

UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD

AYLO FREESITES, LTD

Petitioner,

vs.

DISH TECHNOLOGIES, L.L.C.,

Patent Owner.

IPR2024-00940

Patent No. 11,991,234

FUBOTV MEDIA, INC. & YANKA INDUSTRIES, INC.,

Petitioners,

vs.

DISH TECHNOLOGIES L.L.C.,

Patent Owner.

IPR2024-00917 (Patent 10,757,156 B2)

IPR2024-00918 (Patent 9,407,564 B2)

IPR2024-00919 (Patent 8,868,772 B2)

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fuboTV Media Inc.
Exhibit 1032
fuboTV v. Dish
IPR2024-00917, -00918, -00919
Ex. 1032-001

1 Washington, D.C.

2 Wednesday, May 14, 2025

3

4 Videotaped deposition of R. DREW MAJOR, held
5 at the law offices of Baker Botts, LLP, 700 K
6 Street, N.W., Washington, D.C., beginning at
7 9:27 a.m., taken stenographically by Misty Klapper,
8 Registered Merit Reporter, Certified Shorthand
9 Reporter, Registered Professional Reporter, Realtime
10 Systems Administrator and Notary Public.

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1 C O N T E N T S

2	WITNESS:	EXAMINATION BY:	PAGE:
3	R. Drew Major	Mr. Paquette	9
4		Ms. Rabenstein	65

5

6

7 E X H I B I T S

8 MAJOR EXHIBITS:

9	NO.:	DESCRIPTION:	PAGE:
10	Exhibit 1	Deposition transcript of	
11		Robert Drew Major taken	
12		on 9/17/24	14

13

14

15

16 PREVIOUSLY MARKED EXHIBITS REFERRED TO:

17	NO.:	DESCRIPTION:	PAGE:
18	Exhibit 1021-	Deposition transcript of	
19	Ogdon	Robert Drew Major, taken	
20		on 9/17/24	18

21

22

1 E X H I B I T S (CONTINUED)

2 PREVIOUSLY MARKED EXHIBITS REFERRED TO (CONTINUED):

3

4 NO.: DESCRIPTION: PAGE:

5 Exhibit 2010- Declaration of Robert Drew

6 Ogdon Major in Support of DISH

7 Technologies L.L.C.'s Patent

8 Owner Response to

9 Petitioner's Petitions for

10 Inter Partes Review dated

11 2/26/25 19

12 Exhibit 2020- Declaration of R. Drew Major

13 in Support of Patent Owner

14 Response dated 7/19/24 23

15 Exhibit 2021- Overview of Move Networks

16 Learning Streaming Media Technology 30

17 Exhibit 2024- Business Wire press release

18 Learning dated 9/15/10, Move Networks

19 Awarded Fundamental Patent

20 on Adaptive Streaming 91

21

22

1	EXHIBITS (CONTINUED)		
2	PREVIOUSLY MARKED EXHIBITS REFERRED TO (CONTINUED):		
3	NO.:	DESCRIPTION:	PAGE:
4	Exhibit 2062-	Ryan Lawler blog post dated	
5	Learning	9/15/10, Move Gets Streaming	
6		Patent; Are Adobe & Apple	
7		Hosed?	96
8	Exhibit 2069-	Move Networks document,	
9	Learning	The Next Generation Video	
10		Publishing System	42
11	Exhibit 2096-	Move Networks Newsroom	
12	Learning	article dated 9/15/10,	
13		Move Networks Awarded	
14		Fundamental Patent on	
15		Adaptive Video Streaming	93
16			
17			
18			
19			
20			
21			
22			

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

2 VIDEO OPERATOR: Good morning.

3 We are on the record at 9:27 a.m.

4 Eastern Time. The date today is

5 Wednesday, May 14th 2025 for the

6 stenographically reported and recorded

7 deposition of R. Drew Major in the

8 action of Aylo Freesites, Inc., Dish

9 Technologies and fuboTV Media,

10 Incorporated and Yanka Industries v.

11 DISH Technologies.

12 My name is Ellen Hebert. I am

13 the videographer. Misty Klapper is

14 the court reporter. We are with

15 Hudson Court Reporting and Video

16 Nationwide.

17 This deposition is being held

18 at Baker Botts, LLP, located at 700 K

19 Street, Northwest, Washington, D.C.

20 200001 [sic]. Counsel will be noted

21 on the stenographic record.

22 Madam Court Reporter, you may

1 now swear in the witness.

2 MS. REPORTER: One moment.

3 R. DREW MAJOR,

4 The witness herein, called for
5 examination by the Petitioners, having been
6 duly sworn, was examined and testified as
7 follows:

8 EXAMINATION BY COUNSEL FOR PETITIONER

9 AYLO FREESITES, LTD.

10 BY MR. PAQUETTE:

11 Q. Good morning, Mr. Major.

12 A. Good morning.

13 Q. How are you today?

14 A. Feeling as good as I can under
15 the circumstances.

16 Q. Well, it's nice to see you again.

17 Do you recall that I deposed you
18 about eight months ago in Denver?

19 A. Yes.

20 Q. Do you recall the general subject
21 matter of that deposition?

22 A. It was regarding my HTTP adaptive

1 rate streaming patent, yes -- patents.

2 Q. I think maybe you could speak up
3 a little bit just for the court reporter and
4 the record.

5 A. Okay.

6 Q. Since I know you've been deposed
7 before, I'll just briefly go over the ground
8 rules and we can get started.

9 So I'll be asking you questions
10 today and you'll be providing answers. At a
11 certain point, counsel for fuboTV and
12 MasterClass will ask you questions and you'll
13 provide answers. At certain points your
14 counsel will object. Unless it's a privilege
15 objection and you're instructed not to
16 answer, you still have to answer the
17 questions.

18 Understood?

19 A. Yes.

20 Q. If at any point you need to take
21 a break, just let me know. I'd just ask that
22 you answer any outstanding questions before

1 we go on a break.

2 A. Okay.

3 MR. GUY: On -- on that point,
4 he's got a 5:15 flight that he'd like
5 to make out of Reagan, so I don't --

6 MR. PAQUETTE: I don't
7 anticipate that being a problem.

8 MR. GUY: Okay. Thank you.
9 He -- he'd like to get out of here by
10 3:30. He's all packed and ready to
11 go.

12 Thank you.

13 BY MR. PAQUETTE:

14 Q. Also, please answer verbally with
15 a yes or no rather than a head nod.

16 With that, what did you do to
17 prepare for today's deposition?

18 A. Well, I met with counsel. We had
19 a couple of calls and a meeting yesterday. I
20 reviewed a few documents, the '772 patent, I
21 believe, and something regarding secondary
22 considerations from the patent office or --

1 and that's about it.

2 Q. So you met with counsel, you
3 said?

4 A. Yes.

5 Q. Who did you meet with?

6 A. With Hop -- I forgot your name
7 already. I'm sorry.

8 MR. SHEPARD: Zach.

9 BY MR. PAQUETTE:

10 Q. Mr. Guy and Mr. Shepard?

11 A. Yes.

12 Q. And you said you reviewed the
13 '772 patent?

14 A. Yeah. Looked at the first part
15 of it, yeah.

16 Q. The specification?

17 A. Yeah.

18 Q. Did you review the claims?

19 A. No.

20 MR. GUY: If you can keep your
21 voice up, I'm having a hard time
22 hearing you.

1 THE WITNESS: Okay. I'll be
2 louder.

3 BY MR. PAQUETTE:

4 Q. And you said you reviewed
5 something about secondary considerations from
6 the patent office; is that right?

7 A. There was a document that had
8 a -- some sort of a finding that was from the
9 patent office, I believe, from the -- from
10 the previous thing that I -- I looked at it.
11 I kind of scanned it. Yeah.

12 Q. And that would be from the
13 previous IPRs for which you were deposed?

14 A. I believe so.

15 Q. Did you review anything else?

16 A. No, not really.

17 Q. Okay. Mr. Major, I'm going to
18 hand you a document.

19 MR. PAQUETTE: I would like
20 this marked, please --

21 THE WITNESS: Well, I -- I
22 read -- I reviewed my previous

1 deposition.

2 BY MR. PAQUETTE:

3 Q. You reviewed your -- you reviewed
4 your previous deposition from the prior IPRs?

5 A. That's right.

6 Q. Okay. Well, that's great timing,
7 because I'm going to introduce an exhibit
8 that I would like marked as Major Exhibit 1,
9 please.

10 MR. GUY: Thank you.

11 (Jeffay Exhibit 1 was marked
12 for identification.)

13 BY MR. PAQUETTE:

14 Q. Do you recognize that, Mr. Major?

15 A. Looks like the transcripts from
16 my previous deposition.

17 MR. GUY: One -- one second. I
18 just want to make sure we get that --
19 how is it marked? Major 1, 5-14.
20 Isn't there already a Major 1 in the
21 last deposition in Ogdon?

22 MR. PAQUETTE: Oh, we're not

1 doing a continuation. This is a
2 new -- this is a separate --

3 MR. GUY: Yeah, I know. I'm
4 just trying to keep them separate. I
5 mean -- and the -- and the -- the
6 number at the bottom is actually the
7 Ogdon date -- number.

8 Is that right?

9 MR. PAQUETTE: This is the
10 Ogdon deposition transcript. I don't
11 think I understand.

12 MR. GUY: I'm just trying to
13 get a number that would identify --
14 just -- just some consistent numbering
15 system so we can identify that it's
16 part of this -- the second proceeding.

17 I mean, I -- I -- I just want
18 to make sure it's clear. It will get
19 confusing.

20 So you've got this as Major 1.
21 Is there any way -- I -- I -- I -- I
22 don't know. Is this the -- can you

1 say Leaning IPR or something like
2 that?

3 MR. PAQUETTE: Right. I was
4 going to identify this as your prior
5 ABR deposition transcript or we could
6 call it the Ogdon deposition
7 transcript if that works.

8 MR. GUY: That's fine. That's
9 what it is. I'm just trying to get
10 the numbering system. What do -- what
11 do you -- any suggestion?

12 MR. PAQUETTE: Do you want to
13 go off the record?

14 MS. RABENSTEIN: So why don't
15 we agree to this, because it is marked
16 as Aylo Exhibit 1021 in the -- in the
17 Ogdon IPRs, that's on the stamp at the
18 bottom.

19 MR. GUY: Yeah.

20 MS. RABENSTEIN: So why don't
21 we refer to this as Exhibit 1021 in
22 the Ogdon IPRs.

1 MR. GUY: And not renumber it
2 here?

3 MS. RABENSTEIN: And not
4 renumber it here, because people are
5 going to look at --

6 MR. GUY: You know exactly
7 what's going to happen.

8 MS. RABENSTEIN: Yeah. And I
9 think just if we can get an agreement
10 at the beginning of the record that
11 when we refer to Exhibit 1021, we're
12 referring to Mr. Major's testimony
13 from the Ogdon IPR.

14 MR. GUY: That's fine.

15 MS. RABENSTEIN: And as long as
16 everybody agrees on the record that
17 that's okay, Mr. Major, if you
18 understand that, that if we -- we can
19 always cite back to the fact that
20 there's an agreement that 1021 is the
21 exhibit number from the Ogdon IPRs.

22 MR. GUY: All right.

1 MR. PAQUETTE: Okay. That
2 sounds good.

3 BY MR. PAQUETTE:

4 Q. Mr. Major, I will refer to this
5 as Exhibit 1021 from the Ogdon IPRs and
6 you'll understand what I mean?

7 A. Yes.

8 Q. Great.

9 (Exhibit 1021-Ogdon, previously
10 marked, and also marked as Major
11 Exhibit 1 above, was referred to.)

12 BY MR. PAQUETTE:

13 Q. And do you see on the first page
14 of the exhibit there's a list of IPR numbers?

15 A. Yes.

16 Q. And there's also a list of patent
17 numbers?

18 A. Yes.

19 Q. Are these patents listed the HTTP
20 adaptive bitrate or ABR patents that you
21 mentioned earlier?

22 A. I'm not sure. I don't really

1 remember the numbers.

2 Q. Fair enough. We'll get to that.

3 Let's do this:

4 I'm handing you now what was
5 previously marked in the Ogdon IPRs as
6 Exhibit 2010.

7 (Exhibit 2010-Ogdon, previously
8 marked, was referred to.)

9 BY MR. PAQUETTE:

10 Q. And this -- do you recognize
11 this?

12 A. Yeah. This is a declaration I
13 made.

14 Q. And this was a declaration from
15 the Ogdon IPRs?

16 A. Looks like it.

17 Q. Please go to paragraph 3 of
18 Exhibit 2010 from the Ogdon IPRs.

19 A. Okay.

20 Q. Do you see there you list -- you
21 say, This declaration is about the adaptive
22 bitrate streaming patents that concern the

1 streaming of video content over the internet,
2 referred to as the ABR patents.

3 Do you see that?

4 A. Yes.

5 Q. And then you say the ABR patents
6 include, and then you list some patent
7 numbers.

8 A. Yes.

9 Q. And some of the patent numbers
10 include -- do you see 8,868,772?

11 A. Yes.

12 Q. And do you see 10,757,156?

13 A. 10 -- what did you say 157?

14 Q. 156.

15 A. So 10 -- where is it?

16 Q. Toward the end.

17 A. Towards the end.

18 10 -- 156 -- 757,156.

19 Yes, I see that.

20 Q. And do you also see 9,407,564?

21 A. Yes.

22 Q. And is it your understanding that

1 these ABR patents, as you call them here,
2 share common specifications?

3 A. They're related to each other
4 definitely, closely. I'm not -- again, I'm
5 not a super patent guy, but ...

6 Q. So the ABR patents are all
7 related to each other, according to your
8 understanding, correct?

9 A. To some degree, yes.

10 Q. And do you also see in
11 paragraph 3 you say, at the last -- at the
12 end of the last sentence, The ABR patents
13 include these patent numbers, quote, as well
14 as many others.

15 Do you see that?

16 A. Yes.

17 Q. And so the ABR patent family is
18 larger than the specific patents listed in
19 this paragraph 3, correct?

20 A. Yes. I -- I -- I don't know them
21 all, though, you know. I --

22 Q. I won't quiz you on them.

1 A. I've -- I review -- I review them
2 and sign them and then -- if they look good.
3 I rely on the lawyers to understand the
4 claims and stuff after -- after my reviewing.

5 Q. Okay. Mr. Major, I'm now handing
6 you Exhibit 2020 in the current IPR, which is
7 the -- we'll term the Leaning IPR that you're
8 being deposed about today.

