

1 UNITED STATES PATENT AND TRADEMARK OFFIC
E 2 BEFORE THE PATENT TRIAL AND APPEAL BOAR
D 3 Case IPR2024-000146, 2024-00043,
4 2024-00044, 2024-00045, 2024-00046
5 U.S. Patent No. 10,951,680
6 -----X
7 AYLO FREESITES LTD and fuboTV MEDIA INC.,
8 Petitioner,
9 V.
10 DISH TECHNOLOGIES L.L.C.,
11 Patent Owner.

12 -----X

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15 November 12, 2024

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17 Deposition of Henry H. Houh

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22 Stenographically Reported By:

23 Mark Richman, CSR, CCR, RPR, CM

24 Job No. 2024-962817

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November 12, 2024

9:00 a.m.

Deposition of HENRY H. HOUH, held at
the offices of Venable LLP, 151 West 42nd
Street, New York, NY 10036, before Mark
Richman, Certified Shorthand Reporter,
Certified Court Reporter, Registered
Professional Reporter, and a Notary Public
within and for the State of New York.

1 A P P E A R A N C E S:

2 VENABLE LLP

3 Attorneys for Petitioner and the Witness

4 101 California Street, Suite 3800

5 San Francisco, CA 94111

6 -and-

7 151 W. 42nd Street

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9

10 BY: PHILIP T. SHENG, ESQ.

11 IAN G. PAQUETTE, ESQ.

12

13 BAKER BOTTS LLP

14 Attorneys for Patent Owner

15 700 K Street

16 Washington, D.C. 20001

17

18 BY: ANDREW WILSON, ESQ.

19 Special Counsel

09:16:17 20 ELIOT D. WILLIAMS, ESQ. (REMOTE)

09:16:19 21 G. HOPKINS GUY, III, ESQ. (REMOTE)

09:16:20 22 JAMIE R. LYNN, ESQ. (REMOTE)

23

24 ALSO PRESENT:

25 JOSEPH EDELL, Esq., Dish (Remote)

1 H. HOUGH - 11.12.24

2 HENRY HOUH, called as a witness,
3 having been first duly sworn by the
4 Notary Public (Mark Richman), was
5 examined and testified as follows:

6 EXAMINATION BY MR. WILSON:

7 Q. Good morning, Dr. Houh.

8 A. Good morning.

9 Q. Could you please state your name
09:00 10 for the record.

11 A. My name is Henry Houh, that's
12 spelled H-O-U-H.

13 MR. SHENG: Andrew, I'm sorry to
14 interrupt. Should we make
09:00 15 appearances?

16 MR. WILSON: Fine. On the
17 record.

18 Andrew Wilson with the law firm
19 Baker Botts LLP for patent owner
09:00 20 Dish.

21 MR. SHENG: Philip Sheng with the
22 law firm Venable LLP. I'm joined
23 with my colleague Mr. Ian Paquette,
24 also with Venable. We represent Dr.
09:00 25 Houh and the Aylo Freesites,

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2 Petitioner.

3 Q. Dr. Houh, you're aware that this
4 deposition is being conducted in regard
09:00 5 to a supplemental or a series of
6 supplemental declarations you submitted
7 in related proceedings; is that correct?

8 A. Yes.

9 Q. And that relates to cases
09:00 10 IPR2024-00043, IPR2024-00044,
11 IPR2024-00045, IPR2024-00046 and
12 IPR2024-00146, right?

13 A. I don't know all the numbers by
14 heart, so the 40 series sounds about
09:01 15 right. I don't remember the other
16 number.

17 Q. You don't have reasons to dispute
18 that the numbers I read are the correct
19 cases for which you submitted
09:01 20 declarations, correct?

21 A. I mean I don't think so, but
22 again, I don't have them memorized that
23 way.

24 Q. Well you were previously deposed
09:01 25 in these cases, correct?

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2 A. I believe so, yes.

3 Q. And that was with regard to an
4 initial declaration that you submitted?

09:01 5 A. Or set of declarations I think,
6 perhaps.

7 Q. Sorry, yes. Initial declaration
8 in each case, correct?

9 A. That sounds right.

09:01 10 Q. You also submitted a declaration
11 in several other IPR cases concerning
12 related patents; is that correct?

13 MR. SHENG: Objection, form.

14 A. I'm not sure.

09:02 15 Q. You don't recall submitting
16 declarations in other related matters,
17 in other related IPR matters?

18 MR. SHENG: Objection, form.

19 A. I don't know what you're
09:02 20 referring to by related matters.

21 Q. Well do you recall submitting a
22 declaration in IPR2024-00047?

23 A. Okay. Yes, perhaps. I don't
24 know them by memory, by number, but
09:02 25 perhaps.

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2 Q. And I'm referring to a series of
3 cases where institution of IPR was
4 denied. Do you recall those cases?

09:02 5 A. That sounds familiar.

6 Q. And those cases also involved the
7 reference that we'll call Ogdon; is that
8 correct?

9 A. That sounds about right.

09:03 10 Q. Returning to the cases that are
11 the subject of your deposition today
12 that you submitted two declarations in
13 each of these five cases; is that
14 correct?

09:03 15 A. Sure, that sounds about right.

16 Q. You submitted a declaration in
17 support of each petition first, correct?

18 A. Yes.

19 Q. And then you submitted a second
09:03 20 declaration in each case called a
21 supplemental declaration, right?

22 A. For five cases.

23 MR. WILSON: Could we just pause
24 and go off the record for a second.

09:03 25 (A recess was had.)

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2 MR. WILSON: I'm joined by Eliot
3 Williams, Hopkins Guy, Jamie Lynn,
4 also of Baker Botts LLP, also for
09:16 5 patent owner Dish.

6 No one from your side, Philip?

7 MR. SHENG: No one. I don't see
8 anybody.

9 MR. WILSON: Let me also
09:16 10 introduce Joe Edell with Dish,
11 E-D-E-L-L.

12 Q. Dr. Houh, you recall we were just
13 discussing that you had first submitted
14 an initial declaration along with
09:17 15 petition in each of these five cases; do
16 you recall that?

17 A. Yes.

18 Q. And that you just more recently
19 submitted a supplemental declaration in
09:17 20 each of these five cases, correct?

21 A. Yes.

22 Q. Do you disavow or disclaim any of
23 the opinions in your initial
24 declaration?

09:17 25 A. No, I don't. I stand by all my

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2 opinions.

3 Q. Are you aware of anything in the
4 supplemental declarations that you
09:17 5 submitted that requires correction at
6 this time?

7 A. No.

8 Q. I'd like to focus first on the
9 case involving U.S. Patent Number
09:17 10 10,469,555. I'm handing you what's
11 previously been marked as exhibit 1003.

12 (Exhibit 1003, initial
13 declaration of Dr. Houh submitted in
14 case IPR2024-00146 was previously
09:18 15 marked for identification.)

16 Q. Take a look through that, skim it
17 all the way to the back and note your
18 signature on the back. And do you
19 confirm that this is your initial
09:18 20 declaration that you submitted in case
21 IPR2024-00146.

22 A. Yes.

23 Q. I'll next hand you what's
24 previously been marked as exhibit 1028.

09:18 25 (Exhibit 1028, supplemental

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2 declaration that Dr. Houh submitted
3 in that same case, IPR2024-00146 was
4 previously marked for
09:18 5 identification.)

6 Q. And do the same there, skim that
7 front to back and just confirm that that
8 appears to be your supplemental
9 declaration that you submitted in that
09:19 10 same case, IPR2024-00146.

11 A. Yes.

12 Q. Now you submitted a different
13 exhibit 1028, supplemental declaration
14 exhibit in each of the other four cases
09:19 15 at issue here too, right?

16 A. Yes, I think that's right.

17 Q. Would it be fair to say that the
18 opinions in your different supplemental
19 declarations are consistent?

09:19 20 MR. SHENG: Objection, form.

21 A. With respect to the other four, I
22 believe they're consistent to the extent
23 they have -- that they are discussing
24 the same issues.

09:19 25 Q. They include largely overlapping

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2 opinions, correct?

3 A. Yes, I think they're consistent.

4 Q. So if I questioned you, for

09:20 5 example, on your testimony in the

6 supplemental declaration in this case,

7 the 00461 case, then your answers would

8 also apply to the other cases where you

9 rendered substantially the same opinions

09:20 10 in the other cases, correct?

11 A. Yes, I mean to the extent you'd

12 be asking me about things that are also

13 in the other declarations.

14 Q. Pick up your 1003 declaration,

09:20 15 your initial declaration. If you turn

16 to the table of contents, do you see

17 under Section V of the table of contents

18 -- excuse me, Section VIII of the table

19 of contents, that's Roman numeral VIII,

09:21 20 under VIII F you see it says claims 18

21 and 19 are anticipated by Ogdon?

22 A. I see that heading.

23 Q. If you can do so, please now turn

24 to your exhibit 1028 declaration, also

09:21 25 turn to the table of contents. And you

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2 see there under Section V that it says
3 Ogdon and Allen and/or Ogdon, Allen and
4 SMIL 2 render all challenged claims
09:21 5 obvious? You see that?

6 A. Yes.

7 Q. Isn't it correct that you don't
8 include a section in your exhibit 1028
9 supplemental declaration regarding
09:21 10 anticipation of any claims based on
11 Ogdon?

12 A. I don't see a heading there, but
13 it might be the case that those points
14 with respect to Ogdon might have been --
09:22 15 I don't recall correctly exactly the
16 case, but might not have been rebutted
17 in the patent owner's reply.

18 Q. You don't recall using the word
19 anticipation in your 1028 declaration?

09:22 20 A. I don't have these declarations
21 memorized as to exact words used
22 everywhere.

23 Q. Can you turn to paragraph 3 of
24 your 1028 declaration.

09:23 25 A. Okay.

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2 Q. You state that you've been asked
3 to provide opinions regarding statements
4 expressed in the declaration of Dr.

09:23 5 Kevin Jeffay, correct?

6 A. I see some of those words. I
7 don't think you read it word for word
8 but I think that captures some of what I
9 say in paragraph 3.

09:23 10 Q. Well you addressed Dr. Jeffay's
11 opinions in this exhibit 1028
12 declaration, right?

13 A. Part of it, yes, sure.

14 Q. Fair to say that you disagree
09:23 15 with Dr. Jeffay on some points?

16 A. Yes, that's fair.

17 Q. But you've worked with Dr. Jeffay
18 before on patent cases, right?

19 A. I believe I've worked opposed to
09:24 20 him and perhaps with him.

21 Q. In fact, you've each provided
22 expert opinions for the same party in
23 the same proceeding, correct?

24 A. That may be the case. But when I
09:24 25 say I worked with him, I don't mean I

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2 literally collaborated with him. It
3 means we were on the same side of the
4 case. But I don't actually recall

09:24 5 working with him, like collaborating
6 with him or discussing anything.

7 Q. Did you work on the same side of
8 a case with Dr. Jeffay on a recent case
9 involving Nokia?

09:24 10 A. I mean I just went to trial for
11 Nokia, but Dr. Jeffay was not present at
12 that trial, I don't think.

13 Q. Dr. Houh, yes or no, based on
14 your experience with Dr. Jeffay, do you
09:25 15 agree or disagree with the statement Dr.
16 Jeffay cannot be trusted?

17 A. I haven't provided any such
18 opinions in any of my declarations here.
19 So I want -- I -- I clearly disagree
09:25 20 with some of his opinions that he's
21 rendered in this case, but that's what
22 I'm going to say.

23 Q. You wouldn't say he cannot be
24 trusted?

09:25 25 A. I'm not here to provide opinions

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2 about that. I'm just here to provide my
3 opinions why I disagree with Dr. Jeffay.

4 Q. In paragraph 6 of your 1028

09:25 5 declaration, you reference various

6 materials and the opinions in your

7 supplemental declaration are based on.

8 You see that?

9 A. I think so.

09:25 10 Q. Taking a step back to your

11 general process of providing expert

12 testimony in an IPR proceeding, you

13 typically review all papers of record in

14 the IPR; is that fair to say?

09:26 15 A. I try to, yes.

16 Q. You review board decisions?

17 A. Yes.

18 Q. You review all the exhibits?

19 A. I try to review all the exhibits.

09:26 20 Q. And you typically review

21 declarations?

22 A. From the -- yes, I mean if you

23 mean declarations of the other side, I

24 do.

09:26 25 Q. You typically review deposition

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2 transcripts in the IPR proceeding?

3 A. Yes.

4 Q. Turn to paragraph 6. You list

09:27 5 what you considered in rendering the

6 opinions in this supplemental

7 declaration, correct?

8 A. Sorry, what was the question

9 again, please?

09:27 10 Q. Paragraph 6 is where you list the

11 materials that you considered in

12 rendering the opinions that you provide

13 in the supplemental declaration; is it

14 not?

09:27 15 A. At a high level.

16 Q. And those materials that you

17 reviewed include exhibits to your first

18 and supplemental declarations, correct?

19 A. Yes.

09:27 20 Q. They include Dr. Jeffay's

21 declaration, correct?

22 A. I mean yes, but I don't see that

23 listed exhibit 1028. Maybe it's

24 captured under the exhibits in the

09:28 25 response.

