

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

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

v.

MANUFACTURING RESOURCES INTERNATIONAL, INC.,
Patent Owner.

IPR2023-00199 (Patent 8,854,595 B2)
IPR2023-00220 (Patent 9,173,322 B2)

Record of Oral Hearing
Held: March 21, 2024

Before JAMESON LEE, JO-ANNE M. KOKOSKI, and
JOHN A. HUDALLA, *Administrative Patent Judges*.

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The above-entitled matter came on for hearing March 21, 2024 commencing at 9:30 a.m. EDT, at the U.S. Patent and Trademark Office, 600 Dulany Street, Alexandria, Virginia.

P-R-O-C-E-E-D-I-N-G-S

9:30 a.m.

JUDGE HUDALLA: Okay. Good morning. We are here for the consolidated oral hearing in IPR2023-00199 and IPR2023-00220. I'm Judge Hudalla. I have with me Judge Lee and we have Judge Kokoski on the video link.

I think we'll start with appearances. Why don't we start with Petitioner.

MS. BIRBACH: Good morning, Your Honors. Naomi Birbach for Petitioners.

JUDGE HUDALLA: Are you going to be doing the presentation just by yourself today?

MS. BIRBACH: Yes.

JUDGE HUDALLA: Okay.

MS. BIRBACH: To the extent Your Honors would like to hear argument regarding Petitioner's motion to strike, Sanjeet Dutta will handle that argument.

JUDGE HUDALLA: Okay.

And for Patent Owner?

MR. ALEMANNI: Good morning, Your Honors. I'm John Alemanni with Kilpatrick Townsend. I'll be arguing today along with Mr. David Reed who is sitting behind me.

MR. REED: Good morning, Your Honors.

MR. ALEMANNI: Ms. Nita Gray will be helping us with the demonstratives.

JUDGE HUDALLA: Okay. Good morning to you.

1 MR. REED: Thank you.

2 JUDGE HUDALLA: Per our hearing order, we're going to have 90
3 minutes per side. Petitioner will go first and may reserve rebuttal time.
4 Patent Owner goes second and may reserve some sur-rebuttal time. I will
5 remind the parties that we are in an open hearing, this is open to the public, I
6 believe there is a video link. So please do not reveal any confidential
7 information that's been entered in this case. Be careful about that.

8 Also while you're going through the presentations if you can
9 occasionally let us know the slide number you're on. That will help us when
10 we review the record afterwards. And of course, it will help Judge Kokoski
11 as she is joining us remotely.

12 I don't think I have anything else. So if you'd like to start your
13 presentation, you can do that and let me know if you'd like to reserve some
14 rebuttal time please.

15 MS. BIRBACH: Thank you, Your Honor. I'd like to reserve 30
16 minutes for rebuttal.

17 JUDGE HUDALLA: Okay. You can go whenever you're ready.

18 MS. BIRBACH: Thank you. Can you hear me, okay?

19 JUDGE HUDALLA: I can. Judge Kokoski, can you hear as well?

20 JUDGE KOKOSKI: Yes, I can hear.

21 JUDGE HUDALLA: Okay.

22 JUDGE KOKOSKI: Thank you.

23 MS. BIRBACH: Thank you.

24 Good morning. My name is Naomi Birbach, and I represent
25 Petitioner, Samsung Electronics Co. Ltd. and Samsung Electronics America,
26 Inc. I'm joined today by my colleagues Sanjeet Dutta, Doug Kline, Srikanth

1 Reddy, and Christine Potkay from Goodwin Proctor. I am also joined by
2 Dan Girdwood, and Matt Bathon of Samsung Electronics America.

3 Turning to slide 2, today's proceeding is focused on two patents
4 assigned to Manufacturing Resources International, the '595 and '322
5 Patents. The '322 Patent is a continuation of the '595 Patent, so that patents
6 share the same specifications.

7 Turning to slide 3, the alleged invention of the '595 and '322 Patents is
8 a cooling system for a display using a narrowed plate -- using a plate to form
9 a narrowed space through which air is blown using a fan to cool the display.

10 Turning to slide 4, we have here a summary of the grounds set forth in
11 the '595 Patent petition. The primary references used in the '595 Patent
12 petition are the Takeuchi, Kim, and Na references. The claims challenged in
13 the '595 proceedings, claims 1, 4, 7, and 8 of the '595 Patent were also
14 adjudicated at the International Trade Commission.

15 The ALJ found claims 1, 4, 7, and 8 invalid over the prior art.
16 Specifically, the ALJ found that claim 1 was anticipated and/or obvious over
17 Takeuchi, that claim 1 was anticipated by Kim, and that claims 4 and 7 were
18 obvious over the combination of Kim and Hong, and that claim 8 was
19 obvious over the combination of Kim, Hong, and Takahashi.

20 In the ITC proceedings, respondents provided invalidity testimony
21 from Mr. Smith-Gillespie who is also Petitioner's expert in these
22 proceedings. Patent Owner's expert for the '595 and '322 Patents at the ITC
23 is a different expert from the one from which Patent Owner relied on, is
24 relying on in these proceedings.

25 Turning to slide 5. Slide 5 summarizes the grounds set forth in the
26 '322 Patent petition. The primary references used in the '322 grounds

1 include the same Kim and Na references that are used in the '595 petition.
2 The '322 grounds also include primary references Kimura and Cho.

3 Here, claims, 3, 4, 5, 8, 9, 12, and 13 were adjudicated at the ITC.
4 The ALJ found that claims 3, 4, 5, and 8 were obvious based on the same
5 Kim grounds that are presented here. So the grounds that are reflected as
6 ground 1, 5, and 3, and 4.

7 With respect to claims 9, 12, and 13 that were adjudicated at the ITC,
8 the ALJ found there that respondents had failed to demonstrate that Kimura
9 rendered claims 9 and 13 obvious.

10 JUDGE KOKOSKI: Counsel, excuse me.

11 MS. BIRBACH: Yes.

12 JUDGE KOKOSKI: Before you go on, I noticed that in your reply
13 you did not address the Cho grounds, and I think a couple on just the Kimura
14 grounds. Are you still asserting those grounds or just resting on the petition?

15 MS. BIRBACH: With respect to the Cho grounds, we are resting on
16 our petition. With respect to the Kimura grounds, I believe you're referring
17 to grounds 9 and 11 regarding the combination of Kimura and Kochiyama.
18 With respect to ground 11, we are resting on our petition. With respect to
19 claim 9, there's been a nuance which I can address now or earlier on. If
20 you'd like to hear it now, I can talk to it.

21 JUDGE KOKOSKI: Yeah. If you can do it right now, that would be
22 great.

23 MS. BIRBACH: Sure.

24 So in the time since Petitioner's filed the petition we had an ITC
25 proceeding. And in that proceeding the ALJ found that claim 9's
26 requirement that no electronic be mounted on the posterior surface of a

1 display includes electronics that are mounted via a bracket. So in other
2 words, if a bracket connects an electronic component to the rear surface of
3 the display, that component is mounted to the rear surface.

4 Patent Owner argued with respect to claim 11 that if Kochiyama's
5 brackets are used to connect the constricted connection plate, which is in that
6 case an electronic component, to the rear surface using Kochiyama's
7 brackets then that addition of those brackets would then violate claim 9's
8 requirement that no electronic be mounted. And we do not dispute Patent
9 Owner's argument there.

10 JUDGE KOKOSKI: Okay. Thank you.

11 MS. BIRBACH: Now I'll turn to ground 1 of the 199 IPR which is
12 that claim 1 of the '595 Patent is obvious over Takeuchi. The charged
13 arguments based on the Takeuchi reference largely relied on an embodiment
14 of Takeuchi that's described in figure 5 which is shown here on slide 9. And
15 this is a cross-sectional view of Takeuchi's embodiment of figure 5.

16 Takeuchi's display system includes a light guide plate 1, on which
17 video images are displayed by panels 16 and 17. A partition plate, 53, is
18 located behind the display and forms the constricted convection plate
19 required by the claims here.

20 Air enters the cooling system through filtered entrances on the rear
21 cover and moves from the lower ends of the channel up towards the upper
22 side of the chamber and it thereby cools the display from the back side.
23 After the air flows through the chamber it is sucked out by an exhaust vent
24 and blower that are located in the upper portion of partition plate 53.

25 On slide 10 we have claim 1 of the '595 Patent. Patent Owner
26 disputes that Takeuchi discloses all the limitations of claim 1 except for the

1 limitation that requires a fan to draw air from outside of the housing through
2 the system.

3 Patent Owner's arguments here improperly attempt to read in
4 limitations from preferred embodiment of the specifications and narrow the
5 claims. Takeuchi discloses all of the challenged limitations.

6 Turning to slide 11, Takeuchi discloses an electronic display as
7 required by the preamble of claim 1. Takeuchi's electronic display system
8 includes a light guide plate and a panel portion arranged on the back side of
9 the light guide plate that "causes a video image to be displayed on the light
10 guide plate."

11 Patent Owner's expert, Mr. Gershowitz, admitted at his deposition that
12 electronic products, which would include displays, are products or devices
13 with electronic components in them. There is no dispute that Takeuchi's
14 display system requires electricity and includes components to drive the
15 display including for example, driving circuits. Accordingly, Takeuchi's
16 display system is an electronic display.

17 Patent Owner argues that Takeuchi's display is an electric-mechanical
18 display. But the fact that Takeuchi's display additionally includes
19 mechanical components does not detract from the simple conclusion that it is
20 an electronic display.

21 There's also no dispute that claim 1 does not limit the type of
22 electronic display, nor does the specification as reflected on slide 12.

23 Turning to the next limitation on slide 14, Takeuchi discloses that its
24 electronic display has a posterior display surface. As reflected in the
25 annotated figure 5, the posterior surface of panels 16, 17 is a rear facing
26 surface of the display assembly and therefore meets the party's agreed

1 construction for the term posterior display surface which is a rear facing
2 surface of the display assembly.

3 Patent Owner argues that Takeuchi lacks a singular posterior display
4 surface. But even if panels 16, 17 are made up of distinct pieces, those
5 pieces together clearly form a singular rear facing surface of the display
6 assembly.

7 Turning to slide 16, Takeuchi's electronic display is also contained
8 within a housing as required by the preamble of claim 1. Takeuchi's housing
9 is made up of frame 3 and rear cover 51. Takeuchi discloses in paragraph 23
10 that the frame 3 prevents light leakage at the periphery of the panel portion.

11 Takeuchi also discloses in paragraph 40 that the back sides of light
12 guide plate 1 and the panels 16, 17 are completely covered by rear cover 51.
13 According --

14 JUDGE HUDALLA: Can I ask you a little bit about that Counsel?

15 MS. BIRBACH: Of course.

16 JUDGE HUDALLA: In your reply, it seemed like you backed away
17 from frame 3 after hearing Patent Owner's arguments about that. Maybe the
18 frame is outside -- it's on the periphery of the device. Could you respond to
19 that please?

20 MS. BIRBACH: Thank you, Your Honor. We did not back away
21 from that. As set forth in the petition, the frame 3 forms part of the housing.
22 In addition, the rear cover, as expressly disclosed by the specification of
23 Takeuchi, is also a housing in and of itself and that it completely covers rear
24 cover -- it completely covers the light guide plate and the back sides of the
25 panel 16, 17.

1 I think some of the argument is also presented in Petitioner's reply in
2 relation to Patent Owner's argument regarding the location of the light
3 sources. And there we also address the fact that Patent Owner is attempting
4 to transpose elements of figure 1 of Takeuchi into the figure 5 embodiment.

5 JUDGE HUDALLA: Okay.

6 MS. BIRBACH: And so I think in that argument, we're also
7 addressing their argument that the frame 3 is not located where -- they allege
8 that frame 3 is not located in the location of figure 5 and we dispute that.
9 Because figure 1, according to the reference, is a front-view of a display
10 system of the type specified to which the invention can be suitably applied.

11 Takeuchi also has a figure 2 that is a partial cross-sectional view of
12 figure 1. And then figure 5 is a separate embodiment. It's a sectional view
13 that contains a second embodiment of the cooling device according to the
14 present invention. Figure 5 is not described as a cross-section of figure 1.

15 JUDGE HUDALLA: Okay. So basically you're telling us we should
16 consider figure 5 and figure 1 completely separately.

17 MS. BIRBACH: Correct.

18 JUDGE HUDALLA: Okay. All right. Thank you.

19 MS. BIRBACH: Turning to slide 17, Takeuchi's partition plate 53 is
20 the claims' constricted convection plate. Takeuchi teaches that partition
21 plate 53 forms a flow path of the fluid in contact with the back of the light
22 guide plate at least in a region adjacent to the back of the light guide plate to
23 cool the display. Takeuchi discloses that partition plate 53 defines a cooling
24 chamber on the back sides of the light guide plate and the panels 16, 17
25 which are the posterior display surface.

1 Because Takeuchi's partition plate limits the flow path of the fluid in
2 contact with the back of the light guide plate to facilitate convective heat
3 transfer, it constricts air flow in order to achieve the desired cooling effect
4 and satisfies the constricting convective channel limitation of the claim as
5 well.

6 JUDGE HUDALLA: I want to ask you a little bit about that too. The
7 -- this became an issue I guess in the ITC as well, and I think the ALJ talked
8 about it in her decision. And the idea here is how many holes can you have
9 in the back of your plate and still be constricted; I guess is the best way to
10 put it. Do you have a position on that?

11 MS. BIRBACH: With respect to Takeuchi, yes. Patent Owner argues
12 that this plate is not solid because it has multiple intake vents. In Takeuchi
13 there are three intake vents. There are two intake vents at the bottom of the
14 channel and an intake vent in the middle.

15 Petitioner's position is that, which the ALJ adopted, is that even with
16 these intakes Takeuchi's partition plate constricts the air flow to remove heat
17 from the display which meets the requirements of the claim. The claim
18 requires an entrance and an exit, but it does not require only an entrance or
19 only a single exit.

20 JUDGE HUDALLA: So I guess if we were to look at the claim
21 construction and we wanted the standard to decide whether it's constricted or
22 not, we're just looking at air flow? Is that the -- kind of the main driver of
23 whether it meets this claim limitation?

24 MS. BIRBACH: The combination of the partition plate and the air
25 flow. And the express disclosures of the Takeuchi reference are that the

1 partition plate here forms this air flow path and constrains the air so that it
2 can cool the rear surface of the display.

3 And Takeuchi also specifically refers to a cooling chamber that is
4 formed. These claims require a constricted convection channel. There is a
5 chamber that is formed even with these intakes and allows for -- I think
6 Takeuchi even says -- allows for uniform cooling of the display.

7 So it's our position that, to the extent that there are additional inputs,
8 that does not impact the conclusion because the claim is silent as to that.

9 JUDGE HUDALLA: Okay. Okay. Thank you.

10 JUDGE LEE: Counsel, this is Judge Lee. My question is, what's the
11 answer to Patent Owner's argument that if the light pixels, the elements that
12 emit light are not controlled electronically but are controlled by --
13 mechanically, then it's not an electronic display.

14 MS. BIRBACH: An electronic display, according to -- in Petitioner's
15 view and also according to Patent Owner's expert is a display that has
16 electronic components. Period. And uses electricity. Period. There's no
17 specificity in the claims which say electronic display or in the specification
18 as to what electronic components are necessary to comprise an electronic
19 display.

20 So the fact that certain components might additionally be controlled
21 mechanically doesn't detract from this simple analysis of whether there are
22 electronic components and electricity that drives the display. And there are.
23 There is the video display, in order to display video there is necessarily
24 electronics included. There are driving circuits --

25 JUDGE LEE: So which components in Takeuchi are electronic?

1 MS. BIRBACH: There are driving circuits that are indisputably used
2 to drive the display. I think that's in paragraph 26 of Takeuchi, it mentions
3 the driving circuits and I think on the side -- please turn back, I think we also
4 have a cite to Mr. Gershowitz's testimony, which was patent owner's expert.
5 And he agreed that -- and that's on slide 11 -- he agreed that, on this cite, on
6 the side that electronic components just require electronic components --
7 electronic products just require electronic components. But I believe --

8 JUDGE LEE: I see, but you don't disagree with their assertion that
9 the control is not electronic.

10 MS. BIRBACH: The control -- there is electronic components in the
11 control. There are driving circuits that control the display. And --

12 JUDGE LEE: Oh, I see. They're talking about like no thin film
13 transistors as the control. That -- is that part correct?

14 MS. BIRBACH: That's not required by the claims or the
15 specification. So Takeuchi has driving circuits that allow the video image to
16 be seen and also requires electricity. It needs to be plugged in. There are
17 power components.

18 JUDGE LEE: Okay. So you dispute their assertion that the control in
19 Takeuchi is non-electronic.

20 MS. BIRBACH: Yes.

21 JUDGE LEE: Okay. Thank you.

22 MS. BIRBACH: Can you turn to slide 19? Or slide 18 rather.

23 So turning back to the constricted convection plate and channel
24 arguments. Patent Owner also argues that the claims require directional
25 flow from a single entrance to an exit. And this is not required by the
26 claims, as I just mentioned. But in any event, Patent Owner's expert, Mr.

1 Gershowitz, admitted that Takeuchi discloses directional air flow from the
2 entrances to the exit of Takeuchi's cooling chamber.

3 Patent Owner also argues that the channel must be enclosed on all
4 four sides. And to the extent that Patent Owner is suggesting that the sides
5 of the channel have to be solid because the channel is enclosed. That's not
6 required. But in any event, Takeuchi does disclose a cooling chamber.
7 Those are the words he uses, cooling chamber.

8 And Mr. Gershowitz, Patent Owner's expert, admitted that the person
9 of skill in the art would understand a chamber to be enclosed or partially
10 enclosed. So Takeuchi's meets these claim limitations.

11 I'll also mention that Patent Owner admits in its sur-reply that a
12 constricted convection plate of the '595 Patent can include access apertures
13 through which some air may pass. And Patent Owner can't reconcile this
14 admission with its argument with respect to Takeuchi and claim 1 of the '595
15 Patent.

16 Takeuchi also discloses or renders obvious claim 1's required side
17 panels limitation. Takeuchi discloses two sets of side panels. One set on the
18 top and bottom of the cross section that we see in figure 5 on this slide, and
19 this is slide 19, and another set that we do not see on the left and right sides
20 of the cooling chamber.

21 First, Takeuchi discloses that the thermal insulating materials, 52, are
22 applied to inner surface portions of the rear cover 51 in its upper and lower
23 regions. And these are side panels formed at 90 degrees from the partition
24 plate 53 that are shown in yellow.

25 Patent Owner argues that these panels are -- Patent Owner does not
26 dispute that these panels are present but argues that they are not the side

1 panel required by the claims because they're at the ends of the chamber and
2 outside of the air flow path. The claims do not limit the location of the side
3 panels in relation to air flow. And in any event, these side panels are clearly
4 within the air flow path. MRI's arguments here are improperly based on
5 trying to read in exemplary embodiments from the specifications.

6 In any event there's also a side panel on the right and left side of
7 Takeuchi's display. We do not see this in figure 5 which is a cross section,
8 but a person of ordinary skill in the art would have understood from
9 Takeuchi's disclosure of a cooling chamber that it's enclosed as we
10 previously discussed. The person of skill in the art would also understand
11 that there are right and left side panels based on Takeuchi's disclosure of
12 how air flows through the chamber.

13 Takeuchi discloses that ambient air is introduced into the cooling
14 chamber through filters 54, 55a, and 55b that are located on the rear side of
15 the display. Based on this disclosure, the person of skill in the art would
16 understand that these are the only entrances into the cooling chamber. And
17 this is consistent with the airflow arrows that we see in figure five. There's
18 no disclosure that air is entering in any other location other than from the
19 back of the display.

