

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

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

v.

MAXELL, LTD.,
Patent Owner

IPR2024-00828
Patent 8,982,086 B2

Record of Oral Hearing
Held: August 13, 2025

BEFORE: NEIL T. POWELL, TERRENCE W. MCMILLIN, and
KEVIN C. TROCK, Administrative Patent Judges.

APPEARANCES:

ON BEHALF OF THE PETITIONER:

GIANNI MINUTOLI, ESQ.
MICHAEL JAY, ESQ.
DLA Piper LLP
One Fountain Square
11911 Freedom Drive
Suite 300
Reston, VA 20190
(703) 773-4000
gianni.minutoli@dlapiper.com
michael.jay@dlapiper.com

ON BEHALF OF THE PATENT OWNER:

AMANDA S. BONNER, ESQ.	SETH BRUNEEL, ESQ.
ROBERT G. PLUTA, ESQ.	SAQIB SIDDIQUI, ESQ.
Mayer Brown LLP	Mayer Brown LLP
71 South Wacker Drive	1999 K Street, NW
Chicago, IL 60606	Washington, DC 20006
(312) 782-0600	(202) 263-3000
asbonner@mayerbrown.com	sbruneel@mayerbrown.com
rpluta@mayerbrown.com	ssiddiqui@mayerbrown.com

The above-entitled matter came on for hearing on August 13, 2025, commencing at 1:00 p.m., via video teleconference.

P R O C E E D I N G S

- - - - -

JUDGE POWELL: Welcome. We're joined here today for oral argument in IPR2024-00828. That involves U.S. Patent Number 8,982,086 B2. I am Judge Powell, and I am joined by Judges McMillin and Trock.

Let's start with entering appearances for the parties. On Petitioner's side, who do we have here today?

MR. MINUTOLI: Gianni Minutoli from DLA Piper, and with me is Michael Jay from DLA Piper.

MR. PIPER: Good afternoon.

JUDGE POWELL: Thank you. And on Patent Owner's side, who do we have with us today?

MS. BONNER: Good afternoon, Your Honor. Amanda Bonner on behalf of Maxell, the Patent Owner, and with me is lead counsel Rob Pluta and backup counsel Seth Bruneel and Saqib Siddiqui.

JUDGE POWELL: Thank you. Each party will have 60 minutes of argument time today in accordance with our hearing order. Petitioner will open and may reserve rebuttal time. Patent Owner will respond and may reserve surrebuttal time. I will keep track of time with the timer which is displayed behind me, I believe. I plan to let you know when your time is running a little short and I encourage you to also keep track of your time just in case I forget. Sometimes that happens. When you present, please let us know which demonstratives and exhibits you're referring to. It makes it easier especially for the remote judges and keeps things clear on the record.

Because this hearing is currently open to the public, let me ask if

1 either party expects to discuss anything confidential. Let's start with
2 Petitioner.

3 MR. MINUTOLI: No, we do not.

4 JUDGE POWELL: Okay. Patent Owner?

5 MS. BONNER: No, Your Honor.

6 JUDGE POWELL: Okay. Well, before we kick it off, then, does
7 Patent Owner have any questions?

8 MS. BONNER: Your Honor, we have prepared printouts of our
9 demonstratives if the court reporter and Your Honor would like a copy.

10 JUDGE POWELL: I'll take one.

11 MS. BONNER: Okay.

12 MR. PLUTA: May I approach?

13 JUDGE POWELL: Yes, please.

14 MS. BONNER: No, Your Honor. Patent Owner sent an email
15 requesting a prehearing conference in this matter regarding presenting an
16 offer of proof. We understand that request was denied, but we are prepared
17 to make that offer of proof here today if Your Honors will hear it.

18 JUDGE POWELL: Well, I understand that you want to enter more
19 evidence in the record, and if you'd like to use some of your 60 minutes to
20 argue in favor of that, we're receptive to that. We won't be able to rule on
21 that today. We would want to give Petitioner an equal amount of time. So
22 that time would have to come out of your 60 minutes, and then we would
23 grant Petitioner time that doesn't -- equal amount of time that doesn't come
24 out of its 60 minutes to rebut any arguments to that effect. And we'd
25 probably separate that from the rest of the hearing.

26 MS. BONNER: That's acceptable to us, Your Honor, and we are

1 prepared to separate it as part of something acceptable.

2 JUDGE POWELL: Okay. Do you have a preference, if we do
3 that, do you have a preference whether we'd start with that or discuss that
4 after the other arguments?

5 MS. BONNER: We're prepared to present it now.

6 JUDGE POWELL: Petitioner, let's hear if you have any --

7 MR. JAY: I mean, Your Honor, it was not our understanding that
8 this would be permitted today. Certainly, if they want to start with it, we'll
9 respond.

10 JUDGE POWELL: Okay. Would you rather do it at the end?

11 MR. JAY: I think it'd probably be better to do it at the end, but it's
12 certainly up to you.

13 JUDGE POWELL: Well, it's up to my panel members also, in
14 part, and I'm going to communicate with them a bit to see if they have a
15 preference.

16 JUDGE MCMILLIN: May I ask Ms. Bonner a few questions
17 before we go off the record? You say you want to make an offer of proof
18 under Rule 103 of the Federal Rules of Evidence. That's to preserve a claim
19 of error. What is the error that you're trying to preserve?

20 MR. PLUTA: Your Honor, this is Rob Pluta, if I may respond to
21 that. The underlying District Court case was tried May 19th through May
22 28th, 2025. After that trial, we sent an email to the board on June 5th, 2025,
23 requesting authorization to file motions to submit supplemental information.
24 The Board denied that request on June 13th, 2025, in that we were prepared
25 to submit supplemental information addressing inconsistent statements made
26 by Petitioner relating to the claims at the trial. As the Board knows, we sent

1 a request for a prehearing conference and that also was denied. So, we're
2 just renewing that request and offering today to make an offer of proof under
3 FRE 103(a), to present that evidence to preserve the record.

4 JUDGE MCMILLIN: And so the offer of proof relates to
5 inconsistent statements. Can you -- alleged inconsistent statements by the
6 Petitioner in the District Court litigation?

7 MR. PLUTA: Yes, Your Honor. Alleged inconsistent statements
8 by the Petitioner in the District Court trial, as well as the expert that is
9 Petitioner's expert in this proceeding, who also testified at that trial.

10 JUDGE MCMILLIN: Okay, thank you.

11 MR. JAY: Your Honors, may I address that?

12 JUDGE POWELL: Yes, and if you'd like, you may approach the
13 podium.

14 MR. JAY: Okay. So, I certainly think at this point, we would just
15 object to Patent Owner presenting that today. We've never received,
16 because they've tried --

17 JUDGE TROCK: I'm sorry. I can't hear you because your
18 microphone is not on.

19 MR. JAY: I apologize. Are you able to hear me now?

20 JUDGE TROCK: Yes, thank you.

21 MR. JAY: Of course. So, I think at this point, we have not
22 received really any information as to what they plan on arguing or
23 presenting today with respect to the inconsistent statements. I know they've,
24 you know, reached out to offer those before, that's been denied, but we've
25 never received specifics on what they planned to offer or their arguments.
26 So, I think it would be unfair for them to present that today without giving

1 us a full opportunity to consider what they're planning on presenting and
2 fully respond to it.

3 JUDGE POWELL: Okay, thank you. Let's take a little pause here
4 so I can communicate with my panel about how we want to proceed.

5 (Whereupon, the above-entitled matter went off the record at 1:09
6 p.m. and resumed at 1:12 p.m.)

7 JUDGE POWELL: Okay. Given that Petitioner was not
8 previously apprised in what would be argued with respect to the offer of
9 proof, we will circle back after the hearing to authorize paper briefing on the
10 matter whether there's good cause for submission of the new evidence in the
11 wake of the hearing. But, to be fair to Petitioner today and because of time
12 constraints and such, we will not argue the matter here today.

13 MR. PLUTA: May I address the Court, please? Just to clarify.

14 JUDGE POWELL: Sure. And if you want to approach the
15 podium, that's fine.

16 MR. PLUTA: Thanks. I just want to clarify the record about not
17 apprising Petitioner of what we're going to argue. When we sent the email
18 to the Board on June 5th requesting a motion to file supplemental
19 information, we highlighted in that email and in a back-and-forth with
20 Petitioner the precise things we were going to argue. The only subsequent
21 evidence that we would wish to put in are the post-trial briefings, which
22 didn't exist at that time, as well. So, the idea that they weren't apprised of
23 what we intended to put in the record is simply false.