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2 Q. In the third line down, do you
3 see the Jeffay declaration?

4 A. Oh, yes, I see that. Sorry.

09:28 5 Q. The exhibits to Dr. Jeffay's
6 declaration you reviewed, correct?

7 A. Yes.

8 Q. Dr. Jeffay's deposition
9 transcript, you reviewed that, correct?

09:28 10 A. Yes.

11 Q. The declaration of Mr. Drew
12 Major, you reviewed that, correct?

13 A. I mean that sounds, that sounds
14 right. I, I'm not seeing it, exhibit
09:29 15 1028, listed here, but might be in
16 exhibits.

17 Q. Do you recall reviewing Mr.
18 Major's declaration?

19 A. It sounds vaguely familiar. I
09:29 20 don't remember everything I review, and
21 I work on a lot of cases.

22 Q. Do you recall reviewing the
23 deposition transcript of Mr. Major's
24 deposition that was conducted in this
09:29 25 case?

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2 A. I do. I do believe so, yes.

3 Q. Do you recall reviewing testimony
4 from a Mr. Dave Ericson?

09:29 5 A. I don't remember everything I
6 review. I can't say if I remember that
7 or not.

8 Q. Well part of his testimony was
9 submitted in exhibit, exhibit 2063 in
09:30 10 this proceeding. Do you recall that?

11 A. I don't recall everything I
12 review. But I try to review all the
13 exhibits, certainly if they were cited
14 as well.

09:30 15 Q. And you would have reviewed the
16 deposition transcript of Mr. Ericsson's
17 deposition?

18 A. I review a lot of deposition
19 transcripts. I'm not sure if I have a
09:30 20 separate memory of everything I review.

21 Q. But according to your normal
22 process, you would typically review
23 deposition transcripts of witnesses that
24 provide testimony in an IPR, correct?

09:30 25 A. If they were cited or listed as

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2 an exhibit, I would.

3 Q. Did you review the institution
4 decisions in these cases?

09:30 5 A. I think that I did, yes.

6 Q. Do you recall we briefly
7 discussed your involvement in several
8 other IPRs involving the Ogdon reference
9 where institution was denied?

09:31 10 A. Yes.

11 Q. Did you also review the decisions
12 denying institution in those cases?

13 A. I think that I did probably. I
14 don't -- I think that I did.

09:31 15 Q. You reference the Ogdon
16 Provisional in your supplemental
17 declaration, correct?

18 A. Yes.

19 Q. And in paragraph -- turn to
09:31 20 paragraph 44 of your exhibit 1028.

21 A. Okay.

22 Q. There do you see you're
23 discussing the Ogdon Provisional?

24 A. Yes.

09:31 25 Q. And you see that it states the

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2 data used during the show and cached by
3 the M.Show client software is deleted.

4 Do you see that?

09:32 5 A. Yes.

6 Q. Isn't it true that M.Show is a
7 product referenced in the Ogdon
8 Provisional?

9 A. I mean it's referenced right here
09:32 10 and that's from the Ogdon Provisional.

11 Q. And you're aware that M.Show.com
12 is listed on the face of the Ogdon
13 patent as the assignee?

14 A. I don't remember everything that
09:32 15 I've seen on the face of the patent. I
16 mean that might be right, I just don't
17 remember that.

18 Q. If you turn to paragraph 54 of
19 your supplemental declaration. In the
09:32 20 second sentence there you say the
21 argument that elements in Ogdon are
22 PowerPoint slides that do not have a
23 duration and that videos are on the
24 PowerPoint slides has no basis in
09:33 25 Ogdon's disclosures.

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2 Do you see that?

3 A. I wasn't -- I'm not sure where
4 you pointing to or you were reading
09:33 5 from. I might see it now but I wasn't
6 looking there when you read it.

7 Q. Apologies. So you see the second
8 sentence there, further, the argument
9 that elements in Ogdon are PowerPoint
09:33 10 slides that do not have a duration and
11 that the videos are on the PowerPoint
12 slides has no basis in Ogdon's
13 disclosures.

14 Do you see that now?

09:33 15 A. Yes.

16 Q. Isn't it true that the M.Show
17 product you referenced earlier in
18 paragraph 44 of your declaration did
19 deliver Microsoft PowerPoint slide show
09:33 20 presentations?

21 MR. SHENG: Objection, form.

22 A. I'd have to look at the
23 provisional disclosure to confirm that
24 one way or the other.

09:34 25 Q. These are not collated, so bear

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2 with me here.

3 I'll hand you what I'll asked to
4 be marked as Deposition Exhibit 1.

09:35 5 (Exhibit 1, 1999 article "It's
6 MShow Time" was marked for
7 identification.)

8 MR. SHENG: I'm just going to
9 lodge an objection to exhibit 1 as
09:35 10 outside the scope of Dr. Houh's
11 supplemental declaration.

12 Q. Dr. Houh, do you see the Westlaw
13 branding at the bottom of this?

14 A. Yes.

09:35 15 Q. And do you see at the top it says
16 It's MShow Time? Do you see that?

17 A. Yes. I'm not usually given
18 highlighted exhibits, but I see your
19 highlights and it's, I see that in the
09:35 20 title.

21 Q. And do you see the date of
22 September 20th, 1999 in the title there?

23 A. Yes.

24 Q. Any reason to dispute that this
09:36 25 is a news article archived on Westlaw?

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2 A. I wouldn't have any basis to
3 dispute that.

4 Q. You said you saw it says it's
09:36 5 MShow Time at the top, correct?

6 A. Yes.

7 Q. And you see M.Show referenced
8 throughout this document?

9 A. Yes.

09:36 10 Q. And M.Show is the name of the
11 product you identify in your
12 supplemental declaration, correct?

13 A. I did reference M.Show in my
14 supplemental declaration.

09:36 15 Q. In the first paragraph, do you
16 see where it says, M.Show.com, an 85
17 person company that develops and markets
18 interactive broadcasting services, is
19 targeting both service providers and
09:37 20 business customers with its M.Show
21 service. It combines traditional
22 conference calls with Internet-delivered
23 Microsoft PowerPoint slides to give all
24 the elements of a real-world
09:37 25 meeting-without the airfare or rubber

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2 chicken lunches -- luncheons.

3 Do you see that?

4 A. Yes.

09:37 5 Q. Turn back to your exhibit 1028

6 declaration at page 6. You begin a

7 section there entitled video streaming,

8 including adaptive rate streaming, was

9 common and well known before 2004.

09:38 10 A. Yes.

11 Q. 2004 is the earliest challenged

12 date of the claimed patents; is that

13 correct?

14 A. I mean I have to take a look, but

09:38 15 I assume so given that I'm using that

16 date here.

17 Q. You state in paragraph 17 that

18 Dr. Jeffay was incorrect when he said

19 that video streaming was extremely rare

09:38 20 from the time period of 1997 to the

21 priority date. Do you see that?

22 A. Yes, I see that.

23 Q. Isn't it true that Dr. Jeffay

24 never said that?

09:38 25 MR. SHENG: Objection, form.

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2 A. I'm citing to paragraph, exhibit
3 2006 so I could -- we can take a look at
4 that.

09:39 5 (Exhibit 2006, exhibit 2006 that
6 Dr. Houh cites in paragraph 17 of his
7 supplemental declaration was
8 previously marked for
9 identification.)

09:39 10 Q. I'll hand you what's previously
11 been marked as exhibit 2006.

12 A. Thank you.

13 Q. And if you skim that, just
14 confirm that that indeed appears to be
09:40 15 the exhibit 2006 that you cite in
16 paragraph 17 of your supplemental
17 declaration.

18 Dr. Houh, I don't mean to rush
19 you but the question is just to confirm
09:43 20 that this appears to be the exhibit 2006
21 that you cited?

22 A. It appears to be marked that way.

23 Q. If you can turn to page 22, do
24 you see the footnote 3 that you cite to
09:44 25 in your paragraph 17?

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2 MR. SHENG: Andrew, do you have a
3 copy for counsel?

4 MR. WILSON: Apologies.

09:44 5 MR. SHENG: Thank you.

6 A. I see that.

7 Q. Nowhere in this footnote does Dr.
8 Jeffay say anything about video

9 streaming from the time frame of 1997 to
09:44 10 the priority date of the challenged
11 patents, does he?

12 MR. SHENG: Objection, form.

13 A. Well I see here that he says that
14 it's -- he says video streaming would
09:45 15 have been extremely rare and expensive
16 in 1997, and I do see the patent owner
17 response there, what I've cited to,
18 including the words up through the
19 patent, through the 2004 priority date.

09:46 20 If I could see a copy of the
21 patent owner response.

22 Q. I'm sorry, you're referring to
23 paragraph 17?

24 A. Yes.

09:46 25 Q. You see a citation to the patent

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2 owner response after your statement Dr.
3 Jeffay opines that video streaming was
4 extremely rare from the time frame of
09:46 5 1997 to the priority date?

6 A. I just want to see what the
7 patent owner's response is referencing,
8 if they were also referencing Dr.
9 Jeffay's statement there.

09:46 10 Q. But you don't see anything in
11 footnote 3 of exhibit 2006 that refers
12 to video streaming being rare from the
13 time frame of 1997 to the priority date
14 of the challenged patents, correct?

09:46 15 A. Not those words, not some of
16 those words in footnote 3. But I just
17 want to see what the patent owner
18 response which does use that language,
19 was citing to.

09:47 20 Q. In fact, footnote 3 says Ogdon
21 acknowledges the telepresentations and
22 video conferences were growing in
23 popularity in the 1997 time frame of
24 Ogdon's earliest claim priority date.
09:47 25 These technologies were early ancestors

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2 of today's Zoom meetings where live
3 video feed, typically of a room, would
4 be captured at one conference site and
09:47 5 distributed to one or more remote sites
6 via a network typically comprised of
7 dedicated telecommunications circuits.
8 Audio was typically disseminated via
9 conventional telephone because it was
09:48 10 very difficult to beat the quality of
11 telephony audio. However, it may also
12 be distributed by a data network
13 technology.

14 However, these telepresentations
09:48 15 video conferences required expensive and
16 specialized video conferencing systems.
17 Indeed, a POSITA would have understood
18 that video conference telepresentations
19 or video streaming would have been
09:48 20 extremely rare and expensive in 1997,
21 particularly in typical home or even
22 office settings where network bandwidth
23 and access to video conferencing
24 hardware was extremely limited. Ogdon
09:48 25 confirms that the availability and use

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2 of such conferencing systems was
3 limited.

4 Do you see that?

09:49 5 A. Yes, I see that but I disagree
6 with parts of it. And I'm pretty sure
7 Ogdon explicitly talks about video and
8 audio being distributed by --

9 MR. WILSON: Excuse me. Excuse
09:49 10 me. Objection, nonresponsive.

11 Q. Dr. Houh, in 1997 consumers would
12 generally watch TV via cable broadcast
13 television, correct?

14 A. Perhaps some.

09:49 15 Q. You can't name any commercial
16 video streaming systems in 1997 that
17 allowed people to watch live broadcast
18 television by video streaming, can you?

19 MR. SHENG: Objection, form.

09:49 20 A. We had some demonstrations
21 available in -- at my lab in, starting
22 in -- within our lab in 1993 and we made
23 some public demonstrations available in
24 1994 that allowed -- we certainly within
09:50 25 our lab could stream live TV within the

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2 computers in our group, and we made some
3 of those demonstrations available on the
4 Web in 1994.

09:50 5 Q. But no commercial video streaming
6 services, correct?

7 A. Our service was not commercial,
8 no. But I --

9 Q. Turning to exhibit 2024.

09:50 10 MR. SHENG: Hold on.

11 A. But that was just with respect to
12 our system.

13 Q. I'm sorry. Turning to the 2004
14 time period. You couldn't stream video
09:50 15 on YouTube, right?

16 A. I don't remember when YouTube
17 first came out, but it may well have
18 been after that. I just don't remember
19 the timeline.

09:51 20 Q. In fact, YouTube hadn't been
21 created yet, correct?

22 MR. SHENG: Objection, form.

23 A. I don't know the exact timeline
24 and dates offhand.

09:51 25 Q. You couldn't stream video on

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2 Netflix, right?

3 MR. SHENG: Objection, form.

4 Q. I'll reask. In the 2004 period,

09:51 5 you couldn't stream video on Netflix,

6 correct?

7 A. I don't remember when Netflix

8 started their streaming service,

9 offhand.

09:51 10 Q. You couldn't stream video on

11 Amazon Prime, correct?

12 MR. SHENG: Objection, form.

13 A. I don't remember the exact dates

14 Amazon Prime started, but that might be

09:52 15 right.

16 Q. In 2004, you couldn't stream

17 video on Facebook, right?

18 A. I don't recall Facebook was out

19 in 2004. It might not have been. I

09:52 20 don't recall offhand, though.

21 Q. And isn't it true that Instagram

22 and TikTok did not yet exist at that

23 time, the 2004 period?

24 A. I don't have those timelines

09:52 25 memorized. I don't know for sure one

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2 way or the other.

3 Q. iPhones didn't exist yet in 2004,
4 correct?

09:52 5 A. Yes, I think that's right.

