

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

3 TWITTER, INC., § CASE IPR2017-00829  
§ CASE IPR2017-00830  
4 Petitioner, §  
§ PATENT 9,083,997  
5 VS. §  
§  
6 VIDSTREAM, LLC §  
§  
7 Patent Owner. §  
8  
9  
10  
11

12 ORAL DEPOSITION OF JAMES LAWRENCE OLIVIER, PH.D.  
13 JULY 26, 2018  
14  
15

16 ORAL DEPOSITION OF JAMES LAWRENCE OLIVIER,  
17 PH.D., produced as a witness at the instance of the  
18 Petitioner and duly sworn, was taken in the above  
19 styled and numbered cause on Thursday,  
20 July 26, 2018, from 9:03 a.m. to 3:53 p.m., before  
21 TAMARA CHAPMAN, CSR, CRR, RPR in and for the State  
22 of Texas, reported by computerized stenotype  
23 machine, at the offices of Norton Rose Fulbright US,  
24 LLP, 98 San Jacinto Boulevard, Austin, Texas,  
25 pursuant to the Federal Rules of Civil Procedure and  
any provisions stated on the record herein.

Job No. 145139

A P P E A R A N C E S

FOR THE PETITIONER:

Jamie McDole, Esq.  
David McCombs, Esq.  
HAYNES AND BOONE  
2323 Victory Avenue  
Dallas, Texas 75219

-and-

Raghav Bajaj, Esq.  
HAYNES AND BOONE  
600 Congress Avenue  
Austin, Texas 78701

FOR THE PATENT OWNER:

Eagle Robinson, Esq.  
Eric Conley Green, Esq.  
NORTON ROSE FULBRIGHT US  
98 San Jacinto Boulevard  
Austin, Texas 78701

## I N D E X

	PAGE
APPEARANCES.....	2
JAMES LAWRENCE OLIVIER, PH.D.	
EXAMINATION	
By Mr. McDole.....	4
By Mr. Robinson.....	136
REPORTER'S CERTIFICATION.....	140

## E X H I B I T S

	PAGE	LINE
Exhibit 1034,	65	12
Handwritten Notes		
(No Bates - 1 page)		

## PREVIOUSLY MARKED EXHIBITS

	PAGE	LINE
Exhibit 1001	45	25
Exhibit 1009	102	9
Exhibit 2008(in IPR2017-00830)	6	10
Exhibit 2008(in IPR2017-00829)	6	10

1 J. OLIVIER - 7/26/18

2 MR. McDOLE: Jamie McDole from  
3 Haynes and Boone, representing Twitter.

4 MR. BAJAJ: Raghav Bajaj from  
5 Haynes and Boone, representing Twitter.

6 MR. McCOMBS: David McCombs,  
7 Haynes and Boone, representing Twitter.

8 MR. ROBINSON: Eagle Robinson,  
9 Norton Rose Fulbright, representing VidStream.

10 MR. GREEN: Eric Green, Norton  
11 Rose Fulbright, representing VidStream.

12 JAMES LAWRENCE OLIVIER, Ph.D.,  
13 having been first duly sworn, testified as follows:

14 EXAMINATION

15 BY MR. McDOLE:

16 Q. Good morning, Dr. Olivier. Could you  
17 state your full name for the record.

18 A. My full name is James Lawrence Olivier.

19 Q. And do you understand that you're under  
20 oath here today, under penalty of perjury?

21 A. Yes, I do.

22 Q. And that's the same as if you were  
23 testifying in court?

24 A. Correct.

25 Q. Now, how many times have you been deposed

1 J. OLIVIER - 7/26/18

2 in the past?

3 A. 20 to 25 times.

4 Q. Okay. Were those in all patent-related  
5 cases?

6 A. Not all were patent-related cases. Some  
7 were trade secret-related cases and some was a  
8 lawsuit that was personal against me.

9 Q. Okay. Now, for the sake of the court  
10 reporter, I promise to ask questions and allow you to  
11 finish your answers, if you'll allow me to -- me to  
12 finish my questions to make it easier on the court  
13 reporter here. Does that sound fair?

14 A. Yes.

15 Q. Okay. And if there is objections, unless  
16 you're instructed by your counsel not to answer, you  
17 understand that you're still required to provide an  
18 answer to the question?

19 A. Yes.

20 Q. And if you do not understand a question,  
21 will you let me know?

22 A. Yes.

23 Q. And if you provide an answer to a  
24 question, I will assume that you understood the  
25 question. Does that sound fair?

1 J. OLIVIER - 7/26/18

2 A. Sure.

3 Q. Okay. Now, do you understand that you're  
4 appearing for deposition today regarding two  
5 declarations that you filed in IPRs on behalf of  
6 VidStream?

7 A. Correct.

8 Q. Okay. I'm going to hand you those two  
9 declarations. They have been previously marked as  
10 Exhibit 2008 in IPR2017-00830 and Exhibit 2008 in  
11 IPR2017-00829.

12 Do those appear to be the declarations  
13 that you submitted on behalf of VidStream in those  
14 IPRs?

15 A. (Pause.)  
16 This one doesn't have my signature on it.

17 MR. BAJAJ: Was the signature  
18 added as markup?

19 THE WITNESS: It could have been.  
20 I did it as a signature stamp.

21 MR. McDOLE: Counsel, can we get a  
22 printout of the one with the -- I think it's just  
23 a printing issue with a stamp.

24 MR. BAJAJ: Yeah, I think you're  
25 right. I think we can do that.

1 J. OLIVIER - 7/26/18

2 MR. McDOLE: All right. Fair  
3 enough. Thanks.

4 (Break.)

5 Q. Dr. Olivier, I handed you new versions of  
6 the declarations that you submitted in IPR2017-00829  
7 and IPR2017-00830. Have you had a chance to look at  
8 those?

9 A. Yes.

10 Q. And are those accurate versions of the  
11 declarations you've submitted in those two IPRs?

12 A. Yes.

13 Q. And if you turn to -- let's start with  
14 IPR2017-00829. If I refer to that as your 829  
15 declaration, will you understand that I'm referring  
16 to the declaration filed in the 829 IPR?

17 A. Yes.

18 Q. And if I refer to the 830 declaration or  
19 the declaration in IPR2017-00830 as the 830  
20 declaration, will you understand that I'm referring  
21 to the declaration in that IPR?

22 A. Yes.

23 Q. Okay. For the most part, I'll be  
24 referring to the 829 declaration today, but I'll try  
25 to make it clear as to what I'm referring to as we go

1 J. OLIVIER - 7/26/18

2 through.

3 Now, are there any errors in your declaration  
4 that you're aware of, either the 829 or the 830  
5 declaration?

6 MR. ROBINSON: Objection; form.

7 A. None as I sit here right now. If I see  
8 some, I'll point them out to you.

9 Q. Okay. When was the last time that you  
10 reviewed either of your declarations?

11 A. Yesterday.

12 Q. And did you find any errors in your  
13 declaration in your review yesterday?

14 A. Not that I remember, but...

15 Q. Okay. Should the Board expect any errors  
16 in your 829 or 830 declarations when they read them?

17 MR. ROBINSON: Objection; form.

18 A. As an engineer, sometimes I make typos so  
19 there is probably one or two typos in here is  
20 typically what occurs, but outside of that, I don't  
21 recall any errors.

22 Q. Okay. In drafting your 829 and 830  
23 declarations, were you careful in the words that you  
24 considered and used?

25 MR. ROBINSON: Objection; form.



1 J. OLIVIER - 7/26/18

2 A. I tried to be, yes.

3 Q. Okay. What materials did you review in  
4 forming your opinions with respect to the 829  
5 declaration?

6 A. I reviewed the '997 patent and its file  
7 history. I also reviewed the materials that are  
8 cited within my declaration. In addition to that, I  
9 reviewed the deposition testimony of Almeroth,  
10 Dr. Kevin Almeroth, the U.S. Patent 7,327,061. I  
11 reviewed an archived copy of PC.net web page and an  
12 archived copy of -- another archived copy of PC.net  
13 web page that I included as exhibits.

14 Q. Okay. Anything else?

15 A. So it would be all the art that  
16 Dr. Almeroth cited and also the art that I've cited  
17 in here. I can't think of anything else off the top  
18 of my head.

19 Q. Okay. And you said you reviewed the file  
20 history for the '997 patent. How many file histories  
21 did you review?

22 A. I don't recall off the top of my head how  
23 many file histories I reviewed. I reviewed the '997  
24 file history. I don't recall if I reviewed any other  
25 parent application file histories of that or not.

1 J. OLIVIER - 7/26/18

2 Q. Did you review any other parent  
3 applications to the '997 patent?

4 A. I don't recall one way or another.

5 Q. Did you review all the exhibits submitted  
6 with the petition for inter partes review for the  
7 829 -- and the 829 IPR?

8 A. I reviewed all the art that was cited in  
9 Dr. Almeroth's declaration. I don't know if that  
10 corresponds exactly with what the petitioner cited or  
11 not.

12 Q. Okay.

13 A. I was asked to review Dr. Almeroth's  
14 declaration and see where I disagreed or agreed with  
15 him on his opinion.

16 Q. Okay. Let's turn to the 830 declaration.  
17 What materials did you review in forming your  
18 opinions with respect to the 830 declaration?

19 A. Well, it would be -- since they all have  
20 to deal with the same patent, I didn't separate in my  
21 mind when I was dealing with one or the other. So it  
22 would be all the art I cited earlier when talking  
23 about the 829 declaration.

24 Q. Okay.

25 A. In my mind, I consciously didn't separate

1 J. OLIVIER - 7/26/18

2 it into two different investigations. I took it as  
3 one investigation and the one patent.

4 Q. Okay. Approximately, how much time did  
5 you spend in drafting your 829 declaration?

6 A. In drafting or -- so I have to understand,  
7 by "drafting," do you mean the analysis part or just  
8 the writing part.

9 Q. Analysis and writing.

10 A. Okay. So it's one of those questions I  
11 want to make sure I understand.

12 Q. Understood.

13 A. And again, I didn't divide it between the  
14 829 and the 830 because there was so much overlap  
15 between the two. So on both of them, probably around  
16 60 -- 50 to 60 hours.

17 Q. Okay. Did you review the petition for  
18 inter partes re-exam filed by Twitter in either the  
19 829 or the 830 IPRs?

20 A. Yes, I did.

21 MR. ROBINSON: Objection; form,  
22 foundation.

23 Q. I'm sorry. Let me re-ask my question  
24 because I think I misspoke.

25 Did you review the inter partes review petitions

1 J. OLIVIER - 7/26/18

2 filed by Twitter in the 829 or 830 IPRs?

3 A. I looked them over. I devoted almost  
4 entirely my effort to Dr. Almeroth's declaration so I  
5 looked them over. I received them, but I wouldn't  
6 say I studied them in any detail.

7 Q. Okay. Have you reviewed VidStream's  
8 response -- strike that.

9 Have you reviewed VidStream's patent owner  
10 response to the 829 petition?

11 A. No.

12 Q. Have you reviewed VidStream's response to  
13 the 830 petition?

14 A. No.

15 Q. Have you reviewed the institution decision  
16 in the 829 IPR?

17 A. I looked it over briefly.

18 Q. Okay. Have you reviewed the institution's  
19 decision in the 830 IPR?

20 A. Again, I think I looked it over briefly.

21 Q. Okay. Is there anything you disagree with  
22 in the institution decision with respect to the 829  
23 IPR?

24 MR. ROBINSON: Objection; form,  
25 foundation, scope of his declaration.

1 J. OLIVIER - 7/26/18

2 A. Yes. I wasn't asked to form an opinion on  
3 whether I agreed or disagreed with the institution  
4 decision so I didn't perform any analysis in order to  
5 reach a conclusion on that.

6 Q. Is that true with respect to the 830  
7 institution decision as well?

8 MR. ROBINSON: Same objections.

9 A. Yes.

10 Q. Have you ever defined a streaming media  
11 system?

12 MR. ROBINSON: Objection; form.

13 A. I designed the receiver portions of  
14 streamer media systems. I've been involved in  
15 streaming media since my days back at AT&T Bell  
16 Laboratories. So I've been involved in standards  
17 spacers [phonetic], streaming media, and have  
18 designed receiver systems and worked in the -- worked  
19 and understood the head ends, the ends that are  
20 sending the video down and how they're designed, but  
21 I never particularly designed the front-end part.

22 Q. Where did you develop a -- or strike that.  
23 Where did you design the receiver end of a  
24 streaming media system?

25 A. That's -- so, yeah, I got -- sorry, I was

1 J. OLIVIER - 7/26/18

2 just thinking about it in my career and I do need to  
3 add there was one time when I designed the -- the  
4 side that was connecting up the videos. And that was  
5 when I was working at DSC and a BB-IN demonstration I  
6 did at SuperComm. Just to clarify my previous  
7 answer.

8 Q. Okay. So let's start with when you  
9 designed a receiver for streaming media systems.  
10 Where was that at?

11 A. So the first time I was working on that  
12 was when I was working at AT&T Bell Laboratories and  
13 I was working in designing asynchronous transfer mode  
14 systems and I was asked to work on developing a  
15 set-top box for the ATM transfer of video and video  
16 was one of the primary considerations in the  
17 development of the ATM networks for the receiver  
18 part.

19 Then there was some portion of the  
20 receiver part that I worked on at DSC in developing  
21 the video-on-demand delivery system that was  
22 demonstrated at SuperComm.

23 While at Marconi, I worked on what was known as  
24 triple-play systems, systems that could do voice,  
25 video, and data. And there was a number of

1 J. OLIVIER - 7/26/18

2 systems that I worked on at Marconi that were  
3 triple-play systems.

4 And then I worked at Telstrat working on  
5 delivering video to a switch that delivered  
6 video, including a HD TV and IP TV.

7 And then there was times I was working on  
8 consulting with AT&T about content delivery  
9 systems. So that would be the front end -- that  
10 would be the place where it was stored and also  
11 how it got to the receivers.

12 Q. Okay. And in each of those instances, you  
13 testified to, those streamed video?

14 A. There was some streaming video in each one  
15 of those. Correct.

16 Q. Okay. What do you consider yourself to be  
17 an expert in?

18 A. Data networking. I teach at SMU  
19 University, the graduate school, in MPLS which is a  
20 type of dated working technology which is  
21 particularly targeted to the delivery of video. It's  
22 probably one of the most important considerations  
23 today in the backbone networks.

24 So networking, communication protocols in  
25 networking, things of that nature I consider myself

1 J. OLIVIER - 7/26/18

2 an expert in.

3 Q. Anything else?

4 A. And software I consider myself an expert  
5 in because I've written so much software over the  
6 years. I have knowledge of various different levels  
7 based on my experience. Though I may not consider  
8 myself an expert in all of it, I have detailed  
9 knowledge in how web servers work, how -- how the  
10 communication works between browsers and web servers  
11 and things of that nature.

12 Q. Do you consider yourself a legal expert?

13 A. No.

14 MR. ROBINSON: Objection; form.

15 Q. Do you consider yourself an expert in  
16 patent law?

17 MR. ROBINSON: Objection; form.

18 A. No.

19 Q. Do you consider yourself an expert in  
20 patent infringement litigation?

21 MR. ROBINSON: Objection; form.

22 A. I guess I have to ask to understand that  
23 question because I have been an expert in patent  
24 infringement litigation, but I'm not quite sure that  
25 was the question you were asking.



1 J. OLIVIER - 7/26/18

2 Q. Let me rephrase. Do you consider yourself  
3 an -- well, strike that.

4 Do you consider yourself an expert in patent  
5 office procedure?

6 MR. ROBINSON: Objection; form.

7 A. No.

8 Q. Do you consider yourself an expert in the  
9 laws relating to inter partes reviews?

10 MR. ROBINSON: Objection; form.

11 A. No.

12 Q. Do you consider yourself a streaming  
13 content expert?

14 MR. ROBINSON: Objection; form.

15 A. Yes.

16 Q. Why?

17 A. Because of my experience in streaming  
18 content over 20 years.

19 Q. Okay. Do you consider yourself an  
20 internet applications expert?

21 MR. ROBINSON: Objection; form.

22 A. Not an expert, but a high level of  
23 understanding of it.

24 Q. Are you an expert in usability studies  
25 relating to websites?

1 J. OLIVIER - 7/26/18

2 MR. ROBINSON: Objection; form.

3 A. No. I have an understanding of basic  
4 website design principles and how you should design a  
5 website. And to be honest, over the years, I have  
6 visited a lot of websites. I have an understanding  
7 of websites, what's good website design and what's  
8 bad website design, but I haven't done any usability  
9 studies on websites.

10 Q. So in performing your analyses in the  
11 present IPRs, the 829 and the 830 IPRs, you didn't  
12 perform any usability studies?

13 MR. ROBINSON: Objection; form.

14 A. So I would have to ask what you mean by  
15 "usability studies."

16 Q. A study of how a user would perceive a  
17 particular website.

18 A. That's not typically what's known as  
19 usability studies. Usability studies are usually  
20 something like A/B testing where you send different  
21 web interfaces to different customers and try to  
22 determine the responses you get and how well they  
23 like those interfaces. So your -- I don't think your  
24 definition of usability studies was very -- was very  
25 clear to me.