20 In the alternative it would have been obvious to add right and left side
21 panels adjacent to the partition plate and the posterior surface to enclose the
22 chamber to prevent contamination and improve air flow and cooling.

23 Patent Owner argues that the person of skill in the art would have
24 alternatively been motivated to use filters on the sides of the display instead
25 of solid panels. But even if the person of skill in the art would have had
26 reason to use filters, that does not detract from the person of skill in the art's

1 motivation to alternatively enclose the display on the right and left sides.

2 The obvious inquiry does not require the prior art combination to be the
3 preferred or most desirable configuration.

4 Turning to slide 20, while the invalidity analysis is clearly limited to
5 the claims of the '595 Patent, the similarity of Takeuchi's figure 5 -- to figure
6 5 of the '595 Patent is illustrative of the reasons why Takeuchi renders claim
7 1 of the '595 Patent obvious.

8 Turning to slide 22. This slide includes the grounds based on the Kim
9 reference which is used both in the '595 and the '322 Patent IPRs. Before we
10 dive into the grounds, turning to slide 23 I'll provide a brief overview of the
11 Kim reference.

12 Kim is directed to an LCD display with a cooling system. As we can
13 see in figure 2, which is an exploded view of Kim's display, Kim's display
14 apparatus includes a casing (110) which is a housing that contains an LCD
15 panel (120), a backlight unit (130), a shield cover (140), and a cooling fan
16 unit (200).

17 With respect to the first ground based on Kim, which is ground 2 of
18 the '595 Patent IPR, Patent Owner disputes that Kim discloses the
19 constricted convection plate, side panels, and constricted convection
20 limitations of claim 1 of the '595 Patent. But Kim discloses all these
21 limitations.

22 Kim's shield cover (140) is the claim's constricted convection plate.
23 Kim discloses that shield cover (140) is configured to efficiently guide the
24 air flow produced by the cooling fan (210) in order to cool heat generating
25 parts of the backlight unit. The air flows from the fan which is an entrance
26 through the space between the backlight unit (130) and shield cover (140),

1 and then exits the channel through air slits (117) prime. This air flow is
2 shown in the air flow path in figure 5 of Kim, and these arrows are present in
3 the Kim reference.

4 Patent Owner's arguments as to Kim's disclosure are similar to those
5 raised with respect to Takeuchi and should be rejected for similar reasons.
6 Patent Owner again argues that the air flow through the channel must be
7 directional from the entrance to the exit which again is not required by the
8 claims.

9 But in any event, Patent Owner's expert, Mr. Gershowitz, admitted at
10 his deposition that air flow does flow directionally from the entrance through
11 fan (200) through the exits which are slits (117) prime in Kim's figure 5 and
12 that this air removes heat from the backlight unit (130). That satisfies the
13 claims.

14 Patent Owner also argues that Kim does not disclose a constricted
15 convection plate or channel because of the presence of additional holes in
16 Kim's shield cover. But again, Patent Owner admits that the '595 Patent
17 does not require the constricted convection plate to be solid as it may include
18 access apertures through which air may pass.

19 In addition, Patent Owner's positions here are inconsistent with its
20 infringement position before the International Trade Commission. As the
21 ALJ noted in her decision on pages 192 to 193, footnote 74, Patent Owner
22 argued for the purposes of infringement that certain holes in a constricted
23 convection plate do not preclude coverage by the claims limitation.

24 Patent Owner cannot have it both ways.

25 JUDGE HUDALLA: Can I just ask you about that? Just so I'm
26 understanding this correctly. The 117 prime, I guess they're called slits, 117

1 prime. Are you saying that the air exits at the top of the display unit as part
2 of the air flow through those slits, 117 prime?

3 MS. BIRBACH: Correct.

4 JUDGE HUDALLA: Okay. But there are also other slits, 117 prime
5 on the back of the unit, that's what the Patent Owner is talking about?

6 MS. BIRBACH: Correct. Patent Owner is pointing to, there are other
7 slits on the -- there are slits as we can see in figure 2 on slide 23 that there
8 are certain other slits around the periphery of -- at least in figure 2. In figure
9 5, we also, we some additional slits on the top and bottom. But the air flow
10 is flowing in a direction as Mr. Gershowitz admitted from the fan upwards.

11 We can see in this, this is actually a horizontal cross section, but the
12 air is flowing directionally from the entrance through the fan unit (200),
13 through the channel and then that air flow path exits through 117 prime.

14 JUDGE HUDALLA: And I guess the ones you're talking about for
15 the purposes of your analysis are at the top of the device. Is that right?

16 MS. BIRBACH: That's correct. They're -- it may be a horizontal
17 cross section.

18 JUDGE HUDALLA: Okay. Thank you.

19 MS. BIRBACH: So it would exit, in that case, through the -- would
20 enter through the middle of the device and you know, exit either to the left
21 or right side flowing horizontally, but --

22 JUDGE HUDALLA: I see. I just want to be careful because it seems
23 like you're relying on them for your affirmative case in some senses and
24 Patent Owner's arguing about this 117 prime for some of their purposes as
25 well, but there's I guess quite a few of these slits 117 prime.

1 MS. BIRBACH: Right. We don't dispute that there may be
2 additional slits, but the claim requires through a constricted -- through an
3 entrance to an exit, and that is satisfied by Kim's disclosure of an air flow
4 path. And so even if there is some air that may move in a different pathway,
5 there is -- the air is definitely constrained in the area between the entrance as
6 it flows through the channel to get to the exits 117 prime we've identified.

7 JUDGE HUDALLA: Okay.

8 MS. BIRBACH: And that Kim itself identifies.

9 JUDGE HUDALLA: Thank you.

10 MS. BIRBACH: Turning to slide 28 Kim discloses the clean side
11 panels that are adjacent to the constricted convection plate and define the
12 constricted convection panel. These side panels are colored yellow in
13 figures 2 and 5 on slide 28, and they extend from the constricted convection
14 plate to the posterior surface of the backlight unit to enclose the space there
15 between and help direct the air through the channel.

16 Figure 2 is an exploded view of Kim's display system. And Patent
17 Owner argues that when the components of figure 2 are mated together, the
18 side panels dig against the sides of the backlight unit and in essence
19 disappear into the backlight unit.

20 But Mr. Smith-Gillespie, Petitioner's expert, actually testified at the
21 ITC hearing that the yellow side panels only "slip partially into the
22 backlight." That testimony is in Exhibit 2013, page 1058 lines 12 to 14.
23 And this can also be seen in figure 5. The yellow components slip partially
24 into the back sides of the backlight unit but some of the side panels remain
25 in the channel, and they are exposed and located within the air flow path. So
26 they meet the requirements of the claim.

1 For these reasons claim 1 of the '595 Patent is obvious in view of
2 Kim.

3 JUDGE HUDALLA: And just, can I ask you one question about that?
4 You have both, just looking at those, what you've colored in yellow on your
5 demonstrative 28 there. You have both an argument saying that the yellow
6 shaded portion is enough, but you also have a secondary argument that it
7 would have been obvious to make them solid instead or I guess removing the
8 slits that are present in your diagram there. Is that right?

9 MS. BIRBACH: It's not that we would have removed the slits, it's --
10 the alternative obviousness argument is that the side panels would be
11 extended slightly to constitute -- to be larger within the channel. But our --
12 the ALJ adopted our argument that Kim disclosed side panels, but we do
13 have an alternative argument that we presented in our petition.

14 JUDGE HUDALLA: Okay. Thank you.

15 MS. BIRBACH: I'll now turn to ground 3 of the '595 Patent that
16 claims 4 and 7 are obvious in view of the combination of Kim and Hong. So
17 as we can see on slide 30, claim 4 is similar to claim 1 of the '595 Patent but
18 it specifically requires a liquid crystal display with an LED backlight.

19 Patent Owner again disputes the constricted convection plate and
20 channel limitations of claim 4, but they're obvious over Kim for the same
21 reasons discussed with respect to ground 1. Claim 4 does not have the side
22 panels requirement though.

23 The only other dispute with respect to claim 4 of the '595 Patent is
24 whether the combination of Kim and Hong discloses the required metal core
25 printed circuit board.

1 Turning to slide 31, Patent Owner does not dispute that Kim discloses
2 a backlight unit with a light source (131) comprising of plurality of LEDs.
3 As Petitioner's expert Mr. Smith-Gillespie explained, the person of skill in
4 the art would have understood that the LEDs must be mounted on a PCB
5 included within the backlight unit in order to operate. But Kim does not
6 expressly disclose a metal core PCB.

7 Turning to slide 32, it's undisputed that metal core PCBs were well
8 known by the priority date of the '595 Patent, including for use in electronic
9 displays. Hong provides one such example. It discloses an LCD device
10 with an LED backlight having a metal core PCB as well as a cooling system.
11 Hong specifically discloses that the purpose of using a metal core PCB and
12 an LED backlight is to "effectively absorb and transfer heat produced at the
13 LED 124."

14 Turning to slide 33, in view of Hong's teaching and the knowledge of
15 the art, the person of skill in the art would have been motivated to modify
16 Kim's backlight unit to include Hong's thermally efficient metal core PCB in
17 order to improve the heat dissipation in Kim's backlight.

18 Kim discloses that there's a need to emit heat generated from LEDs
19 efficiently and Hong discloses, as we just saw, that a metal core PCB is a
20 way to improve that thermal efficiency. It's undisputed that using a metal
21 core PCB would have been a design choice subject to technical and cost
22 considerations.

23 Turning to slide 34, Patent Owner argues that the person of skill in the
24 art would not have been motivated to combine Kim and Hong. Patent
25 Owner does not dispute the disclosures of the art.

1 Some of Patent Owner's arguments are based on the hypothetical
2 physical combination of Kim and Hong. But Petitioner is not arguing that
3 the person of skill in the art would have bodily incorporated Hong's entire
4 LED cooling system into Kim's display. Rather, Kim is agnostic as to the
5 type of PCB that would be used in its display and it would have been
6 obvious to the person of skill in the art to select a metal core PCB from the
7 known options as disclosed by Hong. And the MCM Portfolio case supports
8 that.

9 Patent Owner also argues that the person of skill in the art would not
10 have been motivated to use a metal core PCB due to cost. That is based on
11 Mr. Gershowitz's opinion. But in any event, a given course of action often
12 has simultaneous advantages and disadvantages. And this does not
13 necessarily obviate motivation to combine. That's taught by the Allied
14 Erecting & Dismantling case.

15 So even if a metal core PCB is more costly than other PCB's, there's
16 strong motivation here to use a metal core PCB in order to improve thermal
17 efficiency.

18 Now I'd like to turn to slide 37 and ground 1 of the '322 Patent IPR.
19 As we can see on slide 37, claim 4 of the '322 Patent is nearly identical to
20 claim 4 in the '595 Patent with two notable exceptions.

21 First, claim 4 of the '322 Patent requires a printed circuit board within
22 the backlight but does not require a metal core printed circuit board.
23 Second, the claim requires the constricted convection plate be substantially
24 parallel to the posterior surface of the PCB.

25 Turning to slide 38, Kim in combination with Hong again discloses
26 the claims PCB. Patent Owner disputes the motivation to combine Kim with

1 Hong again, with respect to the '322 Patent, but its arguments are improperly
2 focused on Hong's exemplary disclosure of a metal core PCB. Patent Owner
3 does not provide any reason as to why the person of skill in the art would not
4 have been motivated to use a standard PCB in Kim.

5 Patent Owner suggests in its sur-reply that because the Petitioner's
6 proposed combination involved a metal core PCB that that unclaimed
7 feature of Hong's PCB is relevant to the motivation to combine. That's in
8 Patent Owner's sur-reply at page 6. But Patent Owner is mistaken here. As
9 we can see in Petitioner's petition, paper 9, Petitioner did not rely on Hong's
10 exemplary metal core PCB in its arguments for the '322 Patent.

11 Petitioner argued that the person of skill in the art would have
12 understood based on Kim's disclosure that the LEDs in Kim's backlight
13 would have been mounted on a PCB because that is how they are typically
14 mounted in the art and that's well known and undisputed. And then the
15 alternative, the person of skill in the art would have been motivated to
16 include a PCB like that disclosed in Hong so that the LEDs can operate as
17 intended.

18 Briefly turning to slide 39, claim 1 of the '322 Patent also requires the
19 constricted convection plate be substantially parallel with the posterior
20 surface of the PCB. Kim's figure 5 shows that Kim's shield cover (140) is
21 substantially parallel with the rear side of Kim's backlight unit.

22 The person skilled in the art would have further understood that in
23 combination with Hong the constricted convection plate would have been
24 substantially parallel with the posterior surface of the PCB within the
25 backlight given the parallel orientation of the backlight as a whole.

1 Patent Owner's arguments here are that the constricted convection
2 plate is not substantially parallel because of the typology that is says is
3 located on the rear surface of the backlight. But the constricted convection
4 plate -- the claim does not require anything more than the constricted
5 convection plate be substantially parallel to the posterior surface. And that
6 is clearly shown in figure 5.

7 Now I'll turn to ground 5 in the '322 Patent IPR which is that claim 5
8 of the '322 Patent is obvious over Kim in view of Tachikawa. Claim 5
9 requires a bracket connecting the posterior surface on the rear side of the
10 PCB with the constricted convection plate. Kim discloses this claimed
11 bracket.

12 A person of skill in the art would have understood that Kim's shield
13 cover (140), which is the constricted convection plate, is connected to the
14 backlight unit using the brackets that are colored in yellow on the side.
15 These are the same components that were identified as the side panels with
16 respect to claim 1 of the '595 Patent.

17 Patent Owner does not dispute that these are brackets, but disputes
18 that they meet the claim because it argues that they do not connect the
19 shields cover to the rear surface of -- to the posterior surface because they
20 connect the constricted convection plate to the sides of the backlight unit.

21 But the claims do not require that the bracket be directly attached to
22 the posterior display surface. Kim's brackets facilitate the connection
23 between the posterior display surface and the constricted convection plate
24 which is all that is required by the claim.

1 In the alternative, brackets were a standard component used in
2 electronic displays. One example is provided by the Tachikawa reference as
3 reflected on slide 41.

4 And turning to slide 42, the person of skill in the art would have been
5 motivated to modify the display disclosed by Kim and Hong to add brackets
6 like those disclosed by Tachikawa to improve Kim's display serviceability
7 and structural strength. Brackets were a well known component used in the
8 art by the time of the '595 Patent, and a routine modification of moving or
9 adding brackets would have been well within the scale of the person of skill
10 in the art.

11 Briefly addressing slide 43. Claim 4, ground 4 for the '322 Patent is
12 that claims 1 to 3 are obvious over Kim in view of Tachikawa. On this slide
13 we have a chart cross referencing claims 1 to 3 of the '322 Patent to other
14 claims and grounds of the '322 Patent. Claims 1 to 3 are obvious for the
15 same reasons previously discussed.

16 I will now turn to the grounds based on the Na reference. And we are
17 on slide 46. The English version of the Na reference, Exhibit 1010 in both
18 IPR proceedings. On slide 47 we have a summary of the disputes regarding
19 Na disclosures themselves and I will address some of these during my
20 presentation.

21 So first, Na discloses the claimed posterior display surface. Figure 13
22 of Na which is located on the left side of slide 48 shows an embodiment of
23 Na's display system. It includes LCD Panel (840), optical sheet (120), and
24 areal light source device (100). The areal light source device includes a
25 reflective plate (110), a side wall (120), a driving substrate (130), and a
26 plurality of light emitting dial of light sources (140).

1 The posterior surface of the reflective plate (110) faces away from the
2 LCD panel and towards storage container (200). As such the lower rear
3 facing surface of the reflective plate (110) is the rear facing surface of Na's
4 electronic display that is formed from the combination of the areal light
5 source (100) which is backlight and the liquid crystal display panel (840).

6 So the dispute here is really what is the electronic display and
7 therefore what is the posterior display surface. Patent Owner's arguments
8 here are based on an alternative identification of the components of Na's
9 device such that they argue that the storage container (200) is the back of the
10 electronic display and therefore that its posterior surface meets the posterior
11 display surface limitation of the claim.

12 Petitioners rely on the storage container (200) and specifically bottom
13 plate (210) as the constrictive convection plate.

14 JUDGE HUDALLA: It doesn't -- so is your posterior display surface,
15 it's interior of the backlight though, isn't it?

16 MS. BIRBACH: It is what Petitioners consider to be the back of the
17 backlight.

18 JUDGE HUDALLA: It's the back of the backlight.

19 MS. BIRBACH: Yes.

20 JUDGE HUDALLA: Okay. So really the issue is I guess Patent
21 Owner saying there's actually a cover outside of that. That should be the
22 posterior display surface.

23 MS. BIRBACH: Yeah. I think the simplest way to think of it is that
24 Patent Owner is arguing that what we see in figure 5 -- we have figure 3 on
25 the right side of slide 48. And Patent Owner argues that the entirety of what

1 we see in figure 3 is the display or is the backlight unit. And, so that it's
2 posterior display surface is the back -- the component we see in green.

3 Petitioner's argument is that the posterior display surface of the
4 electronic display is the rear surface of reflective plate (110) because
5 Petitioner's position is that the electronic display required by the claim is the
6 combination of the LCD panel and the areal light source (100). And that is
7 supported by the specification. The specification teaches that, or states that
8 in an exemplary embodiment the display posterior may be the posterior
9 surface of the backlight assembly.

10 The backlight assembly may comprise a printed circuit board PCB
11 with a plurality of LEDs mounted to the anterior surface. That's in column
12 4, lines 52 to 55 in the '595 Patent. And that's what we have here. We have
13 a backlight assembly comprising a printed circuit board with a plurality of
14 LEDs mounted to the anterior surface. Those -- and that is the back of that
15 surface, the posterior surface of that backlight assembly is rear surface of the
16 reflective plate (110) that is labeled in yellow.

17 JUDGE HUDALLA: Okay. So I guess, one thing that I'm kind of
18 struck by is the agreed-to construction doesn't really address this aspect it
19 seems, right? It just says rear facing. That's all it says.

20 MS. BIRBACH: Correct.

21 JUDGE HUDALLA: And you're saying we're just looking
22 backwards. That's it. That's good enough. Is that right?

23 MS. BIRBACH: Correct. I think the issue is really what is the
24 display assembly because that's what the construction requires. It requires a
25 rear facing surface of the display assembly. Petitioner's position is that the
26 display assembly is the LCD panel (840) and the areal light source (100),

1 and therefore the rear facing surface is the back of the rear most component
2 there which is reflective plate (110).

3 Patent Owner argues that the display assembly is this entire unit so
4 that the rear surface of that unit is the back of the bottom plate (210).

5 JUDGE HUDALLA: Okay.

6 MS. BIRBACH: That we see in green here. Petitioner's position is
7 that bottom plate (210) is the constricted convection plate which I'll discuss
8 in a moment.

9 JUDGE HUDALLA: Okay. I'll keep listening then. Thank you.

10 MS. BIRBACH: So our position is that the specification supports the
11 reading, the understanding of what is the display assembly. The display
12 assembly is simply a display and a backlight unit according to at least the
13 exemplary embodiment. There's nothing in the specification that further
14 limits the display assembly.

15 So I'll turn to slide 52 to discuss the constricted convection plate
16 limitation. Petitioner's position is that Na's bottom plate (210) of storage
17 container (200) is the claimed constricted convection plate which forms a
18 cavity or inner space (260) through which air is drawn to cool the backlight
19 and therefore forms a constricted convection panel.

