album, that the mother, 502, would
02:03:28 18 still remain.

02:03:29 19 Q. Okay. The Figures 5 and 6 -- I'm sorry -- do Figures 6
02:03:35 20 and 7 show the no deletion limitation?

02:03:37 21 A. No, sir, they don't.

02:03:38 22 Q. Does the text in the specification describe at all what
02:03:41 23 would happen to 502 in the father if you deleted 502 in the
02:03:47 24 mother?

02:03:47 25 A. No, sir. The disclosure does not disclose that

02:03:52 1 cross-album functionality.

02:03:54 2 Q. Is there anything anywhere in the specification that
02:03:57 3 describes deleting a piece of video information in one
02:04:00 4 folder and having it remain in the other folder?

02:04:03 5 A. No, sir, it's not disclosed.

02:04:05 6 Q. Is the no deletion limitation inherently disclosed
02:04:09 7 anywhere?

02:04:09 8 A. No, sir, it's not.

02:04:11 9 Q. And why not?

02:04:12 10 A. Well, that's because there are multiple ways to delete
02:04:18 11 an item. One obvious way is I -- if a user deletes 502,
02:04:24 12 the 502 in the father would -- gets deleted as well.

02:04:29 13 Another one is if you delete 502 from mother, the
02:04:32 14 system asks, do you want to delete it here, delete it
02:04:36 15 everywhere, delete it for certain users. There's multiple
02:04:41 16 ways of deleting. This is for the cross-album
02:04:45 17 functionality.

02:04:45 18 Q. So is there any disclosure in the actual specification
02:04:48 19 of this patent of the no deletion limitation?

02:04:57 20 A. No, sir, there's no disclosure.

02:04:58 21 Q. So when was the first time that this no deletion
02:05:05 22 limitation was disclosed to the Patent Office?

02:05:05 23 A. The first time was in a publication in November 9th,
02:05:09 24 2017, where the application included one claim, Claim 1,
02:05:12 25 that had a similar language.

02:05:14 1 Q. Okay. Let's look at that.

02:05:15 2 MR. FOWLER: If we'd put up the next slide.

02:05:17 3 Q. (By Mr. Fowler) So tell the jury what exhibit number
02:05:19 4 we're looking at and what it discloses?

02:05:22 5 A. Yes, sir. So this is Exhibit No. DTX-61. This is at
02:05:26 6 Page 11. This is Claim 1 of the patent application that
02:05:32 7 was filed in November 9th, 2017. The filing of November 9,
02:05:41 8 2017, is on the patent -- '815 patent itself.

02:05:44 9 And, here, the portion of Claim 1 where it recites
02:05:51 10 the relevant passage I've highlighted. And it uses
02:05:55 11 slightly different words, but it means the same thing. It
02:05:57 12 says that "is deleted from" but "continues to be included."

02:06:02 13 Q. Okay. And so was this the very first time that this
02:06:10 14 concept of deleting from one but keeping in the other was
02:06:14 15 ever disclosed by Maxell to the Patent Office in this
02:06:18 16 family -- '815 patent family?

02:06:21 17 A. Yes, sir, this was the first time.

02:06:26 18 Q. So what is the correct priority date for the no
02:06:29 19 deletion -- for Claim 1 of the '815 patent?

02:06:30 20 A. Yeah. The correct priority date for Claim 1 is
02:06:34 21 November 9th, 2017.

02:06:35 22 Q. Okay. Now, if that's the case, is the iPhone 8 prior
02:06:42 23 art to the '815 patent?

02:06:42 24 A. Yes, sir. With this priority date, iPhone 8 becomes
02:06:44 25 prior -- prior art.

02:06:44 1 Q. And if the jury agrees with you that November 9th,
02:06:49 2 2017, is the correct priority date, is there any dispute at
02:06:53 3 all that this claim is invalid?

02:06:54 4 A. No, dispute.

02:06:56 5 Q. Okay. So let's go on to the details.

02:06:59 6 MR. FOWLER: Let's go to the next slide.

02:07:01 7 Q. (By Mr. Fowler) So this is your opinion?

02:07:02 8 A. Yes, sir. It is my opinion that the Apple iPhone 8
02:07:08 9 renders asserted Claim 1 of the '815 patent obvious.

02:07:11 10 Q. Okay.

02:07:11 11 MR. FOWLER: Let's go to the next slide.

02:07:13 12 Q. (By Mr. Fowler) When was the iPhone 8 released, and
02:07:16 13 tell us what evidence you're relying upon?

02:07:18 14 A. Yes, sir. This is DTX-77. It's an Apple news release
02:07:23 15 announcing the release of iPhone 8. And it's -- in the
02:07:29 16 body, it says that it will be in stores beginning Friday,
02:07:32 17 September 22nd, which would be in the year 2017.

02:07:35 18 Q. Again, does that make the iPhone 8 prior art to Claim
02:07:39 19 1?

02:07:39 20 A. Yes, sir, it would.

02:07:40 21 Q. Now, did you obtain, for your own analysis, a prior art
02:07:45 22 iPhone 8?

02:07:45 23 A. Yes, sir, I did.

02:07:46 24 Q. And what exhibit number is that? I think you
02:07:49 25 referenced it before.

02:07:50 1 A. Yes, it is DPX-9.

02:07:56 2 MR. FOWLER: So let's look at the next slide,
02:08:00 3 please.

02:08:00 4 Q. (By Mr. Fowler) There's a lot of claim limitations
02:08:02 5 here.

02:08:03 6 A. A huge amount, yes.

02:08:05 7 Q. Okay. Do we need to walk through them?

02:08:06 8 A. Yes, sir, we do.

02:08:07 9 Q. And are you going to compare the iPhone 8 to each of
02:08:10 10 these claim limitations?

02:08:11 11 A. Yes, sir, I am.

02:08:12 12 Q. And are you required to do that in order to prove your
02:08:14 13 opinion?

02:08:14 14 A. Yes, sir, I am required to do that.

02:08:17 15 Q. So does -- again, does Dr. Singh dispute that any of
02:08:22 16 these claim limitations are present in the iPhone 8?

02:08:26 17 A. Dr. Singh does not dispute any of the elements.

02:08:29 18 Q. Okay. So let's start walking through them as promptly
02:08:33 19 as we can, or efficiently as we can.

02:08:38 20 MR. FOWLER: So let's go to the first -- next
02:08:40 21 slide and look at first claim limitation.

02:08:41 22 Q. (By Mr. Fowler) Tell us what the limitation is and
02:08:43 23 whether you found it in the iPhone 8.

02:08:45 24 A. Yes, sir. The first limitation is an information
02:08:48 25 processing apparatus comprising.

02:08:50 1 And what I have here is from the press release
02:08:53 2 from Apple indicating that it utilizes a CPU design, has a
02:08:58 3 processor in it, and it's also displaying the phone playing
02:09:04 4 a video whereby the information is processed.

02:09:08 5 Q. Okay. And what exhibit number is that we're looking
02:09:11 6 at?

02:09:11 7 A. DTX-77.

02:09:13 8 MR. FOWLER: Okay. Let's go to the next slide.

02:09:15 9 Q. (By Mr. Fowler) What is the next claim limitation, and
02:09:17 10 what evidence did you find pertaining to that limitation?

02:09:20 11 A. The limitation is network interface.

02:09:24 12 And the evidence, DPX-9, is actually the physical
02:09:29 13 device. And on the back is where I have included what's in
02:09:35 14 the screen. And what I have highlighted is that for
02:09:37 15 communication, simply supports the WiFi networking
02:09:41 16 interface.

02:09:42 17 Q. So is this claim limitation present in the iPhone 8?

02:09:45 18 A. Yes, sir, it is.

02:09:46 19 MR. FOWLER: Let's go to the next one.

02:09:48 20 Q. (By Mr. Fowler) Can you please tell us what this claim
02:09:50 21 limitation is and whether you found it in the iPhone 8,
02:09:53 22 and, if so, what evidence you relied upon?

02:09:55 23 A. Yes, sir. The claimed limitation is a recording medium
02:09:59 24 on which is stored a plurality of video information
02:10:04 25 including first video information received wirelessly by

02:10:07 1 the network interface over a network from another
02:10:13 2 information processing apparatus.

02:10:15 3 And what I'm showing here, again from the physical
02:10:18 4 evidence, DPX-9, is the screen from the settings menu where
02:10:22 5 it displays that it has storage and that some of that
02:10:26 6 storage is photos, and the photos include videos that
02:10:30 7 are -- some of them are downloaded using the WiFi network
02:10:35 8 interface.

02:10:36 9 It -- I've also included where the capacity is
02:10:40 10 displayed in the phone, 64 gigabyte, and also on top of the
02:10:45 11 box, too, it says 64 megabytes. Therefore, this claim
02:10:50 12 limitation is met.

02:10:51 13 MR. FOWLER: Let's go to the next claim
02:10:53 14 limitation.

02:10:54 15 Q. (By Mr. Fowler) Can you tell us what this claim
02:10:56 16 limitation is, whether it's in the iPhone 8 and what
02:10:59 17 evidence you relied upon?

02:11:00 18 A. Yes, sir. The limitation is: Wherein, at least some
02:11:02 19 of the plurality of video information is associated with a
02:11:07 20 user profile.

02:11:08 21 So what I have is the screenshot from the settings
02:11:12 22 menu, again, where you -- you can sign in to your iPhone.
02:11:17 23 And once you sign in, that's -- you're selecting a user
02:11:21 24 profile.

02:11:21 25 And also from the previous image that the phone

02:11:26 1 storage is storing photos which also includes videos.

02:11:31 2 Therefore, this claim element is met.

02:11:34 3 MR. FOWLER: Let's go on to the next claim

02:11:35 4 limitation.

02:11:36 5 Q. (By Mr. Fowler) Can you please tell the jury what it

02:11:38 6 is and whether the iPhone 8 has it?

02:11:41 7 A. Yes, so this is the -- the limitation is a display.

02:11:45 8 And just like I have here, the -- Apple has a display.

02:11:49 9 It's actually a touchscreen display.

02:11:52 10 MR. FOWLER: Okay. Let's go to the next slide.

02:11:54 11 Q. (By Mr. Fowler) Can you please tell us what the next

02:11:56 12 claim limitation is and whether it's in the iPhone 8?

02:12:00 13 A. The next limitation is a processor for controlling the

02:12:02 14 display to display.

02:12:03 15 So, again, from DTX-77, the press release where it

02:12:07 16 specified the processor that's in the iPhone 8 and that the

02:12:13 17 screenshot is showing a video being played. Therefore, a

02:12:16 18 processor for controlling the display to display is

02:12:20 19 present.

02:12:20 20 MR. FOWLER: Let's go to the next slide.

02:12:22 21 Q. (By Mr. Fowler) Can you please tell us the next claim

02:12:25 22 limitation and whether it's present in the iPhone 8?

02:12:27 23 A. Yes, sir. The next limitation is a first area

02:12:30 24 including the first character associated with a first group

02:12:33 25 of video information for a first classification and a

02:12:38 1 second character associated with a second group of video
02:12:41 2 information for a second classification different from the
02:12:44 3 first classification.

02:12:45 4 The term "character" is the same character that
02:12:50 5 was construed by the Court to mean a letter, number,
02:12:54 6 punctuation mark, or other symbol or control code that is
02:12:58 7 represented to a computer by one unit of information.

02:13:01 8 And I have screenshots showing the album's view
02:13:07 9 demarked in the red box. And within it, there are two
02:13:11 10 albums that I've marked in green and blue which includes
02:13:16 11 text, the camera roll and favorites. The user selects one
02:13:20 12 of those, they go into a second -- a second display that
02:13:24 13 shows the thumbnails of those albums.

02:13:28 14 So when the user presses on the camera roll, the
02:13:32 15 camera roll thumbnails are displayed. When the user
02:13:37 16 presses on the favorites, the favorites thumbnails are
02:13:39 17 displayed, as is shown.

02:13:41 18 Q. Unlike what we saw earlier today when we were looking
02:13:44 19 at the Galaxy phone, does either --

02:13:44 20 MR. SIDDIQUI: Outside the scope.

02:13:46 21 THE COURT: I'm sorry. Is there an objection?

02:13:51 22 MR. SIDDIQUI: Yes.

02:13:51 23 THE COURT: You want to approach?

02:13:55 24 (Bench conference.)

02:14:11 25 THE REPORTER: I can't hear.

02:14:11 1 THE COURT: Mr. Siddiqui, you're saying it's
02:14:12 2 not -- it's not a properly disclosed opinion; is that
02:14:15 3 right?

02:14:15 4 MR. SIDDIQUI: Correct.

02:14:15 5 THE COURT: Can you show me in the report where --

02:14:15 6 MR. FOWLER: I haven't even asked the question
02:14:17 7 yet.

02:14:17 8 MR. SIDDIQUI: I know where you're going. I know
02:14:19 9 where you're going. You're saying how is that different
02:14:20 10 from the S23 --

02:14:23 11 MR. FOWLER: No, that's not -- that wasn't going
02:14:25 12 to be my question. My question is unlike what we saw this
02:14:28 13 morning, does either Maxell or Samsung have the source code
02:14:30 14 for this iPhone 8? That's not --

02:14:32 15 THE COURT: If you think he's testifying outside
02:14:36 16 or beyond something that's been disclosed --

02:14:41 17 MR. FOWLER: I have one question, and then I'm
02:14:44 18 going to move on.

02:14:46 19 (Bench conference concluded.)

02:14:55 20 Q. (By Mr. Fowler) Let me start my question again.

02:14:57 21 Now, unlike the source code that we saw for the
02:15:00 22 Galaxy earlier today, do either Maxell or Samsung have
02:15:04 23 access to the iPhone 8 source code for you or Dr. Singh to
02:15:11 24 review?

02:15:11 25 A. No, sir. The source code was not available.

02:15:14 1 Q. Okay.

02:15:18 2 MR. FOWLER: So let's go to the next claim
02:15:20 3 limitation.

02:15:21 4 Q. (By Mr. Fowler) Can you tell us what the next claim
02:15:23 5 limitation and whether you found it in the iPhone 8?

02:15:28 6 A. Yes, sir. The next limitation is the first group of
02:15:32 7 video information being configured to allow a user to edit.

02:15:37 8 And that phrase is construed by the Court to mean:
02:15:42 9 The composition of the first group of video information
02:15:45 10 being editable by a user.

02:15:48 11 And what I'm showing here is the composition of
02:15:51 12 the favorites album consists of the three thumbnails that
02:15:54 13 you see.

02:15:55 14 The user selects the middle thumbnail demarked in
02:15:59 15 blue and unfavors that item. And what you see on the right
02:16:05 16 side is the composition changed to two thumbnails. So,
02:16:09 17 therefore, the claim element is met.

02:16:12 18 Q. Okay. And I think I forgot to ask you in the little
02:16:12 19 hullabaloo there.

02:16:12 20 MR. FOWLER: Could we go back one slide, please?

02:16:21 21 Q. (By Mr. Fowler) The first area including claim
02:16:24 22 limitation, did you conclude that that's present in the
02:16:27 23 iPhone 8?

02:16:27 24 A. Yes, sir, I concluded that.

02:16:29 25 MR. FOWLER: And can we go to the next slide,

02:16:33 1 please.

02:16:33 2 Q. (By Mr. Fowler) Picking up with where you left off,
02:16:37 3 did you conclude that this limitation is present in iPhone
02:16:39 4 8?

02:16:39 5 A. Yes, sir. I concluded that this limitation is present
02:16:40 6 in iPhone 8.

02:16:40 7 MR. FOWLER: Let's go to the next claim
02:16:42 8 limitation.

02:16:43 9 Q. (By Mr. Fowler) Can you tell the jury what this
02:16:45 10 limitation is and whether you found it in the iPhone 8?

02:16:47 11 A. Yes, sir. This limitation is: Wherein, the first
02:16:50 12 group of video information and the second group of video
02:16:53 13 information are part of the plurality of stored video
02:16:57 14 information.

02:16:57 15 So what I'm showing is on the very -- on the very
02:17:02 16 left is a folder that has one item, my dog, and the middle
02:17:07 17 item is from the folder's favorites that shares the my dog
02:17:14 18 album, but -- the my dog picture, the thumbnail.

02:17:17 19 So on the aggregate that they only contain part of
02:17:21 20 all of the video information because the camera roll has
02:17:24 21 the dog and has the fabric pattern as part of its
02:17:29 22 collection. Therefore, this claim element is met.

02:17:31 23 Q. Okay. And what is the evidence that we're looking at
02:17:35 24 here?

02:17:35 25 A. This is the physical device, DPX-9.

02:17:40 1 Q. Okay.

02:17:40 2 MR. FOWLER: Let's go to the next claim

02:17:42 3 limitation.

02:17:42 4 Q. (By Mr. Fowler) Can you tell us what this is and

02:17:44 5 whether you found it in the iPhone 8?

02:17:46 6 A. Yes, sir. So the limitation is: A second area

02:17:49 7 displaying thumbnails corresponding to at least a portion

02:17:52 8 of the plurality of stored video information.

02:17:55 9 And what I have shown on the right is from DPX-9

02:17:59 10 again, that the albums, when selects the favorites, the

02:18:04 11 display shifts over to the second area. These are the

02:18:07 12 thumbnails that are contained within the albums. And I

02:18:11 13 marked it in the blue box.

02:18:12 14 Q. And, again, what evidence are we looking at?

02:18:15 15 A. This is DPX-9, the physical device.

02:18:18 16 Q. Is this claim limitation present in the iPhone 8?

02:18:22 17 A. Yes, sir, it is.

02:18:23 18 MR. FOWLER: Let's go to the next claim

02:18:24 19 limitation.

02:18:25 20 Q. (By Mr. Fowler) Can you tell us what it is and whether

02:18:27 21 it's in the iPhone 8?

02:18:28 22 A. Yes, sir. The next limitation is: Wherein user

02:18:32 23 selection of the first character enables the display of a

02:18:35 24 first group of thumbnails corresponding to the first group

02:18:39 25 of video information in the second area.

02:18:42 1 This limitation includes the term "character,"
02:18:46 2 which I've mentioned before. I'm using the Court's
02:18:51 3 construction for this.

02:18:55 4 And what I'm showing on the physical device, the
02:18:58 5 DPX-9 evidence, is that the user presses on the favorites,
02:19:04 6 and the second area, the first group of thumbnails
02:19:05 7 corresponding to the first group of video information is
02:19:08 8 displayed.

02:19:08 9 Q. And, again, did you have access or did Maxell have
02:19:12 10 access to the iPhone 8 source code for this analysis?

02:19:15 11 A. No -- no, sir. There was no source code available.

02:19:18 12 MR. FOWLER: Let's go to the next --

02:19:20 13 Q. (By Mr. Fowler) And so did you find this claim
02:19:22 14 limitation present in the iPhone 8?

02:19:23 15 A. Yes, sir, I did.

02:19:24 16 Q. And --

02:19:27 17 MR. FOWLER: Sorry. Could you go back to where we
02:19:29 18 were?

02:19:30 19 Q. (By Mr. Fowler) Does Dr. Singh disagree with you that
02:19:33 20 this claim limitation is present in the iPhone 8?

02:19:38 21 A. No, sir. Dr. Singh does not disagree.

02:19:39 22 MR. FOWLER: Let's go to the next claim
02:19:41 23 limitation.

02:19:42 24 Q. (By Mr. Fowler) What is the next claim limitation and
02:19:44 25 tell us whether it's found in the iPhone 8?

02:19:46 1 A. Yes, sir. The next claim limitation is: Wherein, user
02:19:49 2 selection of the second character enables the display of a
02:19:53 3 second group of thumbnails corresponding to the second
02:19:55 4 group of video information in the second area.

02:20:00 5 And what I'm showing on the right is, again, from
02:20:03 6 DPX-9, very similar to just the previous limitation, so
02:20:07 7 instead of selecting the same album, now I'm selecting a
02:20:11 8 different album. This is the second character, and it is
02:20:15 9 my fabrics of which I have blown up at the bottom that you
02:20:19 10 see.

02:20:20 11 Again, the same thing, the user selects fabric
02:20:23 12 pattern, the display changes to a second -- second display,
02:20:27 13 and the thumbnails -- the second group of thumbnails are
02:20:30 14 displayed.

02:20:32 15 MR. FOWLER: Okay. Let's go on to the next claim
02:20:35 16 limitation, please.

02:20:37 17 Q. (By Mr. Fowler) Can you tell us what it is?

02:20:39 18 A. Yes, sir. This is the no deletion limitation we talked
02:20:42 19 about earlier.

02:20:43 20 The limitation is: Wherein, upon one video
02:20:49 21 information stored on the recording medium included in both
02:20:52 22 the first group of video information and the second group
02:20:56 23 of video information being deleted from the first group of
02:21:02 24 video information, the one video information continues to
02:21:06 25 be included in the second group of video information.

02:21:09 1 Q. So did the Court construe this limitation?

02:21:12 2 A. Yes, sir, it did.

02:21:14 3 Q. And what did it construe it to mean?

02:21:16 4 A. The Court construed the term "being deleted from the
02:21:21 5 first group of video information" to mean being removed
02:21:26 6 from the first group of video information.

02:21:28 7 MR. FOWLER: Let's go to the next slide.

02:21:29 8 Q. (By Mr. Fowler) Did you find this entire limitation
02:21:32 9 present in the Apple iPhone 8?

02:21:35 10 A. Yes, sir. And I've shown at the bottom through the
02:21:38 11 physical device, DPX-9, that in the favorites album, again,
02:21:44 12 we have the three icons that I talked about earlier.

02:21:49 13 You select the middle button -- middle thumbnail
02:21:51 14 that's a fabric pattern and you unfavor it. You press the
02:21:56 15 heart again, and that thumbnail is now removed from the
02:22:00 16 favorites album. And if you still go to the fabric
02:22:07 17 pattern's album, that thumbnail is still there.

02:22:14 18 Q. So is this claim limitation present in the Apple
02:22:17 19 iPhone 8?

02:22:18 20 A. Yes, sir, it is.

02:22:18 21 MR. FOWLER: Let's go to the next claim
02:22:20 22 limitation.

02:22:21 23 Q. (By Mr. Fowler) Is this the last claim limitation?

02:22:22 24 A. Yes, sir, it is.

02:22:23 25 Q. Okay. Can you tell us what it is and whether it's in

02:22:26 1 the iPhone 8?

02:22:27 2 A. Yes, sir. The last limitation is: The processor
02:22:29 3 controls the display to display a thumbnail corresponding
02:22:32 4 to the one video information as one of the second group of
02:22:37 5 thumbnails when the second character is selected.