9 MR. GUY: Can we have that one
10 marked as Major 1 in this deposition?

11 THE WITNESS: It's a new one.

12 MR. GUY: Because that's the
13 first time that this exhibit is being
14 introduced in any deposition.

15 MR. PAQUETTE: We've just been
16 doing the premarking numbers. But do
17 you think it's just for confusion with
18 the Ogdon declaration?

19 MR. GUY: It's -- yeah.

20 MR. PAQUETTE: I mean, it --

21 MR. GUY: I'm trying to get a
22 clear record here so that, you know --

1 MS. RABENSTEIN: Well, I mean,
2 the document --

3 MS. REPORTER: I'm sorry.
4 Could we go off the record?

5 VIDEO OPERATOR: Going off the
6 record the time is 9:39 a.m.

7 (Thereupon, a discussion was had
8 off the record.)

9 VIDEO OPERATOR: Going back on
10 the record. The time is 9:41 a.m.

11 (Exhibit 2020-Leaning,
12 previously marked, was referred to.)

13 BY MR. PAQUETTE:

14 Q. Okay. Mr. Major, I've just
15 handed you what is Exhibit 2020 in the
16 present Leaning IPRs. And I'll refer to this
17 as Exhibit 2020.

18 Will you understand that to be
19 the declaration at issue in these Leaning
20 IPRs?

21 A. Yes, that's my current
22 declaration. Yeah.

1 Q. Would you please go to
2 paragraph 3 of Exhibit 2020 for the Leaning
3 IPRs.

4 A. Okay.

5 Q. Could you just read that
6 paragraph to yourself and let me know when
7 you're done.

8 A. I'm done.

9 Q. Do you see you list as ABR
10 patents 8,868,772, 9,407,564, 10,757,156 and
11 11,992,234?

12 A. Yes.

13 Q. I'll just note for the record
14 that the 11,992,234 should be -- there's a
15 typo there. It should be 11,991,234.

16 Do you have any reason to
17 disagree with me there?

18 A. I don't know.

19 Q. If I refer to these ABR patents
20 individually by the last three digits of
21 their patent number, will you understand
22 that?

1 A. Yes.

2 Q. Do you agree that your testimony
3 from your prior deposition transcript in the
4 Ogdon IPRs relating to the ABR patents
5 applies equally to the other ABR patents,
6 including the ones at issue today?

7 MR. GUY: One minute.

8 Objection, foundation.

9 Go ahead and answer, if you
10 can.

11 THE WITNESS: Yeah, I -- I --
12 again, in my mind there's a bunch of
13 patents. There's one thing we
14 invented and has different aspects of
15 it that was patented later. So I -- I
16 consider it all sort of the same thing
17 to -- to some degree.

18 BY MR. PAQUETTE:

19 Q. And similarly, do you agree that
20 your prior Ogdon declaration, which is the
21 Ogdon IPR number 2010, do you agree that that
22 Ogdon declaration similarly applies to the

1 ABR patents at issue here today in the
2 Leaning IPRs?

3 A. Yes.

4 Q. Okay. With those
5 representations, I think I can skip a lot of
6 the preliminaries.

7 Let's look at Exhibit 2020 of the
8 Leaning IPR, please. That's your declaration
9 in the present --

10 A. Yes.

11 Q. -- IPR proceeding.

12 Did you write this declaration?

13 A. I was involved in editing it and
14 writing it, yes.

15 Q. Did you make a first draft?

16 A. No.

17 Q. Do you know who did?

18 A. No.

19 Q. Did you check each statement in
20 this declaration -- declaration for accuracy?

21 A. Yes.

22 Q. How did you verify the statements

1 in this declaration?

2 MR. GUY: Objection,
3 foundation.

4 THE WITNESS: Well, I read it.
5 It sounded right. You know, I didn't
6 check each of the numbers here, you
7 know, the -- the -- the details.
8 Again, I'm less into that. But I -- I
9 certainly looked at the -- the --
10 the -- the ideas that were being
11 explained that -- that -- and --
12 and -- and had significant
13 contributions in -- in this and the
14 previous deposition in terms of
15 clarification to make sure it was
16 clear, expressing ideas that I have
17 regarding this patent, the -- the --
18 the HTTP adaptive bitrate
19 capability -- yeah -- patents.

20 BY MR. PAQUETTE:

21 Q. Is there anything you would like
22 to correct in this declaration?

1 A. Not right now, no.

2 Q. Okay. Could we please go to
3 paragraph 10 of Exhibit 2020 --

4 A. 2020.

5 Q. -- which is your declaration in
6 the Leaning IPRs.

7 A. Okay.

8 Q. Okay. Do you see where it says,
9 The ABR patents and our invention solved
10 these problems by providing an entirely new
11 way of delivering video content over the
12 internet?

13 Did I read that correctly?

14 A. Number 10. Yeah, The ABR patent,
15 our invention -- yes.

16 Q. Then you say, quote,
17 Exhibits 2021, 2022, 2069 and 2077 are
18 internal documents that Move used to
19 summarize -- summarize these points and
20 showcase its product, right?

21 A. Yes.

22 Q. Why did you cite to

1 Exhibits 2021, 2022, 2069 and 2077 for this
2 point?

3 A. Well, they explained how ABR
4 worked. I believe they were documents, some
5 of which were internal and some were, yeah,
6 to -- to document it. And I'm not sure any
7 of these were exposed externally, but I know
8 initially, because it was significant -- you
9 know, what we did was significantly different
10 than what had been done in the past.

11 We had to do a lot of explanation
12 as to how it actually worked and why it
13 worked. And so these documents describe
14 that, I believe.

15 Q. So is it fair to say your
16 testimony is that the Move player, as
17 described in those exhibits, practiced the
18 claims of the ABR patents?

19 A. Yes. Sorry.

20 MR. GUY: You've got to wait
21 for my objection.

22 THE WITNESS: Okay.

1 BY MR. PAQUETTE:

2 Q. I'm handing you what is marked --

3 MR. GUY: Oh, I'm sorry. I
4 did -- meant to -- objection on that
5 last one as legal conclusion.

6 BY MR. PAQUETTE:

7 Q. Mr. Major, I'm handing you what
8 is marked in these IPRs as Exhibit 2021. And
9 I'll note for the record that this exhibit
10 has two sets of Bates stamps and the top
11 Bates stamp that marks it Exhibit 2021 is the
12 Bates stamp that applies to these current
13 IPRs.

14 (Exhibit 2021-Leaning,
15 previously marked, was referred to.)

16 BY MR. PAQUETTE:

17 Q. Do you recognize this
18 Exhibit 2021?

19 A. Yes. It's a document written by
20 my coinventor, Mark Hurst.

21 Q. Mark Hurst was a coinventor on
22 the ABR patents?

1 A. Yes.

2 Q. Was he a coinventor on all the
3 ABR patents?

4 MR. GUY: Objection,
5 speculation. Foundation.

6 THE WITNESS: I'm not sure how
7 many of them he was, but he was
8 definitely coinventor in building this
9 thing. Exactly which patents his name
10 was put on or not, I don't -- I don't
11 know.

12 BY MR. PAQUETTE:

13 Q. Fair enough.

14 MR. PAQUETTE: And, Hop,
15 remember, limit it to form objections,
16 please, for the PTAB.

17 MR. GUY: Okay.

18 BY MR. PAQUETTE:

19 Q. If you could please go to page 2
20 of Exhibit 2021.

21 I'd like to direct you to the
22 heading, Enter Quantum Streaming, the second

1 paragraph under that heading.

2 A. Yes.

3 Q. Do you see where it says, One
4 core aspect of our technology is the concept
5 of using streamlets?

6 MR. PAQUETTE: S-T-R-E-A-M-L-E-
7 T-S.

8 BY MR. PAQUETTE:

9 Q. Do you see that?

10 A. Yes.

11 Q. You go on to say, quote,
12 Streamlets are the result of dividing a video
13 stream into sequential pieces of some
14 arbitrary, but consistent, chronological
15 length, right?

16 A. Yes.

17 Q. And you would agree that a core
18 part of your invention in the ABR patents was
19 the use of streamlets, right?

20 A. Yeah, streamlets. Yeah. Mark
21 named them streamlets. I can't remember what
22 I used. We like the term "quantum."

1 Streamlets sounded -- again, we're doing
2 something no one else had done, so you get to
3 name it.

4 Q. So streamlets was a name that
5 either you and/or your coinventor came up
6 with?

7 A. Mark.

8 Q. Right.

9 A. I didn't come up with it. Mark
10 came up with it.

11 Q. How are streamlets created in
12 your invention?

13 A. Streamlets are created by
14 taking -- well, there's several ways. But if
15 you're doing -- creating streamlets from an
16 existing video file, you know, like a
17 recorded file, it's already recorded, you
18 take the video and you -- you segment it in
19 two or other sizes.

20 You take -- take that video, you
21 segment it, and then you take -- you put each
22 of the segments into the encoder. It does a

1 compression. And you also, of course, ask
2 the encoder -- encoder to compress it at
3 different levels of compression, which
4 results in different sizes. But each of
5 those streamlets have the same -- for that
6 particular time frame have exactly the same
7 video, just represented at different encoding
8 complexity or quality, you know, quality.

9 And obviously, the -- the less
10 quality takes less data. Higher quality
11 takes more data. But you take the video, you
12 chop it up and then you encode it.

13 Now, with -- with live, it's
14 different. You wait until a couple of
15 seconds of video has shown up. And then you
16 compress it in different -- different
17 bitrates. And then that's -- represents
18 the -- the -- the video there.

19 And so it -- it -- you don't have
20 it all up front. You just -- you get it two
21 seconds or four seconds or whatever you
22 choose and you compress it and -- and -- at

1 different bitrates, yeah, and different
2 quality levels.

3 Q. Understood.

4 So your streamlets are created
5 by, say, partitioning the -- the material,
6 video, into a plurality of discrete files,
7 each representing successive temporal
8 portions of the material?

9 MR. GUY: Objection, form.

10 THE WITNESS: Yeah, something
11 similar to that, yes.

12 BY MR. PAQUETTE:

13 Q. So, for example, if -- you take,
14 like you said, a complete file of video
15 material and dividing it into a sequence of
16 segments and each of those segments is
17 independently requestable by the client?

18 MR. GUY: Objection, form.

19 THE WITNESS: Well, yeah. I --
20 I don't know what you mean by
21 "segments." I kind of know what I
22 mean by "streamlets."

1 Streamlets are -- yeah,
2 they're -- they're sections of video.
3 And they're dealt with individually,
4 compressed individually, with -- with
5 time and -- yeah, that's the way it
6 works.

7 BY MR. PAQUETTE:

8 Q. Okay. So is a streamlet like --
9 you have a full file --

10 A. Yeah.

11 Q. -- and a streamlet is like
12 subfiles of the full file?

13 MR. GUY: Objection, form.

14 THE WITNESS: No, it's --
15 it's -- they're typically separate
16 files because that makes -- that aids
17 in delivering over the internet. You
18 don't have a giant thing. You deliver
19 just sections. And it also, of
20 course, makes it easy to switch
21 between the different bitrates.

22 It can be, though, stored in a

1 single giant file if you'd like to.
2 And then -- because it -- because, you
3 know, if you can catenate files
4 together, it becomes a big file with
5 different pieces in it.

6 I'll just say, for example, the
7 cloud DVR I wrote, created for
8 adaptive streaming, takes all of the
9 segments and creates it into one big
10 file.

11 But that's arbitrary. That's
12 just a storage issue, how do you
13 optimize the storage.

14 BY THE WITNESS:

15 Q. Um-hmm.

16 A. But you -- you'd view it truly as
17 individual objects all the time.

18 Q. Understood.

19 So a streamlet is like a file,
20 just like any other file on a server?

21 A. Yeah. It's -- it's a -- it's a
22 self-contained file. It has two seconds of

1 the video. And if you just want to watch
2 that two seconds, you can just play it and it
3 works. But if you then play the next one and
4 the next one and the next one, it appears as
5 a single video like it's one thing. But it
6 really internally has been segmented -- has
7 been chopped or cut into streamlets that
8 are -- are individual, yeah.

9 Q. Could we look at page 3 of
10 Exhibit 2021, please.

11 A. Okay.

12 MR. GUY: Page 3.

13 BY MR. PAQUETTE:

14 Q. The last paragraph of page 3, do
15 you see where it says, Because every
16 streamlet has an identical playback time to
17 any other streamlet and starts and stops on
18 the same exact time boundaries as its
19 cousins, it is possible to make on-the-fly
20 substitutions between streamlets that cover
21 the same time space in the content, but which
22 have different encode rates?

1 Do you see that?

2 A. Yes.

3 Q. What does "its cousins" mean in
4 this context?

5 A. Well, that's a -- that's a
6 Markism. And what he's talking about there
7 is just the encoding of different -- the same
8 video, but at different bitrates, as he says
9 in the very first -- I think he's implying it
10 in that very first sentence, which says
11 streamlets can also be encoded at multiple
12 rates.

13 And so cousins, I think, mean the
14 different -- different rates. That's what
15 he's meaning there.

16 Q. So the same time space --

17 A. Same time space.

18 Q. -- but different rate?

19 A. Different rates. And here he
20 just uses a euphemism of cousins.

21 Q. And do they -- do the cousins
22 have to have the same exact time boundaries?

1 A. Yes, they need to in order --
2 because they have -- you can do any of them
3 at any time and you'll see that particular
4 section of video.

5 Q. And that's because, in the case
6 of rate switching, you have the same
7 boundaries for each rate so that the first
8 streamlet you get from the new rate continues
9 on from where the last one left off?

10 MR. GUY: Objection, form.

11 THE WITNESS: Well, again, the
12 playback is -- you can pick any of the
13 different, what he calls, cousins.
14 I -- I won't -- let's don't talk about
15 that anymore.

16 But a different -- different
17 versions of the different bitrates,
18 you can pick any of them for that
19 particular time and play it and then
20 the next two seconds you can pick any
21 of them from there and the next two
22 seconds.

1 And to the viewer it looks
2 continuous and smooth. And if you --
3 if you -- if it's switching up and
4 down a little bit on the bitrate,
5 typically the viewer won't even notice
6 it. Unless it's a dramatic thing,
7 from the highest quality to the lowest
8 quality, then they would notice it.

9 But one of the beauties of what
10 Mark and I -- especially Mark. Mark
11 worked on this for years designing a
12 very powerful algorithm that lets you
13 seamlessly switch. And so you didn't
14 even know that it was switching. But
15 that made it so that the playback was
16 smooth and continuous and -- and
17 phenomenal.

