

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

HANSHOW AMERICA INC. and
HANSHOW TECHNOLOGY CO., LTD,
Petitioner,

v.

SES-IMAGOTAG GMBH,
Patent Owner

IPR2024-00188
Patent 11,405,669 B2

Record of Oral Hearing
Held: February 18, 2025

Before JAMES P. CALVE, BRIAN J. McNAMARA, and TERRENCE W.
McMILLIN, *Administrative Patent Judges*.

IPR2024-00188
Patent 11,405,669 B2

APPEARANCES:

ON BEHALF OF THE PETITIONER:

HAO TAN, ESQUIRE
Arch & Lake, LLP
203 N Lasalle Street
Suite 2100
Chicago, IL 60601
(312) 558-1368
haotan@archlakelaw.com

ON BEHALF OF THE PATENT OWNER:

GRANT KINSEL, ESQUIRE
Perkins Coie
1201 Third Avenue
Suite 4900
Seattle, WA 98101
(206) 359-3516
gkinsel@perkinscoie.com

TYLER KNOX, ESQUIRE
tknox@perkinscoie.com

The above-entitled matter came on for hearing on February 18, 2025, commencing at 10:00 a.m., via video teleconference.

P R O C E E D I N G S

- - - - -

JUDGE MCMILLIN: Good morning. We are convened for oral arguments in IPR2024-00188, which pertains to patentability challenges of claims in US Patent Number 11,405,669. I am Judge McMillin, and also appearing is Judge Calve and Judge McNamara. Can we please have appearances for the parties? Who will be arguing on behalf of Petitioner? Petitioner's Counsel?

MS. KAISER: Your Honor, I see --

JUDGE MCMILLIN: We heard you for just a second, Ms. Kaiser, and then you went quiet. We can't hear you. Can you hear us?

MS. KAISER: Your Honor, this is Jessica Kaiser. I can't -- I see that Petitioner's Counsel is on, but I cannot hear them.

JUDGE MCMILLIN: This --

MR. FAHY: And Your Honor, this is Christopher Fahy, one of Counsel for Petitioner. I'll be arguing in the next proceeding, the '189. I see my colleague, Hao Tan, appears on the call, and when we were in our breakout room, I could hear him, and it's my understanding that he will be arguing the '188 proceeding, but I can't hear him right now.

JUDGE MCMILLIN: You are very quiet, Mr. Fahy.

MR. FAHY: Oh.

JUDGE MCMILLIN: If you could perhaps speak louder or get closer to the microphone. Who is lead Counsel for Petitioner?

MR. FAHY: Hao Tan.

JUDGE MCMILLIN: And are you on the line?

1 UNIDENTIFIED SPEAKER: This is Charlie from the BTC.
2 They are connected. Please unmute your mic. You have to unmute your
3 mic so we can hear you. We had an issue earlier with the unmuting and
4 verifying their audio. Please unmute your mic.

5 JUDGE MCMILLIN: Petitioner's Counsel -- if anyone on behalf
6 of Petitioner can hear me, who is supposed to be arguing for Petitioner this
7 morning?

8 MR. FAHY: I can. This is Christopher Fahy, again. Can you hear
9 me better --

10 JUDGE MCMILLIN: Yes.

11 MR. FAHY: -- Judge? And that --

12 JUDGE MCMILLIN: Perfectly, Mr. Fahy.

13 MR. FAHY: So Hao Tan, it's my understanding, on behalf of
14 Petitioner, who is lead Counsel, will be arguing this first '188 proceeding.
15 And I see him --

16 JUDGE MCMILLIN: Okay. Let's --

17 MR. FAHY: -- on the call. I just can't hear him right now.

18 JUDGE MCMILLIN: I can neither see him nor hear him. I can
19 see Ms. Kaiser, I can hear you, I cannot see you.

20 MR. FAHY: Here, I'll put my video on so you can see me.

21 JUDGE MCMILLIN: Okay. Hi, Mr. Fahy.

22 MR. FAHY: If I -- hi, how are you?

23 JUDGE MCMILLIN: Good.

24 MR. FAHY: Hao Tan is on the -- I can see him in the participant's
25 list, and I was just speaking with him in the breakout room, so I'm not sure
26 why his audio is not working in the main room here.

1 MS. KAISER: Would we be able to get him dial-in information so
2 that we can proceed? Because I know we have a long day, obviously.

3 JUDGE MCMILLIN: Yes.

4 MR. FAHY: Right, and he should have that. I believe I saw it as a
5 backup in the email that was sent around.

6 JUDGE MCMILLIN: Mr. Fahy, are you in the same building with
7 Mr. Tan?

8 MR. FAHY: I am not, but I did just try to text him.

9 JUDGE MCMILLIN: Mr. Fahy, would you mind if we went
10 forward with appearances from Patent Owner's Counsel?

11 MR. FAHY: Absolutely. Go ahead.

12 JUDGE MCMILLIN: Ms. Kaiser, I can see you. I know you're
13 there., You're lead counsel, I understand, for Patent Owner. Will you be
14 speaking today?

15 MS. KAISER: Thank you, Judge McMillin. I am Jessica Kaiser, I
16 am lead counsel for Patent Owner. I will only be speaking in this particular
17 oral hearing, to the extent that the panel has questions about Petitioner's
18 objections to the demonstratives for the '188 proceeding. Otherwise, my
19 colleague, Grant Kinsel, and LEAP Practitioner, Tyler Knox, will be
20 handling the '188 proceeding.

21 JUDGE MCMILLIN: Okay. And because you have a LEAP
22 Practitioner, Mr. Knox --

23 MR. TAN: Hello, Charlie? Can you hear me?

24 UNIDENTIFIED SPEAKER: Yes.

25 JUDGE MCMILLIN: Mr. Tan, is that you?

26 MR. TAN: Okay, okay. I hear you now. That's good.

1 JUDGE MCMILLIN: We cannot see you.

2 MR. TAN: Oh, okay.

3 JUDGE MCMILLIN: I mean, I cannot see you.

4 MR. TAN: Let me --

5 JUDGE MCMILLIN: Can you see --

6 MR. TAN: -- start my video. Can you see me now?

7 JUDGE MCMILLIN: No.

8 MR. TAN: I started my video. I can't see myself, actually.

9 UNIDENTIFIED SPEAKER: You can try to disconnect and
10 reconnect and see if that resolves the issue on your end because, you know --

11 MR. TAN: Okay.

12 UNIDENTIFIED SPEAKER: Yeah, just disconnect and reconnect
13 and that should resolve the issue.

14 MR. TAN: Okay. I'll try that, but --

15 JUDGE MCMILLIN: Please let us know when you're back on the
16 line.

17 MR. TAN: Okay.

18 JUDGE MCMILLIN: As I was saying, Patent Owner is accorded
19 15 extra minutes of arguing time because of the participation of the LEAP
20 practitioner.

21 MS. KAISER: Thank you, Your Honor.

22 JUDGE MCMILLIN: You're welcome. Ms. Kaiser, give me the
23 name of the other person besides Mr. Knox who will be arguing.

24 MS. KAISER: Yes, Your Honor. That's Grant Kinsel, K-I-N-S-E-
25 L.

26 JUDGE MCMILLIN: Thank you. I'm sorry, Mr. Kinsel.

1 MR. KINSEL: Good morning, Your Honor. Grant Kinsel.

2 JUDGE MCMILLIN: Good morning. Mr. Tan, I believe we can
3 see you. Say something.

4 MR. TAN: Good morning, Your Honors. I hope you can hear me
5 now.

6 JUDGE MCMILLIN: Yes. If you could speak loudly. It is hard
7 to hear you. So Mr. Tan, as Petitioner, you will argue first. You have 45
8 minutes of arguing time. Would you like to save any of your time for
9 rebuttal?

10 MR. TAN: Yes, Your Honor. I would like to save 20 minutes for
11 rebuttal.

12 JUDGE MCMILLIN: Okay. You then have 25 minutes of
13 principle arguing time. You may begin whenever you are ready.

14 MR. TAN: Thank you, Your Honor. May it please the Court,
15 Your Honors. This is Hao Tan for Petitioner, Hanshow Technology and
16 Hanshow America. The case is IPR2024-00188. On Slide 1, I show the
17 topics we are going to cover today. I am going to first talk about the alleged
18 invention and then claim construction issues, and also the two grounds
19 instituted, and finally, the expert qualifications.

20 So the '669 patent, as shown on Slide 3, was issued 2022 and the
21 earliest priority date is 2017, November 10, 2017. On Slide 4, we show just
22 two drawings from this '669 patent. We highlighted the two, you know, the
23 playback devices in purple color on the left, which is, I believe, Figure 1. It
24 shows two displays on the right. We show -- the drawing shows three
25 displays. And you can also see some green box, which is identified as
26 electronic shelflabel content or virtual electronic shelflabel, which is

1 identified as 24.

2 So on the next slide, Slide 5, we showed the only independent
3 claim, Claim 1, of the '669 patent, which is a system claim. This system
4 includes a number of playback devices, just as shown on the previous slide,
5 6A, 6B. And it then specifies each playback device comprises a memory
6 and a communication stage. And it further limits the devices are designed to
7 perform two functions, transmitting video and determining synchronous or
8 asynchronous progress. And the last limitation of Claim 1 is the wherein
9 cause, which further limit the display device are designed to display product
10 information or product price by means of virtual electronic shelf label, as
11 shown on the previous screen.