02:22:42 6 And what I'm showing here through DPX-9, the
02:22:46 7 physical device, is that when the user presses the fabrics
02:22:51 8 pattern, the thumbnails of that album is displayed and all
02:22:54 9 of that is controlled by the processor to display.

02:22:59 10 Q. So is this claim limitation present in the iPhone 8?

02:23:02 11 A. Yes, sir, this limitation is present in the iPhone 8.

02:23:05 12 MR. FOWLER: Let's go to the next slide.

02:23:08 13 Q. (By Mr. Fowler) So we've now gone through all of the
02:23:10 14 claim limitations. What's your opinion regarding Claim 1?

02:23:13 15 A. Yes. Because of all the reason I just mentioned, it is
02:23:16 16 my opinion that the iPhone 8 invalidates Claim 1 of the
02:23:23 17 '815 patent.

02:23:23 18 Q. And, again, does Dr. Singh disagree with any of these
02:23:27 19 green checkmarks?

02:23:28 20 A. No, sir, he does not.

02:23:29 21 Q. So if the jury concludes that you're right about the
02:23:32 22 priority date, is there any disagreement that this claim is
02:23:36 23 invalid because of the iPhone 8?

02:23:39 24 A. No disagreement.

02:23:42 25 Q. Okay.

02:23:43 1 MR. FOWLER: So let's turn to the next slide.

02:23:48 2 Q. (By Mr. Fowler) What's your opinion regarding Claims
02:23:50 3 21 and 24?

02:23:50 4 A. It is my opinion that the Netflix app running on the
02:23:57 5 Samsung Galaxy S10 renders Asserted Claims 21 and 24
02:24:03 6 obvious.

02:24:03 7 MR. FOWLER: Let's go to the next slide.

02:24:05 8 Q. (By Mr. Fowler) Okay. So this looks very familiar.
02:24:07 9 Can you tell us what we're looking at?

02:24:09 10 A. Yes, sir. So on the left again is the device running
02:24:13 11 Netflix, so this is the Galaxy -- Samsung Galaxy S10 which
02:24:17 12 was released on March 8th, 2019. And it is running
02:24:23 13 Netflix.

02:24:23 14 And on the right is, again, that same
02:24:28 15 continuation -- the -- the same range of all the
02:24:31 16 applications that were filed leading up to the '815 patent.
02:24:33 17 And I've highlighted May 26th, 2020, because that is the
02:24:37 18 correct priority date for Claim 21 of the '815 patent.

02:24:41 19 Q. And, again, can two different claims in the same patent
02:24:45 20 have a different priority date?

02:24:47 21 A. Yes, sir, they can.

02:24:48 22 Q. And why is it in this case that the priority date for
02:24:52 23 Claim 21 is May 26th, 2020?

02:24:55 24 A. Because this is the first time that all of the
02:24:57 25 limitations of Claim 21 was first disclosed to the Patent

02:25:02 1 Office.

02:25:02 2 MR. FOWLER: Okay. Let's go to the next slide,
02:25:05 3 please.

02:25:05 4 Q. (By Mr. Fowler) Okay. Can you please summarize your
02:25:07 5 opinion on the priority date for this claim and Claim 24?

02:25:10 6 A. Yes, sir. So it's my opinion that Claims 21 and 24
02:25:15 7 have a priority date of May 26th, 2020, because that was
02:25:24 8 when -- what I called the encrypted limitation of Claim 21
02:25:27 9 was first disclosed to the Patent Office.

02:25:28 10 MR. FOWLER: Let's go to the next slide.

02:25:30 11 Q. (By Mr. Fowler) So what are we looking at here on the
02:25:35 12 left?

02:25:35 13 A. What we're looking at is part of Claim 21, which I
02:25:40 14 called the encrypted limitation. And what I have
02:25:45 15 highlighted is receiving first video information wirelessly
02:25:52 16 from a device external to the information processing
02:25:55 17 apparatus, the first video information being received
02:25:58 18 including the second video information that is encrypted.

02:26:05 19 Q. So has the Court helped us all out here by construing
02:26:09 20 part of this phrase?

02:26:10 21 A. Absolutely. So Court construed the term "receiving
02:26:14 22 first video information including second video information
02:26:16 23 that is encrypted" to mean that the second video
02:26:22 24 information is in encrypted form at the time that it was
02:26:25 25 received.

02:26:25 1 Q. Okay. So you have some words down there at the bottom
02:26:30 2 that say Claim 21 = encrypt then receive. What is that
02:26:36 3 intended to convey to the jury?

02:26:39 4 A. Yes. I'm trying to convey that the requirements of
02:26:42 5 Claim 21 dictates that the -- the video that is received
02:26:47 6 first have to be encrypted, then received by the device.

02:26:50 7 Q. And when you say "the device," do you mean the phone?

02:26:52 8 A. The phone, yes.

02:26:54 9 MR. FOWLER: Okay. Let's go to the next screen.

02:26:56 10 Q. (By Mr. Fowler) So what are we looking at here, sir?

02:26:58 11 A. This is a figure from the patent itself. This is
02:27:04 12 Figure 3. It's a general block diagram of the device that
02:27:08 13 is described in -- in the patent. And what I have
02:27:11 14 highlighted is the encryption that they already disclose.

02:27:16 15 And what I've highlighted is that they are
02:27:19 16 describing a system where the video is encrypted to be
02:27:23 17 recorded and later to be decrypted. So what Figure 3 says,
02:27:31 18 it says receive the video data, then encrypt.

02:27:35 19 Q. So this whole block diagram we have here, this -- these
02:27:38 20 are parts of the phone?

02:27:39 21 A. That's correct.

02:27:40 22 Q. Within the dotted lines?

02:27:42 23 A. That's correct.

02:27:42 24 Q. So the video would be coming outside of the dotted
02:27:45 25 lines into this schematic; is that right?

02:27:49 1 A. That's correct.

02:27:49 2 Q. And according to Figure 3, is the video, when it's
02:27:53 3 outside of the phone, has it been encrypted yet or not?

02:27:57 4 A. Yeah. The -- outside of the phone, it -- it is not
02:28:02 5 encrypted.

02:28:03 6 Q. So according to this figure, where is it encrypted?

02:28:06 7 A. Yes. It is in Box 331. That's what I have
02:28:11 8 highlighted. That's the path where the video goes so that
02:28:15 9 it -- it would eventually get recorded. It will get
02:28:17 10 recorded for later retrieval.

02:28:20 11 Q. So does Figure 3 and the -- and the -- the written text
02:28:26 12 and the specification that talks about Figure 3, does it
02:28:29 13 support what's in Claim 21?

02:28:30 14 A. No, sir, it does not.

02:28:32 15 Q. Is it, in fact, just the opposite of what's in Claim
02:28:35 16 21?

02:28:35 17 A. Yes, sir, it is.

02:28:36 18 Q. Okay.

02:28:37 19 MR. FOWLER: So let's go to the next slide.

02:28:39 20 Q. (By Mr. Fowler) So what are we looking at here?

02:28:42 21 A. What we're looking at here is a publication from the
02:28:49 22 United States television standards. This is ATSC, Advanced
02:28:53 23 Television Systems Committee, where they published an
02:28:58 24 article in March 2020 discussing the standard that we
02:29:03 25 currently use in our television watching ABC, NBC, CBS,

02:29:09 1 just through the normal antenna, that it was always
02:29:13 2 unencrypted and is currently unencrypted.

02:29:16 3 Q. So the information that's going into the device would
02:29:19 4 be encrypted or unencrypted?

02:29:21 5 A. Unencrypted.

02:29:22 6 Q. Okay. And is that different than the claim?

02:29:24 7 A. Yes, sir, it is.

02:29:25 8 MR. FOWLER: Okay. Let's go on to the next slide.

02:29:27 9 Q. (By Mr. Fowler) So, again, why do you have highlighted
02:29:29 10 here May 26th, 2020?

02:29:31 11 A. Because that is the first time that the requirements of
02:29:37 12 Claim 21, the elements of Claim 21 receiving encrypted
02:29:43 13 video was first disclosed to the Patent Office.

02:29:45 14 MR. FOWLER: And let's go to the next slide.

02:29:57 15 I'm sorry. Let's go back to the prior slide.

02:30:00 16 Q. (By Mr. Fowler) How -- how was it that this limitation
02:30:03 17 was first disclosed to the Patent Office?

02:30:04 18 A. It was through the application process that was filed
02:30:06 19 on May 26th, 2020.

02:30:08 20 Q. Was it in the claims that were added at that point in
02:30:11 21 time?

02:30:11 22 A. Yes, sir, it was in the claims.

02:30:13 23 Q. So the specification didn't change. It's always been
02:30:16 24 the same over all of these years. It was in these new
02:30:19 25 claims that they added for this case; is that right?

02:30:20 1 A. Yes, sir. The figures and the specifications was the
02:30:22 2 same.

02:30:23 3 Q. Okay.

02:30:23 4 MR. FOWLER: So let's move on to the next slide.

02:30:27 5 Q. (By Mr. Fowler) So what's your theory again as to why
02:30:29 6 Claim 21 and Claim 24 are invalid?

02:30:33 7 A. It -- my theory is that the Samsung Galaxy S10 running
02:30:41 8 Netflix makes Claim 21 invalid because it receives
02:30:45 9 encrypted video and does all of the elements of Claim 21.

02:30:48 10 Q. So I have a similar question that I had for you for
02:30:51 11 Claim 1. Does Dr. Singh disagree with you that everything
02:30:55 12 in the Galaxy -- everything in Claim 21 and Claim 24 can be
02:31:01 13 found in the Galaxy S10?

02:31:04 14 A. Yes, sir, Dr. Singh does not disagree with me.

02:31:07 15 Q. So if the jury were to agree with you on the -- what
02:31:07 16 the priority date is, would there be any dispute that
02:31:10 17 Claims 21 and 24 are also invalid?

02:31:12 18 A. Yeah, there would be no dispute.

02:31:13 19 MR. FOWLER: Okay. Let's go to the next slide.

02:31:18 20 Q. (By Mr. Fowler) What are we looking at here?

02:31:19 21 A. What we're looking at is a news release from Samsung
02:31:23 22 that the Galaxy S10 was released on March 8th, 2019.

02:31:30 23 Q. Okay. What exhibit is that?

02:31:32 24 A. That is DTX-52.

02:31:35 25 MR. FOWLER: Okay. The next slide, please.

02:31:36 1 And I'm sorry, let's go back one.

02:31:39 2 Q. (By Mr. Fowler) Is this earlier than the correct
02:31:40 3 priority date for Claims 21 and 24?

02:31:43 4 A. Yes, sir. This is before the priority date that I
02:31:45 5 mentioned, May 26th, 2020.

02:31:48 6 Q. Okay. And does that make the Galaxy S10 prior art?

02:31:52 7 A. Yes, sir, it does.

02:31:54 8 Q. Okay.

02:31:54 9 MR. FOWLER: Now let's go to the next slide.

02:31:56 10 Q. (By Mr. Fowler) So what are we seeing here, sir?

02:32:01 11 A. This is the Netflix build that was used on the Galaxy
02:32:08 12 S10 at the time. It was released in February 17th, 2019.

02:32:13 13 Q. Okay. And is that also prior to the priority date of
02:32:17 14 the patent?

02:32:17 15 A. Yes, sir.

02:32:18 16 Q. For Claim 21 of the patent?

02:32:20 17 A. Yes, sir, it is.

02:32:21 18 Q. And what exhibit are we looking at?

02:32:24 19 A. This is Exhibit DTX-73.

02:32:27 20 MR. FOWLER: Okay. Next slide, please.

02:32:28 21 Q. (By Mr. Fowler) Okay. Again, we have a bunch of claim
02:32:33 22 limitations here. Do we -- are we required to walk through
02:32:36 23 each one of them to prove that the claim is invalid?

02:32:38 24 A. Yes, sir, we are required to do that.

02:32:40 25 Q. Okay.

02:32:41 1 MR. FOWLER: So let's go to the next slide,
02:32:43 2 please.

02:32:44 3 Q. (By Mr. Fowler) Please tell the jury the first claim
02:32:45 4 limitation and where you found it in the Galaxy S10?

02:32:48 5 A. Yes, sir. The first limitation is: An information
02:32:52 6 processing apparatus comprising.

02:32:55 7 And I found this limitation in DTX-88, which is a
02:33:02 8 Netflix YouTube that is demonstrating that the Galaxy S10
02:33:09 9 device running Netflix is actually playing Netflix
02:33:12 10 utilizing the processor and -- utilizing the video
02:33:17 11 information to display the video for the user.

02:33:19 12 MR. FOWLER: Okay. Let's go to the next claim
02:33:21 13 limitation.

02:33:21 14 Q. (By Mr. Fowler) Can you tell us what the next claim
02:33:24 15 limitation is?

02:33:24 16 A. Yes, sir. The next limitation is: A network interface
02:33:30 17 receiving first video information wirelessly from a device
02:33:33 18 external to the information processing apparatus, the first
02:33:38 19 video information being received including second video
02:33:42 20 information that is encrypted.

02:33:44 21 Q. So we see the Court's claim construction. Is this the
02:33:46 22 same one we discussed before?

02:33:47 23 A. Yes, sir, it is.

02:33:49 24 MR. FOWLER: Let's go to the next slide.

02:33:50 25 Q. (By Mr. Fowler) Did you find this claim limitation in

02:33:54 1 the Galaxy S10?

02:33:54 2 A. Yes, sir. So for the first element, the network
02:33:57 3 interface, what I have shown here is from DTX-48, which is
02:34:06 4 a Samsung S10 service manual -- shows a module where all of
02:34:11 5 the -- well, some of the chips and everything is in there.

02:34:13 6 And one of the items from the top right is what I
02:34:17 7 have blown up. That shows that it's pointing to a WiFi
02:34:21 8 network module.

02:34:23 9 Q. Okay. So is this claim limitation present in the
02:34:26 10 Galaxy S10?

02:34:26 11 A. Yes, sir. That's where the network interface is
02:34:30 12 present.

02:34:31 13 Q. Is the rest of the claim limitation present in the
02:34:33 14 Galaxy S10?

02:34:34 15 A. So there is some -- or limitation, receiving first
02:34:38 16 video information wirelessly from a device external to the
02:34:41 17 information processing apparatus, the first video
02:34:47 18 information being received including second video
02:34:50 19 information that is encrypted as present, yes.

02:34:52 20 MR. FOWLER: Okay. Let's go to the next slide.

02:34:54 21 Q. (By Mr. Fowler) Is this showing what the balance of
02:34:55 22 the claim -- where you can find the balance of the claim
02:34:57 23 limitation?

02:34:57 24 A. Yes, sir. What this is showing is the encrypted part.
02:35:00 25 And what I have shown here is the Netflix press release

02:35:04 1 where it's describing the encryption that they're
02:35:10 2 utilizing.

02:35:10 3 In particular, they are describing that Netflix
02:35:13 4 utilizes transport level security, TLS. It's describing
02:35:18 5 digital rights management, which is a way to control who
02:35:22 6 can view and not be able to steal the video. And, also,
02:35:26 7 the secure HTTP transfer, which is referred to as HTTPS.

02:35:35 8 Q. Okay. Are we done with this claim limitation?

02:35:37 9 A. Yes, sir, we are.

02:35:39 10 MR. FOWLER: Let's move to the next claim
02:35:40 11 limitation.

02:35:41 12 Q. (By Mr. Fowler) Can you tell us what it is and whether
02:35:42 13 it's in the Galaxy S10?

02:35:44 14 A. Yes, sir. The limitation is: A network interface
02:35:47 15 receiving first video information wirelessly from a device
02:35:51 16 external to the information processing apparatus, the first
02:35:54 17 video information being received including second video
02:35:57 18 information that is encrypted.

02:35:58 19 And, again, from the Netflix -- YouTube describing
02:36:06 20 Netflix -- this is DTX-81 -- what I'm showing is the
02:36:09 21 downloaded functionality of Netflix.

02:36:11 22 So this functionality is -- so when you have
02:36:15 23 connection, you download the video. And then when you lose
02:36:20 24 connection, you can play it. So this demonstrates the
02:36:26 25 network interface was utilized, it was encrypted, and that

02:36:30 1 it still displays.

02:36:31 2 Q. So is this claim limitation present in the Galaxy S10?

02:36:35 3 A. Yes, sir, it is.

02:36:36 4 MR. FOWLER: Let's go to the next claim

02:36:38 5 limitation.

02:36:38 6 Q. (By Mr. Fowler) So what are we seeing in terms of the

02:36:40 7 next limitation?

02:36:41 8 A. Yes, sir. So this limitation utilizes the term "user

02:36:45 9 profile," which is construed by the Court to mean: A

02:36:48 10 collection of settings and information associated with a

02:36:50 11 user.

02:36:52 12 Q. Okay. Was this claim limitation in its totality

02:36:55 13 present in the Galaxy S10?

02:36:56 14 A. Yes, sir, it is.

02:36:58 15 MR. FOWLER: Let's go to the next slide to show

02:37:00 16 that.

02:37:01 17 Q. (By Mr. Fowler) What are we seeing here?

02:37:03 18 A. Yes, sir. So the complete limitation is: A display

02:37:06 19 displaying a first user interface for a user to select a

02:37:13 20 user profile from among a plurality of user profiles

02:37:16 21 including a first user profile associated with a first

02:37:20 22 character and a second user profile associated with a

02:37:22 23 second character.

02:37:23 24 And what I'm showing in DTX-81, the YouTube video

02:37:28 25 for Netflix, is that the user is selecting user profiles.

02:37:32 1 MR. FOWLER: Okay. Let's go to the next slide.

02:37:34 2 Q. (By Mr. Fowler) So we're looking at the same claim
02:37:37 3 limitation. What are we seeing now?

02:37:39 4 A. Yes, sir. So, again, from DTX-81, what I'm showing on
02:37:44 5 the right, this is the landing page for Netflix. Just when
02:37:47 6 you start Netflix app, it presents you with the list of
02:37:51 7 users that entered the home screen and start watching
02:37:56 8 videos. So this is where a user selects a user profile.

02:37:59 9 Q. Okay. So is this claim limitation present in the
02:38:04 10 iPhone -- sorry, not iPhone, the Galaxy S10?

02:38:07 11 A. Yes, sir, it is.

02:38:08 12 Q. Okay. Does the Netflix app on the Galaxy S10 provide
02:38:12 13 an option for users to select a profile by selecting a
02:38:15 14 character?

02:38:16 15 A. Yes, sir, it does.

02:38:17 16 Q. Can you explain in words in the name profile, such as
02:38:22 17 Edith and Z, meet the claim construction of character?

02:38:25 18 A. Yes, sir. So as is shown, the top two profiles is
02:38:29 19 Edith and Z, and the user can select the Z character, and
02:38:35 20 that meets the Court's construction. The user can select
02:38:38 21 the E character, and that meets the Court's construction.

02:38:42 22 MR. FOWLER: Let's go to the next claim limitation
02:38:45 23 that begins with "plurality of user profiles" -- I'm sorry.

02:38:54 24 Q. (By Mr. Fowler) Is this entire -- I'm sorry.

02:38:56 25 Is this entire claim limitation present in the

02:38:58 1 Galaxy S10?

02:38:58 2 A. Yes, sir, it is.

02:39:03 3 MR. FOWLER: Okay. Let's go to the next claim
02:39:05 4 limitation.

02:39:06 5 Q. (By Mr. Fowler) What's the next claim limitation, and
02:39:09 6 is it present in the Galaxy S10?

02:39:10 7 A. The next claim limitation is: An input interface
02:39:13 8 receiving a selection of the first user profile at a first
02:39:17 9 time and a selection of the second character at a second
02:39:20 10 time.

02:39:21 11 And what I'm showing here again in DTX-81 is that
02:39:25 12 there's multiple user profiles. A user can select one
02:39:31 13 profile at one time and a different profile at a different
02:39:34 14 time.

02:39:34 15 Q. Okay. Is that present in the Galaxy S10?

02:39:36 16 A. Yes, sir, it is.

02:39:37 17 Q. Can you tell us how?

02:39:39 18 A. Well, when a user selects the first user profile at a
02:39:45 19 first time, they can exit that profile and select the
02:39:49 20 second character at the second time.

02:39:52 21 MR. FOWLER: Let's go to the next claim
02:39:54 22 limitation.

02:39:54 23 Q. (By Mr. Fowler) Can you tell us what we're seeing here
02:39:59 24 and how it applies to your analysis?

02:40:01 25 A. Yes, sir. The claim limitation is: Wherein, in

02:40:05 1 response to the selection of the first user profile, the
02:40:07 2 display displays a second user interface for a user to
02:40:12 3 select desired video information to be reproduced from
02:40:19 4 among the first video information.

02:40:21 5 And what I have shown here in DTX-81 is after the
02:40:24 6 user selects a user profile, it lands on the Netflix
02:40:27 7 homepage. This is where Netflix provides the icons and the
02:40:33 8 interface to start watching videos. Therefore, this
02:40:36 9 limitation is met by -- by -- by this videoclip.

02:40:41 10 Q. Okay.

02:40:41 11 MR. FOWLER: Let's go on to the next claim
02:40:43 12 limitation.

02:40:44 13 Q. (By Mr. Fowler) What is it, and is it found in the
02:40:46 14 Galaxy S10?

02:40:47 15 A. The next limitation is: The second user interface
02:40:50 16 being associated with the first user profile and displaying
02:40:53 17 the first character, the first character associated with a
02:40:57 18 first group of video information and indicating an identity
02:41:02 19 of the user which the first user profile is associated
02:41:06 20 with.

02:41:07 21 And what I have shown here in DTX-81 is a Netflix
02:41:13 22 YouTube video. The bottom large blow-out, it says that in
02:41:19 23 the second display, this is where the thumbnails for videos
02:41:22 24 to be played is, it says "continue watching for Z." So
02:41:29 25 this is where the second display shows the user the

02:41:34 1 identity of the user.

02:41:37 2 Q. So is this claim limitation shown on the Galaxy S10?

02:41:41 3 A. Yes, sir, it is.

02:41:42 4 MR. FOWLER: Let's go to the next claim

02:41:43 5 limitation.

02:41:45 6 Q. (By Mr. Fowler) So what is it, and is it in the Galaxy

02:41:53 7 S10?

02:41:53 8 A. Yes, sir. The limitation is: The second user

02:41:56 9 interface further displaying thumbnails corresponding to

02:41:59 10 the first group of video information.

02:42:01 11 And I have a videoclip here from DTX-88, a Netflix

02:42:09 12 video from YouTube, that upon entering the home screen,

02:42:14 13 Netflix home screen after selecting is that it is providing

02:42:20 14 a first group of video information.