1 J. OLIVIER - 7/26/18

2 Q. Okay. Well, using your definition of  
3 usability study, because I think that's actually what  
4 I meant, did you perform any usability studies with  
5 respect to the -- your declarations in the 829 or 830  
6 IPRs?

7 A. No, I --

8 MR. ROBINSON: Objection; form.

9 A. I didn't do any A/B testing between  
10 different websites' design and my analysis.

11 Q. You're not an expert in psychology?

12 MR. ROBINSON: Objection; form.

13 A. No.

14 Q. How do you stay current as to technologies  
15 that are within your expertise?

16 MR. ROBINSON: Objection; form.

17 A. By keeping up with conferences,  
18 proceedings, articles. One of the things actually I  
19 use in teaching my class is I use conference  
20 proceeding videos from Cisco and Juniper who  
21 regularly, over the years, maybe four times a year,  
22 maybe six times a year, have get-togethers where they  
23 present the newest technology, try to educate the --  
24 their customers on what's coming, what they can do  
25 about what's coming, and things of that nature. In

1 J. OLIVIER - 7/26/18

2 my class I've even taken those videos because I'm the  
3 one who got SMU registered as a Juniper partner so  
4 they give me access to teaching materials that I can  
5 use in my class. So through reading, through --  
6 almost all of these conferences are online so you  
7 don't have to attend -- every one of them is online.  
8 I should say it that way. You don't actually have to  
9 attend them to be there, but I keep up that way.

10 Q. Do you consider those -- make sure I got  
11 the terminology right. Are the Juniper and Cisco  
12 conferences, if I refer to them as conference videos,  
13 is that a fair characterization?

14 A. Teaching videos at Juniper or Cisco  
15 conferences would be the best way to say it.

16 Q. Are the teaching videos at Juniper and  
17 Cisco conferences considered authoritative?

18 MR. ROBINSON: Objection; form.

19 A. By "authoritative," what do you mean?

20 Q. Is it something that a person of ordinary  
21 skill in the art would look to as reference material?

22 MR. ROBINSON: Objection; form.

23 A. It's something a person of ordinary skill  
24 in the art would study. People of ordinary skill in  
25 the art would definitely -- that's the audience,

1 J. OLIVIER - 7/26/18

2 that's the intended. For reference, it's generally  
3 not reference material, it's not something you go  
4 look up an answer in. It's more a teaching  
5 experience. There is multimedia, there's a speaker,  
6 there's PDFs that they provide for each -- think of  
7 it as a lecture, is the best way of looking at it.

8 Q. Okay. Do you review IEEE articles?

9 A. Yes.

10 Q. Do you attend IEEE conferences?

11 A. Not recently. I have. I'm a member of  
12 the IEEE and actually working right now, starting a  
13 new venture in Dallas at the IEEE having to do with  
14 Blockchain.

15 Q. Do you review IEEE articles as reference  
16 material?

17 MR. ROBINSON: Objection; form.

18 A. I guess I'm a little confused. What do  
19 you mean by "as reference material"? I review IEEE  
20 articles in order to keep up in the industry. As  
21 reference material, I don't exactly know what you  
22 mean by that.

23 Q. Materials if you're looking -- by  
24 reference materials, I mean, if you're looking to do  
25 research or work, do you look to IEEE if you need

1 J. OLIVIER - 7/26/18

2 to -- strike that.

3 By reference material, I'm meaning that material  
4 that you may look to in your research or studies  
5 as a professor at SMU to inform you as to a  
6 particular way of doing something.

7 MR. ROBINSON: Objection; form.

8 A. Yes, sometimes you look to the IEEE for  
9 that.

10 Q. Okay. And would a person of ordinary  
11 skill in the art also look to IEEE articles as  
12 reference materials as I've defined it?

13 MR. ROBINSON: Objection; form.

14 A. They could.

15 Q. Okay. Now, in your declarations you  
16 testified that you reviewed PC.net materials?

17 A. Correct.

18 Q. Why did you review PC.net materials?

19 A. To -- to provide support for my opinion as  
20 to what the file designations meant on a particular  
21 file. I already knew it, but this just provided  
22 additional support. That's what I recall. If you  
23 hand them to me, I can probably understand more.

24 Q. Okay. Well, my question is, why did you  
25 choose PC.net as opposed to some other material?

J. OLIVIER - 7/26/18

MR. ROBINSON: Objection; form.

A. It was probably the first one I came across.

Q. Do you have any concerns that PC.net may not be accurate?

MR. ROBINSON: Objection; form.

A. No, not really. I mean, my understanding was to show that there is -- that the different file formats have to do with different video files, and that's pretty well known. I wasn't concerned whether or not it says MP4 for MPEG-4, or MPEG-4 for MPEG-4. It was just to show the differences between MPEG and MPEG-4 file designations.

Q. So you have confidence that materials at PC.net are accurate for purposes of the IPR?

MR. ROBINSON: Objection; form.

A. Reasonably accurate, yes.

Q. Does your 829 declaration contain all of the opinions you plan to provide in IPR2017-00829?

A. Yes, as I sit here these are the opinions that I have at this time.

Q. Okay. And does your 829 declaration include all off the bases for such opinions?

MR. ROBINSON: Objection; form.

1 J. OLIVIER - 7/26/18

2 A. Some of the bases may come from my  
3 experience and understanding over the years, but the  
4 bases for my opinion that I wanted to present to the  
5 Board are in here.

6 Q. Okay. And does your 830 declaration  
7 contain all of the opinions you plan to provide in  
8 IPR2017-00830?

9 A. Yes.

10 Q. And does the -- your 830 declaration  
11 contain all of the bases for such opinions in the 830  
12 IPR?

13 MR. ROBINSON: Objection; form.

14 A. Yeah, as I stated earlier, also some of  
15 the bases for my opinions include my experience.

16 Q. Okay. Now, when you reviewed articles on  
17 PC.net you used the Wayback Machine. Is that  
18 correct?

19 A. Correct.

20 Q. Why did you use the Wayback Machine?

21 A. Because I wanted to have support for my  
22 opinion that was from the time of near the invention  
23 of the patent.

24 Q. Okay. And how do you know that the  
25 Wayback Machine provides accurate versions of PC.net



1 J. OLIVIER - 7/26/18

2 web pages at the time of the invention of the '997  
3 patent?

4 A. I don't have personal knowledge how the  
5 Wayback Machine generates it. I know that's what it  
6 was developed for, was to archive articles at a  
7 particular time. So that's its intended operation.  
8 Whether or not it's 100 percent accurate or not, I  
9 don't know one way or another.

10 Q. Are you confident that the Wayback Machine  
11 provided accurate versions of the PC.net web pages  
12 that you downloaded?

13 MR. ROBINSON: Objection; form.

14 Q. For purposes of your declarations?

15 MR. ROBINSON: Asked and answered.

16 A. Again, as I understand, that's the purpose  
17 of the Wayback Machine, is to provide accurate  
18 information of articles at that particular time, web  
19 pages at that particular time.

20 Q. I understand that. What I want to know is  
21 are you confident -- strike that.  
22 You've submitted to the Board PC.net exhibits.  
23 Correct?

24 A. Correct.

25 Q. And in doing so, you have represented to

1 J. OLIVIER - 7/26/18

2 the Board that they came from a particular date.  
3 Correct?

4 MR. ROBINSON: Objection; form.

5 A. I've represented to the Board that the  
6 Wayback Machine said they came from a particular  
7 date.

8 Q. Are you confident that the date that the  
9 Wayback Machine provided you is accurate?

10 MR. ROBINSON: Objection; form,  
11 asked and answered.

12 A. Yes, as I said before, I am fairly  
13 confident that the Wayback Machine operates properly.  
14 I don't have personal knowledge of how the Wayback  
15 Machine operates. It's theoretically possible it  
16 makes mistakes in some times, but its intended  
17 function is to archive articles at a particular time,  
18 archive web pages at a particular time.

19 Q. Do you believe a POSITA would have looked  
20 to PC.net materials in 2012?

21 A. He could have.

22 Q. Would a person of ordinary skill in the  
23 art have looked to PC.net as reference material --

24 MR. ROBINSON: Objection; form.

25 Q. -- in 2012?

1 J. OLIVIER - 7/26/18

2 A. It -- it's a magazine that's -- that's  
3 readily available to people, a POSITA, and the POSITA  
4 probably wouldn't even need to do that. He would  
5 understand the differences of the file extensions,  
6 anyway. But as I said, this is just to provide  
7 support.

8 Q. Okay. What is realtime as related to  
9 transferring videos to a person for viewing?

10 MR. ROBINSON: Objection; form.

11 A. So you have to have -- realtime generally  
12 needs some sort of context. So when you're talking  
13 about realtime, what do you mean?

14 Q. Well, can you transfer video data in  
15 realtime?

16 MR. ROBINSON: Objection; form.

17 A. You can transfer video in a number of  
18 different ways. Realtime is not really an understood  
19 standard for transferring video. So I'm trying to  
20 understand what you mean by "realtime."

21 Q. Okay.

22 A. It's kind of like saying I'm doing it, but  
23 you're not giving me an understanding of what you're  
24 saying.

25 Q. Okay. A user can view video in realtime.

1 J. OLIVIER - 7/26/18

2 Correct?

3 MR. ROBINSON: Objection; form.

4 A. Again, it depends on your definition of  
5 realtime. A user can view video, a video can be  
6 going over a network and then can interpret some  
7 delays. So if those delays don't fall within your  
8 definition of realtime, you would probably say the  
9 user's not viewing in realtime.

10 If those delays do fall within your  
11 definition of realtime, then you can say the user is  
12 viewing it in realtime. So I was trying to  
13 understand what you meant by realtime when you  
14 said -- it just needs context to understand it.

15 Q. Do you have a definition of what realtime  
16 means?

17 A. Again, realtime depends on context.  
18 Realtime is generally thought of as something that is  
19 not material. So like in realtime in a millisecond  
20 clock would be really tight, whereas realtime in  
21 something in a process that takes longer would be a  
22 longer time frame. So realtime depends on the  
23 context.

24 Q. Okay.

25 A. We build realtime computing machines that

1 J. OLIVIER - 7/26/18

2 try to process information in what people call  
3 realtime, they're not processing it instantaneously.  
4 Realtime depends on when you expect a result so it  
5 doesn't cause an abnormal behavior.

6 Q. What does realtime broadcast TV  
7 distribution mean?

8 MR. ROBINSON: Objection; form.

9 A. Again, it would probably need some context  
10 to understand that. Typically it is -- realtime  
11 broadcast TV means you're broadcasting some sort of  
12 channel over some type of network that has sufficient  
13 speed in that the -- it appears like a television  
14 station, like you're receiving it on a television.

15 Q. Let's turn to Paragraph 51 of your 829  
16 declaration, and you used the word "realtime." What  
17 did you mean by "realtime" in Paragraph 51 of your  
18 829 declaration?

19 A. So in the -- the sentence we're referring  
20 to in Paragraph 51, we're talking about a system that  
21 has a CCD that is generating a stream of video data  
22 that can then be sent to -- on the screen of the  
23 video camera without ever storing a video data on a  
24 file. That kind of example is kind of like if you  
25 have your cell phone and you have the camera on, you

1 J. OLIVIER - 7/26/18

2 can observe it in realtime, you're seeing the picture  
3 as it's being pulled off of the CCD.

4 Q. And what did you mean by "realtime" in  
5 that instance?

6 A. That --

7 MR. ROBINSON: Objection; form,  
8 ask and answered.

9 A. -- there wasn't a sufficient delay in the  
10 processing of the video data from the camera to the  
11 screen so that it created any abnormal behavior to  
12 the user. The user could turn the camera and see  
13 that the camera was turning on the screen. So that  
14 would be how realtime would be understood in this  
15 context.

16 Q. Okay. Can -- can a user view a video in  
17 realtime if the video data is segmented?

18 MR. ROBINSON: Objection; form.

19 A. It depends on the segmentation.

20 Q. Why?

21 A. If you segment too large before sending,  
22 the delay will then become abnormal to the user and  
23 it will be an abnormal situation and he wouldn't  
24 perceive it as being realtime. If the segmentation  
25 is very small, the user may not perceive it and

1 J. OLIVIER - 7/26/18

2 therefore would think he's viewing it in realtime.

3 It's the user experience as opposed to the  
4 technology that has to deal with realtime.

5 Q. So in your opinion is realtime a  
6 subjective term?

7 MR. ROBINSON: Objection; form,  
8 foundation, beyond the scope of his declaration.

9 A. I -- I haven't formed any opinions on  
10 realtime. Realtime is -- is something, as I said  
11 earlier, is very closely tied to the expected  
12 behavior of a system. So in some cases the expected  
13 behavior would be a user interface so that may or may  
14 not be subjective. In other cases in realtime, like  
15 you have realtime constraints in applying -- a  
16 computer applying antilock brakes in a car. That's  
17 not going to be subjective. You have to do it in a  
18 particular time. Again, it depends on the context  
19 you're talking about realtime.

20 Q. Now, in Paragraph 51, going back to the  
21 same use of the word "realtime." In that instance,  
22 what happens to the video when it reaches the  
23 destination?

24 MR. ROBINSON: Objection; form,  
25 foundation.

1 J. OLIVIER - 7/26/18

2 A. Are we talking about the sentence -- which  
3 sentence in Paragraph 51 are we talking about?

4 Q. So the one that starts "Likewise."  
5 "Likewise, that video data could be transmitted to a  
6 device remote from the video camera (for example,  
7 streamed to a television using Apple AirPlay) for  
8 remote viewing in real time."

9 Do you see that?

10 A. Right. And it says, "(or substantially  
11 realtime after any transmission delay)."

12 Q. Correct. So in that instance, video is  
13 captured. Correct?

14 MR. ROBINSON: Objection; form,  
15 foundation, beyond the scope of his declaration.

16 A. So this talks about video being  
17 transmitted from a device. So the -- if you want to  
18 say that the video camera has created a video data,  
19 that's what I'm talking about here.

20 Q. Okay. And that video data is then  
21 transmitted to a destination. Correct?

22 A. Correct.

23 Q. What happens when the video data reaches  
24 the destination?

25 MR. ROBINSON: Objection; form,



1 J. OLIVIER - 7/26/18

2 foundation, beyond the scope of his declaration,  
3 calls for speculation.

4 A. What I say here is it's streamed to a  
5 television using Apple AirPlay.

6 Q. Is it stored at the destination?

7 MR. ROBINSON: Objection; form,  
8 foundation, beyond the scope.

9 A. I've never seen when I've streamed video  
10 using Apple AirPlay that it was ever stored on a  
11 destination.

12 Q. Do you know if data, video data is stored  
13 when using Apple AirPlay at the destination?

14 A. I haven't looked into that one way or  
15 another so I don't have an opinion on that right now.

16 Q. How do you know that Apple AirPlay streams  
17 video?

18 MR. ROBINSON: Objection; form,  
19 foundation.

20 A. I was -- I didn't investigate it to see  
21 exactly what protocol it was using. The way it  
22 appears to be operating is that it's streaming  
23 because there is no file stored at the destination,  
24 as far as I could tell. So that's one of the  
25 indications that it's being streamed. Streaming was

1 J. OLIVIER - 7/26/18

2 developed in order to prevent people from storing  
3 files at destinations.

4 Q. So is it your opinion that streaming is  
5 based on user perception?

6 MR. ROBINSON: Objection; form.

7 A. No.

8 Q. Is it your opinion that you determine  
9 whether video data is being streamed by whether it is  
10 stored at the destination?

11 MR. ROBINSON: Objection; form.

12 A. That is an indication that perhaps it is  
13 being streamed, yes.

14 Q. Okay. How do you know --

15 A. It's not absolute.

16 Q. How do you know that in using Apple  
17 AirPlay that video data is not stored at the  
18 destination?

19 A. Because in --

20 MR. ROBINSON: Objection; form,  
21 foundation, beyond scope.

22 A. The only thing I can say is my experience  
23 with it.

24 Q. Okay. And what's your experience that  
25 leads you to believe that its video data is not

1 J. OLIVIER - 7/26/18

2 stored at the destination?

3 A. In that I never saw any video stored at  
4 the destination when using it.

5 Q. Would you see videos stored at a  
6 destination -- well, strike that.

7 How would you go about determining whether video  
8 data is stored at the destination when using  
9 Apple AirPlay?

10 A. You would look to the Apple AirPlay, where  
11 the destination is, and see if any files are being  
12 stored there.

13 Q. Okay. And when have you looked to see if  
14 files are being stored in Apple AirPlay?

15 A. I didn't see anyplace to even store a file  
16 in my television, so I'm assuming it's not storing  
17 it.

18 Q. Are you saying your television does not  
19 have memory?

20 MR. ROBINSON: Objection; form,  
21 foundation, beyond the scope.

22 A. No, I'm not saying my television doesn't  
23 have memory.

24 Q. Okay. So are you --

25 A. I haven't seen a file system that was

1 J. OLIVIER - 7/26/18

2 storing video on my TV, so I didn't see any -- any  
3 evidence that anything was being stored there while  
4 it was doing Apple AirPlay.