12 So the parties has disputes on two claim construction terms. I'll
13 move to the next slide, which is about claim construction. And --

14 JUDGE MCMILLIN: Mr. Tan, if I may ask a question. This is
15 Judge McMillin. With regard to claim construction --

16 MR. TAN: Go ahead.

17 JUDGE MCMILLIN: -- in the petition, I believe that Petitioner
18 asked that we accord all the terms in the claims their plain and ordinary
19 meanings. More specifically, I believe Petitioner said there was no need for
20 the Board to engage in explicit claim construction. Is that still your
21 position?

22 MR. TAN: Yes, Your Honor. That still is our position, but just for
23 the exercise of this whole proceeding, we're trying to answer the Board's
24 question about the two terms.

25 JUDGE MCMILLIN: Don't misunderstand what I said, Mr. Tan.
26 I'm not telling you not to talk about claim construction. I was just trying to

1 confirm your position, and I didn't mean to interrupt or tell you how to frame
2 your argument. So please go forward.

3 MR. TAN: Thank you, Your Honor. So on Slide 8, we show the
4 first term for claim construction, which is 'designed to'. This is response to,
5 just as Your Honor mentioned, to a suggestion in the -- I believe in the
6 institution decision about how the parties may wish to address whether the
7 proper scope of the claim does not require either a transmission or
8 determination, but rather that the playback device be designed to transmit
9 and determine.

10 So on the right side of Slide 8, which we have the Patent Owner's
11 constructions, which I did a bunch of phrases up here. Each device be
12 expressly configured to transmit and determine during operation of the
13 system, and our position -- Petitioner's construction -- is this should be
14 accorded as its plain meaning, which does not require actual transmission or
15 determination, but it rather requires the playback device be designed to or
16 configured to combination and function.

17 So on Slide 9, we identified two CFC cases, which equates
18 'designed to' with 'configured to' by the Federal Circuit. On Slide 10, we
19 identify another case that Federal Circuit construed that 'configured to' does
20 not require specific performance or such communication actually occurs.

21 Move on to Slide 11. Patent Owner's construction improperly
22 introduces limitation because the claim itself is very clear and never recites
23 such requirements. On the contrary, actually, Claim 1 and a bunch of other
24 dependent claims, like Claims 5, 10, and 12, all recite each device in other
25 places. So the Petitioner -- the Patent Owner knows which word to use. If
26 they choose to use each device, which they definitely use a lot in this

1 claim -- all these claims in the '669 patent, they will use that. But here in
2 Claim 1, they actually used each device and the devices at different places.
3 For example --

4 JUDGE MCMILLIN: Mr. Tan, I'm sorry. This is Judge McMillin,
5 again. Could you go back to your Slide 8?

6 MR. TAN: Sure.

7 JUDGE MCMILLIN: If you look at the transmit limitation, to
8 transmit video playback progress data via the communication stage to the
9 other device, I note that the other device is singular in that limitation, but
10 then if you look at the next limitation -- the determine limitation, I'll call it --
11 it says, determine based on received progress data whether it is in a
12 synchronous or asynchronous playback progress with the other devices,
13 devices in that limitation is plural. Do you accord any meaning or
14 importance to the fact that in the transmit limitation, device is singular, and
15 in the determine limitation, it's devices, plural?

16 MR. TAN: Your Honor, we did notice that discrepancy. From our
17 understanding, I think that may be a typo, but as the -- as is written in this
18 claim, I would think, based on the plain meaning of transmitting video
19 playback progress data to the other device, then that means even if it
20 transmits the playback data to one device, that it would meet the
21 requirement. And then we make the determination, though, it seems that it
22 has to compare maybe data from the other devices, from multiple devices, to
23 reach the conclusion, to determine whether it is synchronous or
24 asynchronous.

25 So maybe the Patent Owner tries to distinguish that, but also, if we
26 move onto the slides -- I believe -- sorry to move around -- to move to Slide

1 14. If we move to Slide 14 on the left side, we have a box that's from the -- I
2 believe, Dr. Hart, Patent Owner's expert. When he tries to explain by
3 adding, of course, by separating the devices into device 6A and device 6B,
4 and then he only uses the singular term, which is device in the transmitting
5 step and also, in the determining step.

6 So if I understand that correctly, Patent Owner's understanding is it
7 only needs one device or it's a singular term there. We don't want to change
8 the claim language as it is written, but I think a POSITA would still
9 understand they are -- like Your Honor just pointed out, there are differences
10 in the plural terms and singular terms. That's the only place actually it uses
11 this singular term in the transmitting step. In the other places, when it uses a
12 singular term, it actually has each playback device, 6A, 6B, comprises a
13 memory. Yeah, but that's different from the devices from my understanding.

14 JUDGE MCMILLIN: Thank you.

15 MR. TAN: Thank you, Your Honor. So move on to Slide 11. As
16 pointed out by Your Honor, here at this, in Claim 7, they use the singular
17 term, where in each device is designed to broadcast adjustment data to
18 adjusting the playback progress of the device of 6A, 6B, over each
19 communication stage, if it detects asynchronous playback progress. Even if
20 we use the Patent Owner's construction, which is each device be expressly
21 configured to perform the actions, then this claim would read, well, in each
22 device be expressly configured to a broadcast. That seems just redundant.

23 Move on to the next slide, Slide 12. Patent Owner's construction
24 improperly introduces limitations because the specification, the intrinsic
25 evidence does not support Patent Owner's construction. The '669 patent only
26 used designed to throughout the specification, without ever using a term like

1 capable of. That's different from the Aspex case, which do have, you know,
2 the Patent Owner in that case did use different terms when describing the
3 functions or limitations there. In the in re Giannelli case and the in re Man
4 Mach case, they both find structural attributes and positional relationship,
5 and that's different from the '669 patent, which have no structure in information
6 or positional or relationship.

7 Move on to Slide 13. In the prosecution history, the Patent Owner
8 claims or alleges they tried to argue about designed to, but in reality, they
9 only talk about the capability. In the first box next to the PO response,
10 Applicant's arguments underscored the required reciprocal nature of the
11 communication during operation between playback devices so that each
12 device can independently make its own synchronicity determination.

13 That's in Dr. Hart's declaration. And also, the Applicant's
14 argument in the prosecution, which is highlighted here, stresses that wherein
15 different ones of the playback devices communicate with each other, thereby
16 enabling independent detection. And lastly, the examiner, actually when in
17 his objection, also stresses that whereby the progress data is construed to be
18 that of the management device having the content and able to send the data
19 and the reproduction device sending the standby state.

20 Move on to next slide, Slide 14, which I just showed to you, Your
21 Honor. Here on the right side, which shows Dr. Hart's deposition transcript
22 and, you know, he understood and a POSITA in the art would understand
23 that the reference numbers are important, but that's also different from a lot
24 of cases that, you know, the reference numbers in the claims shouldn't
25 change the scope of claim.

26 Move on to Slide 15. Patent Owner reads the order of reference

1 numbers as limiting and limits Claim 1 to two playback devices, 6A and 6B.
2 here on the left side, Your Honor, we showed the original language and
3 highlighted the singular and plural terms about the devices and the device.
4 And as mentioned earlier on the right side that we zoomed in the 72 -- part
5 of 72 about the expert, Dr. Hart, which changes the plural to singular in the
6 playback device, starting with each limitation and also ending with the other
7 device at the end of each limitation.

8 Move on to Slide 16. Patent Owner claims there's reciprocal
9 communication that is not supported. Patent Owner tries to use the phrase
10 vice versa, but that's only mentioned in one embodiment. Here on the left
11 side, we show the only place that discloses the term vice versa and on the
12 right side, which actually shows the '669 patent itself stresses it is of
13 particular advantage that the devices are designed to determine
14 independently from a video distribution server. And on the second box on
15 the right bottom, the '669 patent also states that it is to mention that in a
16 system with a relatively high number of display devices (e.g. a few
17 thousands) so that the system can definitely then -- should definitely cover
18 more than two devices.

19 I'll move on to the next slide. We are going to talk about the
20 communication stage limitation for the second claim construction term or
21 dispute here. So on Slide 18, which is highlighted, the communication stage
22 to communication in Claim 1. And this is also in response to the Board's
23 institution decision about the question, you know, whether the term in Claim
24 1 is a means plus function limitation that invokes 112(f).

25 Move on to Slide 19. On the left side, we show Patent Owner's
26 construction. Patent Owner thinks it's unnecessary to construe this term.

1 Petitioners have two options -- propose two options here. So Petitioner first
2 think it is a functional limitation to be construed under 112(f); however,
3 Petitioner also proposed alternatively, if the Board finds that this limitation
4 does not invoke 112(f), the plain and ordinary meaning of the proper
5 construction is actually a communication module that performs the function
6 of communicating with each other.

7 JUDGE MCMILLIN: Petitioner's construction on this slide was
8 not offered in the petition, was it?

9 MR. TAN: Your Honor, that is correct. We did not think it's
10 necessary to construe this term in the petition. I understand Patent Owner
11 tries to say that we did not meet the requirement because we should have
12 done that for each and every term and studied the Federal Circuit case, but in
13 that case, there is a parallel District Court case, so the Petitioner in that
14 case -- in the District Court case -- did proposed claim construction, which is
15 different from the case -- these in the case here. The District Court case is
16 stated, and there is no claim construction or any briefing about claim
17 construction in that case.

