

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SONY INTERACTIVE ENTERTAINMENT LLC,
Petitioner,

v.

INTELLECTUAL PIXELS LIMITED,
Patent Owner.

IPR2021-00237
Patent 10,681,109 B2

Record of Oral Hearing
Held March 10, 2022

Before JENNIFER MEYER CHAGNON, STACY B. MARGOLIES, and
IFTIKHAR AHMED, Administrative Patent Judges.

IPR2021-00237
Patent 10,681,109 B2

APPEARANCES:

ON BEHALF OF THE PETITIONER:

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The above-entitled matter came on for hearing on Thursday,
March 10, 2022, commencing at 1:00 p.m. EST, at the U.S. Patent and
Trademark Office, by video/by telephone.

PROCEEDINGS

1 (Proceedings begin at 1:00 p.m.)

2 JUDGE AHMED: Good afternoon, everyone. We are here
3 for oral argument in IPR2021-00237, Sony Interactive
4 Entertainment LLC v. Intellectual Pixels Limited.

5 I'm Judge Ahmed, and appearing with me today are
6 Judges Chagnon and Margolies.

7 Starting with petitioner, will counsel please enter
8 your appearance for the record.

9 MR. HAAG: Good afternoon, Your Honor.

10 This is Joseph Haag from Wilmer Hale for petitioner,
11 Sony Interactive Entertainment LLC.

12 JUDGE AHMED: Thank you, Mr. Haag.

13 And for patent owner?

14 MR. WILSON: Good afternoon, Your Honor.

15 This is Douglas Wilson of Armond Wilson LLP for
16 patent owner, Intellectual Pixels Limited.

17 JUDGE AHMED: Thank you, Mr. Wilson.

18 We set forth the procedure for today's oral hearing
19 in our order granting the parties' request for an oral
20 hearing, which is Paper 30.

21 Each party will have 60 minutes of total argument
22 time. We will begin with petitioner, who may present its

1 case with regard to the challenged claims and the grounds
2 set forth in the petition. Petitioner may reserve time for
3 rebuttal.

4 Thereafter, patent owner may respond to petitioner's
5 arguments and may reserve time for surrebuttal.

6 Petitioner may then present its rebuttal, followed
7 by patent owner's surrebuttal.

8 In this video format, we do not have a timer that we
9 can share with you; however, when it's your turn, if you
10 would please let me know how much time you'd like to reserve
11 for rebuttal, I'm happy to remind you when we reach that
12 point in your opening argument.

13 A few other things to keep in mind, some
14 housekeeping.

15 First, it is my understanding that we are not
16 discussing any information that the parties deem
17 confidential. This hearing is open to the public, and there
18 may be someone listening on the phone, so please keep that
19 in mind.

20 Second, please be as clear as possible during your
21 argument regarding what slide you may be referring to or
22 exhibit so that the record is clear and we may follow along.

23 We have electronic versions of all your demonstratives and
24 all of the documents in the record.

25 Third, remember to keep your line on mute when it's

1 not your turn to speak so that we can minimize any
2 background noise.

3 Fourth, before speaking, please use half a second or
4 so to pause in case there is any lag in the transmission.

5 And finally, if either side experiences any
6 technical or other difficulties that fundamentally undermine
7 counsel's ability to participate, please let the Panel or
8 our IT personnel know as soon as possible and we'll make
9 adjustments as needed.

10 Petitioner, any questions about what I have
11 discussed?

12 MR. HAAG: No, Your Honor.

13 JUDGE AHMED: Patent owner, any questions about what
14 I've discussed?

15 MR. WILSON: Not from me, Your Honor.

16 JUDGE AHMED: Okay. With that, Mr. Haag, how much
17 time would you like to reserve for rebuttal?

18 MR. HAAG: I'd like to reserve ten minutes for
19 rebuttal, Your Honor.

20 JUDGE AHMED: Okay. Sounds good.

21 You may proceed.

22 MR. HAAG: Thank you, Your Honors.

23 I'm going to start on Slide 12 which summarizes the
24 parties' disputes, together with the grounds to which each
25 dispute relates, and an identification of where each dispute

1 is addressed in petitioner's briefing.

2 And I'm going to start with the first issue set
3 forth on Slide 12, which is whether Wiltshire and Saha
4 disclose compressing at least one updated image.

5 If we could turn to Slide 14.

6 As the Board found in its Institution Decision,
7 Wiltshire discloses a server that generates updated images in
8 connection with box 220 of Figure 2 and, as taught in
9 Column 7, compresses those updated images before they are
10 transmitted to the client in Step 230.

11 Wiltshire teaches compression using the same industry
12 standard compression technique taught by the '109 patent,
13 and that's MPEG, and it teaches transmitting a stream of
14 compressed images to the client where each image comprises a
15 single video frame.

16 If we can turn to Slide 15.

17 To begin with, Wiltshire discloses that the server
18 generates updated images.

19 The left part of the slide shows detail from
20 Figure 2 of Wiltshire and the right shows a discussion of
21 Step 220 in Wiltshire's specification.

22 As explained in Column 7, lines 9 through 10, at
23 Step 220, Wiltshire's server determines whether an image is
24 to be displayed on the screen of the client server computer.
25 If so, the server updates the image as shown in decision box

1 220 which reads "Display/Update Image".

2 This is further explained --

3 JUDGE AHMED: Let me interrupt you.

4 Does Wiltshire mention what that update is?

5 I think that is patent owner's point is that there's

6 nothing in Wiltshire telling us what update is happening.

7 Wiltshire could just be sending down pre-existing images.

8 MR. HAAG: I think it does tell us what's updated.

9 If you look, as an example, at Column 8, lines 61

10 to 63, which I have here on Slide 15, it says that, "The

11 game program response to the input command 112," so that's

12 the game program running on the server, "by updating the

13 state of the game and possibly modifying the image displayed

14 on the screen."

15 So this is the disclosure of the game program on the

16 server modifying the image, and that image would be modified

17 before it's compressed and transmitted to the user -- or to

18 the client.

19 If we turn to Slide 16, Wiltshire also discloses

20 compressing the updated image before transmission.

21 At Column 7, lines 62 to 64, Wiltshire describes the

22 bandwidth requirements for transmission from the server to

23 the client, and it talks about reducing this bandwidth

24 requirement. And specifically, Wiltshire teaches compressing

25 the server-generated updated images before transmission to

1 the client in order to reduce the bandwidth requirements for
2 transmission.

3 JUDGE AHMED: Let me interrupt you again.

4 Where does it tie those two things together, the
5 generation of the new image and the compressing part?

6 MR. HAAG: So two things, Your Honor.

7 First, when we looked at Column 8 on the previous
8 slide, it talked about modifying the image displayed on the
9 screen, and it was -- again, it was the game program running
10 on the server that does that, that's Column 8, lines 61 to
11 63, and then, if you look at Column 7, lines 7 -- Column 7,
12 lines 13 to 18, it first talks about Step 220 where the
13 update takes place, and then right after that, right after
14 this update takes place, in Stage 230 is when a compressed
15 video MPEG stream is sent to the client.

16 So Wiltshire teaches us that the game program can
17 decide whether to modify the image, then it can update the
18 image. If it's going to send a compressed video MPEG
19 stream, that's a compressed image, and it's sent to the
20 client as a stream, a video stream in Step 230.

21 If I can turn to Slide 17.

22 Saha confirms that MPEG compression was well known
23 before the '109 patent and would have been obvious to a
24 person of ordinary skill in the art based on Wiltshire's
25 instruction to use MPEG compression.

1 And at the bottom of Column 1 and top of Column 2 of
2 Saha, and we see this on Slide 17, Saha explains that MPEG
3 compression is a method for compression and decompression of
4 full-motion video images, such as the animated images in
5 Wiltshire's gaming system, and as Saha describes, MPEG yields
6 very high-compression ratios.

7 Saha also has additional disclosures in Columns 2,
8 lines 5 to 21, about the predominant MPEG standards and
9 taking advantage of the redundancy in compression.

10 If we turn to Slide 18, patent owner makes a few
11 arguments -- and Your Honor asked about these arguments as
12 well -- in contending that Saha and Wiltshire did not
13 disclose compressing an updated image.

14 First, as Your Honor noted, the patent owner argues
15 that Wiltshire does not disclose an updated image, patent
16 owner instead says it selects preloaded images on the
17 client. Patent owner is incorrect on that.

18 The patent owner bases its argument in part on
19 Column 8, lines 8 through 11, which we see here on Slide 18,
20 which states, "In some embodiments, images are preloaded
21 into a client memory."

22 But Column 8 describes this as an alternative
23 embodiment, it says some embodiments, not all embodiments.

24 And if we turn to Slide 19, Wiltshire's embodiment of
25 Figure 2 relies on transmitting an updated image from the

1 server to the client, and this is shown again in Figure 2 in
2 Step 230 which states send video stream to client. So it's
3 sending a video stream to client, and that appears right
4 after Step 220.

5 So this is not using preloaded images on the client,
6 the images are instead sent from the server to the client as
7 part of this video stream.

8 And in addition, Columns 8, lines 61 to 63, which I
9 mentioned earlier, mentions that the game program running on
10 the server can update the state of the game and possibly
11 modify the image displayed on the server.

12 If we turn to Slide 20, a person of ordinary skill
13 in the art would not read Wiltshire as limited to preloading
14 images. That's inconsistent with Wiltshire's disclosure in
15 Figure 2 in Columns 7 and 8, and it's also inconsistent with
16 Wiltshire's disclosure of interactive games.

17 One of those interactive games is Doom. You can see
18 that here in Wiltshire at Column 1, lines 26 to 43.

19 And Wiltshire actually defines the terms game and
20 gaming to which its disclosure relates, and it defines game
21 and gaming as including video games like Doom. And those
22 are games you can use with the server/client interactions
23 described in Figure 2 of Wiltshire.

24 And if you look at the transcript of patent owner's
25 expert, this is Dr. Hart, that's Exhibit 1025 at pages 52,

1 53, and 54, you'll see that he admits that games like Doom
2 generated updated images in response to user inputs in
3 realtime. That is not using preloaded images, as the patent
4 owner contends.

5 If we turn to Slide 21, the second argument that
6 patent owner makes is that Wiltshire does not disclose
7 transmitting a compressed image from the server at all.
8 Instead, the patent owner contends that Wiltshire's
9 disclosure of transmitting compressed video MPEG stream
10 actually means sending a precompressed video MPEG file, such
11 as a prerendered video clip banner that says something like
12 jackpot on it.

13 But Wiltshire does not contain that disclosure, and
14 you can see that patent owner admits that in its patent
15 owner response. It says, "Wiltshire does not disclose this
16 example."

17 That's true, it's not in Wiltshire. Wiltshire does
18 not disclose the server transmitting a precompressed video.
19 The only discussion of preloading is at the client in
20 Wiltshire, not at the server.

21 Now, if we turn to Slide 22, patent owner's
22 experts -- patent owner's expert, Dr. Hart's position
23 actually is that Wiltshire transmits only uncompressed video,
24 that is not a compressed video MPEG stream as Wiltshire
25 states, but uncompressed video. He says that in his

1 declaration, Exhibit 2009 at paragraph 63.

2 As you can see from this exchange from his
3 deposition, Exhibit 1025 at pages 149 and 150, Dr. Hart
4 contends that Wiltshire discloses a compressed video MPEG
5 stream, but then contends that Wiltshire does not send a
6 compressed MPEG video stream to the client at all.

7 And you can see that at the very bottom, he said, "I
8 don't think Wiltshire was disclosing the transmission of a
9 compressed MPEG video stream to the client."

10 That makes no sense given Wiltshire's disclosure and
11 given Wiltshire's desire to reduce bandwidth by using
12 compression, and it's inconsistent with the words of
13 Wiltshire itself.

14 Now, if we turn to Slide 23, Dr. Hart's argument
15 directly contradicts Wiltshire's disclosure, and as we see
16 here from Column 7, lines 62 to 64 of Wiltshire, it performs
17 compression to reduce the bandwidth required to transmit
18 data from the server to the client, and Wiltshire discloses
19 MPEG compression as one way to achieve this goal of reducing
20 the bandwidth required for transmission.

21 If Wiltshire's server decompressed its video stream
22 before transmission, that would defeat Wiltshire's stated
23 purpose for performing compression. You wouldn't need to
24 worry about reducing bandwidth.

25 Now, finally, the patent owner contends that the

1 Saha reference is limited to offline MPEG encoding and that
2 a person of skill in the art would not have understood how
3 to use MPEG for live, realtime, interactive video games
4 disclosed in Wiltshire.

5 But Saha and Wiltshire contain just as much
6 disclosure as the '109 patent itself about compression, and
7 you can see that here on the slide, that Wiltshire has
8 details about compression, the compressed video MPEG stream
9 and the bandwidth being reduced through compression, and all
10 we've got from the '109 patent is compress the image data in
11 box 66.

12 So the '109 patent's disclosure of the claim
13 compression is no more detailed than Wiltshire's, Wiltshire
14 has just as much detail.