24 JUDGE POWELL: Okay. While you're there, let me ask, so at the
25 moment, what we're discussing is whether to argue this orally. I think,
26 would you agree that if we can do this on paper after the hearing that should

1 suffice? And if need be, we could even have a conference call to address --

2 VTC TECH SUPPORT: Judge, can I interrupt you?

3 MR. PLUTA: Yeah, I think that's fair.

4 VTC TECH SUPPORT: Judge, can you hear me?

5 JUDGE POWELL: Who is that?

6 VTC TECH SUPPORT: It's VTC. I lost Judge McMillin, just

7 give me a second to reconnect him back.

8 JUDGE POWELL: Okay.

9 VTC TECH SUPPORT: Thank you.

10 JUDGE POWELL: I think then I'll confirm with Judge McMillin

11 after he gets back online, but that sounds like --

12 MR. PLUTA: That sounds fair to Patent Owner, Your Honor.

13 JUDGE POWELL: -- working with us on that.

14 VTC TECH SUPPORT: Judge McMillin, can you hear me?

15 JUDGE MCMILLIN: I can hear you.

16 VTC TECH SUPPORT: Thank you.

17 JUDGE POWELL: Let me check with Judge McMillin and Judge

18 Trock. Are you both ready?

19 JUDGE MCMILLIN: Yes, thank you.

20 JUDGE TROCK: I've got a slight tech problem here in San Jose.

21 Just give me a minute, Judge.

22 JUDGE POWELL: Okay. I think we're all set on the technical

23 issues. If not, somebody will jump in here, I'm sure. With that out of the

24 way, does Patent Owner have any other questions before I give the floor to

25 Petitioner?

26 MR. PLUTA: No, Your Honor.

1 JUDGE POWELL: Okay. I have one more question for
2 Petitioner, and that is, how much of your 60 minutes, if any, would you like
3 to reserve?

4 MR. MINUTOLI: Twenty minutes.

5 JUDGE POWELL: Twenty minutes? Okay. I will reduce the
6 display on the timer to reflect what you intend to use, and keep track of all of
7 it. Like I said, if you could keep track of it in parallel, that would be great.
8 And you may approach the podium and prepare to begin.

9 MR. MINUTOLI: Thank you, Your Honor.

10 JUDGE POWELL: Are you ready?

11 MR. MINUTOLI: Yes.

12 JUDGE POWELL: Proceed when you want.

13 MR. MINUTOLI: Thank you, Your Honor. I forgot to introduce
14 him, but with us here today is Matt Bathon from Samsung, and I'd like to
15 thank you all for your time today.

16 So, on Slide 2, you see the agenda for today. It looks like there's a
17 lot of issues. This IPR can be pretty much settled on a couple issues,
18 construction of a couple of terms and whether the Rogers reference discloses
19 the terms. And pretty much all we need to discuss today is Ground 1, unless
20 the Board has any questions for us.

21 And I'm reading from Exhibit 1022, which is the Petitioner's slides.
22 So we'll turn to Slide 3, and we'll have a brief overview of the '086 Patent.
23 The '086 Patent relates to a way to enter a password on your smartphone,
24 and not just by -- I'm sorry. It's not just the entering of a password number,
25 as you see on Slide 3, it's also how the digits are entered. So if a bad guy
26 knew your password was 1234, it would be pretty much useless if you didn't

1 understand how the digits were entered, either by fingertip or finger pad.
2 And in the example on this slide, we see that the digit zero was entered by a
3 fingertip, and the rest of the numerals, 5, 2, and 8, were entered by a finger
4 pad. And that's what's shown in the right-hand side of Figure 12 from the
5 '086 Patent. You have the password and the input method for the password.

6 On Slide 4, we see that the '086 Patent discloses that the fingertip
7 and finger pad inputs are distinguished from each other based on the size of
8 the contact or the area of contact on the device itself. This is also sometimes
9 referred to as the contact range in the '086 Patent. In the underlined part on
10 the right, we see that a fingertip, which is a smaller size or contact range is
11 one input, and a finger pad is a much wider input that has a wider contact
12 range on the device.

13 I'm on Slide 5 now. And we see that these concepts are in the
14 claims. Limitation 1c introduces two operating modes. One is a registering
15 mode and one is an identification mode. Today, we'll be talking mostly
16 about the registering mode and particularly the limitations in Limitation 1f,
17 which says, in said registering mode, which is the mode in Limitation 1c,
18 there is provided a first registering mode for inputting information by the
19 pad of the finger, and a second registering mode for inputting information by
20 the end of a finger. Sometimes we'll say fingertip today. I'd like to note that
21 other than the claims, the terms registering the mode, first registering mode,
22 second registering mode, or even the term mode itself do not appear in the
23 '086 Patent at all.

24 On Slide 6, we see that the Board instituted on four grounds, but
25 like I mentioned earlier, most of the arguments for Grounds 2, 3, and 4 are
26 repetitive of the grounds in Ground 1. So, hopefully, we can address all the

1 issues today just by discussing Ground 1.

2 On Slide 7 is a high level of overview of the prior art relied on in
3 the petition. On the left-hand side is the Rogers reference, which pretty
4 much discloses or renders obvious all of the limitations of the challenged
5 claims in Ground 1, with the exception of the express recitation of a finger
6 pad input.

7 Rogers is close, however, because Rogers discloses distinguishing
8 between two inputs, a stylus input, like a pen, or a fingertip input. But
9 because it doesn't actually disclose a finger pad, the Petitioners rely on the
10 two references shown in the middle, Rosenberg in Grounds 1 and 2, and then
11 Rekimoto in Grounds 3 and 4. Both of those references explicitly disclose
12 distinguishing between a finger pad and a fingertip, as required by
13 Limitation 1f. And I don't think we'll have much discussion of this reference
14 today, the fourth reference, Miyazawa. It's relied upon in the petition as
15 teaching specific types of inputs, tap, drag, flick, and pinch, which are not
16 explicitly disclosed in the other references.

17 On Slide 8, we see there's a lot of things that aren't in dispute
18 today. There's been no dispute that all the references are prior art, there's
19 been no dispute that all the references are in the same field as the patent,
20 there's been no dispute about the motivation to combine these references.
21 The only real disputes today are whether certain claim limitations are
22 disclosed, and those arguments, the Patent Owner relies on certain claim
23 constructions that we're about to discuss in the next few slides.

24 JUDGE MCMILLIN: Excuse me, this is Judge McMillin. Is there
25 any dispute with regard to level of skill in the art?

26 MR. MINUTOLI: I don't think so.

1 JUDGE MCMILLIN: Thank you.

2 MR. MINUTOLI: So, on Slide 9, you'll see the terms that are in
3 dispute today. In Limitation 1e, we have highlighted in green a second
4 controller term, and on Limitation 1f, the first registering mode, the second
5 registering mode. These are three terms that we'll discuss constructions for
6 today and that are pertinent to the prior art. There are two other terms
7 highlighted that were identified in the petition, but neither party's arguments
8 rely on the construction of the terms in Limitations 1b or 1d. So they will
9 not be discussed further today, unless the Board has questions.

10 JUDGE MCMILLIN: Was it -- excuse me, again, this is Judge
11 McMillin. Was it Petitioner that requested the constructions in 1b and 1d,
12 and did that relate to whether or not they were limited in some way to
13 fingerprints? Was it you who made that argument, and you're now dropping
14 it?

15 MR. MINUTOLI: Yes. I'm sorry, I'll try not to get too close to the
16 mic. Yes. What we did was we proposed the claim construction that we
17 proposed in the District Court litigation to not hide the ball, be consistent
18 with what we were doing in both IPR and the litigation. As we see in Slide
19 10, the District Court did not agree that fingerprints were excluded, but as
20 we'll see today, there are no arguments that the prior art has fingerprints, so
21 we don't need to worry about this construction.

22 JUDGE MCMILLIN: Thank you.

23 MR. MINUTOLI: You're welcome, Your Honor. So, I'll turn to
24 Slide 11. Slide 11 contains two of the terms that we need to discuss today.
25 In Limitation 1f, there's a first registering mode for inputting information by
26 a pad of the finger, a second registering mode for inputting information by

1 an end of the finger. Patent Owner essentially is replacing the term
2 registering mode with operational state in both of these terms, and so there
3 would need to be a first operational state and a second operational state, as
4 shown on the left-hand side of the slide. Petitioners believe that this term
5 does not need construction, that the plain and ordinary meaning can be used.
6 We'd also like to note that prior to this IPR -- I think we lost Judge
7 McMillin.