18 BY MR. PAQUETTE:

19 Q. Five-minute break?

20 A. What?

21 Q. Five-minute break okay?

22 A. That's fine.

1 MR. PAQUETTE: Let's go off the
2 record.

3 VIDEO OPERATOR: Going off the
4 record. The time is 9:59 a.m.

5 (Thereupon, a brief recess was
6 taken.)

7 VIDEO OPERATOR: Going back on
8 the record. The time is 10:10 a.m.

9 BY MR. PAQUETTE:

10 Q. Mr. Major, I'm handing you what
11 is marked in these IPRs, the Leaning IPRs, as
12 Exhibit 2069. And again, I'll note for the
13 record that for these IPRs, the Bates stamp
14 at the top is relevant, which is
15 Exhibit 2069. There is a Bates stamp at the
16 bottom for the Ogdon IPRs that you can
17 ignore.

18 (Exhibit 2069-Leaning,
19 previously marked, was referred to.)

20 BY MR. PAQUETTE:

21 Q. Do you recognize this document as
22 one of the other internal Move documents you

1 cited in your declaration in these Leaning
2 IPRs?

3 A. Yes.

4 Q. Could you please turn to page 17
5 of Exhibit 2069.

6 A. Yes.

7 Q. You see here it says, Appendix A,
8 Putting Move Adaptive Stream to the Test?

9 Do you understand this appendix
10 to be showing results of testing of the Move
11 player against other streaming protocols
12 under different network conditions?

13 MR. GUY: Objection, form.

14 THE WITNESS: Yes.

15 BY MR. PAQUETTE:

16 Q. Please turn to look at the first
17 table on page 18. It's under Start Delay
18 Time, in seconds, averaged over five test
19 runs.

20 Do you see that?

21 MR. GUY: One second, one
22 second.

1 Okay.

2 THE WITNESS: Yes.

3 BY MR. PAQUETTE:

4 Q. What is this table showing under
5 Start Delay Time?

6 A. Showing how long it takes
7 before -- when you ask for the video before
8 it starts playing to the user.

9 Q. Do you see the bottom row, Move
10 Adaptive Stream TCP on this table?

11 A. Yes.

12 Q. The first column says, No added.
13 Is that no added latency in this test?

14 A. Yes.

15 Q. And it says here that With no
16 added latency, the Move player takes, on
17 average, according to these tests, three
18 seconds to begin.

19 Is that right?

20 A. Yes.

21 Q. Why isn't it zero seconds?

22 MR. GUY: Objection, form.

1 THE WITNESS: You don't -- you
2 have to get the full first segment
3 before it's started and usually the
4 second segment to guarantee you had
5 enough so that you wouldn't -- it
6 wouldn't hiccup after that.

7 And so typically it waited for
8 a couple of the -- if it was using the
9 two second things, it would wait for,
10 like, getting four seconds total of
11 video to start. And that -- on
12 average, that sounds like it took
13 three seconds to get four seconds of
14 video over the internet.

15 BY MR. PAQUETTE:

16 Q. You can put this aside.

17 A. Okay.

18 Q. Can we go back to your
19 declaration in these Leaning IPRs, which was
20 Exhibit 2020.

21 A. 2020, okay.

22 Q. I'd like to direct you to

1 paragraph 11, please.

2 A. Paragraph 11.

3 Q. Here you say, The HTTP Adaptive
4 Bitrate Streaming invention covered by the
5 ABR patents is also superior when looking at
6 how the invention implements streaming of
7 live HD video. Specifically, the invention
8 changed the live video feed into a sequence
9 of segments so that each segment could be
10 encoded and compressed on the fly into
11 various quality levels, or bitrates.

12 Did I read that right?

13 A. Yes.

14 Q. And you mentioned earlier that
15 your invention included live video, right?

16 A. Yes. Support for the live video
17 streaming, yeah.

18 Q. In a live video feed, the
19 segments are created as the event is
20 occurring, correct?

21 A. Yes.

22 Q. As opposed to prerecorded?

1 A. That's right.

2 Q. So in a prerecorded video you can
3 have all the segments available?

4 A. We have the entire video
5 available and then we can cut it up into
6 the -- whatever, two-second segments, encode
7 each of those individually, yeah, and do the
8 entire video in as many segments as required,
9 yeah, for the time.

10 Q. And so for a live video, you also
11 create sequential segments, but you have to
12 create them as the event progresses?

13 A. That's right. We wait for two
14 seconds of video to show up and then we
15 dispatch it to be encoded and compressed and
16 then, two seconds, later the next one.

17 Q. Okay. So from the client
18 perspective, let's say we have a client
19 watching a live video. They start when the
20 live event begins. Is it fair to say your --
21 the system encodes -- slices and encodes the
22 first two seconds if the client requests the

1 first streamlet.

2 Are you with me?

3 A. Yeah. At some point later, he --
4 he would request it. It's not -- there's --
5 there's always a delay.

6 Q. Fair enough.

7 A. There's a delay for processing
8 and for delivery over the internet. But,
9 yeah, he'll start it at a -- a certain delay,
10 yeah.

11 Q. When -- when -- so let me put it
12 this way:

13 When available, the client will
14 request the first streamlet of the live
15 video?

16 A. Yes. Then they'll start it,
17 yeah.

18 Q. And it will -- does it place it
19 into a buffer?

20 A. Well, it will -- it will -- it
21 will fetch it from the -- from the origin web
22 server or typically actually from a proxy

1 cache, CDN server that's distributing it and
2 it will fetch it, bring it down.

3 And, again, as I said before,
4 you -- you probably need two of them before
5 you want to really start, because it's --
6 besides getting the video data, it's also
7 timing, how long it took to know whether it
8 needs to -- whether it can get higher quality
9 or lower quality. But then it's -- it's
10 just -- there's -- there's a -- there's --
11 yeah, things are -- everything in -- in --
12 within computer systems are put in buffers,
13 you know. You -- you read it off a hard
14 drive, it goes in a buffer. You read it off
15 the internet via TCP or HTTP, it goes into a
16 buffer and then it gets played later.

17 And, of course, the art is to --
18 to -- to -- to give the -- give the viewer a
19 contiguous and uninterrupted playback, you
20 know, so you have to -- you want to be as
21 close to live as possible, but you don't --
22 but -- but -- but you want to be able to deal

1 with momentary interruptions on the internet
2 stuff that -- or where the data comes slower.

3 And so -- yeah. So it all gets
4 in a -- it's kind of a long sequence of flow
5 of data, eventually culminating with it being
6 put up on the screen.

7 Q. Got it.

8 So you -- you mentioned it was
9 like a -- it was a sequence of data. So
10 in -- in my description here, tell me if I'm
11 getting anything wrong.

12 So the client is watching a live
13 video feed. When available, the client will
14 begin requesting the first streamlet,
15 correct?

16 A. Yeah. Now, if it's -- yeah.

17 Q. And then after the client
18 requests the first streamlet and queues it,
19 it will request the second streamlet when
20 available, correct?

21 A. But sometimes it will do them in
22 an overlapping fashion too.

1 Q. So is --

2 A. It could be getting -- it can be
3 getting several streamlets down at the same
4 time, if it --

5 Q. But if we're -- if we're live --
6 and you said you want to be as close to live
7 as possible, right?

8 A. Yeah.

9 Q. So --

10 A. But to -- to -- to -- to make it
11 uninterrupted and to maximize the quality,
12 you have to put a little time in between the
13 live and the other because, again, it's --
14 it's flowing in -- in streamlets, sometimes
15 concurrently with -- you know, with multiple
16 HTTP TCP connections underneath and you're
17 just trying to ship the data over the
18 internet.

19 And then in the end, it obviously
20 has to be assembled in a contiguous thing
21 that the player just sees and it's got to
22 come -- it has to come fast enough.

1 But, yeah, there's -- there's --
2 there's always some delay there. But that's
3 okay, because the quality is there.

4 Q. So you mentioned -- you said
5 sometimes concurrently with -- you know, with
6 multiple HTTP TCP connections.

7 A. Yes.

8 Q. Does your invention require using
9 multiple TCP connections?

10 A. No.

11 MR. GUY: Objection --

12 THE WITNESS: Yeah.

13 MR. GUY: -- form.

14 THE WITNESS: Okay. Yeah.

15 No, but it usually does better.

16 Depending on the internet, it can --
17 multiple TCP connections allow -- it's
18 like putting more lanes on the
19 freeway. You can get more data
20 through.

21 Sometimes it's not needed
22 though. So it doesn't require it, but

1 it's -- it's a -- it's one of the
2 capabilities that made our streaming
3 higher quality because we -- you know,
4 we added more lanes on the freeway so
5 we could get more people through the
6 freeway. Or, you know, now -- that's
7 kind of a bad analogy, but it sort of
8 explains what happens there.

9 BY MR. PAQUETTE:

10 Q. So let's say in my hypothetical
11 the client's only using one TCP connection.
12 Okay?

13 A. Yeah, okay.

14 Q. And we have a live video.

15 A. Yeah.

16 Q. When the first streamlet is
17 available, the client will request over that
18 single TCP connection the first segment,
19 right?

20 A. Correct, yeah.

21 Q. And that's part of your invention
22 too, single --

1 A. Yeah.

2 Q. -- TCP connection?

3 A. It will -- it will use HTTP,
4 which is a --

5 MS. REPORTER: I'm sorry, sir?

6 THE WITNESS: It will use the
7 web protocol HTTP, which is the -- a
8 fundamental protocol of the whole
9 internet, that underneath is
10 implemented using TCP to go get that
11 video object, which in some ways is a
12 file, data file, from either a proxy
13 cache or from the origin web server.
14 Yeah. It does an HTTP GET, asks for
15 the data, comes.

16 BY MR. PAQUETTE:

17 Q. Okay. So the client does an HTTP
18 GET for streamlet 1 --

19 A. Yeah.

20 Q. -- receives it and queues it,
21 right?

22 A. No. He would have -- yeah, he

1 will receive it and use it. But typically,
2 even with a single -- it doesn't have to be
3 this way, but it's more optimal if -- when he
4 gets close to getting the first one
5 completed, you know, you're moving a bunch of
6 data. It's going to take maybe a second or
7 two.

8 When it's -- when the data is
9 almost all the way there, it's also useful to
10 go and ask for the next video segment. That
11 eliminates a round-trip latency. And then
12 the web server is just going to be sending
13 the data contiguous as opposed to, okay, I've
14 got the first object. Then I've got to go
15 ask for the second object.

16 If I have to wait for the first
17 object to come all the way down there, then
18 there's going to be time delay between that
19 and getting the second object, the second
20 segment -- streamlet, I'm sorry. I should be
21 using the term "streamlet."

22 But it's -- it -- it -- so -- so

1 we -- we -- again, we do everything we can in
2 terms of exploiting HTP [sic] and the
3 internet -- HTP's capabilities to maximize
4 the amount of data, the timeliness and the
5 amount of data we can flow to -- to ensure
6 that the playback is smooth and continuous.

7 Q. So you -- your answer, was that
8 even in the instance of one TCP connection?

9 A. Yeah. In the instance of one TCP
10 connection, we ask for the next one before
11 the first one was done.

12 Q. Is that required of your
13 invention?

14 A. It's not required --

15 MR. GUY: Objection, form.

16 THE WITNESS: It's not
17 required, but it makes it better.
18 Sometimes we don't if the next one
19 isn't available yet.

20 BY MR. PAQUETTE:

21 Q. So let's pick up on that. So in
22 my live example, let's say you want to be

1 very close to live and you're just requesting
2 segments as soon as they're available
3 sequentially.

4 Is that something that happens?

5 A. Yeah, we would want to do that.
6 We'd want to be as close to live as we can.

7 Q. So in that situation, you'd
8 request streamlet 1, put it into the player,
9 right? You'd request streamlet 2, put it
10 into the player and so on; is that fair?

11 A. Again, that's --

12 MR. GUY: Objection, form.

13 THE WITNESS: That's not
14 exactly how it would work because we
15 usually, again, want to have at
16 least -- we want to be buffered at
17 least one object ahead.

18 So we'd ask for the first one.
19 As soon as we get the second one or
20 the second one is close to being
21 there, at that point then we would
22 start playing it.

1 So we try -- you know, because
2 again, it's a -- it's a timing thing
3 in a data flow sequencing. So you --
4 you -- again, the most important thing
5 is to not start and then stop.

6 BY MR. PAQUETTE:

7 Q. So --

8 A. You usually would notice that.
9 But you want to be as fast as possible. So
10 it's a -- it's an art.

11 Q. Okay. So let's continue on what
12 you just said.

13 So you said as soon as we get the
14 second one, meaning the second streamlet, at
15 that point we would start playing it --

16 A. Well --

17 Q. -- is that right?

18 MR. GUY: Objection, form.

19 THE WITNESS: I'm not
20 totally -- you know, I -- I know we
21 waited for the second one. We'd
22 sometimes maybe wait for the third

1 one. That's -- that's sort of an
2 implementation detail.

3 Again, this is -- we're talking
4 data flow here of how much -- you
5 know, how much data do you want to
6 have buffered before you'd want to
7 start to play.

8 The key -- the -- the key value
9 of -- and -- and why our -- our
10 streaming was so superior to others is
11 that we would just have enough time to
12 find out oh, wow, we're going to be in
13 trouble soon. I -- I better downshift
14 to a lower bitrate because this last
15 two-second streamlet of data took
16 three seconds to come over the
17 internet. So I'd better get the next
18 one soon.

19 So I have to have enough --
20 enough -- enough stored within the --
21 the -- the client, but I don't want
22 too much. It's -- again, it's an art

1 to -- to get it to where it's as fast
2 as possible but yet you have the
3 flexibility to deal with the random
4 challenges you see in the internet.
5 And the biggest one, of course, for
6 video is if a two-second chunk takes
7 three seconds or four seconds to come
8 over the internet, then you're --
9 unless you correct that immediately,
10 you're going to -- the -- the user is
11 going to experience -- experience
12 problems.

13 So we -- we -- Mark Hurst
14 worked for years figuring out how to
15 do that really well. And I can
16 argue -- I'll argue that he did a
17 better job than most of the other
18 people that have implemented it since.
19 You know, I -- I -- I see problems
20 when I stream off of Amazon that I
21 wouldn't have seen with Mark
22 Hurst's -- Mark Hurst's

1 implementation, you know, 20 years
2 ago, so ...