18 JUDGE MCMILLIN: This is Judge McMillin. Part of the reason I
19 asked about this again is that was the reason I asked you earlier on whether
20 Petitioner was asking the Board to expressly construe any terms in the
21 claims. So you're not asking us to expressly construe this term in the
22 claims?

23 MR. TAN: We're not asking expressly to construe this term. We
24 believe a POSITA understands it to be the plain meaning.

25 JUDGE MCMILLIN: And is there a dispute between the parties,
26 as to whether this claim limitation is met by the asserted art?

1 MR. TAN: I believe there is a dispute, Your Honor. The other
2 side of causing -- is trying to say the communication stage is not met and we
3 know it is met. So I believe there is a dispute there.

4 JUDGE MCMILLIN: Okay, thank you.

5 MR. TAN: Thank you, Your Honor. So moving to Slide 20. We
6 just highlighted all the places talking about the communication stage. There
7 are four places, including two claims, that talks about communication stage.
8 On the left side, that's in the specification. On the up left box, it discloses in
9 particular the server may use the same communication stage for
10 downloading the video data to the devices. And on the left bottom, in order
11 to keep the communication highly efficient in an environment with up to a
12 few thousand devices, it is of particular advantage that the communication
13 stage is designed to use UDP multicast data. That's the only two places that
14 talk about -- discloses the communication stage.

15 On the right hand -- on the right side, there are just two claims,
16 which premise is also showed on the screens. Claim 1 and Claim 7, both
17 recites a communication stage. On the next slide, Slide 21, we believe the
18 Board can ascertain the claim scope with reasonable certainty. Even if it's a
19 means plus function term, the indefiniteness of limitation precludes a
20 patentability determination only when the indefiniteness renders it logically
21 impossible for the Board to reach such a decision. That's in Intel v.
22 Qualcomm, the Federal Circuit Case in 2021.

23 JUDGE MCMILLIN: If we were to find that limitation is a means
24 plus function term -- a means plus function limitation -- and then we were to
25 agree with you that there's no structure disclosed in the specification, that
26 corresponds to that function, that communication stage, how can we

1 determine whether your prior art meets that limitation? What do we
2 compare it with?

3 MR. TAN: That's exactly the kind of question and issues geared in
4 the Intel case, Your Honor. We believe even if the Board here or the other
5 Board find a term is a means plus function term, the lack of disclosure of
6 structure doesn't preclude the Board to determine the scope of the meaning
7 because a POSITA can still understand this communication stage, the
8 meaning of it.

9 JUDGE MCMILLIN: Thank you. You've used up the 25 minutes
10 and you're now into your rebuttal time.

11 MR. TAN: Okay.

12 JUDGE MCMILLIN: You can keep arguing as long as you want,
13 but you're eating into your rebuttal time.

14 MR. TAN: Thank you, Your Honor. I'll try to finish up as fast as I
15 can.

16 JUDGE MCMILLIN: Okay.

17 MR. TAN: Moving on to the institution grounds. There are two
18 grounds instituted on Slide 23, which does show the two grounds. There are
19 two reference combos, Swafford and Masumoto, and the three reference
20 combo, Masumoto, Kipp, and Takashi. Move on to Slide 25. We just show,
21 you know, in the first ground, the Swafford drawings on the top and the
22 Masumoto drawing on the bottom, you know, which corresponds to the
23 limitations of Claim 1.

24 Move onto Slide 26. We show the disputes. Many -- there are five
25 limitations -- 1.3b, 3c, 1.4, 7.1, and 11.1. Move on to Slide 27. Even if the
26 Board construes 1.3b and 1.3c to require actual transmission of

1 determination, we believe Masumoto does satisfy such limitations. Moving
2 on to Slide 28. 1.3c actually only recites to determine based on received
3 progress data. There's never a limit about whether the received progress
4 there, that includes the master display data. And Patent Owner also admits,
5 Masumoto displayed the -- made some sort of synchronization
6 determination. And Patent Owner's expert actually also states the master
7 display is always considered correct.

8 Moving on to Slide 29. We just want to highlight Masumoto
9 satisfies 1.3b and 1.3c, even under the Patent Owner's limiting construction.
10 Moving on to Slide 30. Masumoto's display makes synchronicity
11 determination independent from any server. Patent Owner tries to argue
12 Masumoto is a hub-and-spoke system, different from a so-called peer-to-
13 peer network, but nowhere in the claim has such indications about hub-and-
14 spoke or peer-to-peer. Dr. Hart also notes that Claim 1 doesn't state,
15 communicate directly, in his deposition.

16 Move on to Slide 31. Swafford also discloses Claim 1.4 and we
17 highlight the portions from Swafford's disclosure in paragraph 287. Move
18 on to Slide 32. Petition expressly identified the overlapping feature in
19 Swafford, which shows in the drawing on the right, which is Figure 43 and
20 on the left, which is Figure 6 from the '669 patent.

21 Move on to Slide 34 about 7.1. The dependent claim, which
22 recites, wherein each device is designed to broadcast adjustment data for
23 adjusting the playback progress. As shown in paragraph 79, the '669 patent
24 itself -- paragraph 79 shows a display frame rate determined based on --
25 Masumoto, paragraph 79 -- shows that a frame rate determined based on
26 comparison result in Step S7. And in next, Slide 35, the '669 patent itself

1 used transmit and broadcast interchangeably.

2 JUDGE MCMILLIN: Is there -- I'm sorry, Mr. Tan -- this is Judge
3 McMillin, again. Is there another potential claim construction issue between
4 the parties with regard to the meaning of broadcast in Claim 7?

5 MR. TAN: Your Honor, I don't believe the parties dispute the
6 meaning of this term. Again, it should be accorded its plain and ordinary
7 meaning, even if there is a dispute from Patent -- from Petitioner's
8 perspective. And here, I think we have in the specification itself, which use
9 the prefix broadcast, just to follow the word 'transmit', and also, our expert,
10 Dr. Tentzeris on Slide 36, also discussed about this term, but of course if the
11 Board finds it necessary to construe this term, I think the broadcast in the
12 plain other meaning just means transit.

13 JUDGE MCMILLIN: Okay, thank you.

14 MR. TAN: Thank you, Your Honor. So move on to Slide 37
15 about Claim 11. This claim recites wherein the communication stage is
16 designed to use UDP multicast data packets for the communication. And
17 our expert, Dr. Tentzeris states that UDPs are well-known communication
18 protocol for time-sensitive applications, like gaming or playing videos, and
19 the UDP is really commonly utilized for a multicast of information to all the
20 players.

21 JUDGE MCMILLIN: If I understand -- excuse me, again, this is
22 Judge McMillin. If I understand your position on Claim 11, it seems to me
23 that Petitioner acknowledges that Swafford doesn't teach UDP but makes a
24 contention that a POSITA would understand from reading Swafford that it
25 relates to UDP. Can you explain your position with regard to Claim 11,
26 please?

1 MR. TAN: Yes, Your Honor. I agree generally with you that
2 Swafford does not mention UDP specifically, so -- but because UDP is such
3 an old and well-known protocol in the video and gaming industry, so on
4 petition, it is based on the reading of the '669 patent, which if we move to
5 Slide 38, actually, on the right side, we highlight the only place it talks about
6 the UDP, which in the '669 patent itself, it only talks about the
7 communication between the devices and may be performed according to
8 various protocol implementations.

9 And '669 patent itself only uses a UDP as one example of its
10 various protocols, in which all the protocols -- UDP or
11 (INDISCERNIBLE) -- all well-known before the earliest priority date of this
12 case. So that's our petition, you know, because it's all well-known and it's
13 just one of the various protocol implementations, so that a POSITA reading
14 the Swafford would understand this is our best --

15 JUDGE MCMILLIN: Thank you.

16 MR. TAN: Thank you, Your Honor. And also, I want to point out
17 in Swafford, it also discloses that when they talk about in Swafford about
18 communication, it also mentions the display shelf label devices 28200a to
19 200c and products may be a wide communication path through network
20 28210. And at that time, the network will use all kinds of different
21 implementation protocols.

22 Move on to Slide 38. The '669 patent, like I was just mentioning,
23 does not distinguish the UDP communication from UDP multicast data for
24 progress data. And then move to Slide 39. There's no compatibility issue
25 between Swafford and Masumoto. They both have these multiple display
26 sizes, both trying to use a lower network -- lower the network load, and both

1 trying to accomplish a simultaneous display.

2 I'll move on to Slide 40. Swafford and Masumoto are directed to
3 the same goal and the Board has correctly rejected SES's argument that the
4 two references are not directed to the same goal. Moving on to the Ground
5 2, which includes Masumoto, Kipp, and Takashi on Slide 43.

6 JUDGE MCMILLIN: Mr. Tan, you've now used 35 minutes of
7 your argument time. You have 10 minutes left for rebuttal.

8 MR. TAN: Thank you, Your Honor.

9 JUDGE MCMILLIN: You can keep talking as long as you want.

10 MR. TAN: I'll stop right now and I'll reserve the 10 minutes for
11 my rebuttal.

12 JUDGE MCMILLIN: All right. Thank you.

13 MR. TAN: Thank you.

14 JUDGE MCMILLIN: Ms. Kaiser, Mr. Kinsel, you may -- Patent
15 Owner may proceed.

16 MR. KINSEL: Thank you, Your Honor. Open speaker in that --

17 JUDGE MCMILLIN: Mr. Kinsel, how much time would you like
18 to reserve for rebuttal? You have one hour of argument time.

