

UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD
Case IPR2022-00138
IPR2022-00135

-----	:	DEPOSITION OF:
THE DATA COMPANY	:	
TECHNOLOGIES INC.,	:	DAVE LEVIN
	:	
Petitioner	:	
	:	
v.	:	
	:	
BRIGHT DATA LTD.,	:	
	:	
Patent Owner.	:	

July 22, 2022

The virtual recorded deposition
of DAVE LEVIN, taken stenographically by Karen
Friedlander, CCR-NJ, RCR-NY, RMR, RDR, CRR, on
the above date, at 9:00 a.m. ET.

Job No.: 5325

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I N D E X

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Examinations

Page

DAVE LEVIN

BY MR. DUNHAM:

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BY MR. WICHMAN:

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E X H I B I T S

No. Description

Page

- No exhibits marked -

1 THE VIDEOGRAPHER: Good morning.
2 We are now on the record. Today's date is
3 July 22, 2022, and the time is 9:03 a.m. Eastern
4 Standard Time.

5 This is the video deposition of
6 Dr. Dave Levin in the matter of The Data Company
7 Technologies, Inc., versus Bright Data LTD,
8 filed in the United States Patent and Trademark
9 Office before the Patent Trial and Appeal Board,
10 and the case number is IPR2022-00135.

11 This deposition is taking place
12 via web videoconference with all participants
13 attending remotely.

14 My name is Luis Garcia, I am the
15 videographer representing TransPerfect Legal
16 Solutions.

17 Will counsel on the conference
18 please identify yourselves and state whom you
19 represent, beginning with the questioning
20 attorney.

21 MR. DUNHAM: This is Tom Dunham
22 for patent owner Bright Data Limited. I'm with
23 the firm of Cherian LLP, and with me today is
24 Elizabeth O'Brien.

25 MR. WICHMAN: This is Adam

1 Wichman, I represent the data company, The Data
2 Company Technologies, and with me is Dr. Dave
3 Levin.

4 I do want to point out that there
5 are two cases that are involved today. It's not
6 just IPR2022-00135, but also IPR2022-00138.

7 THE VIDEOGRAPHER: Thank you.
8 Our court reporter today is Karen Friedlander
9 representing TransPerfect Legal Solutions.

10 Would the court reporter please
11 swear in the witness.

12 (DAVE LEVIN, having been duly sworn as a
13 witness, testified as follows:)

14 MR. DUNHAM: Okay. Would the
15 videographer please stop the video recording now
16 but keep the video (sic) running.

17 Just to confirm, we are still
18 recording audio, correct?

19 THE VIDEOGRAPHER: Correct.

20 MR. DUNHAM: Okay. Thank you.

21 EXAMINATION

22 BY MR. DUNHAM:

23 Q. Dr. Levin, are you ready to go?

24 A. I am.

25 Q. Great. Well, good morning, and

1 thank you for being here today.

2 And, Mr. Wichman, thank you for
3 the clarification. I had intended to note as
4 well, by agreement by the parties, the
5 deposition today is applying to two IPRs, the
6 -00135 and the -00138.

7 So, Dr. Levin, please allow me to
8 begin with a little bit of background. Have you
9 been deposed before?

10 A. No. This is my first deposition.

11 Q. Great. So let me just go over a
12 few ground rules with you so we can try to make
13 things as smooth as possible.

14 A. Great.

15 Q. So I will be asking you a series
16 of questions. From time to time, your counsel
17 may interpose an objection. Unless your counsel
18 instructs you not to answer, even if he has
19 objected, please answer my question, okay?

20 A. Okay.

21 MR. DURHAM: It appears that the
22 video has frozen of the witness.

23 Is this something that's been
24 going on with your system? I think I heard
25 about that yesterday.

1 MR. WICHMAN: I think we
2 discovered this -- yes.

3 (Court reporter seeks
4 clarification.)

5 MR. WICHMAN: We discovered that
6 there is this intermittent issue with some calls
7 freezing on the conference room video.

8 MR. DURHAM: Well, we'll work
9 through this. Hopefully, it will go smoothly.

10 BY MR. DURHAM:

11 Q. Dr. Levin, as I said, I'll be
12 asking you a series of questions, and it's
13 important when you respond to a question, that
14 if you first don't understand the question,
15 please ask me to clarify, and I'll do my best to
16 do so. In addition, you must always answer with
17 a verbal answer. The court reporter will not
18 take down nods or gestures, so please always
19 give an audible answer. Is that understood?