5 Q. Okay. Well, sir, what I'm trying to get  
6 to is you have made a representation to the Board  
7 that video data is streamed to a television using  
8 Apple Airplay. Are you confident that that statement  
9 is 100 percent correct to say that to the Board under  
10 oath?

11 MR. ROBINSON: Objection; form,  
12 foundation, misrepresents his testimony.

13 A. It was an example I gave of streaming. I  
14 didn't go investigate the various details inside of  
15 there to make absolutely sure that it was streaming.  
16 So I believe it's correct, but I didn't undergo a  
17 detailed investigation in order to see if it was  
18 correct or not.

19 Q. Okay. Would you call that spec- -- that  
20 you speculated that video data is streamed to a  
21 television using Apple AirPlay?

22 A. No.

23 MR. ROBINSON: Objection; form.

24 Q. If you learned that Apple AirPlay actually  
25 used segmenting, as opposed to another method, would

1 J. OLIVIER - 7/26/18

2 you still believe that the statement was correct?

3 A. No, I would not.

4 MR. ROBINSON: Objection; form.

5 A. If I found that it was using segmenting,  
6 then I would say it's not streaming.

7 Q. Okay. Can -- can a -- can video data be  
8 segmented and not stored at the destination?

9 A. It would have to be --

10 MR. ROBINSON: Objection; form,  
11 foundation, beyond the scope.

12 A. -- it would have to be stored at least for  
13 a portion of time in order to be unpacked.

14 Q. Okay. And then the instance -- does video  
15 data have to be stored temporarily when it is  
16 streamed?

17 MR. ROBINSON: Objection; form.

18 A. You get into the difference between  
19 buffering and storing a file when you're talking  
20 about those particular things. There is always some  
21 sort of storage in any communication system, so data  
22 always has to be buffered in some way. It's just the  
23 way things work in the world.

24 Q. Okay. What's the difference between  
25 buffering and storing?

1 J. OLIVIER - 7/26/18

2 A. The difference between buffering and  
3 storing of files, what I was saying before, is a file  
4 has some sort of attributes that allow you to find  
5 it, whereas buffering is just an elastic container  
6 for holding data for a certain period of time.

7 Q. What's the difference between an elastic  
8 container and a file container?

9 MR. ROBINSON: Objection; form.

10 A. The difference between a file and a buffer  
11 is that a buffer can be made up of a simple memory,  
12 whereas a file has certain attributes and a file  
13 system has certain attributes in order to find a file  
14 within the system, as opposed to simple buffering,  
15 which doesn't have such characteristics.

16 Q. Okay. So my question was relating to  
17 what's the difference between an elastic container  
18 and a file container.

19 A. Well, I think I equated a --

20 MR. ROBINSON: Objection; form.

21 A. -- I equated a buffer to an elastic  
22 container. So I think the answer is the same.

23 Q. So a buffer -- well, strike that.  
24 So an elastic container can be made up of simple  
25 memory?

1 J. OLIVIER - 7/26/18

2 A. Yes.

3 Q. And a file container has to have the  
4 attribute in order to be able to find a file within  
5 the system?

6 MR. ROBINSON: Objection; form.

7 A. That's one -- I mean, there is -- there is  
8 differences between a file system and a -- and a  
9 simple buffer that's storing data for a certain  
10 period of time before sending it out. One of them  
11 had to do with how you -- how you reference the  
12 information within the two systems.

13 Q. So a buffer would not provide the ability  
14 to find the stored information?

15 MR. ROBINSON: Objection; form,  
16 foundation, beyond the scope.

17 A. A buffer has to have some way of finding  
18 information within it. All memory has to have some  
19 way of finding information in it, and a buffer is  
20 made up of memory. It's just the approach taken  
21 between simple buffering and a file system is -- is  
22 different.

23 Q. Would a person of ordinary skill in the  
24 art in 2012 understand that buffering -- a buffer --  
25 or -- strike that.

1 J. OLIVIER - 7/26/18

2 Would a person of ordinary skill in the art in  
3 2012 understand that buffering is a type of  
4 storing?

5 A. Yes.

6 MR. ROBINSON: Objection; form.

7 Q. What's the difference between storing and  
8 caching?

9 A. Caching is -- again, it's a context thing,  
10 but the first thing I think about when you talk about  
11 caching, and memory caching, is to temporarily store  
12 a copy of the -- the information in that -- in a  
13 certain place so that you can retrieve it faster than  
14 having to go back to a primary memory location in  
15 order to retrieve it. So it's like a secondary copy  
16 of it.

17 But, again, it completely depends on context.  
18 That's just the first context I think of when you  
19 say "caching."

20 Q. Okay. Is caching considered a type of  
21 storing?

22 MR. ROBINSON: Objection; form.

23 A. The context I was using for caching in  
24 what I just explained is a type of storing, yes.

25 Q. Would a person of ordinary skill in the



1 J. OLIVIER - 7/26/18

2 art in 2012 understand that caching is a type of  
3 storing?

4 MR. ROBINSON: Objection; form.

5 A. Again, a person of ordinary skill in the  
6 time of 2012 may or may not think of the type of  
7 caching I was talking about, because there is  
8 different types of caching, and it depends on  
9 context, but the type of caching I was talking about,  
10 a memory caching in a memory system, such as a CPU,  
11 he would understand that that's a type of storing.

12 Q. Okay. And in memory caching is  
13 information stored in a file?

14 MR. ROBINSON: Objection; form.

15 A. The type of caching I was referring to,  
16 which like is a Layer 2 cache in an Intel product,  
17 would not be a file system.

18 Q. Okay. Then how if -- if memory caching is  
19 not considered a file system, how would the computer  
20 be able to identify the cached information?

21 MR. ROBINSON: Objection; form,  
22 foundation --

23 A. In the --

24 MR. ROBINSON: -- beyond the  
25 scope.

1 J. OLIVIER - 7/26/18

2 A. -- in the Layer 2 caching system I'm  
3 referring to here he has pointers.

4 Q. Okay. And the pointer would identify the  
5 data?

6 MR. ROBINSON: Objection; form.

7 A. The -- there would be some sort of -- in  
8 the system I'm talking about, the -- the memory  
9 location that the CPU was trying to access would  
10 first pass into the cache to determine whether or not  
11 there is a cache hit or not.

12 If there is a cache hit, it would pull the  
13 information back out of the cache in the Layer 2  
14 cache and return it to the CPU. Otherwise it would  
15 go on the main memory, where it would pull the  
16 information from main memory and send it back to the  
17 CPU.

18 Q. Okay. What's a file?

19 MR. ROBINSON: Objection; form.

20 A. A file is a -- it's information that is  
21 identified through a file system. It's 1s and 0s  
22 that are -- can be represented as a -- an entity  
23 within a file system.

24 Q. Are there any particular attributes a file  
25 must have?

1 J. OLIVIER - 7/26/18

2 MR. ROBINSON: Objection; form.

3 A. Must have or typically does have?

4 Typically a file has a name, it has a location, it  
5 has file attributes associated with it, it has a file  
6 extension.

7 Q. Anything else?

8 A. What else does it usually have?

9 MR. ROBINSON: Objection; form,  
10 beyond the scope.

11 A. Typically there is a -- there is a set of  
12 pointers to tell you how to retrieve the file for the  
13 file system because they're not -- sometimes they  
14 work contiguously. There is usually a way of --  
15 there is usually some directory structure associated  
16 with a file system that allows you to group files  
17 together.

18 Q. How would I -- strike that.

19 How would a person of ordinary skill in the art  
20 distinguish between data saved in a file and data  
21 that's simply buffered in memory?

22 A. The data saved in a file would -- the  
23 first thing a person of ordinary skill would look to  
24 to see is if there was a name for that, because data  
25 stored in buffer doesn't have a name. So it's just

1 J. OLIVIER - 7/26/18

2 data in the buffer. So if you saw a named  
3 designation, you would say, "Oh, that's probably the  
4 file system name applied to this information."

5 Next you would probably see a file  
6 extension that would tell you what type of data  
7 you're expecting to look for inside that file. There  
8 would probably be a location associated where that  
9 file -- where is it at in a directory system.

10 So all those would inform a person of  
11 ordinary skill, or maybe even just a person who  
12 graduated undergraduate, that this is a file and not  
13 a buffer.

14 There is also the -- file systems tend to be made  
15 up of different types of memory usually. There  
16 is file systems that are stored on magnetic. You  
17 know, you can store them in different kinds of  
18 RAM. So there is -- whereas buffers are  
19 generally usually made up of just RAM because the  
20 idea is to get to it quickly and get the  
21 information out fast. Those are some of the  
22 differences that come to my mind.

23 Q. Okay. What were common video file formats  
24 in 2012?

25 MR. ROBINSON: Objection; form,

1 J. OLIVIER - 7/26/18

2 foundation, beyond the scope.

3 A. So there was FLV, there was MPEG, there  
4 was .mov. There was something -- I think it was .asf  
5 maybe, though I would have to check on that. So  
6 there was different file formats associated around  
7 2012.

8 Q. So FLV and MPEG were two types of common  
9 video files in 2012?

10 A. They were designations of the type of file  
11 that the video was stored in.

12 Q. Okay. And what does FLV stand for?

13 A. Flash video.

14 Q. Okay. Can you cache video data and then  
15 stream it?

16 MR. ROBINSON: Objection; form.

17 A. Can you cache video data and stream it? I  
18 haven't considered that. And, again, it depends on  
19 what you mean by "cache."

20 Q. Well, does the '997 patent include the  
21 word "cache"?

22 A. I don't recall. If you hand it to me, I  
23 can look through it.

24 Q. Sure. I hand you what has been previously  
25 marked as Exhibit 1001. Mark that in both of the

1 J. OLIVIER - 7/26/18

2 IPRs.

3 First, let's look at the '997 patent.  
4 Does the '997 patent use the word "cache"? And if we  
5 look at Column 10 about Line 17.

6 A. So you asked me whether the whole patent  
7 used it. Right? Is that correct?

8 Q. Yeah.

9 A. Okay. So I was going to review the whole  
10 patent to see where it used it.

11 Q. You're welcome to do so if you want to.  
12 I'm going to be referring to the part at Column 10,  
13 Line 17. So when you get there, pay particular  
14 attention there.

15 A. Okay.

16 (Pause.)

17 Okay. I'm on Column 10.

18 Q. Okay. And do you see at Column 10 about  
19 Line 17 starting at 16, it says, "More specifically,  
20 as video data is generated, the video data is cached  
21 and a predetermined amount of video data is  
22 intermittently transmitted from the client computing  
23 device to one or more of the back-end servers."

24 A. Yes.

25 Q. So focusing on the word "cached," can

1 J. OLIVIER - 7/26/18

2 video data be cached and then streamed?

3 A. Yes.

4 Q. Would a person of ordinary skill in the  
5 art cache video data and then stream it in 2012?

6 MR. ROBINSON: Objection; form,  
7 foundation, beyond the scope of his declaration.

8 A. So almost any -- a person of ordinary  
9 skill would understand that anytime you're  
10 transferring data from one point to another, you're  
11 temporarily buffering that information while you're  
12 sending that data.

13 And if you look up above around Line 5 in  
14 this same column, that's what the patentee is  
15 referring to when he's talking about caching here, in  
16 that the user device capture audio video data that is  
17 temporarily buffered in memory.

18 So whenever you're sending any kind of  
19 digital data, you necessarily have to use some sort  
20 of temporary buffering. So a person of ordinary  
21 skill would understand that in streaming, there is  
22 some type of temporary buffering going on.

23 Q. Okay. If you cache video data and send it  
24 in a file container format, in your opinion, that  
25 wouldn't be streaming. Correct?

1 J. OLIVIER - 7/26/18

2 A. Correct.

3 Q. Okay.

4 THE WITNESS: Can we take a break?  
5 We've been going for a bit and I'm out of water.

6 MR. McDOLE: Sure. Why don't we  
7 take a five-minute break.

8 (Break.)

9 Q. Welcome back, Dr. Olivier.

10 A. Thank you.

11 Q. If you cache video data -- or strike that.  
12 In your opinion, if you cache video data and send  
13 it in a file container format, that wouldn't be  
14 considered streaming. Correct?

15 MR. ROBINSON: Objection; form,  
16 asked and answered.

17 A. If you're sending files, you're not  
18 streaming.

19 Q. Okay. If you cache video data and send it  
20 in an FLV format, that wouldn't be streaming, either.  
21 Right?

22 MR. ROBINSON: Objection; form,  
23 foundation, beyond the scope of his declaration.

24 A. So streaming has a format. It doesn't  
25 have a file. So FLV format -- you could stream using



1 J. OLIVIER - 7/26/18

2 FLV format whether -- and, of course, you temporarily  
3 buffer any time you're sending any information over  
4 the internet.

5 Q. Okay. FLV is a file format, though.  
6 Right?

7 A. It's also a file format. It's also a way  
8 of formatting data, too.

9 Q. Okay. So what does FLV format mean?

10 MR. ROBINSON: Objection; form,  
11 asked and answered.

12 A. It is the flash video format.

13 Q. Okay. And your view is, is that means  
14 more than just a file?

15 MR. ROBINSON: Objection; form --

16 A. No --

17 MR. ROBINSON: -- asked and  
18 answered, mischaracterizes testimony.

19 A. Flash video format, it's a format. It's  
20 also a file designation. A file can be a flash video  
21 format. The important thing to understand is the  
22 files and formatted data, as it's being transported,  
23 are two different things. So when you tell me flash  
24 video format in streaming, I'm saying, yes, I can  
25 stream a flash video format, but that's different

1 J. OLIVIER - 7/26/18

2 than sending a file that is a flash video  
3 formatted -- or flash video file designated.

4 Q. Okay. Describe to me, in your opinion,  
5 how video streaming works.

6 MR. ROBINSON: Objection; form.

7 A. So the camera receives the CCD  
8 information. It then encodes it into particular  
9 codec. The data is then streamed. In other words,  
10 it's brought out of the buffer and sent on the  
11 internet at that particular codec. It's then  
12 received at a player, a video player, which then does  
13 the decompression of the video data and displays it  
14 on a screen.

15 Typically -- typically -- always there  
16 is a buffer at the player because of network jitter  
17 problems that occur. So at the particular example  
18 I'm giving, which is streaming video over the  
19 internet, which is one example of streaming, that's  
20 how that works. There's other examples of streaming,  
21 too.

22 Q. Okay. What are the other examples of  
23 streaming?

24 A. So you could just stream data over -- over  
25 ATM. You could just -- AAL 34 was the ATM adaptation

1 J. OLIVIER - 7/26/18

2 layer that was particularly developed just for  
3 transporting video. And that would be transporting  
4 video without a file format and without a file  
5 associated with it and a person would think that was  
6 streaming, also.

7 There is -- that's -- that's what I think about  
8 right now.

9 Q. Is video data that is streamed sent in a  
10 packet?

11 MR. ROBINSON: Objection; form,  
12 foundation, beyond the scope of his declaration.

13 A. Yes, if it's sent over the internet it's  
14 probably sent in a packet. If it's sent over ATM  
15 it's probably sent in a cell.

16 Q. And is a packet a container?

17 MR. ROBINSON: Objection; form.

18 A. A packet is an IP packet which is an IETF  
19 standardized packet. It's not a container in how I  
20 think of containers.

21 Q. If I say "transmit video data," do you  
22 know whether it's a stream or a file?

23 A. If you say it, no, I don't know. You have  
24 to give me more information.

25 Q. Okay. Packets do have identifying

1 J. OLIVIER - 7/26/18

2 information such as headers and footers. Correct?

3 MR. ROBINSON: Objection; form,  
4 beyond the scope of his declaration.

5 A. Correct. Packets have headers and footers  
6 associated with them. All the information sent over  
7 the internet is in a packet format.

8 Q. Is Netflix a video streaming service?

9 MR. ROBINSON: Objection; form,  
10 foundation, beyond the scope of his declaration.

11 A. I didn't investigate one time or to see if  
12 Netflix was a video streaming service and what one  
13 would understand video streaming to be in light of  
14 the '997 patent and so I don't have an opinion on  
15 that.

16 Q. Would a person of ordinary skill in the  
17 art in 2012 consider Netflix to be a video streaming  
18 service?

19 MR. ROBINSON: Objection; form,  
20 foundation, beyond the scope, asked and answered.

21 A. I -- the video streaming or how video  
22 stream is -- how I applied the claim construction for  
23 video streaming, he would have to look to how Netflix  
24 was transporting the information in order to  
25 determine whether or not there was a video streaming

1 J. OLIVIER - 7/26/18

2 service in that definition.

3 Q. Do you know if Netflix uses MPEG-DASH?

4 MR. ROBINSON: Objection; form,  
5 foundation, beyond the scope, asked and answered.

6 A. So I don't think in 2012 they were using  
7 MPEG-DASH because that's a more recent development  
8 and I am not -- it's not germane to my opinion one  
9 way or another what Netflix uses today as far as how  
10 they transport information.