15 And if we turn to Slide 25, the Levoy
16 reference that Dr. Fuchs cited in both of his declarations,
17 he cited this in Exhibits 1002 and 1033, he cited the Levoy
18 reference, Exhibit 1016, and this corroborates his point
19 stating that, "Realtime image compression, as used in the
20 Wiltshire-Saha combination, was straightforward to a person
21 of ordinary skill in the art years before the '109 patent,
22 so a person of skill in the art would have had no trouble
23 using MPEG encoding and decoding in realtime."

24 Now, I'm going to turn to the second issue. If we
25 turn to Slide 26. I'm going to go to whether Wiltshire and

1 Saha disclose a frame.

2 I'm going to go Slide 28, if we can, and I want to
3 give you some background on the claim construction dispute
4 here.

5 The patent owner is trying to construe the claim
6 term frame from the '109 patent to exclude Saha's express
7 disclosure of compressed image frames. That is, Saha uses
8 the word frame, Saha discloses image data as compressed
9 frames, and discloses multiple types of frames.

10 And here, on Slide 28, we see the patent owner's
11 expert, Dr. Hart's deposition testimony, this is
12 Exhibit 1025 at pages 104 and 105, and he agrees that Saha
13 discloses compressing frames using MPEG. He agrees with
14 that.

15 So to be clear, the real issue here is that Saha
16 discloses a frame that has been compressed, so it discloses
17 a compressed frame, and the '109 patent term frame should
18 not be construed so it does not cover Saha's frame.

19 That's what the patent owner's attempting to do, and
20 as the Board found in its Institution Decision, Saha's
21 frames are frames in the '109 patent.

22 If we can turn --

23 JUDGE AHMED: Let me ask a question there.

24 I think patent owner's point is that there is no
25 frame to begin with in Wiltshire. So even if you're using

1 MPEG, that's just doing compression, so as construed, patent
2 owner argues frame does not exist to begin with so the MPEG
3 disclosure is not helpful.

4 MR. HAAG: Well, there's got to be something that
5 you're compressing when you're using MPEG compression.
6 You've got to be compressing something, and you end up with a
7 compressed frame. That's what Saha teaches us.

8 There are various types of frames, I-frames,
9 P-frames, as an example, but if you're taking something, an
10 image, a video, if you're compressing it, you've got
11 something that you're compressing.

12 And that's what Wiltshire has as well, because
13 Wiltshire's got updated images -- remember, it possibly
14 modifies those images and it can compress them. So that's
15 what it's compressing, those images that it has modified.

16 JUDGE AHMED: Why would an I-frame not be a complete
17 display --

18 MR. HAAG: Well, it could be.

19 JUDGE AHMED: -- in MPEG format?

20 MR. HAAG: Yes, it could be. Absolutely. It could
21 be a complete display, yeah.

22 I think patent owner's position may be that it's
23 not, but it is.

24 Now, if we turn to Slide 27, I want to briefly
25 address the claim construction dispute.

1 The parties appear to agree that a frame represents
2 a single instance in time of a video or animated sequence;
3 that is, you take a number of frames and put them in a
4 sequence to form a video.

5 It appears the parties' dispute arises from the
6 patent owner's attempt to then add to this definition of
7 this term a requirement that a frame must be of the display.

8 Now, the issue with of the display is, what does
9 that actually mean? And the patent owner seems to be taking
10 different positions on what that means.

11 If you read the patent owner response, it argues
12 that the display in its construction is the client display,
13 and it refers to this as the entire display. In fact,
14 patent owner says that in its surreply at page 4.

15 Then if we look at what Dr. Hart said in his
16 declaration, he also said this in his deposition, is that,
17 "Of the display appearing in patent owner's construction,
18 actually refers to the full image generated by the
19 application," and you can see that here on the third entry
20 on Slide 27 for patent owner's construction.

21 That argument is not -- this argument about the full
22 image generated by the application is not in the patent
23 owner response and is inconsistent with the notion that the
24 display is the client display, as the patent owner had said.

25 And this construction that the patent owner is

1 offering also lacks support in the intrinsic and extrinsic
2 record.

3 Instead, as the Institution Decision found, the term
4 frame requires no construction at all and should receive its
5 plain and ordinary meaning, and that's the meaning that
6 Dr. Fuchs has used in his analysis for the petitioner.

7 If we turn to Slide 28 -- actually, I'm going to
8 turn now to Slide 30 -- there's nothing in the '109 patent
9 specification that limits the broad plain meaning of frame,
10 and as an example, the patent owner cites the abstract as
11 supporting its construction, and we see the abstract here on
12 line 30.

13 But as the Board found in its Institution Decision,
14 the mere mention of a display in the abstract does not
15 support patent owner's construction, the abstract merely
16 describes a sequential display of modified frames without
17 reference to the client display, the size of the image, or
18 that it has to be the full image generated by the
19 application.

20 And on Slide 31, the patent owner cites Column 4,
21 lines 10 to 12, which states that, "The typical data
22 processing segment is a frame." The quote here does not
23 refer to the display, as Dr. Hart conceded at his
24 deposition, that's Exhibit 1025 at page 111, line 23 to 112,
25 line 24, nor does this quote refer to the full image

1 generated by the application. As the Board found in its
2 Institution Decision, "This disclosure does not characterize
3 a frame in terms of the display."

4 Now, if we turn to Slide 32, none of the patent
5 owner's other citations to the specification state that a
6 frame must be for the entire client display or that the
7 frame must be for the full image generated by the
8 application.

9 As an example, the patent owner cites to Column 6,
10 lines 66 to Column 7, line 1 of the '109 patent, and that's
11 shown at the bottom of Slide 32, but this passage does not
12 characterize a frame in terms of the display.

13 And when I asked Dr. Hart about this at his
14 deposition, that's shown at the top of Slide 32, he conceded
15 that he had not rendered an opinion on that particular use
16 of the term frame in the '109 patent.

17 I also asked Dr. Hart about other portions of the
18 specification that the patent owner cited. He gave similar
19 responses, and we've covered that on page 4 of our reply
20 brief.

21 So that takes us to the file history, and it does
22 not help the patent owner's construction either.

23 And if we can turn to Slide 33, the patent owner
24 points to the applicant's argument to distinguish a prior
25 art reference called Yamada, and those arguments are all on

1 page 273, the file history, that's the only relevant page of
2 the file history for this, and as we see, a portion of
3 page 273 here on Slide 33.

4 These file history statements are far short of the
5 clear and unmistakable disavowal required by the Federal
6 Circuit. The applicant never argued that Yamada did not
7 disclose a single instance of the display, nor did the
8 applicant argue that Yamada did not fill the entire
9 client display, nor did the applicant argue that Yamada does
10 not disclose the full image generated by the application.

11 And if we turn to Slide 34, this shows the argument
12 that the applicant actually did make to distinguish Yamada
13 in the file history, and again, this is page 273 of the file
14 history.

15 As the Board found in its ID, the file history does
16 not characterize a frame as the patent owner suggests.

17 The applicant argued -- and you can see this at the
18 bottom of what's highlighted in yellow -- the applicant
19 argued that Yamada uses local execution of the game. You
20 can see that highlighted there.

21 So because Yamada's client device -- not the server,
22 Yamada's client device -- executes the game application, it
23 was Yamada's client device that generated the game images
24 locally, and because the client device executed the game
25 application, Yamada's system did not transmit images as

1 compressed frames or otherwise from a server to a client,
2 and that is how the applicant actually distinguished Yamada
3 in the file history.

4 JUDGE AHMED: Let me stop you there.

5 So on your prior slide you had applicant's argument
6 where applicant said, "There is nothing to suggest that
7 Yamada first generates a frame of image data and then
8 compresses that frame prior to transmitting it to the remote
9 client device." So they at least said that much.

10 And I don't think you dispute that the examiner
11 cited to portions of Yamada that talk about MPEG compression,
12 and then, in face of this argument, allowed the claims.

13 So what do we make of that?

14 MR. HAAG: What you should make of that is you
15 should look at the argument that the applicant actually made
16 about the file history.

17 Now, and just on your MPEG point, I want to briefly
18 address that, because I asked Dr. Hart about this, and he
19 confirmed this, this is page 36 -- or Slide 36.

20 I asked him -- he conceded that the file history
21 does not discuss MPEG at all, and you can see that from
22 page 96 of Dr. Hart's deposition.

23 So the file history doesn't actually discuss MPEG.
24 What the file history does discuss -- and again we've got
25 this on Slide 34 -- what the file history does discuss is

1 how Yamada actual was distinguished.

2 Yamada did not generate an image at the server and
3 then transmit it to the client for display, Yamada instead
4 locally executed the game, and so there was no server that
5 was sending and transmitting to the client to begin with.

6 That's the way that the applicant distinguished
7 Yamada. It didn't have to do with MPEG, it didn't have to
8 do with the term frame.

9 JUDGE AHMED: Okay.

10 MR. HAAG: And I also asked Dr. Hart at his
11 deposition -- and this is -- this is on Slide 35 -- I also
12 asked him to confirm that the applicant was distinguishing
13 Yamada because Yamada locally executes a game rather than the
14 server running an interactive software application, and he
15 agreed with that. You can see that, page 96 of his
16 deposition.

17 Now, I'd like to turn, if I may, to Slide 37.

18 Dr. Hart also confirmed at his deposition that a
19 person of ordinary skill in the art would understand an MPEG
20 frame to be within the scope of the term compressed frame as
21 it's used in the '109 patent. Again, this is patent owner's
22 expert.

23 And I asked him"

24 "Q. In your view, is an MPEG frame within the scope
25 of a compressed frame as that term is used in the '109

1 patent?

2 "A. So, yes, I believe that's within the scope."

3 And again, that's Exhibit 1025 at page 114, lines 7
4 to 15. That's patent owner's expert, Dr. Hart, agreeing
5 that a compressed MPEG frame is within the scope of the
6 claims.

7 So if I can turn now to Slide 41.

8 I want to address the merits beyond just the
9 construction of the term frame, and that the combination of
10 Wiltshire and Saha discloses compressed frames, as the Board
11 found in its Institution Decision.

12 Wiltshire discloses sending an image generated by a
13 server to a client as a compressed video MPEG stream. You
14 can see that here from the top quote at Columns 7, lines 13
15 to 18 from Wiltshire.

16 And as you can see in the bottom quote, "The client
17 terminal computer receives the compressed image and then
18 causes it to be displayed on the client computer screen."

19 The person of ordinary --

20 JUDGE MARGOLIES: I'm sorry, counsel. Sorry.

21 What slide are you on? I may have missed that.

22 MR. HAAG: I'm on Slide 41.

23 JUDGE MARGOLIES: Thank you.

24 MR. HAAG: A person of ordinary skill in the art
25 would understand from Wiltshire's reference to MPEG that the

1 techniques described in Saha would be used for Wiltshire's
2 compression and decompression of images.

3 Now, if we turn to Slide 42, we see that Saha
4 discloses that MPEG compression compresses image frames.

5 Saha describes MPEG compression as a set of methods
6 for compression and decompression of full-motion video
7 images, and it uses interframe and intraframe compression
8 techniques.

9 Saha goes on, and it describes that MPEG compression
10 relies on the fact that there are large portions of
11 successive frames in a video sequence that are redundant,
12 and so, Saha says -- and this is the bottom quote from Saha,
13 Saha at Column 2, lines 19 to 20 -- MPEG compression uses
14 this inherent redundancy to encode or compress frames in the
15 sequence.

16 And that's a clear disclosure from Saha that uses
17 frames in the same, exact way as in the '109 patent.

18 Now, on Slide 43, Saha also explains in detail --
19 and this is in Column 2 of Saha -- about three different
20 types of MPEG compression, and each of these use frames, and
21 you can see I-frames, P-frames, and B-frames discussed here,
22 and again, there's a detailed discussion of frames in the
23 Saha reference.

24 In short, under the plain meaning of a frame, that
25 the images are ordered in a sequence to produce a video or

1 an animated sequence, Saha discloses frames and compressed
2 frames.

3 Saha's frames qualify as frames regardless of
4 whether it's for the entire display, or the full image
5 generated by the application for display, or if a frame only
6 has to be for part of what's displayed on the client.

7 Either way, the Saha-Wiltshire combination discloses a frame.

8 JUDGE CHAGNON: I think I heard you just say this,
9 but I just want to confirm.

10 So is it your position that, even if we agree with
11 patent owner's construction for frame, that Saha still
12 teaches a frame under patent owner's construction?

13 MR. HAAG: So the answer to that is yes, because
14 Saha does disclose a frame, it discloses a compressed frame,
15 it uses the same words as the '109 patent.

16 And I want to add on to that that Wiltshire also
17 discloses it as well.

18 Now, to be clear, as I said, the combination of
19 Wiltshire and Saha discloses compressed frames even under
20 patent owner's construction, and a person of ordinary skill
21 in the art would understand Wiltshire's figures, such as
22 Figure 4B, to be the full image generated by the
23 application.

24 And if we turn to Slide 46, I've got here Wiltshire
25 at Column 8, lines 2 through 7, Wiltshire confirms that its

1 embodiments use full-screen refreshes, and that's what
2 Dr. Hart refers to as a full image generated by the
3 application.