20 A. I understand, yes.

21 Q. Thank you. Also, it's important
22 that we all do our best to make sure we only
23 speak one person at a time. If the two of us
24 speak at the same time, it becomes exceptionally
25 difficult for the court reporter and that

1 creates a lot of problems. So I will do my best
2 when you are answering me, to wait until your
3 answer is complete, and I would ask that you do
4 the same when I am asking questions. Please
5 wait until I have finished asking the questions
6 before you respond and that will give us a much
7 cleaner record at the end of the proceeding.

8 All right?

9 A. Yep, I'll do my best.

10 Q. We will be going through some
11 documents today. I do see you have a few
12 binders on the table in front of you and then
13 also some boxes, the boxes we shipped to you,
14 and there should be also one box or envelope
15 from Sir Speedy that was -- I believe red, and I
16 don't know if it's that red box or something
17 different.

18 A. This red box says Sir Speedy on
19 it, yes.

20 Q. Great. Most of what I will be
21 talking to you about today will be in that red
22 box with one minor exception, but I do notice
23 you have a couple of binders in front of you.

24 Could you please tell me what
25 materials are in front of you on the table that

1 are not from those boxes?

2 A. Yes, in this binder to my left, I
3 have my declaration for the '319 patent, and
4 this binder here to the right, my right, I have
5 my declaration for the '510 patent, and in
6 front, these are just the table of contents from
7 my declaration, and this one I'm pointing to
8 here, these are just a printout of the claim
9 listings from the respective patents.

10 Oh, and here is a printout of
11 Plamondon, as far as I can tell a clean printout
12 of Plamondon -- I'm sorry, this is just a blank
13 legal pad.

14 Q. Thank you. And I think you
15 anticipated my next question. In terms of the
16 materials in front of you, are there any notes,
17 post-its, markings, tabs, any other markings of
18 any form in any of those documents you just
19 identified?

20 A. Not to my knowledge, no. I
21 flipped through them. I don't see any, no.

22 Q. Okay. So as we go through the
23 day today, we'll take a break approximately
24 every hour. If at any time you need a break
25 during the day, please do not hesitate to ask,

1 and I'll work with you to get you a break as
2 quickly as possible. We may have to finish up a
3 question or two to get to the next break, but I
4 certainly want to make sure we accommodate any
5 scheduling issues or if you need just a mental
6 break or other type of break, that's fine. So,
7 please don't hesitate to let me know. Okay?

8 A. That sounds good, thank you.

9 Q. All right. And this question
10 always sounds a little strange to witnesses, but
11 it's important we always ask. Is there any
12 reason today, such as medication or illness,
13 anything of that nature, that would prevent you
14 from giving complete, truthful answers in your
15 testimony?

16 A. No, not that I can think of, no.

17 Q. Okay. Thank you.

18 So can you tell me, generally,
19 what you did to prepare for the deposition
20 today?

21 A. Generally, I read back through my
22 declarations, I read back through and
23 refamiliarized myself with the patents, the '319
24 patent and the '510 patent, and Plamondon and
25 some of the other prior art.

1 I spoke with Mr. Wichman about
2 what a deposition process is like and watched
3 some YouTube videos, seeing as how I mentioned,
4 this is my first deposition, I wasn't really
5 sure what it was.

6 So basic background preparation,
7 refamiliarizing myself with these documents. I
8 also spoke with my dad. Turns out my dad had
9 given depositions years and years ago and he
10 just gave me some general advice and also sent
11 me some other links to YouTube videos. So
12 generally speaking, that's what I did.

13 Q. Approximately how much time did
14 you spend preparing for the deposition today?

15 A. I'm not sure exactly. How much
16 time -- in terms of a number of hours?

17 Q. Yes.

18 A. I'm not sure exactly. I started
19 preparing last week and spent time each day this
20 week. In terms of number of hours, I'm not sure
21 off the top of my head.

22 Q. Would you say more than a full
23 day preparing?

24 A. Yes.

25 Q. More than two days?

1 A. More than two work days? Yes.

2 Q. Have you been keeping track of
3 your time in these two matters?

4 A. I have been keeping track of the
5 time, I just don't remember it off the top of my
6 head.

7 Q. Sure. Do you have -- can you
8 tell me how many hours in total you have devoted
9 to these two particular matters?

10 A. In total, even beyond the
11 preparing for the deposition?

12 Q. Yes, sir.

13 A. I'm sorry. I don't remember that
14 either.

15 Q. Do you know if it's more than 50
16 hours?

17 A. I don't remember. I'm sorry.

18 Q. I want to mark two exhibits just
19 for -- so they're in the record. These are not
20 going to be among the documents in front of you.