20 The bottom plate (210) of the storage container (200) has a
21 rectangular flat shape and includes four side walls. Na discloses that the
22 bottom plate (210) has a plurality of through holes (212). As we've
23 discussed previously, the claims allow -- the claims in the specification
24 allow certain entrances within a constricted convection plate.

25 But in addition, Na discloses an alternative embodiment where the
26 through holes may further be formed in the first to fourth side walls or may

1 be formed only in the first to fourth side walls. And Petitioner's expert, Mr.
2 Smith-Gillespie explains that the person of skill in the art would have
3 understood such an embodiment to look like the modified versions of figures
4 2 and 3 that we have on the right side of slide 52 which include no through
5 holes in the bottom plate (210), and through holes on one or more of the side
6 walls.

7 JUDGE HUDALLA: Just so I'm clear on that too. You do not have
8 an obviousness theory that has an unmodified version of that bottom plate.
9 Is that right?

10 MS. BIRBACH: We do have an obviousness theory based on Na's
11 unmodified --

12 JUDGE HUDALLA: Okay.

13 MS. BIRBACH: -- plate in our petition.

14 JUDGE HUDALLA: Okay.

15 MS. BIRBACH: Or in our reply we did focus on the alternative
16 embodiment, but we stand on our papers with respect to the unmodified
17 argument.

18 JUDGE HUDALLA: Okay. Thank you.

19 MS. BIRBACH: And Patent Owner again, to your question earlier,
20 Patent Owner argues that this bottom plate is not a constricted convection
21 plate because it believes that this plate is the posterior surface of the display.
22 But based on Petitioner's identification of the components in Na in line with
23 the requirements of the claims themselves and the specification, this bottom
24 plate is not part of the display assembly that's required and therefore is a
25 separate component from the constricted convection plate.

1 Claim 1 also requires an outer housing and we have an obviousness
2 argument based on Kim for that limitation. Patent Owner does not dispute
3 that limitation with respect to the '595 Patent claim 1.

4 JUDGE HUDALLA: So you're, if I'm -- I guess I'm getting a little
5 confused by this but, you're saying I don't even have to get to the part where
6 we're not modify -- modifying or not modifying this bottom plate because
7 you're saying that your identification is different from Patent Owner's in the
8 first place. Is that right?

9 MS. BIRBACH: Patent Owner preliminarily argues that the
10 identification of the components would be different in terms of what is the --
11 where the posterior service of the electronic display is. That's their primary
12 argument. I believe they have additional arguments that even in Petitioner's
13 identification is accepted there are additional reasons why Na's bottom plate
14 (210) would not meet the claimed constricted convection plate.

15 JUDGE HUDALLA: Okay. Thank you.

16 MS. BIRBACH: But for the reasons discussed with respect to slide
17 52, the -- Na's embodiment and modified embodiment satisfy the
18 requirements of the constricted convention plate and channel limitations.

19 Briefly I will turn to slide 53 with respect to '595 Patent ground 6.
20 The person skilled in the art would have been motivated to combine Na with
21 Hong. As we discussed earlier claim 4 additionally requires a metal core
22 PCB and Hong discloses that limitation. It would have been obvious to
23 combine Na with Hong for similar reasons as we discussed with respect to
24 the combination of Kim and Hong.

25 Turning to '322 Patent ground 6 on slide 54, while Patent Owner does
26 not dispute the motivation to combine Na and Kim with respect to the '595

1 Patent, it does dispute the motivation to combine Na with Kim for the '322
2 patent. Claim 7 additionally requires a housing element. Kim discloses that
3 element which Patent Owner does not dispute. Patent Owner simply
4 disputes the motivation.

5 The person of skill in the art would have recognized that housings
6 were well known and that LCD displays were typically enclosed in housings
7 like the one disclosed by Kim. The person of skill in the art would have
8 further been motivated to improve Na's system by including an outer
9 housing in order to protect some of the components from exposure to
10 ambient air. The addition of the housing's also a routine and simple
11 modification.

12 I'll now turn to our final reference on slide 56 which is the Kimura
13 reference. There are four grounds in validity for the '322 Patent based on
14 Kimura and other references.

15 Starting with claim 9 on slide 57, Patent Owner does not dispute that
16 Kimura discloses a system for cooling an electronic display comprising a
17 front surface and a posterior surface where no electronics are mounted to the
18 posterior electronic display but disputes the other limitations.

19 First, turning to slide 58, Kimura's driving circuit (19) is the claimed
20 constricted convection plate. At the ITC, the ALJ found that Respondents
21 who are the Petitioners here had shown by clear and convincing evidence
22 that Kimura's driving circuit is a constricted convection plate but found that
23 Respondents had not demonstrated that Kimura's driving circuit covers a
24 majority of the posterior display surface. The record here, however, is
25 different.

1 So first just discussing the constricted convection plate, the person of
2 skill in the art would have understood that Kimura's driving circuit (19) is a
3 plate that confines the constricted air flow between the driving circuit (19)
4 and the rear surface of the backlight unit (18). And this is reflected in the
5 arrows that we see in figure 9 of the Kimura reference. This again is a cross
6 section, and these arrows are provided by the original figure 9.

7 The person of skill in the art would have understood from the length
8 of cooling fan (20) which runs across the entire width of the LCD panel to
9 reflect the sides of the backlight unit (18) and the driving circuitry (19). So
10 Petitioner's expert, Mr. Smith-Gillespie, opines that the person of skill in the
11 art would have understood that Kimura's air flow design facilitates a driving
12 circuit (19) that covers the majority of the posterior display surface without
13 generating overheat -- without overheating the display.

14 But in the alternative, turning to slide 59, Mr. Smith-Gillespie opined
15 in this proceeding that the person of skill in the art would have been
16 motivated to optimize the display cooling capabilities by enlarging the
17 driving circuit (19) to cover the entire rear surface of the display so that the
18 entire backlight unit is cooled uniformly with the reasonable expectation of
19 success.

20 JUDGE HUDALLA: Is this, paragraph 274 on demonstrative 59
21 here, is this something that was not in front of the ALJ?

22 MS. BIRBACH: That's correct.

23 JUDGE HUDALLA: That's different? Okay.

24 MS. BIRBACH: The ALJ found that Mr. Smith-Gillespie, at the
25 hearing for the ITC, had not opined that it would have been obvious to
26 enlarge the driving circuit to cover the majority of the posterior display

1 surface. In this proceeding Mr. Smith-Gillespie has expressly provided that
2 opinion.

3 JUDGE HUDALLA: And that hasn't been countered by Patent
4 Owner at all?

5 MS. BIRBACH: I believe they dispute his opinions, but I do not -- I -
6 -

7 JUDGE HUDALLA: Okay.

8 MS. BIRBACH: We'll see.

9 JUDGE HUDALLA: We'll ask them to talk about that then. Thank
10 you.

11 MS. BIRBACH: Kimura also discloses the claims means for forcing
12 air. The parties agree, and the board agreed in its institution decision that
13 the means for forcing air through the constricted convection channel
14 limitation is a means plus function limitation where the recited function is
15 forcing air through the constricted convection channel and the corresponding
16 structure to perform this function is one or more fans or an air conditioning
17 unit.

18 Kimura discloses the structure and function. It clearly has a fan that is
19 element (20) that forces air through the constricted convection channel.
20 Even though Patent Owner agrees to the construction in its papers it tries to
21 read in additional structural requirements arguing that Kimura's fan is
22 different from those in the figures of the '322 Patent and that it does not
23 force air into the channel because air flow is divided onto both sides of
24 Kimura's driving circuit which is the constricted convection plate.

25 First of all, there is no requirement that air only be forced into the
26 channel in the agreed function and structure requirements of the

1 construction. There's no dispute that Kimura's fan forces air in between the
2 driving circuit and the backlight. Patent owner also has no support for its
3 argument that air flows in the rear side of the driving circuit. Kimura only
4 shows arrows indicating air flow between the driving circuit and the rear
5 surface of the backlight.

6 Patent Owner's argument is also unsupported because its expert
7 insisted that he had not formed an opinion as to whether air flow is behind
8 the driving circuit.

9 JUDGE KOKOSKI: Counsel, I have a question. I noticed on
10 demonstrative 60 you've got the phrase, "means for forcing air through the
11 constricted convection channel" as being part of claim 9. I don't see that
12 exact terminology in claim 9. I see "means for forcing air through the
13 constricted convection plate in the posterior surface of the electronic
14 display." Does that change your arguments at all or is that just a typo? Can
15 you explain that?

16 MS. BIRBACH: I apologize for the typo. You are correct that the
17 language that you recited is the language in claim 9, but the analysis does
18 not change. The parties have agreed that a constricted convection plate is a
19 plate that forms part of a constricted convection channel and the recited
20 function that we have on this slide is the agreed construction. So even with
21 the limitations as they should have been recited on the claim analysis is not
22 any different.

23 JUDGE KOKOSKI: Okay. Thank you.

24 MS. BIRBACH: Turning to slide 62, claim 13 of the '322 Patent
25 requires a plurality of fans placed near the entrance aperture. Petitioner
26 argues that this is met by the Kimura reference itself, but I want to also

1 briefly address our alternative obviousness argument. The ALJ found that
2 Kimura did not disclose this limitation but found that Mr. Smith-Gillespie's
3 obviousness argument was conclusory.

4 Our position is that his opinion is further developed and that the
5 person of skill in the art would have been motivated to replace Kimura's
6 single fan with the plurality of shorter rotating fans to increase the wind
7 producing area to prevent vane deformation during operation with a
8 reasonable expectation of success. And that's in Mr. Smith-Gillespie's
9 declaration, Exhibit 1002, paragraphs 290 to 294.

10 I want to briefly address ground 10 of the '322 Patent IPR on slide 63.
11 This ground is based on the combination of Kimura and Hong with respect
12 to claims 4 and 7. Patent Owner's only dispute here relates to the motivation
13 to combine Kimura with Hong for the metal core PCB limitation.

14 As we discussed earlier today the person of skill in the art would have
15 been motivated to incorporate Hong's PCB into Kimura's LED for the same
16 reasons we discussed earlier. And again this is claim 4 of the '322 Patent
17 which only requires a PCB, not a metal core PCB.

18 I'd like to briefly discuss secondary considerations. I make take a few
19 minutes of my rebuttal time to do so. Turning to slide 66, as Your Honors
20 are aware, some of the information regarding secondary consideration are in
21 the sealed record so I will not discuss that today since we are on the public
22 record.

23 Patent Owner's evidence of secondary considerations is very weak.
24 All the evidence and arguments of alleged secondary considerations cited by
25 the Patent Owner in these proceedings were presented, evaluated, and
26 rejected in the ITC case. Both the ALJ and the Commission determined that

1 the evidence of alleged secondary considerations could not overcome the
2 strong evidence of obviousness based on the prior art. And that's because
3 Patent Owner consistently failed to show that there's any nexus between the
4 alleged secondary considerations and the claims it mentions. There's no
5 reason why Patent Owner is entitled to a different result here.

6 And I'll start with commercial success which is on slide 70. Patent
7 Owner is not entitled to a presumption of nexus because it has not shown
8 that any Samsung products are coextensive with any challenged claim. With
9 respect to the '322 Patent, Patent Owner only alleges that Samsung's mid-
10 size products are coextensive with claim 9 of the '322 Patent with dependent
11 claims.

12 So importantly, Patent Owner is not seemingly suggesting that it's
13 commercial success evidence is tied to all of the claims of the '322 Patent.
14 Only claim 9 of the '322 Patent and its dependent claims. MRI exclusively
15 relies on conclusory attorney arguments. Its expert, Mr. Gershowitz does
16 not provide any secondary considerations or opinions at all.

17 With respect to claim 9, the ALJ found that Samsung's mid-size
18 products were not infringing so there's no evidence that Samsung practices
19 claim 9 of the '322 Patent. And MRI's course to success argument in the
20 '595 and '322 Patent proceedings is limited to Samsung's alleged success.

21 Similarly with respect to the '595 Patent IPR, MRI only alleges that
22 Samsung's mid-size products are coextensive with claim 1 of the '595 Patent.
23 It does not present an argument with respect to the other '595 Patent claims
24 that are challenged in this proceeding.

25 MRI's allegations are limited to a conclusory statement based solely
26 on attorney argument. Neither MRI nor its expert has compared the claimed

1 and unclaimed features of Samsung's products with respect to claim 1.
2 Samsung's mid-size products are coextensive with claim 1. Claim 1 of the
3 '595 Patent is directed to a system for cooling an electronic display.

4 Samsung does not sell display cooling systems. It sells display
5 systems with a wide variety of features, some of which are included on slide
6 70 from Exhibit 2038. Even if Samsung practices claim 1, the cooling
7 systems in its display products are not limited to the features that are recited
8 in claim 1. Samsung's thermal management systems in its mid-size products
9 include additional features and cooling structures. While these features are
10 confidential business information, they can be seen in Exhibit 2038, page 18
11 which is also duplicated on page 71 of Patent Owner's response in the '595
12 Patent proceedings.

13 For these reasons MRI is not entitled to any presumption of nexus
14 based on coextensiveness. MRI has also not shown that the cooling systems
15 in Samsung's products drive sales.

16 MRI points to a large customer presentation that includes features of
17 Samsung's thermal management system which is Exhibit 2038 as evidence
18 of a thermal management system being important to customers. But Exhibit
19 2038 is a 178 page PowerPoint that includes discussion of Samsung's
20 thermal management system omits discussion of many other features. And
21 slide 70, which excerpts page 7 of that presentation provides some, an
22 overview of those many features.

23 As can be seen on page 7 of Exhibit 2038 and the remainder of the
24 PowerPoint which is under seal, customers choose Samsung products for a
25 large variety of reasons. This is also reflected in in Patent Owner's Exhibit

1 2028 on page 24 that reflects some of the reasons that customers choose
2 Samsung including brand recognition.

3 With that, I will address the remainder of secondary considerations in
4 my rebuttal.

5 JUDGE HUDALLA: Okay.

6 MS. BIRBACH: Unless there are further questions.

7 JUDGE HUDALLA: I don't think so. So I think you'll have 28
8 minutes left, probably.

9 MS. BIRBACH: Thank you.

10 JUDGE HUDALLA: I'll turn it to Mr. Alemanni.

11 MR. ALEMANNI: Thank you.

12 JUDGE HUDALLA: Would you like to reserve some rebuttal time?

13 MR. ALEMANNI: I would, Your Honor. I'm likely to take a bit
14 more time. I'm guessing between Mr. Reed and myself it will probably be
15 about 80 minutes and we'll reserve about 10 minutes for rebuttal.

16 JUDGE HUDALLA: Okay.

17 MR. ALEMANNI: Let me get back to the cover just for a second.
18 Great. Thank you. I'm ready when you are, Your Honor.

19 JUDGE HUDALLA: You can begin.

20 MR. ALEMANNI: Great. Thank you.

21 My name again is John Alemanni. I'm here on behalf of MRI with
22 Kilpatrick Townsend. I've got my team with me. David Reed will be
23 arguing, Carl Sanders, Matthew Meyer. We also have John Harris, that's
24 another colleague. Mike Brown's here with MRI. I appreciate your time
25 this morning. I appreciate your attention.

1 So as we all know, it's Samsung's burden to show that the claims are
2 invalid. They fail to carry it. I'm going to demonstrate to you that every
3 primary reference in which they rely is missing at least two elements from
4 the claims that they're challenging. There's more, in some of the places I'll
5 actually show you that there's more. But there's at least two for every
6 reference.

7 Mr. Reed's going to get up, he's going to demonstrate to you that the
8 secondary considerations here are overwhelming. Particularly here where
9 you've got competitors, we're all sitting here. You've got actions, you've got
10 communications that are specific to them. It's not sort of a disconnected
11 secondary considerations case.

12 And when you put those all together, you put this really weak prior art
13 case together with a really strong secondary considerations case, you're
14 going to find the claims are valid. So with that let me go forward.

15 I think it probably makes sense to give you just a little bit of context
16 on the patents. Can we bring up Exhibit 1001? And I'm going to talk
17 primarily about the '595 record. At the very end when I talk about Kimura
18 I'll switch over to '322. So this is the patent, Will Dunn's inventor. Okay.
19 So Mr. Dunn did not discover that electronics get hot, right. He didn't
20 discover that you've got to cool them to make it work.

21 What he says in the patent is, if you go to column 1 which is page 13
22 of the PDF please, and let's go down to lines 52 to 55. So what he says is,
23 conductive and convective heat transfer systems for electronic displays are
24 known. Right. They're known. The way they work is to get air in and out
25 through as many side walls as possible. Right.

1 And so you see this on like Kim and Na, it's Swiss cheese in the back,
2 right. You cut as many slits or holes or whatever you can, and you add fans,
3 and you continuously sort of circulate air through that Swiss cheese to try to
4 make -- to try to get the things cool. So that's the prior art.

5 Takeuchi's that to an extent, I'll explain it when I get to Takeuchi. If
6 we go to column 2, which is the next one over. Let's go to 8 through 10, I
7 mean 8 through 11, excuse me.

8 So he says, you know, what do they do, they get air in through that
9 Swiss cheese, they cool the entire back of the display. So again, you're
10 trying to get as much air as possible behind the display and then you
11 exchange that air. That's prior art.

12 And so what does he say that you do? Well counter intuitively, his
13 idea is, instead of maximizing the volume of air, you constrict it. You
14 constrain it. You create a small volume of air. The way you do that is
15 through a channel. So you create a channel, right, that can take the air. You
16 have air flow. Judge Hudalla, you were asking the question earlier, is this
17 about air flow. Absolutely. You're creating a channel through which the air
18 flows.

19 If we go to the next page, column 3 lines 2 through 5. It says, what
20 you do, is you create this channel, and then you use fans. And what you're
21 able to do is draw a substantially uniform flow of air from the entrance to the
22 exit. And that's where the cooling comes from. No Swiss cheese, no taking
23 fans and just throwing as much air as you can at it. You constrain it. You
24 constrict it. You create a channel. And then you blow air through that.

25 So that's the problem. That's the solution. And luckily for me, which
26 makes my job easier, this is in the claims, and it's clearly in the claims. So if

1 we go to slide 4, right. It says a system for cooling an electronic display. It
2 has a posterior display surface, and it has a housing.

3 Now there was some noise in the briefing about whether or not the
4 preamble is limiting. It's clearly limiting here. Why these are joined in the
5 dispute on those terms. The terms in the preamble are carried down in the
6 body of the claim. So it is limiting. I don't think there's really a dispute
7 about that.

8 And so you have a constricted convection plate, right, posterior -- to
9 the posterior display surface. You've got a little patent language, right.
10 You've got the back of the display, you have a plate behind it, and then you
11 have side panels. So you create a channel. And then what you do is you
12 have a fan down there and you push air through the channel. That's how you
13 cool the device.

14 If we go to slide 5 just briefly. This is claim 9. I think Judge Kokoski
15 asked about this question, I hope I pronounced that correctly. So this claim
16 doesn't include the channel, it doesn't say channel. But if we go to
17 Petitioner's slide 7, I don't think they brought this up. They actually put a
18 good slide together, it's easy.

19 So these are claim constructions. You'll see the first term, they gave a
20 construction for the first term, we said plate and -- it doesn't matter because
21 their construction doesn't say anything about constricted or channel. And as
22 Your Honors know, that's where the dispute lies. It really doesn't have to do
23 with heat. I mean these things all do deal with heat in one way, shape, or
24 form. So that's why we said we didn't think that was particularly helpful.