8 JUDGE POWELL: Yeah, let's -- let me stop the clock here.

9 VTC TECH SUPPORT: Yes, Judge, we'll try to reconnect him a
10 different way. Judge McMillin, can you speak so they can see inside the
11 room?

12 JUDGE MCMILLIN: Can you hear me? Can you see me?

13 JUDGE TROCK: Yes, we can.

14 MR. MINUTOLI: Yes, Your Honor.

15 JUDGE POWELL: Yes, we can.

16 JUDGE MCMILLIN: Thanks.

17 MR. MINUTOLI: Thank you. So, I think where I left off, we
18 were saying that Petitioners believe that the plain and ordinary meaning
19 applies. We'd also like to note that in a prior ITC litigation and even in the
20 corresponding District Court litigation in this matter, the Petitioner never
21 offered this operational state -- the Patent Owner never offered this
22 operational state construction for these terms. But there are other reasons
23 why this construction is incorrect.

24 So, if we go to Slide 12, we see that claim Limitation 1c has two
25 operating modes, an identification mode and a registering mode. Claim
26 Limitation 1f builds upon that by saying that in said registering mode, there

1 are provided a first registering mode for inputting information by a pad of
2 the finger, a finger pad, and the second registering mode input information
3 by the end of the finger, or fingertip. Unlike Limitation 1c, Limitation 1f
4 does not include the phrase operating modes, that's because the operating
5 mode is already in there through the registering mode portion of the
6 limitation. And it's presumed that if the term is not in Limitation 1f, that the
7 Patentee did not intend to include it in that limitation.

8 On Slide 13, we'll see some disclosure from the '086 Patent. The
9 '086 Patent discloses a single password registration process, which is
10 highlighted on the slide, in those three figures. That is used to register a
11 numerical password and how the password is entered. As you see, there's a
12 prompt for the user in Figure 11A that says input by fingertip or finger pad.
13 Slide 11B, you see that the user used his finger pad to input digit five, and in
14 Figure 11C, the user used the fingertip to input the digit zero.

15 So, like the claim language, the '086 Patent only discloses one
16 registration process, which is the claim registering mode we saw in
17 Limitation 1c. And in that mode, the input can be entered through the
18 fingertip or finger pad touches, as we see on these figures. And the prior
19 slide, we saw on Slide 12, those things are not called states, they're actually
20 called input methods. As we see on the right-hand side of Figure 3, it
21 doesn't say input state, it says input method.

22 So, I'm going to go to Slide 14. What you're going to see in Patent
23 Owner's presentation is a lot of talk about calibration in Figures 10A and
24 10B. But calibration is not registration, as we see on the slides. They label
25 calibration, that's the user interphase, and it's instructing the user to touch, in
26 Figure 10a, it's telling the user to touch by fingertip, so the unit can calibrate

1 the user's fingertip size. And in Figure 10B, it says touch by finger pad,
2 same thing, so the device can figure out approximately the size of the finger
3 pad input. It's worth noting here that at no point is a password registered or
4 entered as part of this process, it's only setting up the device so that a
5 password can be entered. So, because the password's not being entered or
6 registered during calibration, that cannot be a registering mode.

7 So Slide 15 has a little bit more intrinsic evidence, this comes from
8 the re-exam history of the '086 Patent. The Patentee added this claim, Claim
9 5, during the re-exam process. It adds further limitations that there's going
10 to be a display of a first image and a first descriptive text that's associated
11 with the first registering mode, and a second image and a second descriptive
12 text associated with the second registering mode. So they're building on
13 what gets displayed during those modes. And when the Patent Owner added
14 this claim, it argued in the re-exam history that the support for this claim was
15 in Figures 11A to 11C, which we saw two slides ago. And that's proper,
16 because those are labeled password registration. Figures 10a and 10b, as we
17 see back on Slide 14, they're labeled calibration, so that's not part of the
18 registration process. The Petitioners raised this in our reply on pages 5 to 6,
19 and the Patent Owner did not respond to this specific argument.

20 So, on Slide 16, we see one piece of extrinsic evidence relied upon
21 by the Patent Owner to support that operational states goes with the claim
22 term 'mode'. But as we see, this is an online dictionary definition that was
23 downloaded in January 21st of 2025, which I believe was two or three days
24 before the Patent Owner filed its Patent Owner response. It is not evidence
25 of what one would have known in 2011. And it's also worth noting that
26 although we don't need to rely on extrinsic evidence in this case, there was

1 no pre-2011 extrinsic evidence produced to support that a mode is an
2 operational state.

3 If you don't have any questions on claim construction, I can go into
4 the grounds. Thank you, Your Honors. So on Slide 17, we see Ground 1,
5 which is based on the Rogers reference in view of Rosenberg. And I'd like
6 to turn to Slide 18. And we see that most of the challenged limitations, or
7 even dependent claims on this slide in Ground 1, are not disputed. Those are
8 the ones in gray. We only need to discuss today Limitations 1d and 1f and
9 Claim 5, and because we just went through the construction of registering
10 modes, I'd like to start with Limitation 1f. And how the prior art shows
11 Limitation 1f, I apologize.

12 So, on Slide 19, we see the Rogers reference. It's a device that
13 allows you to enter a graphical passcode by touching the touchpad in a
14 memorable manner, one or more multiple times. The password registration
15 process in Rogers is shown in Figure 4, which is highlighted on the slide. At
16 the end of that process, in the very last step, what the user entered is stored
17 for later use in the identification process, or the authentication process, I
18 think is what Rogers calls it, which is there at Figure 5.

19 On Slide 20, we see actual touches and a graph depicted by
20 Rogers. In this example and in the quote, in this embodiment, Rogers is
21 talking about recognizing the various taps on the screen in Figure 7A by the
22 pressure and the amount of time that the user has used when he or she
23 pressed those taps. 7E shows basically that this four shorter taps with less
24 pressure and one larger tap, the one in the middle labeled 230, that had more
25 pressure and a little bit longer. According to Rogers, the one in the middle
26 would have been the fingertip and the other four would have been by a

1 stylus. That's one of the examples it gives.

2 So how is that relevant to this case? Well, on Slide 21, we see that
3 Rogers says, well, you don't really need to use the time as a parameter.
4 That's what's in the upper half of this slide. But then it goes on to say that a
5 graphical passcode may employ a measurement of size, i.e. area of the object
6 or fingertip applied to the touch surface. So Rogers discloses that you can
7 use contact size, just like the '086 Patent, when entering in these digits.
8 Rogers also talks about discriminating between a fingertip and a small stylus
9 tip, but as we'll see later on, that finger pad is disclosed by the Rosenberg
10 reference.

11 In Slide 22, this is purely a demonstrative that we created today.
12 We replaced the labeling on Figure 7E. Instead of saying pressure, we
13 added size. So the top one says larger input slash fingertip, and the bottom
14 on the Y axis is smaller input slash stylus. And the taps on the left
15 correspond to the taps on the right, so four of those taps would have been by
16 a stylus, because they're smaller, and the one in the middle would have been
17 by a fingertip because it has a larger size.

18 So, on Slide 23, we see the Rosenberg reference. As discussed
19 earlier, although Rogers discloses distinguishing touch inputs by size and
20 distinguishes a stylus and fingertip, the claim requires a distinction of
21 fingertip and finger pad, and that's where Rosenberg comes in. So, as shown
22 on Figures 8a and 8b and a quote on the right, Rosenberg discloses
23 distinguishing a finger pad input, which it calls pad pointing, and a fingertip
24 input, which it calls tip pointing, by the contact size, or their size or contact
25 area.

26 So, on Slide 24, Rosenberg is like Rogers. It knows you can use a

1 stylus, but Rosenberg provides a reason why a user wouldn't want to use a
2 stylus, because it's basically another piece of equipment the user has to hang
3 onto and use. It later discusses fingertips and finger pads as a more natural
4 way to input the passwords. This is not disputed -- what Rosenberg is not
5 disputed by the Patent Owner, but what is disputed is whether Rogers
6 discloses two registry modes.