21 These are just your notices of
22 deposition, which are paper 15 from both IPRs.
23 I am assuming from what you've told me, you do
24 not have those in front of you; is that correct?

25 A. Correct.

1 Q. They are in Box 1 that we
2 shipped, and if you are able to open Box 1, they
3 would be in the first file folder to the left.

4 A. I'm not sure which one is Box 1.

5 Q. Is there a green tear sheet in
6 the box you just opened on top?

7 A. Not that I see. I don't see a
8 green tear sheet.

9 Q. Okay. Can you open the Sir
10 Speedy box, then, the red box, please.

11 A. There's some tape here. I've
12 just opened it.

13 Q. There should be two papers, they
14 just will say patent owner's notice of
15 deposition of Dave Levin.

16 A. I see -- I see one stapled
17 document with three pages that says that, and
18 that refers to case IPR2022-00138.

19 Q. Sure. And there should be
20 another one just like it for the 135 case.

21 A. Yes, I have the notice.

22 Q. Okay. All right. So for the
23 record -- and thank you for retrieving those
24 from the box. These are both marked in the IPRs
25 as paper 15 and these are the notices of

1 deposition that patent owners served for your
2 deposition today, for both IPRs, the 135 case
3 and the 138 case.

4 And my question is, sir, have you
5 seen these notices of deposition before?

6 A. I have not.

7 Q. You do understand you're
8 testifying here today in response to these
9 notices to give testimony about the opinions
10 you've rendered in the two IPRs, the 135 IPR and
11 the 138 IPR, correct?

12 A. That's my understanding, yes.

13 Q. So today your testimony is just
14 as if you were in court under oath in front of a
15 tribunal. You understand that, correct?

16 A. I understand.

17 Q. Okay. Thank you. That is --
18 that is the bulk of my housekeeping, so you can
19 certainly place those notices aside now.

20 A. Thank you.

21 Q. What I would like to do now is
22 proceed to asking you some questions about some
23 things you've made in statements in your
24 declarations, and for convenience, I'm going to
25 work primarily from your declaration in the 135

1 IPR, and that is Exhibit No. 1003 from the IPR.

2 So if you could get that
3 declaration handy, that would be great. And
4 this would be the declaration on the '319
5 patent.

6 A. I have that declaration in front
7 of me.

8 Q. Okay. Before I get into the
9 substance, did you draft your declarations in
10 this case?

11 A. Yes, I did. There were some
12 parts of it, especially the quite specifics
13 legal background part. I'm not a lawyer, I'm
14 not trained in the law. I did not write the
15 first draft of that, the lawyers did, but I read
16 it, I understand it, and this is my report and I
17 know I'm going to have to answer questions about
18 it.

19 Q. Did you draft the remaining
20 portions of the declarations, besides the legal
21 section, as you've just explained?

22 A. Yes, there may have been a couple
23 small parts. So again, there's some legalese
24 here and there in terms of the specific wording
25 of that, that I had -- I may have not drafted

1 initially or may have had some help with.
2 Things also like the references, I didn't fill
3 in the exact reference numbers to reference
4 paragraphs. There are some things that worked
5 with that, but, yes, I did.

6 Q. Okay. We had received an email
7 from Mr. Wichman on July 19th at 6:26 p.m.,
8 indicating several corrections that you had
9 wished to make to your declarations, and my
10 question is --

11 MR. WICHMAN: Objection.

12 MR. DUNHAM: Pardon?

13 MR. WICHMAN: That's misstating
14 the record. He identified two typographic
15 errors.

16 BY MR. DUNHAM:

17 Q. Well, are those errors you wish
18 to correct in your report, sir?

19 A. I don't recall exactly which
20 errors you're -- which typographic errors you
21 are referring to.

22 Q. Well, sir, then, sitting here
23 today, are there any corrections that you would
24 wish to make to either of your declarations?

25 A. I -- if I recall correctly, there

1 was an email about -- I believe it was paragraph
2 319, if I recall correctly, where I had some
3 claim numbers that were incorrect. I think that
4 was clarified by the attorney. I think that's
5 the typographical error that you are referring
6 to.

7 I noticed a couple of other -- in
8 going back and preparing for this deposition and
9 preparing my declaration, I noticed a few other
10 small typographic errors. I think at one point,
11 for example, I wrote ETDX referring to the
12 Eastern District Court of Texas or the EDTX,
13 little typographic errors like that that -- I
14 think it's still clear from the context what I
15 was referring to.