25 But for the constricted convection plate we both agree, and Samsung
26 said it today as well, that the constricted convection plate must define a

1 channel. So it's a little bit different wording. And the claim structure is a
2 little bit different, but you do have to have the channel with all of the claims.

3 With that let me go to Takeuchi. And I think unfortunately it's helpful
4 for me to try to describe this reference because I think that gives you context
5 for understanding what both sides' arguments are.

6 Can you bring up 1005 -- 4 from the '595 record? This is Takeuchi.

7 So this is a unique reference, right. When I like picked it up and
8 looked at it, you see NGK Insulators as an assignee. When I think about
9 displays, when I think about TV's, I think about Samsung, I think about LG.
10 When you look at our prior art, Kim and Na are Samsung references.

11 There's an LG reference. This is NGK Insulators. It's a ceramics company.

12 When you look through the disclosure of the reference you see
13 references to Zirconia and Piezoelectrics and you see all of these things
14 about what the light guide plate is made out of, transparent ceramics, right.
15 There's all these references that aren't what you would think of when
16 normally look at an LED LCD reference.

17 It's a different kind of reference. It's not one of the companies that
18 you'd typically expect to be looking at. It's one of those classically, one of
19 these things is not like the others, right.

20 And so let's go to -- actually I think I can do the through the slide.
21 Let's go to slide 10. What I'm going to do is show you figure 1, 2, 3. And
22 I'll note, contrary to Samsung's argument today, and I didn't understand that
23 they were making this argument although it may be in the briefing, I'm not
24 saying it's new.

25 So when you look at these figures, all the numbers are the same. All
26 right. When you go one, two, three, four, five, and you look at the numbers

1 you have the same numbers and each of these figures that refer to the same
2 things. So when we see frame 3 in figure 1, right, there's a frame 3 in figure
3 5 it's just not what that thing is pointing to.

4 So let me show you this. Let's go to figure 1, let's blow it up a little
5 bit. So figure 1, you've got lights on the outside, right, we made them
6 yellow. You have cooling fans, 15a,b which is right in the middle of those
7 lights, the light source. The idea is that those lights shine down through the
8 panels, right. They shine down through the panels, you don't see anything
9 and I'm going to explain how you see something in a second, right.

10 And then if you look at the front, we've color coded this, the blue is
11 the display's light guide plate, blue. And then inside that is 3 which is the
12 frame. We're going to talk a little bit more about the frame as we go
13 forward. So outside blue, the light guide panel, then inside that the frame.

14 Let's go to figure 2 which is on the left hand side. So you have to
15 picture this, you take the display, you kind of turn it, right. That's what
16 we're looking at. So you see blue again. And then you see the thing behind,
17 what's behind the light guide plate. These are these panels. So Samsung's
18 pointed to the two that are sort of to the right, 16 and 17. They say 16, 17,
19 and 1 are the display.

20 Then if you look to the left here you see frame 3. Okay. Same thing
21 you saw in figure 1. So then the question is well, how does this thing
22 display anything. Let's go to slide 8. Can you blow up the thing on the
23 right?

24 So figure 1, 2, 3. This is the third figure. Same numbers, okay. It
25 doesn't show the frame I don't think in this one, but you see the panels, you

1 see the references to 16 at the bottom. Bottom right it says 16. So we're still
2 in the same place except you're seeing the inside. So how does it display?

3 So the lights going down through the light guide plate, or through
4 these panels, right. If you want something to display, you pop the actuator
5 against the front. Light's reflected out, you see a pixel. Does that make --
6 okay. If there's no questions then let me move on.

7 So I'm going to show you four elements that Takeuchi does not
8 disclose. I'm going to start with the easiest one first which is contained
9 within a housing. I showed you the claim, it says the display, the electronic
10 display has to be contained within a housing. Samsung hasn't shown that.
11 In fact, I mean we pointed this out in page 28 of our response. They're really
12 relying on a typo. And so I thought when we pointed that out in our
13 response that they were relying on a typo that they would back off of this
14 reference like they did Cho.

15 But instead they doubled down and said well, we're just going to -- the
16 figures are different. So I think that's an interesting -- well anyways, we
17 disagree. Let me just say that.

18 Slide 9 please. So this is their diagram. If you -- can you blow up the
19 picture -- this is from the petition on 24-25. I'm going to blow up the picture
20 just a little bit. This is the same thing they showed you.

21 So this is figure 5, right. And you see 3 up there, so 15 a and b to the
22 left, that label stands. It's the same 15a, 15b that I showed you in figure 1.
23 It's fans. And that's pointing to where the fans are. And then you see 3, up
24 at the top right and it's pointing to the same thing, the fans.

1 If you look back behind where the blue is, you see all those panels.
2 So we know 3 is the outermost panel and then you go 16, 17, right, and then
3 you have 3 at the bottom. Because 3 is the frame of those panels. Right.

4 So that's a typo. That doesn't work, 3 doesn't surround it. And even
5 here, they identify 1, 16, and 17 as electronic display. Claim is contained
6 within a housing. 3 is offset to the back. There's no way 3 contains panel 1,
7 right.

8 Their second argument is well, you've got 51 and 51 completely
9 covers the back of the light guide plate and the panels. Okay. That's not
10 what the claim says. My hands are roughly the same size, right, I mean
11 generally. My right hand when they're back to back covers my left hand. It
12 does not contain my left hand. It's a different thing.

13 The claim requires that the housing contain the display. By
14 Samsung's own argument, 1, 16, and 17 are the display. Rear cover 51 does
15 not contain the housing. I'm sorry, does not contain the display therefore it
16 can't be the recited housing. So Samsung fails on that basis.

17 Let me give you the second one. The second one has to do with
18 electronic display unless there are any questions.

19 JUDGE HUDALLA: Well I was going to ask, it didn't seem like, at
20 least in your papers, I didn't see you arguing, kind of arguing against the rear
21 case like you're talking about now. At least that wasn't my impression
22 reading it. So you do now dispute that the rear cover 51 is a housing on its
23 own?

24 MR. ALEMANNI: I mean, you can call it a housing I guess if you
25 wanted to, it doesn't matter but it doesn't contain the display. Our
26 argument's been that it doesn't contain what they identify as the display.

1 I don't think it matters -- I don't think the semantics of it matter. I
2 think the problem is the claim doesn't just say a housing, it says a housing
3 that contains the electronic display. So by the words in the claim it can't
4 meet it.

5 JUDGE HUDALLA: And so if it's just -- if this rear cover 51 is just
6 at the back of the display it doesn't have -- basically it's like a flat plane
7 essentially, that --

8 MR. ALEMANNI: Well I don't know if it's flat but yes, Your Honor.
9 I --

10 JUDGE HUDALLA: Let's just assume it's a flat plane.

11 MR. ALEMANNI: Yes.

12 JUDGE HUDALLA: So you're saying that wouldn't be a housing
13 containing the display then?

14 MR. ALEMANNI: No. I mean for the same reason my right hand
15 can't contain my left hand. At least not like this, right. It's just -- it just
16 covers. It's not containing. Like that would be more contained.

17 JUDGE HUDALLA: And you've argued this in your papers.
18 Because I --

19 MR. ALEMANNI: I think so.
20 Do we have a -- can you give me a specific cite?
21 I'll ask my team to give you a cite.

22 JUDGE HUDALLA: That would be great.

23 MR. ALEMANNI: I mean this is the argument we're trying to make.
24 If it's not clear, I apologize. But, yeah.

1 And they say completely covers in their briefing. They don't say
2 contains. I think they use the term resides, and completely covers, but not
3 contains.

4 JUDGE HUDALLA: So regardless of whether we agree with your, I
5 guess your frame 3 argument which seems to be -- I think they kind of
6 walked away from that in their Petitioner reply.

7 MR. ALEMANNI: They did, yes.

8 JUDGE HUDALLA: You still think there's an argument here to be
9 made that undermines their mapping, I guess.

10 MR. ALEMANNI: I mean, yeah. Absolutely. I don't think that --
11 that is not a housing that contains a display. At least not as they've defined
12 it.

13 JUDGE HUDALLA: Okay. Thank you.

14 MR. ALEMANNI: Okay. I mean, we can --

15 JUDGE LEE: Can I follow up?

16 MR. ALEMANNI: Yes, sir.

17 JUDGE LEE: It's Judge Lee. At some point in the argument it breaks
18 down, but I'm not sure where because if you have -- all you're talking about
19 is containment, right? So you can have a housing that holds something, but
20 it's not capped. It's open top, right. You would still say that contains the
21 components in it even though it's got the top open, correct?

22 MR. ALEMANNI: I mean, I would say that -- you're asking me to get
23 to the very extent. I mean the record is this, this is definitely isn't it. If you
24 tell me that the thing that you're identifying maybe goes around everything
25 but the front, right. Because you've got a display --

26 JUDGE LEE: Right.

1 MR. ALEMANNI: -- you can't cover that.

2 JUDGE LEE: I mean that's the example --

3 MR. ALEMANNI: That could be a housing.

4 JUDGE LEE: Yeah. Exactly.

5 MR. ALEMANNI: Just so it's on the back.

6 JUDGE LEE: But at some point it stops being a housing when you
7 take away, piece by piece you know. You take away one of the four walls --

8 MR. ALEMANNI: Right.

9 JUDGE LEE: -- is that still a housing?

10 MR. ALEMANNI: I mean, well it depends which wall, right? If you
11 take away the back one, no. If you -- probably.

12 JUDGE LEE: Well my question is, how many do you take away
13 before it stops being a housing?

14 MR. ALEMANNI: Well on this one you're taking away three of
15 them, right. You've only got the back.

16 JUDGE LEE: So I'm just hypothetically saying you know, if you take
17 one away, another one, do you have an -- I mean, when does this stop
18 becoming a housing?

19 MR. ALEMANNI: When it doesn't contain the display -- well in
20 terms of the claims, when it stops containing the display.

21 JUDGE LEE: Yeah, well if you take away one --

22 MR. ALEMANNI: So if you've got to identify this as a display.

23 JUDGE LEE: -- one, is that still a housing?

24 MR. ALEMANNI: What's that?

25 JUDGE LEE: If you have like a box.

26 MR. ALEMANNI: Yeah.

1 JUDGE LEE: It has no top. And then, okay, you said that probably
2 still is a housing.

3 MR. ALEMANNI: Yeah. Yeah. So you're saying basically if a
4 display were like dropped in it so I could see it out the front?

5 JUDGE LEE: Right.

6 MR. ALEMANNI: Yeah. I think that's a housing.

7 JUDGE LEE: Yeah. So then I take away one side. Then is that still a
8 housing?

9 MR. ALEMANNI: Well you just took away one side, you mean
10 another side?

11 JUDGE LEE: Yeah. There's still three sides left.

12 MR. ALEMANNI: Yeah, I mean I don't know. I guess it would
13 depend on -- I'd have to see it. I guess maybe, maybe not. I'm not sure.

14 JUDGE LEE: Maybe not. So at some point it just stops completely
15 being a housing.

16 MR. ALEMANNI: Yeah, like this.

17 JUDGE LEE: Because they only have one side that would be in your
18 view, completely not a housing.

19 MR. ALEMANNI: Right. Right. And this is in our sur-reply pages 3
20 and 4.

21 JUDGE LEE: Okay.

22 MR. ALEMANNI: I'm assured.

23 JUDGE HUDALLA: Sur-reply 3 to 4.

24 MR. ALEMANNI: Page 3 through 4.

25 JUDGE HUDALLA: Yeah, because I was looking at the reply. I
26 didn't necessarily see this argument, but I'll check it out.

1 MR. ALEMANNI: The sur-reply.

2 JUDGE HUDALLA: Yeah. I just looked in the index. Excuse me, I
3 looked in the response. I didn't see that argument. I'll look in the sur-reply
4 too.

5 MR. ALEMANNI: Yeah. And I think you heard the argument shift a
6 little bit between the petition and the reply. And so we're kind of dealing
7 with the shifted arguments about figure 5 being somehow different then the
8 rest of the figures and all that. I agree, the arguments in both papers kind of
9 move a little bit as we go.

10 So let me give you -- let me move on. Let me move to 2, electronic
11 housing. So we -- I'm sorry, electronic display. So you got a preview of this
12 argument.

13 The whole point of Takeuchi, it's sort of unique, it talks about it's not
14 an LCD, it's not an LED, you can make it big because you've got these
15 actuators. Then they say the problem is the actuators generate a bunch of
16 heat. And so these mechanical components generate a bunch of heat. If we
17 pull up, this is Exhibit 1004, it's paragraph 8, page 9 of the PDF.

18 It's page 9 of the PDF, top right column. There we go.

19 So what Takeuchi says, this is actually the bottom of the column
20 before now, but it's paragraph 8. The inventors found that heat generation
21 occurs in the display, this display, particular display by the displacement
22 operations, by the actuators and by the contact between the actuators and the
23 light guide panel or the panel.

24 And then they say in paragraph 10, which is a little bit further down,
25 that the whole point is to effectually cool the actuators and light guide plate.
26 All right.

1 So Samsung has said a couple times well, Mr. Gershowitz agrees with
2 us, and anything can be electronic. That's not what he said. His testimony's
3 in paragraphs 55 through 64 of Exhibit 2006. He says, this particular display
4 -- and I don't disagree that there's one off you know, one word or two word
5 sentences in Takeuchi that says there's drive circuits somewhere in there. It
6 says that.

7 The whole focus of this though is on the mechanical components.
8 Those actuators bumping against the panel and making heat. And that's
9 what they're trying to cool. In fact, for the light guide, which is something
10 you tried in other types of displays, they cool those with fans. All right. So
11 they've already dealt with that.

12 JUDGE HUDALLA: By this line of argument, are you getting to this
13 electromechanical versus electronic issue?

14 MR. ALEMANNI: Yeah. This isn't electronic display. I mean I
15 would say it's akin to my car. You know I drive a 15-year-old station
16 wagon, it's got a computer. It's not an electronic car or, I'm not a watch guy
17 so I've got a fairly inexpensive analog watch. Right. It's certainly got a
18 driving circuit in it and a battery. I mean, it's electrical, it's got something in
19 it. It's not an electronic watch. It's not an iWatch.

20 Mr. Gershowitz explained why this is not an electronic display. And
21 when you look at the record and you look at the evidence. You look at what
22 Mr. Smith-Gillespie says. He says it's an electronic display. Period. And
23 then he has this fall back. It's in a footnote. And I don't have the -- oh, I do
24 have the cite. It's paragraph 105 of his declaration 102. It's on page 7. He
25 says well, even if this isn't an electronic display, the challenged patents say

1 that the invention of Mr. Dunn would apply to displays that have not yet
2 been discovered.

3 But of course that cannot apply to Takeuchi because it's prior art. One
4 of skill in the art would have known about it, right. So I think they feel the
5 weakness here and so they tried to fall back on this saying well the bang can
6 be -- and they say it today, it can be anything.

7 But it's not an electronic display. Mr. Gershowitz explains it. It has
8 electronics, there are some electronics to it, it does work with electricity, we
9 don't dispute that. But as Mr. Gershowitz explained, and as we've already --
10 it's just not an electronic display. So that's the second reason, second thing
11 in the claim that this didn't show.

12 Okay. Let me give you the third one.

13 JUDGE LEE: Mr. Alemanni, it's Judge Lee. But why is the thin film
14 or transistor layer the determinative part to say well if you have that it's an
15 electronic display but if you don't have that it's not?

16 MR. ALEMANNI: I mean you're asking me if that one element
17 converts it, the TFT array, or the TFT matrix behind the LCD? I don't think
18 that's the determining factor. I think Mr. Gershowitz explains this. He goes
19 through and says, and I think in the context of Takeuchi it makes a lot of
20 sense.

21 When one of skill of the art looks at this they think, this isn't an LED,
22 it's not an LCD, it's not even a CRT. It's something different. They pick up
23 the Takeuchi reference they go okay, this is NGK which I don't think of as
24 LG or Samsung or Vizio or whatever. It's a different company. They say
25 it's unique. They say it's different than an LCD, LED. And then you look at

1 how it works, it work through mechanical actuation through actuators. It's
2 not an electronic display.

3 I don't know that I can give you the absolute metes and bounds in
4 every situation but in this record, in this case, Takeuchi is a non-electronic
5 display. Samsung displays are you know, other things we see, the Kim
6 reference, the Na reference, the Kimura reference --

7 JUDGE HUDALLA: This line of argument though almost sounds
8 like you're saying the art is not analogous. I mean, would you go that far?

9 MR. ALEMANNI: I mean for the purposes of this, I think that's
10 probably a new argument. We said one with skill would turn to it. We
11 didn't actually flesh that out into the factors that you'd look at for analogous
12 art.

13 I mean it says display. So would one of skill of the art pick it up?
14 Maybe, maybe. It's just when they read the thing. I mean it's one of those
15 references, it says display, you pick it up going oh, okay, maybe it's relevant.
16 And then you start reading it and you're like, wait a second. This is
17 completely different. They're trying to cool the actuators.

18 So my point is you have to read the reference as a whole. As you all
19 know, when you read the reference as a whole it's clear that they're not
20 worried about the electronics, they're dealing with electro mechanical
21 portions and the display itself is electro mechanical.

22 JUDGE HUDALLA: Okay.

23 MR. ALEMANNI: And also the third reason, right, any one of these
24 reasons is enough to knock this ground out. I'm going to give you the third
25 reason. There's no constricted convection channel.

26 Let's go to slide 13. It's on the screen. Down. Thirteen. Thank you.

1 We talked a little bit about this. Actually I'm going to talk about
2 channel. So we don't think channel needs to be construed. I don't think
3 either party offered a construction. I do think this term is a good place to
4 contrast Mr. Smith-Gillespie's testimony with Mr. Gershowitz's though, so
5 I'd like to bring up Exhibit 2006, paragraph 75. It starts on page 42 of the
6 PDF. It's at the very bottom. It starts talking about the channel. Yeah.
7 Thank you. That's perfect.

8 I'm not going to read this whole thing to you, but Mr. Gershowitz goes
9 through, he's talking about Takeuchi here, right. He says, one of skill in the
10 art would understand that a channel's a path where heat transfer fluid can
11 flow and then it travels from a source to a destination. Right. It's
12 directional. It travels from a source to a destination.

13 And he says, you know, this is just how one of skill in the art would
14 understand it. It's perfectly consistent with dictionary definitions. And so he
15 brings out a dictionary definition next and he says, dictionary defines a
16 channel as a narrow gap or passage, a tubular passage or duct for liquid.
17 And so a person of skill in the art would understand that the channel is
18 enclosed in the cross section, right. It's a channel. It flows from the
19 entrance to the exit.

20 And it's all about the air flow. So the flow, the air flow is directed
21 from the entrance to the exit. And then later in this paragraph he's talking
22 about Takeuchi specifically. I'm not going to go into that, but let me pull up
23 Exhibit 1002, page 141 of the PDF. This is paragraph 76 of Mr. Smith-
24 Gillespie's, and to be fair this is his summary.

25 But he never gives you a definition of constricted convection channel.
26 I think this may be his claim construction section. Yeah, this is claim

1 construction. So he just says, I understand the district court construed it, and
2 I've applied it. So he doesn't give you any context, any understanding what
3 that term really means.

4 And I think that's a problem because when you look at these Swiss
5 cheese references particularly, there's just no channel. There's nothing there
6 that controls the flow.

7 And so let me go, let me go to Petitioner's slide 17 just briefly. Yeah.

8 I just -- so I think the way it was argued was fine. This figure on the
9 right side in the record that way where it says entrance and exit with just one
10 word, entrance and exit. I just want to make clear if you look at this that
11 everybody I think agrees that Takeuchi has multiple entrances. Mr. Smith-
12 Gillespie testified to that. I don't think anyone's argued that there's a single
13 entrance in Takeuchi, so I just want to make that clear.