3 BY MR. PAQUETTE:

4 Q. So getting back to my
5 hypothetical --

6 A. Okay.

7 Q. -- specifically on the
8 requests -- let's leave aside whether you
9 requested when the current streamlet is
10 almost done or whether you requested --

11 A. Yeah.

12 Q. -- after it's done. I'm just
13 talking about the requests.

14 A. Yeah.

15 Q. So we're watching a live video
16 feed. A client requests streamlet 1, right?

17 A. He'll -- he'll ask for the
18 first -- first of the -- when -- when --
19 where he's going to come into that live, yes.

20 Q. And then streamlet 2 becomes
21 available, the client asks for streamlet 2?

22 A. Yes.

1 Q. And then streamlet 3 becomes
2 available, the client asks for streamlet 3?

3 A. Yes.

4 Q. And so on until the live event is
5 complete, correct?

6 A. That's one way it can happen. It
7 can also happen where the client asks for 1
8 and 2 overlapping. And with multiple TCP
9 connections, he can ask for parts of
10 segment 1. He can break it into three pieces
11 and get a third of it on one HTTP request, a
12 third of it on the next HTTP request and a
13 third one on the -- a third of it on the
14 last -- last HTTP request.

15 They show up and then it's glued
16 together into one streamlet. But, then,
17 again, you have the advantage at that point
18 of having multiple TCP requests and multiple
19 lanes on the freeway, so to speak, and the
20 data comes faster, because it's coming on
21 three -- using three TCP connections instead
22 of one.

1 So it's -- it's a lot more --
2 you -- you -- you're -- you're talking a
3 very -- very simple case, which is kind of
4 core, but -- but we did a whole bunch of
5 other things, very clever, around that to --
6 to -- again, to guarantee that the playback
7 was smooth and as highest quality as we
8 could, but we could deal with pretty much
9 whatever the internet threw at us in terms of
10 losing -- occasionally losing some bandwidth.

11 Q. Understood.

12 But it's your position that the
13 simple case, as you called it, of requesting
14 sequential streamlets and playing them back
15 is also covered by your invention?

16 A. Yes.

17 MR. PAQUETTE: I think I might
18 be done. Let's go off the record and
19 let me confirm.

20 VIDEO OPERATOR: Going off the
21 record. The time is 10:29 a.m.

22

1 (Thereupon, a brief recess was
2 taken.)

3 VIDEO OPERATOR: Going back on
4 the record. The time is 10:51 a.m.

5 I apologize. The time is
6 10:41 a.m.

7 BY MR. PAQUETTE:

8 Q. Hi, Mr. Major, I just have a few
9 more questions and then I'll leave you alone.

10 A. It's okay.

11 Q. Do you recall before the break I
12 asked you in the simple case, as you called
13 it, requesting sequential streamlets and
14 playing them back is covered by your
15 invention and you answered yes, right?

16 A. Yes.

17 Q. Now, by sequential streamlets,
18 are those streamlets in order of ascending
19 playout time of the video?

20 MR. GUY: Objection, form.

21 THE WITNESS: Yeah, I would
22 be -- yeah. This first second, the

1 second second, yeah, to where
2 together, as you play them it -- it
3 appears as one contiguous video and
4 you don't even know underneath that
5 it's actually been multiple
6 streamlets, yeah.

7 BY MR. PAQUETTE:

8 Q. Right. So if a client requests
9 streamlets individually, one at a time, in
10 order of ascending playout time, is that
11 covered by your invention?

12 MR. GUY: Objection, form.

13 THE WITNESS: Yeah, that's one
14 way it can be -- it can be used, yes.

15 BY MR. PAQUETTE:

16 Q. Okay. I'm going to end here and
17 pass it over to counsel for fuboTV and
18 MasterClass.

19 A. Okay.

20

21

22

1 EXAMINATION BY COUNSEL FOR PETITIONERS
2 fuboTV MEDIA, INC. AND YANKA INDUSTRIES, INC.

3 BY MS. RABENSTEIN:

4 Q. Hi, Mr. Major. I'm Reba
5 Rabenstein. I have not -- haven't had the
6 pleasure of meeting you today, so --

7 A. Thank you.

8 Q. Sorry, meeting you before today.
9 But I represent fuboTV and --

10 A. Yes.

11 Q. -- and Yanka Industries doing
12 business as MasterClass.

13 I have a couple of housekeeping
14 questions before we start.

15 A. Okay.

16 Q. We've taken a couple of breaks
17 today.

18 A. Yes.

19 Q. During any of the breaks so far,
20 have you discussed the substance of your
21 testimony with anyone?

22 A. No, no one.

1 Q. Thank you.

2 And I know you're testifying
3 under oath today, but is there any reason
4 that you cannot provide accurate and truthful
5 testimony, any medications you're taking,
6 anything like that?

7 A. No, there's no --

8 Q. All right.

9 A. -- medications, yeah.

10 Q. Great.

11 And you can -- nothing blocking
12 you from giving accurate --

13 A. No.

14 Q. -- and truthful testimony, right?

15 A. Nothing is.

16 MS. REPORTER: One at a time,
17 please.

18 MS. RABENSTEIN: Yes. Sorry.
19 I will try to make sure we're not
20 speaking over each other.

21 BY MS. RABENSTEIN:

22 Q. About how much time did you spend

1 preparing for your deposition today?

2 A. Less than ten hours.

3 Q. Okay. And was that time you
4 spent by yourself preparing?

5 A. Well, some was reading a couple
6 of the materials, glancing over a -- a few,
7 mostly, and -- and I reviewed the '722 --
8 '772 patent or whatever it was, '722 or '772,
9 whatever, patent, the -- the first part of
10 it.

11 I read parts of my previous
12 deposition, kind of skimmed through that
13 because it's big, you know. And -- and what
14 else did I look at? And then we -- of course
15 we had a couple -- we had a meeting here
16 yesterday for several hours.

17 Q. And when you said you had a
18 meeting here yesterday for several hours, who
19 was with you at that meeting?

20 A. Well --

21 MR. GUY: Hopkins Guy.

22 THE WITNESS: Yeah.

1 MR. SHEPARD: Zach Shepard.

2 THE WITNESS: And who else was
3 there?

4 MR. GUY: And jamie.

5 THE WITNESS: Jamie.

6 BY MS. RABENSTEIN:

7 Q. And Jamie is also an attorney?

8 A. He's an attorney, yeah.

9 Q. Okay. And those are the only
10 people who met with you yesterday?

11 A. There may have been someone on
12 Zoom. I can't remember. Maybe a -- a DISH
13 attorney on Zoom, I think. I'm --

14 Q. Is that the only meeting you had
15 to prepare for your deposition today?

16 A. We had one more previous call
17 about a week ago, yeah.

18 Q. And who was on the call about a
19 week ago?

20 A. I don't really remember. It was
21 DISH -- lawyers from DISH and from Baker
22 Bott [sic].

1 Q. Were they all lawyers on the
2 call?

3 A. I believe so. I believe so.

4 Q. So you were the only nonlawyer on
5 the call; is that right?

6 A. I believe so.

7 Q. How --

8 A. Excuse me.

9 Q. Sorry.

10 A. Excuse me.

11 Q. About --

12 A. One more time.

13 Q. And you have water there, too, if
14 that helps.

15 A. No, I don't want water. I'm
16 just ...

17 Okay. Thank you. Sorry.

18 Q. That's okay.

19 How long was the call?

20 A. Less than an hour.

21 Q. Okay. And this is a yes or no
22 question.

1 Did you discuss any documents on
2 that call?

3 A. Yes.

4 Q. Okay. Do you recall about how
5 many?

6 A. Oh, less than ten, maybe four or
7 five.

8 Q. Do you recall if they were all
9 documents you cited in your declarations?

10 A. Pretty much, yes.

11 Q. Do you recall if there were any
12 documents that you had not cited in your
13 declarations?

14 A. I -- I don't know.

15 Q. In your meeting yesterday --
16 sorry.

17 In your meeting yesterday -- and,
18 again, yes or no question.

19 In your meeting yesterday, did
20 you discuss any documents?

21 A. Yes.

22 Q. Okay. About how many documents

1 did you discuss?

2 A. Less than ten. Probably
3 five-ish.

4 Q. And were they all documents that
5 you cited in your declarations?

6 A. Yes, in this one. And of course
7 we talked about my previous deposition as
8 well.

9 Q. Okay. Did you -- were any of the
10 documents ones you had not cited in your
11 declarations?

12 A. I don't think so.

13 Q. You mentioned earlier that you
14 had reviewed a document from the patent
15 office talking about secondary
16 considerations; is that right?

17 A. Yes.

18 Q. Okay. And you have not cited
19 that document in your declarations, correct?

20 A. I don't think it's cited, no.

21 Q. Okay. Let's see here. All
22 right.

1 So with that, can you please take
2 out Ogdon IPR Exhibit 1021. So this is your
3 declaration from the Ogdon IPRs.

4 A. So it's -- so I'm sorry, 10 --

5 Q. 21. So it's the one that looks
6 like this (indicating). It's got the 1021 on
7 the bottom.

8 Sorry. Ogdon IPR is
9 Exhibit 2010. My apologies.

10 A. 20 --

11 Q. I didn't mean to confuse you.

12 THE WITNESS: Which one is it?
13 This one?

14 MR. GUY: This one.

15 THE WITNESS: This one, okay.

16 Yeah.

17 BY MS. RABENSTEIN:

18 Q. All right. So -- so let's keep
19 that on one side. And then can you keep out
20 your declaration in this Leaning IPRs, which
21 is Leaning IPR Exhibit 2020.

22 A. Okay.

1 Q. And just keep them side by side,
2 because we're going to be going back and
3 forth between them.

4 A. Okay.

5 Q. Okay. In Ogdon IPR Exhibit 2010,
6 can you please turn to the last page.

7 A. Okay.

8 Q. Is that your signature there?

9 A. Yes, it is.

10 Q. And you signed this on July 19th
11 2024; is that correct?

12 A. Yes.

13 Q. Okay. Let's look, please, at
14 Leaning IPR Exhibit 2020, the last page of
15 that.

16 A. Okay.

17 Q. Is that your signature there?

18 A. Yes.

19 Q. And you signed your declaration
20 in the Leaning IPRs on February 26, 2025; is
21 that correct?

22 A. Yes.

1 Q. Okay. And so you signed these
2 declarations prior to when you saw the
3 document from the patent office discussing
4 the secondary considerations; is that
5 correct?

6 A. Yes.

7 Q. When did you first see the
8 document from the patent office discussing
9 secondary considerations?

10 A. Week ago.

11 Q. A week ago, okay.

12 Let's do some comparisons between
13 your two declarations, please.

14 So if you could turn, please, to
15 paragraph 36 in Ogdon IPR 1021. It's the
16 second to last paragraph of the declaration.

17 A. Okay. So which one? 2021 --

18 Q. 2010. I'm sorry. I keep saying
19 that.

20 A. Yeah, 2010, yeah. Okay. And you
21 said 30 what?

22 Q. 30 -- paragraph 36, please.

1 A. 36, okay.

2 Q. Right at the end.

3 A. Okay.

4 Q. Okay. And then can you turn,
5 please, to paragraph 29 in Exhibit -- Leaning
6 IPR Exhibit 2020.

7 A. Okay.

8 Q. It should be the second to last
9 paragraph there.

10 Do you have both of those
11 paragraphs in front of you?

12 A. Yes, I do, the one -- okay.
13 Yeah.

14 Q. These paragraphs discuss your
15 induction into the Utah Valley
16 Entrepreneurial Forum Hall of Fame and the
17 Utah Technology Hall of Fame, correct?

18 A. Yes.

19 Q. And these paragraphs -- excuse
20 me -- paragraph 29 in Leaning IPR
21 Exhibit 2020 and paragraph 36 in Ogdon IPR
22 Exhibit 2010 contain identical language to

1 one another, the only difference being the
2 cited exhibit number, correct?

3 A. I'm not sure exactly.

4 Yeah, the numbers are different.
5 But, you know, I've got to look at -- do you
6 want me to look at word for word or -- they
7 appear to be the same, other than the -- the
8 numbers.

9 Okay. Yeah.

10 Q. And when you say the numbers are
11 different, you mean the numbers on --

12 A. The EX --

13 Q. -- the cited exhibits?

14 A. Yeah, the number of the cited
15 exhibits seem to be different. I'm not sure
16 what the -- yeah. Okay. Yeah.

17 Q. Do you generally know what the
18 cited exhibits are in paragraphs 36 [sic] of
19 Exhibit 2010 and paragraph 29 of
20 Exhibit 2020?

21 MR. GUY: Objection, form.

22 THE WITNESS: I -- I briefly

1 looked at them in the past, but not
2 recently.

3 BY MS. RABENSTEIN:

4 Q. And when you say in the past, did
5 you look at them before you signed your
6 declarations?

7 A. I looked at them before I signed
8 the first declaration.

9 Q. Do you recall if you looked at
10 the -- do you recall if the exhibits, despite
11 their numbers being different, if they're the
12 same exhibits?

13 A. I don't know if they are or not.

14 Q. Okay. Did you personally select
15 the documents to cite in support of the
16 statements in either of your declarations?

17 MR. GUY: One second.

18 THE WITNESS: I was --

19 MR. GUY: Just one second. One
20 second.

21 THE WITNESS: Okay. Okay.

22 MR. GUY: I think that goes to

1 privilege, so I'm going to object on
2 privilege. Instruct him not to
3 answer.

4 MS. RABENSTEIN: I asked him if
5 he personally selected them.

6 MR. GUY: Right. And the
7 question is -- by inference, you're
8 asking whether an attorney did it, so
9 I think it goes to attorney work
10 product.

11 MS. RABENSTEIN: I disagree
12 with that.

13 BY MS. RABENSTEIN:

14 Q. But, Mr. Major, are you going to
15 take your counsel's instruction?

16 MR. GUY: And not answer.

17 THE WITNESS: Yes.

18 BY MS. RABENSTEIN:

19 Q. Okay. So you're not going to
20 answer my question as to whether you
21 personally selected the documents to cite as
22 support in your declarations, correct?

1 A. I'm not going to answer that.

2 Q. Okay. All right. Let's look one
3 paragraph above where we just were. So let's
4 look at paragraph 35 in Ogdon IPR
5 Exhibit 2010 and paragraph 28 in Leaning IPR
6 Exhibit 2020.

7 Are you there?

8 A. Yes.

9 Q. Okay. Can you please read those
10 paragraphs to yourself.

11 All right. Paragraphs [sic] 35
12 in Ogdon IPR Exhibit 2010 and paragraph 28 in
13 Leaning IPR Exhibit 2020 contain identical
14 language to one another, correct?