16 But that one, in terms of the
17 claim numbers, I think that's perhaps the
18 typographical error that you're referring to and
19 I did want that corrected.

20 Q. So other than the error that you
21 testified about that was captured by the email
22 that counsel sent and maybe some ministerial
23 errors of naming the Court in Texas, were there
24 any other corrections you wish to make to your
25 declarations today?

1 A. No, just like I said, small
2 little typographical errors, but the context I
3 think still remains clear. But those are the
4 only ones that I recall at this time.

5 Q. I'd like you to turn to paragraph
6 21 of your declaration, and again, for
7 convenience, we're working out of the
8 declaration in the 135 IPR.

9 And if it's helpful, please take
10 a moment to review that paragraph.

11 A. Okay. I've read the paragraph.

12 Q. Sir, are you relying on inherency
13 to support any of your opinions as to
14 anticipation?

15 MR. WICHMAN: Objection. Calls
16 for a legal --

17 THE WITNESS: I understand
18 "inherency" to be a legal term. I'm not a
19 lawyer. I don't think I can really speak
20 definitively to that. As I recall through my
21 declaration, I mainly use "obviousness," but
22 again, I'm not -- I'm not a lawyer, so if -- if
23 there's a specific, like, technical legal
24 question about notion of inherency, I'm not sure
25 I understand the question.

1 BY MR. DUNHAM:

2 Q. Well, sir, in your declaration,
3 you say that: "Each and every limitation must
4 be satisfied, expressly, or inherently, and the
5 subject matter provided by a single prior art
6 reference."

7 Do you see that language?

8 A. I see that.

9 Q. And my question is: In your
10 analysis, did you find each and every limitation
11 to be expressly disclosed, or did you rely on
12 inherency to support your anticipation opinions?

13 MR. WICHMAN: Objection. Form.
14 Calls for a legal conclusion.

15 THE WITNESS: Again, these are
16 legal terms. I'm not sure exactly what the
17 question is. Throughout my -- if there's a
18 specific part of the declaration, a specific
19 part of my declaration where I'm drawing a
20 conclusion that you -- that you're asking about,
21 that you'd like to ask about, which is whether I
22 implied that it was satisfied expressly or
23 inherently, I'm happy to try to answer that.

24 BY MR. DUNHAM:

25 Q. So is the answer, you're not sure

1 if you relied on inherency in any of our
2 opinions on anticipation?

3 A. I -- I don't recall a specific
4 use of inherency. I remember speaking to
5 obviousness.

6 Q. Okay. If you look further down
7 in that same paragraph, you reference disclosing
8 the limitation based on inferences that a POSA
9 would reasonably be expected to draw from the
10 explicit teachings.

11 Do you see that reference in
12 paragraph 21?

13 A. Yes.

14 Q. What did you mean by that?

15 A. What I meant -- this is a lot of
16 legalese. I just want to make sure I answer
17 your question to the best of my ability.

18 What did I mean when I said -- I
19 understood the last part -- based on inference
20 is --

21 (Court reporter seeks
22 clarification.)

23 THE WITNESS: Actually, would you
24 mind reading back the question to me, please.

25 (Pertinent portion of the record

1 is read back.)

2 THE WITNESS: By that, I believe
3 that was in relation to inferences that a person
4 of ordinary skill in the art would reasonably be
5 expected to draw from the explicit teachings of
6 the reference when read in the context provided
7 by the person of ordinary skill in the art.

8 (Court reporter seeks
9 clarification.)

10 THE WITNESS: As I understand,
11 the question was, what did I mean by "that,"
12 where "that" was referring to inferences that a
13 person of ordinary skill in the art would
14 reasonably be expected to draw from the explicit
15 teachings in the reference when read in the
16 context provided by the person of ordinary skill
17 in the arts, knowledge, and experience.

18 So as I understand that, it means
19 that a person of ordinary skill in the art at
20 the time would read the reference and the
21 specification and under what I, as an expert,
22 believe a person of ordinary skill in the art at
23 the time would understand and know at the time
24 that also what, what they would -- what they
25 would infer from a patent, in terms of what it

1 means, what problems it raises, how it might
2 combine with other -- other work that was known
3 at the time. That's -- that's my understanding
4 of it.