7 What we see on the left is how the '086 Patent does password
8 registration, input by fingertip or finger pad. The user does various taps, and
9 you'll see one through three and four in the middle, and those are
10 distinguished by their size. A small touch is a fingertip in the '086 Patent, a
11 larger contact area is a finger pad input. And what we see on the right is
12 Rogers in view of Rosenberg, a user enters a graphical password by using
13 multiple taps on the screen, where each tap is input in one mode, a small
14 touch by a fingertip or another mode, a larger touch by the finger pad, as
15 disclosed by Rosenberg.

16 So, if we turn to slide 26, we see that Limitation 1f would be
17 rendered obvious by this combination. And we'll jump back to up
18 Limitation 1d. It's a memory limitation, but the limitation requires storing
19 second information related to the identification of the user. That second
20 information is the information input by the registry modes in Limitation 1f,
21 and as we see on Slide 27, the Patent Owner's argument is that, well, you
22 didn't prove Limitation 1f, so you didn't prove Limitation 1d either. So,
23 because we think their argument about Limitation 1f is wrong, their
24 argument about Limitation 1d must also be wrong. On Slide 28, we see that
25 Limitation 1d is also obvious.

26 Now we'll talk about Limitation 1e, which is a different limitation,

1 and it's called the second controller, and that second controller is configured
2 to execute a specified process. So, for example, unlocking the user's device,
3 when the first information is coincident with the second information entered
4 in advance. In layman's terms, if the user enters a password that matches
5 what was already registered and stored, you can unlock your device, and the
6 second controller would be responsible for that.

7 JUDGE MCMILLIN: Excuse me again, this is Judge McMillin.

8 MR. MINUTOLI: Sure.

9 JUDGE MCMILLIN: Is the word -- I know control unit is used in
10 the '086 Patent specification, but is the word controller used in the '086
11 Patent specification?

12 MR. MINUTOLI: That's a good question. I don't recall, but
13 there's been a lot of testimony by both experts and in the papers that a
14 control unit is a controller. I'd have to look, maybe, and get back to you on
15 rebuttal on that.

16 JUDGE MCMILLIN: And how many control units -- do you
17 know how many control units are disclosed in the '086 Patent?

18 MR. MINUTOLI: Yeah, the '086 Patent has a processor, and it has
19 a thing called a determination unit. And the Patent Owner is construing that
20 to be, the processor is the first controller, and the determination unit is part
21 of the second controller or is the second controller. But we disagree with
22 that position.

23 JUDGE MCMILLIN: Thank you.

24 MR. MINUTOLI: Okay. So, on Slide 29, this is a disclosure from
25 the prior art Rogers reference. Highlighted in yellow is this processor, and
26 that's described as consisting of processing elements comprising electronic

1 hardware, computer software, or combinations of both. And there's also
2 disclosure of it executing a process, or a specified process, which according
3 to Rogers, that would be your passwords match, we'll allow you to access
4 the device. This disclosure is not disputed, isn't in dispute. What's in
5 dispute is whether this processor and its processing elements or pieces of
6 software or both would be a second controller. Patent Owner doesn't think
7 so. We disagree.

8 I'd like to note initially that on Slide 30, we see that this is a new
9 argument also raised by the Patent Owner for the first time in this IPR.
10 Other instances of where they did not dispute this are on the slide, but I don't
11 think we need to discuss that today. If we turn to Slide 31, we'll see that
12 Patent Owner has told the ITC that a controller could be one or more
13 processors. Nice and simple.

14 I have a lot of slides coming up that pretty much say the same
15 thing, or they show more examples and ways that the Patent Owner has
16 broadly read this term in other proceedings, but I'm going to skip those for
17 now to avoid your eyes glazing over and just reading a bunch of quote after
18 quote after quote. So I'm going to skip to Slide 35.

19 So, Slide 35 is actually testimony in this proceeding, not other
20 proceedings. This is Dr. Wobbrock, he is the expert for the Patent Owner.
21 In here, you'll see -- we left off the question, so I apologize. The question
22 asked at the deposition was, "So, the claims don't require a physically
23 separate controllers, the first, the second controller, is that right?" And that's
24 at Exhibit 10118, page is 77, lines 12 to 14. And Dr. Wobbrock's reply on
25 page 78 of the transcript is, "The claim is silent on the specific hardware
26 arrangement." So he goes a little further and says, "The claim limitations

1 could be met by programmatically separate components such as isolated
2 code that's separate from each other -- from other code, but perhaps on the
3 same physical processor." So it does not have to be separate processors, per
4 the Patent Owner's expert. And if we turn to Slide 38 --

5 JUDGE MCMILLIN: Excuse me again.

6 MR. MINUTOLI: Yes.

7 JUDGE MCMILLIN: That's at column -- on your Slide 35, where
8 it says it could also be done with some physically similar but
9 programmatically separate component, like running isolated code that's
10 separate from other code, but perhaps on the same physical processor. Is
11 that how you claim the two controller limitations are met and disclosed in
12 Rogers?

13 MR. MINUTOLI: Yes, that is one way. So Rogers says it could
14 be a processor with one or more processing elements, but it does specifically
15 mention separate code. So, yes, and our argument would be that one
16 processor running two sets of code would be the second controller.

17 JUDGE MCMILLIN: Thank you.

18 MR. MINUTOLI: You're welcome, Your Honor. And if you see
19 on Slide 38, this is what our expert actually says in his expert declaration.
20 Here, our expert Dr. Nielson mentions that separate software modules on a
21 single processor could be that second controller, the difference between a
22 first controller and a second controller, which is what we just discussed on
23 the prior slide. And I believe this position is actually un rebutted.

24 So, if we go to Slide 39, we'll see that every limitation in Claim 1
25 has been rendered obvious by the Rogers and Rosenberg combination.
26 Ground 1 has another claim, Claim 5, which we sort of touched on before. It

1 includes the limitation of the touch panel having a display screen configured
2 to display a first image and first descriptive text associated with the first
3 registering mode, and a second image and second descriptive text associated
4 with the second registering mode.

5 So, basically, when you're entering in the passcode, there should be
6 some kind of indications, one text and one image. And on Slide 40, we're
7 showing that Rogers, during the tapping operations, Rogers discloses that
8 visible indicators like an X or a target symbol, so text or a symbol, can
9 accompany the password entry to improve user efficiency and accuracy.
10 And it is our position a POSITA would have understood that this disclosure
11 covers the claim language that we just saw in Claim 5.

12 I think you're going to see in some slides later by the Patent
13 Owner, their argument is really that this limitation requires a particular user
14 interface, and they don't really dispute whether Rogers discloses displaying
15 the X or the symbol, the visible indicator. Instead, they just say, hey, you
16 need to have another user interface, and that's not disclosed, and we think
17 that position is wrong. So as you see in Slide 41, all the claims in Ground 1
18 are obvious in view of Rogers and Rosenberg. If the panel doesn't have any
19 further questions, I can go to Ground 2? Thank you, Your Honors.

20 So, Slide 42, we see the prior art combination for Ground 2.
21 Again, it's based on Rogers and Rosenberg, and as we mentioned earlier,
22 Miyazawa is cited for the limitations in Claims 4 to 12, I believe, that
23 include tapping, pinching, dragging, things that you do on your Samsung
24 Galaxy today. But as we see in Slide 43, Patent Owner's response to Ground
25 2 is just the same arguments as Ground 1. You haven't proved Ground 1,
26 you haven't shown that Limitations 1e and 1f were shown. So, Ground 2 is

1 also deficient. So, if we go to Slide 44, if this honorable panel agrees with
2 us on the Grounds 1, it should also agree with us on Ground 2.

3 Ground 3 is Rogers in view of Rekimoto. It's pretty much the
4 same claims as Ground 1, and the Rekimoto reference is used for the same
5 reason that Rosenberg is. This dispute here is whether, again, whether
6 Rogers -- not the secondary reference, whether Rogers discloses the first and
7 second registering modes. And Petitioner's arguments for the most part, in
8 the Patent Owner response, relies on the same arguments from Ground 1,
9 Limitations 1e and 1f. So, nothing new here, nothing new to discuss, unless
10 the Board has questions.

11 So we can see on Slide 48 that Ground 3 would be rendered
12 obvious for the same reasons we've discussed prior for Ground 1. And on
13 Slide 49 is the fourth ground. Fourth ground is Rogers and Rekimoto and
14 relies on Miyazawa again for the pinching, dragging, and other type of
15 touches which aren't shown explicitly in Rogers or Rekimoto. And on Slide
16 50, we see that the Patent Owner basically relies on the same arguments as
17 Grounds 1 and 3 for this ground also. So, if the panel believes -- sides with
18 the Petitioners on the prior grounds, they should side with the -- it's
19 respectfully submitted that they should side with us on Ground 4, and that
20 Claims 9 through 14 are also invalid based on this combination. Does the
21 panel have any questions?