15 A. That's what it looks like.

16 Q. Okay. And these paragraphs do
17 not contain any citations to any exhibits,
18 correct?

19 A. They have no citations, no.

20 Q. And that's so -- even that you're
21 saying that The most significant recognition
22 of all, however, is that almost all video

1 streaming that happens over the internet
2 today for live or on-demand content is based
3 on the HTTP adaptive bitrate approach we
4 invented; is that correct?

5 A. Yes.

6 Q. Okay. So you didn't cite any
7 recognition there of that fact?

8 A. I did not cite it there.

9 Q. Okay. All right.

10 So let's move to the immediately
11 prior paragraphs. So that will be
12 paragraph 34 in Ogdon IPR Exhibit 2010 and
13 paragraph 27 in Ogdon -- or excuse me -- in
14 Leaning IPR Exhibit 2020.

15 A. Okay.

16 Q. Can you read those paragraphs for
17 me, please.

18 A. Yes.

19 Q. Mr. Major, paragraphs 20 --
20 excuse me -- paragraph 34 in Ogdon IPR
21 Exhibit 2010 and paragraph 27 in Leaning IPR
22 Exhibit 2020 list out various awards Move

1 Network received from OnHollywood, OnMedia
2 and TechCrunch, correct?

3 A. Among others, yes.

4 Q. And paragraph 27 -- excuse me.

5 And paragraph 34 in Ogdon IPR
6 Exhibit 2010 and paragraph 27 in Leaning IPR
7 Exhibit 2020 contain identical language to
8 one another. The only difference is in the
9 cited exhibit numbers, correct?

10 A. I think so.

11 Q. And you cite the same number of
12 exhibits in each of these paragraphs. It's
13 just that the numbers used to identify them
14 are different, correct?

15 A. That -- that's what it looks
16 like, yes.

17 Q. All right. Let's go to the
18 paragraph immediately above that, so
19 paragraph 33 in Ogdon IPR Exhibit 2010 and
20 paragraph 26 in Leaning IPR Exhibit 2020.

21 Can you please read those
22 paragraphs to yourself, please.

1 A. Okay.

2 Q. Okay. Now, paragraph 33 in Ogdon
3 IPR Exhibit 2010 and paragraph 26 in Leaning
4 IPR Exhibit 2020 cite a single exhibit to
5 claim that many in the industry praised
6 Move's technology; is that correct?

7 MR. GUY: Objection, form.

8 THE WITNESS: Yeah, that's what
9 these -- this paragraph has, yes.

10 BY MS. RABENSTEIN:

11 Q. Okay. And the quoted language
12 from the sole exhibit cited in paragraph 33
13 in Ogdon IPR Exhibit 2010 and paragraph 26 in
14 Leaning IPR Exhibit 2020, that quoted
15 language is the same, correct?

16 A. It appears the same.

17 Q. The -- sorry. So despite the
18 different exhibit numbers, they're talking
19 about the same substantive exhibit, correct?

20 A. Yes. Appears that way, yeah.

21 Q. All right. Let's go to the next
22 paragraphs and look at paragraph 32 in Ogdon

1 IPR Exhibit 2010 and paragraph 25 in Leaning
2 IPR Exhibit 2020. Please read those
3 paragraphs.

4 Have you finished reading them,
5 Mr. Major?

6 A. Yes.

7 Q. Okay. So paragraph 32 in Ogdon
8 IPR Exhibit 2010 and paragraph 25 in Leaning
9 IPR Exhibit 2020 you discuss HLS being,
10 quote, heavily inspired by Move's HTTP
11 adaptive bitrate streaming technology, end
12 quote, correct?

13 A. Yes.

14 Q. And you assert that Apple's HLS
15 protocol supports certain features that you
16 claim are like those in the -- Move Networks
17 technology and the technology embodied in the
18 claims of the ABR patents, correct?

19 A. Yes.

20 Q. Did you personally assess whether
21 the technology was in the claims of the
22 specific ABR patents in these IPRs?

1 MR. GUY: Objection, form.

2 THE WITNESS: I originally -- I
3 reviewed the first HLS specification
4 when it came out. And given what
5 Apple used to do, it was very much
6 heavily inspired by what Move does.
7 And of course I was also aware that
8 under a nondisclosure, Greg Smith from
9 Move, at the request of Disney visited
10 with Apple in 2006 and 2007 and
11 disclosed the core capabilities and
12 how -- how the Move HTTP adaptive rate
13 streaming worked to the core guy --
14 the guy in charge of streaming at
15 Apple. And it was interesting that
16 three years later, he -- they set
17 aside what they've been doing for a
18 decade and came up with a system that
19 was very, very close to what we had
20 done instead.

21 BY MS. RABENSTEIN:

22 Q. I understand that's what you want

1 to say, Mr. Major --

2 A. Yeah.

3 Q. -- and that's the story you want
4 to tell, but that didn't answer my question.

5 A. Okay.

6 Q. My question is, did you look at
7 the claims of the specific ABR patents that
8 are involved in these IPRs and compare those
9 to Move technology to personally assess
10 whether Move's technology is covered by the
11 claims of those specific patents? Yes or no?

12 A. Yes.

13 Q. When did you compare the claims
14 of the specific patents that are involved in
15 these IPRs to Move's technology?

16 A. I would have looked at them when
17 we were applying them and I was putting my
18 signature on them.

19 Q. When you were applying --

20 A. For the patents that I signed.

21 Q. Okay. So you looked at the
22 claims of the patents when you signed them to

1 apply for them?

2 A. I believe most of the time that's
3 what I did, yes.

4 Q. Okay. So the assessment you did
5 of whether Move's technology embodies the
6 claims of the APR -- ABR patents is when you
7 initially applied for those ABR patents,
8 correct?

9 MR. GUY: Objection to form.

10 THE WITNESS: Yeah. Of course
11 I would have reviewed them before I
12 put my signature on them.

13 BY MS. RABENSTEIN:

14 Q. And when you say put your
15 signature on them, that's when you signed the
16 applications for those --

17 A. Yeah.

18 Q. -- patents, correct?

19 A. And I would have applied for the
20 patents, yes. And my name's on the patent,
21 yes.

22 Q. Did you ever compare the patent

1 claims after they issued from the patent
2 office to the Move technology?

3 MR. GUY: Objection, form.

4 THE WITNESS: I didn't have to.

5 BY MS. RABENSTEIN:

6 Q. All right. Let's look back,
7 please, at paragraph 32 in Ogdon IPR
8 Exhibit 2010 and paragraph 25 in Leaning IPR
9 Exhibit 2020.

10 A. So -- so 32 on 2020 -- yeah.

11 Q. 2010 and 25 on Exhibit 2020.

12 A. Okay. Yeah.

13 Q. It's the same -- it's the same
14 paragraphs you just read --

15 A. Yeah.

16 Q. -- and I'm just going back to
17 them, transitioning you back to them.

18 So the ABR patents you're
19 referencing here, they're -- you're
20 referencing the same or common features
21 between all the claims of the ABR patents,
22 right?

1 MR. GUY: Objection, form.

2 THE WITNESS: Yeah, I'm
3 referencing the essence of what HTTP
4 adaptive rate streaming does --

5 BY MS. RABENSTEIN:

6 Q. All right.

7 A. -- or how it works.

8 MS. REPORTER: Are you
9 saying --

10 THE WITNESS: HTTP adaptive
11 bitrate streaming, the essence of it,
12 yes.

13 BY MS. RABENSTEIN:

14 Q. So looking at paragraph 32 of
15 Ogdon IPR Exhibit 2010, the paragraph we've
16 been looking at, you do not cite any exhibits
17 in this paragraph, correct?

18 MR. GUY: Excuse me. Which
19 paragraph did you say?

20 MS. RABENSTEIN: So I'll reask
21 the question so it's all clean and
22 together.

1 BY MS. RABENSTEIN:

2 Q. So in paragraph 32 in Ogdon IPR
3 Exhibit 2010 you do not cite any exhibits in
4 that paragraph, correct?

5 A. I do not.

6 Q. But if you look at the
7 corresponding paragraph, 25, in Leaning IPR
8 Exhibit 2020, you do cite three exhibits,
9 correct?

10 A. Yes.

11 Q. Okay. Why did you add a citation
12 to three exhibits in Leaning IPR Exhibit 2020
13 when the language is the same as in the
14 paragraph in Ogdon IPR Exhibit 2010?

15 A. It just adds strengthening to
16 that statement is all that -- that we
17 encountered in reviewing it the second time,
18 yeah.

19 Q. Okay. And so you believe it is
20 strengthening to cite three exhibits to
21 support your statement in Leaning IPR
22 Exhibit 2020, paragraph 25?

1 A. Yeah, it would help. But it
2 just -- it would clarify it.

3 Q. Okay. Let's look at those
4 exhibits.

5 So we're handing you what's been
6 marked Exhibit -- Leaning IPR Exhibit 2024.

7 (Exhibit 2024-Leaning,
8 previously marked, was referred to.)

9 BY MS. RABENSTEIN:

10 Q. Can you please take a look at
11 that, Mr. Major.

12 Mr. Major, is Leaning IPR
13 Exhibit 2024, which you're looking at, is it
14 one of the exhibits you cited in support of
15 your statement in paragraph 25 of Leaning IPR
16 Exhibit 2020?

17 A. Yes.

18 Q. Okay. And Leaning IPR
19 Exhibit 2024 is a Move press release that was
20 posted on Business Wire; is that correct?

21 A. Yes.

22 Q. Okay. So the language in Leaning

1 IPR Exhibit 2024 is language Move drafted
2 about itself, correct?

3 MR. GUY: Objection, form.

4 THE WITNESS: Yes, including
5 quotes from me.

6 BY MS. RABENSTEIN:

7 Q. Thank you.

8 So Move is the one saying in
9 Leaning Exhibit 2024 that Move was, quote,
10 awarded a fundamental patent on adaptive
11 video streaming, end quote, correct?

12 A. We're announcing that we received
13 our patent, yes.

14 Q. Okay. And you mentioned this,
15 but you were also quoted in Leaning
16 Exhibit 2024 in the second paragraph for
17 stating that, quote, Practically every major
18 online video provider, including Akamai,
19 Apple, Adobe, Limelight, Microsoft, Netflix,
20 Widevine and several others, has deployed an
21 adaptive bitrate architecture inspired by
22 your invention, end quote?

1 A. Yes.

2 Q. Okay. So your citation to
3 Leaning Exhibit 2024 in your declaration in
4 the Leaning IPRs that is Exhibit 2020 is just
5 citing something you said in a press release
6 previously, correct?

7 MR. GUY: Objection, form.

8 THE WITNESS: But there's other
9 stuff in it too, of course.

10 BY MS. RABENSTEIN:

11 Q. But it's -- it's also citing what
12 you said, correct?

13 A. It's citing what I've said as
14 well, yes.

15 MR. GUY: Same objection.

16 BY MS. RABENSTEIN:

17 Q. All right. Let's look at -- so,
18 Mr. Major, you've just been handed Leaning
19 IPR Exhibit 2096.

20 (Exhibit 2096-Leaning,
21 previously marked, was referred to.)

22

1 BY MS. RABENSTEIN:

2 Q. Can you please take a moment to
3 read that.

4 Okay. Mr. Major, Leaning IPR
5 Exhibit 2096 is one of the three exhibits
6 that you cited in paragraph 25 of your
7 declaration in the Leaning IPR's
8 Exhibit 2020, correct?

9 A. Yes.

10 Q. Okay. And Leaning IPR
11 Exhibit 2096 is the same Move press release
12 that we just looked at in Leaning IPR
13 Exhibit 2024, but this time it's downloaded
14 from the Move Networks newsroom, correct?

15 A. It appears that's the way it is,
16 yes.

17 Q. Okay. And both Exhibit --
18 Leaning IPR Exhibits 2096 and 2024 are dated
19 September 15th 2010; is that correct?

20 A. Yes.

21 Q. Both Leaning IPR Exhibits 2096
22 and 2024 have the same title, correct?

1 A. Yes.

2 Q. Both Leaning Exhibits IPR --
3 Leaning IPR Exhibits 2096 and 2024 have the
4 same text, correct?

5 MR. GUY: Objection, form.

6 THE WITNESS: Yeah, it -- it --
7 they're -- they're -- it appears to be
8 very close. I haven't done a
9 word-for-word comparison.

10 BY MS. RABENSTEIN:

11 Q. But nothing jumps out as
12 different between the two, correct?

13 MR. GUY: Objection, form.

14 THE WITNESS: Yeah, it appears
15 to be substantially the same.

16 BY MS. RABENSTEIN:

17 Q. And so, like you testified for
18 Leaning IPR Exhibit 2024, Leaning IPR
19 Exhibit 2096 is Move Networks talking about
20 itself and its own technology, correct?

21 A. It's talking about the patent we
22 got and what it means.

1 Q. Right. And it's -- it's language
2 that Move Networks supplied, correct?

3 A. I don't know where the language
4 came from. They quoted me, so that came from
5 me, but the rest I don't know. I guess you
6 could contact Sam here --

7 Q. So --

8 A. -- who created it, the -- the --
9 there's a contact that I'm sure generated it
10 or likely generated it, yeah.

11 Q. And the contact who generated it
12 is someone at Move Networks, correct?

13 A. I'm not sure if he was employed
14 or was just a consultant, but he was
15 working -- my recollection is he was working
16 for Move Networks at the time, yes.

17 Q. All right. Let's look at the
18 third exhibit you cited.

19 (Exhibit 2062-Leaning,
20 previously marked, was referred to.)

21 BY MS. RABENSTEIN:

22 Q. Mr. Major, you have been handed

1 Leaning IPR Exhibit 2062. Can you take a
2 moment to read through that, please.

3 A. 2062, yeah.

4 Do you want me to read all the
5 comments?

6 Q. No, just the -- the article is
7 fine. But of course you can read anything
8 you think you need to -- to answer the
9 questions that I'll ask. But I don't think
10 you'll need to read the comments.

11 Mr. Major, Exhibit -- excuse
12 me -- Leaning IPR Exhibit 2062 is one of the
13 three exhibits you cited to support your
14 statement in paragraph 25 of your declaration
15 in the Leaning IPR's Exhibit 2020, correct?

16 A. Yes.

17 Q. Okay. All right. And Leaning
18 IPR Exhibit 2062 is a blog post from someone
19 named Ryan Lawler on September 15th 2 --
20 2010, correct?