5 BY MR. DURHAM:

6 Q. Sir, in paragraph 22 of your
7 declaration, you describe your understanding of
8 when a limitation may be inherent, and you refer
9 to the phrase: "A claim limitation is inherent
10 in a prior art reference if that limitation is
11 necessarily present when practicing the
12 teachings of the reference," and the paragraph
13 goes on from there.

14 Are you relying on an element
15 being necessarily present, as opposed to
16 expressly disclosed in a reference to support
17 any of your opinions as to anticipation?

18 A. I don't recall any instances
19 where I am relying on it being necessarily
20 present. If there's a specific claim or a
21 specific paragraph from my declaration you'd
22 like to ask about, I'd be happy to. But off the
23 top of my head, I can't think of one.

24 Q. Is it your understanding, sir,
25 that even if a person of ordinary skill in the

1 art would not recognize the presence of a
2 limitation in a prior art reference, that
3 limitation may still be present for purposes of
4 anticipation?

5 A. May I please have that question
6 read back to me?

7 Q. Sure. Is it your position that
8 even if a person of ordinary skill in the art
9 would not recognize the presence of limitation
10 in a prior art reference, that limitation may
11 still be present for purposes of anticipation?

12 A. If I'm understanding the question
13 correctly, I believe that's what I say in my
14 paragraph 22. I say: "I understand that the
15 claim limitation is inherent in a prior art
16 reference if that limitation is necessarily
17 present when practicing the teachings of the
18 reference, regardless of whether a person of
19 ordinary skill in the art recognizes the
20 presence of that limitation in the prior art."

21 So as it pertains to inherency,
22 that sounds like my paragraph 22.

23 Q. If you could take a look at
24 paragraph 27, sir. And if you'd like to take a
25 moment to read it to yourself, that's fine.

1 A. I've read it.

2 Q. Sir, would you agree that when
3 combining references in an obviousness
4 combination, if the function of an element were
5 to change in the proposed combination, then such
6 a combination would be improper?

7 MR. WICHMAN: Objection. Calls
8 for a legal conclusion.

9 (Court reporter seeks
10 clarification.)

11 THE WITNESS: Can I have that
12 question read back to me one more time?

13 BY MR. DUNHAM:

14 Q. I'll repeat it for you, sir.
15 Would you agree that when
16 combining references in an obviousness
17 combination, if the function of an element were
18 to change in the proposed combination, then such
19 a combination would be improper?

20 MR. WICHMAN: Objection. Calls
21 for a legal conclusion.

22 THE WITNESS: I don't know the
23 answer to that question, as I'm not a lawyer. I
24 do know from my paragraph 27, that if the -- if
25 there's no change in their respective functions,

1 then the combination would have yielded -- I'm
2 sorry, I'm sorry.

3 That -- it's my understanding
4 that a patent claim is invalid as obvious if the
5 claimed elements were known in the prior art,
6 one skilled in the art would have combined the
7 elements as claimed by the methods with no
8 change in their respective functions, and that
9 the combination would have yielded nothing more
10 than predictable results.

11 So since we are describing the
12 same thing, then yes.

13 BY MR. DUNHAM:

14 Q. If you could please -- if you'd
15 like to read paragraph 28 to yourself, that's
16 fine. I just have a couple of questions about
17 it.

18 A. Sure. Okay.

19 Q. I'm mostly going to focus on the
20 last bullet in paragraph 28, if that helps you
21 orient yourself, and my first question, sir, is:
22 In performing your obviousness analysis, did you
23 read every word of each reference that you
24 relied upon?

25 A. I believe that I did, though I

1 certainly have not committed them to memory.

2 Q. Did you consider portions of the
3 references that taught away from your proposed
4 combinations?

5 MR. WICHMAN: Objection. Calls
6 for a legal conclusion.

7 THE WITNESS: I'm not sure I
8 recall any parts that taught away. I would have
9 considered the entire references, but it seems
10 to be presupposing that there are parts that
11 taught away the combination, and I'm not
12 familiar that any part of the prior art did
13 that.

14 BY MR. DUNHAM:

15 Q. It's your understanding that in
16 an obviousness analysis, in order to modify the
17 prior art reference which combined more than one
18 prior art reference, there must be some
19 teaching, suggestion, or motivation in the prior
20 art?

21 MR. WICHMAN: Objection.

22 THE WITNESS: It is my
23 understanding that -- that that is one -- that's
24 one relevant consideration for motivation, that
25 it was taught in the prior art, but it's also my

1 understanding that that motivation could have
2 been clear to a person of ordinary skill
3 through, through -- it would have been clear to
4 a person of ordinary skill.