02:42:22 15 Q. Okay. So is this claim limitation found in the Galaxy

02:42:26 16 S10?

02:42:26 17 A. Yes, sir, it is.

02:42:28 18 MR. FOWLER: Let's go to the next claim

02:42:30 19 limitation.

02:42:31 20 Q. (By Mr. Fowler) What is it and is it found in the

02:42:33 21 Galaxy S10?

02:42:33 22 A. The next limitation is: Wherein, in response to the

02:42:37 23 selection of the second user profile, the display displays

02:42:42 24 the second character and a second group of thumbnails

02:42:46 25 corresponding to a second group of video information

02:42:49 1 associated with the second user profile when the second --
02:42:52 2 second character is selected.

02:42:54 3 And what I have here is in DTX-88, a Netflix
02:42:58 4 YouTube video, is that this is simply the home screen of a
02:43:03 5 user that selected a different user profile than before.
02:43:06 6 So it's the second user profile.

02:43:08 7 Q. Okay.

02:43:10 8 A. And the limitation is met by the Galaxy S10.

02:43:13 9 MR. FOWLER: Let's go on to the next claim
02:43:16 10 limitation.

02:43:17 11 Q. (By Mr. Fowler) Can you tell the jury what it is and
02:43:23 12 whether it's found in the Galaxy S10?

02:43:24 13 A. Yes, sir. The limitation is: The first group of video
02:43:29 14 information and the second group of video information
02:43:31 15 including one video information that is the same.

02:43:33 16 So in the previous two Netflix home screens that I
02:43:37 17 showed you, the videos that are available, both of them had
02:43:40 18 the new releases, Christopher Robin in it. So both the
02:43:46 19 first video information and the second video information
02:43:48 20 had a commonality as shown here with Christopher Robin.

02:43:55 21 Q. So is this claim limitation present in the Galaxy S10?

02:43:58 22 A. Yes, sir. This limitation is present in the Galaxy
02:44:01 23 S10.

02:44:01 24 MR. FOWLER: Okay. Let's go on to the next claim
02:44:03 25 limitation.

02:44:04 1 Q. (By Mr. Fowler) What is it, and is it present in the
02:44:08 2 Galaxy S10?

02:44:08 3 A. The next limitation is: A processor for removing one
02:44:14 4 video information from the first group of video information
02:44:16 5 after the input interface receives a selection to remove
02:44:21 6 the one video information from the first group of video
02:44:24 7 information associated with the first user profile.

02:44:29 8 And what I'm showing on the right, this is from
02:44:31 9 DTX-48, again, the Samsung S10 service manual, it's at Page
02:44:38 10 45. It clearly shows that the Galaxy S10 utilizes a
02:44:44 11 processor, the SM8150.

02:44:47 12 Q. Okay. And so does that show that this claim limitation
02:44:50 13 is present in the Galaxy S10?

02:44:51 14 A. Yes, for the processor part.

02:44:54 15 Q. Okay.

02:44:55 16 MR. FOWLER: And let's got to the next slide.

02:44:57 17 Q. (By Mr. Fowler) So this is the same claim limitation.
02:44:59 18 What are we seeing here?

02:45:00 19 A. Yes, sir. So the rest of the claim limitation, I'm
02:45:08 20 showing that Netflix has a functionality to maintain a
02:45:11 21 list, a list of videos that you have selected.

02:45:14 22 And in this list, which is the first group of
02:45:20 23 video information, the user can go and select an item and
02:45:24 24 remove it from the list.

02:45:26 25 So that's -- that's the part that is required in

02:45:28 1 the claim.

02:45:29 2 Q. Okay. Does that mean that all of this claim limitation
02:45:32 3 is present in the Galaxy S10?

02:45:34 4 A. Yes, sir, and that evidence is captured in DTX-82.

02:45:39 5 Q. Okay.

02:45:39 6 MR. FOWLER: What's the next claim limitation?

02:45:45 7 Q. (By Mr. Fowler) Can you tell us -- well, we've seen
02:45:47 8 this limitation before. In shorthand, is this the no
02:45:50 9 deletion limitation?

02:45:51 10 A. That's correct. Would you like me to read it?

02:45:53 11 Q. Well, I think you read it to the jury once before.
02:45:56 12 Maybe we can save a little time.

02:45:58 13 A. Yes, sir.

02:45:58 14 Q. Is this limitation present in the Galaxy S10?

02:46:01 15 A. Yes, sir. So what happens is that if a user in one
02:46:04 16 user profile removes an item from My List that another user
02:46:09 17 profile that had that same item shared, will not be removed
02:46:13 18 from that list. The lists are independent from each other.

02:46:17 19 Q. So is this claim limitation present in the Galaxy S10?

02:46:22 20 A. Yes, sir, it is.

02:46:23 21 MR. FOWLER: Okay. Let's go on to the next claim
02:46:26 22 limitation.

02:46:26 23 Q. (By Mr. Fowler) Can you tell us what the limitation is
02:46:31 24 and whether it's found in the Galaxy S10?

02:46:33 25 A. Yes, sir. The limitation is: Wherein, the processor

02:46:37 1 decrypts second video information corresponding to a
02:46:40 2 selected thumbnail when the input interface receives a
02:46:44 3 selection of desired video information based on a selection
02:46:48 4 of a thumbnail from the first group of thumbnails.

02:46:51 5 And what I have shown here in DTX-88, the YouTube
02:46:56 6 for Netflix, is that the Galaxy S10 is actually playing
02:47:01 7 that video. And since we knew earlier that Netflix
02:47:04 8 receives encrypted video, the fact that it is playing the
02:47:07 9 video means that it must have been decrypted.

02:47:11 10 Q. Okay. Is this claim limitation present in the Galaxy
02:47:14 11 S10?

02:47:14 12 A. Yes, sir, it is.

02:47:15 13 MR. FOWLER: Let's go to the next claim
02:47:17 14 limitation.

02:47:17 15 Q. (By Mr. Fowler) And what is -- and is this the last
02:47:23 16 claim limitation?

02:47:24 17 A. Yes, sir, this is the last limitation.

02:47:26 18 Q. And what it is?

02:47:27 19 A. It is: Wherein, the display displays the decrypted
02:47:32 20 video information.

02:47:32 21 And just like the immediately previous slide in
02:47:35 22 DTX-88, the Netflix displaying the video, which we know was
02:47:41 23 received in encrypted form, is now being displayed.
02:47:46 24 Therefore, the display displays the decrypted video
02:47:49 25 information.

02:47:49 1 Q. Okay.

02:47:49 2 MR. FOWLER: So let's go to the next slide.

02:47:55 3 Q. (By Mr. Fowler) Are all of the claim limitations of
02:47:58 4 Claim 21 found in the Galaxy S10?

02:48:00 5 A. Yes, sir, all of the claim elements of Claim 21 is
02:48:05 6 found in the Galaxy S10.

02:48:07 7 Q. And, again, does Dr. Singh disagree with you?

02:48:09 8 A. No, sir, he does not disagree with me.

02:48:11 9 MR. FOWLER: Let's go to the next claim limitation
02:48:15 10 or the next slide.

02:48:17 11 Q. (By Mr. Fowler) So now we have to deal with Claim 24.

02:48:19 12 Can you tell us what Claim 24 requires and whether
02:48:22 13 it's found in the Galaxy S10?

02:48:24 14 A. Yes, sir. So Claim 24, again, is a dependent claim.
02:48:26 15 It depends on Claim 21. We already went through all of the
02:48:29 16 elements of Claim 21. The additional limitation is that:
02:48:32 17 Wherein, the processor generates a list of video
02:48:38 18 information based on preferences of a user determined by a
02:48:42 19 user selection of thumbnails from the first or second group
02:48:46 20 of thumbnails.

02:48:48 21 And what I have shown already from DTX-88 is the
02:48:52 22 My List that maintains the videos for the user, those are
02:49:01 23 his preferences. Those are their preferences. The list of
02:49:04 24 the video is the list based on preferences of the user.

02:49:08 25 Q. Okay. Is this present in the Galaxy S10?

02:49:10 1 A. Yes, sir, this is present in the Galaxy S10.

02:49:12 2 Q. Does Dr. Singh disagree with you about that?

02:49:14 3 A. No, sir, he does not.

02:49:17 4 Q. Okay. Before I turn to your last set of opinions, I
02:49:21 5 want to ask you one question. I want to go back to the
02:49:24 6 iPhone 8 for a minute, and Claim 1.

02:49:27 7 Now, you were here and you gave testimony about
02:49:31 8 non-infringement of Claim 1 of the Galaxy S23. Do you
02:49:39 9 recall that?

02:49:39 10 A. I do recall that.

02:49:40 11 Q. And what evidence did you primarily rely upon in
02:49:45 12 reaching that conclusion?

02:49:46 13 A. For Claim 1 --

02:49:48 14 Q. Claim 1, non-infringement?

02:49:48 15 A. The character.

02:49:48 16 Q. Right. And what evidence did you rely upon?

02:49:50 17 A. The source code.

02:49:51 18 Q. Right. And your own observation; is that right?

02:49:54 19 A. That's correct.

02:49:54 20 Q. Okay. So when we are looking at the iPhone 8, were you
02:49:58 21 able to look at the source code?

02:49:59 22 A. No, sir, the source code was not available. I did not
02:50:03 23 do that.

02:50:03 24 Q. Now, for -- for Claim 20 and -- 21 and 24, is Mr. West
02:50:11 25 going to be coming up next to talk about source code for

02:50:14 1 the Netflix application on the prior art product?

02:50:16 2 A. Absolutely, yes. Mr. West looked at the code for that.

02:50:20 3 Q. And that's something that we were able to -- the
02:50:25 4 parties were able to get from Netflix to look at that,
02:50:28 5 right?

02:50:28 6 A. Correct.

02:50:29 7 Q. So let's turn your fourth and last subject --

02:50:29 8 MR. FOWLER: Your Honor, should I keep going or
02:50:32 9 take a break?

02:50:33 10 THE COURT: We okay for just a few more minutes?
02:50:35 11 We'll take our break about 3:00 -- a little after 3:00.

02:50:39 12 Q. (By Mr. Fowler) Okay. Well, then let's just finish
02:50:41 13 this out, Dr. Kia.

02:50:43 14 MR. FOWLER: Could you go to the next slide,
02:50:49 15 please? I think I skipped one here. Let's keep going.
02:50:51 16 Let's keep going.

02:50:52 17 Q. (By Mr. Fowler) Okay. So let's go to your fourth
02:50:55 18 subject. What is the fourth area of opinions that you gave
02:50:58 19 in this case?

02:50:58 20 A. I gave an opinion that certain licenses are technically
02:51:02 21 comparable to the subject matter of the '815 and '848
02:51:06 22 patents.

02:51:06 23 Q. So did you review any Samsung license agreements in
02:51:09 24 this case?

02:51:09 25 A. Yes, sir, I did.

02:51:11 1 Q. And why did you do that?

02:51:12 2 A. Because I was asked to provide opinion on the patents
02:51:19 3 that they were licensing -- or the terms of the license
02:51:25 4 included patents. And I was asked to compare the subject
02:51:28 5 matter of those patents with the subject matter of these
02:51:31 6 two patents, which are the '815 and '848 patents.

02:51:35 7 Q. And was that to see if they're in the same technology
02:51:38 8 field?

02:51:38 9 A. Yes, sir.

02:51:38 10 Q. Okay. Did you have to read the patents cover-to-cover
02:51:41 11 to determine if they were in similar fields of technology?

02:51:44 12 A. No, sir. I did not need to read it cover-to-cover.

02:51:49 13 MR. FOWLER: So let's go on to the next claim
02:51:51 14 limit -- or the next slide.

02:51:52 15 Q. (By Mr. Fowler) Did you review the 2011 patent
02:51:55 16 purchase agreement between Hitachi Maxell and Samsung?

02:51:58 17 A. Yes, sir, I did.

02:51:59 18 Q. How many Hitachi patents did you review in connection
02:52:02 19 with your work here?

02:52:03 20 A. Roughly around 120 patents.

02:52:10 21 Q. Okay.

02:52:10 22 MR. FOWLER: And let's go to the next slide.

02:52:17 23 I'm sorry, Your Honor.

02:52:22 24 Thank you.

02:52:23 25 So let's bring that slide back up.

02:52:25 1 Wanted to make sure we didn't have to go on the
02:52:27 2 confidential record, Your Honor.

02:52:29 3 Q. (By Mr. Fowler) What are we looking at here on DT --
02:52:33 4 DDX-4.95?

02:52:35 5 A. What I have here is a table of patents that was covered
02:52:39 6 in the Hitachi license, and these are the patents that
02:52:41 7 Samsung purchased, purchased outright.

02:52:45 8 Q. Okay. Did you reach a conclusion as to whether each of
02:52:47 9 these patents Samsung bought outright relate to mobile
02:52:52 10 technology for phones or tablets?

02:52:53 11 A. Yes, sir, I did.

02:52:54 12 Q. What's your opinion?

02:52:55 13 A. So as I have delineated in this table in the fourth
02:53:00 14 column, it says mobile phone.

02:53:02 15 For the entries that says yes, the patents
02:53:06 16 directly relate to mobile phones. And --

02:53:10 17 Q. So -- go ahead.

02:53:13 18 A. Yeah. These are Groups 1, 2 -- I mean, family members.
02:53:17 19 Family members 1, 2, 9, and 10 are directly relate to
02:53:21 20 mobile phones.

02:53:22 21 Q. Okay. So what about the columns -- or -- in Column C
02:53:26 22 where it doesn't say yes, what about those?

02:53:28 23 A. So those entries, and they have family members 3, 4, 5,
02:53:34 24 6, 7, and 8, are technologies that can be used in mobile
02:53:38 25 phones. They're not -- they're not directly mobile phones

02:53:41 1 in and of themselves, but they can contribute to mobile
02:53:45 2 phones.

02:53:45 3 Q. Such as what technologies did you find?

02:53:47 4 A. One good example is a battery technology. Battery
02:53:51 5 technology just by itself is not a phone. But, certainly,
02:53:54 6 all phones that have good battery technology would benefit
02:53:57 7 from it.

02:53:57 8 Q. Did you find examples here of cameras and video
02:54:01 9 technologies such as what we're discussing here in the
02:54:03 10 trial?

02:54:03 11 A. Yes, sir. Those were some other areas.

02:54:05 12 Q. Okay.

02:54:05 13 MR. FOWLER: So let's go to the next slide.

02:54:07 14 Q. (By Mr. Fowler) Now, this is a pretty busy slide here,
02:54:10 15 Dr. Kia, but can you explain what we're looking at here?

02:54:12 16 A. Yes, sir. So these are the rest of the patents that
02:54:16 17 was in the Hitachi license.

02:54:17 18 So you recall I said the 120 I reviewed, previous
02:54:22 19 slide had about 30 or so in them, so these are the rest.
02:54:27 20 These were licensed patents, not purchased.

02:54:32 21 And I categorized them into the red, blue, and
02:54:35 22 orange buckets. And those buckets are for mobile
02:54:41 23 phone/tablet technology, they are for digital rights
02:54:44 24 management functionality, and they are for mobile phone,
02:54:46 25 camera, and video technology.

02:54:48 1 Q. So in the middle bucket, it says digital rights
02:54:52 2 management functionality. Is that something that is used
02:54:55 3 in mobile phones?

02:54:55 4 A. Yes, sir. So just like what we just demonstrated with
02:55:01 5 Netflix, the encryption, that is a type of digital rights
02:55:06 6 management functionality.

02:55:08 7 Q. Okay. And are there some patents that are not in any
02:55:12 8 of these buckets?

02:55:13 9 A. Yes, sir. So on the very top, there are color-coded
02:55:19 10 resembling the buckets. As you can see, there are entries
02:55:22 11 that are white. There are nothing in them.

02:55:24 12 Q. Is that because they do not pertain to the two patent
02:55:28 13 subject matters that you're looking at, the '815 and the
02:55:31 14 '848?

02:55:31 15 A. Yes, sir, that's the case.

02:55:34 16 Q. As a result of your analysis, did you decide whether
02:55:35 17 the Samsung-Hitachi license is technically comparable to
02:55:38 18 the patents asserted in this case?

02:55:38 19 A. Yes. I concluded that the Hitachi-Samsung license
02:55:43 20 agreement was technically comparable to the subject matters
02:55:47 21 of the '815 and '848 patents.

02:55:49 22 MR. FOWLER: Okay. Let's go to the next slide.

02:55:51 23 Q. (By Mr. Fowler) I'd like to move to some other license
02:55:56 24 agreements. Does this reflect your analysis of other
02:55:58 25 Samsung license agreements?

02:55:59 1 A. Yes, sir. I looked at other licenses that I've shown
02:56:03 2 here.

02:56:03 3 Q. Can you tell us what those license agreements are?

02:56:05 4 A. Yes, sir. So the first one is CEV. It's captured in
02:56:13 5 Exhibit DTX-185. And I found out that the two patents that
02:56:17 6 are covered in this agreement relate to the technical field
02:56:21 7 of the '848 patent.

02:56:23 8 The next one from ebmpapst, captured in DTX-174,
02:56:30 9 again, two other patents that are covered in that license
02:56:34 10 are comparable to both the '848 and '815 patents.

02:56:39 11 And, lastly, the RAH Color Technologies, captured
02:56:45 12 in DTX-186, they have three patents each that relate to the
02:56:55 13 '848 and 815 patents.

02:56:56 14 Q. Now, as a result of the analysis that you performed,
02:56:58 15 did you find that each of these three Samsung licenses is
02:57:02 16 technically comparable to -- to the patents in this case,
02:57:04 17 the '848 and the '815?

02:57:06 18 A. Yes, sir, that's my conclusion.

02:57:08 19 Q. Thank you, Dr. Kia.

02:57:10 20 MR. FOWLER: I have no further questions. I pass
02:57:11 21 the witness, Your Honor.

02:57:12 22 THE COURT: Okay. All right. We'll hold
02:57:14 23 cross-examination until after our afternoon recess.

02:57:18 24 We'll be in recess about 15 minutes.

02:57:21 25 COURT SECURITY OFFICER: Please stand for the

02:57:22 1 jury.

02:57:23 2 (Recess.)

03:15:18 3 (Jury out.)

03:15:18 4 COURT SECURITY OFFICER: All rise.

03:15:19 5 THE COURT: Mr. Beaber and Mr. Fowler, can I see
03:15:27 6 you all again?

03:15:29 7 (Bench conference.)

03:15:32 8 THE COURT: I'm now told that one of our jurors
03:15:38 9 has a graduation tonight and really wants to leave by 5:00
03:15:44 10 p.m., so I'd like to respect that.

03:15:46 11 MR. FOWLER: Absolutely.

03:15:47 12 THE COURT: I don't know if we get to a point
03:15:48 13 where, you know, going a little bit longer would get this
03:15:52 14 done. I think -- I want you to know about that time
03:15:55 15 constraint.

03:15:56 16 MR. FOWLER: I'll stop at 5:00 or shortly before.

03:16:03 17 THE COURT: Yeah, that would be great.

03:16:03 18 MR. BEABER: Understood. Thank you.

03:16:05 19 (Bench conference concluded.)

03:16:05 20 THE COURT: All right. Mr. Goecke, if you would
03:16:07 21 have the jury brought down.

03:16:36 22 COURT SECURITY OFFICER: Please stand for the
03:16:38 23 jury.

03:16:38 24 (Jury in.)

03:16:39 25 THE COURT: All right. Please be seated.

03:17:02 1 Mr. Siddiqui, whenever you're ready.

03:17:12 2 CROSS-EXAMINATION

03:17:14 3 BY MR. SIDDIQUI:

03:17:14 4 Q. Good afternoon, Dr. Kia. How are you doing today?

03:17:17 5 A. Good afternoon, sir. I'm well. How are you?

03:17:17 6 Q. Good, good. How are things in Maryland? I hear it's
03:17:21 7 very wet and rainy.

03:17:21 8 A. I'm sorry, I didn't hear you.

03:17:23 9 Q. How are things in Maryland back home? I've heard it's
03:17:26 10 very wet and rainy.

03:17:26 11 A. Yeah, it's been rainy.

03:17:26 12 Q. I got an earful from my wife because our husky got her
03:17:26 13 soaked up.

03:17:31 14 A. Yeah. The weather here is much nicer.

03:17:32 15 Q. I know we have a lot to cover. I'll try to keep it as
03:17:35 16 efficient as possible.

03:17:38 17 MR. SIDDIQUI: Mr. Ebersole, can we please have
03:17:55 18 DDX-004.3?

03:17:56 19 Q. (By Mr. Siddiqui) Dr. Kia, these are all the topics
03:17:59 20 you testified about today, correct?

03:18:02 21 A. That's correct.

03:18:02 22 Q. Okay. Let's start where we left off, which is the
03:18:03 23 technical comparability of the licenses?

03:18:06 24 A. Yes, sir.

03:18:07 25 Q. These are the Samsung license agreements you testified

03:18:13 1 about, correct?

03:18:15 2 A. That's correct.

03:18:15 3 Q. Sir, you didn't select these particular licenses to
03:18:19 4 opine about, correct?

03:18:21 5 A. That's correct.

03:18:21 6 Q. These licenses were presented to you by counsel from
03:18:24 7 Samsung, correct?

03:18:25 8 A. That's correct.

03:18:25 9 Q. Did you ask for any additional licenses that weren't
03:18:28 10 provided to you?

03:18:29 11 A. I'm a scientist. I do not know even where to start
03:18:36 12 with that, so no.

03:18:37 13 Q. So you were just given these licenses, and you were
03:18:40 14 told find out if these are the most technically comparable,
03:18:40 15 correct?

03:18:44 16 A. I don't know how to answer your question.

03:18:50 17 Q. Okay. Let's start with the first one on the top.
03:18:51 18 That's the CEV agreement, correct?

03:18:54 19 A. That's correct.

03:18:54 20 Q. You testified to the jury that there are two patents in
03:18:57 21 the CV agreement -- CEV agreement, the '827 and the '508
03:19:04 22 that are technically comparable to the '848 patent.
03:19:08 23 Correct?

03:19:09 24 A. That's correct.

03:19:09 25 Q. Isn't it correct that the CEV license agreement covers

03:19:12 1 a total of nine patents?

03:19:14 2 A. It could, yeah.

03:19:16 3 Q. Okay. Well, would you agree -- would you take my
03:19:20 4 representation that the evidence, if the jury were to look
03:19:22 5 at it, they would see DTX-185 covers nine patents?

03:19:28 6 A. Okay. If you say so.

03:19:29 7 Q. Okay. But you did not form an opinion about any of the
03:19:32 8 other seven patents because you were not asked to, correct?