22 JUDGE POWELL: It does not.

23 MR. MINUTOLI: Looks like no. So, I'd like to thank you for
24 your time and turn this over to the Patent Owner.

25 JUDGE POWELL: Thank you. How much time would you like
26 to reserve?

1 MS. BONNER: Twenty-five minutes, please.

2 JUDGE POWELL: Okay. When you're ready, we are.

3 MS. BONNER: May it please the Court. I'm Amanda Bonner on
4 behalf of Maxell. I want to start on Patent Owner's demonstrative Slide 8,
5 because I think we're all on the same page with one thing here, and that's the
6 petition has presented four grounds, and they all really hinge on Rogers.

7 Jumping to Slide 11, all four of those grounds fail based on Rogers
8 for really three primary reasons. There's really three issues in dispute that I
9 want to focus on here today, and really the same three issues that Petitioner's
10 counsel walked through, and I'm going to do it in roughly the same order.

11 So, the first issue that needs to be addressed is the correct
12 construction of the mode term. The second dispute is whether Rogers
13 discloses or renders obvious the first and second registering modes, and then
14 third, I'll go through whether Rogers discloses the claimed second controller.
15 Now, I want to start with claim construction, and I'm on now on Slide 12,
16 because it's clear here that the parties are applying different constructions of
17 mode, and for that reason the term must be construed. Both parties have
18 said --

19 JUDGE MCMILLIN: Excuse me, I'm sorry Ms. Bonner, excuse
20 me for interrupting you. Is mode used in the '086 Patent outside of the
21 claims?

22 MS. BONNER: The '086 Patent, I don't think it explicitly uses the
23 word mode, but it refers to the registration and the identification process,
24 which someone would understand to be referring to the claimed registration
25 mode. And the discussions and the specification regarding that registration
26 and the two different forms of registering would apply and provide meaning

1 to the claimed registering mode and operational mode and identification
2 mode. So, the exact word is not used, but registration is, and it's understood
3 to be talking about the registration mode in the claims.

4 JUDGE MCMILLIN: Are you arguing that there's lexicography
5 with regard to the word mode in the '086 Patent?

6 MS. BONNER: We are not, Your Honor. We're arguing that
7 -- actually, both parties have said the term should be given its plain and
8 ordinary meaning, but the reason the dispute needs to be resolved and the
9 term needs to be construed here is because the parties dispute what that plain
10 and ordinary meaning is. It's Maxell's position that a person of skill in the
11 art would understand that plain and ordinary meaning to be an operational
12 state for registering. The problem is Petitioner has taken the position that
13 instead of the claim saying registering mode, they're rewriting it to say input
14 mode. So, it might help if we pull up the claim language here. So, we --

15 JUDGE MCMILLIN: Excuse me, I have another question. Are
16 you claiming that there's disclaimer or disavowal with regard to the meaning
17 of mode?

18 MS. BONNER: No, we are not, Your Honor. We're arguing that
19 the term should be given its plain and ordinary meaning as understood by
20 someone of skill in the art, which would include and which would mean an
21 operational state of the device for registering. And that's based on primarily
22 the intrinsic record, but also supported by both experts in this case.

23 JUDGE MCMILLIN: The intrinsic record that you're talking
24 about doesn't use the word mode?

25 MS. BONNER: Well, the intrinsic record starts with looking at the
26 claim language, Your Honor, so I wanted to start there and point out that the

1 claim recites two operating modes and then says, at least an identification
2 mode and a registering mode. So the claim tells you the registering mode
3 must be an operating mode. And then further down, it says that same
4 registering mode that we know is an operating mode is broken down into
5 two sub-registering modes. A first registering mode and a second
6 registering mode.

7 So, the claim language alone tells you that the registration -- that
8 the first and second registering modes must be an operating mode, and they
9 must also still be a registering mode. And the problem is Petitioner doesn't
10 apply that interpretation. They've rewritten the claim to recite an input mode
11 for inputting input information. They read out registering and they read out
12 operating, and that's why the term needs to be construed here.

13 JUDGE MCMILLIN: I agree with you that the words operating,
14 as used in operating modes and registering, and used in registering mode, are
15 important for claim interpretation. But it seems to me that Claim 1c -- I'm
16 sorry, element 1c, Limitation 1c says two operating modes, and it identifies
17 two operating modes, an identification mode and a registering mode, but
18 when it comes to describing the registering mode more particularly in
19 Limitation 1f, that it doesn't call those registering mode or the second
20 registering mode operating modes.

21 MS. BONNER: Well, Your Honor, it doesn't have to, because we
22 know from 1c that that registering mode that's broken down into two is an
23 operating mode. Again, our position is the term should be given its plain
24 and ordinary meaning, but that includes reading all of the limitations to the
25 claim and applying them. And because the Petitioner has read out the
26 operating mode from 1c and the registering from 1f, those need to be

1 included as part of the construction of mode. Again, the term does not need
2 to be construed and could be given its plain meaning if that interpretation is
3 applied. The problem here is that Petitioner has consistently rewritten the
4 claim to say an input mode for inputting input information. They're not even
5 --

6 JUDGE TROCK: Counsel, this is Judge Trock. I hate to interrupt
7 you, but could we talk about Limitation 1f for a second?

8 MS. BONNER: Sure.

9 JUDGE TROCK: It says here we've got a first registering mode,
10 and it says that mode is for inputting information by a pad of a finger. Then
11 it also describes a second registering mode for inputting information by an
12 end of a finger. It seems pretty clear to me that that's what Petitioner is
13 alleging here.

14 MS. BONNER: Your Honor --

15 JUDGE TROCK: And you want to work backwards and start
16 calling these things operating modes by going back up to 1c. But 1f defines
17 these first and second registering modes pretty expressly.

18 MS. BONNER: Your Honor, respectfully, Patent Owner is
19 reading the claim as a whole, and when you read the claim as a whole, it
20 tells you that the registering mode must still be an operating mode. And it
21 must still be a registering mode. Yes, it's for inputting information, but the
22 device expects, when it's in mode one, the contact of a finger pad. When the
23 device is in mode two, it expects the contact of a fingertip. The device does
24 two different things based on which mode it is in, based on what it's
25 expecting the touch to be. And the problem is -- there's a registration that
26 happens.

1 The problem is that Petitioner is looking at just the input and
2 reading out the registering. They're just looking at what the contact is, and
3 it's more than that. Because the '086 Patent is all about providing two
4 different modes of operation, or two different modes of registering two
5 different types of touch. Because it's erected to creating this more secure
6 passcode. You can't just put in 1234, you've got to put it in in the same way
7 that you registered, with either your tip or the pad of your finger.

8 And that matters in the '086 Patent. That's important, and that's
9 what's claimed in Element 1f when it says a first registering mode and a
10 second registering mode. And the reason we think the term needs to be
11 construed to include an operational state of the device for registering, is
12 because that part of Element 1c and 1f is being read out by Petitioner, when
13 they're just interpreting the claim to be an input for inputting information.

14 It's also supported by the specification and what we see on Slide
15 15, Figures 10A and 10B, and we can look at those really in connection with
16 Figure 9, and that's on Slide 16. Because here, this shows how in the '086
17 Patent a password is registered using two different registration modes. In
18 step 2002, and this is the first registering mode, it displays Figure 10B to
19 prompt the user to make a finger pad contact. In step 2001-- sorry, Your
20 Honor, were you --

21 JUDGE MCMILLIN: Does the '086 Patent call what's in figures
22 -- what's illustrated in Figures 10A and 10B different registering modes?

23 MS. BONNER: It is all part of the registration process that is
24 made clear in Figure 9, and in the specification at column 6, lines 28 to 26,
25 which explains that calibration is part of the registration process. And part
26 of that calibration is taking an input by a finger pad, determining acceptable

1 ranges, and then registering it as a finger pad input. There's then a separate
2 registration mode and calibration done for a fingertip input. That is all part
3 of the process for registering a secure password that's depicted in Figure 9 of
4 the '086 Patent, and it's using and explaining that the term registering mode
5 is putting the device in two different operational states.