21 A. That's what it says, yeah.

22 Q. Okay. And Leaning IPR

1 Exhibit 2062 is dated the same day as the
2 identical press releases we just looked at in
3 IPR Exhibits 2096 and 2024, correct?

4 MR. GUY: Objection, form.

5 THE WITNESS: I don't know. It
6 says by him, September 15, 2010 and up
7 above it says 5-10-2021. Okay.
8 September -- let's see -- I've been
9 looking at the -- make sure I look at
10 the right date.

11 Okay. Yeah, that appears to be
12 the same date, yes.

13 BY MS. RABENSTEIN:

14 Q. Okay. Just I'm going to ask the
15 question again so we have a little --

16 A. Yeah, I'm sorry. I --

17 Q. -- clean record.

18 A. I've got two dates here, I'm --

19 Q. Totally fine. I understand.

20 So Leaning IPR Exhibit 2062 is
21 dated the same day as the press releases we
22 just looked at in Leaning IPR Exhibits 2096

1 and 2024, correct?

2 A. Appears --

3 MR. GUY: Object to form.

4 Go ahead.

5 THE WITNESS: -- both of them

6 September 15th 2010, yeah. Appears

7 both of them have that same date,

8 yeah.

9 BY MS. RABENSTEIN:

10 Q. Okay. All right. And Leaning
11 IPR Exhibit 2062 quotes a press release where
12 it says, quote, according to a Move Networks
13 press release, end quote, correct?

14 A. Yes.

15 Q. So the language in Leaning IPR
16 Exhibit 2062 that is quoted from the press
17 releases is, again, what Move was saying
18 about its own patent and technology, correct?

19 A. It was quoting the press release,
20 but there's also a lot of language here
21 that's not from the press release.

22 Q. Okay. And Leaning IPR

1 Exhibit 2062 also paraphrases the press
2 release, stating, quote, In the press
3 release, Move founder Drew Major even
4 explicitly names multiple video companies
5 that have deployed technology similar to
6 which -- to that which Move Networks received
7 the patent for.

8 Did I read that correctly?

9 A. Yes.

10 Q. Okay. And Leaning IPR
11 Exhibit 2062 also says that in the press
12 release you are quoted as saying that these
13 companies, quote, all now use adaptive
14 bitrate streaming that was inspired by Move's
15 invention, correct?

16 A. Yeah, he's paraphrasing that in
17 saying that, yes.

18 Q. Okay.

19 A. He says that there.

20 Q. So since Leaning IPR
21 Exhibits 2024 and 2096 are the same press
22 release and Exhibit 2062 is based on and

1 quotes that same press release, why did you
2 cite all three in your declaration in the
3 Leaning IPR's paragraph 25 of Exhibit 2020?

4 MR. GUY: Caution the witness
5 not to disclose any privileged or
6 attorney-client communication. You
7 can answer of your own personal
8 knowledge or belief.

9 THE WITNESS: Yeah, my personal
10 knowledge and belief is one was -- you
11 know, one's from the website. One's
12 showing that it was picked up by
13 Business Wire and actually put out.
14 And this one was -- someone was
15 monitoring our -- this Ryan guy, who I
16 don't know who he is, don't -- was
17 looking at it and had the opinion and
18 I'm sure he justify [sic] it. You've
19 got a -- you just got a -- a -- a
20 patent for HTTP adaptive bitrate
21 streaming that's valuable. And --

22

1 BY MS. RABENSTEIN:

2 Q. So --

3 A. And there's no dispute that --
4 that this wasn't being used by all these
5 people.

6 Yeah, I'm -- I'm claiming it, but
7 it -- it's also fact. It was -- that's what
8 was happening.

9 Q. So looking at Exhibit -- excuse
10 me -- IPR Exhibit 2062, it's your testimony
11 that it was Mr. Lawler's opinion that Move
12 got a valuable patent?

13 A. That -- that's what -- that's
14 what he says. But, again, I've never met
15 him. I have no idea, but he expressed an
16 opinion. So --

17 Q. Okay.

18 A. And I -- I personally agree with
19 him, yes.

20 Q. So in IPR Exhibit 2062, which is
21 Mr. Lawler's blog post, he states, quote,
22 According to a Move Networks press release,

1 quote, the seminal patent covers the encoding
2 and use of multiple bitrate streamlets, end
3 quote.

4 Is that right?

5 A. Yeah, that's part of it. Yes.

6 Q. So isn't it a fair read that
7 Mr. Lawler is quoting what Move Networks said
8 in the press release when Move Networks said
9 it was a seminal patent?

10 Is that right?

11 A. I don't know. I have no idea his
12 background. He could have -- he could have
13 been following us as an analyst for years or
14 he could just have been a -- you know,
15 someone who comments about things. I -- I
16 have no idea.

17 Q. Okay. So your testimony about
18 Exhibit -- excuse me, Leaning IPR
19 Exhibit 2062 and Mr. Lawler's opinion is just
20 based on what you're reading in Exhibit 2062;
21 is that correct?

22 A. Yeah, he's -- he's saying it's

1 useful, that's -- valuable. Of course I
2 agree with that, so ...

3 Q. Where do you say him saying it's
4 useful and it's valuable?

5 A. Move Networks just got a lot more
6 valuable on the intellectual property front.

7 Q. Okay. And that's because he was
8 saying, According to a Move Networks press
9 release, quote, from Move, the seminal patent
10 covers?

11 Is that right? Correct?

12 A. Well, we got a patent for
13 adaptive rate -- HTTP-based adaptive rate
14 streaming. And definitely it's my opinion,
15 and I think it's the opinion of a lot of
16 people, that's a very valuable capability.
17 And this is just someone else opinionating
18 the same thing.

19 Q. Do you know if Mr. Lawler had
20 evaluated the technology in the patent that
21 was granted that he's --

22 A. No, I didn't know what he --

1 Q. -- talking about here?

2 MS. REPORTER: I'm sorry. One
3 at a time.

4 THE WITNESS: Sorry.

5 BY MS. RABENSTEIN:

6 Q. I'm reask it and then you can
7 answer.

8 Do you know if Mr. Lawler
9 evaluated the patent that was issued here
10 before writing this post --

11 A. I have --

12 Q. -- that was --

13 A. -- no idea.

14 Q. Okay.

15 All right. Let's go back to your
16 declarations, please.

17 A. Okay.

18 Q. Let's turn now to paragraph 21.
19 And it's the one with the picture of the Emmy
20 in it in your Ogdon IPR Exhibit --

21 A. Okay.

22 Q. -- 2010 and paragraph 18 in your

1 Leaning IPR Exhibit 2020.

2 A. Okay.

3 Q. And first I'd like to go to where
4 the picture of the Emmy is in both of those
5 paragraphs, Mr. Major.

6 So in your declaration in the
7 Ogdon IPRs, on page 10 of Ogdon IPR
8 Exhibit 2010, there's a block of text to the
9 right of the photo where it says the Emmy is
10 for, quote, development that considerably
11 improves existing technology, end quote,
12 correct?

13 A. Yes.

14 MR. GUY: I'm sorry. Which one
15 are you looking at, the Leaning or the
16 Ogdon?

17 MS. RABENSTEIN: Ogdon.

18 MR. GUY: Okay. All right.

19 Thank you.

20 BY MS. RABENSTEIN:

21 Q. And now I'm going to have you
22 look at the Leaning one, so --

1 MR. GUY: There we go.

2 BY MS. RABENSTEIN:

3 Q. -- in the Leaning IPR
4 Exhibit 2020 on page 8, we see the Emmy
5 there, right, but there's no block text next
6 to it, correct?

7 A. Correct.

8 Q. Why did you take out the text in
9 your most recent declaration?

10 MR. GUY: Same objection and
11 caution regarding attorney-client
12 communication.

13 Answer if you have your own
14 personal view as to why the edit was
15 done.

16 THE WITNESS: I'm not sure.

17 BY MS. RABENSTEIN:

18 Q. All right. Let's turn to
19 paragraph 16. Excuse me. Sorry. I should
20 tell you which one I want you to look at
21 before I tell you the paragraph to look at.

22 A. Okay.

1 Q. Let's turn to -- in your Ogdon
2 IPR declaration, which is Ogdon IPR
3 Exhibit 2010, turn to paragraph 20, please.

4 A. Paragraph 20.

5 Q. And, at the same time, please
6 turn to paragraph 16 in your Leaning IPR
7 declaration that is Leaning IPR Exhibit 2020.

8 A. 16 and --

9 Q. 20.

10 A. 16 and 20. They don't seem to
11 match, which -- you're trying to match the
12 same one?

13 Q. Wait. Hold on one second.

14 A. 16 matches with 19.

15 Q. 16 matches with 19, okay. So my
16 apologies. Let's fix that.

17 So -- okay. So let's look --
18 I'll clean up the question. My apologies.

19 So let's look at paragraph 20 in
20 Ogdon IPR Exhibit 2010 and paragraph 17 in
21 Leaning --

22 A. Okay.

1 Q. -- IPR Exhibit 2020.

2 Are you there?

3 A. Okay.

4 Q. Okay. In both paragraph 20 in
5 Ogdon IPR Exhibit 2010 and paragraph 17 in
6 Leaning IPR Exhibit 2020 you state, quote,
7 Sling TV grew to over 2 million subscribers
8 based on its adoption of our, or the,
9 inventive technology, end quote, correct?

10 A. Yeah.

11 Q. Okay.

12 A. That's what it says here.

13 Q. And -- let's see here.

14 You also say in both paragraphs
15 that either Sling or DISH, quote, also
16 received industry recognition for its
17 contribution to internet video streaming,
18 correct?

19 A. Yeah, that's part of the one
20 sentence and it's more the -- yeah. Yeah.
21 Just -- it was rephrased, saying basically
22 the same thing.

1 Q. So when you rephrased it in your
2 current declaration, which is paragraph 17 of
3 IPR -- of Leaning IPR Exhibit 2020, you
4 added, quote, In addition to Move's receiving
5 voluminous press and industry recognition,
6 correct?

7 A. Yes.

8 Q. Okay. Why did you add that?

9 MR. GUY: Again, same caution
10 with attorney-client communication.

11 THE WITNESS: It -- to -- to --
12 for just additional clarification to
13 make sure that it wasn't just -- we
14 weren't -- you know, we got
15 recognition as Move as well as --
16 as -- as with Sling TV, so just -- it
17 was just amplification and
18 clarification.

19 BY MS. RABENSTEIN:

20 Q. Okay. Now, both paragraph 17 in
21 Leaning IPR Exhibit 2020 and paragraph 20 in
22 Ogdon IPR Exhibit 2010 talk about industry

1 praise, correct?

2 A. Yes. Industry recognition, yeah.

3 Q. But you don't cite a single
4 exhibit in either of those paragraphs to
5 support those statements, correct?

6 A. Not in these paragraphs. Next
7 one I do.

8 Q. Why didn't you cite anything -- I
9 mean, if -- if the industry was praising Move
10 voluminously and recognizing Sling, shouldn't
11 it have been easy to find articles to cite
12 there in support?

13 MR. GUY: Objection. Again,
14 same caution, attorney-client
15 communication.

16 Answer of your own personal
17 knowledge.

18 THE WITNESS: Yeah, there's
19 other places where we cited them. You
20 know, there's other -- other places
21 later on. I was sort of summarizing
22 it here and then, in other paragraphs

1 later on, we talked, certainly, about
2 the voluminous press and industry
3 recognition in subsequent paragraphs.

4 BY MS. RABENSTEIN:

5 Q. Okay. And why didn't you just
6 add the cites there if you already had them?

7 A. Style.

8 MR. GUY: Same objection.

9 MS. REPORTER: Sorry?

10 THE WITNESS: Style.

11 BY MS. RABENSTEIN:

12 Q. Style, okay.

13 And so the only evidence you were
14 referring to of industry praise would be
15 cited in your declarations, correct?

16 MR. GUY: Objection, form.

17 THE WITNESS: Well, the
18 declaration just has some of it, but
19 not all of it. There's -- there's a
20 lot more.

21 BY MS. RABENSTEIN:

22 Q. Okay. And why did you leave out

1 the rest?

2 A. Again --

3 MR. GUY: Same objection as to
4 attorney-client communication.

5 Answer of your personal
6 knowledge.

7 THE WITNESS: Yeah. This is
8 just style. There was a whole bunch
9 of stuff. We couldn't -- we -- we
10 narrowed it down to what we felt were
11 the most relevant.

12 BY MS. RABENSTEIN:

13 Q. Okay. You testified earlier that
14 the reason why you added three exhibit
15 citations to one of your paragraphs was that
16 you thought it would be more convincing to
17 have it there.

18 Is that a fair characterization?

19 MR. GUY: Objection, form.

20 THE WITNESS: It added
21 substance to that particular point and
22 it felt like that was appropriate at

1 that point because it was -- I was
2 making an assertion that wasn't
3 directly -- you know, just -- so,
4 again, we added things, we shuffled
5 things a little around. It was mostly
6 just to clarify and to make it easier
7 to understand.

8 BY MS. RABENSTEIN:

9 Q. But in paragraph 17 of Leaning
10 IPR Exhibit 2020, where you're talking about
11 Move receiving voluminous praise, you didn't
12 think you needed to add substance to that
13 particular point?

14 A. Not -- not at that part. I
15 would -- again, I call it style. You just
16 kind of tell them what you're going to do it.
17 You then -- then you tell it. And then you
18 summarize it, well, this is the -- this is
19 what we're going to talk about here.

20 And so it was the introduction of
21 that paragraph that it kind of led to these
22 things coming up because, yeah, it's a

1 good -- we were going to -- we're going to
2 talk about industry recognition.

3 Q. Okay. So you're saying it's a
4 style -- a style point.

5 So you --

6 A. Readability and -- you know.

7 Q. You made the -- you didn't feel
8 the need?

9 A. What?

10 Q. You made the choice not to add
11 exhibits to cite and support in paragraph 17
12 of Leaning IPR Exhibit 2020; is that correct?

13 MR. GUY: Same objection and
14 caution regarding attorney-client
15 communication.

16 THE WITNESS: I -- I --

17 MR. GUY: Answer if you know.

18 Please wait until I'm finished.

19 THE WITNESS: I -- you know,
20 it's just -- again, it's style, how
21 does it read, what's the flow. You
22 know, is it going to make sense, are

1 you taking people down a -- a logical
2 path. And that was just -- for me, it
3 made sense to do it this way, so
4 that's how we did it.