4 So what we see as Column 8, lines 2 through 7, is
5 that Wiltshire describes alternative embodiments that can
6 refresh limited areas of the screen. By disclosing
7 alternative embodiments that may use partial-screen updates
8 rather than full-screen refreshes, and that's what it says
9 at the very end, it refers to limited -- it refers to
10 updates can be limited to areas of the screen that are
11 actually modified rather than full-screen refreshes, so it's
12 saying that full-screen refreshes can also be used in
13 Wiltshire, and those full-screen refreshes would meet patent
14 owner's construction of the term frame as well. That would
15 be the entire image on the screen, it would be the entire
16 image output from the application.

17 So if I can, I want to turn to Slide 47 and move on
18 to the next issue, which is whether the prior art discloses
19 the term mobile device, and this is from Dependent Claims 6,
20 11, and 12.

21 If we turn to Slide 48, to begin with, we see here
22 that the prior art PC Magazine, that's Exhibit 1007,
23 discloses an Apple iBook laptop computer.

24 Now, the patent owner attempts to exclude a laptop
25 from being a mobile device, and you can see that here with

1 patent owner's construction of mobile device as a handheld
2 computer device, and patent owner also stating that it
3 contends that its construction of mobile device does not
4 cover a portable laptop computer, and you can see that at
5 the very bottom of Slide 48 from the patent owner response.

6 This is wrong. As the Board found in its
7 Institution Decision, a laptop such as an Apple iBook
8 laptop, is a mobile device as recited in the challenged
9 claims.

10 I'm going to turn now to Slide 49.

11 The term mobile device should be given its plain and
12 ordinary meaning, which includes a laptop, just as the
13 patent owner argued in District Court.

14 And we see that here on Slide 49. This shows a part
15 of Exhibit 1031 at pages 20 to 21. This is patent owner's
16 complaint against the petitioner in District Court, and it's
17 addressing Claim 6, and it's addressing the claim term the
18 client device is a mobile device, and it refers to laptop
19 computers which are mobile devices. Those are patent
20 owner's words in District Court.

21 And if we turn to Slide 50, we see that patent owner
22 said the same thing again several months later in October
23 2020 in its amended complaint. This is Exhibit 1032.

24 It again said laptop computers are mobile devices,
25 and we can see that here at Exhibit 1032 at page 30.

1 If you turn to the intrinsic record on mobile
2 device --

3 JUDGE AHMED: So on the complaint, patent owner says
4 these are preliminary contentions. Do you know if the
5 contentions have changed in any way?

6 MR. HAAG: They have not. These are the only --
7 they've contended that laptops are mobile devices.

8 JUDGE AHMED: Okay. Thank you.

9 MR. HAAG: And I will add to that, Your Honor, their
10 contention that these are preliminary contentions, there are
11 cases that say that the most probative evidence is statements
12 by the patent owner.

13 And if you look at the Intel v. VLSI, IPR2018-1033,
14 if you look at Paper 32, which is the final written decision,
15 it says, "We find patent owner's position taken in a related
16 District Court case the most persuasive."

17 So that is relevant, what they're saying in District
18 Court, they can't just say, oh, it's preliminary, it doesn't
19 matter.

20 Now, the patent owner comes along later and it says,
21 no, no, a laptop is not a mobile device. That is not
22 consistent with the intrinsic record or the meaning of the
23 term mobile device.

24 If we turn to Slide 51, if we turn to the
25 specification, it lacks any expressions of manifest

1 exclusion or restriction that could represent a disavowal of
2 claim scope to limit mobile device to handheld computing
3 devices.

4 You will find references to a client device and
5 common consumer client devices in the '109 specification.
6 You can see them here on page 31.

7 Now, to be sure, if we turn to Slide 52, at
8 Column 5, lines 51 to 55, the '109 patent refers to PDAs and
9 cellular telephones, and this is something that patent owner
10 cites.

11 But the specification refers to the PDA and the
12 cellular telephone as exemplary clients. And you can see
13 that highlighted in yellow, exemplary clients. And it's
14 improper to use examples from the specification to import
15 limitations into the claims.

16 Now, if we turn briefly to the extrinsic evidence
17 for mobile device, the patent owner cites -- if we turn to
18 Slide 53, it cites Exhibit 2007.

19 Now, that's a document from -- or a book from 2008,
20 so that is about seven years after the priority date of the
21 patent.

22 Now, if we instead look at the extrinsic evidence of
23 record that is at or before the time of the invention,
24 you'll see that a laptop is a mobile device.

25 And if you turn to Slide 54, you'll see a couple

1 excerpts from the Wang paper, this is Exhibit 1026, and it's
2 dated in the year 2000. And it twice refers to laptops as
3 mobile devices, and you can see that here on page 4 of
4 Exhibit 1026.

5 If you turn to Slide 55, this shows Exhibit 1027,
6 which is an FCC report, again from the year 2000, and it
7 refers to mobile data devices as including laptop computers
8 equipped with wireless modems, and you can see that here
9 from page 36 of Exhibit 1027.

10 So this is another extrinsic reference from at or
11 before the time of the alleged invention that refers to
12 laptops as a mobile device, or in this particular case, a
13 mobile data device.

14 I'm going to turn, if I can, to Slide 59.

15 And here we see PC Magazine's disclosure of the
16 Apple iBook laptop.

17 PC Magazine describes the iBook as a portable laptop
18 as including wireless technology that allows the user to
19 roam up to 150 feet from a base station, and the device has
20 a six-hour battery life. Those are all hallmarks of a
21 mobile device.

22 A person of ordinary skill in the art would
23 understand a laptop, such as the iBook, to be a mobile
24 device under the correct, plain meaning of the term mobile
25 device.

1 And if you take the patent owner's words from its
2 infringement complaints against the petitioner, a laptop,
3 such as the iBook, is a mobile device.

4 Now, if we turn to Slide 60, even under patent
5 owner's incorrect construction that a mobile device must be
6 handheld, the iBook is still a mobile device.

7 When the Apple iBook was unveiled in 1999, Steve
8 Jobs demonstrated its mobile and wireless capabilities by
9 browsing multiple websites while holding the iBook in his
10 hand. So he was holding the iBook in his left hand, and you
11 can see that here on Slide 60.

12 And this wasn't incidental, he was actually
13 demonstrating a use case where he was browsing the web while
14 moving around a room. This is not holding a bulky laptop --
15 or I'm sorry -- bulky desktop in your hand or a bulky
16 set-top box with a TV in your hand, this was something that
17 was meant to be carried in one hand, and he was showing that
18 when he unveiled it in 1999, and you can see that on
19 Slide 60.

20 I want to turn, if I may, to the next issue, and
21 this is on Slide 61, and this relates to whether a person of
22 ordinary skill in the art would have been motivated to
23 combine PC Magazine with Wiltshire and Saha.

24 As an initial matter, as the Board found in its
25 Institution Decision on pages 38 to 39, a person of ordinary

1 skill in the art would have been motivated to use PC
2 Magazine's iBook computer as the client device in Wiltshire
3 for several reasons, including that using a laptop like the
4 iBook was just one of a finite number of known options that
5 would have been predictable and would have been obvious to
6 try.

7 And in addition, using an iBook would have been a
8 simple substitution of one known element for another to
9 obtain predictable results, and we've covered that in our
10 reply brief, for instance, at pages 24 and 25.

11 Now, if we look specifically at Slide 62, we can see
12 that Wiltshire and PC Magazine actually teach toward their
13 combination.

14 For instance, Wiltshire teaches -- and this is at
15 Wiltshire 5, lines 14 to 17 -- that its client 120 can be any
16 type of cost-effective, special purpose, or general purpose
17 computer, and specifically identifies Mac Power PCs sold by
18 Apple computer as an example.

19 The iBook disclosed at PC Magazine is an Apple
20 MacBook ROPC computer. PC Magazine specifically discloses
21 that the iBook uses a 300 megahertz G3 processor, and it's
22 undisputed that this G3 processor was a Power PC processor.

23 So a Power PC is disclosed in Wiltshire, and it's
24 also disclosed in PC Magazine.

25 And this means, as we've explained in our briefing,

1 that a person of ordinary skill in the art would have been
2 not only motivated to combine the iBook from PC Magazine to
3 Wiltshire but would have been a reasonable expectation of
4 success in that combination.

5 JUDGE AHMED: Let me just ask you a question there.

6 Patent owner's point is that, even today, gaming
7 establishments use large, bulky gaming stations. So even
8 though the PC industry might have been moving towards
9 laptops back in 2001, the gaming industry hasn't changed.

10 So it's not a question whether a person of skill in
11 the art would have combined the two, it's whether they would
12 have been motivated to do that in the gaming environment
13 that Wiltshire teaches.

14 MR. HAAG: And so let me address that, Your Honor,
15 and if you could turn to Slide 65.

16 The patent owner's arguments that Wiltshire is
17 limited to this casino embodiment where mobile devices would
18 not be used, that's not right. Wiltshire is not limited to a
19 casino embodiment, and we see that here at Wiltshire,
20 Column 1, lines 26 to 43, which, again, defines games and
21 gaming, and it includes games such as Doom or Mist or video
22 games based on sports, such as Golf.

23 So Wiltshire provides a large number of examples that
24 are not these casino games. And the disclosure of
25 Wiltshire's Figure 2 can be used with those embodiments.

1 That relates to client-server interactions. So it's not
2 limited to just a casino embodiment.

3 And by the way, Wiltshire also discloses that input
4 commands, such as mouse movements, mouse clicks, or
5 keystrokes, that's at Wiltshire, Column 5, lines 59 to 65,
6 those are disclosed in Wiltshire for input commands on a
7 client, those aren't things you would find in the
8 traditional casino environment, either.

9 Now, the other thing I want to address briefly --
10 and I'm going to go back to Slide 64 -- is that --

11 JUDGE AHMED: By the way, Mr. Haag, you have about
12 10 minutes left.

13 MR. HAAG: Thank you, Your Honor.

14 The argument that you couldn't use these credit card
15 readers or these wager acceptors in a laptop, that's also
16 not correct, and that's an argument that the patent owner
17 has made so it's focusing on a specific example in Wiltshire
18 of a client.

19 And what they rely on refers to some embodiments,
20 and you can see that right here, some embodiments might
21 include these wager acceptors, so it doesn't have to include
22 that, and in the context of Wiltshire where we've got
23 client-server interactions, and when you can be using the
24 internet for those interactions, it doesn't make sense to be
25 using these wager acceptors to begin with.

1 But even on top of that, these wager acceptors can
2 include credit card readers. And we see that at the bottom.
3 There's no reason you can't use that with a laptop. Credit
4 card readers are used widely, including with laptops, and
5 there's no significant security risk with doing that.

6 JUDGE AHMED: How about the security concerns that
7 Wiltshire makes? It would be easy to tamper with laptops
8 rather than these bulky gaming stations. How do you respond
9 to that argument?

10 MR. HAAG: So I don't think it would be easy to
11 tamper with laptops. I mean, there's -- I mean, it's --
12 we're talking about the same type of computer, the iBook, as
13 disclosed as an example in Wiltshire.

14 So it's not like there's some significant
15 difference. I mean, Wiltshire discloses using a Mac Power
16 PC. That's what the iBook is, it's the same type of
17 computer.

18 So there should be no greater security risk -- I
19 mean, it's using the same thing that Wiltshire disclose, the
20 iBook is, there should be no greater security risk there.

21 And if you're using a credit card reader to begin
22 with, again, there shouldn't be any significant security
23 concern.

24 So I'd like to turn now to the last issue I'm going
25 to be covering, and this is on Slide 69, and this relates to

1 whether a person of ordinary skill in the art would have
2 been motivated to combine Chen with Wiltshire and Saha.

3 Now, I want to start on Slide 70, and I have here
4 the language from Independent Claim 1 and Dependent Claim 2.

5 And the first thing I want to note is that Claim 2
6 refers to "the client device"; that is, it only has to be
7 one client device, a single client device, and you can see
8 it only has to be one client device in Claim 1, as well.

9 The point of Claim 2 is that there's a different
10 bandwidth for transmitting from the client to the server as
11 from transmitting from the server to the client.

12 And if we turn to Chen at Slide 71, we see Chen's
13 disclosure of asymmetric digital subscriber line, that's
14 ADSL, and we see that Chen talks about ADSL using separate
15 channels for the upstream and from the downstream.

16 So the upstream control channel is 16 to 64 kilobits
17 per second, the downstream channel is 1.544 megabits per
18 second. That's different bandwidth between the two. That
19 meets this asymmetric bandwidth requirement that is set
20 forth in the '109 patent.

21 And if we turn to Slide 72, here's the '109 patent
22 on DSL. It says -- and this is from the '109 patent, 6,
23 lines 14 to 16 -- it says, "The client bandwidth can be
24 asymmetric," and then says, "an example being DSL."

25 In other words, the '109 patent says that ADSL is an

1 example of asymmetric bandwidth, as used in the '109 patent
2 claims, and as we just saw, Chen discloses the use of ADSL.

3 Now, there are a number of reasons why a person of
4 ordinary skill in the art would combine Wiltshire, Chen, and
5 Saha. We've covered this in our petition at pages 61 to 63
6 in detail.