6 JUDGE TROCK: Counsel, this is Judge Trock. Your Slide 15,
7 you've added these designations, attorneys have added these designations,
8 second registering mode and first registering mode onto these two figures, is
9 that right?

10 MS. BONNER: That's correct, Your Honor.

11 JUDGE TROCK: And the title where you claim that it's two
12 different registering modes, you put that on there as well?

13 MS. BONNER: Yes Your Honor, for demonstratives.

14 JUDGE TROCK: And if I just look at what's in Figures 10A and
15 10B, it refers to calibration, is that right?

16 MS. BONNER: Yes. Those are --

17 JUDGE TROCK: It doesn't refer to registration, does it?

18 MS. BONNER: It doesn't say that here, but it is described in
19 column 6, lines 28 to 36 of the patent as being part of the registration
20 process.

21 JUDGE TROCK: I understand, Counsel, but I'm looking at
22 Figures 10A and 10B.

23 MS. BONNER: Right, but you've got to review the figures in light
24 of the specification, which explains --

25 JUDGE TROCK: Counsel, I understand that, but I'm asking you a
26 very specific question about 10A and 10B. So if you can respond to my

1 question, I'd appreciate that. Does Figure 10A deal with calibration?

2 MS. BONNER: Figure 10A is labeled with the word calibration
3 and Figure 10B is labeled with the word calibration.

4 JUDGE TROCK: Thank you.

5 MS. BONNER: And the specification explains how it is included
6 as part of the registration of a passcode in Figure 9, and it's further explained
7 in column 6, lines 38 to 41 and 52 to 59 on how when the device expects a
8 contact from the finger pad in one of the registering modes, that the contact
9 range is recorded and the device -- the control unit checks and makes sure it
10 registers the values appropriately based on the input it's expecting. So if it's
11 expecting and it's in the registration mode for pad, and it receives that, it's
12 registered as such. If it's in the registration mode for tip and the control unit
13 determines that it received a contact for tip, it's registered as tip. Two
14 different registration modes, and the values are registered based on what the
15 device is expecting.

16 JUDGE MCMILLIN: Excuse me. If we look at the brief
17 description on the drawings in column 2, it talks about Figures 10A and 10B
18 as calibration, and then it talks about Figures 9, 11, 11B, 11C as registration.
19 And we find the same distinction in the part that you referred us to, column
20 6, where it says Figure 9 showing a flow chart of password registration,
21 Figures 10A and 10B showing typical screen image displayed during
22 calibration, and then Figures 11A to 11C showing screen images for
23 prompting a user to register.

24 So there seems to be a distinction, at least a different word is used,
25 for what's going on in 10A and 10B, and what's going on in 11A to 11C. In
26 10A and 10B we're calibrating, and in 11A to 11C we're registering.

1 MS. BONNER: And, respectfully, Your Honor, we disagree,
2 because when you look at Figure 9 and the whole flow process and all of the
3 steps that are involved in it -- and this is again described as the process for
4 password registration. You look at what 2001, 2002, 2003, and how those
5 steps are described in the spec, it describes Figures 10A and 10B and
6 calibration that are part of password registration. Which makes sense,
7 because if you're going to register a password using a finger or anything,
8 there's going to be some form of calibration involved, it's going to be part of
9 that process.

10 And I'm not sure that Petitioner is going to disagree that calibration
11 wouldn't be part of registration. I believe they pointed to the training session
12 in Rogers as being part of the registration there. So I don't know that this is
13 that much of a dispute, and there's an overwhelming amount of support in
14 the specification of how, in this case, calibration is part of registration. But
15 that's not the only support we have for our construction of mode.

16 We have the claim language, which I think is pretty clear. We
17 have Petitioner's expert in litigation saying a mode can be interpreted as a
18 state, a state of the system, a mode of the system. This is consistent with the
19 position that we've taken in the re-exam. I know Petitioner's counsel said
20 we've never kind of raised this interpretation of mode before. It's been
21 raised in the intrinsic record, it was raised in the re-exam, and that's Exhibit
22 1004. You can look at pages 75 through 80, and pages 29 to 32, all support
23 for this interpretation of mode being in the intrinsic record. It's not being
24 raised for the first time here, and Patent Owner's position has been entirely
25 consistent.

26 But even if you don't construe the term and you're just looking at

1 what the claim language says, it is still our position that Petitioner has not
2 shown how Rogers discloses the claimed first and second registering modes.
3 And unless Your Honors have any more questions on claim construction, I'd
4 like to spend some time walking through Rogers and why the two registering
5 modes are not disclosed.

6 So, I think we're all on the same page that Rogers is what is relied
7 on in each of the four grounds for the disclosure of the two registering mode
8 elements in Claim 1f. But Rogers only discloses a single registering
9 process. It discloses creating a template for a graphical passcode, and it does
10 it in a single registering process. This is critical. With respect to Figure 4, it
11 explains that the user is prompted, the passcode is entered as a template, and
12 then it is stored. That's it. A passcode is entered, the template -- the user is
13 prompted, the passcode is entered, the template is stored. That's what
14 happens each time in the single registration process. Our expert --

15 JUDGE MCMILLIN: I'm sorry, Counsel. This is Judge McMillin
16 again. How is that distinguished by what's disclosed in the '086 Patent?
17 Wasn't it disclosed, just those three steps, as a registration process?

18 MS. BONNER: It does not, Your Honor, and we can look at
19 Patent Owner's Slide 31, and you can see the difference of Figure 4 in
20 Rogers, depicting the one registration mode, and Figure 9 of the '086 Patent
21 showing how two different registration modes are used. The difference in
22 the Rogers reference is every time a user is prompted, a passcode is entered,
23 and a template is stored. The device does not care what touches the screen.
24 It could be a stylus, it could be a finger. It does not matter. It could be a
25 swipe, it could be a tap. All that matters in Rogers is the recording of a
26 graphical template. That is quite in contrast to Figure 9 of the '086 Patent,

1 which cares, and the device expects and registers differently a contact from a
2 finger pad and a contact from a finger end.

3 I want to give an example here, because I really think it helps
4 clarify the distinction between what Rogers is talking about and what the
5 '086 Patent is talking about. So, in Rogers, if I take my stylus and I go to
6 register a graphical passcode and think of my graphical passcode as an
7 exclamation point. So I'm going to take my stylus and go line, dot. And it
8 tells you in step 103 that you can complete a training session. So let's say I
9 do that, and that's important in Rogers, because Rogers is about creating
10 these parameters and envelopes for a graphical passcode to allow the user
11 greater flexibility during authentication. So I'm going line, tap, line, tap.
12 And I do it a bunch of times to register a parameter of like a thicker line, and
13 maybe a circle the size of, I don't know, something bigger than like the tip of
14 an eraser. So that's what's stored in the single registration process of Rogers.

15 If I do that, and register that passcode, my 7-year-old son can pick
16 up my phone and do the same thing with his smaller fingers and get access
17 to my device, because the device does not matter that it was done by a
18 stylus. It could be done by a small finger. As long as it's within the
19 envelope range, those parameters, that's what Rogers cares about and that's
20 what's disclosed in the one registration mode of Rogers. That is in complete
21 contrast to the '086 Patent. If I go in and enter a passcode and I do 1, 2, 3, 4,
22 but I use my pad, pad -- sorry. Pad, pad, and then my fingertip, tip, and do
23 1, 2, 3, 4, the device records the input, the number, and the use of a fingertip
24 or a finger pad. That's really important in the '086 Patent, because it has to
25 do with more secure device authentication. My son picks up my phone and
26 tries to enter 1, 2, 3, 4 with his finger, he doesn't get access, because he has

1 not done the correct input method with the correct passcode.

2 JUDGE TROCK: Counsel, this is Judge Trock. So what if he uses
3 the pad and tip?

4 MS. BONNER: It's not going to work, because he hasn't used my
5 pad and my tip that I've registered in the --

6 JUDGE TROCK: Are you saying that there's some kind of
7 fingerprint identification going on here?

8 MS. BONNER: Well, I'm saying it's got to register it in through
9 the process the input from my finger pad and my fingertip. It says the user
10 -- for input information by the end of the finger. So it's taking the
11 information from the end or tip of my finger and recording those values
12 based on which mode it's in. It cares about that.

13 JUDGE TROCK: Right. So how does this Exhibit 1001, how
14 does this '086 Patent distinguish between your tip and his tip?

15 MS. BONNER: That's all part of the registration process that we
16 see in Figure 9, where it completes the calibration and it records and stores
17 in its memory the entries of the finger pad and the fingertip as part of
18 registering that password.