14 But I think she argued it that way, I don't think -- I don't think it's a
15 new argument, it just looked different to me when I saw it.

16 Can we go to our slide 13? So Takeuchi has multiple entrances, right,
17 in the back. For the thing we can see, it has multiple entrances. Takeuchi
18 explains why it has multiple entrances. It says, this is paragraph 41, the
19 additional intake vent with the fine filter 55b in the middle portion of the
20 partition plate allows fresh ambient air to be supplied to uniformly cool the
21 back.

22 That's prior art. All right, that's get in as much air in as possible and
23 then blow it out. It's not a uniform flow from bottom to top, doesn't
24 maintain the flow. It brings in ambient air because I think their concern is
25 they can't keep the thing cool enough. Right, it's not quite Swiss cheese but
26 it's also not a channel.

1 It's a good picture when you first look at it but when you see how big
2 those openings are you realize it doesn't work. So that's another reason why
3 this doesn't render the claims obvious.

4 JUDGE HUDALLA: So I mean where do we draw the line then? Is
5 it zero holes in the back? I mean --

6 MR. ALEMANNI: No, no, no. No, not at all. I think it's all about air
7 flow as you mentioned earlier. It's all about the air flow. So we mentioned
8 in the patent, and Mr. Gershowitz talks about this. You can have apertures
9 in the back. And if they're small enough that they don't disrupt the air flow
10 you know, I guess like eye glass screws, or something tiny. I don't know
11 how you do it exactly. They're small enough so they don't disrupt the air
12 flow, this is in column 6 of the patent, then it's fine. But then you may want
13 to plug them. And Mr. Gershowitz explains in his declaration that the
14 reason you plug them is if they're going to disrupt the air flow.

15 So if they get big then you plug them. As long as they're small it's
16 okay. The whole idea is air flow. It's how do you keep that air flow
17 consistent.

18 JUDGE HUDALLA: I mean, any hole would disrupt the air flow to
19 some extent if there's a fan drawing in air, wouldn't it?

20 MR. ALEMANNI: I think the answer is, I mean I'm not an expert. I
21 think the answer is no. Mr. Gershowitz testified that if they're small enough
22 they don't disrupt it, at least not significantly enough to affect the invention.

23 JUDGE HUDALLA: Well see, that's the -- I think that's the problem.
24 You're saying not significantly enough. How are we supposed to draw a line
25 there? I mean that seems --

1 MR. ALEMANNI: Well you know this does. You know this does
2 because it pulls -- it's meant to pull in ambient air. It's not meant to be an
3 access aperture. It's meant to pull in ambient air. So you can draw the line
4 there and say you know that one doesn't work.

5 JUDGE HUDALLA: So I have to look at the purpose of the holes
6 then, is that what you're alleging?

7 MR. ALEMANNI: Well I mean, the purpose is that you'd have to still
8 have a channel. And if you have air coming in all over the place like Swiss
9 cheese or purposely to bring in ambient air partway through because you're
10 not confident that you can cool the channel with what you started with, then
11 you're disrupting the flow of air from the entrance to the exit. You don't
12 have a channel anymore.

13 JUDGE HUDALLA: Don't we have testimony from both declarants
14 though saying there is a prevailing flow of air in Takeuchi?

15 MR. ALEMANNI: Well yeah, and there is a flow of air it's just when
16 you get halfway up it replaces the air that was in there with ambient air or at
17 least to some degree, right. It says it brings ambient air in so it must be
18 exchanging it. So you're losing the channel at that point. You've got another
19 entrance that's designed to bring in air. It's not an access aperture, it's not
20 designed to just be -- to not disrupt the air.

21 JUDGE HUDALLA: It's that --

22 MR. ALEMANNI: I'm not saying it absolutely has to not disrupt the
23 air, but.

24 JUDGE HUDALLA: I keep hearing you say things about the purpose
25 of the holes, like it's meant to do this, it's meant to bring in air. I don't know
26 how we would kind of square that with the language of the claim. Maybe I'll

1 -- I'll just keep listening, but I would like to hear you address that
2 specifically.

3 MR. ALEMANNI: Yeah. I mean, the way I would square it is if
4 you've got a channel and you're trying to have air flow from top to bottom,
5 then when the apertures get big enough that they introduce ambient air and
6 disrupt the flow then that's when you know.

7 So we'd have to look at -- I agree, we can look at particular examples
8 in the '595. There's an example where there are holes on the back, and it
9 says those are fine and if they get bigger you need to plug them.

10 JUDGE HUDALLA: Do we have testimony in the record saying that
11 this prevailing flow I guess from bottom to top in Takeuchi is disruptive in a
12 significant way -- I guess is how you'd say it?

13 MR. ALEMANNI: It's in Mr. Gersohwitz's testimony. I'll them to
14 get -- I'll ask for a cite. I thought I had it in there.

15 JUDGE HUDALLA: Sorry, I keep doing that to you.

16 MR. ALEMANNI: Can you give me a cite for -- I think I already had
17 it -- but Mr. Gershowitz where he talks about the aperture?

18 JUDGE HUDALLA: Thanks. Go ahead, please proceed then.

19 MR. ALEMANNI: Yeah. No. No, I mean I'm here for you
20 obviously, right. So it's your argument.

21 So let me give you the fourth reason why you should decide that
22 Takeuchi doesn't disclose these claims. So there's no side panels, okay.
23 Let's see.

24 Samsung's argument -- this is in slide 19 -- but basically -- let's pull up
25 their slide 19, Petitioner's slide 19. So I guess, highlight the figure.

1 So the first argument is that you have side panels but they're not at the
2 sides, they're at the top and the bottom. The problem is that they're not
3 defining the channel. Right, the channel has to be defined by side panels.
4 Those are on the top and bottom so they're not side panels, they're -- I'm not
5 sure what they are, they're just little pieces of something, thermal insulating
6 material up at the top.

7 So they create the exit, but they don't define the channel. They're not
8 --

9 JUDGE HUDALLA: Can I ask you about that one too? I was
10 actually looking through your secondary consideration section this morning.
11 So it's like, I think it was about page 73 of the Patent Owner response. You
12 talked about certain, I guess it is, of -- let's see -- the context of the tear
13 down evidence from Samsung.

14 You talked about there being four side walls, top, bottom, left, and
15 right. Doesn't that kind of undermine the position that you can't do top and
16 bottom side walls?

17 MR. ALEMANNI: No, that's a good point. That's an excellent point
18 actually. So if you turn that sideways, I think you saw this yesterday. You
19 know I mean, this is upright. But if you turned it sideways you could still
20 have the channel this way, and then it would be top, bottom, back, and forth.

21 But I mean the way the claims are recited and the way I always think
22 about it is you, you know, still have got to around the periphery.

23 JUDGE HUDALLA: Right.

24 MR. ALEMANNI: And so if those were the side panels then you'd
25 see the channel going from across the page, not up and down the page. So
26 yeah, you're definitely right though. That's a good point.

1 JUDGE HUDALLA: Is it your argument though that the air flow,
2 you say the side panels have to be parallel to the air flow, right?

3 MR. ALEMANNI: I mean, yeah. It's the cross section. It's like what
4 Mr. Gershowitz talked about, it's the cross section that's constrained by the
5 side panels, the posterior of the display surface and the convection plate. So
6 --

7 JUDGE HUDALLA: See, that's when I read this, this seems to be
8 somewhat contrary to that. Because obviously you can't have four side walls
9 and all of them be parallel to your air flow, right?

10 MR. ALEMANNI: Well I mean, they're on four different sides. I
11 mean we name something different in the claims, right. We say posterior,
12 then we say posterior again, or we say convection plate posterior to the
13 posterior.

14 JUDGE HUDALLA: I don't know. I just, I read that. I thought that
15 was somewhat inconsistent so.

16 MR. ALEMANNI: So I don't think so. But I think, I mean it sounds
17 inconsistent I agree, because of the terminology, but it's just turned to the
18 side. So you have the four -- you have this, but well, you don't have this.
19 But you have what's in the patent, you just have to turn it sideways I think.

20 I'll have Mr. Reed -- if it's okay I can have Mr. Reed offer more detail.

21 JUDGE HUDALLA: No, you're fine.

22 MR. ALEMANNI: I don't know it as well as he does, but my
23 understanding is that you're just talking about the thing being laid over.

24 JUDGE HUDALLA: Okay.

25 MR. ALEMANNI: Okay.

26 JUDGE HUDALLA: Thank you.

1 MR. ALEMANNI: Okay. So side panels. So I don't think those are
2 side panels for the reasons I said. I think Samsung makes a couple of
3 arguments that I want to address. First in the Petition 27, and I want to
4 address this because it's in the institution decision. They said it again today,
5 side panels on the right and left side of the partition are not shown in the
6 figure. Right, they're not there. We agree. They're not shown.

7 And so the question is, where are they disclosed? First, they said top
8 and bottom, but they say even if not they're on the side you just can't see
9 them. Our argument would be well then, they're not disclosed. You can
10 certainly argue they'd be obvious but they're not there.

11 The second one is if it is disclosed it would have been obvious. And
12 so Mr. Gershowitz testified, this is paragraph 78, he says, okay, so if you're
13 going to create side panels in light of the other disclosure of Takeuchi where
14 you're trying to get ambient air in, then it's likely that you would have some
15 openings in the side as well to get more air in because Takeuchi says getting
16 more air in is better for cooling.

17 So Samsung replied to that. They made two arguments. I think I
18 heard them both today. One is in the reply at 9. They said, well you don't
19 need -- it doesn't need to be enclosed. You don't have to create a channel,
20 right.

21 And that's consistent with our argument about the other -- the Swiss
22 cheese references in Kim and in Na. Their argument is basically as long as
23 you can get air to move in a direction it doesn't matter if it's enclosed, there
24 doesn't have to be a channel.

25 JUDGE HUDALLA: Well that's kind of what the ALJ said too, right.
26 I mean --

1 MR. ALEMANNI: What who said? Sorry.

2 JUDGE HUDALLA: In the ITC, the ALJ said that.

3 MR. ALEMANNI: Yeah. I mean, you may be shocked by this, but
4 we don't agree with the conclusion in the ITC. And I mean, a lot of what I'm
5 explaining today is -- are places where we don't agree. We just think she got
6 it wrong. And it's a little different record, a lot less time than we're spending
7 today, right. But we think she got it wrong, and that's one of the place.

8 JUDGE HUDALLA: Okay. Well again, I'm still at the -- you keep
9 saying Swiss cheese, you know, how many holes is too many holes? How
10 do we decide where the constricted convection plate no longer constricts?
11 And that's what I'm having trouble with right now.

12 MR. ALEMANNI: I mean, I think you'd have to rely on one of skill
13 in the art. You'd have to rely on the testimony in this case. I can't give you
14 a bright line. I can tell you what the patent says, the evidence in this case,
15 which says you can have holes but if they get to a certain size -- well it
16 doesn't say size, right. It says you can have holes, and then you can plug
17 them if you need to. It doesn't, to be fair, explain exactly why but when you
18 read the specification it says you're worried about the air flow through the
19 channel.

20 Mr. Gershowitz says when you take that all together, what that tells
21 you, is if they're big enough to disrupt the air flow then that's when you have
22 a problem. I'm not a fluid dynamic -- I'm just a computer guy. I'm not a
23 fluid dynamics guy. I can't explain to you where this bright line is, but he
24 talks about that. They're giving me the cite, 73, 75, and 78 in Exhibit 2006.

25 I'll do it slower. Exhibit 2006, paragraph 73, 75, and 78. But he
26 walks through that. And we're not asking you to construe it to be they have

1 to be a certain size. We're just looking at it as one in the skill of the art
2 would.

3 So the second argument they made besides the one that it doesn't have
4 to be on all four sides, this is on page 11. They say, well we don't
5 understand what difference it makes if there are filters on the side instead of
6 panels. So it's the same argument. If it's all, if those sides are just all filters
7 then you're just letting air in, right. There's no channel.

8 JUDGE HUDALLA: The filter construct was something you brought
9 into the equation, was it not?

10 MR. ALEMANNI: Well Gershowitz said that. He said, benefit --
11 well -- well, I mean he said that sort of. So Takeuchi doesn't disclose side
12 panels.

13 JUDGE HUDALLA: Right.

14 MR. ALEMANNI: So if you were going to add them, how would you
15 add them? Well you'd look at the rest of Takeuchi which has filters, and I
16 think he said very logically if you're going to have open sides or you're
17 going to close the sides in, you're going to do it the exact same way. You're
18 going to put filters. I think that's a really reasonable way to look at that.

19 Okay. Let's see. So I think that's it. I've given you four claim
20 elements that Takeuchi doesn't disclose in claim 1 of the '595. Any one of
21 them defeats their argument. They're argument's it's obvious. So that's the
22 first one. And I promise I won't take that long on all of these other ones.

23 Let me go to Kim. Exhibit 1005 please, can you bring it up? I just,
24 for each of these I just kind of want to show you what it looks like. So this
25 is Kim. I think it's actually one of Samsung's slides. It's a -- It's a Samsung
26 reference, so this is one of their references.

1 Just to give you a little context, go to page 2. I'm sure you've all seen
2 this. You've seen the record. What Kim's describing is what's sitting in
3 front of you, right. There's six of them on the bench. It's a TV or a
4 computer monitor. Okay. And it's all -- I mean, it's essentially all squished
5 together, it's fairly thin, you can tell that from the diagram.

6 But that's just what it is. When you go to the diagram which is all
7 exploded, I just want to give you some context on what that looks like. So
8 let's go to slide 16. I don't know why I keep looking over there, I've got it in
9 front of me.

10 So this is the diagram we've all seen. Okay. What Kim describes is
11 that air comes in through the back where the X is, bottom right above the
12 119, you see the X going in, right. That's where the air come in. And then
13 where does it go? It goes everywhere. Right. It's got slits. So you see the
14 casing is the far back and then you've got the shield cover that's going to
15 slide out of the backlight. But it's got slits everywhere we can see.

16 So it's Swiss cheese, right? What's the point? Get as much air in as
17 you can through the fan and just get it out. I don't know where it would go
18 most. Like I don't know if you put your hand on it where the air would go.
19 And there's no record, there's no evidence of that. But all it does is it sends
20 the air everywhere. There's no channel, right.

21 I think that's obvious from this. Just having -- it doesn't really have
22 directional flow. I mean, Gershowitz says it goes directionally to all the
23 exits. So it's directional in that it goes everywhere, every direction, but it
24 doesn't go in any particular direction. There's nothing to keep it from going
25 wherever it wants to go. So there's no constricted convection channel.

1 So then the second thing, the second thing it doesn't have, in addition
2 to having Swiss cheese and not having the channel. It doesn't have two side
3 panels. And I'm going to take what I think the three arguments that
4 Samsung raised on this in turn.

5 The first one is they say well, there's a little bit of something on the
6 sides. I guess, go to slide 19, that's where they show this. They said well,
7 there's a little bit of plastic at the top, so that's a side panel, the top and
8 bottom.

9 So the problem with that is it's not really guiding air. I mean it's there,
10 but the air is going out the slits. The air is going out everywhere. So that's
11 not defining a channel.

12 The second argument they make is well, what you could do is you
13 could take one of these monitors and you could make it really wide. Well I
14 shouldn't say really wide. They didn't say really wide. They said you could
15 make it wider, you could back it up. So now it's a thick screen monitor.
16 And then somehow that would cause air -- that would create side panels.

17 They don't explain though what that does to the air flow. They don't
18 understand. They rely on the fact that the casing and the shield cover close
19 to be constrictive given that there's no channel. So then they're going to
20 unrestrict it. That's their second argument. I don't think that one makes
21 any sense in light of what the claims say.

22 And then the third argument they make, and Smith-Gillespie doesn't
23 support it, he just parrots it. The third argument they make is let's see. Slide
24 30. Slide 30 is probably the easiest one. No, I'm sorry that's not the right
25 one. Slide 20, I can't read my own writing.

1 The third argument they make is they say well, there's these tabs on
2 the side, okay. And so again, it's like an Ikea piece of furniture, right,
3 everything goes together. So you slide them together and you've got those
4 tabs on the side, they've got little channels, pretty clear where they go.

5 And so you know, we asked Smith-Gillespie we said, well isn't that
6 where they go? And he said yeah, they meet up. That makes sense. And
7 then if you read, I'll let you read this in the reply. In the reply he says well it
8 was, "clearly that figure shows what it shows but it was clearly mis-made" is
9 how he puts it.

10 So he says well, that doesn't mean what it says because it was clearly
11 mis-made. There should -- I think Samsung made the argument, it actually
12 doesn't slide all the way on even though that's exactly what it looks like.
13 That one of skill in the art would understand there's some way that it doesn't.

14 I don't think there's any support for that. I don't think pointing to the
15 disclosure and saying it's clearly mis-made is really persuasive evidence, but
16 it doesn't show side panels.

17 Let me go to their slide 26. I want to address a couple of arguments
18 they made on this point.

19 JUDGE HUDALLA: Just one question on that. You said the
20 modification they wanted to make, and you called it a thick -- I think a thick
21 monitor or something.

22 MR. ALEMANNI: Yeah.

23 JUDGE HUDALLA: You made an argument about it not being
24 unconstricted at that point. Like what makes something unconstricted versus
25 constricted?

1 MR. ALEMANNI: Well the air flow again. Right. If it's so wide that
2 the air is just sort of going wherever it's going to go then it's not constricted
3 any more. The idea is you constrict it, so you push the air through the
4 channel. The air has to move through the channel.

5 You get it far enough apart, again I'm not a fluid dynamics guy, but I
6 assume the air is just going to sort of sit there. It's not going to be blown out
7 because you've got such a large volume. Maybe it will be blown. I mean,
8 I'm speculating. This is in the record. I don't know. Again, it's based on air
9 flow.

10 The whole lot mentions about air flow and creating this channel. And
11 so if you're pulling it apart, it's exactly the opposite of what the invention's
12 talking about. You're just trying to get more air into the back.

13 JUDGE HUDALLA: But I assume there's probably times where you
14 might have a constricted channel, you can just ever so slightly make it wider,
15 and you'd still have a constricted channel.

16 MR. ALEMANNI: Yeah. Yeah, 100 percent. I agree with that 100
17 percent Your Honor.

18 JUDGE HUDALLA: Okay.

19 MR. ALEMANNI: Yeah. It's all about the air flow.

20 JUDGE HUDALLA: Okay.

21 MR. ALEMANNI: Okay. This still on the right hand side, I just want
22 to point out this. Can you pull it up? This is our expert. Can you zoom in
23 on the right hand side for me? Yeah. Perfect.

24 So they relied on this testimony. They said, well Gershowitz said that
25 it's direction. Right. He said it goes everywhere. It goes every direction.
26 So that doesn't help I don't think.

1 And then 27. This is, this gets to the point that I was trying to make
2 earlier. This is where Mr. Gershowitz -- this is Exhibit 2006, 73. So they
3 talk about the fact that in the ITC they were found to infringe even though
4 they had some holes in the back. The ALJ found that, I assume that may be
5 what drove your question. So I'd have you look at paragraph 73 of Exhibit
6 2006.

7 Mr. Gershowitz says the embodiment for the access apertures are
8 provided. The '595 patent teaches that the apertures may be closed before
9 operation. He says a POSITA wouldn't understand that the integrity of the
10 convection channel can be compromised by these additional openings and so
11 they should be closed before operation.