7 If we turn to Slide 73, one reason is that Wiltshire
8 describes using a communication pathway between a client and
9 a server that is the internet. And you can see it refers to
10 including the internet and the Worldwide Web. That's at
11 Column 5, lines 30 to 32 of Wiltshire.

12 And then Chen describes how the use of ADSL has been
13 considered ideal for internet access, and you can see that
14 here from Chen at page 69. That's pages 5 of 8 of the PDF
15 in Chen.

16 Now, if we turn to Slide 74, I wanted to respond to
17 some of patent owner's alleged reason why this combination
18 would not be made.

19 The first is they say that Wiltshire is limited to
20 commercial casino establishments and Chen is limited to
21 residential applications and the two would not be combined.

22 Neither is true. Wiltshire is not limited to
23 casinos, and instead teaches it could be used in a variety
24 of context.

25 And by the way, even if one is residential and one

1 is commercial, you could still use the two together. The
2 reasons to combine that we've set forth in our petition
3 would still apply.

4 But it's also not true that Wiltshire's limited to
5 this commercial casino establishment, and we see that
6 column -- again Column 1, lines 26 to 43 of Wiltshire --
7 where it defines gaming as including video games, such as
8 Doom and other types of video games as well.

9 And then we can see the last quote from Chen. Chen
10 discloses more than just ADSL in residential context, but
11 also for business applications like accessing database
12 records and tele-education, and as the Board found, those
13 are business applications, as the Board found in its
14 Institution Decision.

15 Now, next the patent owner argues that the
16 Wiltshire-Saha-Chen combination would require transmitting
17 multiple concurrent MPEG video streams to multiple clients
18 and that Chen's ADSL could only provide one MPEG video
19 stream. That is not correct.

20 And if you look at the language of Claim 2 of the
21 '109 patent, it only requires a single client device, so it
22 doesn't matter whether Wiltshire can use multiple client
23 devices, the '109, Claim 2, only requires one client.

24 Same applies to Claim 1., it only requires one
25 client.

1 So if one communication pathway 130 in Wiltshire uses
2 ADSL, as set forth in Chen, that meets the claim
3 requirements. So communication between one server and one
4 client, that is all that is required to meet the claims.

5 Now, to be sure, Wiltshire discloses in Figure 1D
6 that it can use multiple clients, but Wiltshire also
7 discloses the use of one client terminal.

8 And you'll see, in our petition at pages 22, 23, 59,
9 62, and in a variety of places in connection with Claims 1
10 and 2, we refer to "the client" in Wiltshire in the singular.

11 And you also see that in Figure 2 of Wiltshire. It
12 refers to client in the singular because it's focusing on
13 the interactions between the client and the server.

14 So if you have one communication pathway that is
15 using ADSL in Wiltshire, you have the asymmetric bandwidth
16 requirement being met.

17 Now, third, the patent owner argues that the
18 downstream transmission rate of 1.544 megabits per second in
19 Chen is not sufficient to handle multiple MPEG streams. We
20 don't agree with that, either.

21 Now, to be sure, Wiltshire is not limited to multiple
22 clients, and multiple clients are not required for Claims 1
23 and 2 of the '109 patent.

24 But even if you assume that I was wrong about what I
25 just said, you could still use multiple clients over the

1 same ADSL line using ADSL in Chen, and we've got what
2 Dr. Fuchs set forth in paragraph 79 of his declaration of
3 Exhibit 1033 that there are games, such as Pong and other
4 games, that don't require anywhere near the full-motion
5 video 1.3 megabits per second that Chen discloses for MPEG.

6 So if you're using this low requirement for games,
7 you could stream multiple games over the same ADSL line.

8 JUDGE AHMED: So let me interrupt you there.

9 Dr. Fuchs' original declaration said that the MPEG
10 stream needed at least 1.3 megabits per second bandwidth.

11 So is there anything in the petition or the original
12 declaration that says that the MPEG stream could be less
13 than that?

14 MR. HAAG: So he didn't say it has to be 1.3. He
15 was looking actually at what Chen discloses, and he said that
16 full-motion video MPEG -- again, full-motion video -- for
17 full-motion video -- not for something simple like Pong, but
18 full-motion video may require 1.3 megabits per second. He
19 didn't say using MPEG will require 1.3 megabits per second.
20 He never said that.

21 And with that, Your Honors, I'm going to conclude,
22 unless you have any more questions, and I'll reserve the rest
23 of my time for rebuttal.

24 I'm sorry.

25 JUDGE AHMED: Does the Panel have any questions?

1 Okay.

2 Thank you, Mr. Haag.

3 MR. HAAG: Thank you.

4 JUDGE AHMED: Mr. Wilson, how much time would you
5 like to reserve for surrebuttal?

6 MR. WILSON: Thank you, Your Honor.

7 I would like to reserve 10 minutes.

8 JUDGE AHMED: Okay. Thank you.

9 You may begin.

10 MR. WILSON: Thank you, Your Honor.

11 I'd like to start with Slide 3 from patent owner's
12 demonstratives.

13 And in Slide 3 it's a list of the arguments that I
14 plan to address, starting with the no compressing the at
15 least one updated image limitation from Claims 1 and 8 which
16 are the independent claims and, thus, this limitation is
17 present in all challenged claims.

18 And turning to Slide 4, I want to talk about what
19 the claims actually require here.

20 There are three steps that are addressed in this
21 argument.

22 The first step in Claim 1 is generating at least one
23 updated image at the server in response to updating the
24 state of the interactive software application.

25 The second step is compressing the at least one

1 updated image, that is the image that was just generated.

2 And then third, transmitting the compressed updated
3 image to the client device.

4 So we have three steps, and they must be performed
5 in this sequence; first, generating at least one updated
6 image in response to updating the state of the server, the
7 interactive software application; second, compressing that
8 at least one updating image; and third, transmitting the
9 compressed updating image to the client. And you will see
10 very similar limitations in Claim 8, and therefore, these
11 same three steps are required of every challenged claims.

12 Now, turns to Slide 5, we can see that the '109
13 patent discloses these same three steps in Steps 62, 66, and
14 68, and thus, confirms both the requirements of the steps
15 and the sequence.

16 And the reason this is important, turning to
17 Slide 6, is the sequential nature of the claim steps is
18 apparent from the plain meaning of the claim language and
19 nothing in the written description suggests otherwise,
20 meaning that these steps, as they are written, must be
21 performed in this order.

22 Now, turning to Slide 7, petitioner relies entirely
23 on Wiltshire for these three limitations, and it asserts that
24 Wiltshire discloses these limitations, discloses compressing
25 the at least one updating image and transmitting the

1 compressed updating image to the client device.

2 So let's compare, turning to Slide 8, Wiltshire with
3 the '109 patent.

4 And on Slide 8, we can see the three steps on the
5 left from the '109 patent. On the right we see Wiltshire,
6 starting with Step 220, which merely says, "Display/update
7 image, question mark," which petitioner asserts means
8 generating an updating image.

9 Now, as we will see, that is not what Wiltshire
10 actually says, Wiltshire actually says it's just a step for
11 determining whether an image is to be displayed, so that
12 does not disclose generating an updating image, and
13 especially not in response to updating the state of the
14 interactive software application.

15 Now, the next step is compressing the updating
16 image. That step is entirely absent here from Wiltshire.

17 And finally, we have sending the video stream to the
18 client which should correspond to transmitting the
19 compressed image, but since you don't have either of the
20 first two steps, the third step doesn't comply, either.

21 Now, turning to Slide 9, this is the passage that
22 petitioner relies on, or at least one of the passages that
23 petitioner relies on for disclosure of these three steps,
24 and here's the problem. Let's start at the top.

25 Stage 220 then determines whether an image is to be

1 displayed on the screen of client terminal computer 120, in
2 which case operation 200 proceeds to Stage 230.

3 In Stage 230, an image is sent from server host
4 computer 110 to client terminal computer 120.

5 Now, stepping back to Stage 220, it simply says it
6 determines whether an image is to be displayed on the screen
7 of client terminal 120, it says nothing, absolutely nothing
8 about generating an image, much less generating an image in
9 response to updating the state of the interactive software
10 application.

11 Now, why does it phrase this step as determining
12 whether an image is to be displayed on the screen?

13 It's because it's contemplating a situation in which
14 the images are already existing, so all we're doing is
15 deciding whether to display a certain image on the screen of
16 the client computer. That's why it's written that way, and
17 that's what Wiltshire discloses.

18 JUDGE AHMED: Let me stop you there.

19 MR. WILSON: Sure.

20 JUDGE AHMED: But that doesn't even make sense in
21 the context of realtime gaming, that you would have
22 pre-existing images, and you would send those.

23 220 clearly says "update image". Right? So what
24 does that update mean in context of realtime games?

25 MR. WILSON: It means changing the image that's on

1 the screen. That's what it means.

2 Now, Wiltshire never says, never discloses generating
3 a new image in response to updating the state of the
4 interactive software application that is then displayed on
5 the screen. It simply does not disclose that. You will
6 find that disclosure nowhere.

7 JUDGE AHMED: Doesn't the flowchart show that you're
8 getting an input from the user and the next step is in
9 response to that input, and the user --

10 MR. WILSON: Yes, it does.

11 JUDGE AHMED: -- in the context of a game, the user
12 is playing the game, how could you even know what
13 pre-existing image to send?

14 MR. WILSON: Let me give you a perfect example, and
15 this example comes straight out of what petitioner just
16 argued.

17 If you take a look at Wiltshire, and if you have the
18 reference Wiltshire in front of you --

19 JUDGE AHMED: Yeah.

20 MR. WILSON: -- I'm going to look at Column 8, and I
21 want to look, starting at line 42.

22 JUDGE MARGOLIES: Can you just give us a minute,
23 please? Thanks.

24 MR. WILSON: Sure. I'll try here to actually just
25 share my screen.

1 Now, hopefully, you can see this portion of -- can
2 you see my screen?

3 JUDGE AHMED: Yeah, we can, but we have access to
4 the reference.

5 MR. WILSON: Okay. Okay. I can stop sharing if
6 that's easier.

7 Okay. So here in Column 8 of Wiltshire, starting at
8 line 42, we have an example, Figure 4A shows an attract
9 mode, image 400 displayed on screen 140 while computer
10 gaming system 100 is in an attract mode.

11 Now, it discusses someone touching the screen, and
12 then it switches to this casino floor image.

13 At line 49 you see casino floor image 410
14 illustrates various casino games supported by computer
15 gaming system 100.

16 Each of the available games is represented by a
17 virtual button, Bertha button 420, Blackjack button 430,
18 video poker button 440, slots button 450, and Keno button
19 460.

20 Now, let's follow this example. It says, "The
21 patron can select any of these games by touching a
22 corresponding area of screen 140. When the patron presses a
23 virtual button, an input command is detected by client
24 terminal program 122 and transmitted to a server host
25 computer 110 over communication pathways 130. Server host

1 interface program 114 in turn receives the input command and
2 passes the input command along to game program 112. Game
3 program 112 then responds to input command 112 by updating
4 the state of the game and possibly modifying the image
5 displayed on screen 140."

6 Now, let's go back to the context that was just
7 discussed. We're selecting a game to play. It's Bertha, or
8 Blackjack, or video poker, slots, or Keno.

9 Now, you can imagine that the next step in that
10 process is to display that game. Right?

11 Now, does that require the generation of a new image
12 or does that require simply displaying the first image in
13 that game?

14 We don't know. Wiltshire doesn't say.

15 JUDGE AHMED: It says possibly modifying the image.

16 MR. WILSON: It says possibly modifying the image.

17 Let's go back up to Column -- the top of Column 8 at
18 line 8.

19 It says, "Moreover, in some embodiments, images for
20 use by computer gaming system 100 are preloaded into a
21 memory of client terminal computers 120 to further reduce
22 the amount of communication network bandwidth required."

23 The only way you can do that is if the images are
24 pre-existing.

25 Now, whether you transmit them or not is irrelevant.

1 Yes, in some embodiments -- it says, "In some embodiments
2 the images are preloaded." But the point is the images
3 pre-exist. That's what Wiltshire is saying. That's the only
4 way you can preload them. So whether you preloaded them or
5 not, the images pre-exist.

6 So what does it mean when it says "modify the image
7 on the screen?" it means display a new image.

8 What does that mean? It means grab a new image that
9 already exists and put it up on the screen.

10 That's why Wiltshire, back to our Demonstrative Nine,
11 at page 9, says, "Then determines whether an image is to be
12 displayed on the screen of client terminal computer 120."

13 That's why it does not say something like generate a
14 new image in response to user input or something like that,
15 it says simply "determine whether an image is to be
16 displayed". That's all it says.

17 JUDGE AHMED: What about during actual game play?

18 MR. WILSON: So during actual game play, the same
19 can be true.

20 Look at the games we're talking about. We're
21 talking about Bertha, Keno, poker.

22 I mean, number one, these games don't require
23 updating the screen, they require changing a card face.
24 Right? A card face is likely a pre-existing image.

25 The only thing that Wiltshire discloses is these

1 examples of pre-existing image.