19 MR. KINSEL: Thank you, Your Honor. We'll reserve 10 minutes
20 for our rebuttal. As I mentioned, my -- we've got a speaker open on one of
21 our monitors here. Sorry. Bear with us for one second. Jess --

22 JUDGE MCMILLIN: Thank you.

23 MR. KINSEL: There we go. Okay, now we've got it under
24 control. Thank you. Grant Kinsel for Patent Owner. With me today is
25 Tyler Knox, and he will be presenting some material on motivation to
26 combine. I'll go ahead and share my screen with the panel as we move

1 through a couple of our slides here. There we are. So hopefully you're
2 seeing our slide deck and let me go to Slide 2 because it summarizes the five
3 reasons that Petitioner has failed to carry its burden with respect to these
4 claims.

5 The first reason is that Petitioner has failed to carry its burden to
6 show that Masumoto discloses limitations 1.3(b) and 1.3(c). Second,
7 Petitioner has failed to carry its burden to show that either Swafford or
8 Takashi disclose the overlap or substitution limitation 1.4. Three, Petitioner
9 has failed to carry its burden to show that either -- that Masumoto teaches
10 the broadcast limitation of Claim 7 or the UDP multicast limitation of Claim
11 11.

12 Fourth, Petitioner has failed to carry its burden as to all of the
13 claims because it has provided the panel with a functional construction for a
14 communication stage, and not a structural construction as it was required to
15 do. And fifth, as my colleague, Mr. Knox, will show, Petitioners failed to
16 carry its burden to show that there's a motivation to combine any of this art.

17 I plan to focus my attention here on the first two reasons,
18 limitations 1.3(b) and (c), and limitation 1.4, but I do want to discuss why
19 the Petitioner's functional construction of communications stage means that
20 Petitioner has failed to carry its burden as to any of the claims. And of
21 course, I'm happy to answer any questions along the way that the panel may
22 have, but in the absence of any questions, we'll stand on our briefing with
23 respect to the dependent claims.

24 JUDGE MCMILLIN: Mr. Kinsel, I do have a question -- kind of
25 an over-arching question on claim construction. Is the Patent Owner
26 intending that the Board must expressly construe any of the claim terms?

1 MR. KINSEL: No, no.

2 JUDGE MCMILLIN: So you're asking us -- I'm sorry for
3 interrupting you, Mr. Kinsel.

4 MR. KINSEL: No. The short answer is no. We don't believe that
5 any express construction is necessary. We have tried to explain in our
6 briefing what the claims mean and what the claims are describing, but we
7 don't think any express construction is necessary because under no
8 construction of these terms does Masumoto teach limitations 1.3(b) or (c), or
9 limitation 1.4. So ultimately, I don't believe the Board needs to enter a
10 formal construction, at least from our point of view.

11 JUDGE MCMILLIN: Does that mean the Patent Owner believes
12 the Board should apply the plain and ordinary meaning to all the claim
13 terms?

14 MR. KINSEL: We do. We do.

15 JUDGE MCMILLIN: Thank you.

16 MR. KINSEL: And I suppose we should -- I should dovetail a
17 little bit with what you were just discussing with Mr. Tan about the meaning
18 of the term broadcast in Claim 7 for the broadcast limitation. Petitioner is
19 trying to change the plain and ordinary meaning of broadcast to mean
20 something narrower -- or something broader, actually. So they're trying to
21 equate transmission and broadcast, and that's not the plain and ordinary
22 meaning.

23 So from our point of view, if the panel provides the plain and
24 ordinary meaning and applies the plain and ordinary meaning of broadcast,
25 which means, you know, more than one recipient, then again, Masumoto
26 doesn't teach the broadcast limitation. So again, we believe the plain and

1 ordinary meaning controls and we believe that the plain and ordinary
2 meaning establishes that none of these limitations are met.

3 JUDGE MCNAMARA: Counsel, this is Judge McNamara. This
4 has always been an issue with the question of plain and ordinary meaning.
5 So my understanding then is that both parties here say, well, we should give
6 everything the plain and ordinary meaning. We have a disagreement as to
7 what the plain and ordinary meaning of at least broadcast is. Are there other
8 terms for which there is a dispute as to what the plain and ordinary meaning
9 is?

10 MR. KINSEL: Well, that's a really fair question, Judge
11 McNamara, and I think it's possible that there's a dispute with respect to the
12 plain and ordinary meaning of designed to. And the reason I say it's possible
13 is that Petitioner has taken at least three different positions as to what that
14 term means, and our position is that designed to has its plain and ordinary
15 meaning, which is essentially, adapt to or configured to, and in some of
16 Petitioner's briefing, they seem to agree with that, and in some of Petitioner's
17 arguments, they seem to disagree with that.

18 So I'm not exactly sure if there's a dispute over there. In fact, that
19 was one of the places I wanted to actually start on this discussion. In fact,
20 let me put up -- if I can, I'm going to switch over to -- this is the Petitioner's
21 deck, Slide 8 from the Petitioner's deck to sort of talk about designed to.

22 And what Petitioner seems to be saying here is that designed to
23 carries this plain and ordinary meaning which is configured to. And if that's
24 what Patent Owner is saying, then I don't -- or Petitioner is saying, then I
25 don't think there's any real dispute, but they've characterized our position in
26 a way on these slides that just isn't reflective of what our actual position is.

1 And so I thought it might be useful to frame this discussion, to actually read
2 into the record what our position is, so that it's distinct from what Patent
3 Owner has characterized it to be. So let me pull up on the screen here. This
4 is our surreply brief, page 6 through 7. And I'll just read it into the record.

5 And what it reads is the following: Although Petitioner believes
6 this is disputed -- reply 4 through 11 -- the parties agree that actual
7 transmission determination is not required. Rather, PO contends the claims
8 require a system in which each device is configured to both transmit and
9 determine, as recited during the system's operation. In other words, the
10 claims require only that such a system exists as configured, even if it is
11 never put into use. And so that's our position and I think it's pretty clear.

12 If Petitioner's understanding of the claim is like Patent Owner, that
13 designed to is sort of akin to, configured to, or adapted to, then I don't think
14 there's any dispute because this seems to be what their position also is. And
15 if Petitioner's view is that designed to has the same meaning as configured to
16 or adapted to, then there really shouldn't be any dispute that Masumoto does
17 not teach limitations 1.3(b) or (c). And the reason for this is that it is
18 undisputed that the system of Masumoto -- it is never the case that all of the
19 displays are designed to both transmit playback progress data and to use
20 received playback progress data to determine whether they are in sync.

21 In the Masumoto system, there is always one display that is
22 designed to be the master display, and that display is not designed to
23 transmit its playback progress data, and the remaining non-master displays
24 are not designed to determine whether they are in sync. And so if the parties
25 are in agreement that designed to means configured to or adapted to, then
26 there really shouldn't be any dispute over Masumoto.

1 I did want to put up the claim language because there was some
2 discussion about potential typos and things of that nature, so let me put up
3 claim -- Patent Owner's Slide 5, which has the full claim language. There
4 was some --

5 JUDGE MCMILLIN: Mr. Kinsel, this is Judge McMillin. If we
6 look at Masumoto, there's four displays, at least in one embodiment, and out
7 of the box, each of those displays, it seems to say is equivalent. At least they
8 have the same structure. And there's a teaching in Masumoto that they have
9 the same structure. I think it's paragraph 40. But when you turn on the
10 system or an operator configures the system, the system or the operator
11 determines that one of those displays is the master display.

12 And so at what point do we look at Masumoto and its displays to
13 determine whether they meet the limitations? And I think that may be the
14 dispute between the Patent Owner and the Petitioner. It seems that as they
15 come out of the box, before they're turned on, before anyone sets them up,
16 before anyone configures them, that they're all the same and their
17 transmission and determination abilities are equivalent. But then in
18 configuration, a display becomes the master display. So is it a matter of
19 when we look at Masumoto?

20 MR. KINSEL: No. No, Your Honor, it's not. The claims -- and
21 the reason I put up the claim language here on Slide 5 is because the claims
22 are very specific about what we're talking about here. We are talking about
23 a system and in that system, each of the devices in that system must be
24 designed to both, transmit, playback progress data, and to determine from
25 received playback progress data, whether they are in sync.

26 The only way to meet this limitation or this claim is to have a

1 system in which all of the devices are doing these two things, and you can
2 see that language here in the beginning of the claim where it says, a
3 communication stage to communicate data with each other wherein the
4 devices -- so those are the devices -- more than one device in the system --
5 are designed to, one, transmit video playback progress data -- that's the
6 transmission limitation -- and then to determine based on the received
7 progress data whether they are synchronic or asynchronous playback
8 progress data. It's not a question of when Masumoto is configured.

9 The only disclosure of Masumoto that would be relevant is the
10 Masumoto system, and the Masumoto system is not one in which all of the
11 devices are designed -- and again, whether that means configured to or
12 adapted to, it's in that sort of general vicinity I think -- all of the devices are
13 not designed to do these two things. So it's not a question of what the
14 Masumoto system looks like, sort of out of the box. As you described it,
15 Judge, it's how does Masumoto disclose its system. It's -- the only system
16 that's disclosed in Masumoto that's relevant is one in which it is indisputable
17 that one of the devices does not meet the transmit limitation and in the case
18 of the three -- the four embodiment, the other three simply don't meet the
19 determination limitation.