5 BY MS. RABENSTEIN:

6 Q. Got a little bit more to do. I
7 think we've been going for about an hour.

8 Do you want a quick break,
9 Mr. Major?

10 A. Whatever you want to do.

11 MR. GUY: Could you -- could we
12 go to lunch? I don't know if lunch is
13 here.

14 THE WITNESS: It's 11:40.

15 MS. RABENSTEIN: Do you want to
16 go off the record and then we can sort
17 this out?

18 MR. GUY: Sure.

19 VIDEO OPERATOR: Going off the
20 record. The time is 11:38 a.m.

21 (Thereupon, a discussion was had
22 off the record.)

1 VIDEO OPERATOR: Going back on
2 the record. The time is 11:47 a.m.

3 BY MS. RABENSTEIN:

4 Q. Welcome back, Mr. Major. Typical
5 housekeeping question:

6 During our break did you discuss
7 the substance of your testimony with anyone?

8 A. No one.

9 Q. Okay. Great. Thanks.

10 Let's turn back to your
11 declarations, please, and let's go to
12 paragraph 18 in Ogdon IPR Exhibit 2010. It
13 starts, In 2010 EchoStar ...

14 A. Paragraph 18?

15 Q. Yep. And then when you have that
16 open, I'd also like you to open up
17 paragraph 15 in Leaning IPR Exhibit 2020,
18 which also states, In 2010 EchoStar ...

19 A. So you're saying 18 and 16?

20 Q. 15.

21 A. 15.

22 Q. Apologies.

1 A. 15 now. Okay.

2 Q. Okay. And let me know once
3 you've had a chance to read them.

4 A. I'm ...

5 Q. Okay. Now, am I correct that the
6 last sentence in paragraph 15 of Leaning IPR
7 Exhibit 2020 does not appear in paragraph 18
8 in Ogdon IPR Exhibit 2010?

9 A. Yes.

10 Q. Okay. So the sentence you added
11 to paragraph 15 of Leaning IPR Exhibit 2020
12 states, quote, And not only do Sling TV users
13 get to view these channels in HD, but they
14 experience the same seamless switching
15 between quality levels without buffering,
16 stalling or latency, thanks to Sling's use of
17 HTTP adaptive bitrate streaming technology,
18 end quote.

19 Correct?

20 A. Yes.

21 Q. Okay. And you did not cite any
22 exhibits or documents to support the sentence

1 that you added to paragraph 15 of Leaning IPR
2 Exhibit 2020, correct?

3 A. I do not cite anything, yes.

4 Q. All right. What prompted you to
5 add this sentence to paragraph 15 of Leaning
6 IPR Exhibit 2020?

7 MR. GUY: Objection, may call
8 for privilege. Caution the witness
9 not to disclose any discussion with
10 counsel or work product of counsel.

11 Answer if you have a personal
12 view.

13 THE WITNESS: It just amplified
14 it. It just explained it better. It
15 said hey, and -- well, we wanted to
16 say something and, look, it works
17 really well and -- because up there
18 we're talking about -- earlier we're
19 talking about how it's paid live TV
20 streaming service over the internet
21 and it seemed appropriate to say look,
22 it's -- it's very high -- it was very

1 high -- it's very high quality,
2 especially at the time. There's --
3 other streaming solutions had
4 buffering. We solved that. This --
5 saying that this -- the HTP adaptive
6 bitrate streaming technology, the
7 quality --

8 MS. REPORTER: Sorry, sir.
9 You'll have to repeat that.

10 THE WITNESS: Okay. I'm sorry.

11 With the HTTP adaptive bitrate
12 streaming technology, the quality was
13 pretty much as -- you know, the same
14 as what you were getting
15 traditional -- with traditional TV
16 packages. And seemed like that was a
17 natural place to put that -- to --
18 to -- to draw that out, emphasize that
19 here.

20 BY MS. RABENSTEIN:

21 Q. So you say you -- you were
22 amplifying what you said before; is that

1 right?

2 A. Yeah.

3 MR. GUY: Objection, form.

4 BY MS. RABENSTEIN:

5 Q. So in substance, it's the same as
6 what you said before, just amplified?

7 A. It's -- it's just -- it's just
8 clarifying a point. This was really pay TV.
9 And now, for the first time, you could get
10 pay TV over the internet. That was a
11 significant -- at the same quality. That was
12 a significant jump.

13 Q. So --

14 A. It never happened before.

15 Q. So the declaration you submitted
16 in the Ogdon IPRs wasn't clear enough; is
17 that right?

18 A. Well --

19 MR. GUY: Objection, form.

20 THE WITNESS: Again, we -- we
21 had the -- we had the ability to
22 revise it a little bit and this made a

1 lot of sense.

2 BY MS. RABENSTEIN:

3 Q. Okay. And why did it make sense?

4 A. Because it --

5 MR. GUY: Again, caution the
6 witness regarding attorney-client
7 communication.

8 THE WITNESS: Yeah, it just --
9 it just -- it -- it made the point
10 stronger.

11 BY MS. RABENSTEIN:

12 Q. What point?

13 A. The point that you could get
14 internet television -- traditional television
15 that you typically got with cable or
16 satellite, now you could get it over the
17 internet and it was just as good as what you
18 were -- in fact, maybe some ways better than
19 what you could get in a traditional manner.

20 Q. Okay. And you feel that point
21 wasn't strong enough, made strong enough in
22 your declaration in the Ogdon IPRs, that you

1 needed to clarify it here?

2 A. Well, I wanted to pull it in to
3 talk about a real example about what really
4 happened. That -- that -- that -- that --
5 that's -- that's one -- it's strong
6 validation on this -- on this -- the idea
7 that we launched the first pay TV -- full
8 package pay TV over the internet, yeah.

9 Q. You said you wanted to talk about
10 a real example.

11 Is the real example you're
12 talking about Sling TV?

13 A. It was sling TV, yes.

14 Q. Okay. And if you look at
15 paragraph 18 of Ogdon IPR Exhibit 2010, you
16 already mention Sling TV in that paragraph,
17 correct?

18 A. Yeah. I talk about it again,
19 yes.

20 Q. Okay. So in your Ogdon IPR
21 declaration you already had a real example,
22 right?

1 A. Had an example and were --
2 clarified how good it was.

3 Q. And so why did you feel you
4 needed to clarify it in Leaning IPR
5 Exhibit 2020? Is there anything that
6 prompted that clarification?

7 MR. GUY: Objection, form and
8 caution the witness regarding
9 attorney-client privilege.

10 THE WITNESS: No, it just
11 seemed like the -- a -- a -- a good
12 thing to add.

13 BY MS. RABENSTEIN:

14 Q. Okay. In your opinion, why was
15 it a good thing to add?

16 MR. GUY: Objection, form.

17 THE WITNESS: Because it was
18 important to say that streaming over
19 the internet, which traditionally in
20 the past had -- had been limited to
21 little, small things or downloads or,
22 you know, the stuff you used to get on

1 YouTube TV, you know, small streaming,
2 now suddenly it's full quality and it
3 works as well and in some ways has --
4 we -- we -- we had time shifting and
5 stuff that you couldn't do the other
6 places.

7 You know, so it was -- it was
8 a -- a -- a very powerful first
9 bringing of pay TV to the internet.

10 BY MS. RABENSTEIN:

11 Q. And so that answer you just gave,
12 that's your clarification that you meant when
13 you added the last sentence to paragraph 15
14 of Leaning IPR Exhibit 2020; is that right?

15 A. Yeah.

16 Q. Okay.

17 A. Just makes it -- makes it
18 stronger and emphasizes the core value of
19 HTTP adaptive rate. Without HTTP adaptive
20 rate streaming for live, it wouldn't have --
21 wouldn't have worked.

22 Q. Now, one thing in this sentence

1 you state here and you stated a little bit in
2 one of your answers was you talked about
3 seamless switching between quality levels
4 without buffering, stalling or latency,
5 correct?

6 A. Yep.

7 Q. Okay.

8 A. Yes.

9 Q. Has anyone who has ever watched
10 Sling TV never had delay due to buffering?

11 A. Watch Sling TV?

12 Q. Sling TV, yeah.

13 A. I don't know.

14 Q. You don't know. Okay. So it's
15 possible that someone who used Sling TV's
16 player would have experienced an episode of
17 buffering?

18 MR. GUY: Objection, form.

19 THE WITNESS: Well, it's
20 definitely possible.

21 BY MS. RABENSTEIN:

22 Q. Okay. And it's -- it's possible

1 that someone who used Sling TV's player could
2 have experienced video stalling?

3 MR. GUY: Objection, form.

4 THE WITNESS: It's possible.

5 BY MS. RABENSTEIN:

6 Q. Okay. So your technology doesn't
7 ensure that viewers will never experience
8 buffering or stalling, correct?

9 MR. GUY: Objection, form.

10 THE WITNESS: Yeah, we can't --
11 I -- can't ensure it. Just like cable
12 and satellite, you can get
13 pixelization and see little black
14 dots. It -- there's -- it's number of
15 nines imperfection that were -- we
16 have a lot of. We had way more than
17 anyone else had. In terms of all the
18 things we did to guarantee, we did
19 some very clever and hard things to,
20 hell or high water, try and keep the
21 video continuous and -- yet quality.
22 We did way more than anyone else was

1 doing at the time.

2 BY MS. RABENSTEIN:

3 Q. So in terms of buffering and
4 stalling delays, you were doing it better,
5 but you hadn't completely eliminated it; is
6 that fair?

7 A. Yeah. There's nothing in
8 networking today that is perfect.

9 Q. All right. Let's turn back to
10 your declarations, please.

11 MR. GUY: If this is a good
12 point to grab lunch --

13 MS. RABENSTEIN: I literally
14 have one last paragraph that I want
15 to --

16 MR. GUY: There you go.

17 MS. RABENSTEIN: -- ask
18 questions about, so --

19 THE WITNESS: Good. Thank you.

20 MS. RABENSTEIN: I'll let you
21 decide, but --

22 MR. GUY: Sold.

1 MS. RABENSTEIN: All right.

2 BY MS. RABENSTEIN:

3 Q. Let's go to paragraph 7 in Ogdon
4 IPR 2010, please.

5 MR. GUY: 7 or 17?

6 MS. RABENSTEIN: 7.

7 MR. GUY: Okay. Ogdon 7.

8 BY MS. RABENSTEIN:

9 Q. And then once you're there, let's
10 do paragraph 6 in Leaning IPR Exhibit 2020,
11 please.

12 Take a moment just to read
13 through those quickly.

14 A. Okay.

15 Q. Now, I'm going to ask you about
16 some of the differences between them, but in
17 general, would you agree that paragraph 7 of
18 Ogdon IPR Exhibit 2010 and paragraph 6 of
19 Leaning IPR Exhibit 2020 are largely the
20 same?

21 A. They are largely the same, yes.

22 Q. Looking at paragraph 6 in Leaning

1 Exhibit 2020, do you see the sentence in the
2 middle of the paragraph that states, quote,
3 Often, viewers wishing to view videos
4 according to these methods experienced
5 persistent interruptions, e.g., buffering,
6 latency or packet loss.

7 Do you see that sentence?

8 A. Yes.

9 Q. And can you confirm for me,
10 please, that that sentence does not appear in
11 paragraph 7 in Ogdon IPR Exhibit 2010?

12 A. That does not, yes.

13 Q. Okay. So why did you feel the
14 need to add that sentence into your Leaning
15 IPR exhibit -- declaration that is
16 Exhibit 2020?

17 MR. GUY: Same caution with
18 respect to attorney-client
19 communication and privilege.

20 Answer if you have a personal
21 view.

22 THE WITNESS: Yeah, this --

1 this expanded what some of these
2 issues were. It just explained where
3 they -- they came from. Buffering
4 comes from latency problems or packet
5 loss problems. There was -- you know,
6 again, there were -- they used to use
7 several different approaches,
8 especially for live. And they were
9 fraught with -- they -- I -- I would
10 say they were kind of good, but there
11 was always a -- there was -- there was
12 always the possibility of a problem.

13 You know, it -- obviously it
14 didn't not work, but, you know, I --
15 I -- I just remember signing up for
16 Major League Baseball streaming in
17 2002 and trying to do it and -- it
18 worked at the office and it didn't
19 work at home and it was latent. It
20 was -- it was just like, you know --
21 it was generally a hit-or-miss
22 experience.

1 And so I added that to -- to
2 just -- just to say -- because I knew
3 what was -- what's going on
4 underneath, why it was working that
5 way. And I'm talking about the core
6 things that were -- were happening
7 that caused the buffering there.

8 BY MS. RABENSTEIN:

9 Q. Okay. And so in paragraph 6 of
10 Leaning IPR Exhibit 2020 and paragraph 7 of
11 Ogdon IPR Exhibit 2010, you're both talking
12 about the state of the art before your
13 inventions that were disclosed in the ABR
14 patents, correct?

15 A. That's right, yeah, what -- what
16 I was personally experiencing and what I
17 think everyone in the industry knew.

18 Q. Okay. So when you're clarifying
19 or adding the sentence that we -- that we
20 just read, you're describing the same state
21 of the art because we're talking about what
22 happened years ago, correct?

1 A. Yes.

2 Q. Okay. So it's not like the state
3 of the art that you were describing in
4 paragraph 7 of the Ogdon IPRs Exhibit 2010
5 was somehow different than the state of the
6 art that you're talking about in Leaning IPR
7 Exhibit 2020, correct?

8 A. I'm talking about the --
9 basically the same thing, just trying to
10 clarify what was cause -- what was kind of
11 causing it.

12 Q. Okay. Can you please read the
13 last sentence of -- well, I'll just read them
14 both in and then we'll go that way.

15 So paragraph -- the last sentence
16 of paragraph 6 in the Leaning IPR Exhibit
17 2020 states --

18 MS. REPORTER: I'm sorry, I
19 couldn't hear.

20 MR. GUY: My --

21 MS. RABENSTEIN: Sure.

22 MR. GUY: -- my apologies.

1 MS. RABENSTEIN: Let's strike
2 that and let me start.

3 BY MS. RABENSTEIN:

4 Q. Let's do it this way:

5 So the last sentence in
6 paragraph 7 of Ogdon IPR Exhibit 2010 states,
7 quote, There was a great need for a system
8 that could consistently deliver high quality
9 video on demand and live video, end quote.

10 Did I read that correctly?

11 A. Yes.

12 Q. Okay. And so you stand by that
13 characterization, correct, that before your
14 inventions disclosed in the ABR patents --

15 A. There was --

16 Q. -- your opinion is that the great
17 need was for a system that could consistently
18 deliver high quality video on demand and live
19 video, correct?