12 I understand that it doesn't get you to a hard line test about what's too
13 much, but I think that testimony is helpful in illuminating our position, the
14 evidence on which we're relying, and then to judge whether or not
15 Samsung's made its case. And I think we've agreed that it's clear that they
16 haven't.

17 So with that I've shown you two elements that Kim doesn't disclose. I
18 mean, I'm not covering everything in our briefs obviously but those are two
19 elements that that second primary reference doesn't disclose. And it's Swiss
20 Cheese.

21 Kim and Hong, let me -- I'll do this one quickly, so Mr. Reed doesn't
22 get mad at me for taking all of his time. Can you pull up the petition? Paper
23 3 at 55. I'm going to pull up the first full paragraph on petition paper 3. It's
24 63 of the PDF. Yeah, it's the first full paragraph. It starts with POSITA.

25 JUDGE HUDALLA: Yeah.

26 MR. ALEMANNI: You may be able to tell she's done this before.

1 So this is what they said in the petition. And there's two different
2 arguments, I'm going to take them in turn.

3 The first argument was in the petition they said look, a POSITA
4 would have understood the advantage of Kim's methodology for the
5 constricted convection channel, which I've argued it doesn't actually have, to
6 cool the backlight unit. And then modifying it with Hong's metal core PCB
7 for use with high power LEDs.

8 So high power LEDs in Kim. We said look, Kim is just a desktop
9 monitor or TV, the LEDs don't have to be super bright. MCPCBs, it's
10 undisputed, they cost more. They're -- I think she said they were time and
11 cost, and something. I don't think anybody argues that they cost more. They
12 definitely cost more. We've presented evidence. I don't think it's disputed.

13 So what we're saying is if you've got Kim, and it's an indoor display
14 you don't need high power LEDs, so why would someone put high power
15 LEDs and spend the additional money for the MCPCB. And so they backed
16 off that argument. I don't know, maybe they're still pursuing this or -- they
17 backed off that argument.

18 And the argument they made in the reply, this is paper 30 at 16, so
19 paper 30, it's 27 of the PDF. It's the bottom one, yeah.

20 So MRI argues that Samsung's motivation to combine is built on the
21 faulty premise that Kim used high powered LEDs. I would submit to you
22 that that's a fairly good summary of what we argued that that was a faulty
23 argument.

24 So that's right and then they say not so. They say they didn't rely on
25 the high power LEDs. They said instead, Kim discloses there's a need to
26 emit heat. Yes. Kim says you need to cool it. We don't disagree with that.

1 Our argument though is those metal core PCBs are still expensive.
2 You have to provide some rationale, I mean you just KSR every obviousness
3 case. You've got to provide some reason why somebody would spend the
4 extra money. Is there something about Kim that tells you it can get hotter
5 than the Kim in a better spot? I mean, just something. I don't think there's
6 any rationale. I don't think there's an explanation.

7 It's their burden to show that one of skill in the art would take Kim,
8 that's already removing the heat and then put the metal core PCB in it. And
9 that's our argument.

10 I just wanted to make sure it was clear. It sounded a little different
11 based on what they were saying. And the argument changed a little bit from
12 petition to reply. It's in the same ballpark but it's a little different so I just
13 wanted to make sure we had addressed both of them.

14 And then let me -- Kim, Hong, and Takahashi. So Takahashi
15 references -- let me just say this one, I won't pull it up. I mean, the
16 Takahashi reference describes something called an air leak prevention part.
17 Right. So they said well Kim would have wanted an air leak prevention
18 part. The thing is, Kim doesn't try to prevent air leaking. In fact Kim has
19 slits everywhere, right. It's trying to get all the air out it possibly can.

20 So they're argument is you drill bigger holes in it and then you plug
21 them. Our argument is, in a nutshell, that doesn't make any sense. Unless
22 you have any questions about that I'm just going to move on. Okay. I think
23 that was fairly straightforward.

24 I want to go to Na. So Na's another Swiss cheese reference. I think,
25 actually I think your questioning sort of highlighted that. I'm going to go to

1 Na again. So let's go to Exhibit whatever it is, 1010. So this is Na. This is a
2 Samsung reference. Right. Another Samsung reference.

3 So this is sort of their approach. Lots of holes, fans, et cetera. Let's
4 go to the figures. Let's go to page 13 of the PDF. Yeah. So that's the first
5 figure. I mean, that's basically what we're dealing with. So the backlight
6 cover, this whole thing is the display, and this isn't all of it, but the whole
7 thing's a display. But the backlight has a bunch of holes in it.

8 What does Na say about those holes? At page 4 Na says that through
9 holes (212), so 212 in the figure, are formed in portions except for the
10 portion where the first driving circuit (214), so the thing on the bottom. So
11 you notice in the middle, there's holes everywhere except for the middle,
12 right. Swiss cheese. And then you have fans.

13 So if we go to figure 2, which is the one we're talking mostly about,
14 well at least the side view. And then you already know this. This figure 2
15 does not look like the figure 2 that Samsung's using. Because they're figure
16 2 is not anywhere in the patent.

17 Again, a bunch of holes. I think we counted them, I think there's over
18 50. But there's a bunch. Right. The whole thing is covered in holes. And
19 then there's fans. So the whole idea is get air in and out.

20 In fact if you look at page 6 of Na it says, the process of discharging
21 high temperature internal air and introducing low temperature external air
22 are continuously repeated. It's page 6, right. Air in, air out. Get it in, get it
23 out.

24 Let's go to the next figure. I'm not going to go through every figure. I
25 just want to show you the next one. Here's the next figure. And what you
26 see here are more holes. Right.

1 So one of skill in the art reading this thing says, and there's more fans
2 I think. There's like two more fans, right. So one of skill in the art reading
3 Na says Swiss cheese, bunch of fans, as many holes as you can make, let's
4 get air in, let's get air out, let's get this thing cooled off. That is what Na was
5 thinking. When one of skill in the art looks at that, that is what they see.

6 Let's look at Petitioner's slide 52. And then zoom in on the right. And
7 so what Samsung took from that, let's put holes everywhere and fans
8 everywhere and what Mr. Smith-Gillespie says he learned from that is that
9 what you do is you get rid of all the holes, and then you look at -- well I
10 think you look at the claim, he didn't say he looked at the claim, I'm
11 speculating. And he said well if I just put holes on one side and I put the
12 fans on the far side then I've created a channel and there you go, the claims
13 are obvious.

14 There's nothing in Na that supports doing this to figure 2. This is cut
15 from whole cloth. I agree it's a lot better than Na. I mean if there were
16 references that showed this it would be more problematic for us. There's
17 another problem with this reference but this would be problematic if it
18 actually existed. They take one line from the patent, I think it may be on this
19 slide, that says well you can put holes anywhere. But the whole point of Na
20 is to put as many holes as you can, Swiss cheese. Get the air in, get the air
21 out. Get the air in, get the air out.

22 This is the prior art that Mr. Dunn was addressing. He didn't want to
23 do this. This doesn't work for the types of displays he wanted to create.
24 And this isn't in Na. Okay.

1 JUDGE HUDALLA: Isn't there a hook though that they reference to -
2 - I guess it's page 4 of Na where it talks about different configurations of
3 through holes?

4 MR. ALEMANNI: On 4? Is that what you're saying?

5 JUDGE HUDALLA: No, in Na page 4.

6 MR. ALEMANNI: I think it may be on this slide Your Honor.

7 Can you -- yeah. Can you highlight the top for me?

8 JUDGE HUDALLA: I mean, I think it was more than just cut from
9 whole cloth though, there's this, at least this thought in Na that you could
10 maybe have different numbers of through holes.

11 MR. ALEMANNI: It's on the screen, Your Honor. Is that what you
12 mean? That section? This is their slide.

13 JUDGE HUDALLA: Yeah, I think that's it. I think that's it.

14 MR. ALEMANNI: Yeah. It says, through holes can be formed on the
15 bottom plate, on the first of four side walls, only in the first four side walls,
16 it can be formed on the bottom plate and any one or more of the four side
17 walls. I mean if you really squinted at this hard and you really wanted to
18 come up with that modified figure 2, maybe. I don't think -- I still think the
19 answer is no, it doesn't support it.

20 JUDGE HUDALLA: So you're saying a person of ordinary skill in
21 the art reading this wouldn't say, oh I can change the holes, whatever I want.
22 You're saying that just wouldn't occur to that person?

23 MR. ALEMANNI: Well not when they look at figure 1 and it's got as
24 many holes as you can put, and it describes it as you drill a hole everywhere
25 except for where the drive circuit is. And then you go to figure 2 and it says

1 not only that but drill holes in all the side walls and put more fans in. So
2 that's the road you're going along.

3 And then they're suggesting that you read this, and you slam on the
4 brakes and go okay, you don't want holes. You don't want a bunch of fans
5 which is completely contrary to the teaching.

6 JUDGE HUDALLA: I assume Gershowitz addressed his
7 interpretation of this.

8 MR. ALEMANNI: Yeah. I'm not even sure we need Gershowitz but
9 yes he does.

10 Let's see. There's a -- I think they're going to talk a little bit about
11 Gershowitz's testimony. Well I'll deal with it if I need to later.

12 Na and Hong. Na and Hong is another combination. I'm just going to
13 rest on the arguments I gave to you about the metal core PCB on that. I
14 don't want to spend time. I'm going to talk about Kimura briefly. Again,
15 finish -- and if you have more questions I can go longer but Mr. Reed would
16 like to have some time, so.

17 So Kimura is not Swiss cheese, but it's another reference that is not
18 like the others. And I'm going to explain why. So let's bring up 1004 of the
19 '322. This is the other proceeding, the '322 proceeding.

20 Okay. So this is Kimura, I think it's a Sony reference. Yeah, it's a
21 Sony reference. Can you show the bottom? Just so this figure -- so this is
22 figure 1.

23 So super complicated fan design. Right. I've never seen anything
24 quite like it. It's interesting. So you bring air into it from the bottom of this,
25 A. And then by moving the fans around, I'm sorry the vanes on the fan

1 around, you can somehow make the air direct very specifically through a
2 prime. Right.

3 And so if we go -- let's just go through a couple of figures. Let's show
4 figure 1 and 2. We'll just kind of walk through them a little bit. So there's
5 1. Go to 2. Right. Super complicated. It doesn't just look like propellers or
6 whatever. Whatever when you see a regular fan or the other fans in here.

7 So the ones that are --

8 JUDGE KOKOSKI: Excuse me, Counsel. Excuse me. Can you tell
9 me what document you're looking at?

10 MR. ALEMANNI: I'm sorry. It's Exhibit 1004 but from the '322
11 patent proceeding, page 220.

12 JUDGE KOKOSKI: Okay. Thank you.

13 MR. ALEMANNI: Yeah. Of course.

14 So super specific fan, super complicated fan. And it says in
15 paragraphs 24 and 25 of Exhibit 1004, the reason you've got this super
16 complicated fan is you can generate a fine wind in the form of a film.
17 Which when I first looked at it I didn't know what that means. But it, you
18 can -- when you read the reference it makes sense.

19 So let's go down to figure 9, which is page 10 of the PDF. This is the
20 one that we're arguing about primarily. Figure 9 and 10 go together. It's
21 page 10 of the PDF, that one. So this is the one you keep seeing.

22 This is a really good looking picture for Samsung. I mean when you
23 look at this, when I looked at this I thought oh, okay. The problem is it
24 doesn't disclose what it seems to disclose when you actually look at it.

25 Let's go to figure 10 which is the next page. This is also in the
26 briefing and in the slides. Right. You've got the super complicated fan on

1 the bottom, it looks a little like a curling iron. And then you can see the way
2 the air is coming into it and then going up along the backlight.

3 The thing you don't see in this figure is the driving circuit. Right. So
4 let's go see how Kimura describes this. Go to page 15 of the PDF. And then
5 I want you to highlight 39-40.

6 So what is figure 9? It's a side elevation of an internal construction
7 showing the arrangement of the fan with respect to the display. Okay. It's a
8 side elevation.

9 So figure 10. What is figure 10? Figure 10 is an external prospective
10 view showing how the backlight of a liquid crystal display panel is cooled.
11 So figure 10 shows how you cool the back panel. And the thing that's not in
12 figure 10 is the driving circuit because it has nothing to do with cooling,
13 with directing the air. It's just there.

14 Let's go to our slide 34. So again, you see that we've got a description
15 here from Kimura. Just something that -- it talks about the way that you're
16 creating an air flow in a particular direction. Figure 10 is showing you what
17 that direction is. You're creating a film on the backlight. Figure 10 shows
18 you how the cooling is done.

19 Thirty-five. I just want to point out that when Kimura talks about the
20 fan and what it's trying to do in the claims, or what it claims the invention is
21 again, it's talking about the vane angle control means. So that's why there's
22 so many figures that tell you what to do with those vanes in order to create
23 that film of air on the backlight.

24 And then when we go to let's see 36, our slide 36. I'm sorry. Yeah,
25 36. Am I on the wrong one? Go to 37. Yeah. This is the one I wanted.

1 So we asked Mr. Smith-Gillespie, you're looking at the side angle, can
2 you tell me where the driving circuit is? No I can't.

3 Let's go to 38. So we, this is the one we created to be perfectly
4 honest, right. This is what we think it would actually look like. The driving
5 circuit is not likely to be as large as what they're saying. This is in our
6 counter response 49 to 52, right.

7 It's more likely the driving circuit is not as big as the entire display.
8 And if we go to slide 39, I mean we know that when we look at the prior art,
9 right, when we look at Na, how big is the driving circuit in Na? It's not the
10 entire surface. I mean, it's smaller.

11 And then the same thing in Kim. So that's our argument for Kimura is
12 that it's not showing how to cool the backlight and then it clearly doesn't
13 cover the entire display surface.

14 And then I wanted to address -- although, are any questions about
15 Kimura?

16 JUDGE HUDALLA: No.

17 MR. ALEMANNI: Just half a second on that. You've got our
18 argument, I just want to say it out loud. I was going to skip it but the
19 argument about Na is just that it's -- the whole thing is a display, right. And
20 we have evidence and I'm not going to pull it up in the interest of giving Mr.
21 Reed some time. But there's evidence in the record that what Mr. Smith-
22 Gillespie says, if you've got a display, you've got to go to the far rear
23 surface, the far posterior surface. That's the thing you have to cool.

24 In Na you're blowing air into the display which is not what the claims
25 say. And so that's the argument.

1 And with that, unless there's questions, I'm going to turn it to Mr.
2 Reed. Thank you, Your Honor.

3 MR. REED: All right. Good morning Your Honors. David Reed,
4 again for Patent Owner MRI.

5 Ms. Gray if we could start at slide 55 actually.

6 You heard Mr. Alemanni discuss the flaws in Samsung's obviousness
7 grounds, all the grounds here are obviousness across both cases.

8 I'll be discussing secondary considerations but there was a question
9 that came up from Judge Hudalla, your review of the Patent Owner
10 response, there was a question about side walls, the top, bottom, left, and
11 right. And I just want to clarify because I think there might be confusion
12 there.

13 That statement about the side walls at the top, bottom, left, and right
14 on page 73 of the Patent Owner response in the '595 Patent proceeding was
15 referring to the outer housing, not to the side panels that in part define the
16 constricted convection channel.

17 So you see that the housing is labeled in the photo in the top left, this
18 is in the page before that in the Patent Owner response. That has the side
19 walls around that contain the electronic display, the LCD, going around top,
20 bottom, left, and right. The side panels that meet the side panels limitation.
21 That's in the bottom, that's inside the housing. That's showing with the, I
22 guess it's purple arrows in the bottom left figure. So side panels, side walls.
23 Those are referring to different parts of the product.

24 JUDGE HUDALLA: Okay.

25 MR. REED: Okay.

26 JUDGE HUDALLA: I'll re-look at that. Thank you.

1 MR. REED: So Ms. Gray you can go back to slide 46 please.

2 And I want to start by just addressing nexus. The secondary
3 considerations here directly tie MRI's cooling system innovation including
4 the constricted convection channel. That evidence is directly tied to the
5 innovation. Yesterday, I discussed a lot of this yesterday. I'm not going to
6 go through all of the evidence with the limited time we have remaining, but
7 I'll speak to it.

8 There was a long felt need for outdoor displays. That cannot be
9 disputed. In Samsung's own words, companies wanted their messages
10 outdoors. That was in Samsung's white paper that we discussed. That need
11 was unmet.

12 Samsung itself tried and failed to meet this need. We have testimony
13 from Sung Ki Kim, Samsung's engineer, sworn testimony from the ITC
14 proceeding in the record here. He explained that he joined the research
15 efforts for outdoor displays by 2005. By 2010 Samsung finally introduced
16 their first outdoor product and that product didn't use a constricted
17 convection channel, it used air conditioning. We saw in the white paper that
18 was the conventional approach at the time.

19 They certainly, Samsung certainly didn't see use of a constricted
20 convection channel as an obvious or viable solution at that time. Ultimately
21 they finally introduced a fan-cooled display in 2013 or so and that product
22 was referred to as OHD product, but the evidence shows, much of Mr. Kim's
23 testimony is redacted, what is not redacted is that generated heat was not
24 being removed well from that product.

25 So we get to 2017, 10 years after research had begun. And Samsung
26 introduces its mid-size OHF products. These are the 46 and 56 inch OHF

1 products. Those are different than the 75 and 85 inch products that used a
2 heat exchanger that we discussed yesterday. This is a different family of
3 products.

4 The only change from the OHD was the use, the addition of this
5 constricted convection channel in the design. And during the development
6 of that product, that new design, the one that actually proved successful
7 Samsung performed tear downs of a company's product. It's unnamed, it's
8 redacted. I think you had the opportunity to review the unredacted briefing,
9 so you know the company that was the subject of that tear down.

10 So after the switch to use the constricted convection channel, what
11 happened in the market? Samsung's sales shot through the roof. They
12 increased by orders and magnitude. The raw numbers are in our Patent
13 Owner response at pages 77 and 78.

14 But again, the change was from the product that doesn't work to
15 incorporate the constricted convection channel which did work, and the sales
16 dramatically increased. That's nexus. That's direct nexus. We're not -- we
17 don't need a presumption here. We have direct evidence tying the success to
18 the feature and the invention.

19 Now --

20 JUDGE HUDALLA: You know what's striking about this line of
21 argument is you're basically giving us the exact same evidence from
22 yesterday and ascribing it to certain terms in these patents that we're talking
23 about today. And to me at least, that seems like, you know, you can't have
24 nexus to everything, right? I mean you have to have a nexus to the claim
25 terms that are -- to the actual claims that are at issue here.

1 So could you address that? Because I think that's what I'm most
2 concerned about. I'm seeing the exact same evidence and it's being used for
3 -- okay yesterday it's for this claim limitation, today it's for this claim
4 limitation. It's the same evidence. I guess you can't ascribe it to everything,
5 right?

6 MR. REED: Your Honor, thank you for that question because I don't
7 want there to be confusion. And I mentioned the two different product
8 families here. So when we're talking about commercial success of
9 Samsung's design, they ultimately introduced 75 and 85 inch products, those
10 are larger format displays. They also introduced 46 and 55 inch displays,
11 call them smaller mid-size. They've been referred to both ways.

12 The larger displays receive more sunlight over this much larger
13 surface area. So they need, to have effective cooling systems they need
14 something more effective. I think you see that reflected in the '740 and '142
15 Patents we discussed yesterday. The heat exchanger was the solution to
16 achieve the additional cooling that was necessary.

17 For the patents we're discussing today, the solution for the mid-size
18 products was to use the constricted convection channel. Those products
19 were remarkably successful if you look at the raw numbers, the sales
20 numbers. And especially when you compare that to their earlier failed
21 product and the less impressive sales, let's say.