20 JUDGE MCMILLIN: So let me push back a little bit. This is
21 Judge McMillin, again. It seems to me that on the right-hand side of your
22 slide there, it says each device transmits, each device determines. You seem
23 to have dropped out of the claim 'designed to'. It seems to me that you're
24 proposing an interpretation of the claims. I won't call it a construction
25 because nobody wants us to construe, but an interpretation where you're
26 interpreting the claim as if it didn't contain the words "designed to"

1 “designed to transmit,” “designed to determine.” Can you explain to me
2 why you're not reading words out of the claim or interpreting the claim as if
3 it didn't contain the words 'designed to'?

4 MR. KINSEL: So we read designed to -- the plain and ordinary
5 meaning of designed to as essentially capable or adapted to. And so our
6 point of view is that in Masumoto, the non-master displays are not adapted
7 to or designed to determine that they have -- determined whether they're
8 synchronous or asynchronous for playback, and the master display is not
9 designed to transit video playback progress data.

10 In the system of Masumoto, the master display is simply not
11 designed -- it's not even capable in the Masumoto system of transmitting
12 video playback progress data. So we're not reading out designed in any way.
13 In fact, we -- we think it has a robust meaning. We think it requires that
14 these claims -- that each of the devices in these claims be configured,
15 designed, such that they transmit and they determine. That's what the claim
16 expressly says, so we're not reading out designed in any way, shape, or form.

17 To the contrary, we're assigning it a very -- a plain and ordinary
18 meaning, which is essentially adapted to or configured, but I don't think it
19 really matters. I think you could construe it as capable, although I think
20 that's incorrect as a matter of law, but if you construed it as capable, even
21 Masumoto still wouldn't meet the limitation because the system of
22 Masumoto does not have within it all of the displays that are even capable of
23 performing these two limitations. And that's really the difference.

24 JUDGE MCMILLIN: But Masumoto talks about changing -- this
25 is Judge McMillin, again -- talks about changing the master display, and in
26 that regard, it seems to disclose -- you've got the four displays, A, B, C, D,

1 but if we make display D the master display, that in operation -- that master
2 display -- receives rather than transmits video playback data, but then if we
3 can demonstrate that it's designed to transmit the video playback data by
4 now designating screen C as the master display and now screen D does
5 transmit its video playback progress data. And since each of the displays is
6 capable of transmitting video playback progress data and it's simply a matter
7 of use or configuration, as you say, which ones transmit and which one does
8 not? So --

9 MR. KINSEL: So --

10 JUDGE MCMILLIN: -- again, I'm having a hard time
11 understanding why all the displays are not designed -- at least designed to
12 transmit the progress data.

13 MR. KINSEL: Because this is a claim about a system. This is not
14 a claim about individual devices and how those individual devices work.
15 This is a claim about a system. The system comprises a number of devices,
16 all of which have certain characteristics, and those characteristics -- it's
17 indisputable that Masumoto's system doesn't describe monitors, all of which
18 have both the ability to transmit -- or designed, I should say -- to transmit
19 and are designed to determine.

20 In the Masumoto system, there's always one master display, so you
21 can certainly have one master -- the master display moved. So for example,
22 in one case, it could be D and in one case it could be A or B or C, but you
23 still don't have a system, which is what the claim is talking about. It doesn't
24 matter that individual devices could theoretically be configured to meet
25 these limitations in some separate system. That's not what the claim is
26 about. This is a system claim, so what has to happen is all of the elements of

1 that system have to meet the limitations. And you don't have -- you don't
2 have that in Masumoto because in Masumoto, the system is designed such
3 that you always have a master display. It doesn't matter the identity of the
4 master display. It's sort of irrelevant.

5 The question is, what does Masumoto disclose? Masumoto
6 discloses a system in which there is a master display. Whether it's device A,
7 B, C or D is neither here nor there. You can configure a different system,
8 but the system that's disclosed by Masumoto and the burden that was
9 supposed to be carried by Patent -- by Petitioner, is to show that the system
10 Masumoto discloses meets the limitation where all of the devices in that
11 system are designed to do these two things, and they are not.

12 JUDGE MCNAMARA: Mr. Kinsel, it's Judge McNamara, again.
13 So that system, when it's powered off and it's hanging on the wall, it's not a
14 system? It's got all the parts.

15 MR. KINSEL: We don't believe that -- we don't believe that you
16 actually need to deploy the system in order for it to meet the limitation. You
17 don't have to turn it on, but you do have to have a system, such that it is
18 configured that if it were turned on that it would do all of these things. You
19 don't have to actually have transmission. You don't have to actually have
20 determination, but you do have to have a system that is specifically designed
21 so that the -- so that the devices, if they were turned on, would perform these
22 functions.

23 JUDGE MCNAMARA: And that if the transmit limitation -- at
24 the end of that limitation, it's the other device and in the determine
25 limitation, it's the other devices --

26 MR. KINSEL: Right.

1 JUDGE MCNAMARA: Is that a typo in the transmit limitation or
2 is there meaning we should attribute to the fact that the transmit limitation
3 device is singular and then the determine limitation devices is plural?

4 MR. KINSEL: It's the -- it's just simply the -- a function of the
5 English language, the way the claim is written. So I think you've got to back
6 up a little bit and start with the communication stage. So a communication
7 stage to communicate data with each other wherein the devices are designed,
8 so we know all of the devices in the system are designed to do these two
9 things, to transmit from one to the other, and so the English just simply
10 requires a singular there, not a plural. And then they determine whether
11 they're in synchronous playback progress with all of the other devices, and
12 so you have a plural there, but this isn't a typo.

13 This is the -- this is a result of the fact that the limitation itself
14 requires all of the devices, A and B as examples, to perform both of these
15 functions. So the Patent -- the Patentee wasn't using device to suggest that
16 there's only one device that is being transmitted to. Just the opposite. The
17 claim requires expressly that all of the devices have the capability to
18 transmit, because otherwise, you don't have the wherein clause, right?

19 JUDGE MCMILLIN: Does the Patent Owner --

20 JUDGE MCNAMARA: Counsel, this is -- this is Judge
21 McNamara. I'm getting really confused now, okay? So I'm reading this
22 claim and the first thing it says is I have a system, and I understand what a
23 system -- I think I understand what a system is. And I have then -- that
24 system has a number of playback devices, 6A and 6B, so they're playback
25 devices. Those playback devices play back a video on their screens and
26 each playback device has a memory that stores video data that represents a

1 video. So they do two things. They play back and they store video. And
2 they have a communication stage to communicate data with each other.
3 Wherein the devices -- now I assume the devices we're talking about there,
4 the antecedent is the playback devices 6A and 6B?

5 MR. KINSEL: That's my understanding.

6 JUDGE MCNAMARA: All right. So we're in the -- okay, so the
7 playback devices 6A and 6B are designed, A, to transmit video progress
8 data -- playback progress data. So I'm in the process of -- one of those
9 devices is in the process of transmitting something and it's going to transmit,
10 along with whatever it's transmitting, it's going to transmit progress data
11 that -- via the communication stage to the other devices. That doesn't say it's
12 actually transmitting the video. It's just progress data, right?

13 MR. KINSEL: Correct.

14 JUDGE MCNAMARA: Okay. Then the next limitation says that
15 the device is also -- is designed -- and that expression 'designed' creates a
16 whole issue which we are not going to address about, you know, whether or
17 not this is a thought. But it should really have -- it should probably read -- it
18 would better read if it said, is equipped to, or has equipment to. But in any
19 case, to determine based on the received progress data -- so one -- this is a
20 different device now from the one that's doing the transmitting. It's -- to
21 receive progress data, whether it -- what is 'it'? Which, you know -- is it the
22 data -- the device that's receiving the playback or the device that's
23 transmitting? And is it in a synchronous or asynchronous playback progress
24 with the other devices? So what is the 'it'?

25 MR. KINSEL: The 'it' there is the device that is receiving the
26 playback progress data. So the way the system works --

1 JUDGE MCNAMARA: Okay, great. No, no, let me --

2 MR. KINSEL: -- that --

3 JUDGE MCNAMARA: -- finish. Let me finish --

4 MR. KINSEL: Sure. I'm sorry.

5 JUDGE MCNAMARA: -- my questions, okay?

6 MR. KINSEL: Yes.

7 JUDGE MCNAMARA: Please.

8 MR. KINSEL: I'm sorry.

9 JUDGE MCNAMARA: The next question then is wherein the
10 display devices -- now 6A and 6B -- are those different from the playback
11 devices 6A and 6B or are they the same devices because --

12 MR. KINSEL: I believe --

13 JUDGE MCNAMARA: -- the display devices --

14 MR. KINSEL: -- they're the same device.

15 JUDGE MCNAMARA: -- are designed -- they're the same
16 devices, okay. So we've called them -- we've called them -- in this claim,
17 we've called them playback devices, we've called them devices, we've called
18 them 'it', and we've called them display devices. You can see where we're
19 getting confused now, at least where a simple person like me is getting
20 confused. Okay, so there's some real problems here.