11 Q. Do you own any -- strike that.  
12 Do you have a subscription to any movie-based  
13 service such as Netflix?

14 A. Yes, I do.

15 Q. Based on -- what is that subscription  
16 service?

17 A. Netflix.

18 Q. Based on your use of Netflix, you don't  
19 know whether they stream video?

20 MR. ROBINSON: Objection; form,  
21 foundation, beyond the scope, asked and answered.

22 A. That's absolutely correct. I didn't  
23 investigate as an engineer to see how Netflix is  
24 transporting the video from one point to another. So  
25 I don't know if they're a video streaming service, if

1 J. OLIVIER - 7/26/18

2 they're doing progressive download. I know that 2012  
3 there was a conversion for YouTube when YouTube  
4 switched from progressive download to streaming and  
5 so I don't know the state as it sits right now  
6 whether Netflix is using streaming technology or  
7 using progressive download technology because I  
8 didn't investigate it and it's not germane to my  
9 opinions.

10 Q. You didn't investigate Apple AirPlay,  
11 either?

12 A. Correct.

13 Q. Based on your testimony. Correct?

14 A. Correct.

15 Q. But you felt comfortable to put that into  
16 your opinion to the Board?

17 MR. ROBINSON: Objection; form,  
18 asked and answered.

19 A. It was an example. It's not germane to my  
20 opinion one way or another if it does the -- whether  
21 it's performing streaming or not. It was just an  
22 example. It doesn't inform my opinion in any way,  
23 shape, or form, or change it if it all of a sudden it  
24 was determined that it was doing progressive download  
25 verses streaming.

1 J. OLIVIER - 7/26/18

2 Q. Can video files be streamed?

3 MR. ROBINSON: Objection; form.

4 A. Some video files can be streamed.

5 Q. How?

6 A. How? By extracting the video data from  
7 the video file and then streaming it over the  
8 transport media.

9 Q. Okay. Would a person of ordinary skill in  
10 the art in 2012 know how to -- know that video files  
11 could be streamed?

12 MR. ROBINSON: Objection; form,  
13 beyond the scope.

14 A. Yes. Video -- a person in 2012 would  
15 understand that you can stream files.

16 Q. Okay. Would a person of ordinary skill in  
17 the art ever call video files being streamed as a  
18 video stream?

19 MR. ROBINSON: Objection; form,  
20 foundation.

21 A. A person of ordinary skill would  
22 understand that a video stream -- that streaming a  
23 file would be grabbing the video data out of the file  
24 and sending it across such that there is no longer --  
25 such that it's independent and not associated with

1 J. OLIVIER - 7/26/18

2 the video file and that would be a type of video  
3 streaming.

4 Q. What is segmenting, in your opinion?

5 MR. ROBINSON: Objection; form.

6 A. So segmenting as I discussed in my  
7 declaration is a type of -- a way of moving small  
8 files from one part of the internet to the other part  
9 of the internet.

10 Q. Okay. And is segmenting inferior to video  
11 streaming?

12 MR. ROBINSON: Objection; form.

13 A. It depends completely on what you're using  
14 to measure the inferiority or not. There is pluses  
15 and minus to both ways of doing it, which is why in  
16 2012 YouTube was switching from one to the other. So  
17 when you say "inferior," you have to give some sort  
18 of criteria to determine inferior as to what.

19 Q. Okay. In your opinion, is segmenting --  
20 strike that.

21 In your opinion, does segmenting fall within the  
22 scope of any of the claims of the '997 patent?

23 MR. ROBINSON: Objection; form,  
24 foundation, beyond the scope of his declaration.

25 A. And by "segmenting," especially if I'm



1 J. OLIVIER - 7/26/18

2 going to match it to claim terms, I need to have a  
3 very clear understanding of what you mean by the word  
4 "segmenting."

5 Q. You described what segmenting was in your  
6 declaration. Correct?

7 A. Correct.

8 Q. Using that definition of segmenting, does  
9 segmenting fall within the scope of any claim of the  
10 '997 patent?

11 MR. ROBINSON: Objection; form,  
12 foundation, beyond the scope of his declaration.

13 A. It wasn't analysis I was asked to perform,  
14 but I can take a look at it if you'd like.

15 Q. Are you saying that you did not offer an  
16 opinion as to whether the prior art is segmenting  
17 versus video streaming?

18 MR. ROBINSON: Objection; form.

19 A. No.

20 MR. ROBINSON: Foundation.  
21 Mischaracterizes his testimony.

22 A. No, I didn't say that. You asked me in  
23 regards to all of the claims in the patent. Correct?

24 Q. Yes.

25 A. And I said I didn't perform an analysis on

1 J. OLIVIER - 7/26/18

2 all the claims in the patent to see if it falls  
3 underneath the definition of segmenting which I gave  
4 in my declaration.

5 Q. Let's start with the 829 declaration,  
6 then. You offered an opinion as to Claims 1 through  
7 13 in the 829 declaration. Correct? I'm sorry. 1  
8 through 19.

9 A. Yeah. I was going to say. Correct.

10 Q. Does segmenting fall within the scope of  
11 Claims 1 through 19 of the '997 patent, in your  
12 opinion?

13 MR. ROBINSON: Objection; form,  
14 foundation, goes beyond the scope of his  
15 declaration.

16 A. Yeah, I said that wasn't an analysis I was  
17 asked to perform, but I will do it right now.

18 MR. ROBINSON: So I need to make  
19 clear we're not here to pay Dr. Olivier to form  
20 new opinions. If there are specific opinions you  
21 want to ask him, please feel free.

22 MR. McDOLLE: Counsel, please don't  
23 make speaking objections on the record. You made  
24 your objection, now you're just speaking and  
25 trying to influence the witness.

1 J. OLIVIER - 7/26/18

2 MR. ROBINSON: I'm not trying to  
3 influence him at all. We can have this  
4 conversation outside of his presence if you'd  
5 like.

6 MR. McDOLE: I'm going to ask my  
7 questions and you can provide your objections and  
8 if you have an issue, you can raise it with the  
9 Board. I disagree with your objection.

10 A. (Pause.)  
11 Is it okay? I generally do this by taking notes  
12 of some kind. So how do I do that?

13 Q. Sure. Paper. And here's a pen.

14 A. Thank you.

15 Q. Again, my question was, does segmenting  
16 fall within the scope of Claims 1 through 19 of the  
17 '997 patent, in your opinion?

18 MR. ROBINSON: Same objections.

19 A. (Pause.)

20 MR. McDOLE: We can go off the  
21 record. Just given that there is a question  
22 pending, I want to make sure you're not going to  
23 be talking to your counsel.

24 THE WITNESS: Okay.

25 MR. ROBINSON: I won't go

1 J. OLIVIER - 7/26/18

2 anywhere.

3 (Break.)

4 A. You don't, by chance, have the file  
5 history with you, do you?

6 Q. Not with me, no.

7 A. Okay. Or the '506 or '304 patent?

8 Q. No.

9 A. (Pause.)

10 THE WITNESS: Can you read the  
11 pending question back to me.

12 (The requested material was read.)

13 Q. Does segmenting fall within the scope of  
14 Claims 1 through 19 of the '997 patent, in your  
15 opinion?

16 A. Okay. Without being able to review the  
17 file history and only being able to review the '997  
18 patent, it's difficult to make a determination on  
19 claim terms, but the way I see it right now is that  
20 the segmenting -- get this right.  
21 Segmenting would not fall within Claims 1 through  
22 12 or 15 or 16.

23 Q. And you provided that answer after about  
24 an hour of reviewing the '997 patent?

25 A. Yes. So that was the only information I

1 J. OLIVIER - 7/26/18

2 had to review. Based on that I wasn't given access  
3 to the file history or some of the patents that are  
4 incorporated by reference in the '997 patent.

5 Q. Okay. And you have reviewed the file  
6 history and the patents that are incorporated in the  
7 specification by reference previously. Correct?

8 A. I have reviewed them. I haven't reviewed  
9 them in regards to certain claim terms that are --  
10 I've been asked to make an understanding of.

11 Q. Okay. Just a few more questions and then  
12 we can break for lunch.

13 With respect to segmenting, video is  
14 sent -- strike that.

15 With respect to segmenting, video data is sent in  
16 small files to a destination. Correct?

17 MR. ROBINSON: Objection; form.

18 A. Yeah, I think I described segmenting in  
19 here in my declaration.

20 (Pause.)

21 I can't find it right now, but segmenting -- one  
22 of the processes in segmenting is to generate  
23 small files of video files.

24 Q. Okay. And those files are then -- strike  
25 that.

1 J. OLIVIER - 7/26/18

2 Those files, after they're divided into smaller  
3 files, are then sent sequentially to the  
4 destination?

5 MR. ROBINSON: Objection; form.

6 A. When you said -- when I -- your question  
7 seemed to imply that there were a larger file that  
8 got divided into smaller files.

9 Q. So if we -- maybe I can point you to it.  
10 If you can go to Paragraph 19.

11 A. In which one?

12 Q. The 829 declaration. Page 19.

13 A. Page 19. Got it.

14 Q. In Paragraph 55.

15 Okay. So in the middle, you talk about  
16 segmenting or chunking the files, dividing a video  
17 file into a set of smaller files?

18 A. That's one way of doing it.

19 Q. Okay. And the way --

20 A. There is other ways of just generating it.  
21 If it's a live video, you would just generate the  
22 smaller files.

23 Q. Okay. And when those smaller files are  
24 generated, they're sent sequentially to the  
25 destination and saved at the destination?

1 J. OLIVIER - 7/26/18

2 MR. ROBINSON: Objection; form.

3 A. They typically are, as soon as they're  
4 generated, sent so they could be sequentially.

5 Q. Okay. If it were a live file, those  
6 smaller video files would be sent sequentially.  
7 Correct?

8 MR. ROBINSON: Objection; form.

9 A. If it was a live video?

10 Q. A live video file.

11 A. Yeah. They're generated for a particular  
12 time and then sent.

13 Q. Okay. And so they're sent sequentially?

14 MR. ROBINSON: Objection; form.

15 A. They're not intentionally sent out of  
16 order.

17 Q. Okay. Is there any time in segmenting  
18 where a file is intentionally sent out of order?

19 A. No.

20 MR. ROBINSON: Objection; form.

21 A. It's not something you try to do.

22 Q. Okay. So the intention with segmenting is  
23 to send smaller files sequentially to the  
24 destination?

25 A. That's --

1 J. OLIVIER - 7/26/18

2 MR. ROBINSON: Objection; form.

3 A. In order of time frame, yes.

4 Q. Okay. Are streaming and segmenting  
5 understood to be alternative methods for video  
6 transfer?

7 MR. ROBINSON: Objection; form.

8 A. Yes.

9 Q. If a POSITA was designing a video system  
10 in 2012, would it be a design choice for them to  
11 choose either video streaming or segmenting?

12 MR. ROBINSON: Objection; form,  
13 beyond the scope, calls for speculation.

14 A. It is different ways of transporting video  
15 that they understood existed at the time so they  
16 could -- they could choose one way or another way.

17 Q. Okay. And both video streaming and  
18 segmenting existed in 2012?

19 A. Yes.

20 MR. McDOLE: Why don't we break  
21 for lunch.

22 MR. ROBINSON: Okay.

23 Q. One more question before we go off the  
24 record. In any of your previous breaks, have you  
25 discussed your testimony, the substance of your



1 J. OLIVIER - 7/26/18

2 testimony or your declaration with counsel?

3 A. No.

4 MR. McDOLE: We can take a break.

5 Thank you.

6 (Break.)

7 Q. Welcome back, Dr. Olivier. First thing I  
8 want to do is mark your notes that you took, which  
9 fixed some of those last questions. So if you can  
10 hand those over to me. I'm going to mark the notes  
11 that you took as Exhibit 1034.

12 (Exhibit 1034 was marked.)

13 Q. If I could have you turn to the '997  
14 patent. And specifically Column 10 at lines --  
15 starting at Line 38, starting with "In general." Can  
16 I have you read the first sentence or however much  
17 you need to get some context?

18 A. Column 10. What lines?

19 Q. Starting at Line 38.

20 A. 38. Okay.

21 (Pause.)

22 Okay.

23 Q. Is one of the goals of the '997 patent to  
24 provide an easy-to-use system?

25 MR. ROBINSON: Objection; form.

1 J. OLIVIER - 7/26/18

2 A. It says here an easy-to-use interface. So  
3 I would say that one of the descriptions in the  
4 specification talks about it providing an  
5 "easy-to-use interface."

6 Q. Okay. So you don't have an opinion as to  
7 whether one of the goals of the '997 patent includes  
8 providing an easy-to-use system?

9 MR. ROBINSON: Objection; form,  
10 asked and answered.

11 A. If you want, I can review the patent and  
12 develop an opinion. I didn't put any of those  
13 opinions in my declaration.

14 Q. Okay. That's fine. If we could turn to  
15 Paragraph 79 of your 829 declaration. Are you there?

16 A. Yes.

17 Q. At the bottom of Paragraph 79 you say  
18 "Rather than streaming the video content from the  
19 locally-stored MPEG file, a POSITA would have instead  
20 simply uploaded the MPEG file either using whole-file  
21 transfer or segmenting, thereby avoiding the risk or  
22 errors described in Paragraph 72 above."

23 Do you see that?

24 A. Yes.

25 MR. ROBINSON: Objection; form,

1 J. OLIVIER - 7/26/18

2 misstates testimony.

3 Q. Is there anything I read incorrectly  
4 there?

5 A. I don't believe so.

6 MR. ROBINSON: Objection; form.  
7 Best evidence.

8 Q. Okay. Is it your opinion that a person of  
9 ordinary skill in the art in 2012 would not stream  
10 video from a locally stored file?

11 MR. ROBINSON: Objection; form,  
12 foundation, calls for speculation.

13 A. So in the -- Paragraph 79 is describing  
14 Nassiri. And the locally stored file we're referring  
15 to is the file on the contributing computer system in  
16 Nassiri.

17 So in that regards, I don't believe it  
18 would have made sense for someone of ordinary skill  
19 reading Nassiri to stream the -- a locally stored  
20 MPEG-4 file. You would have just transferred it, as  
21 I stated here. Instead would simply upload the  
22 MPEG-4 file using either whole-file transfer or  
23 segmenting.

24 Q. Okay. And my question was a little bit  
25 broader than that. My question is is it your opinion

1 J. OLIVIER - 7/26/18

2 that a person of ordinary skill in the art would not  
3 stream video from a locally stored file?

4 MR. ROBINSON: Objection; form,  
5 foundation, calls for speculation, outside the  
6 scope.

7 A. So in some situations you could stream  
8 from a locally stored file. I mean, it doesn't make  
9 sense to stream from a remotely stored file. I was  
10 talking about in the context of Nassiri. You  
11 wouldn't stream from that locally stored file.

12 Q. Okay. And why wouldn't you stream from  
13 the locally stored file in Nassiri, but in other  
14 instances someone could stream from a locally stored  
15 file?

16 MR. ROBINSON: Objection; form,  
17 foundation --

18 A. That goes back --

19 MR. ROBINSON: -- assumes facts  
20 not in evidence.

21 A. -- back to the fundamental difference  
22 between streaming and as we're calling whole-file  
23 transfer or segmenting here. The whole driving force  
24 behind streaming was so that you could prevent  
25 someone from having a complete file at the

1 J. OLIVIER - 7/26/18

2 destination.

3 So in the situation where you don't want  
4 someone to have a complete file at the destination,  
5 such as like you are streaming a television program  
6 and you don't want a person to be able to copy that  
7 television program, you would use streaming. So you  
8 could stream the locally stored file down if you  
9 didn't want a person to have a copy of -- like you  
10 had a movie, let's say, and you were playing it. You  
11 wouldn't want that person to get a copy of that  
12 movie. You wouldn't want the file to be transferred,  
13 the movie file to be transferred down to the user.  
14 You would use streaming in that regard.

15 Q. So streaming is used to prevent the  
16 destination from having the whole file?

17 MR. ROBINSON: Objection; form.

18 A. That was one of the reasons streaming was  
19 developed, to make it difficult for the destination  
20 to have the whole file. You have to understand how  
21 streaming works in order to understand why it works  
22 that way.

23 Q. Okay.

24 A. You never contain the whole entire file at  
25 the streamed location.

1 J. OLIVIER - 7/26/18

2 Q. The streamed location is the destination.  
3 Correct?

4 A. Correct. So that's one of the advantages  
5 of streaming, over the other types of downloading we  
6 discussed.

7 Q. So in video streaming you never contain  
8 the entire file at the destination?

9 MR. ROBINSON: Objection; form,  
10 foundation.

11 A. No. It was one of the goals of streaming,  
12 is to make it difficult for the person to -- to make  
13 a copy of your video at the destination. You can --  
14 there is ways of working around almost anything, but  
15 it is a goal of streaming in order to -- it's -- it's  
16 one of the reasons you would apply streaming, is if  
17 you didn't want the person to be able to have a copy  
18 of your, let's say, the latest "Star Wars" movie and  
19 be able to put it out on the internet.

20 Q. Okay.

21 A. So when you say "never," you can't say  
22 never. It is always possible to work around things.

23 Q. Okay. Does the streaming of the '997  
24 patent prevent a destination to have the entire video  
25 file?

1 J. OLIVIER - 7/26/18

2 A. No.

3 Q. In fact, the claims of the '997 require  
4 storing the entire file at the destination. Correct?

5 A. Some claims do.

6 Q. For video streaming, is video data  
7 transmitted to the destination while the video is  
8 being recorded?

9 MR. ROBINSON: Objection; form.

10 A. You would have to give me more information  
11 about what system you're describing.

12 Q. What additional information would you need  
13 to know?

14 A. So your question was as the video is being  
15 recorded in the '997, it's being recorded at a  
16 destination. So I would need more understanding of  
17 what -- what the system is you're talking about.