6 Q. You agree that most, if not all,
7 services that customers use today to
8 stream video didn't exist in 1997
9 certainly, correct?

09:53 10 MR. SHENG: Objection, form.

11 A. What was the question again,
12 please?

13 Q. You'd agree that most, if not
14 all, services that customers use to
09:53 15 stream video today didn't exist in 1997,
16 correct?

17 MR. SHENG: Same objection.

18 A. If you're referring to all the
19 modern services today used, no, no.
09:53 20 That quite could -- that quite possibly
21 could be correct.

22 Q. And the same is true for 2004,
23 correct? You would agree that most, if
24 not all, services that customers used
09:53 25 today to stream video didn't exist in

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2 2004?

3 MR. SHENG: Objection, form.

4 A. I, I might agree to the most, but

09:53 5 I'm not sure about all. I don't know

6 all the timelines.

7 Q. And there certainly wasn't any

8 commercial service available to stream

9 full length television shows or movies

09:54 10 in 2004, right?

11 MR. SHENG: Objection, form.

12 A. I'm not sure if that's right.

13 Q. I'll hand you what I'll ask to be

14 marked as Deposition Exhibit 2.

09:55 15 (Exhibit 2, document entitled

16 Peloton Interactive, Inc was marked

17 for identification.)

18 Q. Take a look at this document.

19 Let me know if you recognize it?

09:56 20 A. I do recognize it.

21 Q. You recall that this is a

22 declaration submitted in IPR2020-01541

23 that you submitted on behalf of patent

24 owner Peloton; is that correct?

09:56 25 A. Yes.

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2 Q. If you go to paragraph 108, do
3 you see there you're discussing a
4 reference called Garcia?

09:56 5 A. So this is not what I submitted
6 because it has highlights that I don't
7 think they were there when I submitted
8 it but I would have to double-check.

9 Q. I'll represent to you that this
09:56 10 is the version that was found on public
11 docket searches, so.

12 A. Okay.

13 Q. And you see there you're quoting
14 a portion of Garcia, correct?

09:59 15 A. I see that citation to Garcia.

16 Q. Do you recall the reference
17 Garcia?

18 A. Not really. It was a while ago.

19 Q. I'll represent to you that Garcia
10:00 20 was filed in 2010 and published in 2011.
21 Do you have any reason to dispute that?

22 A. I --

23 MR. SHENG: I'll just lodge an
24 objection here. Dr. Houh has never
10:00 25 seen this document -- well hasn't

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2 reviewed this document recently until
3 today. So that question I'll object
4 to form and outside the scope.

10:00 5 A. I don't, but I don't know the
6 priority, the claim priority date
7 offhand.

8 Q. Do you see in paragraph 108 in
9 the portion that you cite of Garcia, you
10:00 10 say -- well, before that, you say Garcia
11 explains that its video streaming was
12 made practical and cost-effective by the
13 declining costs and increasing
14 availability and reliability of video
10:01 15 streaming over the Internet. Until
16 recent years, the technology of sending
17 live video feeds through the Internet
18 was too costly and not yet reliable.

19 MR. SHENG: Objection, form.

10:01 20 Q. Do you see that?

21 A. I didn't see what you first read
22 in the Garcia citation. Are you reading
23 from paragraph 108 before you started
24 reading from the middle of the cited
10:01 25 portion?

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2 Q. Yes, yes. So the first part,
3 paragraph 108, your words, Garcia
4 explains that its video streaming was
10:01 5 made practical and cost effective by the
6 declining costs and increasing
7 availability and reliability of video
8 streaming over the Internet.

9 You see that part, correct?

10:02 10 A. Yes, I see that.

11 Q. And then within the text that you
12 quote from Garcia, until recent years,
13 the technology of sending live video
14 feeds through the Internet was too
10:02 15 costly and not yet reliable.

16 You see that now?

17 A. Yes.

18 Q. Yes or no, Dr. Houh, do you agree
19 or disagree with the portion of Garcia
10:02 20 that you chose to reproduce here that
21 was just read into the record?

22 MR. SHENG: Objection, form.

23 A. Well, I need to consider the
24 context and the actual priority date of
10:03 25 Garcia. But in, you know, I'm not going

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2 to -- I mean this was what I submitted
3 and what I pointed to earlier. But I
4 would need to consider the whole
10:03 5 context. And it certainly says that,
6 you know, that, it certainly says that
7 it has become a reality at the end of
8 that.

9 MR. WILSON: And I object as
10:03 10 nonresponsive.

11 Q. Dr. Houh, yes or no, do you agree
12 or disagree with this portion of Garcia
13 that you chose to reproduce in your
14 declaration here?

10:03 15 MR. SHENG: Doctor, you can
16 answer the question however you feel
17 is necessary to give truthful
18 testimony today.

19 A. Yes, I mean I don't recall
10:03 20 offhand the actual priority date of this
21 reference. But certainly it says here
22 that it's become a reality. And I'd
23 have to consider the context of what
24 it's saying about until recent years.

10:04 25 Q. Sitting here today, you don't

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2 dispute it?

3 MR. SHENG: Objection, form.

4 A. Well, I'm not, I'm not disputing

10:04 5 the words that are on the paper here.

6 But again, you know, I don't know their

7 actual priority date of the Garcia

8 reference and I'd have to consider the

9 context. And it certainly says here

10:04 10 that it has become a reality. That

11 advances in video streaming technology

12 and the widespread availability of

13 broadband Internet connections, which I

14 know I got at my house in the year 2000,

10:04 15 the ability to provide live Internet

16 active access to numerous exercise

17 fitness facilities has become a reality.

18 Q. Dr. Houh, just for completeness,

19 can you just verify that this is exhibit

10:04 20 2002-001 submitted in the Peloton

21 interactive -- excuse me, submitted in

22 the Echelon v. Peloton, IPR 2020-01541?

23 MR. SHENG: Objection, form.

24 Q. Correct?

10:05 25 A. I think it's simply exhibit 2002.

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2 There are page numbers after that. You
3 added the 001 which is the first page.

4 Q. Fair enough. If we go back to
10:05 5 your supplemental declaration, that's
6 exhibit 1028. If we go to paragraph 18.
7 Towards the bottom of that paragraph or
8 that page, rather, page 6, you cite to
9 the Ogdon Provisional, correct?

10:06 10 A. Yes.

11 Q. The Ogdon Provisional that you
12 cite here is different from the Ogdon
13 patent that you rely on, correct?

14 MR. SHENG: Objection, form.

10:06 15 A. I certainly -- I think certainly
16 portions are different. But it's the
17 Ogdon Provisional.

18 Q. It's a separate document,
19 correct?

10:06 20 A. I believe so, yes.

21 Q. And you don't identify the Ogdon
22 Provisional in any of your grounds of
23 unpatentability, correct?

24 A. I believe that's correct.

10:06 25 Q. Are you familiar with the term

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2 incorporate by reference?

3 A. Yes.

4 Q. You don't contend that the Ogdon

10:06 5 Provisional is incorporated by reference

6 into the Ogdon patent, do you?

7 MR. SHENG: Objection, legal,

8 calls for legal conclusion.

9 A. Yeah, I don't remember if it uses

10:07 10 those words in there or not. I could

11 take a look at Ogdon if you want me to.

12 Q. Well it's true at least that you

13 don't state that Ogdon incorporates by

14 reference the Ogdon Provisional anywhere

10:07 15 in your supplemental declaration,

16 correct?

17 A. I don't have every word memorized

18 but that could be correct. But I'm

19 citing to it here because it informs the

10:07 20 POSITA of the context... for Ogdon.

21 Q. Do you know whether the Ogdon

22 Provisional was ever published in a

23 pre-grant patent application

24 publication?

10:08 25 MR. SHENG: Objection, form.

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2 A. I -- I'm not sure if I have
3 discussed that anywhere here.

4 Q. In fact, the Ogdon Provisional
10:08 5 did not publish as a patent document,
6 correct?

7 MR. SHENG: Objection, form.

8 A. I -- that may be correct. I just
9 -- I don't know for sure.

10:09 10 Q. In paragraph 18 at the very
11 bottom of page 6 you say, any POSITA
12 will recall that in 1995 the MBONE was
13 used to stream a Rolling Stones concert
14 over the Internet live to thousands of
10:09 15 fans from the Cotton Bowl in Dallas. Do
16 you see that?

17 A. Yes.

18 Q. And you cite to exhibit 1018 for
19 that, correct?

10:09 20 A. Yes.

21 Q. Hand you what's previously been
22 marked as exhibit 1018.

23 (Exhibit 1018, New York Times
24 article, February 8, 1995 was
10:10 25 previously marked for

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2 identification.)

3 Q. You recognize this document?

4 A. Yes.

10:10 5 Q. And this is New York Times

6 article; is that correct?

7 A. Yes.

8 Q. And what is the date at the top
9 of this?

10:11 10 A. February 8th, 1995.

11 Q. And this is the article that you
12 referenced in paragraph 18 of your
13 supplemental declaration, right?

14 A. Yes.

10:11 15 Q. Now this doesn't say that M-bone
16 was used to broadcast the Rolling Stones
17 concert to thousands of fans, does it?

18 A. I don't see a reference to the
19 number of fans, but I stand by that
10:13 20 statement.

21 Q. Did you find this exhibit 1018?

22 A. Yes, I probably did.

23 Q. It wasn't given to you by
24 counsel?

10:13 25 A. No, I'm sure it wasn't.

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2 Q. Turning back to the Rolling
3 Stones concert broadcast on M-bone, in
4 fact, that concert was only broadcast to
10:14 5 only one or 200 computers at most,
6 correct?

7 MR. SHENG: Objection, form.

8 A. I don't see anything like that in
9 this document.

10:15 10 Q. Hand you what I'll ask to be
11 marked as Deposition Exhibit 3.

12 (Exhibit 3, Stones Rolling on the
13 Superhighway, Baltimore Sun was
14 marked for identification.)

10:15 15 Q. Do you see again the NewsRoom and
16 Westlaw branding on this document?

17 A. Yes.

18 Q. And do you see on the top it says
19 Stones Rolling on the Superhighway?

10:15 20 A. Yes.

21 Q. And in sort of the middle of the
22 title content it says Baltimore Sun
23 copyright the Baltimore Sun 1994. Do
24 you see that?

10:16 25 A. Yes.

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2 Q. Do you have any reason to dispute
3 that this is an archived news
4 publication, news article, excuse me?

10:16 5 A. No.

6 Q. If you go to page 2, in the
7 middle of the page, do you see there it
8 says the technology may be out there,
9 but it isn't accessible -- well, strike
10:16 10 that.

11 Do you see here that this is
12 addressing, in general, that this
13 article is about the Rolling Stones
14 broadcast on M-bone, correct?

10:17 15 A. I mean I don't think I'd seen
16 this article before. But, sure.

17 Q. And then returning to page 2,
18 again that same sort of middle of the
19 page, the technology may be out there,
10:17 20 but it isn't accessible to many people.

21 Because it takes a high-end computer
22 known as a workstation and a telephone
23 connection that can cost up to \$20,000
24 to receive the M-bone, few computers
10:17 25 other than those at universities and

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2 corporations have access to it. In the
3 end, only about 200 computer sites
4 logged on for the program, but some of
10:17 5 the recipients were from as far away as
6 Iceland and New Zealand and another was
7 at the United States Department of
8 Defense.

9 Do you see that?

10:17 10 A. Yes.

11 Q. Do you know roughly how many
12 computers would have been connected to
13 the Internet in the 1994 time period?

14 A. I probably had seen numbers like
10:18 15 that, but I don't recall them offhand
16 now.

17 Q. Would it surprise you to learn
18 that it's 30 million computers?

19 A. I mean I don't know if I'd be
10:18 20 surprised one way or the other if that's
21 what you say. But again, I don't recall
22 the exact numbers back then.

23 Q. You recall I previously asked you
24 about whether counsel had provided you
10:18 25 the exhibit 1018 document? Do you

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2 recall that?

3 A. Yes.

4 Q. And you had answered that you had

10:18 5 found it, correct?

6 A. I think I probably did, yes.

7 I've known about this article perhaps

8 since it was published.

9 Q. Did you look for other

10:19 10 discussions of the concert when crafting

11 your supplemental declaration?

12 A. I don't recall doing so. But I
13 do recall this article generally, and I
14 probably already had it in my archives.

10:19 15 Q. Dr. Houh, now would be an okay
16 time to take a break if you're --

17 A. Sure.

18 MR. WILSON: Go off the record.

19 (A recess was had.)

10:32 20 MR. WILSON: Back on the record.

21 Q. Dr. Houh, did you discuss the
22 substance of your testimony with your
23 attorneys --

24 A. No.

10:32 25 Q. -- during the break?

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2 I'd like to hand you -- well,

3 I'll start with this. If you turn to

4 your exhibit 1028 declaration, in

10:32 5 paragraph 29, you see you're addressing

6 an argument by patent owner and Dr.

7 Jeffay where they argue that the board

8 correctly found that Ogdon does not

9 teach storing multiple copies of the

10:33 10 same video? Do you see that?

11 A. Yes, I mean correctly found is in

12 quotes. And so is, so are other parts

13 of what you read.

14 Q. Got it. You're paraphrasing or

10:33 15 quoting an argument made by patent owner

16 and Dr. Jeffay there, correct?