2 I mean, at the top of Column 8, Wiltshire says, at
3 line 12, "When an image is either cached or preloaded in a
4 memory of client terminal computer 120, Stage 230 of
5 operation 200 is significantly reduced."

6 So you can either cache these images on the client
7 or you can preload them on the client. There's two examples
8 here of using images that already exist.

9 Where does Wiltshire say that we're going to generate
10 a new image in response to user input? It simply does not
11 disclose that.

12 JUDGE MARGOLIES: So can I just -- so I guess what
13 you're saying is all the games that are disclosed there are
14 all -- if you're, kind of, responding to an input from a
15 user, for all of them you could use a preprepared image to --

16 MR. WILSON: Yes.

17 JUDGE MARGOLIES: -- to update the screen.

18 MR. WILSON: Absolutely. It's certainly conceivable
19 that you can do that.

20 Wiltshire doesn't say one way or the other. He
21 clearly provides examples where we're using pre-existing
22 images, so it suggests that we're using pre-existing images.

23 But, yes, it is certainly conceivable that in those
24 examples you can use pre-existing images without any
25 trouble.

1 Now, I want to jump to the compression step here,
2 and back to Slide 9 of our demonstratives.

3 So the next question is, where does compression come
4 in? Where does Wiltshire disclose compressing an image?

5 That comes from line 15, according to petitioner.

6 Wiltshire says, "The image may include any type of
7 graphical information including a bit mount, a JPEG file, a
8 TIFF file, or even an encoded audio/video stream, such as a
9 compressed video MPEG stream."

10 Notice that it didn't say it can include encoding a
11 compressed video MPEG stream or encoding a video stream to
12 create a compressed video MPEG stream, it says you can have
13 any of these types of files, including a compressed video
14 MPEG stream. What it is talking about there is a
15 precompressed video MPEG stream.

16 Now, how do you get a compressed video MPEG stream
17 into the image? Into one image? Well, you don't. An image
18 is simply an image, it is not a stream.

19 So there are two ways to do that; either you
20 decompress the compressed video MPEG stream and you take and
21 decompress the image out and use that in your image that you
22 plan to transmit, or you simply take a slice of the
23 precompressed video MPEG stream and you send that slice.

24 Now, in the second scenario, there is actually a
25 compressed image that's going to the client, but it was not

1 generated in response to updating the state of the
2 interactive software application.

3 Wiltshire simply does not disclose that sequence of
4 events. It just doesn't.

5 This reference to a compressed video MPEG stream is
6 a pre-existing compressed video MPEG stream.

7 JUDGE AHMED: Let me interrupt you there.

8 It says "encoded MPEG stream", and wouldn't a
9 person of ordinary skill in the art understand that that
10 means that you're going to encode whatever image you're
11 going to send in an MPEG stream?

12 It doesn't say anything about the other formats
13 either, it just says JPEG file, TIFF file, it doesn't say
14 how those are created, either.

15 So the reference to MPEG stream would lead a person
16 of ordinary skill in the art to understand that it's being
17 encoded in an MPEG stream.

18 MR. WILSON: I disagree, Your Honor. It's referring
19 to files. A JPEG file, a TIFF file, or even an encoded
20 audio/video stream.

21 We're talking about files resident on the computer.
22 We're talking about grabbing something that pre-exists. It
23 never says to encode the audio/video stream. It never says
24 that. It never describes that.

25 And even worse for petitioner, its combination with

1 Saha fails even further because Saha only describes offline
2 encoding, which is what is disclosed here. Both of these are
3 examples of offline MPEG encoding.

4 There is no dispute in this record, Dr. Hart
5 testified that Saha was limited to offline encoding,
6 Dr. Fuchs never responds to that point, so the only evidence
7 in this record is Saha is limited to offline encoding.

8 And that's not hard to understand. It relies on
9 interpolated frames. Interpolated frames require frames
10 before and after the frame that you're encoding.

11 So how do you get to an interpolated frame without
12 having the whole stream in front of you when you're encoding
13 it? It's just common sense.

14 So what we're talking about here is offline
15 encoding. There is nothing, nothing in Wiltshire that
16 suggests this compression occurs in realtime. Wiltshire is
17 simply silent on that point and every indication is that the
18 compression pre-exists.

19 Turning to Slide 10, it's the same issue. This is
20 another passage that petitioner relies on that says, "This
21 bandwidth requirement can be further reduced using data
22 compression techniques to about 100 kilobits per second."
23 That says nothing about generating an image in response to
24 updating the state of the interactive software application
25 and certainly nothing about realtime compression.

1 All it says is using data compression techniques.
2 If I have a pre-existing compressed MPEG video, and I'm
3 sending a slice of that video, I'm doing exactly what this
4 says. This says nothing about performing these three steps
5 in sequence.

6 Now I want to jump to Slide 12 and talk about frame.

7 And actually, let's just jump to Slide 13, which are
8 the parties' constructions.

9 So patent owner's position is that frame means a
10 single instance of the display, and as you heard petitioner
11 articulate, display is the critical issue here. Petitioner
12 wants to avoid any reference to display.

13 And petitioner has had two constructions. First in
14 its petition it asserted that frame simply meant picture,
15 and then in its reply brief it changed to frame represents a
16 single instance in time of a video sequence or animation.

17 Now, neither of those constructions are correct, and
18 I did not hear petitioner uttering one word in support of
19 either one of those constructions during its opening
20 argument.

21 It advocated for neither of those. It needs one of
22 those constructions to be correct to prevail.

23 So petitioner simply attacked patent owner's, it
24 offers nothing in support of its own constructions, and
25 that's because they're not correct.

1 Now, turning to Slide 14.

2 Actually, I'm going to skip Slide 14, let's just
3 jump to Slide 15 and jump straight into the real issue here,
4 and this is, essentially, the use of the term frame in the
5 context of the '109 patent.

6 Now, we're starting with a background discussion
7 here in Column 2. And at the top, it says, "For example, in
8 a client server method, based on a hybrid image transmission
9 and geometry transmission approach, the server unit
10 maintains a low level of detail database and a high level of
11 detail database. For each frame of a realtime image stream,
12 images are generated from both a low level of detail and
13 high level of detail database."

14 Now, let me stop right there.

15 The specification is distinguishing images in this
16 video sequence, in this realtime image stream, from a frame
17 by.

18 So clearly, frame means something different from
19 picture, as petitioner advocated in the petition, the
20 question is, does it mean something different from an
21 instance of a video sequence?

22 And of course it does. We have two images here that
23 are instances of a video sequence, but they're not the
24 frame. It says, "For each frame of a realtime image stream,
25 images are generated from both a low level of detail and

1 high level of detail database." We have two images that are
2 representative of an instance in time, but only one frame.

3 It goes on to say, "The difference between the two
4 images is computed using known methods of image processing.
5 The client unit contains only a low level of detail
6 geometric database and renders this database for each
7 frame," again, reference to frame, "and the difference image
8 computed on the server is compressed and transmitted to the
9 client in realtime, which decompresses and composites it
10 together with the image generated by the client from a low
11 level detail database."

12 Now, you can see what's happening here. We have
13 multiple images flying around that represent this instance
14 in time, this frame. Right?

15 There's one frame, one frame on the server, one
16 frame on the client, but there are multiple images flying
17 around here. There's a low level of detail image, a high
18 level of detail image, and there's a composite -- or a
19 difference, and the client takes its low level detail image
20 that it generates and uses the difference image transmitted
21 from the server to turn them into the frame. That's what's
22 happening. The frame is a single instance of the display.
23 It is what gets displayed at the client.

24 The images here all represent instances in time of
25 this video sequence, but none of them are the frame. It's

1 not until the client puts those together that it becomes the
2 frame.

3 Now, let's look at Column 6, lines 63 to 66, shown
4 on the bottom here of Slide 15.

5 It says, "If the system 10 is displaying a series of
6 images on the client, 16, 18, 20, such as in a multimedia
7 animation" -- again, we have a series of images in an
8 animation -- it says, "the visual server 12 transmits the
9 modified image to the client, 16, 18, 20, as a frame."

10 Now, if frame simply means an instance in time of an
11 animation, then we have that at the top. The series of
12 images, that's what those are.

13 But the claim says, "The visual server 12 transmits
14 the modified image to the client as a frame." That must
15 mean something more. It has to mean something more.
16 Petitioner's constructions cannot be correct.

17 Frame means a single instance of the display. It's
18 the output of the application, just as Dr. Hart said, just
19 as we've said.

20 Now, jumping to Slide 17.

21 The extrinsic evidence fully supports our
22 construction.

23 The IEEE dictionary says, "A single display image
24 analogous to a frame in a motion picture."

25 Why does it say display? Why doesn't petitioner

1 like display? The IEEE dictionary says display. That's
2 what it is.

3 Turning to Slide 18.

4 The Microsoft Computer dictionary says, "A single
5 screen-sized image that can be displayed in sequence with
6 other slightly different images to create animated
7 drawings."

8 Again, screen-sized image. It's a single instance
9 of the display. That's the appropriate construction.

10 So turning to Slide 19.

11 This is the passage of Yamada during the prosecution
12 history that the examiner relied on. This is the passage
13 that the examiner cited.

14 And for the life of me, I hear petitioner argue some
15 things that just shock me, like arguing that Dr. Hart
16 admitted during his deposition that MPEG was never
17 discussed.

18 This is the passage that was cited. First of all,
19 the text on the page that he was showing didn't say that,
20 Dr. Hart never said that, and this is the record.

21 Exhibit 2005, 19, 33 through 35, this is Yamada.

22 This is what the examiner cited. It says, "The MPEG decoder
23 52 decompresses image data, such as a background image and a
24 character image used in the game, supplied from the STB6 via
25 the wireless communication."

1 Well, what is the examiner relying on here? The
2 MPEG encoding and decoding of a background image and a
3 character image. Those are not frames. There is clearly
4 MPEG compression and decompression.

5 So I have lost Judge Ahmad.

6 JUDGE AHMED: I'm here. Can you --

7 MR. WILSON: Okay. Sorry. I lost you for a second.
8 I wanted to make sure you were still there.

9 Okay. Turning to Slide 20.

10 So what does the patent owner argue? It argues
11 there is absolutely no mention of a frame in Yamada.

12 Second, there is nothing to suggest that Yamada
13 first generates a frame of image data.

14 Now, we just saw Yamada disclosing a background
15 image and a character image, both of which are compressed,
16 using MPEG and then decompressed, but there's nothing to
17 suggest that Yamada first generates a frame of image data
18 and then compresses that frame prior to transmitting it to a
19 remote client device.

20 The least that you should be able to conclude from
21 this is that MPEG alone is insufficient. MPEG alone does
22 not disclose generating a frame and then compressing that
23 frame, MPEG simply uses the term frame to refer to its
24 compressed parts. It's not the same frame as --

25 JUDGE AHMED: So is it patent owner's position that

1 the MPEG frame is not a compressed frame?

2 MR. WILSON: So, again, I heard petitioner
3 misrepresent Dr. Hart's testimony about this.

4 He said Dr. Hart said Saha discloses a compressed
5 frame. Dr. Hart also said, but that compressed frame is not
6 the compressed frame of the '109 patent.

7 And you'll find that at Exhibit 1025 at 106, 8
8 through 13, the part that petitioner didn't show you.

9 So, yes, there -- a --

10 JUDGE MARGOLIES: Sorry. Can I just hear the
11 question again and your answer again?

12 At least for me, I didn't hear that. Can you repeat
13 the question?

14 MR. WILSON: Sure.

15 JUDGE AHMED: I'll repeat it.

16 Is it patent owner's position that an MPEG frame, be
17 it an I-frame or a P-frame, any of those frames, are not a
18 compressed frame within the scope of the claims?

19 MR. WILSON: So, and again, let me reiterate.
20 Petitioner said Dr. Hart said they were. That's false. And
21 you'll find that at Exhibit 1025 at 106, 8 through 13, where
22 he says that's a compressed frame, but it's not a compressed
23 frame as required by the claims of the '109 patent.

24 So the answer is maybe. Yes, they can be compressed
25 frames, but they are not necessarily. They are not

1 inherently compressed frames.

2 If you start with a frame and you compress it using
3 MPEG, yes, it's a compressed frame.

4 If you start with a background image, like Yamada
5 disclosed, or a foreground image, a character, like Yamada
6 disclosed, and you compress that, it's not a frame. You
7 didn't start with a frame, and you don't get a frame -- a
8 compressed frame out the back end.

9 So it can be, but it's not necessarily. You need
10 something more than just MPEG to have a compressed frame.
11 That's what the file history right here at Slide 20 is
12 saying.

13 And if we look at the other points that petitioner
14 makes about this file history passage, that there are other
15 arguments made, that is entirely legally irrelevant. This
16 argument was made. The examiner said the claims are
17 allowed. The examiner didn't specify which argument the
18 examiner was accepting, but all of that is irrelevant
19 because this argument clearly is part of the public record,
20 which is sufficient.

21 JUDGE AHMED: Let me interrupt you there.

22 Why can't we read applicant's argument as being that
23 there is basically no transmitting to a client device. So it
24 doesn't even matter whether you compress or not, the focus is
25 on the local aspect of Yamada. Because there is no

1 transmission, it wouldn't matter whether there was a frame or
2 not, that's why Yamada doesn't teach the compressed frame.