21 Okay. So the display devices which are the same as the 'it', which
22 are the same as the playback devices, they're designed to display product
23 information, okay? So this limitation is really just telling me the kind of
24 information it's going to play -- it's going to display -- and where it's going to
25 display it. Sort of a -- it's a shelf label and it's in a section of the screen that
26 overlaps with the video content or it substitutes the video content of a

1 section. I'm not sure what the substituting means, but in any case. So the
2 thing I'm curious about here is what precludes a system from, you know,
3 including a device that doesn't include all of these things?

4 In other words, I must have a device that plays back and displays,
5 but I could have other devices that just play back or other devices that just
6 display and don't -- and don't generate video, don't store video. That would
7 still meet that, as long as there's more than one because it says a number of
8 playback devices, but -- so I'm -- I'm really having a lot of trouble on how to,
9 you know, what the scope of this claim is.

10 MR. KINSEL: Yeah. Let me help you parse it because I hear
11 what you're saying and I think part of what we can do is we can look at the
12 6A, the 6B. I think that helps explain that we're talking about the same
13 devices here, okay? So we've got --

14 JUDGE MCNAMARA: Oh, that's another interesting question.
15 Does it matter that they reverse the 6A and 6B as to go through the claim?

16 MR. KINSEL: Yes, because that reflects the reciprocal nature of
17 these communications. That was the point of this. Now, it's not to say that
18 these numerals limit the claims. They do not and we're not suggesting that
19 they do, but they do help understand that we're talking about the same
20 devices throughout this claim. And I'll grant you that they've used different
21 terminology a little bit throughout here, but I think if you follow the
22 numerals, you'll see that we're talking about the same devices. So we've got
23 playback devices 6A and 6B. Those are the playback devices. And the
24 system is made up of these playback devices, 6A and 6B being examples of
25 those devices.

26 JUDGE MCNAMARA: And that -- that's at least those playback

1 devices. There's nothing --

2 MR. KINSEL: At least.

3 JUDGE MCNAMARA: Because it's a comprising, there could be
4 other devices that are not playback devices.

5 MR. KINSEL: There could be -- there could be other playback
6 devices that aren't playback devices, I suppose. They wouldn't be part --

7 JUDGE MCNAMARA: Okay.

8 MR. KINSEL: -- of the system. I don't think that they'd be part of
9 the system because this system is talking about playback devices A and B --
10 6A and 6B.

11 JUDGE MCNAMARA: Okay.

12 MR. KINSEL: So --

13 JUDGE MCNAMARA: Okay.

14 MR. KINSEL: So --

15 JUDGE MCNAMARA: All right. I'll give you that.

16 MR. KINSEL: -- you know, it could have --

17 JUDGE MCNAMARA: Okay.

18 MR. KINSEL: -- some other system with some other devices in it,
19 but the -- the system that's being described here, being claimed here, has
20 playback devices 6A and 6B, okay? And those devices communicate with
21 each other. That's the reciprocal nature of the communication and the
22 devices, all of those devices, are designed. So it says, wherein the devices
23 6A and 6B are designed. So that means -- just as a plain language
24 meaning -- that all of the devices in the system are designed this way. They
25 are designed to transmit, they are designed to determine, and then you see
26 that they also display and they display product price information by means

1 of a virtual display and so on.

2 So we're talking about the same devices throughout this claim.

3 When we're talking about in the determination limitation to determine based
4 on the received progress data whether it is in synchronous or asynchronous
5 playback progress data with the other devices, the 'it' there actually makes a
6 lot of sense because what's happening is each of these devices is receiving
7 communications from the other -- from the other devices in the system.

8 They're receiving, for example, frame numbers. And then each of
9 those devices is determining whether 'it' is in sync with all of the other
10 devices. That's the way the system works. That's what's specifically
11 described in the specification and that's what recited in the claim. So
12 while --

13 JUDGE MCNAMARA: So the 'it' there is the receiving device; is
14 that correct?

15 MR. KINSEL: That's right.

16 JUDGE MCNAMARA: This is, again, Judge McNamara. But the
17 'it' there is -- the 'it' is the -- because each of these devices can both transmit
18 and receive.

19 MR. KINSEL: Yes, Your Honor.

20 JUDGE MCNAMARA: So when we're talking about the 'it' in this
21 case, it's when one of those devices is operating in its receive mode and it's
22 trying to determine if it is synchronous -- if its playback is in sync with the
23 playback from the transmitting device; is that correct?

24 MR. KINSEL: It's trying to determine whether it's in sync with all
25 of the other devices. So the -- each --

26 JUDGE MCNAMARA: Okay, but --

1 MR. KINSEL: Each device is receiving all of the playback
2 information from all of the other devices. This is a peer-to-peer system, so
3 they're receiving all of the playback information from each of their -- each of
4 their peers, so to speak, and then they are determining whether -- and then 'it'
5 is determining whether it is in sync with those peers. That's why --

6 JUDGE MCNAMARA: Can more than one peer be transmitting at
7 the same time?

8 MR. KINSEL: I'm sorry? I didn't catch that. I didn't hear it.

9 JUDGE MCNAMARA: Can more than one peer be transmitting at
10 the same time?

11 MR. KINSEL: They all --

12 JUDGE MCNAMARA: Because you just said it's -- it's -- go
13 ahead.

14 MR. KINSEL: Yeah. So the example in the specification is that
15 the -- that each device waits for one second of its playback time and then
16 transmits its progress, its frame number, to all of the other devices. So the
17 answer to your question is, depending on how the system is set up, if that
18 one second is contemporaneous with all of the other devices, then all of the
19 other devices will transmit at that one second time period.

20 But the example in the specification, as I said, talks about a one
21 second on the clock and then all of the devices that have waited a second
22 report their progress to all of the other devices. And then the devices that
23 receive that information determine whether it is in sync with all of the
24 devices from whom it received information. That's the nature of the system.
25 That's what the system is talking about --

26 JUDGE MCNAMARA: Okay.

1 MR. KINSEL: -- and that's what this claim is reciting.

2 JUDGE MCNAMARA: Okay. And so your distinction -- your
3 distinction over -- over Masumoto, whatever you're -- what is it about this
4 that Masumoto does not disclose? Maybe that's the simplest way to put it.

5 MR. KINSEL: Sure.

6 JUDGE MCNAMARA: I know you've probably said it before, but
7 I just want to make sure I've got it.

8 MR. KINSEL: Yeah. So in the Masumoto system, there's at least
9 three different reasons that Masumoto doesn't cover this, okay? So the first
10 is that in the Masumoto system, the master device is never designed to
11 transmit its video playback progress data to the other devices. In Masumoto,
12 it's a one-way transfer from the non-master devices to the master device. So
13 the master device never transmits its video playback progress data.

14 The second reason that it's distinct is that the non-master devices
15 never make a synchronization determination. Those other devices are told to
16 skip ahead a frame, or 10 frames in the example of the specification. They
17 never determine whether they're synchronous or not. They just simply get
18 instructed to jump ahead 10 frames and then they jump ahead 10 frames, so
19 they're never making a determination. And the third reason is that the --

20 JUDGE MCNAMARA: Okay. Let me -- let me interrupt you
21 there for just a quick second about Masumoto. If they jump ahead 10
22 frames, though, they have to know -- jump ahead from where? So why is
23 that not some kind of a synchronous type determination?

24 MR. KINSEL: Because it's not -- it's never -- let me -- maybe let
25 me walk through Masumoto. Maybe that would help answer your question.
26 Would you mind if I did that? Let me -- let me --

1 JUDGE MCNAMARA: No, no. Anyway you want to do it is
2 fine. I'm just trying to make sure --

3 MR. KINSEL: Yeah.

4 JUDGE MCNAMARA: -- I got -- I understand what we're doing
5 here.

6 MR. KINSEL: Understood. Let me jump to -- let me jump to 19
7 in our slide deck, because this is Masumoto, and I think it will help explain
8 why Masumoto doesn't read on this. So let me start with Masumoto. We've
9 got four displays. Displays A, B, C and D. So this is the example in the
10 specification. According to the specification, there is only one master
11 display at any time, okay? And that master display is identified at start up or
12 installation.

13 Now, Slide 20 shows the first step in the process and here's what
14 happens. The master display sends a request to each of the other displays to
15 send their current frame number and a timestamp, okay? So that's the first
16 step in the process. The master display requests notification from the three
17 other devices in the example.

18 Slide 21 is the next step and what happens in the next step is the
19 displays send their frame number and timestamp to the master display,
20 okay? And this is what I was just talking about a moment ago, Judge. This
21 is a one-way transfer of information, okay? The master is never sending its
22 frame number to the other three displays and the other three displays are
23 never sending their frame number to the other non-master displays. The
24 only place that the frames go is from display A, B, C, D -- A, B, and C to the
25 master display.

26 So not all displays in the system are designed to transit playback

1 progress data because the master display never does it and they don't send it
2 to each other, okay? Which is exactly what the claim language expressly
3 requires, that they transmit to each other, and the displays don't do that.

4 Slide 22 shows the next step in the process. And in this process,
5 the master display receives -- and this is the example from the specification
6 that I'm using here now -- so the master display receives information from
7 display A. It says, I'm at frame 7190 at 120 seconds of playback time, okay?
8 That's the information that the specification tells us the master display is
9 receiving from display A.

10 The master display then calculates a desired frame number. Not
11 the frame number that's being displayed at the master, and this is really
12 important, so let me be careful as I walk through this. The desired frame
13 number is the frame number that the master has determined should be
14 displayed at 120 seconds. So in this case, it's frame 7200. But frame 7200
15 is not the frame that's being displayed on the master display.