03:19:36 9 A. I concluded that the '827 and '508 were technically
03:19:42 10 comparable, and that's where my opinion end.

03:19:45 11 Q. But you did not analyze the other seven patents,
03:19:48 12 correct?

03:19:48 13 A. I think I did.

03:19:49 14 Q. Okay. So just one second.

03:19:52 15 In front of you, you have your binder. Can you
03:19:56 16 please take a look at Page 50 of your deposition?

03:19:58 17 A. Okay. Yes, sir, I'm there.

03:20:15 18 Q. Okay. Please take a look at the top of Page 50, Line 2
03:20:25 19 through 8.

03:20:26 20 A. Yes, I see that.

03:20:29 21 MR. SIDDIQUI: Your Honor, may I publish?

03:20:32 22 THE COURT: Yes.

03:20:32 23 MR. SIDDIQUI: Okay. Mr. Ebersole, can you please
03:20:34 24 publish?

03:20:35 25 Q. (By Mr. Siddiqui) And I will read from here, Dr. Kia.

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03:20:38 1 Is it your opinion that the remaining seven U.S.
03:20:41 2 patents are not technologically comparable to the '848
03:20:47 3 patent?

03:20:48 4 Do you see that?

03:20:48 5 A. I do see that.

03:20:49 6 Q. And you answered: I did not form an opinion about the
03:20:51 7 others.

03:20:51 8 A. Yes, sir.

03:20:52 9 Q. Do you see that?

03:20:52 10 And then it was asked of you: Why not?

03:20:56 11 And you said: Because I was not asked to.

03:20:58 12 Do you see that?

03:20:58 13 A. I do see that.

03:21:00 14 Q. So you were only asked to analyze two out of the nine?

03:21:03 15 A. Yes, sir.

03:21:04 16 Q. Okay. Moving on to the next license agreement, which
03:21:09 17 is the RAH Color Technologies. Do you see that over here?

03:21:15 18 A. Yes, sir, I do.

03:21:15 19 Q. Now, you were -- you opined that three patents in these
03:21:20 20 two agreements are technically comparable to both the '848
03:21:25 21 and '815 patent, correct?

03:21:28 22 A. That's correct, that's what I said.

03:21:29 23 MR. SIDDIQUI: Mr. Ebersole, can we have DTX-186,
03:21:44 24 please? 186, yeah.

03:21:48 25 THE TECHNICIAN: DTX?

03:21:51 1 MR. SIDDIQUI: DTX, yeah. Can we please go to
03:21:54 2 Page 2. And can we -- Mr. Ebersole, can we highlight
03:21:58 3 licensed patents? That'll be great.

03:22:00 4 Q. (By Mr. Siddiqui) So do you see, Dr. Kia, the RAH
03:22:04 5 Color Technologies agreement covers 31 licensed patents? I
03:22:06 6 counted them.

03:22:07 7 A. Okay.

03:22:08 8 Q. So you did not analyze the 31 patents to conclude that
03:22:16 9 three are technically comparable; you only looked at three
03:22:20 10 patents, '845, '340, and '288, correct?

03:22:24 11 A. I only formed opinion on the three, that's correct.

03:22:26 12 Q. And that was because you were instructed by counsel to
03:22:28 13 only consider those three, correct?

03:22:30 14 A. That could be right, yeah.

03:22:32 15 Q. Okay. So you didn't independently study the 31 patents
03:22:35 16 to find the three technically comparable patents, correct?

03:22:40 17 A. I don't understand your question.

03:22:41 18 Q. So you didn't independently study the 31 patents to
03:22:45 19 find 3 technically comparable patents; you were just given
03:22:49 20 3 out of 31 by counsel to only look at 3. Correct?

03:22:55 21 A. Well, I formed an opinion on the three. I had this
03:22:58 22 license, so I knew about the others. But I only formed
03:23:02 23 opinion about the three.

03:23:03 24 Q. Okay. Do you have in front of you your deposition
03:23:06 25 binder?

03:23:07 1 A. Uh-huh.

03:23:08 2 Q. Can you please go to Page 73?

03:23:17 3 A. Yes, sir, I'm there.

03:23:19 4 Q. So you can -- you can read to yourself -- we'll publish

03:23:24 5 in a minute -- Page 72, Line 22 onwards.

03:23:35 6 And on Page 73 --

03:23:37 7 MR. SIDDIQUI: Your Honor, may we publish?

03:23:40 8 Let me ask the question.

03:23:41 9 THE COURT: Yeah.

03:23:42 10 Q. (By Mr. Siddiqui) Dr. Kia, isn't it correct that you

03:23:46 11 were only -- only asked to provide opinions on the '845,

03:23:49 12 '340, and '288 patents only?

03:23:52 13 A. Yes, sir, you're correct.

03:23:53 14 Q. So you -- I'll ask again. So you didn't pick 3 out of

03:23:58 15 31; you were told which three to look at. Correct?

03:24:01 16 A. Yes, sir.

03:24:01 17 Q. Okay. And you were -- you were told from counsel,

03:24:01 18 correct?

03:24:05 19 A. Must have been from counsel, yes.

03:24:07 20 Q. Okay. So, Dr. Kia, you're not a licensing expert,

03:24:14 21 correct?

03:24:14 22 A. That's correct.

03:24:14 23 Q. You're not a valuation expert, correct?

03:24:17 24 A. From what I understand a valuation expert is, I don't

03:24:24 25 think I am, no.

03:24:25 1 Q. So with respect to the CEV, the RAH, and Papst
03:24:29 2 licenses, your technical comparability analysis did not
03:24:33 3 take into account the scope of the licensed products,
03:24:37 4 correct?

03:24:38 5 A. Well, I did not perform the scope of the entire
03:24:43 6 license. I only analyzed the technical comparability of
03:24:47 7 certain licenses.

03:24:49 8 THE COURT: Mr. Siddiqui --

03:24:49 9 MR. SIDDIQUI: Slow down?

03:24:51 10 THE COURT: Would you -- yeah.

03:24:51 11 MR. SIDDIQUI: I got it. I got you, Your Honor.

03:24:54 12 Q. (By Mr. Siddiqui) So did -- in your technical
03:24:56 13 comparability analysis, you did not take into account the
03:25:01 14 length of time left in the licensed patents, correct?

03:25:04 15 A. That's correct. I did not look at that.

03:25:06 16 Q. And, sir, when you were looking at the technical
03:25:09 17 comparability of these three agreements, you looked at the
03:25:14 18 claims first, and if the claims were clear, then you said
03:25:18 19 that's enough.

03:25:19 20 If the claims were not clear, then you looked at
03:25:22 21 the disclosures, as well, to conclude that these patents
03:25:26 22 are technically comparable.

03:25:27 23 Correct?

03:25:28 24 A. I'm sorry. I don't understand your question.

03:25:29 25 Q. Sure. So in -- when you were trying to conclude

03:25:32 1 whether a particular license agreement is technically
03:25:35 2 comparable for these patents that we had on your slide, you
03:25:39 3 looked at the claims to see if they were technically
03:25:42 4 comparable. Correct?

03:25:43 5 A. Well, I mean, the reason I don't understand is I looked
03:25:46 6 at the claims of the '815 and '848 patent. Those -- are
03:25:51 7 you suggesting the claims on the other patents? I don't
03:25:54 8 understand the question.

03:25:56 9 MR. SIDDIQUI: Can we get the slide back up?

03:25:58 10 Q. (By Mr. Siddiqui) No, I'm looking -- I'm talking about
03:25:59 11 the claims of these patents that you concluded were
03:26:01 12 technically comparable.

03:26:02 13 A. Okay.

03:26:03 14 Q. Did you look at the claims of these patents?

03:26:05 15 A. I didn't have to read cover-to-cover. I needed to
03:26:11 16 understand the technology area. So sometimes I did,
03:26:16 17 sometimes I didn't.

03:26:17 18 Q. The inventions are disclosed in the claims, correct?

03:26:20 19 A. I'm sorry?

03:26:21 20 Q. The inventions of any particular patent are covered by
03:26:24 21 the claims, correct?

03:26:25 22 A. That's correct.

03:26:27 23 Q. Okay. Okay. Let's look at the Hitachi patent license
03:26:31 24 sales agreement next, Dr. Kia.

03:26:33 25 You testified about this earlier today, as well,

03:26:37 1 correct?

03:26:37 2 A. That's correct.

03:26:39 3 Q. You testified that you analyzed 87 patents and
03:26:45 4 concluded that they relate to mobile phone technology,
03:26:45 5 correct?

03:26:49 6 A. That's -- this is my slide. So I analyzed the 87 and
03:26:53 7 put them in the buckets.

03:26:55 8 Q. Dr. Kia, isn't it correct that when you categorized
03:26:58 9 them into these three buckets, these three buckets were
03:27:03 10 given to you by counsel? You didn't independently identify
03:27:08 11 these three categories, correct?

03:27:10 12 A. That's correct.

03:27:11 13 Q. And so you just were given these categories, and then
03:27:14 14 you were told by counsel, categorize them, correct?

03:27:19 15 A. Something like that, yes.

03:27:22 16 Q. Okay. Now, isn't it correct that when doing an
03:27:27 17 analysis for these 87 patents that are listed here, you
03:27:31 18 didn't do a claim-by-claim comparison to determine whether
03:27:35 19 the technology was related, correct?

03:27:39 20 A. I did not do a claim-by-claim analysis, no.

03:27:42 21 Q. So you didn't look at the claims, but you just
03:27:45 22 concluded that they're in these categories, correct?

03:27:49 23 A. Well, I understood what the technology area was. I
03:27:51 24 didn't have to look at the claims to understand that.
03:27:53 25 That's why I didn't look at the claims.

03:27:55 1 Q. So all --

03:27:56 2 A. Some of them. Some of them I did look at the claims.

03:27:59 3 Q. Okay. That's not what you -- okay, can we -- can you
03:28:02 4 please take a look at your deposition testimony, please?

03:28:04 5 A. Yes, sir.

03:28:05 6 Q. On Page 88, Line 24.

03:28:24 7 A. Yes, sir.

03:28:26 8 Q. Sorry, I have a -- I have a -- I'm looking for the
03:28:39 9 cite. Just one second. Oh, I'm sorry, 94 -- Page 94.

03:28:42 10 Dr. Kia, if you look at Page 94, Line 16. Can you
03:28:58 11 read that to yourself? Not out loud. And then can you
03:29:08 12 also please read to yourself Page 95, Lines 13 to 15?

03:29:20 13 So let me ask you. Did you perform any
03:29:22 14 claim-by-claim comparison of the 33 patents in the Table 2
03:29:26 15 of Appendix B of the Hitachi -- to the claims of the '848
03:29:31 16 patent?

03:29:32 17 A. No, sir, I did not do a claim-by-claim comparison.

03:29:36 18 Q. Okay. Dr. Kia, before you did the categorization of
03:29:40 19 these patents, did you review the Hitachi-Samsung 2001 --
03:29:46 20 '11 agreement to determine whether the Hitachi mobile
03:29:51 21 patent unit -- mobile unit patent is under the terms of the
03:29:52 22 agreement?

03:29:52 23 A. I do not understand that question.

03:29:57 24 Q. When you were concluding that particular patents in the
03:30:02 25 Hitachi mobile agreement were mobile patents, did you read

03:30:06 1 the terms of the agreement?

03:30:07 2 A. No, sir, I did not.

03:30:08 3 Q. It's because you're not a licensing expert, correct?

03:30:11 4 A. Well, I looked at the patents. That's the technical
03:30:15 5 field I excel at.

03:30:18 6 Q. Dr. Kia, are you aware that for a patent in 2011
03:30:22 7 agreement to be a Hitachi mobile unit patent, it must have
03:30:27 8 been administered by the Mobile Information and Application
03:30:30 9 Division?

03:30:31 10 A. I do not recall that.

03:30:32 11 MR. SIDDIQUI: Let's take a look at DTX-005,
03:30:44 12 Section 1.7, Mr. Ebersole. If you can zoom up.

03:30:48 13 Your Honor, can we seal the Court, but Maxell
03:30:52 14 representatives can stay?

03:30:53 15 THE COURT: Yes, the courtroom will be sealed at
03:30:56 16 this time.

03:30:57 17 (Courtroom sealed.)

03:30:57 18 (This portion of the transcript is sealed
03:30:57 19 and filed under separate cover as
03:42:56 20 Sealed Portion No. 15.)

03:42:56 21 (Courtroom unsealed.)

03:42:57 22 Q. (By Mr. Siddiqui) Do you see this?

03:43:00 23 A. I do see that.

03:43:02 24 Q. Now, Dr. Kia, you don't dispute that Gallery is not
03:43:07 25 pre-installed, correct?

03:43:09 1 A. I do not dispute that, no.

03:43:10 2 Q. So let's see, if we do your same test, where it's
03:43:14 3 coming from.

03:43:17 4 Do you see where it says: App downloaded from
03:43:21 5 Galaxy store?

03:43:21 6 A. Yes, sir.

03:43:22 7 Q. Okay. Now, let's see where Galaxy store is coming
03:43:27 8 from. App downloaded from Galaxy store. Do you see that?

03:43:33 9 A. I do see that.

03:43:34 10 Q. Now, let's see where Netflix is coming from. App
03:43:41 11 downloaded from Galaxy store. Do you see that?

03:43:43 12 A. I do see that.

03:43:45 13 Q. And let's see, just for fun, where calculator is coming
03:43:48 14 from. This one actually is coming from Google Play Store.
03:43:54 15 Do you see that?

03:43:55 16 A. I do see that.

03:43:56 17 Q. Now, all of these apps, just because the phone says
03:43:59 18 it's pre-installed -- or just because the phone says an app
03:44:03 19 is downloaded from another store, that doesn't necessarily
03:44:07 20 mean that it's not pre-installed, correct?

03:44:09 21 A. I cannot agree with that statement.

03:44:11 22 Q. Okay. So you're saying the calculator, the Galaxy
03:44:15 23 store, the Gallery is all not pre-installed?

03:44:18 24 A. It could be updates from Google Play.

03:44:21 25 Q. Okay.

03:44:21 1 A. I cannot agree completely with that. I did not analyze
03:44:24 2 that.
03:44:25 3 Q. Okay. So with respect to Claim 21, the only claim you
03:44:28 4 dispute for -- for infringement is 21[f], correct?
03:44:37 5 A. I'm sorry, what am I looking at?
03:44:39 6 Q. So with respect to Claim 21 of the '815 patent, the
03:44:43 7 only claim that you dispute -- element that you dispute
03:44:46 8 infringement is 21[f], correct?
03:44:49 9 A. I remember that, yes.
03:44:51 10 Q. Okay. Here, you show 21[f] being met by Netflix in the
03:44:58 11 Galaxy S10, correct?
03:44:59 12 A. That's correct.
03:44:59 13 Q. Okay. Now, if -- you pointed to the functioning of
03:45:03 14 continue watching for Z. Do you see that?
03:45:05 15 A. I do see that.
03:45:06 16 Q. If you have the exact same functioning on Galaxy S23,
03:45:15 17 continue watching for kids, wouldn't that infringe?
03:45:18 18 A. Potentially, yes.
03:45:30 19 Q. It infringes?
03:45:31 20 A. Potentially, yes.
03:45:32 21 Q. Yes. Okay.
03:45:33 22 And that was the only dispute with respect to
03:45:38 23 Claim 21 of the S23, correct?
03:45:45 24 A. That's correct.
03:45:45 25 Q. Okay. Let's look at the next one where we have

03:45:51 1 Claim -- Claim 1, okay. Claim 1. With respect to Claim 1,
03:45:57 2 the functionality you dispute is selecting a first
03:46:03 3 character, second character, correct?

03:46:05 4 A. I'm sorry, I'm totally lost. Where are we at?

03:46:08 5 Q. Sure. Sure.

03:46:10 6 With respect to Claim 1 of the '815 patent --

03:46:10 7 A. Okay.

03:46:11 8 Q. -- the function -- the element you dispute is selecting
03:46:15 9 first character or second character, correct?

03:46:18 10 A. That's correct, yes.

03:46:18 11 Q. And you say that Samsung album doesn't let you select
03:46:25 12 particular characters on the screen, correct?

03:46:27 13 A. That's correct.

03:46:27 14 Q. Sir, this is from the Gallery Design Guide. Do you see
03:46:30 15 that?

03:46:34 16 A. I do not recognize this.

03:46:37 17 MR. SIDDIQUI: Actually, Your Honor, sorry, can we
03:46:39 18 seal the court, please?

03:46:41 19 THE COURT: Yes, the courtroom will be sealed.

03:46:43 20 (Courtroom unsealed.)

03:46:43 21 (This portion of the transcript is sealed.

03:46:43 22 and filed under separate cover as

03:46:59 23 Sealed Portion No. 16.)

03:46:59 24 (Courtroom unsealed.)

03:48:46 25 MR. SIDDIQUI: Bring up our presentation.

03:48:52 1 Q. (By Mr. Siddiqui) All right. Then we talked about the
03:48:53 2 iPhone 8, Dr. Kia, correct?
03:48:55 3 A. That's correct.
03:48:56 4 Q. You said the iPhone 8 meets the claim elements,
03:49:00 5 correct?
03:49:00 6 A. That's correct. That's what I said.
03:49:01 7 Q. You said the iPhone 8 has a character, correct?
03:49:04 8 A. I said the iPhone 8, the user selects a character, yes.
03:49:07 9 Q. Favorites, if I recall correctly, favorites and fabric
03:49:10 10 patterns, correct?
03:49:12 11 A. That's correct.
03:49:13 12 Q. What if the Galaxy S23 had favorites and fabric
03:49:22 13 patterns, will that then select the character?
03:49:25 14 A. No, sir. This is different product, different
03:49:32 15 evidence. As I've shown, they select an area.
03:49:35 16 Q. Same finger, same touchscreen. When you select
03:49:39 17 favorites and fabric pattern on the S23, it doesn't meet
03:49:43 18 the claim. When you select it on iPhone, it meets the
03:49:46 19 claim?
03:49:47 20 A. Yeah. Because iPhone 8, we didn't have the source
03:49:52 21 code. I looked at the source code on the S23.
03:49:54 22 Q. So for iPhone 8 using source -- without source code,
03:49:56 23 you can conclude it meets the claim element?
03:49:58 24 A. With the evidence that's provided, I concluded it meets
03:50:03 25 the claim element.

03:50:03 1 Q. So without source code, one can conclude that the claim
03:50:07 2 element is met, correct?

03:50:08 3 A. Without the source code, it's possible. You have less
03:50:14 4 evidence.

03:50:15 5 Q. Okay. So same finger, when I touch F on iPhone 8, it
03:50:20 6 meets the claim. When I touch F on S23, it doesn't meet
03:50:23 7 the claim, correct?

03:50:28 8 A. I don't know. I don't understand your question.

03:50:32 9 Q. Okay. So same finger --

03:50:35 10 A. Yeah.

03:50:35 11 Q. -- touch F on iPhone 8, it meets the claim. Touch F on
03:50:40 12 S23, it does not meet the claim?

03:50:44 13 A. That's two different devices.

03:50:49 14 Q. Instruction from counsel?

03:50:51 15 A. I'm sorry?

03:50:52 16 Q. So let me conclude.

03:50:54 17 You say the iPhone 8 -- or, sorry, S23 doesn't
03:50:57 18 infringe, correct?

03:50:58 19 A. That's correct.

03:50:59 20 Q. Because the touchscreen has some magic in it
03:51:02 21 underneath, there's some magic elves that somehow
03:51:06 22 dynamically change the screen, and it's not the text that
03:51:09 23 the user is selecting, it's the magic screen. Correct?

03:51:13 24 A. No, sir. That was not my testimony. I said it was the
03:51:15 25 source code.

03:51:15 1 Q. You said "dynamic screen," correct?

03:51:18 2 A. That's correct. But it's not magical. It's source

03:51:21 3 code.

03:51:21 4 Q. So finger, am I selecting my nose, or am I selecting an

03:51:26 5 area on my face?

03:51:27 6 A. You're not selecting anything. Your nose is not

03:51:32 7 responding to anything.

03:51:32 8 Q. Is it -- am I not selecting both? Is it -- does one

03:51:36 9 mutually exclude the other?

03:51:37 10 A. I'm sorry. Repeat your question.

03:51:40 11 Q. When I'm touching my nose, am I also touching my face?

03:51:44 12 A. Oh, I see what you mean. If you're touching your nose,

03:51:52 13 are you touching your -- I think, yes.

03:51:54 14 Q. So one -- when you -- one thing is not mutually

03:51:57 15 exclusive of the other, correct?

03:51:59 16 A. I don't understand the question.

03:52:00 17 Q. It's okay.

03:52:01 18 MR. SIDDIQUI: No further questions, Your Honor.

03:52:02 19 THE COURT: Redirect?

03:52:10 20 MR. FOWLER: I don't think I -- sorry, Your Honor.

03:52:15 21 REDIRECT EXAMINATION

03:52:16 22 BY MR. FOWLER:

03:52:16 23 Q. Dr. Kia, I don't think I have too many questions, but

03:52:19 24 let's see if we can unpack a little bit of what we just

03:52:23 25 heard.

03:52:23 1 So let's start at the end. You looked at the
03:52:26 2 Galaxy S23 source code technical documents, and you
03:52:32 3 inspected itself to determine whether it infringed the
03:52:34 4 claims. Is that right?
03:52:37 5 A. That's correct.
03:52:38 6 Q. And does it infringe the claims?
03:52:39 7 A. No, it does not.
03:52:40 8 Q. And I think I asked you this before, but what's your
03:52:43 9 level of certainty about that?
03:52:44 10 A. I'm extremely certain.
03:52:45 11 Q. And is that in part because we showed the jury the
03:52:49 12 source code to show how that works on Claim -- on Claim 1?
03:52:52 13 A. Yes, sir. The source code does not lie. The source
03:52:56 14 code is the source code. It instructs the device to do
03:53:00 15 exactly what it --
03:53:01 16 Q. I noticed counsel didn't show you that source code.
03:53:04 17 And, again, we're talking about Claim 1 of the '815 patent,
03:53:07 18 right?
03:53:07 19 A. That's correct.
03:53:08 20 Q. Counsel didn't show you that source code. That source
03:53:11 21 code shows what?
03:53:13 22 A. That the user is selecting an area.
03:53:16 23 Q. Does that source code indicate anything about selecting
03:53:19 24 a character?
03:53:20 25 A. No, sir, it does not.

03:53:21 1 Q. Is the source code ever wrong?

03:53:23 2 A. It's never wrong.

03:53:24 3 Q. And did their expert talk at all about the source code

03:53:27 4 for this claim limitation?