18 Q. As it's being captured.

19 A. As it's being captured.

20 Q. So --

21 A. In the '997?

22 Q. Just in generally [sic].

23 A. In general?

24 MR. ROBINSON: Objection; form.

25 Q. In generally -- strike that.

1 J. OLIVIER - 7/26/18

2 Generally, in video streaming is video data  
3 transmitted while it is being recorded and  
4 captured?

5 MR. ROBINSON: Objection; form.

6 A. It depends how the capturing is set up in  
7 the particular system.

8 Q. Okay. So if a person of ordinary skill in  
9 the art was told that the video is being transmitted  
10 as it's being recorded, they would not understand  
11 that to be video streaming?

12 MR. ROBINSON: Objection; form.

13 A. I don't think they would understand your  
14 question, no. I didn't understand your question.

15 Q. Okay. So if a person of ordinary skill in  
16 the art was told that video data is being transmitted  
17 as it's being recorded, they would not understand  
18 that to be video streaming?

19 A. Without --

20 MR. ROBINSON: Objection; form.

21 A. -- without more context they wouldn't  
22 understand what you're talking about in that  
23 sentence.

24 Q. Okay.

25 A. I would need more context about what kind



1 J. OLIVIER - 7/26/18

2 of system you're talking about in order to have any  
3 opinion about what one of ordinary skill would  
4 understand.

5 Q. Okay. Can you generate a video file from  
6 a number of video file segments?

7 MR. ROBINSON: Objection; form.

8 A. In some cases you can.

9 Q. Are there cases where you can't?

10 A. If they were incompatible video segments,  
11 you couldn't generate a video file.

12 Q. Okay. So can you generate a video file  
13 from a number of video file segments that are  
14 compatible?

15 MR. ROBINSON: Objection; form.

16 A. Typically --

17 MR. ROBINSON: Beyond the scope.

18 A. -- typically I think you could.

19 Q. Okay. A video stream and a video file are  
20 two different things. Correct?

21 A. Correct.

22 Q. What's the difference?

23 A. I endeavor to explain that.

24 A video file has certain characteristics  
25 that we talked about earlier when we were talking

1 J. OLIVIER - 7/26/18

2 about files, about what characteristics files have.  
3 They have a name. Typically in video files there is  
4 some container format that's used to store the  
5 information. They have a codec dissociated with it.  
6 They're stored in a file system.

7 Video that's being streamed doesn't have  
8 that types [sic] of information. It's more generally  
9 the video data and the codec that's being used to  
10 compress or uncompress the video data.

11 Q. If you stream video from a file, is it  
12 still a video stream?

13 MR. ROBINSON: Objection; form.

14 A. Yes. You can take the video data out of  
15 the video file and create a video stream, and send  
16 that video stream.

17 Q. Okay. But that video stream, because it  
18 came from a file, still had a file associated with  
19 it. Correct?

20 A. No.

21 MR. ROBINSON: Objection; form.

22 A. You remove the association between the two  
23 when you generated a stream.

24 Q. So the second that there is a stream, it's  
25 your opinion that the video stream is no longer

1 J. OLIVIER - 7/26/18

2 associated with the file it came from?

3 MR. ROBINSON: Objection; form.

4 A. Correct. When you -- when you deconstruct  
5 the file and create the video stream from that file,  
6 you've now -- no longer associate that stream with  
7 that file. That stream in itself is not associated  
8 any longer with that file. It's just video data.

9 Q. Okay. Does the disassociation happen  
10 before or after the codec?

11 MR. ROBINSON: Objection; form.

12 A. Before or after -- codec is encoding and  
13 decoding. So do you mean before or after encoding,  
14 decoding?

15 Q. Yes.

16 A. You mean both?

17 Q. Well, we're on the user side, the client.

18 A. On the client side?

19 Q. We're on the client side. And we have a  
20 file, and we're going to stream the information.

21 So at what point does the video stream  
22 become disassociated with the file?

23 MR. ROBINSON: Objection; form.

24 A. When you've removed the file attributes  
25 and information from the video. When you've removed

1 J. OLIVIER - 7/26/18

2 the information associated with the file and only  
3 have a video data and a codec dissociated with it.  
4 After the file information is no longer present, it's  
5 no longer associated with a file.

6 Q. Okay. Can an end user's computer play  
7 streamed video data as soon as it is received if  
8 segmenting is being used in small enough file sizes?

9 MR. ROBINSON: Objection; form.

10 A. Yeah, so the previous question, the end  
11 user was the one streaming it up. Now we're talking  
12 about streaming it down? I guess I need to  
13 understand your hypothetical here.

14 Q. The viewer of a video.

15 A. The viewer of a video.

16 Q. Okay. So I'll ask the question of that.

17 Can a viewer of a computer, at his or her  
18 computer, play streamed video data as soon as it is  
19 received if segmenting is being used with small  
20 enough files?

21 MR. ROBINSON: Objection; form.

22 A. The -- the small file has to be received  
23 in its entirety before it can be presented to the  
24 user.

25 Q. Okay.

1 J. OLIVIER - 7/26/18

2 A. So small enough files, to the user, he  
3 would not -- it's hard to distinguish when people are  
4 using segmenting or streaming. But to the actual  
5 mechanism of how it's happening, they're two  
6 different things. Does that answer your question?

7 Q. Yes. In 2012, did segmenting exist in  
8 such a fashion that a user would perceive no  
9 difference between the segmenting and the -- and a  
10 video stream?

11 MR. ROBINSON: Objection; form,  
12 beyond the scope.

13 A. So I didn't perform that analysis or -- or  
14 try to determine if users could perceive the  
15 difference between the two. It's not material to my  
16 opinions of what users perceive. But I will tell you  
17 around that same time that YouTube switched from one  
18 way of doing it to another way of doing it. Because  
19 of the advantages, they switched from progressive  
20 download to streaming, I believe, because of the  
21 advantages with streaming in. They wouldn't have  
22 done it if there was some sort of impact to the  
23 viewer.

24 Q. Is it your opinion that YouTube does video  
25 streaming?

1 J. OLIVIER - 7/26/18

2 MR. ROBINSON: Objection; form,  
3 beyond the scope.

4 A. It's my opinion that sometimes they were  
5 video streaming and sometimes they weren't.

6 Q. Do you think YouTube is video streaming  
7 today?

8 A. I didn't --

9 MR. ROBINSON: Objection; form.

10 A. I didn't investigate that one way or  
11 another.

12 Q. Okay. So you can't tell me, as you sit  
13 here today, whether a user in 2012 would be able to  
14 distinguish between a video stream and segmenting if  
15 the segmenting had small enough files?

16 MR. ROBINSON: Objection; form,  
17 beyond the scope, asked and answered.

18 A. So as I said, that wasn't some analysis I  
19 performed in -- in my declaration or in my opinions.  
20 If the segmenting is done at a very small level, the  
21 user -- user perceptions are usually much longer than  
22 computer perceptions. Users don't even perceive that  
23 there's packets so it's kind of immaterial to me what  
24 the user perceives. But I can imagine a system where  
25 if the segmenting was small enough, a user would not

1 J. OLIVIER - 7/26/18

2 be able to discern a difference.

3 Q. You believe it's immaterial what a user  
4 perceives?

5 A. If --

6 MR. ROBINSON: Objection; form.

7 A. If a user perceives -- no, I don't believe  
8 it's immaterial what a user perceives.

9 Q. Okay. Did I just read your testimony  
10 wrong or hear it wrong?

11 A. No.

12 Q. Okay.

13 A. In regards to your question, I believe  
14 there's situations where a user won't be able to  
15 perceive the difference. But I don't believe that  
16 user perception is -- what a user perceives is  
17 immaterial. In some cases it is, in some cases it  
18 isn't.

19 Q. Does transmitting a video stream increase  
20 the likelihood of errors being introduced?

21 MR. ROBINSON: Objection; form.

22 A. Yes.

23 Q. Does segmenting require saving a video  
24 file locally on a user's computer?

25 MR. ROBINSON: Objection; form.

1 J. OLIVIER - 7/26/18

2 A. The users -- so what do you mean by  
3 "user's computer" here? Are we talking about users  
4 that were receiving video, sending video? I need to  
5 understand in what context you're talking about a  
6 user here.

7 Q. Fair enough. Does the segmenting --  
8 strike that.

9 Does segmenting require saving a video file  
10 locally on the receiving user's computer?

11 A. Yes.

12 Q. And streaming also requires saving a video  
13 file locally on a receiving user's computer in some  
14 fashion. Correct?

15 MR. ROBINSON: Objection; form.

16 A. No. Incorrect.

17 Q. So earlier you testified that streaming  
18 requires at least some storage of video data on the  
19 receiving user. That wasn't accurate?

20 A. No, that's entirely accurate.

21 Q. Okay. Perfect. Are you familiar with  
22 HLS?

23 A. At a high level.

24 Q. Is HLS segmenting or video streaming?

25 A. I didn't investigate --



1 J. OLIVIER - 7/26/18

2 MR. ROBINSON: Objection; form,  
3 beyond the scope.

4 A. -- HLS in regards to this -- forming my  
5 opinion. If you want to give me a manual on HLS and  
6 want me to form an opinion, I guess I could spend a  
7 couple of hours doing it.

8 Q. Do you know what HLS stands for?

9 A. The LS stands for -- I think it's HTTP  
10 live streaming.

11 Q. Based on the acronym of what HLS stands  
12 for, you don't know whether HLS is streaming or  
13 segmenting?

14 MR. ROBINSON: Objection; form.

15 A. Correct.

16 Q. Do you know what MPEG-DASH stands for?

17 A. MPEG stands for motion picture expert  
18 group. The DASH, I don't remember what DASH stands  
19 for off the top of my head.

20 Q. Would it stand for dynamic adaptive  
21 streaming over HDTV?

22 MR. ROBINSON: Objection; form,  
23 asked and answered.

24 A. Like I say, I don't know one way or  
25 another.

J. OLIVIER - 7/26/18

Q. Do you know if MPEG-DASH is segmenting or streaming?

MR. ROBINSON: Objection; form.

A. I didn't investigate MPEG-DASH to see whether it was segmented and streaming in forming my opinions.

Q. What material did -- strike that. Did -- does the '997 patent provide an explicit definition of "video stream?"

MR. ROBINSON: Objection; form.

A. (Pause.) I don't see where the '997 provides an explicit definition of "video streaming."

Q. Okay. And it doesn't provide an explicit definition of "video stream" either. Correct?

MR. ROBINSON: Same objection.

A. Correct.

Q. Okay. Then what information did you use to derive your construction of "video stream" that's found in your declaration?

MR. ROBINSON: Objection; form, asked and answered.

A. I used the context of the '997 patent along with what one of ordinary skill would

1 J. OLIVIER - 7/26/18

2 understand at the time to be a video stream.

3 Q. Okay. MPEG-DASH existed in 2012.  
4 Correct?

5 MR. ROBINSON: Objection; form,  
6 asked and answered.

7 A. I don't know. I didn't see MPEG-DASH in  
8 the '997.

9 Q. HLS existed in 2012. Correct?

10 MR. ROBINSON: Objection; form,  
11 asked and answered.

12 A. I don't know exactly when HLS came out,  
13 when the standards came out.

14 Q. Okay. So -- but in forming your  
15 definition of what one of ordinary skill in the art  
16 would have understood a video stream to be in 2012,  
17 you didn't feel it was important to investigate what  
18 things such as HLS or MPEG-DASH were and whether they  
19 were streaming or segmenting?

20 MR. ROBINSON: Objection; form.

21 A. Absolutely. Because the difference that  
22 one of ordinary skill would understand between  
23 segmenting and streaming is one of the -- how it  
24 works mechanically, how the system either creates  
25 small files and sends it or -- or it streams the

1 J. OLIVIER - 7/26/18

2 data. The -- the title, how things are mentioned and  
3 different things, you have to investigate how the  
4 thing actually works before you can make -- one of  
5 ordinary skill would have to investigate how it works  
6 before they can make a determination whether it's  
7 streaming, or like we're talking about progressive  
8 downloading or segmenting.

9 Q. I understand that that's what somebody of  
10 ordinary skill in the art would do to determine if it  
11 was streaming or segmenting. What I'm trying to  
12 understand is you have offered an opinion as to what  
13 the definition of a video stream is to a person of  
14 ordinary skill in the art in 2012.

15 What did you do to investigate outside of  
16 the '997 patent what a video stream meant to a person  
17 of ordinary skill in the art?

18 MR. ROBINSON: Objection; form,  
19 asked and answered.

20 A. So as I said, I have been -- I actually in  
21 my class teach the difference between streaming and  
22 progressive download. I've been associated with  
23 streaming video and the different ways of getting  
24 video traffic from one point to another. So I use my  
25 understanding of it and my understanding of how

1 J. OLIVIER - 7/26/18

2 segmenting as opposed to streaming works.

3 I note that Dr. Almeroth has a similar  
4 understanding. I didn't feel necessarily to go  
5 and investigate different standards and different  
6 things in order to make a determination of what  
7 one of ordinary skill in the art would think  
8 streaming is when reading the '997 patent.

9 Q. Okay. So you teach about streaming at  
10 SMU. Correct?

11 A. Correct.

12 Q. And your testimony is despite teaching  
13 streaming at SMU, you don't know what HTTP live  
14 streaming is. Is that correct?

15 MR. ROBINSON: Objection; form,  
16 mischaracterizes testimony.

17 A. HTTP live streaming usually involves  
18 segmenting, which is sending a TS file. But I  
19 haven't reviewed it in a couple of years so I'm just  
20 going off the top of my head. But I have a high --  
21 as I said earlier, a high-level view of what HTTP  
22 live streaming was that was developed by, I believe  
23 it was Apple. But it's not something that I teach  
24 that particular subject in my class. I teach the  
25 difference between segmenting and streaming because

1 J. OLIVIER - 7/26/18

2 that has an impact on how the network behaves and  
3 that's an important part of doing traffic engineering  
4 for a network.

5 Q. Is your understanding of the difference  
6 between streaming and segmenting also at a high  
7 level?

8 MR. ROBINSON: Objection; form.

9 A. No. I would say I have a very good  
10 understanding of segmenting and streaming, I just  
11 don't have or even took cause to investigate in doing  
12 my declaration about how HLS works because the issues  
13 don't have anything to do with how HLS works at this  
14 particular level.

15 Q. Okay. You've also provided a construction  
16 of providing on a first page a link. Correct?

17 A. Correct.

18 Q. What is a link?

19 A. In regards to the '997 patent, it's  
20 something that is visible on a web page.

21 Q. Is a link an anchor tag?

22 MR. ROBINSON: Objection; form.

23 A. If it's something that -- it's something  
24 that can be seen on the web page and be selected by a  
25 user such as an anchor tag with a source attribute,

1 J. OLIVIER - 7/26/18

2 that would -- I would have to see an example of how  
3 the anchor tag is actually used.

4 But in general, they can be links.

5 Q. So a link is an anchor tag in a source  
6 attribute?

7 MR. ROBINSON: Objection; form,  
8 mischaracterizes testimony.

9 A. No, that's not what I said. I said that  
10 could be an example of a link in the '997 patent.

11 Q. Can the user select a link that is not  
12 displayed?

13 A. I don't believe so.

14 Q. What is the difference between a link and  
15 an embedded link?

16 MR. ROBINSON: Objection; form.

17 A. It depends --

18 MR. ROBINSON: Beyond the scope.

19 A. -- on the context.

20 Q. In the context of your declaration?

21 A. So embedded link has different meanings in  
22 different contexts. In the '997 it has a meaning, in  
23 the Nassiri reference it has a different meaning.

24 So, again, I would need to understand the context of  
25 your question and not if you're just pointing to my

1 J. OLIVIER - 7/26/18

2 entire declaration. There's several different  
3 meanings of the word "embedded link" in there.

4 Q. So your testimony is that embedded link  
5 means different things, depending on what reference  
6 you read it in?

7 A. Absolutely. You can see that in Nassiri  
8 versus the '997 patent.

9 Q. Can an embedded link be a link that is  
10 contained in text?

11 MR. ROBINSON: Objection; form.

12 A. I don't understand what you mean by  
13 "contained in text."

14 Q. So if I had a sentence that said  
15 "Dr. Olivier's CV is attached as Exhibit A" and  
16 Exhibit A was highlighted in blue and upon clicking  
17 on it, it took you to your CV, is that an embedded  
18 link?

19 MR. ROBINSON: Objection; form.

20 A. First of all, if you could give me the  
21 HTML of what you're talking about, I'd have a better  
22 understanding.

23 But as I stated earlier, "embedded link" has  
24 different meanings in different contexts so I  
25 would need to understand also what your



1 J. OLIVIER - 7/26/18

2 definition of embedded link you're using in that  
3 context.

4 Q. What is your definition of an embedded  
5 link?

6 MR. ROBINSON: Objection; form,  
7 beyond the scope.

8 A. My definition of embedded link. As I say,  
9 people use it in different contexts so depending on  
10 the context informs my opinion of what the definition  
11 of embedded link is.