3 MR. WILSON: You can't read this passage on Slide 20
4 to say that, because it doesn't say that, it says, "There is
5 nothing to suggest that Yamada first generates a frame of
6 image data and then compresses that frame prior to
7 transmitting it to a remote client device."

8 This is an argument that Yamada fails to disclose a
9 frame.

10 JUDGE AHMED: But applicant follows it up and
11 explains why applicant is saying that. Right? They say it's
12 because of the local nature. The game is stored on the local
13 set-top box, and that's why we're arguing that Yamada doesn't
14 disclose compressing and transmitting a frame.

15 MR. WILSON: Again, that ignores -- you know, so the
16 first argument here.

17 First, there is absolutely no mention of a frame in
18 Yamada. How does that have anything to do with transmission?
19 It doesn't.

20 Second, there is nothing to suggest that Yamada
21 first generates a frame of image data. Let's pause right
22 there. What does that have to do with transmission of
23 anything? It doesn't. It's not referring to transmission
24 at all there. That ignores a substantial portion of this
25 argument, and this argument is valid whether or not some

1 other argument turns out to be valid as well.

2 Again, it's legally irrelevant that other arguments
3 were made. This argument is not that argument.

4 Now, turning to Slide 21.

5 This is where Dr. Fuchs admits that our construction
6 of frame is correct. This is in his article, "Frameless
7 rendering double buffering considered harmful," which was
8 published before he was paid to testify in this case.

9 And he describes two scenarios, "The frameless
10 rendering display exhibits fluid motion while the double
11 buffered display jumps from frame to frame." Let's that you
12 can about what those are.

13 A frameless rendering system updates pixels at a
14 time. As the pixels are output from the graphics processor,
15 it updates them on the screen in realtime.

16 So it's fluid motion. Right? The pixels are just
17 sort of changing. Right?

18 Now, a double buffer display has two memory buffers.
19 Each stores a frame. And as the graphics processor is
20 loading pixels into one, the display is -- or the screen is
21 actually picturing the other one.

22 And once the move display is fully formed in the
23 second buffer, the screen switches to the second buffer, and
24 then the graphics processor starts loading pixels into the
25 other one until it's got a full frame.

1 That's why that's called -- that's why Dr. Fuchs
2 says that is jumping from frame to frame. What is a frame?
3 It's a single instance of the display. There's a single
4 instance in both of those buffers, and it jumps from frame
5 to frame. That's what Dr. Fuchs says.

6 Now, what about a frameless rendering system where
7 it just updates certain pixels at a time?

8 Now, Dr. Fuchs says that's frameless. Does that
9 mean it doesn't have an instance in time of the video? Of
10 course it does. Right? It's got more instances than a
11 double buffer display. So -- but Dr. Fuchs says that's
12 frameless.

13 Petitioner's construction cannot be correct. It
14 cannot be simply an instance in time of a video or animation
15 sequence. It can't be because the frameless rendering
16 system that Dr. Fuchs is describing here has that, but
17 Dr. Fuchs calls it frameless.

18 And then we can see --

19 JUDGE AHMED: Frameless. The frameless rendering
20 system just updates pixels, it's not an instance in time of a
21 picture.

22 MR. WILSON: Sure it is. Sure it is. You can pick
23 any time. Instant in time. Any instant in time and you have
24 a picture that is on the screen. That picture updates pixels
25 at a time.

1 So, yes, there are many instances in time of a
2 picture on the screen, but that is not a frame. Dr. Fuchs
3 says it's not a frame. And in the bottom of page 21, it
4 says:

5 "Q. A frameless rendering system does not update
6 the display a frame at a time, correct?" He says:

7 "A. That's correct."

8 So what is a frame? It means something more than a
9 picture. Right? It means something more than an instance
10 in time of a video. It's a single instance of the display.
11 It refers to the entire display.

12 That's exactly what Dr. Hart said. That's what
13 Dr. Fuchs is saying in this article.

14 JUDGE CHAGNON: Can I ask you a question here?

15 MR. WILSON: Sure.

16 JUDGE CHAGNON: So I asked petitioner's counsel
17 whether -- if we accept your construction of frame, whether
18 the combination still discloses a frame, and he pointed to,
19 at least in part, the discussion in Wiltshire of the full screen
20 refreshes as showing, basically, a full display, to
21 paraphrase his argument.

22 Could you addresses that?

23 MR. WILSON: Sure. So if we look at petitioner's
24 demonstratives, Slide 46 is where that is.

25 Now, let's actually read what is disclosed here

1 rather than what petitioner told you is disclosed here.

2 It says, "In some embodiments, to further reduce the
3 amount of network bandwidth required for the operation of
4 computer gaming system 100, image updates, once an image has
5 been displayed, are limited to areas of the screen that are
6 actually modified rather than full-screen refreshes."

7 So what it's actually disclosing is an example where
8 we're updating only portions of the screen that are
9 modified. Okay?

10 What it doesn't say is that in every other
11 embodiment we do full-screen refreshes.

12 Petitioner asked Dr. Hart this at his deposition,
13 and Dr. Hart said, "Wiltshire is silent on that," because
14 Wiltshire is silent on that, it doesn't say what the other
15 embodiments entail. Petitioner is asking you to infer a
16 disclosure that is not here.

17 This says, "In some embodiments, we do partial
18 screen refreshes," it doesn't say -- it simply does not say
19 in every other embodiment or in any other embodiment we do
20 full-screen refreshes. Wiltshire is silent on that.

21 JUDGE AHMED: It suggests that it's an option. It
22 says, "Rather than full-screen refreshes."

23 Doesn't that suggest that that's an option?

24 MR. WILSON: In Wiltshire's system, no. It suggests
25 that it's theoretically possible in some system, it doesn't

1 say that it's possible in Wiltshire's system, it doesn't say
2 that it's done in Wiltshire's system.

3 Now, if we can jump back to patent owner's Slide 22,
4 we will see what petitioner actually argued in the petition,
5 disclosed a frame, and it is nothing more than MPEG.

6 So to answer your Honor's question, under patent
7 owner's construction, no, the combination of Wiltshire and
8 Saha do not disclose the frame or compressed frame required
9 by the claims because petitioner relies solely on MPEG.

10 You can see that right here on Slide 22. Saha
11 provides an overview of the two predominant MPEG standards
12 at the time of Wiltshire's filing in 1998, MPEG 1 and
13 MPEG 2.

14 Saha explains that these MPEG standards describe an
15 encoder to generate compressed frames, also called pictures.

16 So a picture is a frame to petitioner in the
17 petition, and Saha discloses compressed frames as part of
18 MPEG, and therefore, Saha plus Wiltshire, according to
19 petitioner, discloses compressed frames. That is simply
20 wrong, as I've explained, and under our construction, that
21 cannot satisfy the claims.

22 JUDGE CHAGNON: I just want to make sure I'm clear
23 on your argument.

24 So are you arguing that these frames disclosed in
25 Saha are not the same as the frame that's in the claim of

1 the patent?

2 MR. WILSON: Yes.

3 JUDGE CHAGNON: Okay. Thank you.

4 MR. WILSON: Yes. Saha refers to --

5 JUDGE MARGOLIES: I think you already explained

6 earlier why, but if you'd like to repeat that, maybe that

7 would be helpful.

8 MR. WILSON: Yes. Yes. Just to -- just to make

9 that clear. Okay.

10 So I won't go back and rehash it.

11 So let's talk about mobile device on Slide 26

12 JUDGE MARGOLIES: I'm sorry. I do have a follow-up

13 question.

14 And so I'm looking at your Slide 22, but I think

15 there was a petitioner slide that had more of the quote.

16 And isn't the I-frame the entire screen? If I'm

17 wrong, just tell me. Because I don't understand how this

18 disclosure about MPEG isn't enough under your construction.

19 MR. WILSON: So MPEG takes a series of images and it

20 compresses them into what it calls compressed frames. Right?

21 It's just the image that was input to the compression system,

22 it has nothing to do with, you know, whether it's an entire

23 display or entire output of an application, just like you saw

24 in Yamada where it talked about a background image and a

25 character image in compressing those. Those are not a frame,

1 they're just an image, it's just a series of images.

2 And so you get out of MPEG what you put into it.

3 You must first start with a frame to get a frame, a
4 compressed frame out of MPEG. It does nothing more than
5 compress the series of images it's given, whatever they
6 happen to constitute.

7 JUDGE AHMED: Judge Margolies, I think you're
8 looking for Slide 43 of petitioner.

9 And Mr. Wilson, I'll read you what the I-frame is
10 disclosed as in Saha.

11 "The I-frames contain the video data for the entire
12 frame of video and are typically placed every 10 to 15
13 frames."

14 So my understanding is that MPEG is not just
15 compressing it, it's encoding it in these different frames.
16 So when it encodes an I-frame, why isn't that a frame, a
17 full display?

18 MR. WILSON: Because you didn't start with a full
19 display.

20 And the example we gave in our patent owner response
21 I think is perfect. You can have a banner, a video banner
22 that plays across the top of the screen. That can be
23 compressed in MPEG. It's not a full screen, it's not the
24 full output of the application, it's just a banner. Or it
25 could be just a box, or, you know, anything. It can be

1 anything on the screen.

2 MPEG calls those frames. They're not frames in the
3 instance of a single instance of the display, they're just
4 something the MPEG standard calls frames. That's not a
5 word -- look at the definitions in IEEE and Microsoft
6 Computer dictionary. "A screen-sized image. A single
7 display."

8 So, again, these have nothing to do with a frame as
9 it's understood in the field, they are just MPEGs,
10 terminology, as shown right here on Slide 22, and petitioner
11 concedes, "Frames, also called pictures." All MPEG means by
12 that is these are pictures.

13 So again, this does not advance the -- doesn't
14 advance the argument to say MPEG uses the term frame because
15 frame means something entirely different.

16 JUDGE MARGOLIES: But could it also include
17 something that takes up the entire display? Does it exclude
18 that as a possibility of what goes in?

19 MR. WILSON: No, it does not.

20 Yes, it could entirely include. And, in fact, in
21 the '109 patent, when it describes using MPEG compression of
22 frames, that's exactly what it's talking about.

23 So, yes, you can take a single instance of the
24 display and you can compress that using MPEG and get a video
25 MPEG stream that constitutes compressed frames in the sense

1 that the '109 patent describes it.

2 But that is not inherent in MPEG, you can also use
3 less than that. It depends on what you start with, and the
4 problem is, petitioner hasn't shown that Wiltshire or Saha
5 disclose starting with a single instance of the display.

6 So I want to run quickly through mobile device.

7 JUDGE AHMED: You have about 10 minutes.

8 MR. WILSON: Okay. So turning to Slide 27. Let me
9 just point something out here.

10 Patent owner's position is that mobile device means
11 handheld computing device. Petitioner's position is that it
12 includes laptop or portable laptop computer.

13 Now, petitioner doesn't identify a construction.
14 The question is what is petitioner's construction that
15 includes a laptop computer? Petitioner doesn't tell us.

16 And it is petitioner's burden. As we quoted in our
17 patent owner response, the Board's MaxLite case says, "It is
18 petitioner's burden to explain how challenged claims are to
19 be construed and how the claims read on the prior art."

20 Petitioner hasn't told us this, it just says trust
21 us, it includes a laptop computer.

22 So again, petitioner spends its time attacking
23 patent owner's construction without advocating its own, and
24 that cannot carry its burden of proof.

25 Now, here's why this matters. Turn to Slide 29.

1 We see a series of cases that construe (inaudible)
2 mobile device exactly the way patent owner suggests it
3 should be construed, starting with Rothschild, which is the
4 Board's own decision.

5 And you can see (inaudible) but I want to read
6 another quote from Rothschild, and this is at pages 9 to 10
7 which says, "However, reading the term mobile device to mean
8 any device that is mobile would be overly broad because, as
9 discussed supra, the specification contains clear and
10 consistent descriptions of the term mobile device and lends
11 further guidance to its meaning."

12 Again, Rothschild is analogous to this case. The
13 examples in the specification in Rothschild were mobile
14 phones and PDAs. You can see it right here on the screen.
15 The construction of the term mobile device proffered by
16 patent owner of a mobile communication device, such as a
17 mobile telephone, handset, or digital assistant, is, in our
18 view, consistent with the descriptions of the term as it is
19 used in the specification and does not impermissibly import
20 limitations from various embodiments.

21 And let me also add, this is under the broadest
22 reasonable interpretation standard.

23 JUDGE MARGOLIES: Can I ask you a question?

24 Can you respond to the argument that patent owner,
25 in the District Court, in its complaint and amended

1 complaint, read a laptop onto the term mobile device?

2 MR. WILSON: Yes. Absolutely.

3 And, yes, it is our contention in the District Court
4 that a laptop is a mobile device, and we do that to preserve
5 our rights, because if the claim term is construed broadly,
6 and we don't have that assertion, then we don't get to assert
7 it. Right?