03:53:29 5 A. No, sir. There was no source code presented for this

03:53:32 6 limitation.

03:53:32 7 Q. And didn't you show the jury what would happen if you

03:53:36 8 scrolled down and the characters weren't even there

03:53:40 9 anymore?

03:53:41 10 A. Yes, sir, I did that.

03:53:43 11 Q. What does that prove?

03:53:45 12 A. That proves that the area is selected, not the

03:53:48 13 character. The area is still visible, but all the content

03:53:52 14 that is contained in that area is gone.

03:53:53 15 Q. Okay. So could it be possible that it's selecting the

03:53:56 16 character at that point?

03:53:57 17 A. It's not possible at all.

03:53:59 18 Q. Okay. So on a kind of a scale of 1 to a hundred,

03:54:02 19 hundred being you're certain and 1 being you're

03:54:07 20 completely -- it's not -- it does infringe, where are you

03:54:11 21 on that scale in terms of the confidence of your opinion?

03:54:14 22 Are you at a hundred, or are you at 1?

03:54:17 23 A. I'm at a hundred.

03:54:18 24 Q. Okay. And is there any evidence that's been presented

03:54:21 25 in this case on the infringement issue as to whether the

03:54:23 1 product does or doesn't -- I mean, is there any evidence
03:54:26 2 showing that there's infringement?

03:54:28 3 A. No, they haven't.

03:54:29 4 Q. Okay. So let's now turn to the iPhone 8.

03:54:34 5 Did you have the ability to look at source code
03:54:36 6 for the iPhone 8?

03:54:38 7 A. No, sir, I did not have the source code. I did not
03:54:43 8 have the ability to review it.

03:54:44 9 Q. So let's use that same scale again. You know, what's
03:54:47 10 your -- is your level of confidence on the invalidity
03:54:49 11 higher or lower than it is for infringement?

03:54:51 12 A. It is lower.

03:54:53 13 Q. Okay. So you've concluded that it's invalid. But as
03:55:01 14 between the two of them, which do you think is the stronger
03:55:04 15 opinion?

03:55:04 16 A. That it does not infringe -- the Galaxy S23 does not
03:55:07 17 infringe. It's stronger.

03:55:07 18 Q. And is that because you would have needed to look at
03:55:11 19 that iPhone 8 source code in order to do that?

03:55:13 20 A. Yes, sir, that is.

03:55:14 21 Q. But that wasn't available to Maxell or Samsung or you
03:55:17 22 or Dr. Singh, right?

03:55:19 23 A. That's correct, that was not available to me.

03:55:21 24 Q. Okay. So I -- honestly, I had a little trouble
03:55:26 25 following this, but there was some discussion about

03:55:28 1 Claim 21 of the '815 patent and the Galaxy S10 and the
03:55:35 2 Galaxy S23. Do you recall that?
03:55:43 3 A. I do.
03:55:44 4 Q. Okay. Does Maxell claim that the Galaxy S23 infringes
03:55:52 5 in this case?
03:55:52 6 A. Yes, they do.
03:55:53 7 Q. Do they contend that the Galaxy S10 infringes?
03:55:56 8 A. No, they don't.
03:55:57 9 Q. And -- and are the Galaxy S10 and the Galaxy S23 the
03:56:04 10 same?
03:56:04 11 A. No, sir, they're two different products.
03:56:06 12 Q. That's what I thought. Okay.
03:56:14 13 MR. FOWLER: Let's look at Slide 4.53. I think
03:56:19 14 this was the slide that they showed, if I've got it right.
03:56:26 15 No, I'm sorry, it's our slide DDX-4.53.
03:56:40 16 Q. (By Mr. Fowler) Okay. There was some suggestion that
03:56:46 17 there may have been -- and there may have been, there could
03:56:49 18 have been, an error in one of the slides. The language on
03:56:53 19 the left here, is that the no deletion limitation language
03:56:56 20 from Claim 1?
03:56:57 21 A. Yes, sir, it is.
03:56:58 22 Q. Now, I will represent to you that we looked at this,
03:57:03 23 and unless counsel is going to correct me, I believe this
03:57:05 24 is the correct language from the claim; is that right? I'm
03:57:09 25 sorry, Claim 21. Claim 21.

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03:57:14 1 Okay. So is this the language that you relied
03:57:19 2 upon -- the actual language in the claim to determine
03:57:24 3 whether or not there was a priority date -- what the
03:57:27 4 priority date was?

03:57:29 5 A. Yes, sir. This is the portion that I looked at and no
03:57:37 6 deletion limitation from Claim 1.

03:57:39 7 Q. Okay. So counsel -- I have to give him credit here.
03:57:44 8 He was right on this, and we made a mistake. But this was
03:57:47 9 the language that you looked at in reaching your conclusion
03:57:51 10 regarding the priority date for the no deletion limitation,
03:57:56 11 right?

03:57:56 12 A. That's correct.

03:57:57 13 Q. Okay. So let's look at where we made a mistake. This
03:58:02 14 wasn't your mistake. I'll own this mistake.

03:58:07 15 MR. FOWLER: So let's go to Slide 4.34.

03:58:10 16 Q. (By Mr. Fowler) Now, I will just tell you, this
03:58:14 17 language is from Claim 21 instead of Claim 1. Does that
03:58:17 18 change your view on the priority date at all?

03:58:20 19 A. No, sir, because that no deletion limitation is still
03:58:24 20 there.

03:58:24 21 Q. In both Claim 1 and 21 with slightly different
03:58:28 22 language; is that right?

03:58:29 23 A. Yes, sir, that's correct.

03:58:31 24 Q. Okay. I apologize to you for showing you the wrong
03:58:36 25 language on this slide.

03:58:39 1 Okay. Let's go -- that's the '815 patent. I
03:58:43 2 think I've covered everything.

03:58:45 3 MR. FOWLER: Let's go to the '848 patent and go to
03:58:47 4 our Slide 4.15.

03:58:49 5 Q. (By Mr. Fowler) Now, counsel asked you about what
03:58:56 6 Dr. Balakrishnan showed during his testimony. I think we
03:58:58 7 all agree that when he went through a number of the claim
03:59:01 8 limitations, he talked about source code. Is that right?

03:59:03 9 A. That's correct.

03:59:04 10 Q. But did he show the jury any source code for this claim
03:59:09 11 limitation?

03:59:09 12 A. No, sir, he did not.

03:59:11 13 Q. Okay. And that was consistent with the testimony you
03:59:15 14 gave on direct examination when I was asking you questions,
03:59:18 15 right?

03:59:18 16 A. That's correct.

03:59:19 17 Q. Okay. That's what I thought.

03:59:24 18 MR. FOWLER: Let's go to DDX-4.14.

03:59:26 19 Q. (By Mr. Fowler) Now, counsel drew some things on your
03:59:34 20 drawing.

03:59:35 21 Do you remember that?

03:59:35 22 A. I do.

03:59:36 23 Q. Okay. And I think what he was asking you, if I got it
03:59:38 24 correctly, is that -- that when that pink arrow that comes
03:59:43 25 up and curves over to Hawah, he said that was -- if I got

03:59:49 1 the word right, he said that was associating somehow the
03:59:53 2 picture with that folder, right?
03:59:54 3 A. I remember him saying that, yes.
03:59:56 4 Q. And -- and did you agree with him?
03:59:57 5 A. No, I did not.
03:59:58 6 Q. What's happening there?
03:59:59 7 A. It's just sorting. It's moving that picture into the
04:00:02 8 Hawah album.
04:00:02 9 Q. And -- and is the language "associating" in the claim
04:00:07 10 at all?
04:00:08 11 A. No, sir, it's not.
04:00:09 12 Q. So even if it was somehow -- I don't even know what
04:00:13 13 "associating" means, but even if it was associating, would
04:00:17 14 it meet the claim language?
04:00:18 15 A. No, sir. It would not.
04:00:19 16 Q. What is required by the claim language?
04:00:20 17 A. To be registered.
04:00:21 18 Q. Is there any evidence at all in this case --
04:00:24 19 A. No, sir, there's not.
04:00:25 20 Q. I'm sorry. Let me finish the question.
04:00:28 21 Is there any evidence at all in this case that
04:00:31 22 what's happening here is registration?
04:00:33 23 A. No, sir.
04:00:33 24 Q. Anything in the source code?
04:00:34 25 A. No, sir.

04:00:35 1 Q. Anything in the technical documents?

04:00:37 2 A. No, sir.

04:00:37 3 Q. Anything in the phone itself that indicates that
04:00:39 4 registration is happening?

04:00:40 5 A. No, sir.

04:00:41 6 Q. At this point in time, has Hawah already been
04:00:44 7 registered?

04:00:45 8 A. Yes, sir.

04:00:45 9 Q. So is there any need to register her again?

04:00:48 10 A. There's no need to register her again.

04:00:50 11 Q. Is the only evidence that we've heard in this case that
04:00:54 12 there is registration happening here is Dr. Balakrishnan's
04:00:58 13 say-so?

04:00:58 14 A. That's correct.

04:00:59 15 Q. Okay. Last but not least -- well, maybe least, let's
04:01:04 16 go to the technical comparability questions you were asked.

04:01:07 17 MR. FOWLER: Let's go to DDX-4.97.

04:01:10 18 Q. (By Mr. Fowler) Okay. Now, I think where we got
04:01:15 19 cross-wise here, are you a lawyer or a scientist?

04:01:18 20 A. I -- I believe I'm a scientist, yes.

04:01:20 21 Q. Okay. Thank you.

04:01:20 22 You've never gone to law school, have you?

04:01:22 23 A. Never, no.

04:01:23 24 Q. Okay. No. I think you were asked a bunch of questions
04:01:26 25 that have to do with being a lawyer. Were you asked to do

04:01:29 1 the technical job of comparing the patents in the second
04:01:32 2 column and the third column with the '848 and '815 patents?
04:01:36 3 A. Yes, sir. That's what I was asked to do.
04:01:38 4 Q. And did you find them technically comparable as a
04:01:40 5 scientist and engineer?
04:01:41 6 A. Yes, sir. That's what I did.
04:01:43 7 Q. And did he ask you -- did counsel for Maxell ask you
04:01:46 8 any questions about whether they, in fact, were technically
04:01:49 9 comparable?
04:01:49 10 A. I do not recall. He -- he referenced the licenses a
04:01:54 11 lot.
04:01:54 12 Q. Right. I'm just asking you whether he asked you from
04:01:57 13 an engineering or science perspective whether any of these
04:02:00 14 patents were not technically comparable?
04:02:05 15 A. No, sir.
04:02:05 16 Q. Okay. Now, do you have any idea, because you're a
04:02:08 17 scientist and engineer rather than a lawyer, whether you
04:02:11 18 need to have every patent in a -- in a license be
04:02:14 19 technically comparable or whether it can just be some of
04:02:17 20 them?
04:02:17 21 A. It could be some of them.
04:02:19 22 Q. I mean, do you know?
04:02:20 23 A. I do not know.
04:02:22 24 Q. That's not your job, right?
04:02:23 25 A. That's correct.

04:02:25 1 Q. You're a scientist. You're here to give us technical
04:02:25 2 opinions, not legal ones, right?

04:02:25 3 A. That's correct.

04:02:30 4 Q. And then you were also shown DDX-11.96, if I've got
04:02:33 5 that right. No, I'm sorry, 4.96.

04:02:37 6 MR. FOWLER: Let's look at that one too.

04:02:39 7 Q. (By Mr. Fowler) Okay. Again, here, were you asked to
04:02:41 8 do a lawyer's job or a scientist's job?

04:02:43 9 A. I was asked to do a scientist's job, a technical job.

04:02:47 10 Q. And what was that job?

04:02:48 11 A. To determine the comparability of the certain patents
04:02:53 12 as was listed with this subject matter of the '815 and '848
04:02:58 13 patents.

04:02:58 14 Q. And did you do that?

04:02:58 15 A. Yes, sir, I did.

04:02:59 16 Q. And were you asked any questions that placed your
04:03:02 17 conclusions in doubt about that?

04:03:03 18 A. No, sir.

04:03:04 19 Q. Now, do you understand that there have been other
04:03:06 20 witnesses in this trial who have testified about the
04:03:09 21 contract language, including Mr. Kim and Mr. Yamamoto?

04:03:14 22 A. Yes, sir. I understand that there were testimony about
04:03:17 23 that.

04:03:17 24 Q. And do you understand that Ms. Davis is going to be
04:03:19 25 coming up a little later and talking about that, as well?

04:03:21 1 A. Yes, that's my understanding, as well.

04:03:23 2 Q. Is contract interpretation your job?

04:03:25 3 A. No, sir.

04:03:26 4 Q. So did you -- when you -- when he asked you whether you
04:03:29 5 looked at the agreement, is -- was there any reason for you
04:03:32 6 to look at the agreement?

04:03:33 7 A. There was no reason. Other than the list of the
04:03:37 8 patents, that's it.

04:03:38 9 MR. FOWLER: Thank you, Your Honor. I have no
04:03:39 10 other questions.

04:03:40 11 THE COURT: Mr. Siddiqui?

04:03:44 12 MR. SIDDIQUI: Very briefly, Your Honor.

04:03:47 13 RECROSS-EXAMINATION

04:03:47 14 BY MR. SIDDIQUI:

04:03:47 15 Q. So, Dr. Kia, with respect to the '848 patent, first
04:03:53 16 setting mode, can you -- can the S23 sort or place the new
04:03:59 17 photo in an album without face recognition?

04:04:03 18 A. Okay. Can you repeat your question? I didn't hear it.
04:04:08 19 It doesn't come out well.

04:04:09 20 Q. Sure. Sure. For the S23 device, can a newly captured
04:04:15 21 photo be sorted and placed into a Hawah album without face
04:04:22 22 recognition first?

04:04:23 23 A. No, sir, it cannot.

04:04:24 24 Q. And that face recognition process requires source code
04:04:27 25 to execute, correct?

04:04:29 1 A. There's a process for face recognition, within the
04:04:35 2 content management hub. That's what I heard from the video
04:04:38 3 testimony.
04:04:39 4 Q. And Dr. Balakrishnan did talk about that face
04:04:42 5 recognition source code, correct?
04:04:44 6 A. That's correct.
04:04:45 7 Q. Okay. And with respect to Claim 1 of the '815 patent
04:04:50 8 where your slide says the wrong claim language -- do you
04:04:55 9 recall that?
04:04:55 10 A. Which part? I don't know what you're talking about.
04:04:58 11 Q. Did you make multiple mistakes in your claim language
04:05:01 12 in your slides?
04:05:02 13 A. I tried not to. I didn't aim to make mistakes.
04:05:05 14 Q. So your counsel made the mistake of the claim language,
04:05:08 15 and you followed it; you didn't independently verify if
04:05:12 16 your presentation was correct?
04:05:13 17 A. It was a collaborative effort. I looked at it.
04:05:18 18 Counsel looked at it. Nobody caught it.
04:05:22 19 MR. SIDDIQUI: Okay. Thank you, Dr. Kia.
04:05:25 20 THE COURT: Anything else?
04:05:26 21 MR. FOWLER: One question.
04:05:28 22 REDIRECT EXAMINATION
04:05:28 23 BY MR. FOWLER:
04:05:28 24 Q. Does the face recognition technology in the camera have
04:05:31 25 anything to do with registering a person?

04:05:34 1 A. No, sir, it does not.

04:05:36 2 MR. FOWLER: Thank you, Your Honor. No further
04:05:38 3 questions.

04:05:38 4 THE COURT: Mr. Siddiqui?

04:05:39 5 MR. SIDDIQUI: No, Your Honor.

04:05:40 6 THE COURT: You may step down.

04:05:44 7 THE WITNESS: Thank you.

04:05:44 8 THE COURT: Okay. Samsung may call its next
04:05:48 9 witness.

04:05:50 10 MR. FOWLER: Your Honor, Samsung calls as its next
04:05:53 11 and brief witness, Mr. West.

04:05:56 12 THE COURT: All right.

04:06:03 13 MR. FOWLER: Can we pass out the -- oh, they're
04:06:09 14 ahead of me.

04:06:26 15 (Witness sworn.)

04:06:36 16 MR. FOWLER: May I proceed, Your Honor?

04:06:37 17 THE COURT: You may, yes.

04:06:38 18 MR. FOWLER: Mr. West, you may sit down. Thank
04:06:42 19 you.

04:06:42 20 RYAN WEST, DEFENDANTS' WITNESS, SWORN

04:06:42 21 DIRECT EXAMINATION

04:06:42 22 BY MR. FOWLER:

04:06:42 23 Q. Good afternoon, sir. Could you please introduce
04:06:44 24 yourself to the jury?

04:06:45 25 A. Hi. My name is Ryan West.

04:06:47 1 Q. And can you tell the jury what you do for a living,
04:06:47 2 sir?

04:06:51 3 A. So I'm the founder and lead scientist at CodexWest LLC.

04:06:55 4 Q. And what does CodexWest LLC do?

04:06:58 5 A. CodexWest is a consulting firm that specializes in
04:07:02 6 source code review.

04:07:03 7 Source code is essentially a set of instructions
04:07:07 8 that programmers or other people tell a computer in order
04:07:12 9 to carry out some task. It's like a recipe telling an app
04:07:18 10 how to function, what to do.

04:07:19 11 Q. And how did you get involved in source code review and
04:07:23 12 analysis, sir?

04:07:24 13 A. So I've always been obsessed with computers, ever since
04:07:29 14 I was little. In middle school, I wanted to learn how to
04:07:33 15 program new coding languages. And my middle school in
04:07:38 16 Montana didn't have it, so I tried to teach myself.

04:07:40 17 In high school, I got the first chance to do that,
04:07:43 18 and I took the first class. I loved it, and that led me to
04:07:46 19 college where I got a Bachelor's degree in computer
04:07:49 20 engineering. And I continued --

04:07:52 21 Q. Sorry. Go ahead, please.

04:07:53 22 A. I continued thereafter in various software engineering
04:07:57 23 positions, reading and writing source code at which point I
04:08:02 24 learned that you're working on a team with other people
04:08:04 25 also writing source code, and oftentimes you need to read

04:08:08 1 their source code and understand what did they do. Did
04:08:12 2 they make any mistakes? Was there any way to improve it?
04:08:18 3 That's what source code essentially is.

04:08:20 4 Q. Okay. So you mentioned going to college. Can you
04:08:23 5 please just very briefly tell the jury your educational
04:08:27 6 background?

04:08:27 7 A. Yes. So my Bachelor's degree in computer engineering I
04:08:31 8 got at Brigham Young University. I followed that with a
04:08:35 9 Master's degree in computer science where I focused on
04:08:38 10 cybersecurity and blockchain. And I am currently
04:08:41 11 completing a Ph.D. in computer science at the University of
04:08:45 12 Utah, focusing on 5G mobile networks and other wireless
04:08:51 13 networking.

04:08:51 14 Q. Just out of curiosity, Mr. West, how close are you to
04:08:54 15 getting that Ph.D.?

04:08:55 16 A. I am only one month away. I was last week in London
04:09:01 17 where I presented one of my papers to a conference. And,
04:09:04 18 yeah, four weeks left.

04:09:06 19 Q. So please tell us about your qualifications and
04:09:13 20 experience in source code review and analysis?

04:09:15 21 A. So I have two, soon-to-be three, degrees in computer
04:09:21 22 science or computer engineering related fields. And I've
04:09:25 23 also worked as a software engineer where I wrote and read
04:09:28 24 lots and lots of source code.

04:09:30 25 I've also been in my current position doing this

04:09:35 1 source code review for patent litigation. I've reviewed
04:09:39 2 source code for, I believe, over 40 cases.

04:09:43 3 And during my Ph.D., my research has involved
04:09:47 4 reading and writing lots of source code as well.

04:09:49 5 Q. So the phones in this case involve Android. Do you
04:09:53 6 have experience in reviewing source code relating to
04:09:56 7 iPhone -- Android phones and smartphones?

04:09:59 8 A. Yeah. I believe a dozen or more of the cases that I've
04:10:03 9 been on have involved looking at Android smartphones,
04:10:07 10 understanding how the operating system works, understanding
04:10:11 11 certain apps on Android.

04:10:14 12 MR. FOWLER: Okay. Your Honor, at this time,
04:10:15 13 Samsung proffers Mr. Ryan West as an expert in the field of
04:10:19 14 source code review and analysis.

04:10:23 15 THE COURT: Any objection?

04:10:24 16 MR. JAVED: No objection.

04:10:25 17 THE COURT: All right. Very well.

04:10:27 18 Q. (By Mr. Fowler) So can you tell the jury what you were
04:10:29 19 asked to do in this case?

04:10:32 20 A. So I was asked to analyze the source code of the
04:10:38 21 Netflix Android application. And, specifically, I was
04:10:41 22 asked to look at, first, whether multiple user profiles are
04:10:49 23 on this application; second, when you download a video to
04:10:55 24 the smartphone, does that download come in an encrypted
04:10:58 25 state; and, third, after you downloaded the video, how does

04:11:02 1 the decryption work in order for you to watch the video.

04:11:08 2 Q. Okay. What source code files did you actually review
04:11:12 3 in this case?

04:11:12 4 A. So I looked at Version 5.13.1 of the Netflix Android
04:11:18 5 application. And, specifically, the last modification date
04:11:24 6 that I saw in that source code was February 13th, 2018.

04:11:29 7 Q. Do you have an understanding of the Netflix source code
04:11:32 8 that you looked at is for the prior art Netflix code; is
04:11:37 9 that right?

04:11:37 10 A. Yes, that's correct.

04:11:37 11 Q. It's not the Netflix code for purposes of infringement;
04:11:41 12 is that right?

04:11:41 13 A. Yes, that's correct.

04:11:42 14 Q. Okay.

04:11:43 15 MR. FOWLER: So, Your Honor, at this point, we're
04:11:45 16 going to need to seal the courtroom, I think from both
04:11:47 17 Samsung and Maxell, everybody, because this is Netflix
04:11:51 18 stuff.

04:11:51 19 THE COURT: All right. Very good. We'll seal the
04:11:55 20 courtroom at this time.

04:11:55 21 (Courtroom sealed.)

04:11:55 22 (This portion of the transcript is sealed
04:11:55 23 and filed under separate cover as
04:25:52 24 Sealed Portion No. 17.)

04:25:52 25 (Courtroom unsealed.)

04:26:09 1 THE COURT: Whenever you're ready.

04:26:11 2 MR. JAVED: May I proceed, Your Honor?

04:26:12 3 THE COURT: You may.

04:26:13 4 CROSS-EXAMINATION

04:26:14 5 BY MR. JAVED:

04:26:14 6 Q. Good afternoon, Mr. West. How are you doing today?