12 Q. Let me ask it a different way, then.

13 If a person of ordinary skill in the art  
14 in 2012 had a sentence on their computer that said  
15 "Dr. Olivier's CV is attached as Exhibit A" and  
16 Exhibit A is highlighted in blue and upon clicking on  
17 the -- the blue "Exhibit A," you are taken to another  
18 web page with your CV, is the link that was used as  
19 clicking on Exhibit A considered an embedded link?

20 MR. ROBINSON: Objection; form.

21 Q. To a person of ordinary skill in the art?

22 MR. ROBINSON: Beyond the scope.

23 A. So to a person of ordinary skill in the  
24 art reading in '997, that would not be an embedded  
25 link.

1 J. OLIVIER - 7/26/18

2 Q. Sir, I understand that you're trying to  
3 make your position. But my question didn't include  
4 the '997 patent and I'll read it again.

5 If a person of ordinary skill in the art  
6 in 2012 had a sentence on their computer that said  
7 "Dr. Olivier's CV is attached as Exhibit A" and  
8 Exhibit A is highlighted in blue, upon clicking the  
9 blue "Exhibit A" you are taken to another web page  
10 with your CV, is the link that was used in clicking  
11 "A" considered an embedded link?

12 MR. ROBINSON: Objection; form.

13 Q. To a person of ordinary skill in the art?

14 A. So --

15 MR. ROBINSON: Objection; form,  
16 beyond the scope, object to mischaracterization  
17 of his testimony.

18 A. I have a sentence on my computer. That's  
19 how you started this.

20 Q. Yes.

21 A. What does that mean?

22 Q. You don't know what a sentence on your  
23 computer looks like, sir?

24 A. I type sentences in Word documents all the  
25 time.

1 J. OLIVIER - 7/26/18

2 Q. All right. Let me ask. Can you please  
3 inform the Board what a sentence on your computer  
4 means.

5 A. In the context --

6 MR. ROBINSON: Objection; form --

7 A. -- of your hypothetical --

8 MR. ROBINSON: -- badgering.

9 A. -- I have no idea. That's why I asked you  
10 to clarify it.

11 Q. Okay. So you have no idea what -- in my  
12 hypothetical, what a sentence on your computer means  
13 and that's your testimony to the Board?

14 A. I can speculate on what you mean.

15 MR. ROBINSON: Objection; form,  
16 ask and answered, badgering.

17 A. But I'm not -- I'm told not to speculate.  
18 So if you can tell me what you mean by a sentence on  
19 my computer, I will go ahead and try to answer your  
20 question.

21 Q. No. I think we're good right there, sir.

22 Would you agree in a POSITA in 2012 would  
23 understand an embedded link to mean a link to a  
24 resource that is embedded within text?

25 MR. ROBINSON: Objection; form.

1 J. OLIVIER - 7/26/18

2 A. That is "embedded within text." I don't  
3 understand the context of "embedded within text."

4 Q. So you don't understand what it means to  
5 be embedded within text?

6 A. Correct. That's what I said. I don't  
7 understand what you mean when you're saying "embedded  
8 within text" in that question.

9 Q. And, therefore, you don't understand  
10 the -- a definition of an embedded link that would  
11 define -- strike that.

12 So you would not understand an embedded link or  
13 understand a definition to mean a link to a  
14 resource that is embedded within text?

15 MR. ROBINSON: Objection; form,  
16 beyond the scope.

17 A. So, I'm sorry, I got to hear that question  
18 again. Can you break it down?

19 Q. Sure. So you do not understand what the  
20 definition of "embedded link" means if I were to say  
21 it means a link to a resource that is embedded within  
22 text?

23 MR. ROBINSON: Objection; form.

24 A. I would need an understanding of what you  
25 mean by with -- "embedded within text." You mean

1 J. OLIVIER - 7/26/18

2 embedded within HTML? Do you mean embedded within  
3 text? Text is difference than HTML. I don't  
4 understand what you mean when you say "embedded  
5 within text" in that context.

6 Q. By "text," I mean text.

7 A. So it could be a Word document. It could  
8 be a text document. Is that what you're telling me?  
9 Is that your question?

10 Q. If you saw the definition I provided for  
11 "embedded link" in a dictionary, you wouldn't  
12 understand it?

13 MR. ROBINSON: Objection; form,  
14 foundation, calls for speculation, beyond the  
15 scope.

16 A. So if I saw that definition, I would then  
17 have some context to understand what are the  
18 different meanings of "embedded link" you're talking  
19 about and I may be able to understand it. I don't  
20 know.

21 Q. Sir, if I were to ask you what an embedded  
22 hyperlink is, what would that be?

23 MR. ROBINSON: Objection; form,  
24 beyond the scope.

25 A. An embedded hyperlink. Again, I'd have to

1 J. OLIVIER - 7/26/18

2 go back to "embedded" has different meanings in  
3 different contexts. So if you told me I had an  
4 embedded hyperlink, I would have -- if you could just  
5 present me with the HTML page that you're talking  
6 about or the code, I could probably give you an  
7 opinion.

8 But as it stands right now, there is  
9 obviously different understandings of what "embedded"  
10 means in these two patents we're talking about. So I  
11 would have to understand which one of those we're  
12 talking about in order to answer your question.

13 Q. Sir, I'm not talking about either patent  
14 right now. I'm talking about your expertise in the  
15 area and what a person of ordinary skill in the art  
16 would understand.

17 MR. ROBINSON: Objection; form.

18 Q. Let's make sure we've got this straight.  
19 You claim to be an expert on what a person of  
20 ordinary skill in the art would understand --

21 A. Absolutely.

22 Q. -- in 2012. Correct?

23 A. Absolutely. And a person of ordinary  
24 skill would understand there is different definitions  
25 for what "embedded" and "embedded link" mean at the

1 J. OLIVIER - 7/26/18

2 particular time, and that person of ordinary skill  
3 would be asking you the same questions, to give me  
4 some context of what you're talking about so I can  
5 understand which definition of "embedded" you're  
6 talking about.

7 Q. Would a person of ordinary skill in the  
8 art in 2012, not understanding what an embedded  
9 hyperlink is, look to reference material to try to  
10 understand what it would mean?

11 MR. ROBINSON: Objection; form,  
12 foundation, calls for speculation.

13 A. The reference material could give him  
14 context to understand your question. So they could.

15 Q. And if the reference material simply  
16 stated that an embedded hyperlink is a link to a  
17 resource that is embedded within text or is  
18 associated with an image or an image map, they would  
19 not understand what that would mean?

20 MR. ROBINSON: Objection; form.

21 A. I'm sorry, could you read that again.

22 Q. Sure. If reference material simply stated  
23 that an embedded hyperlink is a link to a resource  
24 that is embedded within text or is associated with an  
25 image or an image map, the person of ordinary skill

1 J. OLIVIER - 7/26/18

2 in the art would not understand what that would mean?

3 A. No. With that context --

4 MR. ROBINSON: Objection; form.

5 A. -- it becomes easier to understand what  
6 you're talking about.

7 Q. Okay. Now, what is an "embedded  
8 hyperlink"?

9 MR. ROBINSON: Objection; form,  
10 asked and answered.

11 A. In that context? It's the hyperlink to  
12 the -- it's the URL that provides the address of the  
13 source information that's going to be downloaded when  
14 you select the text, click on the text.

15 Q. Okay. And so an embedded hyperlink is a  
16 URL?

17 MR. ROBINSON: Objection; form,  
18 asked and answered.

19 A. An embedded hyperlink has a URL, has an  
20 address associated with it and it tells the browser  
21 where to go when you select the text associated with  
22 that hyperlink.

23 Q. Can a user follow a link if the link is  
24 not displayed?

25 MR. ROBINSON: Objection; form.



1 J. OLIVIER - 7/26/18

2 A. I -- I -- when you mean "not displayed,"  
3 what do you mean, that the text associated with the  
4 hyperlink is not displayed?

5 Q. Yes.

6 A. There is -- I mean, you could open up the  
7 HTML source and look for it, but a user generally  
8 can't click on something he can't see.

9 Q. Okay. So if a user wanted to follow a  
10 link, they would typically have to see the link on  
11 the web page. Correct?

12 MR. ROBINSON: Objection; form.

13 A. They would have to see something that they  
14 could select on the web page.

15 Q. Okay. And then the user would have to  
16 click that something, call it a link, to follow it.  
17 Correct?

18 A. Correct.

19 Q. What's an imbedded link with an I,  
20 I-M-B-E-D-D-E-D?

21 MR. ROBINSON: Objection; form.

22 A. I think in the '997, they spelled embedded  
23 with an "I" and with an "E."

24 Q. Okay. And what does the imbedded with an  
25 "I" mean?

J. OLIVIER - 7/26/18

A. The same as embedded with an "E."

Q. Okay. There is no distinction between the two?

A. I don't know.

(Pause.)

I remember when I first read the '997 patent I noticed there was a use of an E or an I, and I always assumed that they were talking about the same thing.

Q. In forming your opinions in this -- in the 829 and 830 IPRs, did you assume that imbedded with an I and embedded with an E meant the same thing?

A. Yes.

MR. McDOLE: Why don't we take a quick break? We've been going for about an hour.

MR. ROBINSON: Okay.

(Break.)

Q. Welcome back, Dr. Olivier. In video streaming is there a way to detect incorrect errors in dropped bits?

MR. ROBINSON: Objection; form.

A. There is lower-level protocols that can perform some of those functions. It's not generally part of the video streaming protocol.

1 J. OLIVIER - 7/26/18

2 Q. But there are ways to detect and correct  
3 errors for dropped bits in video streaming. Correct?

4 MR. ROBINSON: Objection; form,  
5 asked and answered.

6 A. Yeah. Well, as I said, there is  
7 lower-level protocols that can be used to detect  
8 dropped bits.

9 Q. Okay. And what are those low level  
10 protocols?

11 A. So there's usually -- if it's on Ethernet  
12 there is a cksum on Ethernet. There is a sequence  
13 number in the TCP/IP packets that tell you if you  
14 dropped a packet. So there is lower-level protocols  
15 that can tell whether you've dropped a packet or  
16 dropped bits.

17 Q. If Nassiri used streaming, could it have  
18 used those techniques to detect and correct errors?

19 MR. ROBINSON: Objection; form,  
20 calls for speculation.

21 A. So those usually cause a retransmission  
22 that would cause a problem with video streaming,  
23 those type of error detections that I discussed  
24 earlier. You would see an error, but it wouldn't  
25 detect it, and you'd have to cause a retransmission

1 J. OLIVIER - 7/26/18

2 in order to recover from that area, and that  
3 retransmission would cause glitches in video  
4 streaming.

5 Q. Is that an issue that is contained in all  
6 video streaming?

7 MR. ROBINSON: Objection; form.

8 A. I have no idea if it's contained in all  
9 video streaming or not. Typically that's an issue  
10 with video streaming, though.

11 Q. Okay. So that would be an issue with the  
12 video streaming in the '997 patent as well?

13 MR. ROBINSON: Objection; form,  
14 calls for speculation, beyond the scope.

15 A. Perhaps.

16 Q. If we could turn to Paragraph 84 of your  
17 829 declaration. Actually, 83. I'm sorry. In  
18 Paragraph 83 you argue that "At the outset, the  
19 videos submitted by customers are reviewed by a user  
20 of the enterprise computing system 110 before being  
21 distributed for viewing." Correct?

22 MR. ROBINSON: Object to  
23 characterization of his testimony.

24 A. (Pause.)

25 Correct.

J. OLIVIER - 7/26/18

Q. And that's discussing the teachings of Nassiri in Paragraph 83. Correct?

A. I believe so, yes. I don't have Nassiri in front of me, but...

Q. Okay. Now, the discussion of the videos submitted by customers that were reviewed by a customer of enterprise computing system 110 before being distributed before viewing is a manual process.

Correct?

MR. ROBINSON: Objection; form.

A. I believe in Nassiri it was manual.

Q. Okay. Nassiri does not require automation. Is that correct?

MR. ROBINSON: Objection; form.

A. Automation of what?

(Discussion off the written record.)

Q. I'm sorry. We'll get back.

Nassiri does not require automation. Is that correct?

MR. ROBINSON: Objection; form.

A. You mean automation of the submission acceptance or decline?

Q. That's correct.

A. Okay. "Automation" was kind of broad

1 J. OLIVIER - 7/26/18

2 there. But it doesn't require automation at a  
3 particular part that I just mentioned.

4 Q. Okay. Now, Nassiri's videos do not have  
5 to be viewed by a user of the enterprise. Correct?

6 MR. ROBINSON: Objection; form.

7 Q. Maybe it would help if I gave you Nassiri  
8 here. I'm going to hand you what's previously been  
9 marked as Exhibit 1009. I believe it's the same  
10 exhibit in both IPRs. And, again, my question was  
11 Nassiri's videos do not have to be viewed by a user  
12 of the enterprise. Correct?

13 MR. ROBINSON: Same objection.

14 A. Are you -- Nassiri's video -- it's an  
15 intention of Nassiri that users view the videos that  
16 were uploaded.

17 Q. Right. But in Nassiri it talks about the  
18 videos may -- "the user may then view or otherwise  
19 access or review the submitted videos." Correct?

20 MR. ROBINSON: Objection; form.

21 A. I don't understand your question. I'm  
22 sorry.

23 Q. Okay. So I'm still looking at  
24 Paragraph 83 of your 829 declaration, which refers to  
25 Paragraph 48 of Nassiri.

1 J. OLIVIER - 7/26/18

2 A. Okay.

3 Q. And it states "A user of the enterprise  
4 computing system 110 may then view or otherwise  
5 access or review the submitted videos."

6 Do you see that?

7 A. (Pause.)

8 Yes.

9 Q. Okay. And do you understand the word  
10 "may" in that sentence to mean "required"?

11 A. No --

12 MR. ROBINSON: Objection; form.

13 A. -- I do not.

14 Q. Okay. So the user of the enterprise  
15 computing system -- or strike that.

16 Nassiri does not require the user of an  
17 enterprise computing system to view or otherwise  
18 access or review the submitted videos.

19 Correct?

20 MR. ROBINSON: Objection; form.

21 A. If the question is Nassiri doesn't require  
22 a user to view their videos, then I would say the  
23 purpose of Nassiri is to get people to view the  
24 videos, to view the promotional videos. If no one  
25 views them, it would have no purpose.

1 J. OLIVIER - 7/26/18

2 Q. Okay. But we're talking about the user of  
3 the enterprise computing system. Correct?

4 A. Correct.

5 Q. And so the user of the enterprise  
6 computing system is not required to view or otherwise  
7 access or review the submitted videos in Nassiri.

8 Correct?

9 MR. ROBINSON: Objection; form.

10 A. So the user of the enterprise system may  
11 or may not access the videos that have been submitted  
12 to them.

13 Q. Okay. So if the user of the enterprise  
14 computing system decides not to view or otherwise  
15 access or review the submitted videos, then there is  
16 not necessarily a delay before a video is distributed  
17 for viewing in Nassiri. Correct?

18 MR. ROBINSON: Objection; form,  
19 beyond the scope, calls for speculation.

20 A. It's obviously that the teachings in  
21 Nassiri is -- a delay would not have any impact on  
22 the system. But if you can imagine that if the video  
23 was -- I'll just leave it at that.

24 Q. Does Nassiri disclose a link to a video  
25 capture page?



1 J. OLIVIER - 7/26/18

2 MR. ROBINSON: Objection; form.

3 Q. And specifically I'll point you to Nassiri  
4 at Paragraph 18.

5 MR. ROBINSON: Same objection.

6 A. (Pause.)  
7 And your question was?

8 Q. Does Nassiri disclose a link to a video  
9 capture page?

10 A. It says "In some examples, the executable  
11 instructions for video capture may include a link to  
12 a separate video capture page."

13 Q. It says "to a separate"? Where do you see  
14 the word "separate"? Oh, you're up there. I'm  
15 looking a little bit further down.

16 A. Oh, okay.

17 Q. If you look down a little bit further it  
18 says "In this manner, a user accessing the website or  
19 other content delivery by executable instructions for  
20 website display may follow a link to a video capture  
21 page hosted by the video host computing system 112."

22 Correct?

23 MR. ROBINSON: Objection; form,  
24 best evidence.

25 A. So where are you at? I can't see the

1 J. OLIVIER - 7/26/18

2 line --

3 Q. Sure. I'm in Paragraph 18, pretty much  
4 middle of the -- middle of the paragraph that starts  
5 "in this manner."

6 A. Right. "In this manner."

7 Q. "A user accessing the website or other  
8 content delivered by the executable instructions for  
9 a website display may follow a link to a video  
10 capture page hosted by the video host computing  
11 system 120." Correct?

12 A. Correct.

13 Q. And that doesn't use the word "separate."  
14 Correct?

15 A. Because it's referring -- in this manner  
16 they're referring to what's up above that.

17 Q. Okay. That sentence doesn't use the word  
18 "separate." Correct?

19 A. The sentence not uses -- yeah, you can  
20 take the sentence out of context and say they don't  
21 use the word "separate." That is correct.