22 JUDGE HUDALLA: But you've given us the same evidence of long
23 felt need in both instances, is that right?

24 MR. REED: That is correct Your Honor. The long felt need here was
25 for outdoor displays. There was a desire to put those displays outdoors.
26 They're -- MRI has developed multiple inventions in order to achieve that

1 depending on the needs of the different sizes of the displays. Does that
2 make sense?

3 That for these larger format displays they had an innovation that
4 addressed that need and achieved it for the 75 and 85 inch sizes. For the
5 mid-size, the constricted convection channel was the solution that led to
6 success.

7 JUDGE HUDALLA: Well I think the problem there is that the
8 broader you draw the scope of what the long felt need was, hey we wanted
9 outdoor displays. I mean, that's where to me, the nexus argument gets more
10 difficult for you. Because you're not -- you know, that's a huge, broad
11 category of things and you're trying to tie it down to a very specific set of
12 claims.

13 MR. REED: So the claims are the solution to the need. So I think the
14 Volvo Penta case is instructive. There was, to highlight this distinction
15 between the need or the problem in the industry and the solution to that
16 which is what the claim is.

17 JUDGE HUDALLA: Okay.

18 MR. REED: In that case, the need in the art was safer wake surfing.
19 It was about you know, wake surfers that would fall down and hit the
20 propellor or the drive of a boat, the stern drive. The solution there was the
21 claimed was kind of reversing the orientation of the stern drive on the boat.
22 And that was claimed. And the claim didn't say anything about the long felt
23 need in the art. It was claiming the solution.

24 JUDGE HUDALLA: Okay.

25 MR. REED: So here there was a long felt need. No one had come up
26 with an effective way to cool outside to having to resort to air conditioning

1 which was you know, environmentally difficult, required a lot of
2 maintenance, was more expensive, was bulky, a lot of problems with that.

3 JUDGE HUDALLA: Well that, see that's, I guess to me that's -- if
4 you say oh, we don't have effective outdoor displays. Well you do if you
5 use air conditioning. Maybe it's not as effective but it still, I think that kind
6 of undermines the idea of long felt need when you have such a broad sense
7 of what the need is, right?

8 MR. REED: Well if you look through the white paper, the
9 explanation there was that the air conditioning was sort of limited to like
10 high volume locations, retail and media clients. If you look at Exhibit 2025
11 at page 3. I won't take the time to bring it up, but you'll see that that solution
12 wasn't fully able to address the market need. And there remained a demand
13 for a non-air conditioned solution that would function.

14 So I would -- I also think that when you look at the sales of those
15 products that -- there's no evidence here that those sales were anything
16 significant, that those products were successful or solved a need.

17 Quite the opposite. In their white paper they're describing those
18 enclosures and yet there was still a need. They called it an enormous
19 engineering challenge. And it wasn't until they came out with the actual
20 designs that undisputedly practiced the claims that they were able to achieve
21 the commercial success. I think that is a direct tie between the use of those
22 cooling systems and that success.

23 JUDGE LEE: Counsel, it's Judge Lee. You said undisputably
24 practiced the claims. Is that -- I mean, don't you accuse them of
25 infringement in the ITC and they go, oh I guess we do?

1 MR. REED: So they have disputed infringement in the ITC, that's a
2 different record. Here we put in evidence that they practiced the claims.
3 They did not dispute that in these proceedings so it's not at issue.

4 JUDGE LEE: I see. How about, do we have in the record how many
5 of their patents cover the 75, 85 product and how many of your patents
6 allegedly cover their 75, 85 products?

7 MR. REED: I don't think we have anything about that in the record
8 Your Honor.

9 JUDGE LEE: Nothing in the record to say, not even like -- don't we
10 have at least two patents? This is a consolidated proceeding, and you know,
11 you have two patents, and then you have this -- you're alleging the same
12 thing. At least two patents cover.

13 MR. REED: Yes, these two related patents that were cited mention
14 relating to constricted -- the constricted convection channel. Those cover
15 the mid-size Samsung products.

16 JUDGE LEE: Other than these two patents we don't have anything in
17 the record. How many additional --

18 MR. REED: We've also started --

19 JUDGE LEE: -- patents that would cover that product?

20 MR. REED: Sorry Your Honor. We've also accused the '287 Patent
21 which will be argued in about a month of the mid-size products of infringing
22 that patent as well.

23 JUDGE LEE: Is that in the record --

24 MR. REED: It's not in the record.

25 JUDGE LEE: -- of these two cases?

26 MR. REED: It's not Your Honor.

1 So how do we know that the constricted convection channel invention
2 here was important to the success? And again, it was the only change that
3 ultimately led to this increase in sales, the only identified change. But also I
4 would direct you to Samsung's marketing documents.

5 And back to that Exhibit 2038, a presentation to a big Samsung
6 customer. The lead section of that presentation, it's mostly redacted again.
7 The lead section of that presentation is directed to the thermal management
8 system. That's what was being marketed front and center to Samsung's big
9 customer.

10 And if you look at pages 18 to 21 of that presentation you'll see that
11 the innovations that we're talking about here, MRI's innovations were key to
12 that marketing where highlighted. So I won't go into more detail than that in
13 the interest of keeping the courtroom open, but the evidence of this feature,
14 this cooling system, the effectiveness of it was front and center in Samsung's
15 marketing efforts.

16 JUDGE HUDALLA: I mean you hear, I think we're probably going
17 to hear Petitioner say there's other aspects of their product that may have led
18 to the commercial success that you're claiming here for secondary
19 considerations.

20 You know, how -- isn't that -- I mean, one thing that seems to be
21 missing in your case is the co-extensiveness of the sales to this particular
22 feature, the constricted convection plate.

23 MR. REED: So a few responses to that. Co-extensiveness relates to
24 the presumption. So we've argued that we're entitled to a presumption here,
25 but we don't only rely on a presumption of nexus.

26 JUDGE HUDALLA: Right.

1 MR. REED: We have hard evidence tying the success in the features
2 to the sales. So the other, second point I would mention that secondary
3 considerations, the nexus, is not a binary on/off switch. It's a sliding scale.
4 So you know, the stronger the nexus the more weight, the weaker the nexus,
5 the less weight. It's not an on/off switch.

6 I would also note that in the PPC Royal Fan case there's -- there can
7 be a nexus, there can be a presumption of nexus. And this is true even when
8 a product has additional unclaimed features. And that case notes that in
9 contested proceedings such as IPRs where the Petitioner has the means to
10 rebut the patentee's evidence the presumption applies.

11 And I know that because in the briefing, Petitioner has just kind of
12 identified other features. Now a lot of those relate to the claimed invention,
13 but regardless, they haven't shown that any of those features were -- caused
14 the sales to the exclusion of the cooling system. I think the evidence is quite
15 to the contrary.

16 I would also note that there's evidence, testimony that is, from John
17 Palmer, he's a Samsung integrator he's called. He basically sells Samsung,
18 these displays to end users. And he was asked during deposition, why do
19 customers purchase Samsung displays. And he pointed to the cooling. To
20 the ability of those products to avoid the black spotting that occurs when
21 they overheat, and the LCD fails.

22 JUDGE LEE: Can I ask you a question about, along this line as well.
23 You have multiple claims, right. So you accuse their product of infringing
24 all of these claims, more than one claim at least, right?

25 MR. REED: That's correct.

1 JUDGE LEE: So isn't there a nexus problem there too as well? You
2 know, if you have four claims and they're of different scope, maybe it's the
3 features of this, one of the four claims that's really good, that you know, that
4 got them the results. If that's so, then the nexus is tied to that one claim and
5 not the other three.

6 MR. REED: So we focused here on the claims that also were those at
7 issue in the ITC. In terms of showing which ones are practiced that's claim 1
8 of the '595 and claims 9, 12, 13, and 16 of the '322 Patent. So that's been the
9 focus of our effort to show that these products practice the patents.

10 Now the -- so you know, those are the ones that we have the evidence
11 that's undisputed practice the claims. There's a lot of evidence here in terms
12 of long felt need that wasn't satisfied by Samsung. I mean that relates to all
13 of the claims. They had the opportunity back in 2005 to 2008 when MRI
14 was researching in Alpharetta, Georgia. They were researching in Suwon,
15 South Korea.

16 Their team, some of these references they're asserting are Samsung
17 references. They didn't come up with a successful product using those
18 references. Any product that practiced any of the claims until many years
19 later, right. So they had the opportunity to come out with a fan cooled unit
20 using a constricted convection channel and they didn't. That is the -- that is
21 telling that this team of engineers didn't do that. And they had you know,
22 they tout their recourses and their expertise in cooling and yet they didn't
23 themselves do what they say is obvious now. That's strong objective
24 evidence that it wasn't.

1 So I think we'll reserve the remainder of our time. I see that we're
2 almost into our rebuttal, sur-rebuttal time. But if there are other questions I
3 am happy to answer them.

4 JUDGE HUDALLA: Not at this time. Thank you.

5 MR. REED: Thank you.

6 JUDGE HUDALLA: You can begin whenever you're ready. MS.

7 BIRBACH: Thank you Your Honor. Just give us a moment to --

8 JUDGE HUDALLA: Sure.

9 MS. BIRBACH: Thank you, Your Honor.

10 I will start by making a clarification. I think there was some
11 confusion. And I'm starting with the Takeuchi reference. I think there was a
12 bit of confusion about Petitioner's argument regarding the relation between
13 figure 1 and figure 5 and whether that was disclosed in Petitioner's papers.

14 That argument is in paper 30, Petitioner's reply in the '595 IPR at page
15 7. The argument is slightly above the housing section. It is discussed in
16 relation to the location of the posterior surface. Patent Owner also made an
17 argument that they have now focused on today that relates to the location of
18 the light sources in relation to the frame, but the same argument regarding
19 the figures is applicable to the location of the frame in relation to the
20 arguments Patent Owner made today with respect to the housing. So it's
21 fully disclosed in our papers.

22 There's no support for MRI's argument that frame 3, the location of
23 frame 3 in figure 5 is a typo. That frame 3 is located in the same location in
24 all of the cooling system embodiments of Takeuchi's figures.

25 In addition, frame 3 is consistently identified in all of the figures.
26 Figure 1 has frame 3 and it is a frame. Paragraph 23 of Takeuchi's

1 disclosure says that the frame 3 prevents light leakage. Paragraph 32 teaches
2 that you mount frame 3 before panel to prevent light leakage.

3 There's really no dispute about frame 3. Patent Owner's dispute seems
4 to really be about the location of the light source that's in relation to frame 3.
5 Frame 3 is consistent throughout the figures. There's no typo, there's no
6 dispute. Frame 3 is located as it is shown here in figure 5 at the top of the
7 display in order to form part of the housing.

8 Petitioner made an argument in it's sur-reply and again -- sorry, not
9 Petitioner.

10 Patent Owner made an argument in it's sur-reply and again here today
11 about the completely -- about whether the housing contains or surrounds the
12 electronic display. It mentioned the completely covered language. That
13 language is from Takeuchi's reference. It says in paragraph 40 that with
14 respect to rear cover (51) that that rear cover (51) completely covers the
15 display. That's the housing.

16 I'll also note, and because this was an argument in Patent Owner's sur-
17 reply that was new there we didn't have an opportunity to respond expressly
18 in our papers. But the ALJ's initial determination is in the record, it's Exhibit
19 1040 in the '595 IPR papers.

20 And the issue of whether the housing must surround the display and
21 cooling system came up there. And there Patent Owner argued the system
22 for cooling that was contained within a housing when there's a small frame
23 and a rear cover covering some of the display.

24 And we actually saw that in Petitioner's -- sorry, in Patent Owner's
25 slides, slide 51. They had some images of Samsung's products. And you
26 can see there that the back cover does not enclose the entirety of the display.

1 The ALJ accepted Patent Owner's arguments with respect to
2 infringement and found that the accused products infringed but they were
3 invalid over Takeuchi because Takeuchi's frame is consistent with the frame
4 that MRI had argued was infringing. And that's on pages 50 to 54 of the
5 ALJ's initial determination which the Commission determined not to review.
6 That same reason has to apply here.

7 I'll briefly turn to the electronic display. Patent Owner, Mr. Alemanni
8 in his remarks did not address Mr. Gershowitz's depo, the deposition
9 testimony. Mr. Gershowitz in his deposition on, that's Exhibit 1041 on
10 pages 12 to 13 Mr. Gershowitz expressly admitted that Takeuchi's display
11 includes electronic components and requires electricity in order to function.

12 Mr. Alemanni also mischaracterized footnote 7 in Mr. Smith-
13 Gillespie's expert declaration in these proceedings. It's Exhibit 1002, and it's
14 the '595 declaration. He explained that Takeuchi's display is different from
15 an LCD and a plasma display because of the seal structure and how different
16 displays can be mounted together to form a larger display.

17 And he noted in so doing that the specification widely describes the
18 type of electronic displays that can be used in the invention. He did not at
19 all, in any way say that Takeuchi did not disclose an electronic display.

20 And I'll note there that claim 1 requires a system for cooling an
21 electronic display. There's no other limitations on the electronic display in
22 claim 1. We do have claim 4 of the '595 Patent which does place additional
23 limitations on the type of electronic display. That claim is directed to an
24 LCD with an LED backlight. Those components are not required in claim 1.

25 Now let me turn to the issue of the holes in the display. You know we
26 heard Swiss cheese a lot mentioned. And I think Mr. Alemanni said

1 something about that it's all about air flow. And I think that's something that
2 we agree with.

3 And I think that there does not need to be a determination of you
4 know, how many holes are enough because in the references that we have
5 presented in the proceeding there is a clear disclosure that the constricted
6 convection plate causes air flow through the channel to remove heat from
7 the posterior display surface. That's Samsung's proposed construction for a
8 constricted convection channel. It was adopted in the district court in the
9 MRI v. Civiq case. It was adopted again by the ALJ at the ITC. MRI has
10 not provided any reason why that construction should not again be adopted
11 in this proceeding.

12 The specification of Takeuchi itself, I don't have it on the slide I don't
13 think but it was on one of Patent Owner's slides. It says that its cooling
14 chamber allows substantially uniform -- it substantially, uniformly allows
15 cooling. It is very clear disclosure in the figures of Takeuchi and its
16 disclosure that its air flow is unidirectional from the entrance to the exit and
17 results in cooling of the posterior surface of the display even if there is an
18 additional small entrance in the middle of that constricted convection plate.

19 The specification of the '595 Patent expressly allows for holes in the
20 constricted convection plate. I think that Mr. Alemanni eventually admitted
21 that there's nothing in the specification that says that you have to plug those
22 holes. They suggest that you do in some of their papers, but the
23 specification does not say that. That's in column 6 lines 27 to 29,
24 specifications it says, that act as apertures may be plugged.

25 And in fact there's a claim, claim 8 which is challenged in this
26 proceeding, was accused against Samsung that requires access apertures. It

1 does not require those access apertures be plugged, it just requires the
2 presence of access apertures.

3 And if we look at -- can we turn to slide 3 please.

4 This is figure 4 of the '595 Patent. It shows those access apertures.
5 There are many.

6 Briefly addressing the side panels, I just want to clarify for the record
7 that Petitioner's position is that the side panels in Takeuchi are disclosed or
8 rendered obvious. I think Patent Owner may have been suggesting that we
9 were only relying on inherent -- inherency argument. That is not the case.

10 I also want to note that the claim requires only that the side panels be
11 adjacent to the constricted convection plate on the posterior surface such as
12 the air flow -- and that that together defines the channel. There's no
13 requirements in the claim as to where the side panels be located in relation to
14 the air flow. Side panels at the top of the display or at the bottom of the
15 display or at the right or left, either way are defining that channel if they're
16 present.

17 It's only the specification that has the single embodiment of a figure
18 that has side panels on the right and the left sides of its channel. There's no
19 reason to limit the claims in that way.

20 I'll turn to the Kim reference now unless there are any questions about
21 Takeuchi.

22 JUDGE HUDALLA: You can proceed.

23 MS. BIRBACH: I heard Mr. Alemanni say that there are slits
24 everywhere. I do not think that is the case in the shield cover (140) that's
25 disclosed in Kim. There are slits sat the periphery. There are not holes

1 everywhere. If anything, there are holes everywhere in the figures in MRI's
2 patent itself.

3 But beyond that, like in Takeuchi you know, we can focus here on the
4 disclosure of Kim about the air flow. That's really what's relevant to the
5 claims. Kim discloses, and that's Exhibit 1005 in both proceedings at lines
6 4, 59 to 63 that the shield cover may be formed in diverse shapes such that
7 the flowing air produced by the cooling fan (210) can be efficiently guided.
8 That is the purpose of Kim's shield cover. It causes the air to be guided.

9 As we can see in figure 5, as Mr. Gershowitz agreed it flows from an
10 entrance to an exit. And Patent Owner argues that the air flows in all the
11 different directions. The air flow does not flow in all different directions. It
12 certainly does not flow in the X axis direction, it's constricted when it flows
13 through the channel.

14 And Kim describes at column 7, lines 53 to 62, how it's display
15 functions in relation to figure 5 and how the air flow moves in from the X
16 direction to -- and flows in a unidirectional way from that entrance to the
17 exits.

18 JUDGE HUDALLA: So you dispute, I think they showed a -- I can't
19 find it -- but there's a demonstrative where they have air going in four
20 different directions. You dispute that that's accurate. Is that correct?

21 MS. BIRBACH: That's correct. Kim discloses that there is air that
22 flows in the Y and Z directions. It does not flow backwards in the X
23 direction.

24 JUDGE HUDALLA: Okay.

25 MS. BIRBACH: On slide 20 of Patent Owner's presentation they
26 discuss the testimony from Mr. Smith-Gillespie. That testimony related to

1 and talked about how Mr. Smith-Gillespie said that a certain figure was mis-
2 made. His testimony, I just want to clarify that his testimony was in relation
3 to a demonstrative exhibit that MRI Counsel presented to him at his -- at the
4 hearing during his cross-examination and he was arguing that -- he was
5 testifying that that figure was mis-made, not that any of the Kim figures in
6 the Kim's specification were mis-made.

7 So I just want to make that clear on the record that he was testifying
8 that in his opinion the way that MRI had taken Kim's figure 2 which is an
9 exploded view and put those components together was mis-made. Because
10 if you read I think, right above the testimony that MRI cites, Mr. Smith-
11 Gillespie explained that when the components of figure 2 are mated
12 together, that the side panels do not slide all the way into the backlight.
13 Rather they are sliding in partially such as the side panels are still present in
14 that channel that is formed between the posterior surface of the backlight
15 unit and the shield cover (140) which is the constricted convection plate.

16 I want to briefly address the combination of Kim and Hong with
17 respect to the metal core PCB. Mr. Alemanni says there's no dispute that
18 metal core PCBs cost more. I don't think that's correct. The only evidence
19 MRI presents that metal core PCBs cost more is Mr. Gershowitz's say-so
20 which we point out in our papers.

21 Patent Owner also cites Exhibit 2014 as supporting its argument. In
22 my review there is nothing in that exhibit that talks about the cost of a metal
23 core PCB. And as we explained in our opening remarks, even if a metal
24 core PCB does cost more, there is still motivation to include it to improve
25 thermal efficiency.

1 I want to briefly address the Takahashi reference which is relevant to
2 claims 8 of both the '322 and '595 Patent. Takahashi discloses a component
3 that can be used to allow access to service components without
4 disassembling a display.