16 Masumoto never says that. This is a calculated or idealized frame
17 number, okay? It is never the frame that's being displayed by the master.
18 And so again, that's really important because here, the master isn't
19 determining whether it is in sync, nor is it determining frankly whether the
20 display A is in sync. What it's doing is it's comparing the frame that A is at,
21 at a given time, to the desired frame. And then it'll calculate a correction --
22 in this case, 10 frames.

23 In the next step, step 23, Masumoto -- Slide 23, beg your pardon --
24 the master display sends the notification to skip 10 frames only to display A,
25 okay? And so with that understanding, you can see that there are some
26 pretty significant differences, and let me just summarize them. I'm going to

1 summarize them on Slide 25.

2 First, the master display never transmits its playback progress data
3 to other playback devices. That never happens. There's no system in
4 which -- in Masumoto in which the master is designed to do this. Second,
5 the non-master devices never determine whether they are synchronized
6 based on received playback progress data. Again, no system disclosed by
7 Masumoto has devices that do this. Third, the master device never
8 determines whether it is in sync with the other devices. As I mentioned
9 earlier, it's calculating a desired frame number. Not -- it's not showing you
10 what frame the master is on. It's calculating a desired frame number, okay?

11 So hopefully, Judge McNamara, that helps explain why it is that
12 we think Masumoto just simply doesn't teach us limitation in any way. You
13 never --

14 JUDGE MCNAMARA: I appreciate that. Thank you very much.

15 JUDGE CALVE: Yes.

16

17 JUDGE CALVE: Mr. Kinsel, Judge Calve. Is Petitioner also
18 relying on paragraph 17 of Masumoto? It seems to be cited in the petition
19 bridging pages 25 to 26. What is your interpretation of paragraph 17 of
20 Masumoto, specifically these two limitations you've just discussed in
21 regards to the Figure 9 fifth embodiment?

22 MR. KINSEL: So I think -- I'm going to go to Figure 17 just to
23 make sure I -- I just want to look at paragraph 17 before I answer your
24 question to make sure I -- I believe that's a general description and I believe
25 they're relying on that. I'm not sure what purpose that they're relying on it
26 for. There is some talk in the reply brief about frame speed and a different

1 embodiment from Masumoto. This figure -- this paragraph 17 simply
2 describes this process that I've just laid out. That's the correction quantity.

3 I don't -- I believe the Petitioner is saying that the -- and I could be
4 wrong about this because I didn't quite track what Petitioner was saying on
5 this point -- but Petitioner seems to be saying that the request that the master
6 display sends to the non-master displays counts as transmitting for purposes
7 of this limitation. And I think that may be what they're trying to get at here,
8 but that's wrong for a number of reasons, and so let me just talk about why
9 that's incorrect.

10 The transmission has to be of playback progress data, okay? And
11 playback progress data is data that reflects where the display is at the time
12 that it is reporting its progress, right? That's the plain and ordinary meaning
13 of playback progress data, but the -- the request or the correction sent by the
14 master display is not playback progress data. So the transmission limitation
15 requires transmitting playback progress data, but that's not what the master
16 display ever transmits. The master display only transmits a request and --

17 MR. CALVE: I understand. Let me -- Mr. Kinsel, I understand
18 about this master display issue you've described, but paragraph 17 seems to
19 say there's a plurality of displays, each of which has a controller, and the
20 controller in each of the displays sends a request signal to the other display
21 or displays to transmit information of what's displayed on the other display,
22 and then gets that information back from the other display and it uses it to
23 sync up. That seems to be the 1.3 -- the limitations that you're disputing.
24 That's what I don't understand.

25 MR. KINSEL: Yeah, this paragraph 17 is not talking about the
26 embodiment 5, right? Embodiment 5 is a very specific embodiment, which

1 is the one that's relied on by Petitioner. I don't know if Petitioner has cited
2 specifically to 17 or not, but the embodiment 5 simply doesn't describe any
3 system where all of the devices can do these things. And I don't know that
4 this -- there are other embodiments where the controllers are sending
5 information to each other, but those are different embodiments. Those are
6 not embodiments, A, that are relied on by the Petitioner in the petition, or B,
7 talk about communicating frame information. They're talking about other
8 kinds of information that can go back and forth, and I believe that's what
9 paragraph 17 is talking about. It's not talking about frame information.

10 JUDGE CALVE: Well, the petition bridging pages 25 and 26
11 seems to be saying, the controller in one display sends a request signal to
12 another display to transmit information of the video signal display, this
13 playback information. It receives the information from the other display and
14 then it sends a notification of a correction and they're citing specifically to
15 paragraph 17.

16 And if you pop up to page 24, that seems to all be Petitioner's
17 contentions regarding at least limitation element 1.3. So it seems to me, at
18 least, at this level that they're relying on this global generic disclosure of an
19 embodiment that has this paragraph 17. So what is missing on these
20 limitations in this paragraph 17?

21 MR. KINSEL: So paragraph 17 isn't talking about receiving
22 progress -- playback progress data from all of the other devices. It's not
23 talking about making a determination based on that information. It's simply
24 talking about information going between these two devices. And as I
25 mentioned, there are other embodiments in this Masumoto disclosure that
26 this is referring to. So this generic disclosure doesn't meet the limitations

1 because it doesn't have transmission of video playback progress data. It
2 doesn't have a determination based on the received progress data that the --
3 that the device is synchronous with the other devices.

4 It simply doesn't meet those limitations. This generic limitation.
5 And I would note that the Petitioner puts the display in brackets, so we're
6 reading into what the Petitioner is even saying. It's not clear to me that this
7 disclosure is even talking about the displays. This paragraph just simply
8 isn't clear enough to be in an embodiment, such that it could read on this
9 limitation.

10 JUDGE MCMILLIN: If I can interrupt a second. This is Judge
11 McMillin. You've used up 50 minutes of your time, Mr. Kinsel.

12 MR. KINSEL: Okay. I'll --

13 JUDGE MCMILLIN: You have about 10 minutes left and we
14 have not heard from your LEAP Practitioner.

15 MR. KINSEL: Yes. So let me wrap up and turn over to Mr. Knox
16 now, so that Mr. Knox can have an opportunity to talk about the motivation
17 to combine.

18 JUDGE MCMILLIN: You're into your rebuttal time. Thank you.

19 MR. KINSEL: Understood. Thank you, Your Honor. Mr. Knox?

20 MR. KNOX: Hello, Your Honors. Can you hear me?

21 MR. KINSEL: Yes.

22 MR. KNOX: Thank you.

23 JUDGE MCMILLIN: All right.

24 MR. KNOX: Thank you, Mr. Kinsel. Your Honors, Tyler Knox,
25 Perkins Coie, representing Patent Owner, and thank you for having me.

26 And --

1 JUDGE MCMILLIN: Mr. Knox, there's an echo. Do you have
2 something on that's causing that echo?

3 MR. KNOX: Oh, let me -- it might be on here. I did that already.
4 Sorry. Is that better, Your Honor?

5 JUDGE MCMILLIN: It is. Thank you.

6 MR. KNOX: Great, thank you. Your Honors, so what I'd like to
7 do is just share our slides, again briefly, and what I'd like to cover on Slide
8 59 are the Petitioner's combinations. And to review on Slide 60, Your
9 Honors, you see that Hanshow, again, they put forth two grounds. First
10 ground is a combination of Swafford and Masumoto, of which we spoke of
11 Masumoto in depth. And Ground 2, which required a combination of
12 Masumoto, Kipp, and Takashi.

13 And as shown on Slide 61, it's clearly Hanshow's burden of proof
14 with particularly why its combination are, in fact, obvious per statute and per
15 precedent. I think what's important to note, Your Honors, is that if you turn
16 to Slide 62, this panel already found, with respect to the combination of
17 Swafford and Masumoto, in Ground 1, that it is true that the video playback
18 displays in Swafford and Masumoto are quite different and require different
19 considerations.

20 And further, in the institution decision, Your Honors noted that the
21 structural similarity between Swafford's and Masumoto's devices does not
22 provide a motivation to combine. And specifically, as Mr. Tan briefed
23 earlier, Your Honors took issue with the use of LCDs and how that common
24 form of video displays is an inadequate explanation as to why to motivate
25 the combination of Swafford and Masumoto.

26 So interestingly, Your Honors, with your opinions provided in the

1 institution decision, Hanshow did not further explain its combinations or
2 improve its record of evidence, responsive to the skepticism, much less with
3 any degree of particularity, which is fatal under the now heightened
4 evidentiary standard requiring a preponderance of the evidence.

5 If Your Honors would refer to Slide 41 of Hanshow's
6 demonstratives, the first bullet on that slide, in particular, rehashed this idea
7 of two systems that both contain an LCD display, therefore, they're obvious.
8 But as we just reviewed, Your Honors, you dismissed that as a basis, as to
9 why these combinations would make sense. And also on that slide, Your
10 Honors, you'll see that the only citations post-institution are to the reply for
11 the sake of advancing the Intel and Unwired Planet cases. And those cases
12 as argument are too far removed to create a helpful nexus to explain why, in
13 this technology with these facts, this combination would make sense.