04:26:17 7 A. Good. Thank you.

04:26:18 8 Q. Mr. West -- Mr. West, did you provide any infringement
04:26:21 9 opinions in this case?

04:26:21 10 A. I did not.

04:26:23 11 Q. And did you provide any validity opinions in this case?

04:26:28 12 A. No, that was for Dr. Kia to do.

04:26:33 13 Q. Mr. West, if the jury finds that the U.S. Patent Office
04:26:37 14 correctly assigned the 2004 priority date to the '815
04:26:41 15 patent, then none of your source code review matters,
04:26:41 16 correct?

04:26:46 17 A. If the jury finds that, I believe so.

04:26:49 18 Q. Okay.

04:26:49 19 MR. JAVED: Thank you, Your Honor. No further
04:26:51 20 questions.

04:26:51 21 THE COURT: All right. Anything else?

04:26:52 22 MR. FOWLER: No, Your Honor.

04:26:53 23 THE COURT: Okay. That may be the easiest
04:26:55 24 cross-examination you ever have.

04:26:58 25 You may step down.

04:27:00 1 THE WITNESS: Thank you.

04:27:01 2 THE COURT: All right. Call your next witness.

04:27:26 3 MS. GIBSON: Thank you, Your Honor. We call

04:27:28 4 Ms. Julie Davis.

04:27:29 5 (Witness sworn.)

04:27:47 6 THE COURT: Whenever you're ready.

04:27:52 7 MS. GIBSON: Thank you, Your Honor.

04:27:54 8 JULIE DAVIS, DEFENDANTS' WITNESS, SWORN

04:27:54

04:27:54 9 DIRECT EXAMINATION

04:28:05 10 BY MS. GIBSON:

04:28:05 11 Q. Good afternoon, Ms. Davis.

04:28:07 12 A. Good afternoon.

04:28:07 13 Q. Would you please introduce yourself to the ladies and
04:28:10 14 gentlemen of the jury, and tell us why you're here today?

04:28:12 15 A. My name's Julie Davis, and I've been asked to address
04:28:16 16 the damages issues in the event you are to decide that any
04:28:19 17 of the patents in this case are both valid and infringed.

04:28:23 18 Q. What if the jury decides that the asserted claims are
04:28:27 19 not valid or are not infringed, what does that mean for
04:28:33 20 your opinions or Mr. Jarosz's opinion?

04:28:35 21 A. You can ignore my opinions, and you can ignore
04:28:39 22 Mr. Jarosz's opinion. They would not be relevant.

04:28:41 23 Q. Thank you.

04:28:42 24 In this trial, which party retained you to provide
04:28:44 25 an opinion?

04:28:45 1 A. I was retained on behalf of Samsung.

04:28:47 2 Q. Have you prepared any materials that would help us
04:28:50 3 follow along with your testimony today?

04:28:52 4 A. I have.

04:28:55 5 MS. GIBSON: Your Honor, may we publish her
04:28:56 6 slides?

04:28:58 7 THE COURT: Yes.

04:28:59 8 MS. GIBSON: Thank you.

04:29:02 9 Q. (By Ms. Gibson) Ms. Davis, what do you do for a
04:29:06 10 living?

04:29:06 11 A. My area of work is all in the area of intellectual
04:29:11 12 property consulting.

04:29:11 13 Q. I see that you work at Stout. What is Stout?

04:29:13 14 A. Stout is a consulting firm, and one of the -- the
04:29:17 15 sections within Stout is litigation consulting where we are
04:29:24 16 hired on behalf of clients who are involved in some sort of
04:29:28 17 litigation matter and someone needs to help the jury sort
04:29:31 18 out the damages issues.

04:29:32 19 Q. What do you do as a managing director at Stout?

04:29:35 20 A. I lead a team of people who do this kind of work where
04:29:39 21 we analyze damages in patent infringement matters.

04:29:43 22 Q. Before we move on, where did you grow up?

04:29:45 23 A. I grew up on a wheat farm in Western Kansas.

04:29:49 24 Q. Did you go to college?

04:29:50 25 A. I did. I went to Kansas State University and earned a

04:29:53 1 degree there in 1978 in business administration and
04:29:56 2 accounting.

04:29:57 3 Q. Have you received any honors or awards?

04:30:00 4 A. I did. Starting back when I graduated, I graduated
04:30:04 5 first in my class. I was first in the state on the CPA
04:30:09 6 exam with the highest score in the state. And then at one
04:30:11 7 point, I was also inducted into the Kansas State University
04:30:17 8 Accounting Hall of Fame.

04:30:18 9 Q. Are you a certified public accountant?

04:30:20 10 A. I am. I am a certified public accountant. I am
04:30:26 11 licensed here in Texas, as well as Kansas, Missouri,
04:30:29 12 Illinois, and California.

04:30:30 13 Q. At a very high level, what have you been up to since
04:30:33 14 becoming a certified public accountant?

04:30:33 15 A. I can give you the 30-second overview of 47 years of
04:30:33 16 experience. I started my career in the Kansas City office
04:30:41 17 of one of the Big Eight public accounting firms at the
04:30:42 18 time.

04:30:43 19 I was there for 10 years as an auditor before I
04:30:46 20 moved to Chicago and joined one of the other big public
04:30:49 21 accounting firms at the time, and that's when I first got
04:30:53 22 involved in intellectual property consulting.

04:30:54 23 So for the last 37 years, that's what I've been
04:30:57 24 doing.

04:30:59 25 Q. In your 37 years of doing this, about how many cases

04:31:02 1 have you worked on involving patent damages?

04:31:05 2 A. I've been involved in at least 400 patent cases over
04:31:09 3 that time period.

04:31:10 4 Q. And how many of those case have you submitted a written
04:31:13 5 report or testified?

04:31:14 6 A. That must be somewhere between 250 and 300 by now.

04:31:18 7 Q. And then how many of those cases did you testify at
04:31:21 8 trial?

04:31:21 9 A. That must be about 90.

04:31:24 10 Q. In each of those close to 90 trials, were you qualified
04:31:28 11 by the Court as an expert in the field of intellectual
04:31:31 12 property damages?

04:31:32 13 A. Always.

04:31:33 14 Q. Were any of those trials here in Texas?

04:31:35 15 A. Quite a few of them, actually.

04:31:37 16 Q. Now, you said you were retained by Samsung in this
04:31:40 17 case. Do you always work for Defendants?

04:31:43 18 A. No. My work is split pretty much 50/50 between the
04:31:46 19 patent owners on one hand and the alleged infringers on the
04:31:50 20 other.

04:31:50 21 Q. Can you give us some examples of the industries for
04:31:54 22 which you have analyzed patent damages?

04:31:56 23 A. The industries have -- have ranged quite broadly. They
04:32:00 24 go from jet engines to golf balls, farm tractors to
04:32:05 25 semiconductors, cell phones to kitty litter.

04:32:08 1 Q. Is it fair to say that intellectual property damages
04:32:11 2 are the primary focus of your professional practice?

04:32:15 3 A. Yes, that would be true.

04:32:16 4 MS. GIBSON: Your Honor, we move to qualify
04:32:18 5 Ms. Davis as an expert in the field of -- in the
04:32:20 6 determination of patent damages.

04:32:22 7 MR. LEVY: No objection.

04:32:23 8 THE COURT: Very well.

04:32:24 9 Q. (By Ms. Gibson) Ms. Davis, what is your role here
04:32:28 10 today?

04:32:28 11 A. I was asked to talk to you about the damages issues,
04:32:35 12 provide you the tools that you would need to make the
04:32:37 13 decisions that you'll be asked to make next week.

04:32:39 14 And so, specifically, I was asked to share my
04:32:43 15 opinions regarding the amount of money that Samsung should
04:32:47 16 pay to Maxell if you were to determine that any of the
04:32:50 17 patents were both valid and infringed. And then I was also
04:32:54 18 asked to share my views of Mr. Jarosz's opinions in this
04:32:57 19 case.

04:32:59 20 MS. GIBSON: Can we have Slide 3, please?

04:33:01 21 Q. (By Ms. Gibson) Ms. Davis, did you reach any
04:33:03 22 conclusions regarding the amount of any damages?

04:33:06 23 A. I did.

04:33:07 24 Q. If the jury finds the patents are not infringed, what
04:33:11 25 would the damages be?

04:33:12 1 A. That would be zero. There would be no damages.

04:33:16 2 Q. And looking in the middle there, if the jury finds the
04:33:19 3 patent claims are invalid, what would the damages be?

04:33:22 4 A. Likewise, there would be no damages.

04:33:25 5 Q. If there's no infringement or the patents are invalid,
04:33:29 6 does Samsung need a license to these patents?

04:33:31 7 A. No.

04:33:32 8 Q. If the jury finds the patents infringed and not
04:33:37 9 invalid, then what would the damages be?

04:33:40 10 A. For the reasons that we'll be talking about, the
04:33:43 11 reasonable royalty in total for those three patents would
04:33:46 12 be no more than \$3,465,000.

04:33:49 13 Q. Now, if the jury finds that only some of the patents
04:33:52 14 are infringed and not invalid, what would happen to that
04:33:55 15 number?

04:33:55 16 A. That would be less, and I'll show you exactly how much
04:33:58 17 less.

04:33:58 18 Q. Now, in cases like this, is it typical for the
04:34:02 19 Defendant to hire a damages expert even though they believe
04:34:06 20 they do not infringe and the patents are invalid?

04:34:08 21 A. Yes. In my experience, the Defendant or alleged
04:34:13 22 infringer always consults with a damages expert.

04:34:17 23 Q. Let's discuss your investigation for this assignment.

04:34:19 24 What did you do before forming your opinions on
04:34:22 25 this matter?

04:34:23 1 A. My work on this case started last fall, and I asked a
04:34:29 2 couple of my colleagues to assist me.

04:34:31 3 And what we did is reviewed all the documents that
04:34:33 4 had something to do with damages issues that were provided
04:34:35 5 by both Maxell and Samsung.

04:34:38 6 We reviewed the deposition testimony of the
04:34:40 7 various witnesses that addressed issues that were pertinent
04:34:43 8 to damages.

04:34:45 9 I reviewed the expert reports of all the experts
04:34:48 10 you've heard from this week.

04:34:50 11 And then I have also submitted a written report,
04:34:53 12 that is probably here in this binder, and sat for a
04:34:57 13 deposition.

04:34:58 14 And then I have also been here in the courtroom,
04:35:01 15 as you have, to hear all the testimony of these witnesses.

04:35:04 16 Q. So, Ms. Davis, were you in the courtroom when Maxell's
04:35:07 17 damages expert, Mr. Jarosz, testified?

04:35:09 18 A. I was.

04:35:10 19 Q. And were you present when Ms. Smith cross-examined him
04:35:13 20 on his 1 percent royalty rate?

04:35:15 21 A. Yes.

04:35:15 22 Q. Do you agree with Mr. Jarosz's conclusions regarding
04:35:19 23 the amount of damages?

04:35:21 24 A. There are a number of things we do agree on, but we do
04:35:24 25 not agree on our conclusions.

04:35:26 1 MS. GIBSON: So let's have Slide 4, please.

04:35:28 2 Q. (By Ms. Gibson) So we'll get into disagreements in
04:35:30 3 detail in a minute. But before we do that, do you and
04:35:34 4 Mr. Jarosz agree on anything?

04:35:37 5 A. Yes. These are the big-picture things we agree on. So
04:35:40 6 you don't have to sort out whether there's any
04:35:44 7 disagreements here.

04:35:44 8 First of all, we both agree that there would be no
04:35:47 9 damages if there's no infringement or the patents are
04:35:50 10 invalid - --

04:35:50 11 Secondly, we both agree that this is a situation
04:35:54 12 where one should look at a Georgia-Pacific analysis, and
04:35:57 13 we'll talk a little bit more about that.

04:35:58 14 We both agree that this is a situation where we
04:36:02 15 should be talking about a hypothetical negotiation between
04:36:06 16 Hitachi Maxell and Samsung.

04:36:08 17 And then, fourth, we both agree that the outcome
04:36:12 18 of that hypothetical negotiation would be an agreement upon
04:36:16 19 a license. In this case, it would be called a "bare patent
04:36:21 20 license."

04:36:21 21 Q. Now, that's a new term. Can you tell us what a "bare
04:36:24 22 patent license" is?

04:36:25 23 A. A bare patent license is -- is simply a license that
04:36:29 24 gives the licensee, in this case Samsung, the permission to
04:36:33 25 use somebody else's patents. They don't get anything else.

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04:36:37 1 They don't get any know-how, they don't get any technology,
04:36:41 2 they don't get any blueprints, they don't get any
04:36:43 3 engineering drawings, they don't get any technical
04:36:44 4 assistance. All they get is permission to use the patents.
04:36:48 5 Q. Okay. Assuming damages are relevant in this case, can
04:36:52 6 we start with the Georgia-Pacific analysis?

04:36:56 7 What is the Georgia-Pacific analysis?

04:36:58 8 A. Mr. Jarosz mentioned this yesterday, but what you'll
04:37:01 9 recall probably is that Georgia-Pacific is a corporation
04:37:04 10 that was involved in a lawsuit back in the late 1960s,
04:37:08 11 early 1970s. And the judge in that particular case, in his
04:37:15 12 decision, identified a series of factors that can be
04:37:20 13 considered in the determination of a reasonable royalty.

04:37:24 14 So since that time, so for the last 50-some years
04:37:27 15 now, those of us who are assigned with that task review
04:37:32 16 those Georgia-Pacific factors in -- in reaching a
04:37:34 17 conclusion on what a reasonable royalty would be.

04:37:40 18 Q. Have you used the Georgia-Pacific factors to perform a
04:37:44 19 reasonable royalty analysis before?

04:37:45 20 A. Yes, hundreds of times. Probably every single patent
04:37:48 21 case I've ever been involved with.

04:37:51 22 MS. GIBSON: May I have Slide 5, please?

04:37:54 23 Q. (By Ms. Gibson) So how many Georgia-Pacific factors
04:37:57 24 are there?

04:37:57 25 A. There are 15 factors. As you see here, this is kind of

04:38:00 1 the shorthand language that would describe what those
04:38:03 2 factors are.

04:38:04 3 Q. Are they all equally important?

04:38:06 4 A. They are not.

04:38:07 5 Q. Did you consider all of these 15 factors in this case?

04:38:11 6 A. I did. I addressed every one of them in my report.

04:38:14 7 Q. Do we need to address them all today?

04:38:16 8 A. Happily, we do not.

04:38:18 9 Q. I'm sure the jury is glad to hear that.

04:38:21 10 MS. GIBSON: Let's go to the next slide.

04:38:25 11 Q. (By Ms. Gibson) What is the hypothetical negotiation?

04:38:26 12 A. Well, the -- the last slide, the Factor No. 15 ends
04:38:31 13 with the hypothetical negotiation.

04:38:33 14 And the idea is that you are to picture yourself
04:38:40 15 sitting at a hypothetical negotiation table at the time
04:38:43 16 when the alleged infringement is first -- first comes
04:38:48 17 about. So, in this case, that would be July of 2016.

04:38:51 18 And the two parties to that negotiation would be
04:38:55 19 Hitachi Maxell and Samsung, and they are to determine in
04:38:59 20 that negotiation how much Samsung should pay to Hitachi
04:39:08 21 Maxell for the right to use the three patents in this case.

04:39:11 22 Q. Does the commercial relationship between Samsung and
04:39:14 23 Hitachi Maxell matter to your analysis?

04:39:16 24 A. It does.

04:39:17 25 Q. How does it matter?

04:39:18 1 A. Well, you can picture this: If you're competitors, you
04:39:23 2 would -- you would charge a higher royalty rate because if
04:39:27 3 I allow you to use my patents, that means you're going to
04:39:32 4 sell products that takes money out of my product -- in my
04:39:34 5 pocket.

04:39:35 6 That would not be the case in a situation like
04:39:36 7 this particular negotiation between Hitachi Maxell and
04:39:41 8 Samsung because Hitachi Maxell does not sell smartphones or
04:39:46 9 tablets.

04:39:46 10 Q. At this hypothetical negotiation, what would Samsung
04:39:48 11 and Hitachi have been negotiating for?

04:39:53 12 A. They would have been negotiating for -- to allow
04:39:56 13 Samsung the right to use the three patents that we've been
04:40:00 14 talking about all week long.

04:40:01 15 Q. And when exactly would this hypothetical negotiation
04:40:06 16 have taken place?

04:40:08 17 A. Hitachi Maxell alleges that the first infringement was
04:40:12 18 in July of 2016.

04:40:14 19 Q. Now, is July of 2016 the same hypothetical negotiation
04:40:19 20 date assumed by Mr. Jarosz?

04:40:21 21 A. It is not. He identified March of 2015.

04:40:24 22 Q. Why did he do that?

04:40:27 23 A. He used the issue date of the first of the three
04:40:30 24 patents to issue.

04:40:31 25 Q. Now, does that difference of opinion on the

04:40:35 1 hypothetical negotiation date between you and Mr. Jarosz,
04:40:37 2 does it matter to your opinions?

04:40:38 3 A. It does not. He and I both agree that it doesn't
04:40:42 4 really matter whether it's March of 2015 or July of 2016.

04:40:46 5 Q. The negotiation that you're describing, the
04:40:49 6 hypothetical negotiation, did it actually happen in the
04:40:52 7 real world?

04:40:54 8 A. No, it did not. If it had, we wouldn't be here.

04:41:00 9 Q. Is the hypothetical negotiation the same as a
04:41:04 10 real-world negotiation?

04:41:06 11 A. It's very much the same. There are two significant
04:41:09 12 differences, though.

04:41:11 13 The first of those differences is that we are to
04:41:14 14 assume that both parties knew with certainty that the
04:41:19 15 patents were -- patents were valid and infringed. And, of
04:41:23 16 course, that's never the case in the real world because
04:41:25 17 that's part of what they're fighting about.

04:41:27 18 The second thing that makes a hypothetical
04:41:31 19 negotiation different from a real-world negotiation is we
04:41:34 20 are to assume that both parties knew everything that we now
04:41:40 21 know about the facts and circumstances of the case and the
04:41:45 22 products and the patents and everything else that -- that
04:41:48 23 we've been hearing about all week long.

04:41:50 24 Q. Is that called the Book of Wisdom?

04:41:53 25 A. It is called the Book of Wisdom.

04:41:55 1 Q. Can you give us an example of something the parties
04:41:57 2 would know through the Book of Wisdom?

04:41:59 3 A. A particularly pertinent example in this case would be
04:42:03 4 a number of the licenses that you've been hearing about
04:42:07 5 this week were executed after the hypothetical negotiation
04:42:08 6 date. But we are to pretend that those hypothetical
04:42:12 7 negotiators knew the circumstances of those licenses.

04:42:14 8 Q. What information did you consider to be the most
04:42:19 9 important in arriving at your damages opinion?

04:42:22 10 A. Well, if you want to determine the outcome of a
04:42:26 11 hypothetical negotiation, it makes sense to look at what
04:42:29 12 happens in real-world negotiations for similar technology
04:42:33 13 and similar products. So I started with real-world
04:42:37 14 licenses.

04:42:38 15 Q. About how many licenses did you review in this case?

04:42:42 16 A. I reviewed the same 74 licenses that Mr. Jarosz did.

04:42:46 17 Q. How many licenses did you find to be comparable?

04:42:50 18 A. There are five that we should talk about.

04:42:54 19 MS. GIBSON: Your Honor, at this time, I think we
04:42:56 20 should seal the courtroom.

04:42:57 21 THE COURT: All right.

04:42:58 22 MS. GIBSON: If I could get just guidance on one
04:43:01 23 thing.

04:43:01 24 THE COURT: Okay.

04:43:01 25 MS. GIBSON: So we have two sets of confidential

04:43:04 1 information. The first set is Samsung licenses that the
04:43:09 2 Maxell folks can't hear, and the second is the other way
04:43:11 3 around. We can close the courtroom once for everyone, or
04:43:15 4 we can bounce back and forth.

04:43:16 5 THE COURT: Why don't we just close it once for
04:43:19 6 everyone?

04:43:20 7 MS. GIBSON: We will do that, Your Honor.

04:43:21 8 THE COURT: Anyone object to that? We'll close it
04:43:24 9 once for everyone.

04:43:26 10 MS. GIBSON: Thank you, Your Honor.

04:43:28 11 THE COURT: And, Ms. Gibson, do be mindful of the
04:43:32 12 time, given our constraints.

04:43:33 13 MS. GIBSON: I will be, Your Honor.

04:43:34 14 Go to Slide 8, please?

04:43:37 15 (Courtroom sealed.)

04:43:37 16 (This portion of the transcript is sealed
04:43:37 17 and filed under separate cover as
04:57:29 18 Sealed Portion No. 18.)

04:57:29 19 (Courtroom unsealed.)

04:57:30 20 THE COURT: All right. Ms. Miller?

04:57:32 21 MS. MILLER: Good afternoon.

04:57:32 22 THE COURT: Good afternoon.

04:57:33 23 MS. MILLER: We are -- we have worked with
04:57:36 24 Samsung, and we've agreed on the exhibits that were
04:57:38 25 discussed on May 21st and May 22nd, and those are PX-11;

04:57:42 1 12; 21; 25; 44; 45; PX-49, Pages 18 to 30, 34 to 35, 161 to
04:57:56 2 165, 192 to 201, 230 to 244, 373, 435 to 438, and 501 to
04:58:06 3 503.

04:58:07 4 Then back to PX-54, 89, 108, 242, 243, 246C, 247A
04:58:19 5 and 247B, 251B, 257, 259, 276, 277, 280, 290, 294, 296,
04:58:34 6 309, PX-310 at Pages 10 to 12 and 41, PX-311, 312, 318,
04:58:44 7 325, 326, 408, 431, 416, 418, 421, 424, 431, 440, 441, 450,
04:59:00 8 and DTX-59 to 61 and DTX-142 and 212.

04:59:08 9 The parties have also agreed that PX-245 was
04:59:11 10 discussed, but we are finalizing what that exhibit looks
04:59:15 11 like. There were some pieces in it not discussed, so we
04:59:19 12 are waiting until that's final before actually moving it in
04:59:23 13 for admission.

04:59:23 14 THE COURT: And those exhibits were either
04:59:25 15 admitted without objection or over objection; is that
04:59:28 16 correct?

04:59:28 17 MS. MILLER: That is correct.

04:59:29 18 THE COURT: All right. And who is speaking for
04:59:31 19 Samsung?

04:59:31 20 MS. GIBSON: I will, Your Honor. No objection.