17 A. That's right.

18 Q. And in your opinion, the board

19 got that wrong?

10:33 20 A. I mean I'm pointing out if you

21 look in paragraph 30 that this

22 requirement of copies or same video,

23 those words do not appear anywhere in

24 the claims of the '555 patent.

10:34 25 Q. Well, do you disagree -- strike

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2 that.

3 You disagree with the board's
4 finding that Ogdon does not teach
10:34 5 storing multiple copies of the same
6 video; fair to say?

7 A. I'm actually disagreeing with
8 patent owner Dr. Jeffay's arguments
9 about requirements of the '555 patent
10:35 10 claims that aren't there because the
11 '555 patent claim I believe uses the
12 word correspond, corresponds to the same
13 part as opposed to requiring a copy of
14 the same video.

10:35 15 Q. If the board were to find that
16 Ogdon does not teach storing multiple
17 copies of the same video, you would
18 disagree with that, correct?

19 MR. SHENG: Objection, form.

10:35 20 A. I'm not sure why the board would
21 use language that's not part of the
22 claims in their analysis for this
23 particular claim and its corresponding
24 requirement.

10:35 25 Q. It's more than just a semantic

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2 disagreement, though, that Ogdon does
3 not use those exact words, correct?

4 MR. SHENG: Objection, form.

10:35 5 A. I think it's factual as to what
6 claim 1, what words are used in claim 1.

7 Q. In paragraph 30 you say that
8 copies and same video don't appear in
9 the claims of the '555 patent, correct?

10:36 10 A. That's what I say. You
11 paraphrased a bit, but sure.

12 Q. At best, you say, the '555 patent
13 requires streamlet to correspond to the
14 same parts of the video, correct?

10:36 15 MR. SHENG: Objection, form.

16 A. I mean you omitted a word there
17 but I wouldn't -- I'm not going to
18 dispute your paragraph phrasing.

19 Q. But the claims actually require
10:36 20 that the video streams be the same
21 underlying video, don't they?

22 MR. SHENG: Objection, form.

23 A. I mean could I see a copy of the
24 '555 patent, please?

10:37 25 Q. I'll hand you that in a second.

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2 But the claims specifically recite a
3 single video that's encoded at a
4 plurality of bit rates to create a
10:37 5 plurality of video streams; isn't that
6 correct?

7 A. I don't have the words memorized
8 but there might be something that sounds
9 like that in the claim language.

10:37 10 Q. I'm going to hand you a stack of
11 documents that have each been previously
12 marked as exhibit 1001 in each of the
13 five proceedings.

14 (Exhibit 1001, US Patents '555,
10:37 15 '798, '138, '554, '680 was previously
16 marked for identification.)

17 Q. And first, briefly, do these
18 appear to be the exhibit 1001 documents
19 that you reviewed.

10:38 20 A. Yes, they do.

21 Q. And if we start with the one
22 marked for the '555 patent. You'd agree
23 this is a copy of the '555 patent?

24 A. Yes.

10:38 25 Q. If you turn to claim 18.

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2 A. Okay.

3 Q. Do you see there it says a system
4 for adaptive rate content streaming of
10:39 5 live event video? You see that?

6 A. Yes.

7 Q. And then in sort of the second
8 paragraph that's indented it says, the
9 live event video encoded at a plurality
10:39 10 of different bit rates creating a
11 plurality of streams. Do you see that?

12 A. Yes.

13 Q. And if we turn now to the '680
14 patent, turn to claim 1.

10:39 15 A. Okay.

16 Q. Do you see there it's very
17 similar language, streaming of video,
18 the video encoded at a plurality of
19 different bit rates creating a plurality
10:40 20 of streams?

21 MR. SHENG: Which paragraph?

22 Which line are you looking at?

23 MR. WILSON: Line 1 of -- well,
24 line 24 of column 18.

10:40 25 MR. SHENG: Okay.

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2 A. I don't see streaming of video
3 there.

4 Q. In the '680 patent, I'm in claim
10:40 5 1, the first line of claim 1.

6 A. Okay, okay, adaptive rate content
7 streaming of video. I see that there.

8 Q. And then the third paragraph is
9 indented, wherein the video encoded at a
10:40 10 plurality of different bit rates
11 creating a plurality of streams. You
12 see that?

13 A. Yes.

14 Q. Now each of the other asserted
10:41 15 patents includes either identical or
16 very similar language in claim 1 --

17 MR. SHENG: Objection, form.

18 Q. -- is that correct?

19 MR. SHENG: Objection, form.

10:42 20 A. With respect to those words
21 there's some similarities, similar words
22 in the other, the other exhibit 1001s.

23 Q. And if we turn to your exhibit
24 1028, again at paragraph 30. And there
10:43 25 you say as a threshold matter, copies

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2 and same video do not appear anywhere in
3 the claims of the '555 patent. At best,
4 the '555 patent requires each streamlet
10:43 5 to correspond to the same part of the
6 video.

7 Do you see that?

8 A. Yes.

9 Q. You don't address the claim

10:43 10 language that we just went through in
11 this paragraph 30, do you?

12 A. I think I am addressing that.

13 I'm talking about corresponding

14 segments, and those are the

10:44 15 corresponding segments that are encoded

16 at different bit rates for the same

17 portion of the same segment. So I

18 wouldn't, I wouldn't agree with you

19 there.

10:44 20 Q. You don't quote the claim

21 language, the live event video encoded

22 at a plurality of different bit rates

23 creating a plurality of streams, in this

24 paragraph 30, correct?

10:44 25 A. Not those words in paragraph 30,

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2 in just paragraph 30, no.

3 Q. And you don't quote that claim
4 language anywhere in the supplemental
10:44 5 declaration, correct?

6 MR. SHENG: Objection, form.

7 A. I mean if you want me to look
8 through here I could, but I don't have
9 every word memorized.

10:45 10 Q. In paragraph 31 you state that
11 Ogdon repeatedly explains that the
12 different versions of a video
13 presentation are indeed copies of the
14 same video presentation. Do you see
10:45 15 that?

16 A. This is to the extent that the
17 claims actually are deemed to require
18 copies of the same video.

19 Q. And you provide on the next page
10:45 20 after that sentence a series of
21 citations and quotations. Do you see
22 that?

23 A. Yes.

24 Q. Taking the first one, you cite to
10:45 25 Ogdon at column 2, line 30 as saying

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2 different versions of the same

3 presentation, correct?

4 A. That's right.

10:46 5 Q. But that section of Ogdon isn't

6 talking about encoding the same video at

7 different bit rates, right?

8 MR. SHENG: Objection, form.

9 A. If you take Ogdon as a whole,

10:46 10 this is supporting what I'm saying here.

11 Q. Well that section of Ogdon that

12 you cite to first isn't talking about

13 different copies of the same

14 presentation, is it?

10:46 15 MR. SHENG: Objection, form.

16 A. Do I have a copy of Ogdon here

17 yet?

18 Q. You don't recall offhand?

19 A. I don't have photographic memory

10:46 20 where I can recall instantly every word

21 in everything I've looked at.

22 (Exhibit 1004, Ogdon patent,

23 6,161,137 was previously marked for

24 identification.)

10:47 25 Q. I'll hand you what's previously

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2 been marked exhibit 1004.

3 A. Thank you.

4 MR. SHENG: Thank you.

10:48 5 Q. So Ogdon, at that section you
6 cite to, column 2, line 30 is actually
7 talking about different versions of a
8 presentation such as one for Japanese
9 audience members and one for members
10:48 10 affiliated with a particular
11 organization, correct?

12 A. If you're referring to the
13 sentences after the line I said it. But
14 again, if you consider Ogdon as a whole,
10:49 15 these are the citations that I included
16 that support my statements here.

17 Q. Ogdon doesn't disclose coding the
18 same video at different bit rates there.

19 MR. SHENG: Objection, form.

10:49 20 A. If you're referring to lines 30
21 through 35 doesn't use those words. But
22 again, considering Ogdon as a whole,
23 these are the citations that I'm
24 included -- that I've included to
10:50 25 support my statements in this paragraph.

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2 Q. Well in fact none of the quoted
3 portions of Ogdon that you string cite
4 here disclose encoding the same video at
10:50 5 different bit rates?

6 MR. SHENG: Objection, form.

7 A. I mean if you look at my analysis
8 in my opening declaration, I believe I
9 at least address that there. This
10:50 10 section --

11 Q. This paragraph 32?

12 A. I'm sorry, I just thought of
13 something. This section is in response
14 to Dr. Jeffay's arguments about, about,
10:50 15 you know, copies of the same video and
16 related issues are there. So if you're
17 looking for what I said about different
18 bit rates, I've at least addressed that
19 in my opening declaration.

10:51 20 Q. In paragraph 32 of your exhibit
21 1028 declaration, you state that Dr.
22 Jeffay appears to be making an argument
23 that when Ogdon describes content as
24 corresponding across the segments in the
10:51 25 different versions, it is somehow

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2 describing something different from the
3 same content.

4 Do you see that?

10:51 5 A. Yes.

6 Q. You further say that,
7 interpretation is inconsistent with how
8 a POSITA would have understood
9 corresponding in 1997, correct?

10:51 10 A. I do say that.

11 Q. And you point to dictionary
12 definitions to define corresponding,
13 correct?

14 A. I -- yes.

10:52 15 Q. And one dictionary definition
16 that you identify defines corresponding
17 as identical in all essentials or
18 respects, correct?

19 A. That's what I've cited here.

10:52 20 Q. If you consider two audio
21 recordings where one is recorded in
22 English and the other is recorded in
23 Spanish, you wouldn't consider those
24 recordings to be identical, would you?

10:53 25 A. If they conveyed -- I have to

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2 consider the context of that. But if
3 they conveyed the same essential
4 information, they may not do it in the
10:53 5 same language but I'd have to consider
6 the context.

7 Q. So it's your testimony that
8 depending on the context, an audio
9 recording recorded in English and a
10:53 10 separate audio recording recorded in
11 Spanish could be identical?

12 MR. SHENG: Objection, form.

13 A. Depending on the context, they
14 could be. They could be corresponding
10:53 15 to each other. And certainly we could
16 look at the extended dictionary
17 definitions here. But this is what I've
18 cited with respect to the rebuttal
19 points of, you know, to the extent that
10:54 20 the claims are deemed to require copies
21 of the same video then this is my
22 support for that with respect to the
23 copies. And citing the corresponding
24 definitions that include things that are
10:54 25 identical or the same.

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2 But if you look at these, there's
3 potentially broader definitions of
4 corresponding. But this is with respect
10:54 5 to the rebuttal point that Dr. Jeffay
6 and patent owner seem to require copies
7 of the same video that in some meanings
8 corresponding does refer to identical or
9 the same.

10:54 10 Q. So the term corresponding doesn't
11 require that the two items being
12 compared be identical?

13 A. In part, in partly these
14 dictionary definitions I've cited
10:54 15 because it appears that Dr. Jeffay is
16 seeming and patent owner seem to require
17 copies of the same video.

18 My point is Ogdon, to the extent
19 that actually is required by the claim
10:55 20 language, Ogdon is still teaching this
21 because Ogdon discusses corresponding,
22 it uses the word corresponding and
23 describes the content as corresponding.

24 And under these dictionary
10:55 25 definitions, corresponding includes

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2 identical or things that are defined the
3 same as corresponding.

4 So this is a, really a rebuttal
10:55 5 point to the extent that it's required
6 in Ogdon.

7 I'm not saying this is -- I think
8 you're asking a slightly different
9 question. This is a rebuttal point

10:55 10 about Dr. Jeffay's statement that
11 appears, that he seems to somehow
12 require copies of the same video. And
13 to the extent that is the actual thing
14 that the claims are deemed to require,
10:56 15 then Ogdon is still teaching that.

16 Q. The hypothetical two audio
17 recordings, one in English, one in
18 Spanish, if you listen to them they're
19 not identical, are they?

10:56 20 MR. SHENG: Objection, form.

21 A. So corresponding -- so what I've
22 cited here are corresponding to the
23 extent requires things to be copies or
24 -- of the same video, whatever Dr.

10:56 25 Jeffay says.

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2 Now corresponding has broader

3 meanings. But my point here is this is

4 a rebuttal point. And to the extent

10:56 5 that it's found that the claims actually

6 require that the videos be copies of the

7 same video, then Ogdon is teaching that

8 because under some definitions of

9 corresponding he talks about the

10:57 10 dictionaries refer to that as things

11 being identical or the same or identical

12 in all essential respects.

13 And so that's the point here.

14 I'm not, I'm not trying to make that

10:57 15 point. That's a different point that

16 you're asking about.

17 This is with respect to

18 specifically Dr. Jeffay's apparent

19 requirement that, that Ogdon is not

10:57 20 teaching copies of the same video.

21 And Ogdon is teaching content is

22 corresponding across the segments of

23 different versions and that under some

24 definitions of corresponding that I've

10:57 25 cited here, that they do show identical,

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2 that corresponding is -- does include
3 identical in all essential, essential
4 respects.

10:57 5 You're asking a different
6 question that I'm not directly
7 addressing here because this section is
8 a rebuttal to what Dr. Jeffay and patent
9 owner seems to require of the same video
10:57 10 presentation at different quality
11 levels.