22 Q. Okay. So Nassiri does disclose a link to  
23 a video capture page. Correct?

24 MR. ROBINSON: Objection; form,  
25 asked and answered.

1 J. OLIVIER - 7/26/18

2 A. It discloses a link to a separate video  
3 capture page.

4 Q. Okay. That link can be integrated with  
5 other information on a web page. Correct?

6 MR. ROBINSON: Objection; form.

7 A. The particular one with the separate video  
8 capture page? Or I read Nassiri -- "the link may in  
9 some examples" and now they're giving another example  
10 of the teachings of Nassiri here.

11 Q. I don't understand what your confusion is.

12 MR. ROBINSON: Objection; form.

13 A. I guess I didn't understand what you're  
14 referring to when you said link -- can I hear your  
15 original question?

16 Q. Sure. The link can be integrated with  
17 other information on a website page. Correct?

18 MR. ROBINSON: Objection; form.

19 A. And when you say "the link," are we  
20 talking about the link to the separate capture page  
21 or not?

22 Q. We're talking about the link that's  
23 described in Paragraph 18.

24 A. There is many links described in  
25 Paragraph 18.

1 J. OLIVIER - 7/26/18

2 Q. Okay. Can any of the links in  
3 Paragraph 18 be integrated with information on a web  
4 page?

5 MR. ROBINSON: Objection; form.

6 Q. Strike that.  
7 Can any of the links in Paragraph -- can any of  
8 the links in Paragraph 18 be integrated with  
9 other information on the web page?

10 MR. ROBINSON: Objection; form,  
11 best evidence.

12 A. So the link may be integrated with other  
13 information in a web page.

14 Q. And Nassiri discloses that its video  
15 recorder can be provided in an iframe. Correct? I  
16 think you'll find that in Paragraph 19 of Nassiri.

17 A. The -- yeah, Nassiri teaches the use of an  
18 iframe to hold the video recorder.

19 Q. And that iframe can appear within the  
20 context of other content. Correct?

21 A. Correct.

22 Q. So Nassiri describes that a web page can  
23 include other content and the iframe. Correct?

24 MR. ROBINSON: Objection; form.

25 A. Other content and the iframe, that is

1 J. OLIVIER - 7/26/18

2 correct.

3 Q. And Nassiri also describes a web page can  
4 include a link and other -- strike that.  
5 Nassiri also describes that a web page can  
6 include a link and other content. Correct?

7 MR. ROBINSON: Objection; form.

8 A. Nassiri describes links can be on pages  
9 with other content. The links can be around the  
10 iframe which is containing the video capture software  
11 or the links can be a link to a completely separate  
12 page that contains the video capture software.

13 Q. Okay. When you say around the web page,  
14 do you mean above, below -- strike that.  
15 When you say that the -- "around the iframe," do  
16 you mean above, below, left, or right?

17 MR. ROBINSON: Objection; form.

18 A. All are possible.

19 Q. All are possible?

20 A. Above, below, around. You can put  
21 information around an iframe, you can put the iframe  
22 at the top, the middle, it's where you encode the  
23 HTML to display the iframe.

24 Q. How difficult is it to encode the HTML to  
25 display the iframe in different locations on the web

1 J. OLIVIER - 7/26/18

2 page?

3 MR. ROBINSON: Objection; form.

4 A. It depends. It could be very easy if you  
5 just want to put it at the top or the bottom, or it  
6 could be very hard if you want to move it into the  
7 middle. Then you have to use some content style  
8 sheets and set up ranges within the page in order to  
9 get it in a particular part.

10 Q. So putting the iframe at the bottom of the  
11 page below a link would be easy to a person of  
12 ordinary skill in the art?

13 MR. ROBINSON: Objection; form.

14 A. A person of ordinary skill could put the  
15 iframe vertically almost anyplace in the page they  
16 would like. It's not difficult to move it down or  
17 up, depending on whatever content you have that you  
18 want to move it through.

19 Q. And placing a link in reference to the  
20 iframe above, below, left, or right of it would be  
21 easy for a person of ordinary skill in the art to  
22 code as well. Correct?

23 MR. ROBINSON: Objection; form.

24 A. Placing a link that's referencing the  
25 iframe?

1 J. OLIVIER - 7/26/18

2 Q. Yes.

3 A. You can also put those anywhere on the  
4 page you would like.

5 Q. Okay. And that would be easy for a person  
6 of ordinary skill in the art to do?

7 MR. ROBINSON: Objection; form.

8 A. Relatively easy, yes.

9 Q. If we could turn to Paragraph 94 of your  
10 829 declaration. Now, the video recorder iframe code  
11 in Paragraph 19 of Nassiri is just example code.  
12 Correct?

13 MR. ROBINSON: Objection; form.

14 A. It's the only example we have of Nassiri.  
15 But it's -- they -- he's actually given us the code  
16 for the iframe. So I wouldn't call it example  
17 because it's pretty specific in that it's pointing to  
18 their website. So it's -- it's actually software  
19 that actually executes except the destination is no  
20 longer missing.  
21 So, I mean, they're teaching us about the iframe  
22 here.

23 Q. Okay. Nassiri calls it an example.  
24 Correct?

25 A. Correct. It's the only example they gave

1 J. OLIVIER - 7/26/18

2 us of an iframe.

3 Q. Okay. And a person of ordinary skill in  
4 the art would understand how to modify the code  
5 provided in Paragraph 19 of Nassiri to do simple  
6 things such as move an iframe or a link associated  
7 with an iframe. Correct?

8 MR. ROBINSON: Objection; form.

9 A. There is no link associated with the  
10 iframe in Nassiri.

11 Q. Okay. I understand your position.

12 A. And nor can there be because there is no  
13 name attribute for the iframe.

14 Q. Would a person of ordinary skill in the  
15 art have found it easy to change the iframe code of  
16 Nassiri?

17 MR. ROBINSON: Objection; form --

18 A. You can --

19 MR. ROBINSON: -- calls for  
20 speculation.

21 A. You can change code anywhere you want to.  
22 You have to have some sort of understanding of what  
23 you're trying to do with the code. You can always  
24 hack code. It may not make sense to do it, but you  
25 can change code all you want.



1 J. OLIVIER - 7/26/18

2 Q. A person of ordinary skill in the art  
3 would have the ability to code in order to design a  
4 web page. Correct?

5 A. Correct.

6 Q. And that person of ordinary skill in the  
7 art would have known what modifications they could  
8 make to Nassiri's code. Correct?

9 MR. ROBINSON: Objection; form.

10 A. They could modify Nassiri's code if they  
11 felt they needed to.

12 Q. Okay. A person of ordinary skill in the  
13 art in 2012 would have known about name attributes.  
14 Correct?

15 MR. ROBINSON: Objection; form.

16 A. There is no teaching of name attribute in  
17 Nassiri, so they may or may not have known about a  
18 name attribute. It's something that existed for a  
19 while but I wouldn't say a person of ordinary skill  
20 knows everything about every HTML statement you have.

21 Q. So it's your testimony that a person of  
22 ordinary skill in the art would not know what a name  
23 attribute was in 2012?

24 MR. ROBINSON: Objection; form.

25 A. He could probably look it up if he needed

1 J. OLIVIER - 7/26/18

2 to. But I don't think off the top of his head he  
3 would know exactly about all of the HTML attributes  
4 and what's in each thing.

5 Q. But the name attribute in 2012 wasn't new,  
6 was it?

7 A. No, it was not.

8 Q. A person of ordinary skill in the art in  
9 2012, having done -- looked at reference materials,  
10 would have known how to code a name attribute into a  
11 website design. Correct?

12 MR. ROBINSON: Objection; form,  
13 asked and answered, calls for speculation.

14 A. They could have if they felt the need to  
15 do such a thing, make changes to the code.

16 Q. If they had a need to use a name attribute  
17 in designing their website, it would have been easily  
18 accessible through reference documents if they didn't  
19 know what a name attribute was. Correct?

20 MR. ROBINSON: Objection; form,  
21 beyond the scope, calls for speculation.

22 A. They could have figured out how to use a  
23 name attribute if they felt a need for it.

24 Q. Okay. If a person of ordinary skill in  
25 the art felt the need to have a name attribute in

1 J. OLIVIER - 7/26/18

2 designing a web page, it would not have been  
3 difficult for them to have code -- coded that name  
4 attribute and modified Nassiri to include that name  
5 attribute. Correct?

6 MR. ROBINSON: Objection; form,  
7 beyond the scope, asked and answered, calls for  
8 speculation.

9 A. If they felt a need to add a name  
10 attribute, it wouldn't be beyond one of ordinary  
11 skill to add a name attribute to an iframe.

12 Q. If we can look at Paragraph 120 of your  
13 829 declaration. Are you there?

14 A. Yes.

15 Q. Is that -- you provide in Paragraph 120 of  
16 your 829 declaration a set of source code. Correct?

17 A. Correct.

18 Q. Is that the same source code that's  
19 contained in Paragraph 77 of your 830 declaration?

20 A. What paragraph in 830?

21 Q. I think it's 77.

22 MR. ROBINSON: Objection; form,  
23 best evidence.

24 A. (Pause.)

25 Appears the same to me.

1 J. OLIVIER - 7/26/18

2 Q. I'm going to be asking you questions in  
3 reference to your 829 declaration and, you know, my  
4 questions are going to apply equally to your 830  
5 declaration so if you see a difference between the  
6 two as we proceed, please let me know.

7 A. Okay.

8 Q. Could you explain to me what the code in  
9 Paragraph 120 represents?

10 A. It represents removing the source  
11 attribute entirely from the example codes that I was  
12 working through at this particular time.

13 Q. Okay. Which example codes were you using  
14 to generate the code in Paragraph 120?

15 A. I --

16 MR. ROBINSON: Objection; form.

17 A. I started with the iframe that was taught  
18 in Nassiri and then proceeded to show different  
19 examples of that code in different renderings of  
20 browsers and what that would produce. And one of the  
21 options I did was remove the source attribute  
22 entirely and that's what I discuss in Paragraph 120.

23 Q. Okay. And so the -- is your intent with  
24 120 to show code if a person of ordinary skill in the  
25 art were to have combined Nassiri and Bradford?

1 J. OLIVIER - 7/26/18

2 MR. ROBINSON: Objection; form.

3 A. My intent was to show that Dr. Almeroth's  
4 proposal to combine Nassiri and Bradford together,  
5 though he never gave us what he -- would be the  
6 combination as far as the HTML source code, what one  
7 of ordinary skill would be presented with and  
8 different possibilities that they could try to  
9 combine these two together and show that these --  
10 this combination, in trying it a number of different  
11 ways, doesn't make sense.

12 Q. Okay. So the code in 120 is one of the  
13 possibilities that you believe exists if a person of  
14 ordinary skill in the art were to combine Nassiri and  
15 Bradford?

16 MR. ROBINSON: Objection; form,  
17 mischaracterizes testimony.

18 A. So it's the option where you remove the  
19 source attribute entirely from the iframe. It's not  
20 what's taught in Nassiri, but it is something that  
21 one of ordinary skill could try to do to try to  
22 overcome the incompatibilities with combining Nassiri  
23 with Bradford.

24 Q. Okay. So your opinion is that a POSITA  
25 would not combine Nassiri and Bradford, not that they

1 J. OLIVIER - 7/26/18

2 could not combine them. Is that correct?

3 MR. ROBINSON: Objection; form.

4 A. The combination, no matter how you try to  
5 do it, wouldn't make sense to a POSITA. So you can  
6 always push code together, but does it make any sense  
7 when you actually do it. That's -- that's why this  
8 combination wouldn't make sense.

9 Q. Okay. But just to be clear, a person of  
10 ordinary skill in the art could combine Nassiri and  
11 Bradford and it may end up with a result that may  
12 not -- they may not like, but they could do it.  
13 Correct?

14 MR. ROBINSON: Objection; form,  
15 asked and answered.

16 A. There is --

17 MR. ROBINSON: Calls for  
18 speculation.

19 A. They could combine, there's no reason for  
20 them combining it because the combination doesn't  
21 make sense.

22 Q. Now, did you code the examples -- strike  
23 that.

24 Did you code the example of the code in  
25 Paragraph 120 on W3School web-based software?

1 J. OLIVIER - 7/26/18

2 A. Yes.

3 Q. Any concern that W3Schools is not  
4 accurate?

5 A. No.

6 Q. Would a POSITA have used W3Schools in 2012  
7 as a reference?

8 MR. ROBINSON: Objection; form.

9 A. I was using that as a way of producing a  
10 result. A POSITA would probably use different, more  
11 advanced software tools. If he had an understanding  
12 of how to do iframes and do names, he had an  
13 understanding of how to render stuff in a browser and  
14 view the result. This was just a way of getting it  
15 in a visual form instead of tried to explain it with  
16 text.

17 Q. Okay. So is W3Schools a simplified  
18 software to render code?

19 MR. ROBINSON: Objection; form.

20 A. No. It's using the same browsers that  
21 everyone else is using. It's not simplified. It's  
22 a -- it's a way of using the web to generate the  
23 results rather than using your computer to generate  
24 the results.

25 Q. What browser did you use when using

J. OLIVIER - 7/26/18

W3Schools?

A. Firefox.

Q. What operating system did you use when using W3Schools?

A. Windows 7.

Q. What resolution was your display set at when using W3Schools and to run this code in Paragraph 120?

A. What resolution that the screen monitor was?

Q. Yes.

A. I don't remember one way or another.

Q. Would it matter?

A. No, it wouldn't change the result in any way materially.

Q. So you don't think that the resolution of your display in rendering the web page in 120 from the code -- running the code in Paragraph 120 would be effective -- would affect the image in Paragraph 121 in any way?

A. No --

MR. ROBINSON: Objection; form.

A. -- that's not what I said. I said it wouldn't render it any different in any meaningful



1 J. OLIVIER - 7/26/18

2 way, it would still be displayed. As a matter of  
3 fact, the resolution for the printer is probably much  
4 less than the resolution for my screen. So it's not  
5 to show how tight the dots are on the line. That's  
6 not the point.

7 Q. Okay. If you turn back to Paragraph 103  
8 of your 829 declaration. There is an image at the  
9 bottom of Paragraph 103, and on the right side, it  
10 says, "Result Size: 638 X 445."

11 Do you see that?

12 A. Yes.

13 Q. What was the result size of the image in  
14 Paragraph 121 generated from the code in  
15 Paragraph 120?

16 A. They were all the same.

17 Q. They were all the same?

18 A. Yes.

19 Q. And why didn't you display the result size  
20 in Paragraph 121?

21 A. Because it's immaterial to what I was  
22 trying to put across.

23 Q. If you change the result size of the image  
24 in Paragraph 121, do you know whether the "Do you  
25 want to load the video capture" link would change the

1 J. OLIVIER - 7/26/18

2 location in comparison to the iframe box?

3 A. It would actually make it worse by making  
4 it push itself over to the left. It would have  
5 wrapped around. So I was trying to present it in the  
6 most logical fashion.

7 Q. How long did it take you to code the --  
8 strike that.

9 How long did it take you to write the code in  
10 Paragraph 120?

11 MR. ROBINSON: Objection; form,  
12 beyond the scope.

13 A. (Pause.)  
14 So I used Nassiri as the starting point. So much  
15 of that code came from Nassiri or part of the  
16 iframe came from Nassiri. The other part came  
17 from the W3 web page because I was using an  
18 example that had an iframe name attribute already  
19 in it. So it didn't take me very long to do it,  
20 but I didn't time it while I was doing it.

21 Q. Was it less than a day?

22 A. To code that particular example?

23 Q. Yes.

24 A. It was around a day.

25 Q. Okay. So going back to the result size of

1 J. OLIVIER - 7/26/18

2 Paragraph 121. If you were to expand the result  
3 size, do you think that link "Do you want to load the  
4 video capture software" would appear under the  
5 iframe?

6 MR. ROBINSON: Objection; form,  
7 calls for speculation.

8 A. It could. I don't know one way -- one way  
9 or another. As I do it, I'd probably just code it up  
10 and test it. I think the way it's written is it ends  
11 up being there unless it wraps around.

12 Q. Okay. So if you shrank the box, the  
13 results -- strike that.

14 If you shrank the result size and made it wrap  
15 around, where would the link "Do you want to load  
16 the video capture software" appear?

17 MR. ROBINSON: Objection; form,  
18 asked and answered.

19 A. I think it would break and then part of it  
20 would end up underneath a bit.

21 Q. Okay. Would you be surprised if I ran  
22 this source code on W3schools and the link appeared  
23 below the iframe box?

24 A. No.

25 Q. Why not?

1 J. OLIVIER - 7/26/18

2 A. Because that wouldn't surprise me. It's  
3 possible.

4 Q. So is the -- is the placement of the  
5 iframe and the link dependent on the computer you're  
6 using?

7 MR. ROBINSON: Objection; form.

8 A. It -- it's always going to be right next  
9 to the iframe. It can be underneath it. It can be  
10 to the side -- beside it, depending on the width of  
11 the browser you have open. Again, that's immaterial  
12 to the point I was trying to make here.

13 Q. Okay. Well, If the link "Do you want to  
14 load the video capture software" appeared below the  
15 iframe, would it be less confusing to a user?