5 So Petitioner is not suggesting that all of the air holes in Kim would
6 be plugged in order to combine it with Takahashi. That is what Patent
7 Owner is arguing. Rather, Petitioner is arguing that Takahashi discloses a
8 component that allows access to the rear surface of the display. And here we
9 have -- and is therefore an access aperture, and that the person of skill in the
10 art would understand how to combine the disclosure of Takahashi if directed
11 to a through hole that allows as access with the disclosures of Kim.

12 Patent Owner's arguments are again relying on bodily incorporation of
13 these two different references which is not what the law requires.

14 Turning to slide 52 please.

15 As Your Honor, Judge Hudalla recognized Na expressly discloses an
16 embodiment where there are no holes on the bottom plate of its cooling
17 system. And Mr. Gershowitz agreed with Mr. Smith-Gillespie's
18 interpretation of that embodiment. His opinion is on paragraph 124 of
19 Exhibit 2006 in the '595 IPR proceeding.

20 I'll note briefly regarding the Kimura reference, Mr. Alemanni noted
21 that Patent Owner created slide, the slide 38 figure. That figure shows
22 driving circuit 19 which is the constricted convection plate. And its
23 purported size in relation to the backlight unit, that is truly Patent Owner's
24 argument. That argument is not supported by Mr. Gershowitz. We did not
25 see that figure presented in his report. That is a figure that Patent Owner's
26 Counsel pre-did.

1 JUDGE HUDALLA: In your affirmative case though do you talk
2 about the extent of how far that I guess, in their -- Patent Owner's
3 demonstrative 38 they colored in red. Is it, I mean do you talk about how far
4 that driving circuit might go on the back of the display?

5 MS. BIRBACH: We do. Petitioner argues, and Mr. Smith-Gillespie
6 explained that a person of skill in the art would understand that the driving
7 circuit has the same spatial -- is the same size as the backlight unit. So it
8 would extend to cover the backlight unit. The claim requires that the
9 constricted convection plate require a -- cover a majority of the posterior
10 display surface.

11 So he provided that opinion, that that's how he would understand the
12 reference. He looked at the size of the fan, fan (20) in relation to other
13 figures and based on the way the reference describes the fan, he opined that
14 to achieve the substantial uniform cooling that's essential. Again, you know
15 we're thinking about constricted convection plate. We're thinking about
16 what it allows, how it allows the back of the display to be cooled. And so he
17 opined that the length of the cooling fan would be indicative of the size of
18 the driving circuit (19) as well as the backlight unit.

19 But in the alternative he provided an obviousness argument that the
20 person of skill in the art would have understood how to optimize the display
21 cooling capabilities by enlarging the driving circuit. Because you would
22 have heat coming from the entirety of the backlight unit and Mr. Smith-
23 Gillespie's opinion is that by optimizing the size of the driving circuit (19)
24 which is the constricted convection plate, you would allow that air to
25 directly contact the rear surface of the posterior display surface to most
26 efficiently cool the system.

1 So unless there are any other questions I'll turn my remaining time to
2 secondary considerations.

3 JUDGE HUDALLA: That's fine.

4 MS. BIRBACH: So I think Judge Hudalla, you hit the nail on the
5 head here. Mr. Reed noted at the beginning of his argument that he
6 discussed most of the same evidence of alleged secondary considerations
7 yesterday even though those patents are directed to entirely different cooling
8 systems.

9 Patent Owner seems to be suggesting that any display cooling system
10 has a nexus to the alleged secondary considerations evidence. And that
11 cannot be.

12 Patent Owner discussed the switch to a constricted convention plate in
13 Samsung's display history. And I don't believe there's any evidence of that
14 in the record. Patent Owner is relying on testimony from a Samsung
15 engineer, Mr. Sung Ki Kim. And his testimony vaguely relates to the OHD
16 and OHF family of displays.

17 The OHF family of displays includes both mid-size products and
18 large-size products. It seems that for the '595 and '322 Patents Alemanni is
19 focusing on the mid-size products although I will note that Patent Owner did
20 accuse the large-size products of infringement, of certain claims of the '595
21 Patent and '322 Patent in the ITC.

22 And as to your question, Judge Lee, the ITC's decision is in the
23 record. It's Exhibit 1040 in the '595 IPR. And there you may see which
24 patents MRI accused of infringing, or which Samsung products MRI
25 accused of infringing which patents.

1 So Mr. Kim's testimony vaguely relates to the changes between the
2 OHD and the OHF displays. It's not clear which particular displays he's
3 talking about because the mid-size OHF Samsung displays have a very
4 different cooling system than the large-size Samsung OHF displays.

5 And there's no evidence in Mr. Kim's testimony or anywhere in the
6 record whether the earlier displays did or did not have features of the claims.
7 I heard, you know, again Mr. Reed said the switch to the constricted
8 convection plate.

9 There's no evidence as to whether earlier displays did or did not have
10 you know, such a plate. And there's no evidence that any alleged failure was
11 due to the absence of such a plate. The testimony relates to the switch from
12 an air conditioning system to a non-air -- to a different cooling system.
13 There's no discussion of the specifics of that cooling system and how that
14 impacted sales or any other secondary considerations that Patent Owner is
15 asserting here today.

16 There's no evidence here that the cooling system specifically drives
17 sales. And I got into the presumption for the reasons I discussed earlier.
18 There's that the products are not co-extensive with any of the claims. MRI
19 has not made such a showing.

20 MRI does not have any evidence regarding co-extensiveness, nexus of
21 Samsung's patents to the claims, to Samsung products to the claims here. It's
22 entirely secondary considerations arguments or based on attorney arguments.
23 There's no expert testimony or other evidence supporting that any of
24 Samsung's products meet the claims and as discussed the ALJ found
25 otherwise with respect to some of the claims and that decision is in the
26 record.

1 MRI Counsel mentioned the Volvo case which related to long felt
2 need. The difference there is that the article that the Court was relying on --
3 or that the party was relying on there identified a need and that Volvo's
4 products satisfied that need.

5 Here we have kind of, we're relying on this Samsung white paper. At
6 most that white paper discusses the fact that heat dissipation is important in
7 digital displays. We know from the prior art that that need was widely
8 known, and that the prior art presented solutions to that problem.

9 Even if there is an alleged long felt need Patent Owner has not
10 established how any of its claims meet that need. The claims of the '595 and
11 '322 Patent are not limited to large or outdoor display systems, and I do not
12 see in MRI's papers any explanation of how or who met the alleged need if
13 there is an alleged need that they have proven existed.

14 There's also no evidence that Samsung copied any feature of the
15 claimed systems. Infringement is not the same as copying. Patent Owner
16 relies generally on the fact that Samsung performed a tear down of a
17 competitor's product. But all it cites in its papers are two PowerPoints
18 related to that tear down. I do not even think it cites any pages. It is not
19 clear which products Samsung -- MRI is alleging that Samsung copied.

20 MRI does not in its papers identify any particular feature of one of
21 those competitors' products that Samsung allegedly copied. MRI has to do
22 so. That is what copying requires. It requires copying of a specific feature.

23 Patent Owner doesn't specify the products it alleges that were copied
24 and it doesn't specify whether those products practice the claims. It's
25 entirely unclear what Patent Owner is relying on here.

1 And as discussed as well in Petitioner's papers and as we discussed
2 yesterday there is a date issue here. Samsung conducted the analysis after it
3 had completed development.

4 Turning back briefly to the commercial success. Turning back to
5 commercial success and if we could have the slide there.

6 There, as I discussed earlier, there are many reasons why Samsung's
7 customers buy Samsung products. And some of those are on this slide.
8 There are software considerations. You know, remote management of the
9 devices, performance, security, there are -- there's a magic glass. That's not
10 a requirement of these claims. There are certain panel components,
11 brightness. I could read, go on and on.

12 We don't have the evidence. In this proceeding MRI has not even
13 attempted to make a showing that customers buy any products because of
14 the cooling systems. And as I mentioned earlier the cooling system is not
15 co-extensive of any of the claims of the patents here.

16 MRI Counsel cited the PPC case. That case is distinguishable. There
17 the products and the claims were directed to connectors. Here we have a
18 very different situation where the claims are directed to a cooling system and
19 Samsung's products are displays and involve cooling systems as well as
20 many other features that we see throughout Exhibit 2038 and other evidence
21 in the proceeding.

22 The situation here is most analogous to the Fox family case which is
23 cited in Petitioner's papers. And that case discusses the analysis of how, of
24 whether a claim, what the co-extensiveness analysis requires. There's no --
25 and Patent Owner hasn't even attempted to make a co-extensiveness
26 showing. There is a single sentence in their Patent Owner, their POR, that

1 says that there's a nexus and that the claims are co-extensive. They have not
2 done any additional analysis. That cannot be enough to show co-
3 extensiveness or nexus given the evidence of all of these features that the
4 products include.

5 What did I say? I said Fox family. It is Fox Factory, that case in our
6 reply.

7 And with that, unless there are any questions I'm about out of time.

8 JUDGE HUDALLA: Thank you.

9 MS. BIRBACH: Thank you.

10 JUDGE HUDALLA: We'll turn back to Mr. Alemanni now please.

11 MR. ALEMANNI: All right. Let me do this quickly. I'm going to
12 give Mr. Reed the majority of the balance of time I just want to go through a
13 couple of things.

14 I think Samsung's Counsel misspoke maybe a little bit. I think
15 everyone here realizes that res judicata, collateral estoppel does not apply to
16 the ITC proceeding. I think she said we've already litigated, that it's settled.
17 It's not settled. But we encourage you to look at the proceeding. There's
18 rational reasoning in there that I think you should look at. We disagree with
19 her, I think there's good reason. I think in the context now that you've heard
20 our arguments and with the briefing it will make more sense with what we're
21 arguing.

22 The second point I wanted to make is, and I don't know why they keep
23 doubling down on this.

24 Can you throw up our slide 10? Our slide 10. That's the wrong day.
25 That's the wrong day. That's yesterday. We've all seen this. I probably

1 talked more than you wanted to about it. So we're on the '595 proceeding.
2 It's our slide 10.

3 Yeah. Okay. So this is Takeuchi. I'm not going to go through this at
4 length. You see 15a is a fan, you see 7a is a light, you see frame 3 is within
5 the periphery of the display. You look over at figure 2 and you see how it
6 works. You have the panels 16 and 17 and then on the end of those you
7 have frame 3 which stops the light from going through those. Right. That's
8 where the light stops.

9 Then you go figure, slide 8. I'm sorry, slide 10 -- slide 9. And then
10 zoom in.

11 And what they're asking you to believe is that figure 5, which shows
12 the display and shows the panels behind it, that somehow Takeuchi is
13 describing ripping that 3 out from behind the display and putting it on top
14 even though that's where we would expect the fan to be. Not only would we
15 expect it to be there, but it says 15a and b. So again, I'm not sure why
16 they're digging in on that, but they are.

17 I want to address Judge Lee's concern about housing. I know
18 Samsung's Counsel suggested that in the ITC the housing didn't actually
19 bound the display, it wasn't on all four sides. It was a mischaracterization
20 with what Mr. Reed said.

21 If you look at Patent Owner reply, I'm sorry Patent Owner response
22 pages 72 to 73 and then Exhibit 1040, I'm just doing this for the record,
23 pages 50 to 52 it will answer the question and it will address your concerns
24 about the housing I think, at least to that.

25 Gershowitz, so I heard Samsung's Counsel say that Mr. Gershowitz is
26 the only one that says MCPCBs are expensive. That's true. But that's

1 evidence. It's unrebutted. There's no other evidence in the record that
2 suggests they're not expensive. I don't think, other than the fact that it's only
3 Mr. Gershowitz's testimony, you can weigh it as you will. We think it's
4 persuasive. But it's the only evidence in the record that's unrebutted, that
5 MCPCBs are more expensive, and they should have explained that.

6 And the last thing I'll touch on and then I'll turn it over to Mr. Reed.
7 Kimura, the driving circuit. So here's their argument to you. You don't
8 know how wide it is, but Mr. Smith-Gillespie tells you if you make the
9 driving circuit really big then that's going to help cooling. We make this
10 argument in our sur-reply page 20.

11 The driving circuit is electronics. It generates heat. That's what we've
12 been talking about all morning. And so if you make the driving circuit really
13 big you're generating heat. And so that doesn't make any sense. And so we
14 raise that issue. That's an argument that we made.

15 And I won't take any more of your time. I'll turn it over to Mr. Reed
16 unless you have any questions.

17 JUDGE HUDALLA: No. Thank you.

18 MR. ALEMANNI: Great. Thank you.

19 MR. REED: All right Your Honors. A few comments on the
20 secondary considerations. First of all, there's a statement that all of the
21 evidence here was presented in the ITC. That's not correct. The records are
22 different. There's additional evidence, different briefing here that wasn't
23 present there including Exhibit 2025.

24 JUDGE HUDALLA: That's the white paper?

25 MR. REED: That's the white paper.

26 JUDGE HUDALLA: Okay.

1 MR. REED: And regardless the ITC decision isn't in any way
2 binding, it's not final, it's still subject to appeal, so I just wanted to put that
3 aside.

4 JUDGE HUDALLA: Is there anything else other than that white
5 paper that really we should be focusing on or no?

6 MR. REED: I think the entire body of evidence Your Honor has to be
7 weighed as a whole. I think it all collectively should be given really heavy
8 weight.

9 JUDGE HUDALLA: I guess I gave you a bad question. Is there
10 anything really different about the two records other than the white paper
11 that we should be focusing on? Or is that pretty much the main one?

12 MR. REED: I think just in the way that they've been highlighted I
13 think that the briefing just is different and maybe just calls it out in certain
14 ways. So I think again it's the body of evidence as a whole.

15 JUDGE HUDALLA: Thank you.

16 MR. REED: There's a question about there being multiple inventions
17 across the cases. I just want to make sure that it's clear here. There can be
18 multiple non-obvious ways to solve a long felt and unmet need. The
19 motivation for a person of ordinary skill in the art is to solve that need which
20 is undisputed. Indisputable here I guess I would say. That companies
21 wanted their displays outside.

22 The obvious solutions get used right away. Or they would get used
23 right away. The non-obvious ones do not. And that's the case here. None
24 of MRI's inventions got used by Samsung until many years after MRI
25 pioneered solutions for the DOOH industry. That's what you see in the

1 email that's at Exhibit 2001. Samsung itself recognized that MRI was a
2 pioneer.

3 None of MRI's inventions got used by Samsung until many years
4 later. Until after copying. Until Samsung finally found success for its mid-
5 size units using the invention of the '595 and '322 Patents.

6 JUDGE HUDALLA: Could you address, I think Ms. Birbach brought
7 up an argument with kind of the pre-constricted convection plate days at
8 Samsung and the post-constricted convection plate days.

9 What's the evidence of that? I think she mentioned, or she at least
10 alleged that there was no evidence of that.

11 MR. REED: So you anticipated where I was going. So I would direct
12 you to Sung Ki Kim's testimony. And it's in the record. A lot of it is
13 redacted. It's brand new argument. I'm frankly surprised that they would
14 contest and --

15 JUDGE HUDALLA: Well I will be honest with you, when she said
16 that I actually thought to myself, because I almost asked you a question
17 about that when you were up and presenting. So I would like to hear kind of
18 your take on it.

19 MR. REED: So I don't know if the suggestion is that Samsung -- so
20 it's undisputed that Samsung's OHF products used the constricted convection
21 channel. They haven't contested that in this proceeding. So the suggestion
22 would be oh, we were using it before. That's the suggestion. That's never
23 been asserted in any case ever.

24 And the evidence is that the OHD product had a different cooling
25 system, and the generated heat was not being removed well. That's Mr.

1 Kim's testimony. And then we have a new product, and it has this cooling
2 system that practices the patent.

3 So that's what I would say here on the public record.

4 JUDGE HUDALLA: Okay.

5 MR. REED: About that switch from the failed OHD product to the
6 successful OHF product.

7 On copying, they -- Samsung had access to products of a company
8 during development. It's undisputed that they practiced MRI's -- that they
9 replicated features of MRI's patent claims by practicing the, incorporating
10 those features from MRI's or their patents into Samsungs products.

11 Copying can be evidenced by access and replication of features.
12 That's the Institut Pasteur case. The date issue that they suggested, that
13 relates to the large format tear down document. That doesn't relate to the
14 mid-size tear down. So I don't know why they're citing to evidence of that.
15 But that's misplaced.

16 On slide 70 my colleague stated that there are many reasons that
17 customers buy these products. That's not in evidence. All that Petitioner has
18 done in this case is say that there are other features of these products. But
19 the PPC Broadband case says that doesn't defeat nexus. They need to show
20 that there are some other features driving sales and not the cooling system.
21 And that is simply not the case. Mr. Palmer, his testimony supports it.
22 Their marketing presentations support it. I mean, it would be a remarkable
23 suggestion that the cooling system, but for which these products in this
24 whole category don't exist, isn't playing the driving role in the success of
25 these products.

1 These products don't have any sales or have very small sales in the
2 case of the OHD product if they don't have a working cooling system. The
3 cooling system is extremely important to the commercial success. It's
4 fundamental to the customer for commercial success here.

5 Again, looking back to the time period that we're evaluating
6 obviousness, 2008. Samsung, they tried. They didn't come up with their
7 design that practices the patents until a decade later. That's just not
8 obviousness.

9 JUDGE LEE: Counsel, it's Judge Lee. On copying you mentioned
10 replication. I seem to recall case law that says a replication may mean a
11 look-alike. You take apart your product it's this way. And you look in there
12 it's exactly this way. It's not enough to simply have their feature be within
13 the scope of the claim. Is that your understanding or no?

14 MR. REED: So no Your Honor. I don't think it has to be like a
15 cookie cutter copy. I think it's replicating the features, like the functionality.
16 A patent is all about functionality. Replicating the way that the cooling
17 system functions. And that's my understanding of the replication of features.

18 JUDGE LEE: Well I may be wrong, but my recollection is that. So
19 in your view as long as they have that, a feature that's within the scope of
20 your claim that would be enough for copying? It doesn't have to look like
21 yours?

22 MR. REED: Exactly. If they developed a product a works in the
23 same way using the same devices, the same configuration or methodology or
24 approach.

1 JUDGE LEE: Yeah. If I can just you know, to drive my point. If the
2 claim element is fastener and you have you know, screws and they have
3 bolts. That would still be copying?

4 MR. REED: I think it would depend on the facts, but I think it could
5 be, yes. I mean it depends on how fundamental that difference is to you
6 know, the hypothetical I guess I would say.

7 JUDGE LEE: You get my point, right. It doesn't -- you're saying it
8 doesn't have to be the exact type that you have as long as it's covered by
9 your claims you're going to deem that as copying.

10 MR. REED: Right. The constricted convection channel doesn't have
11 to for instance, have the exact same dimensions or exact same shape. But if
12 they're using the same approach, using that feature for cooling than yes,
13 that's replicating a feature from the claims.

14 JUDGE LEE: Thank you.

15 MR. REED: And again, nexus is not binary. It's you know, weighed
16 on a sliding scale.

17 If there are no further questions, thank you.

18 JUDGE LEE: Thank you. I appreciate it.

19 JUDGE HUDALLA: Okay. We are at the end of the hearing here. I
20 wanted to thank everybody. It was great to actually ask some questions
21 about these, we're looking at a million drawing figures. So it was very
22 helpful to have your explanations over the course of these two days.

23 So these two cases are submitted, and we are adjourned. Thank you.

24 (Whereupon, the above-entitled matter went off the record at 2:38
25 p.m.)
26

IPR2023-00199 (Patent 8,854,595 B2)

IPR2023-00220 (Patent 9,173,322 B2)

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