12 Q. Dr. Houh, are you able to answer
13 whether the hypothetical of two audio
14 recordings, one in English, one in
10:58 15 Spanish, whether those are identical,
16 set aside the rebuttal argument that
17 you're making? Are you able to answer
18 that?

19 MR. SHENG: Objection, form.

10:58 20 A. That's not what I'm addressing
21 here. This is a hypothetical as you
22 rightfully recognized that I'm not
23 directly addressing. What I'm
24 addressing in my declaration,
10:58 25 supplemental declaration is a different

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2 point as to that Dr. Jeffay appears to
3 be arguing that the claims require
4 copies of the same video. And to the
10:58 5 extent that is what's found to be what
6 the claims require.

7 Ogdon is still teaching
8 corresponding content under -- which
9 include in these dictionary definitions
10:59 10 things that are identical. And so that
11 hypothetical is not what I'm addressing
12 here. And I would have to consider the
13 context of -- of -- of that.

14 Q. The dictionary definitions you
10:59 15 cite to also include things that are not
16 identical; is that correct?

17 A. I mean we can look at the
18 dictionary definitions. But the reason
19 I cited to these is to the extent the
10:59 20 claims do require copies of the same
21 video in the way that Dr. Jeffay and
22 patent owner seem to imply, then Ogdon
23 is describing already corresponding
24 content where corresponding includes in
10:59 25 these various dictionary definitions the

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2 sense that things are identical in all
3 essential or respects or identical with
4 what is about to be or just -- or has
11:00 5 just been mentioned.

6 And that's the point.

7 This is, to the extent that it's
8 required by the claims, the sense that
9 Dr. Jeffay and patent owner seem to be
11:00 10 implying, then Ogdon is already -- is
11 disclosing this. And this is what I'm
12 citing to. Because these definitions of
13 corresponding include being identical in
14 all essentials and respects.

11:00 15 Q. So you don't dispute that Ogdon
16 discloses a presentation segment with a
17 graphic in English and a corresponding
18 presentation segment with a graphic in
19 Japanese?

11:00 20 A. Yes, I'm not disputing that. But
21 the point, this is a rebuttal point
22 which is different than what you're
23 asking about there.

24 Q. And you don't dispute that Ogdon
11:01 25 prescribes prerecorded audio

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2 presentations of different segments in
3 different languages as corresponding,
4 correct?

11:01 5 MR. SHENG: Objection, form.

6 A. Well, that's not the point here.

7 They may fit under, you know, in the
8 context where they are corresponding.

9 But on their other definitions, but the

11:01 10 reasons I cited these definitions was

11 because to the extent that -- to the

12 extent that the claims require copies of

13 the same video and that that those in

14 content are different as maybe the

11:01 15 example, you know, maybe what you're

16 trying to imply by this example, but

17 Ogdon is teaching that there are,

18 there's content that is across the

19 segments which under dictionary

11:02 20 definitions include the notion that they

21 are identical in all essentials and

22 respects.

23 And so to the extent that the

24 claims are to be read strictly under Dr.

11:02 25 Jeffay and patent owner's implied

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2 construction or reading, then Ogdon is
3 teaching this point already because it
4 doesn't talk about corresponding
11:02 5 content.

6 I'm not -- and not -- and you're
7 asking about a lot. There's a lot of
8 other things that Ogdon describes that I
9 might not be pointing to to support all
11:02 10 of my points here. But one thing that
11 Ogdon does describe, it describes
12 content as corresponding across the
13 segments in different versions. And
14 under some dictionary definitions of
11:02 15 that includes the sense where they are
16 identical.

17 So under Dr. Jeffay and patent
18 owner's implied construction or the way
19 they are sensing this word that the
11:03 20 claim language should be interpreted,
21 Ogdon is disclosing that if that's
22 required.

23 Q. Can you turn to paragraph 34 of
24 your exhibit 1028 declaration.

11:03 25 A. Okay.

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2 Q. In that first sentence you say,
3 beginning in sort of the middle of the
4 sentence, it is worth noting that a
11:03 5 POSITA in the late 1990s would have
6 understood Ogdon's disclosure of "slide
7 show format" and "slide show
8 alternative" to mean a very low frame
9 rate video.

11:04 10 Do you see that?

11 A. Yes.

12 Q. And towards the bottom of this
13 page 16 in the same paragraph you state,
14 and by 1999, any POSITA would know that
11:04 15 with the RealPlayer's RealVideo encoding
16 tool, that you could choose to encode a
17 large video for low bandwidth as a slide
18 show, which streams approximately one
19 frame per second.

11:04 20 Do you see that?

21 A. Yes.

22 Q. Are you aware that the RealPlayer
23 document that you cite to here at the
24 end of this sentence repeatedly
11:05 25 references image slide shows?

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2 MR. SHENG: Objection, form.

3 A. Again, I don't remember every
4 word of every document that I've read.

11:05 5 (Exhibit 1031, realsystem G2 was
6 previously marked for
7 identification.)

8 Q. I hand you what's previously been
9 marked exhibit 1031. And you recognize
11:05 10 this as the real system production guide
11 that you cited in your declaration as
12 exhibit 1031?

13 A. Yes.

14 Q. If you turn to the very start of
11:06 15 chapter 1 on page 5. Do you see under
16 new streaming possibilities, the first
17 sentence says RealText and RealPix let
18 you stream text and create streaming
19 slide shows that use special effects
11:06 20 such as fades and zooms?

21 Do you see that?

22 A. Yes.

23 Q. Can you turn to page 13. Do you
24 see it says you can also assemble JPEG
11:06 25 and GIF images in a RealPix presentation

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2 to create eye catching slide shows? Do
3 you see that?

4 A. Yes.

11:06 5 Q. And JPEG there, that's an image
6 format, correct?

7 A. Yes.

8 Q. On page 54, under the Tip
9 heading, it says use RealVideo to show
11:07 10 the speaker and a RealPix slide show to
11 present visual aids such as information
12 written on a blackboard.

13 Do you see that?

14 A. Yes.

11:07 15 MR. SHENG: I'm sorry, Andrew,
16 where were you reading from? I
17 didn't find it.

18 MR. WILSON: Middle of page 54,
19 middle of the tip.

11:08 20 Q. Dr. Houh, are you familiar with
21 minimum frame rates required for the
22 human eye to perceive continuous motion?

23 A. Generally, I believe so.

24 Q. What are those frame rates?

11:08 25 A. Well, I think at around 24 or 30,

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2 to 30 frames a second, that the eye
3 generally perceives that kind of
4 continuous motion.

11:08 5 Q. And below 24 to 30 frames per
6 second, stated conversely, the eye does
7 not perceive continuous motion, correct?

8 A. There might be some gray area but
9 certainly by, you know, one frame every
11:09 10 five seconds or so, you know, then the
11 eye is -- that might be a different
12 domain.

13 Q. And back to 1028, paragraph 34,
14 in the middle of page 16, you cite to an
11:09 15 exhibit 1019. Do you see that?

16 A. Sorry, where are you again,
17 please?

18 Q. This is your 1028 declaration in
19 the '555 patent case, paragraph 34,
11:09 20 middle of page 16 and where you're
21 citing to an exhibit 1019 at page 270
22 with a quote that modem speeds.

23 Do you see that that quote?

24 A. Yes.

11:10 25 Q. It says at modem speeds the MPEG

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2 based systems revert to slide show type
3 video.

4 Do you see that?

11:10 5 A. Yes.

6 Q. What does MPEG refer to there?

7 A. There's a video coding standard,
8 or a class of standards, perhaps, that
9 encode video.

11:10 10 Q. And there was an MPEG-1 standard,
11 correct?

12 A. Yes, I believe so.

13 Q. There's an MPEG-2 standard as
14 well, correct?

11:10 15 A. I think that's right.

16 Q. And MPEG-1 was designed to handle
17 the 24 to 30 frames per second video
18 that you had just discussed; isn't that
19 correct?

11:11 20 MR. SHENG: Objection, form.

21 A. I mean I don't remember how it's
22 characterized but I think it's been used
23 to encode video at such a frame rate, I
24 believe.

11:11 25 Q. And MPEG-2, same thing, commonly

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2 used -- well, strike that.

3 Are you familiar with profiles in
4 the MPEG-2 standard?

11:11 5 A. I think so. I certainly have
6 used -- heard that used with respect to
7 it.

8 Q. The MPEG -- well strike that.

9 MPEG-1 defines a minimum frame
11:12 10 rate, doesn't it?

11 MR. SHENG: Objection, form.

12 A. I'd have to look at the MPEG
13 standard.

14 (Exhibit 1019, Bamba - Audio was
11:13 15 previously marked for
16 identification.)

17 Q. Hand you what's previously been
18 marked exhibit 1019.

19 And you recall that we were in
11:14 20 the middle of your paragraph 34 of your
21 1028 declaration and you had cited to an
22 exhibit 1019.

23 Do you recall that?

24 A. Yes.

11:14 25 Q. And this is that exhibit 1019

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2 that you cited to?

3 A. Yes.

4 Q. If you stay on the first page

11:14 5 labeled 269, in the right column, do you

6 see the last paragraph there starred

7 with the word's today's computer-network

8 infrastructures?

9 A. Yes.

11:14 10 Q. The second sentence there says,

11 streaming media requires that data be

12 transmitted from a server to a client at

13 a sustained bit rate that is high enough

14 to maintain continuous and smooth play

11:14 15 back at the receiving client station.

16 Do you see that?

17 A. Yes.

18 Q. You don't directly address or

19 dispute this sentence in your

11:15 20 declaration, do you?

21 A. I don't remember every word of my

22 declaration.

23 Q. You don't recall, sitting here

24 today, addressing that sentence?

11:15 25 A. Do you want me to look through my

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2 declaration to all references to exhibit
3 1019?

4 Q. If you feel you have to.

11:16 5 And I'll just interrupt you
6 there, doctor. If this is going to be a
7 page by page turning, I'll just reask
8 the question.

9 Sitting here today, you don't
11:16 10 recall addressing this in your
11 declaration?

12 A. Yes, I mean I don't remember
13 every word of everything I've written.
14 I couldn't say one way or the other
11:16 15 right now.

16 Q. If you turn to paragraph 39 of
17 your 1028 declaration.

18 A. Sorry, where again, please?

19 Q. Paragraph 39.

11:17 20 A. Okay.

21 Q. And there you're addressing a
22 figure that you directed counsel to
23 create. You see that?

24 A. Yes.

11:17 25 Q. And that figure is on page 20 of

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2 your declaration?

3 A. Yes.

4 Q. And you state that your figure on

11:17 5 page 20 is an example of the embodiment

6 that is described in Ogdon and recited

7 in claim 6, 9, and 20 of Ogdon, correct?

8 A. Yes.

9 Q. Can you pull up Ogdon reference

11:18 10 simultaneously with the figure. If you

11 can't, I'll ask you to go to claim 6.

12 A. Okay.

13 Q. Do you see in the first paragraph

14 -- sorry, the second paragraph of claim

11:18 15 6 under A it says, said first sub

16 collection? You see that?

17 A. Yes.

18 Q. You don't identify any sub

19 collections in this figure on page 20,

11:19 20 correct?

21 MR. SHENG: Objection, form.

22 A. If I don't here it's because this

23 is really a rebuttal point. And I will

24 refer you back to my original

11:20 25 declaration. Wait, I don't remember if

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2 claim 6 is part of it. But if it's with
3 respect to addressing the claim terms
4 for unpatentability issues, I would have
11:20 5 discussed all the required claim
6 elements of the challenged claims in my
7 opening declaration. But again, this is
8 really a rebuttal point to specific
9 issues that Dr. Jeffay raised.

11:20 10 Q. So you don't address that sub
11 collection aspect of claim 6 in this
12 figure, correct?

13 MR. SHENG: Objection, form.

14 A. I'm just looking back at my
11:21 15 original declaration. I don't appear to
16 be challenging -- I don't see claim 6 as
17 part of any of the grounds in my quick
18 review right here right now.

19 So again, this is a rebuttal
11:21 20 point to Dr. Jeffay's points that he's
21 raised about multiple versions of the
22 same video presentation and I'm pointing
23 out here that claim -- I'm focusing on
24 different things that are mentioned in
11:22 25 claim 6 including reduced motion video

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2 and later I think.

3 Well, my declaration is what it
4 is.

11:22 5 So I'm not using every word of
6 claim 6 in my discussion here, but I'm
7 using some words that are in claim 6.

8 Q. If we turn to paragraph 58 of
9 your supplemental declaration.

11:23 10 A. Okay.

11 Q. And here you're addressing the
12 Ogdon Allen combination, correct?

13 A. Sure, at a high level. But
14 again, these are rebuttal points.

11:23 15 Q. You say a POSITA would have been
16 motivated to modify Ogdon based on Allen
17 to encode the video presentation into
18 multiple quality levels. You see that?

19 A. Yes.

11:23 20 Q. Now flipping back to page 20,
21 it's your opinion that Ogdon teaches a
22 video encoded at at least two quality
23 levels, right?

24 A. I mean that section is directed
11:24 25 to a different point than that section

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2 is.