16 MR. ROBINSON: Objection; form.

17 A. I don't believe so, no. There would be a  
18 big blank spot and then it would say, do you want to  
19 load it. I think both of them represent the same  
20 thing.

21 Q. What if the link were above the iframe  
22 box, would it be less confusing to a user, in your  
23 opinion?

24 A. No. The user would still have the big --  
25 my point was it shows you a large blank space in the

1 J. OLIVIER - 7/26/18

2 middle of the web page, or some portion of the web  
3 page has a large blank space and that's what is  
4 confusing to the user.

5 Where the particular -- the text goes for it, I  
6 don't believe that part's confusing to the user.  
7 It's the large blank space, the empty space on  
8 the page which is confusing.

9 Q. Okay. Is that large blank space a problem  
10 with the '997 patent as well?

11 MR. ROBINSON: Objection; form,  
12 beyond the scope.

13 Q. Let me -- let me rephrase the question.  
14 Is the large blank space in the iframe a problem  
15 with the '997 patent as well?

16 MR. ROBINSON: Objection; form,  
17 beyond the scope.

18 Q. I'll specifically direct you to  
19 Figure 1(b).

20 A. (Pause.)  
21 So the '997 inventors probably didn't think that  
22 was a problem that there was a large blank space  
23 sitting there.

24 Q. Okay. I mean --

25 A. That's why it's counterintuitive to do

1 J. OLIVIER - 7/26/18

2 this.

3 Q. Okay. But instead of -- would a person of  
4 ordinary skill in the art in 2012 know that they  
5 could fill that blank white space with an image?

6 MR. ROBINSON: Objection; form,  
7 beyond the scope, calls for speculation.

8 A. They -- they could put different things in  
9 the white space if they chose to. The reason why  
10 they would do that would be why would they be  
11 motivated to do such a thing.

12 Q. Okay. One thing that they could place in  
13 the -- well, strike that.  
14 One item they could place in white space in the  
15 result that you've provided in Paragraph 121 of  
16 your declaration is text that says, "Video  
17 recorded to load here." Correct?

18 MR. ROBINSON: Objection; form,  
19 beyond the scope.

20 A. (Pause.)  
21 Which declaration on Page -- Paragraph 121?

22 Q. Paragraph 121. So on Paragraph 121, you  
23 have depicted the results of what you -- strike that.  
24 In Paragraph 121, you have depicted what you  
25 state are the results of running the code from

1 J. OLIVIER - 7/26/18

2 Paragraph 120. Correct?

3 A. Correct.

4 Q. And you say that a user would be confused  
5 by the large white space --

6 A. Uh-huh.

7 Q. -- contained in the image in  
8 Paragraph 121. Correct?

9 A. Correct.

10 Q. A person of ordinary skill in the art in  
11 2012 could easily modify the code in Paragraph 120 to  
12 put the language "Video recorder will load here" in  
13 the box. Correct?

14 MR. ROBINSON: Objection; form,  
15 beyond the scope.

16 A. It's not easy and it doesn't make a lot of  
17 sense. It's theoretically possible, but you have to  
18 remember what's loaded in there isn't HTML. It's a  
19 file. The iframe has a source attribute which loads  
20 the file. So in order to do something like that, the  
21 person would have to go create a file that had the  
22 text in it, put that file someplace in the directory  
23 structure of it so that the -- the representation on  
24 the page would say, "Software to be loaded here."

25 Q. And is it your opinion that that's beyond

1 J. OLIVIER - 7/26/18

2 the skill of a person that -- is it your opinion that  
3 doing that is beyond the skill of a person of  
4 ordinary skill in the art?

5 MR. ROBINSON: Objection; form --

6 (Simultaneously speaking.)

7 A. It's my opinion that there is no  
8 motivation for wanting to do something like that. I  
9 mean, you can do all sorts of crazy stuff if you want  
10 to on a web page, but why would you go to all that  
11 trouble when you don't need to.

12 Q. Okay. But my question was, could a person  
13 of ordinary skill in the art in 2012 do it?

14 MR. ROBINSON: Objection; form,  
15 goes beyond the scope of his declaration.

16 A. So if he wanted to, it's possible he could  
17 try to do this. I see no reason why he would want to  
18 do that, though.

19 MR. ROBINSON: Can we take a  
20 break?

21 MR. McDOLE: Sure.

22 (Break.)

23 Q. Going back to video streaming,  
24 Dr. Olivier. Can you stream and store video data in  
25 a file at a destination?



1 J. OLIVIER - 7/26/18

2 MR. ROBINSON: Objection; form.

3 A. You can. It's not simple. You have to  
4 design a system upfront to start to do that as is  
5 taught in the '997.

6 Q. Okay. Turning back to your source code in  
7 Paragraph 120 of your 829 declaration. Now,  
8 originally in Nassiri the frameborder was set to  
9 zero. Correct?

10 A. Correct.

11 Q. What difference would that have made in  
12 the image in 121?

13 A. You wouldn't have the line drawn around  
14 it. You would just see more of a blank area.

15 Q. How difficult would it be for a person of  
16 ordinary skill in the art in 2012 to change the  
17 frameborder to zero?

18 MR. ROBINSON: Objection; form.

19 A. Actually Nassiri teaches that the  
20 frameborder is zero.

21 Q. Would take no effort for a person of  
22 ordinary skill in the art to set the frameborder to  
23 zero?

24 A. I think Nassiri teaches it to set the  
25 frameborder to zero.

1 J. OLIVIER - 7/26/18

2 Q. How difficult or how long would it take a  
3 person of ordinary skill in the art to change the  
4 frameborder to zero in 2012?

5 MR. ROBINSON: Objection; form,  
6 asked and answered.

7 Q. From the code you have in Paragraph 120?

8 A. It wouldn't take long at all.

9 Q. Okay.

10 A. Nassiri teaches the frameborder zero. It  
11 would create a larger white space on the page if you  
12 took away -- you can imagine in Paragraph 121 taking  
13 away the border, and then you would see a giant white  
14 space there. But as I stated, I changed the  
15 frameborder so you could see where the frame was on  
16 the page.

17 Q. And if a person of ordinary skill in the  
18 art in 2012 had a desire to put the link "Do you want  
19 to load the video capture software" above the iframe  
20 in Paragraph 121, what would the person of ordinary  
21 skill in the art have to do to the code in  
22 Paragraph 120?

23 MR. ROBINSON: Objection; form,  
24 beyond the scope.

25 A. You would move some code around in the

1 J. OLIVIER - 7/26/18

2 code on Page 120. You would, in particular, take the  
3 href code, the anchor, and move it up above the  
4 iframe.

5 Q. And in 2012, how long would it have taken  
6 a person of ordinary skill in the art to modify the  
7 code of Paragraph 120 such that the link "Do you want  
8 to load the video capture software" would appear  
9 above the iframe in Paragraph 121?

10 MR. ROBINSON: Objection; form,  
11 beyond the scope.

12 A. If a manager told him I wanted to see it  
13 up above there, it wouldn't take him probably less  
14 than an hour.

15 Q. Okay. Does the large blank space in  
16 Paragraph 121 of your 829 declaration make it harder  
17 to use the web page of Paragraph 121?

18 MR. ROBINSON: Objection; form.

19 A. It makes it confusing to use because it  
20 seems like some sort of error occurred because you  
21 have a large blank space sitting in your web page.

22 Q. The web page you coded in Paragraph 120 of  
23 your 829 declaration would not make the web page  
24 depicted in Paragraph 121 unusable, would it?

25 MR. ROBINSON: Objection; form.

1 J. OLIVIER - 7/26/18

2 A. The web page on 121 is usable.

3 Q. Right.

4 A. Okay.

5 Q. And the web page on 121 would still work  
6 for its intended purpose. Correct?

7 MR. ROBINSON: Objection; form.

8 A. And I have to ask you what intended  
9 purpose you're talking about there.

10 Q. Of -- Nassiri's video recorder would still  
11 play in the iframe, correct --

12 MR. ROBINSON: Objection; form.

13 Q. -- of Paragraph 121?

14 A. If you coded Nassiri as it's coded, there  
15 would be a video recorder sitting here in the iframe.

16 Q. Okay. And that video recorder -- strike  
17 that.

18 Nassiri would still be able to receive videos  
19 from contributors. Correct?

20 MR. ROBINSON: Objection; form.

21 A. The iframe in 121 containing the record  
22 functionality would still operate and you could  
23 receive videos from it.

24 Q. Now, looking at Paragraph 121, what  
25 happens if a user clicks "Do you want to load the

J. OLIVIER - 7/26/18

video capture software"?

A. The --

MR. ROBINSON: Objection; form.

A. The source of the link gets loaded into the iframe.

Q. Okay. So by -- by clicking "Do you want to load the video capture software," you would request a video recorder. Correct?

MR. ROBINSON: Objection; form.

A. In this example, you would make a request for demo\_iframe.htm.

Q. In Nassiri, that would be a request for a video recorder. Correct?

MR. ROBINSON: Objection; form.

A. Nassiri doesn't teach this at all. So in Nassiri -- the video recorder software, the iframe that's taught in Nassiri would already have the video recorder software sitting in here.

Q. Okay. In your example, the demo\_iframe.htm is replaced by the video recorder in Nassiri. Correct?

MR. ROBINSON: Objection; form.

A. It's demonstrating that, correct.

Q. You just used demo\_iframe.htm as a

1 J. OLIVIER - 7/26/18

2 placeholder?

3 A. Correct.

4 Q. And only if the user clicks the link in  
5 Paragraph 121 are resources on the video host and  
6 computer system used. Correct?

7 MR. ROBINSON: Objection; form.

8 A. (Pause.)

9 I just need to hear the question back real  
10 quick.

11 Q. Sure. Only if the user clicks the link in  
12 Paragraph 121 are resources on the video host  
13 computer used. Correct?

14 MR. ROBINSON: Objection; form.

15 A. It's the first time resources are  
16 requested from the video host computing system 120.

17 Q. Okay. And you would agree that minimizing  
18 resources consumed is always a goal in designing  
19 network applications?

20 MR. ROBINSON: Objection; form.

21 A. No. Sometimes it is if it's critical and  
22 sometimes you will -- you don't have to worry about  
23 minimizing resources if the resources you're already  
24 using are so minimal you don't have to worry about  
25 it.

1 J. OLIVIER - 7/26/18

2 Q. Would a person of ordinary skill in the  
3 art in 2012 ever choose to use more resources than he  
4 or she would need to?

5 MR. ROBINSON: Objection; form.

6 A. Yes. Under some situations you may want  
7 to use a minuscule amount more computing time in  
8 order to have a more vibrant, more appealing web  
9 page, to have a more understandable web page.

10 So a person doesn't always try to minimize  
11 resources. If the resources aren't in any way taxed,  
12 there's no -- -- there's no reason to try to minimize  
13 resources. Otherwise, you wouldn't have operating  
14 systems and browsers and things like that. Those  
15 aren't minimizing resources.

16 Q. Okay. Would a person of ordinary skill in  
17 the art want to make a web page easy to use?

18 A. They would endeavor to, yes.

19 Q. Would a person of ordinary skill in the  
20 art have the ability in designing a web page to move  
21 text and boxes around?

22 MR. ROBINSON: Objection; form.

23 A. Yes.

24 Q. Would a person of ordinary skill in the  
25 art in 2012 have the ability to insert hyperlinks

1 J. OLIVIER - 7/26/18

2 into a page in 2012?

3 A. If they saw a need to, if there was a  
4 reason to, they would. They wouldn't insert  
5 hyperlinks just because.

6 MR. McDOLE: Why don't we take a  
7 quick break? I just want to confer with my  
8 colleagues, see if we have any other additional  
9 questions, and we'll be wrapping up soon.

10 (Break.)

11 MR. McDOLE: We have no further  
12 questions.

13 MR. ROBINSON: A little redirect.

14 EXAMINATION

15 BY MR. ROBINSON:

16 Q. Dr. Olivier, in your experience designing  
17 software, do you have to consider how a user will  
18 interact with that software?

19 MR. McDOLE: Objection; leading.

20 A. Yes.

21 Q. What types of things do you have to  
22 consider in that context?

23 A. The usability of the interface, the user  
24 interface is an important part of designing software  
25 systems that interface with human beings. You have



1 J. OLIVIER - 7/26/18

2 to consider how obvious it is for them to use it  
3 without a large amount of training, things of that  
4 nature.

5 Q. Do you always need to perform a formal  
6 study to have an understanding of those factors?

7 MR. McDOLE: Objection; leading.

8 A. No. By far, the largest majority of  
9 software with user interfaces don't undertake a  
10 formal study. The interface is developed and the  
11 developer takes into account the human nature of how  
12 to work with the software.

13 Q. Would you please refer to Paragraph 49 of  
14 your declaration in the 829 proceeding?

15 A. Yes.

16 Q. Do any of the questions that have been  
17 asked today change your opinion of the meaning of the  
18 term "video stream"?

19 A. No, they do not.

20 Q. Does the verb "streaming" always refer to  
21 a video stream?

22 A. The verb "streaming," you have to  
23 understand what context you're using the word  
24 "streaming" in, in order to understand whether  
25 they're talking about a video stream as one of

1 J. OLIVIER - 7/26/18

2 ordinary skill would understand in the '997 patent or  
3 not.

4 Q. In your discussion today of video  
5 streaming, have you been trying to refer to the  
6 context of the '997 patent?

7 MR. McDOLE: Objection; form,  
8 leading.

9 A. I tried to answer the questions and tried  
10 to make clear when I was using the '997, my claim  
11 construction for the '997 video stream, as opposed to  
12 not using it.

13 Q. Would you please refer to Paragraph 18 of  
14 Nassiri?

15 MR. ROBINSON: So it's clear for  
16 the record, that's Exhibit 1009.

17 A. I'm there.

18 Q. You were asked a number of questions about  
19 links being displayed relative to an iframe. I'd  
20 like to make sure the record's clear.

21 Does Nassiri disclose displaying a link on  
22 a web page with an iframe?

23 A. Nassiri does not disclose a link that can  
24 reference the iframe in Nassiri.

25 MR. ROBINSON: That's all I've

1 J. OLIVIER - 7/26/18

2 got.

3 MR. McDOLE: Just give us a couple  
4 of minutes.

5 (Break.)

6 MR. McDOLE: We have no further  
7 questions.

8 (Deposition concluded at 3:53 p.m.)  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

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

3 TWITTER, INC., § CASE IPR2017-00829  
§ CASE IPR2017-00830  
4 Petitioner, §  
§ PATENT 9,083,997  
5 VS. §  
§  
6 VIDSTREAM, LLC §  
§  
7 Patent Owner. §

8 REPORTER'S CERTIFICATION

9 DEPOSITION OF JAMES LAWRENCE OLIVIER, Ph.D.

10 TAKEN JULY 26, 2018

11 I, TAMARA CHAPMAN, Certified Shorthand Reporter  
12 and Notary Public in and for the State of Texas,  
13 hereby certify to the following:

14 That the witness, JAMES LAWRENCE OLIVIER,  
15 Ph.D., was duly sworn by the officer and that the  
16 transcript of the oral deposition is a true record  
17 of the testimony given by the witness;

18 That the original deposition was delivered to  
19 JAMIE H. McDOLLE;

20 That a copy of this certificate was served on  
21 all parties and/or the witness shown herein on  
22 7-30-2018.

23 I further certify that pursuant to FRCP No.  
24 30(f)(i) that the signature of the deponent:

25 \_\_\_\_\_ was requested by the deponent or a party  
before the completion of the deposition and that the

1 signature is to be returned within 30 days from date  
2 of receipt of the transcript. If returned, the  
3 attached Changes and Signature Page contains any  
4 changes and the reasons therefor;

5 X was not requested by the deponent or a  
6 party before the completion of the deposition.

7 I further certify that I am neither counsel  
8 for, related to, nor employed by any of the parties  
9 in the action in which this proceeding was taken,  
10 and further that I am not financially or otherwise  
11 interested in the outcome of the action.

12 Certified to by me this 30th of July, 2018.  
13  
14  
15

---

16 Tamara Chapman, CSR, CRR, RPR  
CSR NO. 7248; Expiration Date: 12-31-18  
17 TSG Reporting, Inc.  
Firm Registration No. 615  
18 Nationwide - Worldwide  
Phone: (877) 702-9580  
19 Info@tsgreporting.com  
www.tsgreporting.com  
20  
21  
22  
23  
24  
25

## ERRATA SHEET

Case Name:

Deposition Date:

Deponent:

Pg.	No.	Now Reads	Should Read	Reason
6	_____	_____	_____	_____
7	_____	_____	_____	_____
8	_____	_____	_____	_____
9	_____	_____	_____	_____
10	_____	_____	_____	_____
11	_____	_____	_____	_____
12	_____	_____	_____	_____
13	_____	_____	_____	_____
14	_____	_____	_____	_____
15	_____	_____	_____	_____
16	_____	_____	_____	_____
17	_____	_____	_____	_____
18	_____	_____	_____	_____
19	_____	_____	_____	_____

\_\_\_\_\_

Signature of Deponent

SUBSCRIBED AND SWORN BEFORE ME

THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2018.

\_\_\_\_\_

(Notary Public) MY COMMISSION EXPIRES: \_\_\_\_\_