04:59:32 21 THE COURT: All right. Very well. Those exhibits
04:59:35 22 will be received.

04:59:36 23 Okay. What else before we take a short break?

04:59:40 24 All right. My rule on jury instructions, if
04:59:42 25 you're not involved in jury instructions, you do not have

04:59:45 1 to stay here. But if you will ever have an opinion about
04:59:48 2 jury instructions, you better stay.

04:59:50 3 All right. We'll take a short recess.

05:01:59 4 (Recess.)

05:14:08 5 (Jury out.)

05:56:18 6 THE COURT: Let's go on the record.

05:56:20 7 It's 6:00 p.m. on Friday. The jury has gone home.

05:56:27 8 We have had a meet and confer here in the
05:56:29 9 courtroom to make progress on jury instructions. The
05:56:34 10 parties, I do think, have narrowed their areas of
05:56:36 11 disagreement.

05:56:42 12 The parties, just within the last few minutes,
05:56:47 13 submitted an amended set of proposed jury instructions.
05:56:52 14 Just taking a look through that now, as well as an amended
05:56:56 15 verdict form.

05:56:56 16 The purpose of this informal charge conference is
05:57:00 17 for us to go through the instructions and the verdict form,
05:57:06 18 and you all make -- you know, make an argument about what
05:57:13 19 you believe the appropriate instruction is or is not.

05:57:20 20 You're welcome to cite whatever law you want to
05:57:22 21 cite. This is really just an informal opportunity for you
05:57:28 22 to persuade me that what you're suggesting is correct and
05:57:34 23 appropriate here in light of the evidence that's come in or
05:57:37 24 that you expect -- as you expect it to come in.

05:57:40 25 I'm going to give you a full opportunity to put

05:57:43 1 your objections to the instructions, to the extent you have
05:57:48 2 any, on the record at the appropriate time. So this is
05:57:54 3 really more an informal thing.

05:57:58 4 So those are my preliminary comments.

05:58:01 5 Any preliminary comments from the Plaintiffs?

05:58:03 6 MR. FUSSELL: No, Your Honor.

05:58:04 7 THE COURT: Any preliminary comments from the
05:58:10 8 Defendants?

05:58:11 9 Mr. Fowler, she can't hear you -- so you don't
05:58:13 10 have to go to the podium if you don't want, but just --

05:58:13 11 MR. FOWLER: I was saying, Your Honor, I think
05:58:16 12 we're only down to four instructions where we have a
05:58:19 13 difference.

05:58:19 14 THE COURT: Okay. So let me short-circuit at
05:58:22 15 least one of them.

05:58:23 16 As Mr. Beaber referred to it, the elephant in the
05:58:26 17 room. On the elephant in the room, I am going to ask the
05:58:30 18 parties or give the parties an opportunity to file some
05:58:33 19 short briefing on this instruction.

05:58:37 20 I very quickly looked at what the Plaintiffs had
05:58:42 21 proposed, what the Defendant had proposed. You all are
05:58:47 22 quite a ways away.

05:58:52 23 I have looked at some of the Delaware instructions
05:58:54 24 on similar issues. So I know there are instructions that
05:58:58 25 are out there.

05:58:59 1 I know the Plaintiffs -- the Plaintiff cited a
05:59:02 2 case from 2012. I'm curious if there's anything more
05:59:06 3 recent from the circuit. But I certainly would be
05:59:10 4 interested in instructions or at least authority from
05:59:13 5 either Delaware or any of the California courts.

05:59:18 6 So what I would suggest is the parties file some
05:59:23 7 briefing on the issue of how the jury is to deal with the
05:59:31 8 IP -- IPR issue and what the -- what the instructions on
05:59:34 9 that ought to be. I was thinking like end of the day
05:59:39 10 tomorrow, but if you all wanted to Sunday at noon, we could
05:59:44 11 probably give you to Sunday at noon.

05:59:47 12 What -- does it matter -- do you have a
05:59:49 13 preference?

05:59:50 14 MR. CUNNINGHAM: We'd be -- on the Defense side,
05:59:52 15 we'd be okay with end of the day tomorrow.

05:59:55 16 THE COURT: End of the day tomorrow okay with the
05:59:57 17 Plaintiff?

05:59:57 18 MR. FUSSELL: Yes, sir, that's fine.

06:00:00 19 THE COURT: Okay. So you all file a brief,
06:00:01 20 simultaneous briefing, say, 6:00 p.m. tomorrow. And -- and
06:00:06 21 tell me what you think about what else you can find out
06:00:09 22 there, particularly anything from the circuit.

06:00:12 23 So I'm happy to hear anything anyone wants to say
06:00:15 24 about that, but I do know that's going to -- I'm going to
06:00:19 25 want some additional briefing on that.

06:00:22 1 MR. CUNNINGHAM: Do you have any sense of length
06:00:25 2 of briefing?

06:00:26 3 THE COURT: No. I mean, whatever it takes.
06:00:28 4 Whatever you all need to --

06:00:29 5 MR. CUNNINGHAM: All right.

06:00:30 6 THE COURT: I mean, you know, there is a reason
06:00:32 7 they call it a brief, Mr. Cunningham.

06:00:34 8 MR. CUNNINGHAM: I was going to suggest to keeping
06:00:36 9 it to a dull roar.

06:00:40 10 THE COURT: Yeah. A dull roar would be
06:00:43 11 preferable.

06:00:43 12 Okay. Do you all -- I'm happy to go through this,
06:00:44 13 or someone can take the initiative. Whatever. If you all
06:00:45 14 want to go to the podium.

06:00:48 15 MR. FOWLER: I believe -- and we can do this
06:00:50 16 together, if you want.

06:00:51 17 MR. FUSSELL: Okay.

06:00:52 18 MR. FOWLER: I believe the first disputed
06:00:54 19 instruction would be on the copy that you have, Your Honor,
06:00:56 20 is Page 38, it's invalidity. And this is going to be a
06:01:00 21 little bit of déjà vu because this is the same issue
06:01:04 22 Mr. Beaber and I argued before you when we were looking at
06:01:06 23 the opening slides.

06:01:08 24 And it has to do with the language in this
06:01:12 25 instruction about the presumption of validity. And I can

06:01:15 1 just argue -- we're the one objecting to their proposal, so
06:01:20 2 I can -- I think a very short view of this is, one, is the
06:01:24 3 presumption is not the burden of proof. The burden of
06:01:28 4 proof is clear and convincing evidence, and that's set
06:01:31 5 forth in multiple places in these instructions.

06:01:35 6 The presumption is something that's in the case
06:01:38 7 law that gives rise to the burden of proof of clear and
06:01:40 8 convincing evidence.

06:01:43 9 Again, presumption is not -- is not the standard.
06:01:45 10 The jury's going to be adequately instructed on the
06:01:48 11 standard. The presumption, if anything, if it's added,
06:01:52 12 essentially is a way for the Plaintiff to put their thumb
06:01:55 13 down on the scale a little bit more because it may suggest
06:01:59 14 to the jury that there's two standards or that this
06:02:03 15 standard somehow is harder to meet than the burden of clear
06:02:10 16 and convincing evidence.

06:02:10 17 And as Your Honor knows, a presumption is
06:02:13 18 something that can be rebutted. And there's nothing in
06:02:15 19 here about how to rebut that presumption, and that's
06:02:18 20 because the Courts have decided on the clear and convincing
06:02:23 21 evidence standard.

06:02:24 22 So that's one.

06:02:25 23 And then, two, honestly, I'm not sure it's even
06:02:26 24 appropriate to give an instruction of presumption in this
06:02:30 25 case because the presumption is based upon the actions of

06:02:33 1 the Patent Office and the fact that the Patent Office has
06:02:35 2 said that this is valid.

06:02:36 3 Here, the Patent Office, the last word we have
06:02:38 4 from the Patent Office is maybe not so much.

06:02:40 5 So those are the two reasons that we have an
06:02:42 6 objection to this, Your Honor.

06:02:44 7 THE COURT: Okay.

06:02:49 8 MR. FUSSELL: Your Honor, this -- this issue was
06:02:51 9 obviously raised in pretrial. I would like to take this
06:02:56 10 opportunity to cite the Court to an additional case that we
06:02:59 11 located. It is Am. Tech. and this is in -- in a footnote
06:03:04 12 in the instructions that we --

06:03:06 13 THE COURT: I see it.

06:03:07 14 MR. FUSSELL: Okay. The Am. Tech. Ceramics case
06:03:10 15 out of the Eastern District of New York.

06:03:12 16 In that case, Your Honor, it came up in a motion
06:03:16 17 in limine, and the Court said he would specifically
06:03:19 18 instruct the jury as to the presumption of validity.

06:03:24 19 But what was interesting in that case, Your Honor,
06:03:27 20 is that he equated it to a criminal case, and the
06:03:30 21 importance in a criminal case to give the jury some context
06:03:35 22 as to why they're dealing with different burdens.

06:03:39 23 I think I touched on this at pretrial, but I'd
06:03:41 24 like to reiterate that point because it's even more
06:03:45 25 important now.

06:03:46 1 And contrary to what Mr. Fowler just said, the
06:03:50 2 fact that they had instituted IPR does not change the
06:03:57 3 presumption of validity.

06:03:58 4 And, now, as I just heard him, he's saying that
06:04:01 5 that should somehow lower the bar. And that's exactly --
06:04:05 6 and, obviously, I think we're going to get into this
06:04:07 7 slightly with the IPR --

06:04:08 8 THE COURT: Sure.

06:04:09 9 MR. FUSSELL: -- argument and that we've had some
06:04:11 10 presumption language in there, but this is even more --
06:04:15 11 more reason why the Court should instruct the jury as to
06:04:19 12 the presumption of validity and make it clear why there is
06:04:26 13 a clear and convincing standard and why that standard is
06:04:28 14 higher than the other standards they hear about in the
06:04:31 15 case, preponderance of the evidence, specifically.

06:04:33 16 So we think there is not only a good basis, and we
06:04:38 17 cite some -- some good authority that this is this -- this
06:04:42 18 is the standard that's typically used in courts.

06:04:42 19 THE COURT: It's -- it's --

06:04:48 20 MR. FUSSELL: It's required.

06:04:48 21 THE COURT: I think what -- honestly, I think in
06:04:55 22 the vast majority of the cases, you may be right. I'm not
06:04:59 23 suggesting I'm going to end up disagreeing with you about
06:05:03 24 this, Mr. Fussell. But this is a really unique case in
06:05:08 25 light of what has transpired.

06:05:11 1 And I don't -- I mean, I'll take a look at your
06:05:13 2 other cases, particularly, the Eastern District cases that
06:05:16 3 you cite there. But I would be surprised if the discussion
06:05:21 4 of invalidity and what the Patent Office has done or not
06:05:25 5 done has, in those cases, come before the jury to the
06:05:31 6 extent that it has in this case.

06:05:33 7 So I'm just suggesting I -- I think this is a
06:05:36 8 highly exceptional case.

06:05:40 9 MR. FUSSELL: I wouldn't disagree with you, and I
06:05:43 10 think from our standpoint, Your Honor, and obviously, we
06:05:46 11 appreciate the opportunity to brief it further, this --
06:05:51 12 because of how the evidence has come out in this case,
06:05:54 13 particularly with all the evidence related to the IPRs and
06:05:58 14 the institution decision, there's even a stronger rationale
06:06:03 15 for why the jury should be instructed --

06:06:04 16 THE COURT: There might be, and I'll think about
06:06:06 17 that. All I'm saying, in the vast majority of the cases
06:06:09 18 you cite, I can assure you, all of the evidence -- all
06:06:12 19 kinds of -- you know, the evidence that we've heard
06:06:15 20 multiple witnesses discuss was not before the jury. So
06:06:18 21 it's got to be a -- it's got to be a cohesive,
06:06:26 22 understandable instruction.

06:06:28 23 MR. FOWLER: Your Honor, may I add one more point?

06:06:31 24 THE COURT: Yes.

06:06:32 25 MR. FOWLER: I'm sorry, I know you already know

06:06:34 1 this, Your Honor. But the other point I forgot to make is
06:06:37 2 to the extent that the Court looks at the federal -- the
06:06:41 3 Federal Circuit Bar Association model jury instructions as
06:06:43 4 the default, the default here is not to include the
06:06:46 5 presumption. Those instructions do not include that
06:06:48 6 language. This is something that we're using the model
06:06:52 7 language, and the Plaintiff wants to add in this
06:06:56 8 presumption language.

06:06:57 9 So to the extent that this is an unusual case, it
06:07:00 10 would have to be an unusual case to change the default
06:07:04 11 rather than the other way around.

06:07:06 12 THE COURT: Right. Well, I'm going to give you an
06:07:08 13 opportunity on this very issue because it is so intertwined
06:07:12 14 with the IPR issue that I've asked you to separately brief.

06:07:18 15 If you want to address this, as well, if there are
06:07:20 16 other cases out there that you think, you know, are more --
06:07:25 17 I mean, I assure you, Mr. Fussell, you are correct in the
06:07:28 18 vast majority of the cases in this district. But this is
06:07:34 19 an unusual case.

06:07:35 20 Okay. So if you all want to add that point to
06:07:38 21 your briefing for tomorrow night, that would be great.

06:07:40 22 Okay. What else on that -- what else on 19 --
06:07:47 23 Section 19?

06:07:48 24 MR. FOWLER: It's all wrapped up in that.

06:07:53 25 THE COURT: Okay.

06:07:53 1 MR. FOWLER: So then the next one we had the issue
06:07:57 2 with is the one that we're going to be briefing on the
06:07:59 3 IPRs.

06:07:59 4 And then the next instruction, unless I'm missing
06:08:02 5 something, where we have a difference is on the
06:08:04 6 instructions on obviousness, which is at Pages 43 through
06:08:09 7 45 of what we provided. And, here, this is, I think, a
06:08:13 8 pretty clear just decision for the Court to make.

06:08:17 9 Samsung has added in green language that either --
06:08:22 10 it depends on the particular paragraph. It's either
06:08:25 11 verbatim or a very close paraphrase out of the KSR opinion.

06:08:32 12 So we have -- we have standard language. When I
06:08:36 13 say standard, it comes from the model instruction. And
06:08:40 14 then there is explanatory language that pertains to the
06:08:45 15 corresponding instruction.

06:08:47 16 So, for example, at the bottom of 43, the standard
06:08:51 17 language is whether the claimed invention was merely the
06:08:53 18 predictable result of using prior art elements according to
06:08:56 19 their known functions.

06:08:58 20 And then what we have -- and, again, this is -- if
06:09:01 21 it's not exactly a quote, it's a very close paraphrase --
06:09:05 22 for example, when a work is available in one field and so
06:09:08 23 forth. That's language right out of KSR. That's true of
06:09:12 24 all of these other three where you go through 1 through 5.

06:09:15 25 And so I think the issue is whether the additional

06:09:18 1 explanatory language that may help the jury understand the
06:09:22 2 shorter points that comes from KSR should be permitted or
06:09:27 3 not. It's a little bit more complicated than that, but
06:09:30 4 that's the thrust of it.

06:09:31 5 THE COURT: Okay. Mr. Fussell?

06:09:32 6 MR. FUSSELL: I think I'll pick up right there.
06:09:35 7 It's a little more complicated. The instructions that we
06:09:37 8 had agreed to or proposed are right out of the Federal
06:09:42 9 Circuit Bar. And we're concerned about this additional
06:09:44 10 language that they've added, Your Honor.

06:09:47 11 Principally, these examples in particular that
06:09:50 12 they have provided here, we're concerned that the jury is
06:09:55 13 going to view those examples as what they need to do.
06:09:57 14 And -- and if we want to start adding examples, I think
06:10:02 15 we're going to -- we need to start -- because this is
06:10:05 16 not --

06:10:05 17 THE COURT: Yeah.

06:10:06 18 MR. FUSSELL: -- the -- this is not the only
06:10:09 19 example.

06:10:10 20 THE COURT: I got it. Okay. All right. I'll
06:10:12 21 take a look at that.

06:10:13 22 MR. FUSSELL: Thank you.

06:10:13 23 THE COURT: And this is not in the Circuit Bar
06:10:19 24 Association --

06:10:20 25 MR. FOWLER: That's correct, Your Honor. This is

06:10:21 1 taking the Circuit instructions, the model instructions,
06:10:25 2 and then taking for each of these points that is in the
06:10:27 3 model instructions and adding the corresponding language
06:10:30 4 from KSR.

06:10:34 5 THE COURT: Got it. Okay. Thank you.

06:10:35 6 Can I go back and ask you all about something on
06:10:42 7 Page 28?

06:10:44 8 MR. FOWLER: I'm sorry, Your Honor, what page?

06:10:47 9 THE COURT: 28. At the end of 28, we say the
06:10:50 10 identification of the representative products are provided
06:10:54 11 on a patent-by-patent basis in a document I'm separately
06:10:57 12 providing to you all.

06:10:58 13 Do you all agree --

06:11:00 14 MR. FUSSELL: That's in their folders, Your Honor.

06:11:02 15 THE COURT: It is in the folder. Good enough.
06:11:05 16 We'll make that clear. We need to make that clear.

06:11:09 17 MR. FOWLER: Yeah, you could change that to: I
06:11:13 18 have separately provided to you --

06:11:15 19 THE COURT: Okay. We'll change the language.

06:11:16 20 Okay. What's the next one after obviousness?

06:11:21 21 MS. GIBSON: Your Honor, I believe it's just the
06:11:29 22 EcoFactor, what I'll call the Whitserve and EcoFactor
06:11:33 23 instruction, I think is the only one I think is left.

06:11:36 24 Let me tell you the actual name of it. It'd
06:11:39 25 probably be helpful.

06:11:40 1 THE COURT: Yeah, sure. This is on Page 57.

06:11:42 2 MS. GIBSON: I have an old version in front of me.

06:11:46 3 Thank you.

06:11:46 4 Thank you, Mr. Fowler.

06:11:48 5 Yes, it is. Yes. That's correct.

06:11:49 6 THE COURT: Okay.

06:11:50 7 MS. GIBSON: So in terms of the evidence and

06:11:54 8 why -- why we're seeking this instruction, Your Honor, we

06:11:58 9 have a situation where at one point in time, I think we've

06:12:03 10 seen Hitachi was getting what we'll call the standard

06:12:07 11 royalty rate -- Your Honor?

06:12:09 12 THE COURT: No, I'm fine.

06:12:11 13 MS. GIBSON: Okay. Okay.

06:12:11 14 THE COURT: Was I looking distracted? I'm sorry.

06:12:14 15 MS. GIBSON: Well, I thought maybe you needed

06:12:16 16 something, and I wanted to pause.

06:12:17 17 So we have a situation where Hitachi, before these

06:12:21 18 patents came to Maxell, was getting a standard royalty rate

06:12:24 19 in context outside of the smartphone context. I think

06:12:27 20 we've seen that through the evidence.

06:12:28 21 And now we have comparable agreements that the

06:12:31 22 experts rely on, or most comparable or however you want to

06:12:35 23 say it, that are in the smartphone context, and they don't

06:12:37 24 have that rate anywhere on the face of the license.

06:12:39 25 And so the only thing we have that would allow

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06:12:43 1 someone to conclude that these are actually at this
06:12:47 2 standard rate is an unsupported assertion from an
06:12:51 3 interested party, and that's part of what EcoFactor says
06:12:54 4 you can't rely on if there's no other evidentiary support
06:12:58 5 for that.

06:12:59 6 And so that's the -- that's the landscape of the
06:13:01 7 evidence of this case for why we're asking for this
06:13:04 8 instruction.

06:13:05 9 So we have, you know, testimony from Mr. Yamamoto
06:13:08 10 that there's a standard rate that gets offered. And then
06:13:11 11 when you look on the face of the license agreements, they
06:13:14 12 don't say that, but he says, oh, but they're still worth
06:13:18 13 that because of nonmonetary compensation or whatever else.

06:13:22 14 So that's the evidentiary landscape.

06:13:24 15 So I'll take our proposal bit by bit.

06:13:27 16 The first, Your Honor, the terms of a proposed but
06:13:30 17 unaccepted license may have some value for determining a
06:13:32 18 reasonable royalty. Goes through the end to the Footnote,
06:13:35 19 I believe, 42 now.

06:13:36 20 That's straight out of Whitserve, Your Honor. It
06:13:39 21 should be a direct quote as reflected in our footnote. And
06:13:44 22 that's to deal with the proposed but unaccepted rates.

06:13:48 23 The next part, Your Honor, there must be a
06:13:51 24 sufficient basis for any testimony that a lump-sum
06:13:54 25 settlement license -- that lump-sum settlement licenses

06:13:57 1 were based on a specific per-unit royalty rate, and goes on
06:14:00 2 from there.

06:14:02 3 When unsupported by any other evidence, you should
06:14:04 4 not consider the testimony alone of a corporate witness. I
06:14:07 5 think we could also change that to interested party. That
06:14:10 6 might be more appropriate in light of EcoFactor.

06:14:13 7 To be sufficient evidence that the parties of a
06:14:15 8 license agreed to a royalty rate, and then the last
06:14:17 9 sentence, the licenses individually or in combination must
06:14:22 10 show that licensees were paying the rate, agreed to pay a
06:14:25 11 particular rate, or agreed that a particular rate was a
06:14:29 12 reasonable royalty.

06:14:29 13 Your Honor, I'll direct you to three places in
06:14:31 14 EcoFactor where this -- where these concepts come from.

06:14:35 15 THE COURT: Okay.

06:14:36 16 MS. GIBSON: Often almost direct quotes.

06:14:40 17 The first is on Page 12 -- and I have just -- not
06:14:42 18 the Westlaw copy but the copy out of the Federal Circuit,
06:14:46 19 Your Honor, where the Court finds -- actually, let me just
06:14:48 20 read it. This is on Page 12.

06:14:51 21 We hold --

06:14:51 22 THE COURT: Is this -- which sentence are you
06:14:53 23 providing support for now, the second sentence or the first
06:14:56 24 sentence?

06:14:57 25 MS. GIBSON: This one, Your Honor, would be the

06:14:58 1 last one. I should be a little more clear. I think
06:15:01 2 actually the first one and the last one, it supports both.

06:15:05 3 THE COURT: Okay.

06:15:06 4 MS. GIBSON: But it's almost a direct quote of the
06:15:08 5 last one, the licenses individually or in combination.

06:15:11 6 THE COURT: Right. Okay.

06:15:13 7 MS. GIBSON: So the Court recites: We hold the
06:15:15 8 existing licenses upon which Mr. Kennedy relied were
06:15:20 9 insufficient individually or in combination to support his
06:15:23 10 conclusion that prior licensees agreed to the X dollar
06:15:28 11 royalty rate, and -- and then goes on from there.