3 Q. Well in your figure on page 20,
4 you have a green row and a yellow row
11:24 5 below it, correct?

6 A. Yes.

7 Q. And it's your opinion that the
8 green row represents higher transmission
9 rate segments, correct?

11:24 10 A. For that section where I'm
11 discussing really the corresponding
12 segments concept and rebutting Dr.
13 Jeffay and patent owner's contentions
14 about that.

11:25 15 Q. And the yellow row represents
16 lower transmission rate segments,
17 correct?

18 A. That's how I labeled it and
19 that's how this figure is labeled.

11:25 20 Q. And then if you turn back to page
21 35, you say -- sorry, on page 34 in that
22 paragraph 58 you say a POSITA would have
23 been motivated to modify Ogden based on
24 Allen to encode the video presentation
11:25 25 into multiple quality levels. Correct?

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2 A. Yes, I say that.

3 Q. You don't specify here which
4 video presentation version from your
11:26 5 page 20 illustration that you're
6 proposing to encode into multiple
7 quality levels in the Allen combination,
8 do you?

9 MR. SHENG: Objection, form.

11:26 10 A. I'm not sure why I need to refer
11 back to a different analysis for this.
12 I mean this is a section about -- first
13 of all, I believe Ogdon already teaches
14 all limitations that Dr. Jeffay and
11:26 15 patent owner allege are missing.

16 But with respect to Allen, this
17 is -- and I believe I've disclosed that
18 in my original declaration as to why
19 Ogdon anticipates this. But Allen also
11:26 20 teaches this.

21 So now Allen, in combination with
22 Ogdon, is rendering obvious the
23 challenged claims as I've discussed
24 here. And this is with respect to
11:26 25 specific bit rates that Allen encodes

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2 the same segment of video into.

3 And so, that's this discussion

4 here. This is a different rebuttal

11:27 5 point.

6 Q. Is it a good time to take a break

7 for you?

8 A. Sure.

9 MR. WILSON: Let's go off the

11:27 10 record.

11 (A recess was had.)

12 MR. WILSON: Go back on the

13 record.

14 Q. Dr. Houh, if you turn back to

11:37 15 your exhibit 1028 declaration, paragraph

16 8.

17 A. Sorry, what paragraph?

18 Q. Paragraph 8. And this begins a

19 section your understanding of legal

11:37 20 principles, correct?

21 A. Yes.

22 Q. In paragraph 10 you say secondary

23 considerations may be probative evidence

24 of non-obviousness.

11:38 25 Do you see that?

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2 A. Yes.

3 Q. But you'd agree that if evidence
4 of secondary considerations is
11:38 5 presented, then it must be addressed as
6 part of an obviousness analysis,
7 correct?

8 MR. SHENG: Objection, calls for
9 a legal conclusion.

11:38 10 A. I don't know what the
11 requirements are. But I understand that
12 the patent owner has raised secondary
13 considerations, so I have provided some
14 opinions here.

11:38 15 Q. But you've previously testified
16 to your understanding that secondary
17 considerations evidence must be
18 addressed, haven't you?

19 MR. SHENG: Objection, form.

11:38 20 A. I might have but I don't remember
21 what the law -- what I might have said.
22 But I'm not a lawyer. I just -- excuse
23 me.

24 I don't know what the
11:39 25 requirements are. But I have addressed

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2 secondary considerations in this

3 supplemental declaration.

4 Q. I'll hand you what I'll ask to be

11:40 5 marked as Deposition Exhibit 4.

6 (Exhibit 4, declaration of Henry

7 H. Houh, US Patent No. 7,574,725 was

8 marked for identification.)

9 Q. Do you -- take a quick flip

11:41 10 through and let me know if you recognize

11 this document.

12 A. Yes, I do.

13 Q. And you recognize this as a

14 declaration that you submitted in

11:41 15 support of petition for inter partes

16 review of U.S. Patent Number 7,574,725,

17 correct?

18 A. Yes.

19 Q. And it's marked exhibit 1002,

11:41 20 correct?

21 A. In that other case.

22 Q. Correct, yes.

23 A. Yes.

24 Q. Exhibit 1002 in the

11:42 25 IPR2024-00736, correct?

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2 A. Yes.

3 Q. If you go to paragraph 32, you

4 see you stated, I understand that an

11:42 5 obviousness analysis must consider, and

6 then under bullet 4 and just before

7 bullet 4 there's an and, bullet 4,

8 secondary considerations, if any, of

9 non-obviousness. You see that?

11:42 10 A. Yes.

11 Q. Back to your 1028 declaration, if

12 you turn to paragraph 70. And here you

13 state that the Move player includes a

14 critical unclaimed feature, correct?

11:43 15 A. Yes.

16 Q. And that critical unclaimed

17 feature is using multiple parallel TCP

18 connections, in your opinion, correct?

19 A. That's what I say here.

11:43 20 Q. Can you pull up your '555 patent,

21 exhibit 1001, '555 patent.

22 A. Okay.

23 Q. And turn to claim 4. Do you see

24 in the second paragraph under claim 4 it

11:43 25 recites a plurality of web servers? You

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2 see that?

3 A. Yes.

4 Q. And each web server is configured

11:44 5 to receive at least one streamlet

6 request over one or more Internet

7 connections from one or more end user

8 stations. Do you see that?

9 A. Yes.

11:44 10 Q. And you understand the language

11 one or more refers to the instance where

12 there can be one instance of an element

13 or more than one instance of an element?

14 A. Yes.

11:44 15 Q. So this claim 4 covers the

16 scenario where a plurality of web

17 servers receives streamlet requests over

18 multiple Internet connections from a

19 single end user station, correct?

11:44 20 MR. SHENG: Objection, form.

21 A. Well it uses the same language

22 with respect to Internet connection, so

23 it's saying one or more Internet

24 connections from one or more end user

11:45 25 stations. So I don't think it's saying

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2 exactly what -- you used different
3 language.

4 Q. You disagree that this claim
11:45 5 covers more than one Internet connection
6 from one end user station?

7 MR. SHENG: Objection, form.

8 A. I mean I don't see why this is
9 teaching multiple parallel TCP
11:46 10 connections for requesting stream lets
11 in parallel which is what Move said
12 their secret was.

13 Q. But the claim recites, or at
14 least covers, more than one Internet
11:46 15 connection from one end user station,
16 correct?

17 MR. SHENG: Objection, form.

18 A. It requires, it says receive at
19 least one streamlet request over one or
11:46 20 more Internet connections from the one
21 or more end user stations to retrieve
22 the first streamlet, storing a portion
23 of the video, and it goes on.

24 Q. Can you turn to claim 10 of the
11:47 25 same patent. Do you see it recites, in

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2 the third indented paragraph, a digital
3 processing apparatus memory device
4 comprising nontransitory machine
11:47 5 readable instructions that, when
6 executed, cause the processor to
7 establish one or more network
8 connections between the client module
9 and the server; do you see that?

11:47 10 A. Yes.

11 Q. So here the claims expressly
12 contemplate one, or alternatively more
13 than one, network connections, correct?

14 A. Well, it says what it says.

11:48 15 Establish one or more network
16 connections between the client module
17 and the server.

18 Q. So you don't dispute that the
19 claim covers more than one network
11:48 20 connection between the client module and
21 the server?

22 MR. SHENG: Objection, form.

23 A. I mean it says what it says, but
24 it's referring to a server which I also
11:49 25 understand could be one or more. And

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2 then it refers to the client module

3 which I don't find it. I'm not seeing

4 right now the antecedent. But again if

11:49 5 it was a client module that would be one

6 or more also.

7 Q. Well it doesn't exclude more than

8 one network connection between one

9 client module, right?

11:50 10 MR. SHENG: Objection, form.

11 A. I don't understand your question.

12 Q. Does claim 10 of the '555 patent

13 which recites establish one or more

14 network connections between the client

11:50 15 module and the server, that claim

16 language does not exclude the scenario

17 in which more than one network

18 connection is established between the

19 client module and the server, correct?

11:50 20 MR. SHENG: Objection, form.

21 A. So when I did my analysis

22 originally for this claim element, if

23 you look back at my original

24 declaration, exhibit 1003, I'm

11:51 25 discussing it with respect to Ogdon

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2 teaching at least one connection is
3 necessary for the client -- sorry, it's
4 page 58, paragraph 101. At least one
11:51 5 connection is necessary for the client
6 module to retrieve elements from the web
7 servers.

8 So I'm not sure that I was
9 considering the case in which you're
11:52 10 asking about right now because Ogdon is
11 teaching one, at least one connection.
12 And that's, that's all that's -- you
13 know, that falls within teaching what
14 claim 10 is claiming.

11:52 15 So that's the analysis that I did
16 with respect to this element which was
17 how Ogdon taught it and, and it just, it
18 just requires at least one connection.

19 Q. So setting aside your prior
11:54 20 analysis, sitting here today, you're not
21 able to state one way or the other
22 whether claim 10 of the '555 patent
23 which recites establish one or more
24 network connections between the client
11:54 25 module and the server, that that claim

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2 language does not exclude the scenario
3 in which more than one network
4 connection is established between the
11:55 5 client module and the server, correct?

6 MR. SHENG: Objection, form.

7 A. I mean I think if I had to
8 consider a case where that was, what a
9 reference said that didn't just have
11:55 10 one, then I might have considered it
11 before now. But it's not that I can't.
12 It's just that this hypothetical hadn't
13 arisen until now. And I'd have to --
14 the way you're asking it. Because the
11:55 15 analysis I did do was with respect to
16 what Ogdon did teach which was there was
17 at least one connection which clearly
18 disclosed this element and taught,
19 taught this element.

11:56 20 Q. Dr. Houh, we talked briefly about
21 Mr. Ericson at the beginning of this
22 deposition; do you recall that?

23 A. Yes.

24 Q. And you're aware that Mr. Ericson
11:56 25 was subject to cross examination in this

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2 proceeding?

3 A. I generally understand that's
4 part of a deposition.

11:56 5 Q. So you understand he sat for a
6 deposition, correct?

7 A. That's what I recall, if my
8 memory is correct.

9 Q. I'll hand you what I'll ask to be
11:57 10 marked exhibit 5.

11 MR. SHENG: Let me pause you
12 there. I don't know, I want to be
13 respectful of your line of
14 questioning. I talked to Dr. Houh at
11:57 15 the last break. He said he wanted to
16 stop around 12:10 for lunch. When
17 12:10 hits I don't want you to be
18 mid-question with this module. So I
19 defer to you if you want to go to
11:57 20 12:10 or you want to take a break now
21 before you hand him the exhibit.

22 MR. WILSON: Yes, I appreciate
23 that. I feel like we can make a
24 little more progress.

11:58 25 MR. SHENG: Okay, great.

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2 MR. WILSON: Let's go ahead and
3 mark the exhibit if we can.

4 (Exhibit 5, deposition transcript
11:58 5 of David R. Ericson was marked for
6 identification.)

7 Q. If that's okay, with Dr. Houh, of
8 course.

9 A. Sure.

11:58 10 MR. SHENG: What exhibit number
11 is this?

12 MR. WILSON: This should be 5.

13 Q. I'll represent to you that this
14 is a deposition of Dave Ericson taken in
11:58 15 these proceedings. Do you see the case
16 numbers listed on the front cover?

17 MR. SHENG: I'm going to lodge an
18 objection here. Foundation hasn't
19 been laid that the witness has seen
11:59 20 this document or ever considered it
21 in any of his, his reports. So to
22 the extent counsel is trying to
23 introduce this as an exhibit through
24 Dr. Houh, I state my objection on the
11:59 25 record.

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2 Q. If you turn to page 130. About
3 line 12, do you see there's a question
4 lodged, the reference is an Emmy. Do
11:59 5 you see that?

6 A. Yes, I do.

7 MR. SHENG: Objection, scope.

8 Q. An Emmy that Sling received,
9 correct?

12:00 10 A. That's what it says there.

11 MR. SHENG: And, Andrew, if I can
12 get a running objection with regard
13 to every question regarding this
14 document. Happy to object each time,
12:00 15 but defer to you. Running objection
16 okay?

17 MR. WILSON: Yes, standing, yes.

18 MR. SHENG: Okay, very good.

19 Q. And if you follow that down, that
12:00 20 thread of questioning down to the middle
21 of page 131 of the transcript, you see
22 that Mr. Ericson says the Emmy was
23 awarded in 2020, correct? And that's at
24 line 16 of 131.

12:00 25 A. I see that.

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2 Q. You don't address this 2020 Emmy
3 that was awarded to Sling in any of your
4 declarations, correct?

12:01 5 MR. SHENG: Objection, form.

6 A. I don't remember every word, but
7 I don't remember if I did, offhand.

8 Q. If you continue following the
9 transcript down to page 132, at about
12:01 10 line 4, do you see that Mr. Ericson in
11 an answer begins describing an Emmy
12 award that ABC won? Do you see that?

13 A. I see that.

14 Q. And do you see he says the Emmy
12:02 15 was for ABC.com that was obviously using
16 Move's technology?

17 Do you see that?

18 A. Yes. I don't see any nexus to
19 the novel parts of the challenged claims
12:02 20 of all these, but I see what you're
21 pointing to.