19 JUDGE TROCK: And how is that different from what Rogers
20 does, with respect to determining the width and the length of a particular line
21 input?

22 MS. BONNER: Because Rogers does not have a separate mode
23 for a stylus, or a separate mode for pad. It doesn't have a separate mode for
24 swipe and a separate mode for tap. It's only one mode. It doesn't care what
25 the input is. It doesn't care if it's a stylus, it doesn't care if it's a finger. All it
26 cares about is the template of the graphical passcode. That's all that matters.

1 It's registering in one registration process a graphical template, and that's
2 what's being used and compared in the identification mode.

3 JUDGE MCMILLIN: Excuse me, Ms. Bonner. Could you look at
4 Figures 5A and 5B of the '086 Patent? Those also refer to calibration.
5 Fingertip calibration and finger pad calibration. Isn't that exactly what you
6 just described Rogers doing? With regard to your son and the thickness, the
7 width, and the length?

8 MS. BONNER: No. So, you know, the difference, Your Honor, is
9 that Rogers is focused on parameters and envelopes for a particular graphical
10 passcode. All that Rogers is seeing is ovals and lines. It's not saying, I see
11 an oval that's coming from a stylus or an oval that's coming from a finger.
12 It's seeing those ovals and registering how big they are. So, even if you're
13 using your finger and you do it a couple times, it's just thinking of it as a big
14 circle. All you've got put on the screen is a big circle. Someone with a
15 bigger hand can put a bigger finger down and gain access to my device, as
16 opposed to my smaller finger. It doesn't care about what the input is. All it
17 cares about is creating a more flexible passcode to create authentication
18 easier for the user by defining a range of parameters for when you put in that
19 graphical passcode. It doesn't have to be the exact width line. It has to fall
20 within a range that is set through the optional training session in Rogers.

21 JUDGE TROCK: Well Counsel, Judge Trock again, isn't that
22 what Figures 5A and 5B are showing us? Aren't these square ranges? Or
23 rectangular ranges?

24 MS. BONNER: The difference here, Your Honor, is that these are
25 calibrations done as part of two separate registration modes, a mode for tip
26 and a mode for pad, and then the values are recorded based on what the

1 device expects. So if the device is expecting a tip, because it's in mode two,
2 and it receives a tip during calibration, it's recording that value. If the device
3 expects a pad, because it's in mode one, and it receives a pad, it records that
4 value. If it receives a tip in mode two, or in mode one, it's not going to
5 record that value because you're in mode one and you're expecting a finger
6 pad, and that's what you're registering in mode one. In Rogers, it simply
7 wouldn't matter. There's only one mode for registration. You could enter
8 the input -- and it says, it says in the training session, we can look at the
9 disclosure, it just prompts the user to enter the same passcode multiple
10 times.

11 And they actually -- in the training session, and on Slide 34,
12 during training, the user may be prompted to input the graphical passcode
13 multiple times. The same passcode. Not doing it in one way -- Rogers
14 would have to disclose, say, okay, here's your graphical passcode, it's an
15 exclamation point. Fine. I want to -- now we're in a mode where I want you
16 to register it with a stylus. Okay. Switching, now we're in mode two, I want
17 you to register it with a finger, and I want to know how you're doing it. So
18 let's say you're doing the line with your finger and the dot with the tip, and
19 the device would have to tell you, okay, I'm in the tip mode, let's register
20 now the tip of the exclamation point. I'm in the other mode, let's register the
21 line and I'll record those values and those ranges for the line. Rogers does
22 not do that, because it does not care. You can do it line, dot, with just a
23 stylus, you can do it with finger, you can do it with both. You can do line
24 then finger, and it does not matter. You can go back in and authenticate
25 your device doing it with either way, as long as you fall within the
26 parameters and envelopes, because that's what Rogers cares about.

1 Now, because I have mentioned the training session in Rogers, I
2 just want to add that the training session here in Rogers is not disclosing
3 some other type of sub-registering mode. It's still not in the context of two
4 different modes. Just like the '086 Patent, the training session is part of the
5 registration process, but the difference is, in Rogers, you're doing the same
6 passcode over and over and over again, that would be similar to being in
7 mode one of the '086 Patent, and just doing mode one's input over and over
8 and over again. That's how the training session is accomplished in Rogers.

9 Now, I think we're all clear on how Rosenberg is being used for
10 Element 1f. Petitioner's only using it for finger pad and fingertip touches.
11 They don't rely on it for the sub-registering modes. So, it can't cure the
12 deficiencies that we've identified in Rogers for failure to disclose the two
13 sub-registering modes.

14 I do want to address one thing with respect to Claim 5. Yes, it
15 relates and falls in line with Petitioner's failure to identify a second
16 registering mode, but there's more than that. Claim 5 is very specific. We
17 can see the language on Patent Owner's Slide 37. It must display a first
18 image and first descriptive text associated with the first registering mode.
19 So, in the registering mode here. And what you saw Petitioner point to, it
20 was the disclosure of using an X or a target symbol at the start and end
21 position. They relied on Rogers, column 8, lines 1 to 5. That has -- if we go
22 to what they rely on. If you look at that disclosure, that is during
23 authentication. That has nothing to do with registering, and this has to do
24 with descriptive image and text during the registering mode. What they're
25 pointing to in 8, 1 through 5, that's during authentication, and this still
26 doesn't disclose any descriptive texts and associated image with each of a

1 first and second sub-registering mode.

2 I'm prepared to move on briefly to address the second controller
3 term, unless there are any additional questions on mode. So, turning to the
4 second controller, then. Even if the panel were to find that the first and
5 second registering modes are disclosed in Rogers, which we dispute, all four
6 grounds still fail, because Rogers fails to disclose a second controller. Now,
7 Petitioner seems to suggest that this comes down to a claim construction
8 dispute. It doesn't. Neither party is arguing that the term needs to be
9 construed. What it comes down to is whether the disclosure in Rogers
10 discloses or renders obvious a second controller in addition to a first
11 controller. And --

12 JUDGE TROCK: Counsel, this is Judge Trock --

13 JUDGE MCMILLIN: I'm sorry. Please go ahead.

14 JUDGE TROCK: I just had a question --

15 JUDGE MCMILLIN: Okay. One of us has to go first. I'll go first,
16 excuse me, Judge Trock. Are you saying that there's lexicography with
17 regard to the word controller in the '086 Patent?

18 MS. BONNER: No. I'm saying controller is a well understood
19 term to be a microcontroller, which someone of skill in the art would
20 understand to include a CPU memory and input-output resources, and that is,
21 I don't think, in dispute.

22 JUDGE MCMILLIN: But you rely upon extrinsic evidence for
23 reading microcontroller in that way, is that correct?

24 MS. BONNER: We point to Exhibit 2008 to show how a
25 microcontroller is understood and how the control unit that is described in
26 the '086 Patent would also be understood to be a microcontroller.

1 JUDGE MCMILLIN: And Exhibit 2008 is extrinsic evidence,
2 correct?

3 MS. BONNER: It is, but again, neither party is arguing that
4 controller needs to be construed. I think there was a question of, you know,
5 whether there's a dispute that the control unit is the controller in the claims
6 and is understood as a microcontroller. I don't think that's disputed. Some
7 of this comes into play because of all of the additional briefing that
8 Petitioner has identified regarding this term, but all that briefing shows is
9 that Patent Owner has been entirely consistent with its positions. And it's
10 also largely irrelevant, because it was briefing done in the context of a party
11 arguing that controller should be construed as a means-plus-function term,
12 and the briefing explained why controller should not be a means-plus-
13 function term. It was not found to be a means-plus-function term. Petitioner
14 here is not arguing that controller should be construed as a means-plus-
15 function term. So again, there's no real claim construction dispute about
16 this. The dispute really comes down to whether Rogers discloses or renders
17 obvious the second controller in the claims.

18 JUDGE MCMILLIN: Could you pull up the slide that's after the
19 one -- I think you have your slides on display now. Could you look at your
20 Slide 41?