06:15:30 12 So that's the first one.

06:15:32 13 THE COURT: Okay.

06:15:35 14 MS. GIBSON: The next one, Your Honor -- let's
06:15:42 15 see, this is on Page 16. The license -- licenses
06:15:47 16 individually or in combination do not support Mr. Kennedy's
06:15:50 17 opinion that the licensees were paying the X dollar rate,
06:15:53 18 agreed to pay the X dollar rate, or agreed that the X
06:15:58 19 dollar rate was a reasonable royalty.

06:15:59 20 And then on the interested party or corporate --
06:16:02 21 what we said corporate witness testimony, but probably
06:16:04 22 should say interested party, on Page 18 of the opinion, the
06:16:08 23 Court finds: In the absence of any evidence, Mr. Habib's
06:16:13 24 testimony amounts to an unsupported assertion from an
06:16:17 25 interested party. His testimony cannot provide a

06:16:19 1 sufficient factual basis for Mr. Kennedy to provide a
06:16:23 2 reliable opinion that the licensees agreed to pay the X
06:16:26 3 dollar rate.

06:16:26 4 And Mr. Habib, Your Honor, was the CEO there that
06:16:30 5 provided the interested party testimony.

06:16:32 6 THE COURT: Okay. Okay. I'll tell you, to be
06:16:40 7 honest with you, Ms. Gibson, the second sentence, there
06:16:48 8 must be a sufficient basis for any testimony that a
06:16:50 9 lump-sum settlement license was based on a specific -- that
06:16:53 10 feels like Daubert to me. And, you know, we're past
06:16:59 11 Daubert. Why is it not?

06:17:02 12 MS. GIBSON: Well, I think, Your Honor -- so we
06:17:07 13 did file a Daubert motion before this decision came out.
06:17:10 14 And now the jury's heard the testimony. And I think that
06:17:14 15 having heard the testimony, they now need the legal
06:17:16 16 framework to deal with it in order to resolve the issue.

06:17:21 17 THE COURT: Okay. But I guess my question is, is
06:17:23 18 there anything about EcoFactor that specifically addressed
06:17:26 19 that?

06:17:27 20 MS. GIBSON: In terms of -- pardon.

06:17:32 21 THE COURT: How it's different from Daubert, I
06:17:34 22 guess, is the question. Is there something about the
06:17:37 23 EcoFactor case that says, oh, wait, this is different than
06:17:40 24 Daubert? You have to do this in addition to Daubert?

06:17:45 25 MS. GIBSON: Well, I think it talks about what's a

06:17:47 1 sufficient basis to support a finding of a reasonable
06:17:52 2 royalty.

06:17:52 3 So I do think it applies outside the Daubert
06:17:55 4 context. I think it would -- because the jury has to
06:17:57 5 determine what a reasonable royalty is, so they have to
06:17:59 6 apply the facts to the law, and I think it guides them in
06:18:02 7 dealing with the evidence that we've heard in this case in
06:18:05 8 applying the facts to the law, Your Honor.

06:18:07 9 THE COURT: Okay. Got it. Thank you.

06:18:09 10 MS. GIBSON: Uh-huh.

06:18:10 11 THE COURT: Mr. Fussell?

06:18:11 12 MR. FUSSELL: Yes. I will say, Your Honor, you
06:18:17 13 hit my argument at the -- right on -- nail on the head.
06:18:20 14 The EcoFactor instruction is not -- is inappropriate
06:18:24 15 because EcoFactor was dealing with a 702 Daubert issue.

06:18:29 16 I believe it's at Page 9 --

06:18:31 17 THE COURT: It wasn't about the evidence the jury
06:18:34 18 heard?

06:18:34 19 MR. FUSSELL: Exactly, Your Honor.

06:18:39 20 The facts of EcoFactor were three lump-sum
06:18:43 21 agreements saying EcoFactor believed there is a reasonable
06:18:45 22 royalty rate of X dollars, as the opinion states, per unit.
06:18:50 23 Two of the three agreements have statements disavowing the
06:18:53 24 reasonable royalty rate and the CEO testimony saying the X
06:18:59 25 per-unit rate on the general understanding of the relevant

06:19:02 1 history.

06:19:02 2 That was all. And the Federal Circuit's
06:19:06 3 statements about this -- about what facts would be helpful
06:19:10 4 are what would have overcome the issues in EcoFactor case
06:19:15 5 do not create law that those facts are required now.

06:19:19 6 And I believe that's what they're trying to do.
06:19:21 7 They're trying to bring in these as new requirements, but,
06:19:25 8 in fact, what EcoFactor -- EcoFactor was doing is analyzing
06:19:30 9 the evidence that was in the case and saying that that was
06:19:34 10 not sufficient. It wasn't creating a new legal standard,
06:19:38 11 what you have to do.

06:19:39 12 And I believe that's what they're trying to import
06:19:42 13 into the case with this instruction.

06:19:43 14 THE COURT: Okay. Anything else, Ms. Gibson?

06:19:46 15 MS. GIBSON: Yes, Your Honor. Just to point out
06:19:53 16 that EcoFactor, of course, was -- dealt with a new trial
06:19:59 17 issue after a jury trial, so it was, I think, Your Honor,
06:20:03 18 far beyond a Daubert issue. They were dealing with what do
06:20:06 19 we do now that the jury has heard this evidence, and we
06:20:09 20 find that was an error, and so we're going to remand and do
06:20:12 21 the trial again. So it was a jury trial.

06:20:13 22 So here we are at a jury trial with -- the facts
06:20:13 23 have come in. Because -- again, it's a unique case where
06:20:22 24 an en banc decision comes down in the middle of the trial.

06:20:22 25 THE COURT: It's not the only unique thing about

06:20:25 1 this case.

06:20:26 2 MS. GIBSON: Agreed. Agreed. So now we're
06:20:29 3 dealing with, okay, this happened. So how do we give the
06:20:33 4 jury the tools to deal with applying the facts to the law
06:20:35 5 as it is as articulated in EcoFactor so that they can reach
06:20:39 6 a decision regarding the reasonable royalty in this case?
06:20:42 7 And I think that our jury instruction would solve some of
06:20:45 8 the issues we now have because of the change in the law
06:20:47 9 mid-trial.

06:20:47 10 THE COURT: Okay. Well, okay. Okay. We'll
06:20:53 11 consider it. I'll look at it. You know, okay. Good
06:21:01 12 enough.

06:21:02 13 MS. GIBSON: Thank you, Your Honor.

06:21:04 14 THE COURT: Okay. And does that solve --

06:21:07 15 MR. FOWLER: That's all the jury instructions we
06:21:09 16 have. Just, like, maybe a couple of minutes on the verdict
06:21:12 17 form?

06:21:12 18 THE COURT: Yeah, sure.

06:21:13 19 MR. FOWLER: So we made some good progress in the
06:21:16 20 sense that we've agreed on Question 1A, which is the
06:21:21 21 infringement question. A lot of that got washed out by the
06:21:21 22 various arguments that the parties were making being
06:21:21 23 dropped.

06:21:24 24 But we still have a disagreement on the remaining
06:21:27 25 questions. And I think I can distill those briefly on each

06:21:30 1 one of the three points, if Your Honor would like to hear
06:21:32 2 that.

06:21:32 3 THE COURT: Of course, yes.

06:21:34 4 MR. FOWLER: So there's some disagreement at the
06:21:39 5 top of Page 3 that has to do with the transitional
06:21:42 6 language. I think the difference as to that relates to the
06:21:47 7 difference on the body.

06:21:50 8 Maxell is asking for a yes-or-no question on
06:21:53 9 willfulness that's not tied to the patents.

06:21:56 10 Samsung is asking for yes or no on willfulness by
06:22:02 11 patent by claim. And we can brief this if you like,
06:22:05 12 Your Honor. But willfulness is supposed to be decided on a
06:22:08 13 claim-by-claim basis, and that's why we've asked for that.

06:22:13 14 THE COURT: Mr. Beaber?

06:22:14 15 MR. BEABER: We disagree with that, Your Honor.
06:22:17 16 We think willfulness is, at most, a patent-by-patent issue
06:22:21 17 and not a claim-by-claim issue.

06:22:23 18 Most -- most verdict forms just have the simple
06:22:27 19 yes or no because most of the time the evidence is, like in
06:22:31 20 this case, based on one letter that had all of the patents
06:22:35 21 in it at the same time. So it rises or falls with the
06:22:38 22 notice.

06:22:39 23 So, otherwise, claim-by-claim, I have never seen a
06:22:42 24 jury verdict in any of the cases I've been involved in that
06:22:46 25 are claim-by-claim. I will tell you I have seen them

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06:22:50 1 patent-by-patent.

06:22:51 2 THE COURT: Yes, and I have, too. But, look, if
06:22:55 3 you all want to brief that, as well --

06:22:58 4 MR. FOWLER: Yes, Your Honor.

06:23:00 5 THE COURT: -- by end of the day tomorrow, that's
06:23:02 6 fine with me, too. But I do agree with Mr. Beaber in
06:23:05 7 general. Okay.

06:23:07 8 MR. FOWLER: Well, Your Honor, just to set
06:23:11 9 expectations, is it that you --

06:23:11 10 THE COURT: No, I mean, I'm not saying I agree
06:23:15 11 with him in the end result. I agree with him that he
06:23:18 12 accurately states most -- certainly in this district,
06:23:20 13 most -- I think most verdict forms look more like Maxell's
06:23:25 14 proposal than Samsung's. That's all I'm -- just an
06:23:29 15 observation.

06:23:30 16 MR. FOWLER: Thank you, Your Honor.

06:23:31 17 So on Point 2, it's really just the transitional
06:23:35 18 language. I'm not even sure why they're objecting.

06:23:39 19 THE COURT: What's the objection there,
06:23:41 20 Mr. Beaber?

06:23:42 21 MR. BEABER: It's just restating what's in
06:23:44 22 Point 2.

06:23:45 23 We say: Did Samsung prove by clear and convincing
06:23:49 24 evidence that the following listed claims of the following
06:23:51 25 patents are invalid?

06:23:52 1 And then it says it again: If you find the claims
06:23:55 2 invalid...

06:23:55 3 I mean, it should just be consistent with Question
06:23:58 4 1 that just asks and says infringement once instead of
06:24:03 5 saying infringement once and invalidity twice.

06:24:06 6 THE COURT: Okay. I think I can resolve that one.

06:24:08 7 All right.

06:24:10 8 MR. FOWLER: And then --

06:24:11 9 THE COURT: Three?

06:24:12 10 MR. FOWLER: Three just has to do with the
06:24:16 11 damages. The Plaintiff wants just one dollar sign blank
06:24:20 12 for them to fill in. We're requesting that they do it by
06:24:24 13 patent.

06:24:25 14 Both experts have presented the damages in this
06:24:28 15 case by patent. And the jury -- the jury -- the jurors
06:24:31 16 have those numbers if they've been taking notes, and they
06:24:35 17 presumably will during closing, as well, as to what this
06:24:38 18 is. This allows them to take the damages calculations for
06:24:41 19 each patent and render a verdict based upon that.

06:24:44 20 The last point at the bottom has to do with
06:24:46 21 running royalty or lump sum. That, at a minimum, pertains
06:24:51 22 to what the Court may or may not need to do after trial in
06:24:56 23 terms of additional payments to the extent that the
06:25:02 24 patent's still valid.

06:25:03 25 I know that I've encountered this many times, if

06:25:07 1 there's a situation where the jury orders lump sum, then
06:25:07 2 that puts a rest to the issue as to whether there could be
06:25:08 3 any continuing royalties or not.

06:25:11 4 THE COURT: Okay. Thank you, Mr. Fowler.

06:25:13 5 Mr. Beaber.

06:25:13 6 MR. BEABER: And we're not necessarily opposed to
06:25:16 7 the 3A, the damages amount by patents. It is the 4B part
06:25:23 8 that's problematic.

06:25:23 9 THE COURT: All right.

06:25:24 10 MR. BEABER: It's -- what's being decided here
06:25:30 11 isn't a -- as it says, a lump sum for the life of each
06:25:35 12 patent. It's just through trial, right? So I think -- I
06:25:40 13 think that's the issue there, and we should just resolve
06:25:44 14 that issue.

06:25:44 15 THE COURT: So tell me how we -- Mr. Fowler, so
06:25:47 16 if -- if Maxell could go along with the patent-by-patent
06:25:52 17 damages blank, why do we have to have 4B?

06:25:58 18 MR. FOWLER: Again, it would be informative for
06:26:01 19 the Court to know whether this was a lump-sum decision,
06:26:03 20 because if it was a lump-sum payment, if that's what the
06:26:06 21 jury decided would have happened at the hypothetical
06:26:08 22 negotiation, it would have been for the life of the
06:26:10 23 patents. It's the nature of a lump-sum payment.

06:26:13 24 I've had -- I've litigated this issue previously.
06:26:15 25 If it's a -- if it's a running royalty, then there could be

06:26:20 1 an argument for post trial damages if they want to come in
06:26:22 2 and say, well, we're owed a continuing royalty, which, of
06:26:26 3 course, is up to Your Honor's decision.

06:26:28 4 THE COURT: Are you going to waive any continuing
06:26:31 5 royalty, Mr. Beaber, so that we can resolve this issue
06:26:34 6 tonight?

06:26:35 7 MR. BEABER: No, we are not. We are not,
06:26:37 8 Your Honor. And I think that obviously goes right to the
06:26:39 9 point, right? The jury has not heard any damages amount
06:26:42 10 for the lifetime of the patent. It's confusing that
06:26:45 11 they're going to put a number down there and they -- and
06:26:48 12 then check a box.

06:26:48 13 THE COURT: All right. We'll look at it.

06:26:50 14 MR. FOWLER: Okay. Thank you, Your Honor.

06:26:51 15 THE COURT: Okay. Okay. Let's see. All right.
06:26:55 16 We will work on that. We will look forward to getting your
06:27:02 17 briefing 6:00 p.m. Texas time tomorrow, simultaneous
06:27:07 18 briefing. Is that good enough?

06:27:09 19 MR. FOWLER: Yes, Your Honor.

06:27:10 20 MR. BEABER: Yes, Your Honor.

06:27:11 21 THE COURT: What else?

06:27:13 22 Closings. Are you all going to exchange your
06:27:19 23 slides?

06:27:20 24 MR. BEABER: I think what was agreed upon is if we
06:27:22 25 use anything that's been used, any exhibits, anything that

06:27:26 1 has been used to date in trial, we're not exchanging. If
06:27:31 2 it's any new slides, we are exchanging.

06:27:35 3 MR. FOWLER: I think that's what's in the pretrial
06:27:37 4 order that we submitted.

06:27:38 5 MR. BEABER: That was our plan.

06:27:40 6 THE COURT: So, but, I mean, your slides that
06:27:42 7 you're planning on using, PowerPoint slides, are you
06:27:42 8 exchanging those?

06:27:42 9 MR. FOWLER: Well, that -- yes, I think --

06:27:46 10 THE COURT: You are.

06:27:47 11 MR. FOWLER: Well, kind of. If they've already
06:27:49 12 been used at some point during this trial --

06:27:51 13 THE COURT: Then no.

06:27:52 14 MR. FOWLER: -- the answer's no.

06:27:52 15 THE COURT: Right.

06:27:53 16 MR. FOWLER: If they're brand new, the answer is
06:27:54 17 yes.

06:27:55 18 THE COURT: Is that fair enough for the Plaintiff?

06:27:57 19 MR. BEABER: Yes, yes.

06:27:58 20 THE COURT: Okay. Yeah. I just don't want to get
06:28:00 21 to Tuesday and have a squabble about slides. I mean, we
06:28:04 22 may if it's a new slide, of course.

06:28:05 23 Do you mind telling me who's doing your closings?

06:28:09 24 MR. FOWLER: I will be for the Defendants.

06:28:10 25 THE COURT: Okay. All of it? Yeah.

06:28:12 1 MR. BEABER: And we will be splitting, myself and
06:28:17 2 Mr. Culbertson.

06:28:17 3 THE COURT: Okay. Good. All right.

06:28:18 4 And you know you all have to use two-thirds of
06:28:20 5 your time in your -- in your first closing?

06:28:25 6 Okay. And fully open on everything, as well.

06:28:29 7 Yeah.

06:28:29 8 Mr. Culbertson?

06:28:30 9 MR. CULBERTSON: Time. I think at one point you
06:28:32 10 may have said --

06:28:33 11 THE COURT: 45 minutes, Mr. Culbertson.

06:28:35 12 MR. CULBERTSON: 45.

06:28:36 13 THE COURT: Yeah. I have considered that already.

06:28:38 14 MR. CULBERTSON: Thank you.

06:28:40 15 THE COURT: Okay. What else. Ms. Gibson?

06:28:43 16 MS. GIBSON: Your Honor, we just wanted to make
06:28:44 17 sure since we're talking about closings now, we -- we had
06:28:47 18 our corporate representative, Mr. Brant, that -- that we
06:28:50 19 chose not to call. There's an agreed MIL on not mentioning
06:28:53 20 I believe witnesses that weren't called.

06:28:56 21 And then there's -- we also withdrew
06:28:58 22 non-infringing alternatives, and there's an agreed motion
06:29:00 23 in limine on not mentioning withdrawn claims and defenses.
06:29:04 24 So I think we're agreed we won't see that in closing.

06:29:04 25 THE COURT: Everybody is good on that.

06:29:07 1 MR. BEABER: Yes.

06:29:07 2 THE COURT: Okay. What else was I going to say?

06:29:10 3 So you all will file your briefing late tomorrow. What I
06:29:14 4 would like to do is circulate probably late on Monday what
06:29:24 5 will be presumably the instructions we intend to give on
06:29:29 6 Tuesday.

06:29:29 7 If there's -- if we have further issues or can't
06:29:38 8 resolve it, we can discuss it first thing on Tuesday when
06:29:40 9 we get here. But I would like to circulate what I hope to
06:29:46 10 be close to the final instructions that we will give before
06:29:51 11 closings, late on Monday, late -- whenever -- sometime on
06:29:56 12 Monday. You all will have an opportunity to look at that
06:29:58 13 Monday night. Come prepared to put your objections on the
06:30:03 14 record on Tuesday.

06:30:08 15 With respect to JMOLs, do the parties have any
06:30:16 16 particular preference about how we do those or when we do
06:30:19 17 those?

06:30:22 18 MR. FUSSELL: Your Honor, I believe we were
06:30:24 19 planning and we had reached an agreement with Samsung's
06:30:28 20 counsel to do those after the close of evidence but before
06:30:33 21 it goes to the jury, along with the proffer that I
06:30:36 22 previously mentioned.

06:30:37 23 THE COURT: Okay. And you're going to -- how long
06:30:39 24 is that going -- I mean, is it going to be a fairly
06:30:41 25 perfunctory thing, or is it something that's going to take

06:30:45 1 some time?

06:30:47 2 MR. CUNNINGHAM: I would imagine ours would be 10
06:30:50 3 or 15 minutes --

06:30:51 4 THE COURT: Okay.

06:30:52 5 MR. CUNNINGHAM: -- of just, you know, reciting
06:30:54 6 what the arguments are.

06:30:55 7 MR. LINDINGER: Ours would be about the same,
06:30:57 8 Your Honor.

06:30:57 9 THE COURT: Okay. I'm just trying to work out the
06:31:00 10 timing. Probably -- you all have 2:45 left.

06:31:13 11 You all have 50 minutes left.

06:31:13 12 MR. LINDINGER: I have 50? I heard 47.

06:31:13 13 THE COURT: You have 2:43.

06:31:18 14 Well, I don't know, maybe we -- we may have
06:31:20 15 further adjustments to make.

06:31:22 16 MR. CUNNINGHAM: I heard they have 47.

06:31:22 17 THE COURT: 48? What'd I say, 50? So I'll give
06:31:26 18 you -- so you got 48:17 to be exact.

06:31:31 19 And you all have 2:45.

06:31:33 20 I was estimating.

06:31:34 21 I don't think you're going to use all of that
06:31:36 22 time, but if -- but if you do, we're going to be well into
06:31:40 23 the afternoon.

06:31:41 24 If it's shorter, and I'm not -- I'm not suggesting
06:31:45 25 it needs to be or ought to be or anything like that. I'm

06:31:48 1 just trying to figure out when we're going to do it.

06:31:51 2 So it may end up that the jury just has an extra
06:31:55 3 long lunch, and that's just something we frequently have.

06:32:00 4 So my preference would be that you all make it
06:32:04 5 orally or in writing but not both. I don't know if you've
06:32:12 6 thought about that. It's really kind of up to you. It's
06:32:14 7 just really your preference.

06:32:16 8 Obviously, once we get a verdict, you can do
06:32:22 9 whatever it is you want to do, you know, in writing, and we
06:32:26 10 can deal with it post-trial. But y'all want to
06:32:29 11 visit about -- I see a lot of murmuring. If you all want
06:32:33 12 to talk about that --

06:32:33 13 MR. CUNNINGHAM: Did you express a preference for
06:32:36 14 oral or written?

06:32:37 15 THE COURT: I don't have a preference -- I have a
06:32:39 16 preference that you do one or the other.

06:32:41 17 MR. CUNNINGHAM: We would prefer to do orally.

06:32:43 18 THE COURT: Okay. Is that okay with you,
06:32:45 19 Mr. Lindinger?

06:32:46 20 MR. LINDINGER: Yeah, my preference is that, too,
06:32:49 21 Your Honor.

06:32:49 22 THE COURT: All right. Good. So you all do it
06:32:51 23 orally. I will rule on it orally, and then, you know,
06:32:58 24 obviously under 50(b), you can file your written motion, to
06:33:01 25 the extent it's necessary.

06:33:02 1 So we will plan to have oral JMOLs at the
06:33:06 2 conclusion of the evidence before instructions. We'll put
06:33:10 3 objections to instructions at some point on the record, and
06:33:16 4 then we'll get it to the jury.

06:33:20 5 What else?

06:33:22 6 MR. BEABER: Nothing from Plaintiffs, Your Honor.

06:33:23 7 THE COURT: Okay. Thanks for all y'all's help
06:33:26 8 today. Try to get some rest.

9 (Court adjourned at 6:33 p.m.)
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CERTIFICATION

I HEREBY CERTIFY that the foregoing is a true and correct transcript from the stenographic notes of the proceedings in the above-entitled matter to the best of my ability.

/S/ Shelly Holmes
SHELLY HOLMES, CSR, TCRR
CERTIFIED SHORTHAND REPORTER
State of Texas No.: 7804
Expiration Date: 10/31/2025

5/23/2025
Date