8 And petitioner told you that there has been no
9 update to those pleadings. What petitioner omitted is that
10 the case is stayed, there can't be any update to those
11 pleadings.

12 So -- and by the way, as we cited in our briefing,
13 Samsung Electronics v. Red Rock Analytics case, it has the
14 parties' arguments alleging that the other party takes
15 inconsistent claim construction positions with respect to
16 those taken in the related District Court case are not
17 helpful to our analysis and we instead focus on the current
18 record, and that's what the Board should do here.

19 So again, several cites here to cases that construe
20 mobile device the way we want it construed.

21 Now, we turn to Slide 32, and we again have this
22 Discovery in Computers textbook. And, yes, petitioner says
23 this is 2008, the priority date is 2001, but let me ask this
24 question: Do mobile devices -- the scope of mobile devices
25 shrink over time or does it get broader? It's not

1 shrinking, it's getting broader.

2 So if something is not a mobile device in 2008, do
3 you think it was in 2001? Of course not.

4 The point here is there's an understanding in the
5 field, and it says, "A mobile computer is a personal
6 computer you can carry from place to place, similarly, a
7 mobile device is a computing device small enough to hold in
8 your hand. A mobile computer, also called a laptop
9 computer, is a portable personal computer designed to fit on
10 your laptop. Mobile devices, which are small enough to
11 carry in a pocket. Three popular types of mobile devices
12 are handheld computers, PDAs, and SmartPhones." This is
13 exactly what we are saying the term means.

14 Now, turning to Slide 33, patent owner relies on
15 Wang, which is a research paper, and there's no evidence
16 that that's even prior art. It's not -- you know, they
17 don't say it's a prior publication or anything so who knows
18 what Wang is.

19 The FCC report they rely on shown here actually
20 supports our construction. It says, "Mobile telephones and
21 other handheld computing devices. Several PDAs, also
22 referred to as handheld devices."

23 JUDGE AHMED: Mr. Wilson, you're breaking up a bit
24 for us.

25 MR. WILSON: Oh, I'm sorry.

1 JUDGE AHMED: Yeah.

2 JUDGE MARGOLIES: Maybe if you could talk just a
3 little bit slower.

4 MR. WILSON: Sure.

5 JUDGE MARGOLIES: We're hearing most of what you're
6 saying, but maybe just slow down a little bit.

7 MR. WILSON: Sure. Okay.

8 So the FCC report that petitioner relies on here
9 refers to mobile phones and PDAs as handheld devices, and it
10 distinguishes them, that class of devices from laptop
11 computers.

12 Again, the FCC report refers to a laptop with a
13 wireless cellular modem as a mobile data device that has
14 absolutely no relevance to the construction of mobile device
15 as it's used in the '109 patent.

16 And I want to jump to Slide 35 very quickly here.

17 The important point here is that PC Magazine says
18 exactly what we've been saying all along, which is a laptop
19 computer is a portable computer and never says it's a mobile
20 device. So PC Magazine itself supports patent owner's
21 construction.

22 JUDGE AHMED: How do you address petitioner's
23 argument that the patentee knew how to say PDA or mobile
24 phone when they wanted to, and they did so in the parent
25 patents, but here, they wanted it broader so they said mobile

1 devices?

2 MR. WILSON: Yeah. So the -- I think that's -- the
3 question is -- or the answer is simple. They understood
4 mobile device to mean handheld computing device like a PDA or
5 a mobile phone, and they wanted to be generic to that class
6 of devices. They didn't want it limited to a mobile
7 telephone by itself or a PDA by itself, so they chose a
8 broader term that was still reflective of those examples in
9 the specification. It's that simple.

10 And in fact, if you look at Slide 30, the Eastern
11 District of Texas Federal District Court, the Court
12 understands that under its customary meaning, a mobile device
13 is distinct from a portable device in that the mobile device
14 is a handheld device, whereas a portable device would
15 encompass a device such as a laptop computer.

16 And let me point out, the Court here said these
17 terms aren't used in the specification, so I've got to go
18 with the ordinary and customary meaning of these terms.

19 That's what he's reciting. He's not relying on the
20 specification or the patent at issue there, the Court is
21 saying this is the ordinary meaning of these terms, so that
22 is --

23 JUDGE AHMED: In those claims, both those terms were
24 in the claims, and the Court there had to distinguish between
25 them. Here, the only claim term we have to address is mobile

1 device.

2 MR. WILSON: Yes. But the Court's rationale is
3 that, yeah, the ordinary meaning, the customary meaning of
4 mobile device is distinct from portable device.

5 I don't understand how that changes the ordinary
6 meaning. If it's the customary meaning of a mobile device
7 but it's a handheld device, then it's the customary meaning,
8 and that's what we're saying. It doesn't matter whether you
9 have to, in an instance, distinguish a portable device from
10 it, but the Court here is saying they are distinct, and that
11 is literally the question that the Board here is being asked
12 to answer is whether a portable device, like a laptop, is
13 distinct from a mobile device, and the Court says yes, under
14 the ordinary meaning, they are.

15 JUDGE AHMED: But what about, like, even if you go
16 with your construction, petitioner offers us pictures where
17 Mr. Jobs is showing an iBook, and in an actual use case
18 showing that an iBook can be a handheld device. Why is that
19 wrong?

20 MR. WILSON: Well, so that's -- this is exactly the
21 point that I was making earlier, which is, what is
22 petitioner's construction? So what is petitioner's
23 construction that reads on that laptop computer?

24 Ours is a handheld device. Handheld means handheld,
25 like this, not something that can rest on your hand, like a

1 desktop computer or a VCR or a printer or anything like
2 that. I can rest all sorts of things on top of my hand, but
3 just like the District Court says in -- I believe it's
4 the -- I believe it's the Uniloc case -- yeah, it's Uniloc
5 case. The Court construes mobile device to mean computing
6 device that is handheld in its ordinary use. That's
7 Slide 31.

8 Again, we're talking about something that is
9 ordinarily used in your hand, not something that you can
10 rest on your hand. That is not a handheld device.

11 So I'm going to jump ahead real quick to --

12 JUDGE AHMED: Mr. Wilson, you're in your rebuttal
13 time now.

14 MR. WILSON: Okay. Thank you, Your Honor.

15 I'm going to go ahead and continue for a few more
16 minutes and I want to jump to Slide 37 and motivation to
17 combine.

18 Slide 37 is the Institution Decision. It says,
19 "Wiltshire's system is directed to commercial gaming."

20 Again, that is self-evident from Wiltshire.

21 In Slide 38, Wiltshire talks about increasing the
22 tamper resistance of individual gaming systems.

23 And then Wiltshire says, and patent owner crops this
24 quote -- or sorry -- petitioner crops this quote -- it says,
25 "In fact, any casino game or" -- well, actually, let me back

1 up.

2 It says, "In particular, the invention is not
3 limited to any particular game. In fact, any casino game or
4 other non-casino games where players against each other for
5 money with the house taking a percentage of the stake for
6 providing the game." That is a commercial gaming operation.
7 That's what we're talking about.

8 JUDGE AHMED: That sentence seems incomplete. Is it
9 saying that --

10 MR. WILSON: It is incomplete.

11 JUDGE AHMED: -- it is not limited to those games
12 or --

13 MR. WILSON: It is saying that that's what's
14 included. Can be any casino game or other non-casino games
15 where players play against each other for money with the
16 house taking a percentage of the stake for providing the
17 game. That's what Wiltshire is describing.

18 And again, if we can jump to Slide 40.

19 Now, the Board said the combination here was
20 satisfied because there was a motivation to combine because
21 there were a finite number of known options contemplated by
22 an ordinarily skilled artisan.

23 The problem is that is legally insufficient. As the
24 Palo Alto Networks case says, "It is not enough to assert
25 that the prior art provides two options and it would have

1 been predictable to implement either. An obviousness
2 rationale generally requires some identification of a design
3 need or market pressure to solve a problem before looking at
4 the finite number of identified predictable solutions."

5 So the question is what is the design need or market
6 pressure here? There isn't one.

7 In fact, we see in Slide 39, Dr. Fuchs admitting
8 that the design need is for tamper resistance. That's why
9 we make these machines mounted to the floor and 4 feet tall.
10 We still do that today.

11 So again, petitioner is saying, yeah, it's got the
12 same processor and it can process it.

13 Turning to Slide 41, that merely says what could
14 have been done, not what a person of ordinary skill in the
15 art would have been motivated to do. Petitioner has
16 provided no motivation to use a laptop in Wiltshire's system,
17 and there isn't one. We see that today. They don't use
18 laptops for commercial gaming.

19 Now, finally, I want to talk about motivation in
20 Chen with Wiltshire and Saha.

21 Chen is limited to -- on Slide 43, Chen is limited
22 to residential applications, it does not disclose anything
23 else. This is what the petitioner relied on.

24 Again, Wiltshire is a commercial gaming operation.

25 If we jump to Slide 45, we pointed out in our patent

1 owner response that there's a gap in petitioner's case.

2 And patent owner comes back and tries to fill that
3 gap in its reply brief by relying on brand new references
4 that were not part of the petition to show that ADSL can be
5 used in business context.

6 That's improper, and the Board should not consider
7 that argument, but even if it does, it does not address the
8 issue -- turning to Slide 46 -- that Chen only discloses
9 enough bandwidth to use a single video stream.

10 Now, petitioner tries to fix this, too. It comes
11 back and says, oh, wait a minute, Dr. Fuchs now says in his
12 reply declaration that you don't need 1.3 megabits per
13 second for an MPEG video stream, but let's recall why
14 petitioner told the Board this in advance in the petition.

15 It told the Board that there's 1.5 megabits per
16 second for downstream and an MPEG video requires
17 1.3 megabits per second, that's what's disclosed in Chen,
18 and the reason it said that was to justify the need for two
19 different bandwidths.

20 And now it's telling you, oh, but we don't actually
21 need that bandwidth.

22 Well, if you don't need that bandwidth then you
23 don't have a motivation to use two different bandwidths.

24 So which is it? You can choose one or the other,
25 but you can't have both.

1 The problem is petitioner is switching positions.

2 And if we go to Slide 49, petitioner now says, by
3 the way -- and I heard petitioner give a very nuanced
4 version of this argument in the opening argument --
5 petitioner said, by the way, the claim only requires one
6 client. But in its reply brief -- here it's shown here on
7 Slide 49 -- what petitioner actually does is pivot to a
8 brand new theory that is not in the petition that Wiltshire
9 discloses a system that can be used with only one client
10 computer, and its entire support for that is one or more
11 client terminal computers in Claim 1.

12 That is nowhere in the petition, the Board shouldn't
13 consider it, but even if it does, here's the problem for
14 petitioner. Wiltshire's system is a commercial gaming
15 system. Why do I want to build a commercial gaming system
16 that only uses one client computer?

17 Petitioner doesn't tell us why I need that. What's
18 the design need or the market pressure that's facilitating
19 that or encouraging that? We don't have one. Petitioner
20 doesn't give one, not even in the reply brief when it first
21 originates this theory.

22 So petitioner cannot prevail on that theory without
23 explaining why a person of ordinary skill in the art would
24 be motivated to build a commercial gaming system that only
25 supports one video stream.

1 And with that I'll --

2 JUDGE AHMED: Let me interrupt you. Let me just ask
3 you a question if you're done.

4 Is that what about this argument that you have
5 simple games that are not going to take up 1.3 megabits per
6 second? So even if you have one or more multiple gaming
7 stations, it can support that much bandwidth.

8 MR. WILSON: So, yeah. That's on petitioner's
9 Slide 76. Let's look at that passage very quickly.

10 Now, remember that the 1.3 megabits per second came
11 from Chen. Right? That's Chen's description of what an
12 MPEG stream requires.

13 So Dr. Fuchs says here, "To the contrary, what's
14 common, especially in 2001 and earlier, is to use much lower
15 transmission rates." Cite? I don't see one.

16 "For example, Wiltshire contemplates games like Pong
17 or simpler games that could stream multiple concurrent MPEG
18 videos that total much less than 1.3 megabits per second."

19 Cite? I don't see one. That's entirely conclusory.

20 There's no support, no logic behind it, nothing, Dr. Fuchs
21 is just saying it. That is not evidence, that's just
22 conclusory expert testimony that should not be given any
23 weight.

24 JUDGE AHMED: Okay. Thank you.

25 JUDGE MARGOLIES: I also have a question. Sorry. I

1 have a question.

2 We're on petitioner's slides, so if we could go to
3 Slide 62.

4 MR. WILSON: Sure.

5 JUDGE MARGOLIES: So can I just understand your
6 position, that first quote from Wiltshire that talks about
7 that Mac Power PC computer, is it your position that that
8 would be like a desktop and not an iBook laptop? Is that
9 your position?

10 MR. WILSON: So here's what -- let me explain
11 something.

12 So what Wiltshire is describing is computers that
13 back up gaming stations. Right? It's not necessarily the
14 entirety of the gaming station, it's a computer that runs a
15 gaming station.

16 So it's saying can be a Mac Power PC computer. So
17 the question is what type of Mac Power PC computer are you
18 going to use? Well, what they clearly show in Figure 1D are
19 desktop tower computers. Right?