5 BY MR. DUNHAM:

6 Q. Is it your understanding, then,
7 that the motivation to combine can come solely
8 from outside of the references sought to be
9 modified or combined?

10 A. I'm not sure I quite understand
11 the question. The motivation -- I mentioned
12 it's all within the context of the --

13 (Court reporter seeks
14 clarification.)

15 THE WITNESS: Can I have the
16 question read back to me, please?

17 BY MR. DUNHAM:

18 Q. I'll repeat it. My question,
19 sir, is then, is it your understanding that the
20 motivation can come solely from outside of the
21 references sought to be modified or combined?

22 A. I'm not sure exactly what "solely
23 from outside" means.

24 Q. In other words, sir, if there's
25 no teaching, suggestion, or motivation inside

1 the references themselves that you seek to
2 combine, can that motivation to combine come
3 solely from some other source?

4 A. I believe -- I believe, from my
5 paragraph 28, that it is possible as, for
6 example, a person -- there was a use of a known
7 technique to improve similar devices, methods,
8 or products in the same way.

9 So even if -- my understanding of
10 that is that in that hypothetical situation
11 where the patent -- the prior art -- I'm not
12 sure I quite understand the question still.

13 Solely from outside of the prior
14 art or solely from outside of the patent that
15 you're trying to combine with. I'm sorry, I
16 don't understand your question.

17 Q. You're on to it. The question
18 is: Can the motivation to combine or modify
19 come solely from outside the references that you
20 actually seek to modify or combine?

21 MR. WICHMAN: Objection.

22 BY MR. DUNHAM:

23 Q. If you're speaking, sir, we're
24 not receiving audio.

25 A. Yeah, sorry. I'm just repeating

1 the question back to myself.

2 From my understanding in my
3 paragraph 28 -- if it was -- there was a known
4 technique to improve similar devices, methods,
5 or products in the same way, if it was known to
6 someone of ordinary skill at the time, if the
7 references themselves, as I understand it, if
8 they didn't expressly articulate or teach it, if
9 it was known to someone of ordinary skill, that
10 -- I believe that that would have sufficed in
11 that hypothetical situation.

12 Q. Would you please turn to
13 paragraph 141 of your declaration.

14 A. I'm at 141 of the declaration for
15 the '319 patent.

16 Q. Sure. If you notice in that
17 paragraph, you state: "I was asked to compare
18 the challenged claims to the disclosures in the
19 Plamondon RFC 2616, RFC 1122, IEEE 802.11-2007,
20 Price and Kozat references."

21 Do you see that?

22 A. I do.

23 Q. In performing your analysis, did
24 you look at the claims, the challenged claims
25 from the patents at issue and then try to find

1 where those particular limitations from the
2 claims appeared in the various prior art
3 references?

4 MR. WICHMAN: Objection. Form.

5 THE WITNESS: I read the
6 challenged claims, I compared them to the
7 disclosures of Plamondon and those other
8 references you just mentioned.

9 BY MR. DUNHAM:

10 Q. Again, I'm trying to understand
11 the way you did your analysis, sir, and that's
12 my question.

13 So let me ask you another
14 question, for example, with respect to paragraph
15 142.

16 In 142, in part, you indicate you
17 were asked to provide your opinion whether
18 Plamondon describes subject matter that
19 satisfies the limitations in each challenged
20 claim.

21 Do you see that?

22 A. I see that.

23 Q. And I'm just trying to understand
24 your analysis. So to do your analysis, did you
25 start with the language of the claim and then

1 look at the Plamondon reference to see if it
2 disclosed each subject matter that satisfied the
3 limitation from the claim?

4 A. As part of my analysis, yes, I
5 looked at every part of -- of each of the
6 challenged claims and -- and compared that to
7 Plamondon and the other references for subject
8 matter that satisfied the limitations in each of
9 the challenged claims.

10 Q. Okay. So, and again, let's talk
11 about your obviousness analysis for a moment.

12 So to do your obviousness
13 analysis, did you start with the claims, look at
14 the language of the claim and then for each
15 claim, look at the different pieces of prior art
16 to see if those limitations were disclosed in
17 some combination of the prior art?

18 A. That wasn't the entirety of it.
19 In some cases, for example, there was claim
20 language that I had already recognized as being
21 known from some of these prior art references.

22 But then, of course, as -- for
23 the sake of the obviousness analysis, because I
24 had, as I understand, this comparison has to go
25 to show the satisfaction -- to show that it

1 satisfies the limitations in each of the
2 challenged claims, as part of that analysis,
3 yes, for each part of the challenged claims, I
4 made sure to cite specific parts of these prior
5 art references, but -- but that was -- that was
6 done after having, you know, read and understood
7 these -- these references.