14 Turning back to our slides, Your Honors, at Slide 64, we see that
15 we printed in the testimony of Dr. Tentzeris at the institution stage, and I
16 think that's important to note because it was unrebutted, but at this stage,
17 Your Honors, we have the testimony to clear and correct testimony of Dr.
18 Hart who is an expert in this field and was selected with particularity for this
19 matter and only this matter, as you will hear today in our hearings. And he
20 provides all the reasons and a checklist road mapping why the rationales that
21 Dr. Tentzeris provided fail.

22 For example, turning to Slide 70, Your Honors, we discuss, again,
23 this LCD display issue, which Dr. Tentzeris mentions, but a quick Google of
24 the relevant art within this timeframe shows at least 100,000 other reasons
25 in -- to combine LCD displays or implementations of it, to show that it's
26 anything but routine. It's actually something that needs to be explained with

1 some particularity.

2 And at Slide 71, most importantly, Dr. Hart identifies reasons why
3 it would not be obvious to combine these references. Specifically, because it
4 creates problems. So not only does Dr. Tentzeris not explain why it would
5 be obvious, but Dr. Hart explains why it would not be obvious, such as the
6 generation of heat, increased power usage, and increased cost of each shelf
7 display. And to give Your Honors an example from Ground 2, since we've
8 spoken of Ground 1, we see the combination of Masumoto, Kipp, and
9 Takashi and how just on the covers they differ, but more specifically, at
10 Slide 74, Dr. Hart correctly described the difference with Kipp being one of
11 streaming and lag time, and trying to display, for example, a sports game
12 match across multiple American TVs in multiple homes.

13 Kipp is directed towards, for example, fixing the Jake Paul/Mike
14 Tyson fight buffering issue that we saw in November. What Masumoto does
15 is simply expand that same blurry picture that Kipp is directed towards
16 fixing across four local displays. These are incompatible systems where the
17 synchronization used in the one would not work with the other.

18 Proceeding, Your Honors, to Slide 75. Petitioners also put forth a
19 point that somehow, achieving this abstract business result of displaying
20 promotion consent, advertising, that somehow, combining the references
21 would satisfy that need. But Your Honors, Dr. Hart clearly points out on the
22 bottom of the slide that both, Masumoto and Kipp independently disclose
23 sports broadcasting, which contains -- as anyone who watched the past
24 Superbowl would understand -- advertising. Therefore, they don't offer
25 solutions that the other reference meets.

26 In conclusion, Your Honors, what Dr. Hart provides is a clear road

1 map and clear testimony to provide you all the reasons you need to affirm
2 your original skepticism with the combinations and to see why they clearly
3 don't work. Thank you for your time. I'd like to reserve the remainder of it
4 for Mr. Kinsel.

5 JUDGE MCMILLIN: Thank you, Mr. Knox. Very good. Patent
6 Owner has three minutes of time left. You're up, again, Mr. Tan. You have
7 10 minutes left.

8 MR. TAN: Thank you, Your Honors. I'll just try to briefly
9 address a few points Patent Owner brought up. So first, about the broadcast
10 in Claim 7, even using the limited or the construction that we don't want to
11 use for that term, you know, we believe Masumoto in paragraph 79 discloses
12 broadcast, the limitation about broadcast, because in that paragraph,
13 Masumoto specifically mentions, you know, the master display where it
14 sends notifications to other displays, A210 to display C230. That's the first
15 point.

16 The second thing, I wanted to kind of address the confusion on the
17 terms about designed to or configured to, whether Patent Owner's position
18 really requires the capability or actually performance. I think I am confused
19 a little bit, too, because I don't believe I've seen any -- I don't see -- we don't
20 see their position about whether it's just a capability until just like a few
21 minutes ago when Mr. Kinsel talked about that in his response.

22 We think there seems to be a confusion there, at least in some of
23 their early papers. They seem to say, oh, this device has to transmit, has to
24 determine, and each of them has to do this, must do that during the operation
25 of the system. So that seems a bit -- I'm a little confused, as Your Honors,
26 too.

1 And lastly, about the combination. I want to go to our Slide 39. I
2 just learned I can also share my screen, so I'll share my screen if it's easier.
3 Let me try to share 39. Let me -- I hope -- can you see my screen?

4 JUDGE MCMILLIN: We can see it.

5 MR. TAN: Great. Yeah, then this is easier for all of us. So for the
6 combination, we agree with the Board there's no compatibility issues there.
7 Neither Swafford or Masumoto, or all the '669 patent itself, specifies any
8 display sizes, aspect or ratios, or pixel counts. And we believe Patent Owner
9 just misapplies the law by arguing incompatibility with this way -- the
10 POSITA from incorporating unmodified displays from Masumoto to
11 Swafford system. And that's all the points I have for today, but Your
12 Honors, if you have further questions, let me know.

13 JUDGE MCMILLIN: I don't see any further questions.
14 Apparently --

15 JUDGE CALVE: Oh, Mr. Tan --

16 JUDGE MCMILLIN: Judge Calve has a question.

17 JUDGE CALVE: Oh.

18 JUDGE MCMILLIN: Go ahead, go ahead. Sorry, Judge Calve.

19 JUDGE CALVE: Oh, quite all right. Little late. Slow on the
20 uptake there, sorry. Mr. Tan, what's your position on paragraph 17 of
21 Masumoto? Specifically, does it address these two limitations of each
22 device being able to transmit and also determine?

23 MR. TAN: Your Honor, we fully agree with your observation and
24 your opinion that paragraph 17 of Masumoto does discuss, and we did cite
25 them in our petition as you pointed out on page 25, page 26 in the original
26 petition. And as you also observed -- as you also pointed out, I think -- I

1 believe Your Honor also pointed out that all the devices in Masumoto, they
2 have processors, they have controllers, they have this communication unit,
3 and they seem to have the same configuration -- hardware configurations.
4 So each display can be a master display.

5 JUDGE CALVE: Thank you.

6 MR. TAN: Thank you.

7 JUDGE MCMILLIN: Anything else? All right. I don't know
8 who's going to talk. Probably Mr. Kinsel. You have three minutes, Mr.
9 Kinsel. You're up.

10 MR. KINSEL: Thank you, Your Honor. Let me talk quickly
11 about Swafford. The Swafford reference simply does not disclose overlap,
12 so let me go to Slide 31 of our deck. I should be sharing that with you now
13 hopefully. And what Petitioner is trying to show here is that this green area
14 overlaps with the purple area. There is no disclosure whatsoever in
15 Swafford that this purple area can display anything. So this is really just sort
16 of a misleading representation of what's in Swafford. Swafford doesn't teach
17 overlapping, nor does Takashi. Let me jump to Takashi.

18 So this is the image from Petitioner's briefing, Petitioner's petition.
19 You can see that they've colored this whole front section of Takashi as
20 purple. There's no disclosure that this bottom portion where Petitioner has
21 colored it in purple actually is a display. That is a housing and there's no
22 discussion anywhere in Masumoto that the electronic, the virtual electronic
23 price tag labels, can overlap with video. There's no disclosure whatsoever.
24 So regardless of your view with respect to limitation 1.3, the -- the asserted
25 art doesn't teach 1.4, just full stop.

26 And then the -- with whatever time I have left, let me just say, on

1 the communication stage, Petitioner has offered a functional construction of
2 that term. As a matter of law, the Board cannot construe -- cannot compare
3 the prior art against a function, which is all the Petitioner has given here.
4 And so if the Board believes that the communication stage limitation is
5 subject to 112 construction, then the Board has to find, as a matter of law, as
6 a matter of Federal Circuit Law, that the Petitioner has failed to carry its
7 burden with respect to any of the claims because Petitioner has not offered a
8 structural construction for that term.

9 JUDGE MCMILLIN: Mr. Kinsel, in your briefing, did the Patent
10 Owner dispute whether Masumoto's playback devices had a communication
11 stage?

12 MR. KINSEL: Did the -- we did not dispute whether it had a
13 communication stage. Our position was that the material that's being
14 communicated doesn't meet the transmission or determination limitations.

15 JUDGE MCMILLIN: Okay. So there's not a dispute that the
16 asserted art teaches a communication stage?

17 MR. KINSEL: That's correct.

18 JUDGE MCMILLIN: All right. Are you finished, Mr. Kinsel?

19 MR. KINSEL: Well, that's a terrible question to ask a lawyer in
20 front of a Board, so I --

21 JUDGE MCMILLIN: Okay, all right.

22 MR. KINSEL: -- could go on forever.

23 JUDGE MCMILLIN: I'm going to rule that you're finished. Will
24 that help you any?

25 MR. KINSEL: I've covered the material that I'd like to cover in
26 my rebuttal. There are obviously additional matters that we should talk

1 through, but I know my time is up.

2 JUDGE MCMILLIN: Okay. The record in this proceeding is
3 closed.

4 (Whereupon, the above-entitled matter went off the record at 11:54
5 a.m.)

PETITIONER:

Hao Tan
Shen Wang
ARCH & LAKE LLP
haotan@archlakelaw.com
shenwang@archlakelaw.com

PATENT OWNER:

C. Gregory Gramenopoulos
Kevin Rodkey
Safiya Aguilar
Milan Feliciello
Alissa Green
Jessica Kaiser
FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, LLP
c.gregory.gramenopoulos@finnegan.com
kevin.rodkey@finnegan.com
safiya.aguilar@finnegan.com
milan.feliciello@finnegan.com
alissa.green@finnegan.com
kaiser-ptab@perkinscoie.com