20 A. Yes.

21 Q. Okay. Now, let's look at the
22 last sentence, that same sentence, in --

1 strike that.

2 Let's look at the last sentence
3 in paragraph 6 of Leaning IPR Exhibit 2020.
4 That sentence reads, quote, There was a great
5 need for a system that could consistently
6 deliver a continuous stream of live or
7 on-demand video with increased quality and
8 reliability and with reduced latency and
9 interruptions, end quote.

10 Did I read that correctly?

11 A. Yes.

12 Q. So your current declaration
13 defines the great need that -- that you --

14 A. Yes.

15 Q. -- think existed --

16 A. I -- I amplified it, yes.

17 Q. Hold on. Please let me --

18 A. Okay.

19 Q. Please let me finish my question
20 just for a clear record.

21 So your current declaration in
22 the Leaning IPRs, Exhibit 2020, defines the

1 great need at the time of -- your patents
2 were filed differently from how you described
3 it in your Ogdon IPR declaration, correct?

4 MR. GUY: Objection, form.

5 THE WITNESS: I just kind of
6 gave an example of what was needed to
7 be solved. So I kind of almost
8 finished -- finished the previous
9 sentence by adding a little more
10 clarification, yeah, what needed to
11 happen. Needed increased quality,
12 reduce latency and interruptions,
13 yeah.

14 BY MS. RABENSTEIN:

15 Q. So in your Ogdon IPR declaration,
16 Ogdon Exhibit 2010 at paragraph 7, you didn't
17 say there was a need for reduced latency and
18 interruptions; is that right?

19 A. No. I -- I didn't put it in this
20 paragraph, but I didn't -- that was other
21 places. I've talked about needing to reduce
22 latency, interruptions in other places.

1 That's one of the things. And I just -- I
2 felt like it needed to be said here too,
3 now --

4 Q. But I'm --

5 A. -- explicitly, yeah.

6 Q. I'm focused on --

7 A. Yeah.

8 Q. -- Ogdon IPR paragraph --

9 A. Yes.

10 Q. -- Exhibit 2010, paragraph 7 --

11 A. Understand.

12 MS. REPORTER: I'm sorry. I
13 can't do two at the same time.

14 BY MS. RABENSTEIN:

15 Q. So I'll direct you again,

16 Mr. Major to --

17 A. Okay.

18 Q. -- Ogdon IPR --

19 A. Yes.

20 Q. -- Exhibit 2010, paragraph 7,

21 where you say, There was a great need for a

22 system that could consistently deliver high

1 quality video on demand and live video, end
2 quote.

3 A. Yes.

4 Q. You do not mention a need for
5 reduced latency and interruptions there,
6 correct?

7 A. In that sentence, no.

8 Q. Not in that sentence.

9 And now, several months later, in
10 your Leaning IPR declaration you do say that
11 there was a great need for a system with
12 reduced latency and interruptions, correct?

13 A. I added that, yes.

14 Q. Okay. And so the need, the great
15 need at the time, wouldn't have changed
16 between the two declarations, correct?

17 A. Correct.

18 MR. GUY: Objection, form.

19 THE WITNESS: Yeah. The need
20 was the same, yes.

21 BY MS. RABENSTEIN:

22 Q. The need was the same.

1 And so you're just describing
2 what the need was differently then?

3 MR. GUY: Objection, form.

4 THE WITNESS: I'm just
5 explaining it more thoroughly.

6 BY MS. RABENSTEIN:

7 Q. And why did you feel the need to
8 explain it more thoroughly?

9 MR. GUY: Objection and caution
10 regarding attorney-client
11 communication.

12 THE WITNESS: Because it seemed
13 like it was appropriate addition to
14 that -- this particular paragraph
15 while -- you know, if you look at the
16 spirit of what I was talking about
17 here.

18 BY MS. RABENSTEIN:

19 Q. Why was it appropriate?

20 MR. GUY: Same caution
21 regarding privilege. Objection, form.

22 THE WITNESS: We're just

1 explaining in different ways the state
2 of the art and the -- all the -- and
3 different -- different issues that
4 consumers -- in -- in viewing video at
5 the time, the experience they were
6 having and this was one more thing to
7 talk about or say.

8 BY MS. RABENSTEIN:

9 Q. So why would you -- what changed
10 that made you feel the need to explain the
11 need -- the historical need in a different
12 way?

13 MR. GUY: Objection, form.

14 THE WITNESS: Really wasn't a
15 different way. It was just an
16 amplification and an extension of what
17 I was saying already. Just to make it
18 a little clearer.

19 BY MS. RABENSTEIN:

20 Q. I'm a little confused. I just
21 asked you --

22 A. Clarify.

1 Q. Sorry, I -- I'm a little
2 confused. I just asked you why was it
3 appropriate to make the clarification and you
4 said we're just explaining it in different
5 ways. And now you're saying you're 23409
6 explaining it in different ways --

7 A. No.

8 MR. GUY: Objection --

9 BY MS. RABENSTEIN:

10 Q. -- is that right?

11 MR. GUY: Objection, form.

12 You've got to wait for the objection.

13 Objection, form and caution the
14 witness regarding privilege.

15 THE WITNESS: I'm just -- it
16 was just -- just clarification in
17 different -- it's -- it's -- you know,
18 you -- you -- you read a paragraph and
19 you come back to it a few months later
20 and oh, it will be a little -- you
21 know, it would be a little clearer if
22 I added this to make the point. And

1 that's -- that's all that happened
2 here.

3 BY MS. RABENSTEIN:

4 Q. But why? What -- what made you
5 think oh, this isn't clear enough, I need to
6 make this more clear?

7 MR. GUY: Same objections.

8 THE WITNESS: It's just -- you
9 know, again, you -- you -- we all
10 rewrite things to make them clearer
11 when we look at them later. I'm sure
12 you do it on your legal briefs.

13 BY MS. RABENSTEIN:

14 Q. But what was unclear about your
15 prior statement?

16 A. It wasn't, but it just made it a
17 little -- even stronger and clearer.

18 Q. So --

19 A. It was pretty clear, but this
20 made it even a little clearer.

21 Q. I'm confused, because if the one
22 before was clear and your reason for changing

1 it now is just that it was a clarification,
2 why did it need to be made more clear? What
3 prompted you to make it more clear?

4 MR. GUY: Objection, form and
5 privilege.

6 THE WITNESS: It would deliver
7 the -- the concept even -- even more
8 directly and clearly of what the
9 issues were with streaming at that
10 time.

11 BY MS. RABENSTEIN:

12 Q. Okay.

13 A. This just --

14 Q. And in the Ogdon IPRs, you didn't
15 feel the need to identify that as an issue
16 with streaming at the time of your patents?

17 MR. GUY: Objection, form.

18 THE WITNESS: I -- I may have
19 overlooked it at the time, but it's --
20 it's -- it's in other places too, you
21 know, already. I talk about latency
22 and stuff other places here. But I

1 just felt like in this paragraph now,
2 it needed to be talked about as
3 well --

4 BY MS. RABENSTEIN:

5 Q. Well, and that's -- that's what
6 I'm -- I'm sorry, I didn't mean to speak over
7 you.

8 That's what I'm struggling with,
9 which is, why did you feel the need to put it
10 in this paragraph? Like what changed that
11 you're like wait, I need to clean that up?

12 MR. GUY: All right. Counsel,
13 at some point you keep asking the same
14 question and -- and I -- I am going to
15 instruct not to answer. It's
16 harassment. You've gotten your
17 answer.

18 We've had a really good
19 deposition. You know, I -- I think
20 it's time to move on.

21 MS. RABENSTEIN: Counsel, I
22 disagree with that. First, you're

1 limited to objection, form. And,
2 like, second --

3 MR. GUY: I'm -- I'm trying
4 to --

5 MS. RABENSTEIN: -- he's not
6 answering my question.

7 I asked him what changed to
8 make it clear and he said I made it
9 more clear. And that's not answering
10 my question.

11 MR. GUY: Okay. Well, we have
12 a debate about that.

13 There's a question pending.
14 Objection to form.

15 BY MS. RABENSTEIN:

16 Q. So let me ask you -- let me ask
17 it this way and see if I can get an answer:

18 Mr. Major, sitting here today --

19 MR. GUY: You know, I -- I
20 object to get an answer. Okay, that's
21 harassment. I'm going to instruct him
22 not to answer. Okay?

1 MS. RABENSTEIN: Guy --

2 MR. GUY: You -- you -- no.

3 You -- you are -- you are indicating
4 that he hasn't answered. Okay?

5 Ask your question without the
6 commentary.

7 MS. RABENSTEIN: No speaking
8 objections. You get objection, form.

9 MR. GUY: Okay. You stick to
10 that. That's fine. But I will stick
11 with the fact that you have harassed
12 the witness at -- by, honestly, asking
13 the same question a dozen times and
14 he's answered.

15 MS. RABENSTEIN: This -- Guy --

16 MR. GUY: Okay?

17 MS. RABENSTEIN: -- this is not
18 harassment. I'm trying to get an
19 answer to a question he's --

20 MR. GUY: You've asked it --

21 MS. RABENSTEIN: No, I'm going
22 to ask --

1 MR. GUY: -- multiple, multiple
2 times.

3 MS. REPORTER: One at a time,
4 please.

5 MS. RABENSTEIN: Stop. Stop
6 eating up my clock.

7 BY MS. RABENSTEIN:

8 Q. Mr. Major, sitting here today,
9 you cannot identify for me any reason you
10 thought you needed to clarify to add in a
11 great need for reduced latency or
12 interruptions in your declaration in the
13 Leaning IPRs that was not in your declaration
14 in the Ogdon IPRs, correct?

15 MR. GUY: Objection to form.

16 THE WITNESS: Yeah, I -- I
17 added that, yes.

18 BY MS. RABENSTEIN:

19 Q. Okay.

20 MS. RABENSTEIN: Let's go off
21 the record and take lunch and I'll
22 clean up and see if I have anything

1 that I need out of this and if -- but
2 to be clear, I'm not going off yet.

3 VIDEO OPERATOR: Going off the
4 record. The time is 12:16 p.m.

5 (Thereupon, at 12:16 p.m. EDT, a
6 lunch recess was taken.)

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1 AFTERNOON SESSION (12:52 p.m. EDT)

2 VIDEO OPERATOR: Going back on

3 the record. The time is 12:52 p.m.

4 BY MS. RABENSTEIN:

5 Q. Welcome back, Mr. Major. A

6 standard housekeeping question:

7 During our lunch break, did you
8 discuss the substance of your testimony with
9 anyone?

10 A. No.

11 Q. Just a couple of cleaning up
12 questions.

13 Do you own any stock in DISH or
14 Sling TV or their related companies?

15 A. I owned a little stock of DISH.
16 Or EchoStar now. I guess it's been changed.

17 MS. REPORTER: I'm sorry?

18 THE WITNESS: EchoStar. It's
19 now changed, yeah.

20 BY MS. RABENSTEIN:

21 Q. So do you have any other form of
22 compensation from DISH, Sling TV or EchoStar

1 than the stock you own?

2 A. You know, I'm -- just I'm a
3 normal employee of DISH or EchoStar and --
4 and the stock I have was normal compensation.
5 Usually when they give me a patent they give
6 me -- when I -- they issue a patent in my
7 name, I get a little stock.

8 Q. Okay.

9 A. A little stock.

10 Q. Okay. For the ABR patents that
11 we've been talking about today in these IPRs,
12 did you receive stock when those patents
13 issued?

14 A. No. Oh, no. I -- I got stock on
15 the ones issued by DISH. The original ones
16 that were sold by Move, were done by Move, I
17 didn't get anything for.

18 Q. Okay. So if the patents
19 issued -- so if there were ABR patents that
20 issued when the company was still Move, you
21 did not get stock for those; is that --

22 A. I did not get --

1 Q. -- correct?

2 A. -- stock for those.

3 Q. But after Move was acquired by
4 DISH and EchoStar and patents issued, then
5 you would get stock; is that right?

6 A. I would get a very small amount
7 of stock.

8 Q. About how much is very small?

9 A. Ten shares, I think.

10 Q. Okay. All right. So other than
11 the stock you have in EchoStar or DISH and --
12 I think you said you get a salary from them;
13 is that right?

14 A. I work -- I work right now from
15 DISH -- for -- for EchoStar, DISH --

16 Q. Okay.

17 A. -- Networks, yes, today.

18 Q. Okay. So other than the stock
19 you have in EchoStar/DISH and the salary that
20 you get from them, do you get any other
21 compensation from EchoStar or DISH?

22 A. No.

1 Q. Okay. I think that is all I
2 have, so -- at least on the initial cross.

3 MR. PAQUETTE: Nothing further
4 from me.

5 MR. GUY: I have no questions.
6 Thank you very much.

7 VIDEO OPERATOR: Thank you.
8 This concludes today's deposition of
9 R. Drew Major.

10 Going off the record. The time
11 is 12:55 p.m.

12 (Thereupon, signature having not
13 been waived, at 12:55 p.m. EDT
14 the deposition concluded.)

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1 CERTIFICATE OF DEPONENT

2 I, R. DREW MAJOR, do hereby certify
3 that I have read the foregoing pages, which
4 contain a correct transcript of the answers
5 given by me to the questions propounded to me
6 herein, except for changes, if any, duly
7 noted on the enclosed errata sheet.

8

9

10

R. DREW MAJOR

11

12

13

14 Sworn and subscribed to before me
15 this ____ day of _____, 2025.

16

17

18 My commission expires: Notary Public:

19

20

21

22

1 CASE: Aylo Freesites, Ltd, et al. v. DISH
2 Technologies, L.L.C.

3 DEPOSITION OF: R. Drew Major

4 TAKEN: May 14, 2025

5 PAGE LINE ERROR CORRECTION REASON

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R. DREW MAJOR

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1 CERTIFICATE OF NOTARY

2 I, MISTY KLAPPER, the officer before whom
3 the foregoing deposition was taken, do hereby
4 certify that the witness whose testimony appears in
5 the foregoing deposition was duly sworn by me; that
6 the testimony of said witness was taken by me in
7 shorthand and thereafter reduced to typewriting by
8 me; that said deposition is a true record of the
9 testimony given by said witness; that I am neither
10 counsel for, related to, nor employed by any of the
11 parties to the action in which this deposition was
12 taken; and, further, that I am not a relative or
13 employee of any attorney or counsel employed by the
14 parties hereto, nor financially or otherwise
15 interested in the outcome of this action.

16

17

Misty Klapper, RMR, CSR, RPR, RSA
and Notary Public

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