8 So, for example, this mentions
9 RFC 1122. I'm familiar with that. It's
10 something that I think a person of ordinary
11 skill could have been familiar with, I read that
12 ahead of time and still refamiliarized myself in
13 its, you know, its breadth, in its entirety, but
14 then, of course, to show that each limitation is
15 met by this prior art, as certainly as part of
16 my analysis, I had to point to specific parts of
17 these prior art references, absolutely.

18 Q. Sure. And I understand at the
19 end of the work that you did, you lined up
20 different pieces of the references with the
21 different claim elements.

22 What I'm trying to understand is
23 more about the process of how you started the
24 analysis. So my question, sir, is, in starting
25 your analysis for anticipation or obviousness,

1 did you start by looking at the elements of the
2 claim and then go look for prior art that would
3 match up to each one of the elements?

4 A. I was -- I'm sorry, you're asking
5 if that's what I did at the start of my
6 analysis?

7 Q. Yes, sir.

8 A. No, I don't recall doing it like
9 that. In some cases, I was asked to compare,
10 for instance, to Plamondon. I don't remember
11 the exact order in which I read various
12 documents, but -- but I tried to fully
13 understand Plamondon to the best of my ability
14 before I identified specific parts. I wanted to
15 understand this in context.

16 Q. Okay. So now, I want to focus
17 for one more moment on your obviousness analysis
18 where you were combining references, okay?

19 A. Okay.

20 Q. My question is a process
21 question. When you were undertaking your
22 obviousness analysis to combine references, did
23 you start with any particular claim that you
24 were interested in, read the elements of that
25 claim, and then go look to see which combination

1 of references might disclose those elements?

2 A. I don't recall the exact process,
3 but I recall --

4 (Court reporter seeks
5 clarification.)

6 THE WITNESS: I recall trying to
7 understand, once I was familiar with all of
8 these different references and, you know,
9 refamiliarize myself with some of the ones that
10 I had -- I was already previously familiar with,
11 tried to understand the functionality of the
12 claim to understand how these things
13 functionally might combine, and then, of course,
14 as part of the analysis, would go through
15 limitation by limitation.

16 But if you're asking for, like,
17 precisely the order in which I read anything, I
18 don't remember off the top of my head. But
19 everything that I tried to do was always done,
20 you know, where I tried to understand fully what
21 these references are, so I really understood the
22 context so I wasn't, you know, taking something
23 out of context or anything like that or
24 misquoting or mischaracterizing.

25 I did my best to really try to

1 capture what these prior art references were
2 doing in the context of -- they were describing
3 as I would understand someone of ordinary skill
4 would have understood them at the time.

5 BY MR. DUNHAM:

6 Q. Sure. So let me ask it a little
7 different way. So did you identify the
8 particular combinations of references that you
9 settled upon just by reading the references
10 themselves, or did you use the claim as a
11 roadmap to figure out that the combination here
12 might be Plamondon plus, say, 802.11 or instead
13 of Plamondon plus Kozat.

14 How did you -- what I'm trying to
15 get to is the process of how you ultimately
16 chose which combinations you made.

17 A. Ultimately, when I put the
18 combination in my declaration, I would only have
19 put in my declaration, as I think I clarified
20 and I'm happy to answer any questions.

21 Once I was sure that it did meet
22 all of the claim limitations, but there are many
23 instances where -- that in reading -- in reading
24 Plamondon, that it also just was obvious to me
25 that there were these problems that arose

1 independent of the -- there was a -- the issues
2 that motivated the combinations as I read
3 Plamondon, these were obvious to me independent
4 of -- of the claim limitations as far as I
5 recall.

6 Q. Could you turn to paragraph 35 in
7 your declaration, please. And please feel free
8 to read that paragraph to yourself.

9 A. I've read it.

10 Q. So I noticed in paragraph 35 that
11 you mentioned working with the people who fit
12 the characteristics of a POSA and being familiar
13 with their level of skill in and around
14 October 2009.

15 And my question is: You did not
16 go so far as to say that you were a POSA.

17 So my question is first: Under
18 your definition of a POSA, did you qualify as a
19 person of ordinary skill in the art as of
20 October 2009?