22 Q. Turn to page 170, line 19. Do
23 you see again Mr. Ericson is discussing
24 Emmy awards?

12:02 25 A. Yes.

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2 MR. SHENG: I'm going to object
3 here, counsel. It seems like you're
4 just having Dr. Houh read or just
12:03 5 confirm that this transcript says
6 certain things. The document speaks
7 for itself.

8 If that's what we're going to do
9 here, just have Dr. Houh confirm that
12:03 10 this transcript says certain things,
11 I'm going to shut this down. So I'll
12 give you a little bit more leeway.
13 But, you know, again the foundation
14 hasn't been laid that Dr. Houh
12:03 15 considered this document. Quite
16 frankly, it's outside the scope and
17 irrelevant. That's my objection.

18 Q. Do you see an exhibit 2 is
19 introduced at line 22 of this page 170?

12:03 20 A. Yes.

21 Q. I'm handing what I will ask to be
22 marked as Deposition Exhibit 6.

23 (Exhibit 6, document entitled
24 Awards Nominees and Winners was
12:05 25 marked for identification.)

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2 Q. And you haven't seen this before,
3 correct?

4 A. I'm not sure.

12:05 5 Q. Do you see it says exhibit 2
6 Ericson at a stamp at the bottom?

7 A. Yes.

8 MR. SHENG: And I'm going to
9 lodge an objection based on the fact
12:05 10 foundation hasn't been established
11 that Dr. Houh considered this
12 document or cited it frankly in his
13 declaration. This is wildly
14 inappropriate, Andrew. So go ahead,
12:06 15 ask your questions. But I mean
16 that's my objection.

17 Q. Let me just ask, you do not cite
18 to this exhibit 2 -- I'm sorry, excuse
19 me. Strike that.

12:06 20 Let me just confirm you do not
21 cite to this Deposition Exhibit 6 or
22 Deposition Exhibit 5 in your
23 declarations, correct?

24 A. Yes, I mean I don't, I don't
12:06 25 think that I do.

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2 Q. And you don't address any of the
3 Emmy awards described in these
4 documents, correct?

12:06 5 A. Well, I do address the fact there
6 can't be a nexus. So generally whatever
7 these documents are can't, you know,
8 can't, you know, be tied to any nexus
9 because there isn't one.

12:06 10 Q. Regarding this Emmy award that's
11 described on page 170, I believe this
12 is, of the transcript, Deposition
13 Exhibit 5, you don't dispute that ABC
14 worked with Move to use Move's
12:07 15 technology and ABC's streaming, correct?

16 MR. SHENG: Objection, scope,
17 lacks foundation, form.

18 A. I mean what you're showing me
19 here might be the first. I'm -- I don't
12:07 20 know if I was aware of that beforehand.

21 Q. I see we're at about 12:10, it
22 would be a good time for a break?

23 MR. SHENG: Go ahead, let's go
24 for five more minutes. Finish your
12:08 25 line of questioning on this.

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2 Q. Would you turn to -- would you
3 turn to paragraph 21 of your exhibit
4 1003, your initial declaration?

12:09 5 MR. SHENG: If we're moving to a
6 different topic then we can go ahead
7 and grab lunch, if that's what we're
8 doing.

9 MR. WILSON: It's certainly
12:09 10 related.

11 MR. SHENG: Okay.

12 MR. WILSON: But I think we can
13 grab lunch.

14 MR. SHENG: Fair enough, let's
12:09 15 grab lunch.

16 MR. WILSON: Go off the record.
17 (Luncheon recess at 12:09 p.m.)

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2 A F T E R N O O N S E S S I O N

3 (12:54 p.m.)

4 MR. WILSON: Let's go back on the
12:54 5 record.

6 HENRY H. HOUH, resumed, having
7 been previously duly sworn, was
8 examined and testified further, as
9 follows:

10 CONTINUED EXAMINATION

11 BY MR. WILSON:

12 Q. Dr. Houh, did you talk to anyone
13 during the break? Did you talk to your
14 counsel about the substance of your
12:54 15 testimony?

16 A. No.

17 Q. Turn to paragraph 21 of your
18 exhibit 1003, your first declaration.

19 A. Okay.

12:54 20 Q. And you see in paragraph 21 you
21 provide a table of materials. Do you
22 see that?

23 A. Yes.

24 Q. And these are materials you
12:54 25 reviewed and considered in preparing the

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2 exhibit 1003 declaration, correct?

3 A. Yes.

4 Q. And in the row for exhibit 1009

12:54 5 do you see that refers to an ITC

6 investigation initial determination?

7 A. Yes.

8 Q. And you reviewed that, correct?

9 A. Yes, certain portions of it.

12:55 10 Q. And you knew that the ITC, ALJ,

11 the administrative law judge, found

12 evidence of objective indicia, correct?

13 MR. SHENG: Objection to form.

14 A. I don't remember everything I

12:55 15 read.

16 Q. Well you didn't address any of

17 the ITC initial determinations, comments

18 or findings regarding objective indicia

19 in your first declaration, correct?

12:55 20 A. Yes, I believe that's correct in

21 general.

22 Q. Can you turn to paragraph 159 of

23 Dr. Jeffay's exhibit 2006 declaration.

24 A. Sorry, what paragraph?

12:56 25 Q. Paragraph 159. It's on page 75.

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2 A. Okay.

3 Q. And you see here Dr. Jeffay is
4 expressing, referencing and discussing

12:56 5 the objective evidence of

6 non-obviousness identified by the ITC,

7 do you see that?

8 A. I see some of those words as part
9 of the heading.

12:56 10 Q. Do you see in paragraph 160

11 there's a long block quote there? Do

12 you see that?

13 A. Yes.

14 Q. And at the bottom of that there's

12:56 15 a cite to that exhibit 1009, the initial

16 determination; do you see that?

17 A. Yes.

18 Q. Isn't it true that you still

19 don't address the ITC's findings

12:57 20 regarding objective indicia in your

21 supplemental declaration responding to

22 Dr. Jeffay's declaration?

23 MR. SHENG: Objection, form.

24 A. I mean I discuss generally how

12:57 25 there can't be a nexus and without a

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nexus my understanding is there can't be
any secondary considerations that are
tied to such a nexus. And so generally
that's what I address. It may not
relate specifically to these, but I
think they generally go to why there's
no nexus because everything was -- well
I'll refer to my report as to what I
say, but what was known and then,
therefore, there can't be any secondary
considerations tied to such a nexus.

Q. If you refer to the exhibit 2006,
the Jeffay declaration, to paragraph
207. Do you have that paragraph?

A. Now I do.

Q. Do you see Dr. Jeffay is
addressing ABC's use of Move's streaming
player?

A. Yes. Wait a second. Well I
think -- I don't see those exact words
but I see ABC and Move in that
paragraph.

Q. And the, towards the -- in the
second line there's a quote in this

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2 paragraph 207 of Jeffay's 2006

3 declaration, exhibit 2006, it says the

4 full screen version offered by Move was

12:58 5 incredibly crisp and clean compared to

6 Flash and only had minimal buffering at

7 the beginning of the stream which he

8 hoped would lead to a better viewing

9 experience for users which in turn

12:59 10 should boost the effectiveness of the

11 commercials that advertising are placing

12 within the streams.

13 Do you see that?

14 A. Yes.

12:59 15 Q. And it continues discussing about

16 Move's type of streaming, do you see

17 that?

18 A. Yes.

19 Q. But you don't address Dr.

12:59 20 Jeffay's testimony regarding ABC's news

21 of Move's player in your supplemental

22 declaration, correct?

23 A. I think generally I do because

24 again there's no tie to any nexus here

12:59 25 that I see. And I generally discuss why

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2 I understand that secondary
3 considerations must be tied to a nexus
4 and that there couldn't be a nexus, and
12:59 5 I lay out the reasons why in my
6 supplemental declaration.

7 Q. But you don't specifically
8 address ABC's use of Move's player,
9 correct?

01:00 10 A. I don't think I specifically
11 address ABC's use of the Move player,
12 except that, generally speaking, I do
13 discuss why there cannot be any nexus
14 because nothing claimed that was already
01:00 15 not -- nothing was claimed that was
16 already not in the prior art -- I'm not
17 sure if I said that exactly right. But
18 if you look at paragraph 75 and what
19 follows, that's, that's what I'm
01:00 20 referring to. And that applies to any,
21 any raised secondary considerations,
22 really.

23 Q. And you were never provided the
24 Ericson deposition transcript to
01:00 25 consider for your opinion of secondary

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2 considerations, were you?

3 A. I don't remember. I mean --

4 Q. You don't --

01:01 5 A. -- I don't know if I cited to it
6 from memory.

7 Q. You were never told that the Move
8 powered ABC player received an Emmy in
9 2006 based on Move's technology?

01:01 10 MR. SHENG: Objection, form.

11 A. I'm not sure I can answer that
12 because I don't remember where I heard
13 that and whether it might have involved
14 privileged communications. I just don't
01:01 15 remember where I first heard that.

16 Q. So you did hear that ABC's Move
17 player received an Emmy in 2006?

18 MR. SHENG: The Doctor raised a
19 privileged question and I'd like to
01:02 20 discuss with him outside why he
21 thinks that it might be privileged
22 discussion. So if we can go off the
23 record for a few minutes.

24 Q. If you feel like you can answer
01:02 25 without divulging privileged information

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2 please do.

3 MR. SHENG: You can answer that
4 question.

01:02 5 A. I don't remember how I heard
6 that.

7 Q. But you did at least hear it,
8 correct?

9 A. I don't know how to answer that
01:02 10 right now.

11 Q. Why can't you answer that right
12 now?

13 A. Because I don't remember the
14 circumstances under which I heard it.

01:02 15 Q. Well then it's difficult to
16 understand how the mere fact of becoming
17 aware of a fact in a case would be
18 privileged.

19 MR. SHENG: Well I mean if it was
01:03 20 from counsel it's certain privileged.

21 I mean he didn't rely on that fact
22 for -- well I don't know, the
23 foundation hasn't been established
24 that he relied on, you know, that

01:03 25 communication for his opinions. So

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2 certainly if it came from an attorney
3 it would be privileged.

4 Q. So you were aware of it but
01:03 5 didn't address it?

6 MR. SHENG: Objection, form.

7 A. I don't know how to answer that
8 question. And I don't remember the
9 exact timing either, so.

01:04 10 But as I said, I generally
11 addressed all such issues about
12 secondary considerations because there
13 can't be a nexus, as I've laid out in my
14 supplemental declaration.

01:04 15 Q. And I think this has been
16 established, but your opinion on nexus
17 does not consider the Emmy award for
18 Move's technology in 2006, correct?

19 MR. SHENG: Objection, form.

01:04 20 A. I think it certainly applies
21 because there couldn't be a nexus, and
22 that's my opinion. And so any such, any
23 such secondary considerations couldn't
24 be tied to a nexus.

01:04 25 MR. WILSON: Pass the witness.

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2 MR. SHENG: We'll take 15

3 minutes, come back.

4 (A recess was had.)

01:32 5 EXAMINATION BY MR. SHENG:

6 Q. Dr. Houh, do you recall counsel
7 for Dish asking you questions whether
8 you had any opinion that Ogdon
9 anticipates claims 18 and 19 of the '555
01:33 10 patent in your supplemental declaration?

11 A. Yes.

12 Q. Okay. Let's turn, if you could
13 pull out your supplemental declaration,
14 that's exhibit 1028. And I'm
01:33 15 paraphrasing and I know I won't get this
16 word for word correctly, but I recall
17 counsel asking you whether or not, or
18 showing you your original declaration
19 that -- well, let's strike that.

01:33 20 Let me start over.

21 So, Dr. Houh, you recall counsel
22 asking you whether or not you addressed
23 anticipation of claims 18 and 19 of the
24 '555 patent in your supplemental
01:33 25 declaration?

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2 A. Yes, I think so.

3 Q. Can you turn to page 82 of your

4 '555 declaration which was marked as

01:33 5 exhibit 1028. Could you read paragraph

6 82 to yourself.

7 A. To myself?

8 Q. Yes.

9 A. Okay. Okay.

01:34 10 Q. Does paragraph 82 refresh your

11 recollection as to whether or not you

12 considered anticipation of claims 18 and

13 19 in the, your declaration submitted

14 for the '55 patent?

01:34 15 MR. WILSON: Objection, leading.

16 A. Yes, it does.

17 Q. Doctor, can you pull up Dr. Houh

18 exhibit number 1.

19 A. Got it.

01:35 20 Q. And I believe opposing counsel

21 asked if you had ever seen this

22 document. Have you seen this document

23 prior to today's description?

24 A. I don't, I don't recall it before

01:35 25 today.

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2 Q. And do you recall opposing
3 counsel asking you questions about this
4 document using the word PowerPoint
01:35 5 slides?

6 A. Yes.

7 Q. I'm going to hand you -- what
8 exhibit number are we?

9 THE REPORTER: 7.

01:35 10 MR. SHENG: I'm going to mark
11 this as Dr. Houh exhibit number 7.

12 (Exhibit 7, MShow.com press
13 release, November 21, 2000 was marked
14 for identification.)