21 MS. BONNER: Yes, Your Honor, I just put that up.

22 JUDGE MCMILLIN: That's an excerpt from the '086 Patent. And
23 you labeled the first controller as the control unit, and in that passage it says
24 control unit which performs particular processing, and then it goes on, and
25 then you label the determination unit as the second controller. And you
26 seem to be arguing that those are two distinct devices, or -- and if you look

1 at your previous slide, Slide 40, it says the control unit includes, and then I'll
2 skip some stuff, a determination unit. So again, you label the control unit as
3 the second controller, and I think that's right on your next -- as a first
4 controller, and you label the determination unit as the second controller, and
5 argue they're two distinct devices. But on your previous slide, the excerpt
6 from the '086 Patent says the control unit includes a determination unit.
7 Those two seem to be incompatible with your argument.

8 MS. BONNER: Your Honor, I want to clarify something. Our
9 argument is not that they have to be two distinct components. What
10 Petitioner has to do is show the two claimed controllers, and they're claimed
11 as performing certain functionality, and they haven't shown the claimed
12 second controller. We've never said that they need to be distinct, physically
13 separate components. As Your Honor pointed out, we agree, yes, that the
14 control unit is the first controller as claimed, and an example of the second
15 controller would be the determination unit in the specification, and those
16 would meet the first and second controller in the claims.

17 JUDGE MCMILLIN: With that, I agree that they must meet the
18 other words that follow them, you know, if, for example, 1e, when it says a
19 second controller configured to execute a specified process when said first
20 information and said second information are coincident within said
21 identification mode. And I read that from Limitation 1e, but that seems to
22 be the function for the control unit that's described in your passage from the
23 '086 Patent on Slide 41. So, the control unit seems to perform the functions
24 of the second controller as described in Claim 1, but you've labeled that as
25 the first controller.

26 MS. BONNER: Well, you also need to look at how it describes

1 the determination unit above that, as determining whether the identification
2 information detected matches the reference identification of information
3 that's stored.

4 JUDGE MCMILLIN: Yes, but tell us -- so you've labeled that the
5 second controller. And you've labeled the control unit as the first controller.
6 The first controller in Limitation 1c is configured, it says, a first controller
7 configured to control the information processing apparatus to operate in two
8 operating modes. The description of the determination unit and control unit
9 in that paragraph that you show on Slide 41 from the '086 Patent does not
10 describe that configuration or that functioning for the first controller. That
11 doesn't seem to relate. You know, the functions for the first controller,
12 where are they described in that paragraph?

13 MS. BONNER: Well, so Your Honor, respectfully, here we're
14 focused on the second controller. So this was meant to show the description
15 primarily of the second controller, which does the matching aspect, and
16 that's the determination unit, which is described as doing the matching. I
17 will happily look through the specification and provide a support for the
18 control unit performing the apparatus processing, if that's what Your Honor
19 is looking for. But again, the claim language is specific to have a first and
20 second controller, and they haven't shown how Rogers has two controllers
21 with the second controller performing this function. All they've generally
22 pointed to is processor 71. That's it. They point to a passage on processing
23 elements, but that's referring to the prior embodiment, each having a
24 processor and a memory, not to any particular embodiment having
25 processing elements. They would also need to go a step further and explain
26 why the second controller would be obvious in Rogers' system. I'm sorry,

1 Your Honors, is there another question? I can't --

2 JUDGE MCMILLIN: Well, I was just going to say, I think it's
3 you folks who do not closely follow the claim language and the functions
4 described in the claim language, and not the Petitioners.

5 MS. BONNER: Respectfully --

6 JUDGE TROCK: Counsel, this is Judge Trock, why don't I
7 interject here. I just have a question I wanted to get on the record here. So,
8 I take it, then, you agree that this first and second controller do not have to
9 be two distinct, separate devices, is that correct?

10 MS. BONNER: Correct, that's the position we've taken and our
11 expert has taken the same position.

12 JUDGE TROCK: You also agree that they can be accomplished
13 by separate code?

14 MS. BONNER: That is wired to perform the particular functions,
15 and there would need to be an obviousness -- there'd need to be a rationale to
16 do that.

17 JUDGE TROCK: Is that a yes, in response to my question?

18 MS. BONNER: Sorry, Your Honor, could you repeat?

19 JUDGE TROCK: I'll ask it again. Do you agree that the first and
20 second controllers in what's described in 1c and 1e can be accomplished by a
21 separate code?

22 MS. BONNER: Yes. They can be accomplished by a separate
23 software to do --

24 JUDGE TROCK: Thank you.

25 MS. BONNER: -- the functions. But of course, the prior art must
26 be shown to disclose that structure and software to do it, and again, all that

1 Petitioner has pointed to is the single processor in Rogers. They haven't
2 explained why it would have been obvious to take the single processor in
3 Rogers, which Rogers has no issues with performing its particular tasks
4 based on that one processor, and then modify it into a dual controller system
5 and why you would do it, how you would do it, how you would add more
6 hardware that would require more power, additional wiring and code to do
7 it, how you would do the rewiring and --

8 JUDGE TROCK: Counsel, this is Judge Trock. Could you remind
9 me what the level of ordinary skill in the art is here?

10 MS. BONNER: I can, Your Honor, and I agree with Petitioner,
11 there is no dispute as to the level of ordinary skill in the art. But again, it's
12 Petitioner's burden on obviousness to show that someone of skill in the art
13 would make these modifications, find it obvious to try --

14 JUDGE TROCK: I didn't ask that question. The question I asked
15 was, could you remind me what the level of ordinary skill in the art is here?

16 MS. BONNER: I believe we can just look at the petition. They
17 provide one on page 6 as a bachelor's degree in electrical engineering,
18 computer engineering, computer science, or a related field with at least one
19 to two years of experience in the field of computing devices with touch
20 interfaces.

21 JUDGE TROCK: And you agree with that description?

22 MS. BONNER: We do, Your Honor.

23 JUDGE TROCK: Thank you.

24 MS. BONNER: And our position is that Petitioner has not met its
25 burden to show why it would have been obvious to modify Rogers' single
26 processor to include a dual processor system to meet the element of the

1 second controller. Now, I see I've gone kind of way over on my time. The
2 additional points I was going to address as to the other grounds really
3 overlap, because they all kind of rise or fall based on Rogers, and Rogers is
4 used for all four grounds. So, unless there are any additional questions, I
5 will reserve whatever remaining time I have left for our surrebuttal.

6 JUDGE POWELL: Which is about 18 minutes for your planning
7 purposes.

8 MS. BONNER: Thank you, Your Honor.

9 JUDGE POWELL: Petitioner, you added four for rebuttal, and
10 you will have 27 minutes and 31 seconds.

11 MR. MINUTOLI: Okay, I'm going to go up to the podium, but I'm
12 just going to answer one question by Judge McMillin and then stop. Is that
13 okay? Unless --

14 JUDGE POWELL: If it's okay with Judge McMillin.

15 JUDGE MCMILLIN: Yes.

16 MR. MINUTOLI: All right, so, thank you, Your Honors. So I was
17 asked earlier today, and I think it came out during that Q&A, but if the word
18 controller was used anywhere else in the patent other than the claims, and it
19 is not. It is always control unit. I have no more rebuttal, unless the panel --

20 JUDGE POWELL: Oh. Oh, that's all, okay. All right.

21 MR. MINUTOLI: Yes. Thank you all for your time.

22 JUDGE POWELL: Thank you. Let me adjust the timer here. As
23 we noted just a minute ago, you have 18 minutes, and let's see here. I
24 believe there were three seconds you have on there, too. Anyway, we're
25 ready for any further arguments you may have.

26 MS. BONNER: Your Honors, unless there are any additional

1 questions, we have no further arguments to make.

2 JUDGE POWELL: I think not. We'll pause here a second for my
3 colleagues to jump in, and if we don't hear anything soon, we'll take care of
4 the housekeeping and --

5 MS. BONNER: Thank you for your time, Your Honor.

6 JUDGE POWELL: Thank you. Yes, thank you to both parties for
7 coming to help us work through this today. With that, the cases are
8 submitted, and we'll go off the record.

9 (Whereupon, the above-entitled matter went off the record at
10 2:36 p.m.)

IPR2024-00828
Patent 8,982,086 B2

PETITIONER:

Gianni Minutoli
James Heintz
DLA PIPER LLP (US)
Gianni.Minutoli@us.dlapiper.com
Jim.Heintz@us.dlapiper.com
Martin.ellison@us.dlapiper.com

PATENT OWNER:

Robert G. Pluta
Amanda S. Bonner
Saqib J. Siddiqui
MAYER BROWN LLP
rpluta@mayerbrown.com
asbonner@mayerbrown.com
ssiddiqui@mayerbrown.com
sbruneel@mayerbown.com