20 So the question is, why then would you use a laptop
21 computer to support a gaming station at a commercial gaming
22 establishment? What's the question that petitioner must
23 answer with evidence to support the assertion that it would
24 have been obvious to do that, or more likely than not that a
25 person of ordinary skill in the art would be motivated to do

1 that.

2 Now, we know for sure today that no one does that,
3 so the objective evidence says no one is motivated to do
4 that.

5 The question is, has petitioner articulated anything
6 to suggest that it can be done or -- sorry -- that it would
7 be done by a person of ordinary skill in the art? And I
8 submit to you that they have not. All they've said is it's
9 possible. It has the same processor that's referred to
10 here, it could be done, why would it be done?

11 Petitioner hasn't offered any evidence of that, and
12 that's the legal standard that they must meet.

13 JUDGE MARGOLIES: Thank you.

14 MR. WILSON: And if there are no further questions,
15 I'll stop.

16 By my timer, I have a minute left, but I don't know
17 what your timer says.

18 JUDGE AHMED: I'll give you a couple minutes back.
19 You can have five minutes of surrebuttal because we asked
20 questions after you were done.

21 MR. WILSON: Okay. Thank you, Your Honor.

22 JUDGE AHMED: Mr. Haag.

23 MR. HAAG: If we could just start at petitioner's
24 Slide 62, just where we left off, this is a specific teaching
25 of combining Wiltshire with PC Magazine.

1 PC Magazine uses the same exact -- uses a Power PC
2 computer, a Mac Power PC computer, the same thing that
3 Wiltshire contemplates.

4 And Wiltshire is not just limited to casinos. I
5 mean, Wiltshire talks about games in a variety of ways,
6 including Doom. It talks about a variety of types of
7 computers that could be used, like a Mac Power PC, and it
8 talks about the pathway between a client and a server being
9 the internet. Those aren't things you'd commonly find in a
10 typical commercial gaming casino, either, because Wiltshire is
11 not limited to specifically just that environment.

12 Now, I want to briefly turn to the combination of
13 Chen with Wiltshire and Saha.

14 And one of the arguments I heard patent owner's
15 counsel make is that Chen is limited to residential
16 applications and so you wouldn't use it in Wiltshire, and we
17 don't agree with that, but I just want to focus on this bit
18 about whether Chen is limited to residential context.

19 Not even patent owner's expert takes that position.
20 If you read Dr. Hart's declaration of Exhibit 2009, you will
21 see that he does not offer any opinion that Chen's ADSL is
22 limited to residential use. We made that point in our reply
23 brief at page 26, Footnote 6.

24 He doesn't offer any opinion that you wouldn't
25 combine Wiltshire and Chen for that reason, either, and I

1 think that's pretty telling on the motivation to combine.

2 Now, I just want to also emphasize, Claim 2 of the
3 '109 patent does not require multiple clients. There are
4 other dependent claims that do, but not Claim 2 with its
5 asymmetric bandwidth requirements.

6 Wiltshire does not require multiple clients, either.
7 And if you look at pages 59 and 62 in our petition, you'll
8 see that we refer to the client in Wiltshire, the client,
9 because we're talking about communication between a server
10 and a client.

11 And you also see that in Figure 2 of Wiltshire,
12 communications between the server and the client, singular.

13 So if a communication pathway in Wiltshire uses ADSL,
14 that is an asymmetric bandwidth connection between a server
15 and the client, and the language of Claim 2 has been met.

16 Now, I want to go back to compression and some of
17 the points that patent owner's counsel made there.

18 And I'm going to go to petitioner's Slides 15 and
19 16, if I may.

20 I'm going to start on Slide 15.

21 There was a discussion from patent owner's counsel
22 that there's no disclosure about the server taking input
23 commands and then updating the state of the game and then
24 modifying an image.

25 I'd submit to you that we see exactly that in

1 Wiltshire at Column 8, lines 61 to 63. Game program 112 in
2 response to input command 112 by updating the state of the
3 game and possibly modifying the image displayed on the
4 screen.

5 That is the game program on the server responding to
6 an input from the client in realtime and modifying the
7 image. That is creating an updated image, and that's an
8 updating image that can then be sent as a video stream to
9 the client. And you see video stream in Step 230 of
10 Wiltshire's Figure 2, which is also shown on Slide 15.

11 Now, there's also a discussion about preloading into
12 memory of the client, and that was something that patent
13 owner's counsel made an issue of.

14 But if images are preloaded on the client, the
15 server would not need to send images or a video stream to
16 the client. And we see in Step 230 that the server sends a
17 video stream to the client.

18 And if you turn to petitioner's Slide 16, you'll see
19 that, again in Step 230, Wiltshire discloses a video stream
20 sent to the client, not an indicator of what is stored at
21 the client but a video stream, and that can be a compressed
22 video MPEG stream as Wiltshire says at Column 7, line 17.

23 That is, the image that is sent from the server to
24 the client in Wiltshire is a frame that has been compressed
25 and is part of an ordered sequence of images or display.

1 Now, there was a discussion also about how the
2 patent owner contends that Wiltshire skips straight from
3 display update image in Step 220 of Figure 2 to send video
4 stream to client, but if a compressed video MPEG stream is
5 sent in Step 230, as Wiltshire says, it would be compressed
6 before transmission.

7 Now, finally -- actually, you know what? I'd like
8 to turn, if I can, to the construction of frame very
9 briefly, and I want to respond to what patent owner's
10 counsel said about a couple of issues on frame.

11 To be clear, patent owner is trying to construe the
12 '109 claim term frame to exclude Saha's express disclosure
13 of compressed image frames. That is improper.

14 Now, there was also a discussion about how the
15 construction that we offered is that a frame is a picture
16 and that we didn't offer any support for our construction.

17 Dr. Fuchs did discuss our construction that frames
18 represent the still images that are ordered in a sequence to
19 produce a video or animated sequence.

20 So if a frame is a still image or a picture, it's a
21 still image or a picture as long as it's part of an ordered
22 sequence. So that picture or the frame needs to be part of
23 a sequence to qualify as a frame.

24 Now, there was a suggestion by patent owner's
25 counsel we didn't offer any support whatsoever for that

1 claim construction, and I want to submit to you that we did,
2 but I'm also going to submit to you that the most relevant
3 and probative extrinsic evidence you can consider is the
4 Saha reference itself.

5 And if you look at Slide 42, you can see what it
6 says. Not only does it discuss frames, but it says, "MPEG
7 compression uses this inherent redundancy to encode or
8 compress frames in the sequence."

9 So it's talking about how frames are in a sequence.
10 That is, you have a sequence of frames to produce a video.

11 That is what Dr. Fuchs' construction is. Saha is
12 the most relevant piece of extrinsic evidence. It has
13 compressed frames using MPEG, just like in the '109 patent.

14 Now, I'd like to turn, if I can very briefly, to
15 mobile device.

16 And one thing I heard is that we relied on this Wang
17 reference and it was never published, or there's no evidence
18 of when it was published.

19 If you look at the Wang reference, Exhibit 1026, at
20 22, you'll see that it was published in the Carnegie Mellon
21 Library in the year 2000. So there is record evidence about
22 it being published.

23 Now, the last thing I wanted just to briefly respond
24 to --

25 JUDGE MARGOLIES: I'm sorry. Can you explain what

1 you just said about -- I'm looking at the exhibit. Can you
2 explain what you just said, how --

3 MR. HAAG: If you go to --

4 JUDGE MARGOLIES: (Inaudible) relying on the
5 stamp -- sorry. Go ahead.

6 MR. HAAG: I'm sorry, Your Honor.

7 If you go to PDF, page 22 of Exhibit 1026, you'll
8 see that there is a record from the Carnegie Mellon Library.
9 You'll see that it refers to the Carnegie Mellon University
10 School of Computer Science. It refers to the creation date
11 of 2000 and a general note of May 2000.

12 And this is a record of when this particular
13 document was published at the Carnegie Mellon Library.

14 Now, just briefly, I want to respond. The patent
15 owner cited some cases on the construction of mobile device,
16 and I'm going to start with, again, what I think is the most
17 probative piece of evidence, which is what patent owner said
18 in the District Court litigation in its complaint, that a
19 laptop is a mobile device.

20 But if we turn to the cases, we talked about those
21 cases in our reply brief at pages 9 to 11.

22 And if Your Honors do consider cases relevant in
23 construing the term mobile device, I'd submit that you
24 should also look at the mobile case that we cited on
25 pages 10 and 11 of our reply brief, and you'll see there

1 that that case construed the term mobile device to mean, "A
2 portable handheld communication device, including a laptop
3 computer."

4 MR. WILSON: Demonstrative 62.

5 JUDGE AHMED: Understood. Thank you.

6 MR. WILSON: Sure.

7 So petitioner refers again to the fact that the
8 Wiltshire reference says you can use a Mac Power PC computer,
9 and you can have a G3 Power PC processor, and PC Magazine
10 refers to the iBook as having the same processor.

11 So again, that's a motivation to use a specific
12 processor, it is not a motivation to use a laptop computer.

13 And that's the critical issue. Where is the design
14 need or market pressure or motivation or apparent reason to
15 use a laptop computer that has that processor? There are
16 plenty of computers out there that use that processor, where
17 is the need for a laptop computer? That's the piece that
18 petitioner has failed to show, and it still, despite me
19 pointing that out in my argument, petitioner has still
20 failed to show it.

21 JUDGE AHMED: Isn't it just one of the finite
22 options? Why is that wrong? People swap out desktops for
23 laptops all the time. Why wouldn't they do that here?

24 MR. WILSON: So let me point you to Slide 40, patent
25 owner's Slide 40, and the Palo Alto Networks case that says,

1 that is insufficient. Simply having a finite number of
2 options is not sufficient to use any one of them, you need a
3 design need or market pressure to solve a problem before you
4 look at the finite number of identified predictable
5 solutions. What is the design need or market pressure that
6 petitioner has proven here? There isn't one. And there
7 certainly isn't one that would motivate use of a laptop
8 computer in a commercial gaming environment. As you can see
9 today, it's still not done, even 20 years later.

10 So now I want to talk about petitioner's Slide 74.

11 This is what petitioner relies on now to say that
12 Chen relates to business use of ADSL.

13 But, of course, Chen doesn't say that. The
14 capabilities of ADSL are also well-suited to applications
15 such as network computing where software and database
16 records could be stored on network servers and retrieved at
17 a speed equivalent to CD ROM access.

18 All it says is you can use ADSL to access database
19 records. Well, that could be things like my bank
20 transactions or my credit card transactions. It says
21 nothing about a business use.

22 And tele-education where a specialist can be shared
23 with a large student population, like, for example, an
24 at-home college course or taking high school classes at
25 home.

1 Again, this is not a business use that's being
2 described here. Chen says nothing about that. Chen does
3 not describe it as a business use.

4 And finally I want to talk about --

5 JUDGE AHMED: When it talks about network servers
6 there, it's patent owner's position that the network servers
7 are somewhere remote?

8 MR. WILSON: Sure. Yes. I -- yes, I think so, at
9 least implied by that passage.

10 JUDGE AHMED: Okay. It can't be that people are
11 using network servers inside their homes in 2001, right?

12 MR. WILSON: No, I think it's talking about
13 accessing database records stored on network servers that are
14 remote, like, for example, my bank transactions or my credit
15 card transactions.

16 JUDGE AHMED: Okay. And how about the point that
17 the specification itself discloses DSL as an option?

18 MR. WILSON: Yes.

19 JUDGE AHMED: So why wouldn't DSL be a good option
20 here?

21 MR. WILSON: So the question is not whether DSL is a
22 good option in the context of the '109 patent invention,
23 which you don't look at for determining whether or not
24 something is obvious, right? That's using the specification
25 specifically for hindsight purposes.

1 So DSL is, yes, disclosed as a good option in the
2 context of the '109 patent invention, the question is, does
3 the prior art teach that, and the answer is no.

4 And I finally want to finish up with the Mobile
5 Commerce case, which petitioner just relied on.

6 Now, in the Mobile Commerce case, it was
7 undisputed -- let me read to you what the case actually
8 says.

9 It says, "The dispute here is whether the term
10 mobile device excludes laptop computers."

11 At the hearing, the parties agreed that it did, and
12 stipulated to a construction that added including a laptop
13 computer to MCS proposed language, and the reason they did
14 that is because the specification of that patent expressly
15 states, "As used herein, a mobile device may also refer to
16 any general purpose mobile machine including, but not
17 limited to, laptop computers."

18 So that case is not probative of the definition of
19 mobile device in the '109 patent.

20 And with that, I think I've run out of time.

21 JUDGE AHMED: Okay. Any questions from the Panel?

22 JUDGE MARGOLIES: No. I just want to say thank you
23 for both sides, the excellent preparation that you had today.
24 We really appreciate it.

25 MR. WILSON: Thank you, Your Honor.

1 MR. HAAG: Thank you, Your Honors.

2 JUDGE AHMED: Yeah, definitely.

3 Okay. With that, we've come to the end of our
4 hearing. Unless the court reporter has some questions, we
5 are done for today. Stay safe.

6 (Proceedings conclude at 3:12 p.m.)

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