01:36 15 Q. Dr. Houh, I'll represent to you
16 that this is a press release from
17 M.Show.com. Do you have any reason to
18 dispute that?

19 MR. WILSON: Objection, leading.
01:36 20 Object to scope.

21 A. I don't think I'd have any reason
22 to dispute it.

23 Q. Okay. Can you please turn to,
24 I'm looking at the first paragraph, the
01:36 25 first paragraph, the full paragraph

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2 which begins with Highlands Ranch. Do
3 you see that?

4 A. Yes.

01:36 5 Q. The very last sentence, I'm going
6 to read this into the record.

7 M.Show.com enables instructor-led online
8 training by integrating streaming video
9 and audio with rich media content to

01:36 10 create a synchronous, highly interactive
11 delivery method.

12 Do you see that?

13 A. Yes.

14 Q. Does that support your opinions
01:36 15 regarding Ogdon?

16 MR. WILSON: Objection, leading,
17 scope.

18 A. Yes, it does. And I want to
19 point out that in exhibit 1 also there's
01:36 20 a consistent statement that's consistent
21 with that if you look at the third full
22 paragraph. It talks about it's part of
23 a mission to deliver voice, video and
24 data services with the simplicity of a
01:37 25 regular phone call.

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2 Q. Great. And then we're still on,
3 Dr. Houh, exhibit 7. If you could turn
4 to the -- go ahead.

01:37 5 A. Yes. That's good.

6 Q. If you could turn to the third
7 full paragraph, the paragraph starting
8 with the M.Show service. Do you see
9 that?

01:37 10 A. Yes, I think so.

11 Q. I'm going to read the second
12 sentence of that paragraph into the
13 record. M.Show.com provides integration
14 and synchronization of IP video and
01:37 15 audio streaming, telephony and graphics,
16 plus extensive content services to
17 ensure high quality presentations.

18 Do you see that?

19 MR. WILSON: Objection, leading,
01:37 20 scope.

21 A. I do see it.

22 Q. What does that sentence mean to
23 you?

24 A. I think that means that they're
01:37 25 talking about streaming video as well.

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2 MR. SHENG: Mark this as Dr. Houh
3 exhibit 8.

4 (Exhibit 8, press release
01:37 5 entitled M.Show.com and Akamai in
6 Strategic Alliance was marked for
7 identification.)

8 MR. WILSON: Object to this
9 document as exceeding the scope.

01:38 10 Q. And, Dr. Houh, I'll represent to
11 you that this is a press release
12 entitled M.Show.com and Akamai in
13 Strategic Alliance.

14 Do you have any reason to dispute
01:38 15 that?

16 MR. WILSON: Objection, leading.

17 A. No.

18 Q. Let's go to the third full
19 paragraph, begins with our relationship
01:38 20 with Akamai. Do you see that?

21 MR. WILSON: Objection, leading.

22 A. Yes.

23 Q. The second sentence of that
24 paragraph, I'll read it into the record.
01:38 25 M.Show.com recognizes Akamai's

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2 large-scale edge content delivery

3 network as key to ensuring high-quality

4 delivery of rich media on the Internet,

01:38 5 especially streaming audio and video.

6 Do you see that?

7 A. Yes.

8 MR. WILSON: Objection, leading,

9 scope.

01:38 10 A. Yes.

11 Q. What does that sentence mean to

12 you, doctor?

13 A. It means M.Show is talking about

14 streaming video as well.

01:39 15 Q. If we can go down to the two

16 paragraphs below that, the sentence, the

17 paragraph beginning M.Show integrates IP

18 video. Do you see that?

19 MR. WILSON: Objection, leading.

01:39 20 A. Yes.

21 Q. I'm going to read that into the

22 record. M.Show integrates IP video and

23 audio streaming, telephony and rich

24 media with a patented pre-caching

01:39 25 technology, Togetherware, that

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2 synchronizes audio and video regardless
3 of each individual end user's bandwidth.

4 Do you see that?

01:39 5 MR. WILSON: Objection, leading.

6 A. Yes.

7 Q. Does that support your opinions
8 with respect to Ogdon?

9 A. Yes.

01:39 10 MR. WILSON: Objection, leading.

11 A. Because it is talking about IP
12 video streaming.

13 Q. Okay, you can put those documents
14 away. Could you pull up, Hough exhibit

01:39 15 2, this is the declaration you submitted
16 in the Echelon Peloton IPR.

17 A. Okay.

18 Q. Do you recall opposing counsel
19 asking you about this document?

01:40 20 A. Yes.

21 Q. And opposing counsel asked you
22 questions about paragraph 108. Let's
23 turn to paragraph 108.

24 A. Okay.

01:40 25 Q. Do you recall opposing counsel

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2 asking you questions about paragraph

3 108?

4 A. Yes.

01:40 5 Q. Let's backup. Let's turn to

6 paragraph 103 first, or page 45. Do you

7 see that -- would you agree or -- strike

8 that.

9 Paragraph 108 is under heading A,

01:40 10 do you see that?

11 A. Yes.

12 Q. What's heading A?

13 A. Heading A is an overview of a

14 reference that was raised by Echelon in

01:40 15 this IPR proceeding which I was on the

16 patent owner side for. And Garcia was

17 one of the references raised as in one

18 of the grounds.

19 Q. So under subheading A there's

01:41 20 paragraphs 103 to 108. See that?

21 A. Yes.

22 Q. Okay. So what was the purposes

23 of paragraphs 103 to 108?

24 MR. WILSON: Objection, leading.

01:41 25 A. It's describing what Garcia's

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2 saying.

3 Q. So let's go to paragraph 108.

4 I'll read the first part of paragraph

01:41 5 108 into the record. Garcia explains

6 that its video streaming was made

7 practical and cost effective by the

8 declining cost and increasing

9 availability and reliability of video

01:41 10 streaming over the Internet.

11 Do you see that?

12 MR. WILSON: Objection, leading.

13 A. Yes.

14 Q. What's your understanding of

01:41 15 paragraph -- of this sentence here in

16 paragraph 108?

17 A. That this is the patentee

18 Garcia's view of video streaming, what

19 was making video streaming practical.

01:41 20 Q. And then still in paragraph 108

21 there's a image of text from Garcia. Do

22 you see that?

23 A. Yes.

24 Q. Okay. And opposing counsel

01:42 25 referred you to the sentence there that

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2 includes some highlighting. Do you
3 recall that?

4 A. Yes.

01:42 5 Q. Did you include that highlighting
6 or was that --

7 A. I don't recall where that
8 highlighting came from, but I don't, I
9 don't have recollection of that.

01:42 10 Q. And so that sentence that counsel
11 referred to you -- referred you to, I'm
12 going to read it into the record.

13 It says, until recent years the
14 technology of sending live video feeds
01:42 15 through the Internet was too costly and
16 not yet reliable.

17 You see that?

18 A. Yes.

19 MR. WILSON: Objection, leading.

01:42 20 Q. And I think opposing counsel
21 represented to you that the priority
22 date for Garcia is 2010. Do you
23 remember that?

24 A. Yes.

01:42 25 Q. With the understanding that

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2 Garcia's priority date was 2010, do you
3 agree with the statement that I just
4 read into the report?

01:42 5 MR. WILSON: Objection, leading.

6 A. No, I wouldn't agree with it.

7 Q. Why not?

8 A. Well there was a lot of

9 technology available well before that

01:43 10 time frame. If you look at things like

11 RealMedia, they were doing streaming

12 video well before this time frame. And

13 I had, as I mentioned earlier, I had

14 broadband access at my home starting in

01:43 15 around 2000, which is well before the

16 time frame of 2010.

17 Q. Thank you, doctor. You can put
18 that away.

19 Doctor, can you take out your

01:43 20 supplemental declaration, again it's

21 exhibit 1028, I believe.

22 A. Okay.

23 Q. And then if you can pull out the
24 Ogdon patent as well at the same time.

01:44 25 A. Okay.

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2 Q. And counsel asked you, opposing
3 counsel asked you about the figure on
4 page 20. If you could turn to that.

01:44 5 Page 20 of your supplemental
6 declaration. And opposing counsel asked
7 you whether or not this figure reflected
8 sub collections or something like that.

9 Do you remember that line of
01:44 10 questioning?

11 A. Yes, generally.

12 Q. Could you turn to Ogdon column 2,
13 line 39 to 43. Read that to yourself.
14 Let me know when you're done.

01:45 15 A. Okay.

16 Q. Does Ogdon column 2 lines 39 to
17 43 refresh your recollection as to
18 whether or not the figure on page 20 of
19 your supplemental declaration reflects
01:45 20 sub collection?

21 MR. WILSON: Objection, leading.

22 A. It does. That section talks
23 about how sub collections can simply
24 have one or more segments, and figure 20
01:45 25 shows one segment. So I didn't use the

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2 word sub collection around this section,
3 but certainly Ogdon is teaching that
4 just one segment is a sub collection.

01:45 5 Q. Thank you. You can put that
6 away.

7 Could you pull out exhibit 1031,
8 that's the thick one, the realsystem G2
9 production guide.

01:45 10 A. Okay.

11 Q. Can you turn to page 56 of that
12 document. Let me ask you this first.
13 Do you recall opposing counsel asking
14 you about the RealPix functionality tool
01:46 15 that's discussed in this document?

16 A. Yes.

17 Q. What is your understanding of the
18 RealPix tool?

19 A. My understanding is the RealPix
01:46 20 tool is a tool that can take images and
21 then create a slide show from the
22 images.

23 Q. Now is that, do you rely on the
24 RealPix tool in your opinions with
01:46 25 respect to Ogdon?

1 H. HOUGH - 11.12.24

2 A. No, I don't think I was.

3 Q. What do you rely on? Well --

4 A. I was relying on the Real

01:46 5 Encoding tool which I cited which talks
6 about converting a video into like a
7 series of, every second taking snapshot
8 and turning that into a slide show
9 format or something like that. Actually
01:46 10 the wording is actually in my
11 supplemental declaration.

12 Q. Why don't I turn you to the page
13 of the exhibit. Can you turn to page 56
14 of exhibit 1031.

01:47 15 A. Okay. I'm there.

16 Q. Okay. And if you look at the top
17 portion of the document there's the word
18 Tip.

19 A. Yes.

01:47 20 Q. Is that the portion of exhibit
21 1031 that you are relying on?

22 MR. WILSON: Objection, leading.

23 A. It is, and actually it's cited
24 and quoted in my supplemental
01:47 25 declaration, at least part of this

1 H. HOUGH - 11.12.24

2 segment is.

3 MR. SHENG: No further questions.

4 MR. WILSON: Five-minute break.

01:47 5 Off the record.

6 (A recess was had.)

7 MR. WILSON: Nothing further.

8 MR. SHENG: Oh, very good. We

9 will order -- what's your regular

01:55 10 turnaround?

11 THE REPORTER: Eight to 10

12 business days.

13 (Continued on next page for

14 purpose of jurat.)

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MR. SHENG: I suspect you will
want it faster than that and I will
piggyback off your order.

01:55 MR. WILSON: I think we want rush
and rough.

THE REPORTER: Do you want the
same?

MR. SHENG: Sure.

01:55 (Time noted:1:55 p.m.)

HENRY H. HOUH

Subscribed and sworn to
before me this _____
day of _____, 2024.

Notary Public

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E X H I B I T S

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I N D E X

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REQUESTS

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None

CERTIFICATION

STATE OF NEW YORK)
 : ss.
COUNTY OF NEW YORK)

I, MARK RICHMAN, Certified Shorthand
Reporter, Certified Court Reporter,
Registered Professional Reporter and Notary
Public for and within the State of New York,
do hereby certify:

That the witness whose testimony is
herein set forth, was duly sworn by me; and
that the within transcript is a true record
of the testimony given by said witness.

I further certify that I am not related
to any of the parties to this action by
blood or marriage, and that I am in no way
interested in the outcome of this matter.

IN WITNESS WHEREOF, I have hereunto set
my hand this 12th day of October, 2024.

Mark Richman

MARK RICHMAN, CSR, CRR, RPR, CM

* * *

DEPOSITION ERRATA SHEET

Deposition of: Henry Houh, Ph.D. Date of Deposition: November 12, 2024

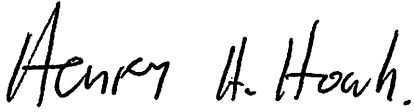
Case Name: *Aylo Freesites Ltd. v. Dish Technologies L.L.C.*

Case Number: PTAB Cases IPR2024-00461, IPR2024-00043, IPR2024-00044, IPR2024-00045, IPR2024-00046

Reporter: Mark Richman, CSR, CCR, RPR, CM

Please make all corrections, changes or clarifications to your testimony, showing page and line numbers. If there are no changes, write "none" across this page. Sign and date on the lines provided.

Page No.	Line No.	Change From	Change To	Reason
All	1	HOUGH	HOUH	Transcription error
35	6	claim	claimed	Transcription error
29	8	by --	by a TCP/IP network	Mr. Wilson interrupted and spoke over me
49	18	paragraph phrasing	paraphrasing	Transcription error
59	14	be. They	be -- they	Transcription error
62	9	about	about,	Transcription error
115	14	Hough	Houh	Transcription error

Signature: 
Henry Houh

Date: November 20, 2024

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