21 A. So -- excuse me. I was asked to
22 apply a particular definition of a person of
23 ordinary skill in the art. I explained in my
24 paragraph 34 of that same declaration, page 17
25 of it, and I did add one slight assumption, one

1 extra assumption to that definition of a person
2 of ordinary skill in the art.

3 I mentioned there, you know,
4 assuming the person described by POSA's
5 definition had some training in networking, I
6 explained that around there. By this
7 definition, yeah -- by both definitions, yes, I
8 met the -- the definition of a person of
9 ordinary skill in the art at that time.

10 Q. As of October 2009, did you have
11 a Master's degree?

12 A. I did not.

13 Q. So to meet the definition, how do
14 you believe that you met the definition of a
15 person of ordinary skill in the art as of
16 October 2009?

17 A. So in paragraph 32 of my
18 declaration, I say what the patent owner had
19 argued what a POSA was, and it was -- I'll just
20 read that real quick: "An individual who, as of
21 October 8, 2009, had a Master's degree or higher
22 in the field of electrical engineering, computer
23 engineering, or computer science, or, as of that
24 time, had a Bachelor's degree in at least one of
25 the same fields and two or more years of

1 experience in internet communications."

2 So I did not have a Master's
3 degree, so I didn't meet that first condition.
4 I would just say a Master's degree had not been
5 conferred upon me, but I actually met all of the
6 requirements for a Master's degree in computer
7 science at the University of Maryland.

8 To be honest, I made the personal
9 choice not to do the one last step, which was
10 fill out a form to get that Master's degree.

11 I had been directly admitted into
12 the Ph.D. program and I decided at that point, I
13 did not want to have a Master's degree out of
14 fear that it would present to me an exit ramp
15 that I might say, yeah, I got a Master's degree,
16 that's enough, I won't finish the Ph.D. I
17 wanted to finish the Ph.D. I did finish the
18 Ph.D. In fact, I finished it less than a year
19 after October 8, 2009.

20 But back to the definition, as of
21 that time, had a Bachelor's degree in at least
22 one of the same fields, computer science was one
23 of those fields. I had a Bachelor's degree in
24 computer science, and two or more years of
25 experience in internet communications.

1 So I had received my Bachelor's
2 degree in computer science from the University
3 of Maryland in 2002. This was seven years
4 later. In that seven-year span -- actually,
5 while I was an undergraduate as well, I had
6 interned at Motorola for a couple of years
7 giving me experience in internet communications,
8 but in the seven years between when I graduated,
9 when I received my Bachelor's degree in computer
10 science, until October 2009, I had, over those
11 seven years, more than two years of experience
12 in internet communications.

13 I think this is evidenced by the
14 fact that I had -- but my sense of publication
15 record through that time as a Ph.D. student, I
16 published papers at -- prior to 2009, I
17 published papers at the top networking venues,
18 including a conference called ACM SIGCOMM,
19 that's spelled S-I-G-C-O-M-M.

20 I referenced that in my CV. I
21 had, prior to 2009, prior to October 2009, I
22 received a best paper award from the Network
23 Systems Design and Implementation Conference,
24 one of the top conferences in network systems.
25 I had, for several years, if not more, prior to

1 2009, published papers on -- and again, it's
2 held conferences and workshops which are the
3 premier venues in computer science, on internet
4 communication, wireless communication, internet
5 routing, peer-to-peer networking.

6 So in these regards -- oh, also
7 at this time, I had been -- given invited talks.
8 I had been recognized, you know, with invited
9 talks and conferences for giving talks, I had
10 one, a Microsoft Live Labs fellowship for my --
11 based largely on my work in networking and
12 that's what ultimately led to me having two
13 summer internships with Microsoft.

14 So the one -- for the select few
15 folks who won this Microsoft Live Labs
16 fellowship, they were guaranteed an internship,
17 and I interned -- I don't remember the name of
18 their group, what it was called at the time, but
19 it was with other folks who also had met these
20 -- these criteria who did have Master's degrees
21 in these kinds of related fields and worked in
22 internet -- with experience in internet
23 communications.

24 So I think with my CV and with
25 these experiences, with the Bachelor's degree

1 and the years of experience in internet
2 communications, the fact that I was less than a
3 year from completing my Ph.D., that the Master's
4 degree is a subset, the requirements -- I'm
5 sorry, for the Master's degree of computer
6 science, at least at the University of Maryland
7 or some set of the requirements of the Ph.D., I
8 would have already completed those requirements
9 by that point.

10 For all of those reasons, I think
11 that I do meet the definition of a person of
12 ordinary skill in the art.

13 Q. At the bottom of paragraph 34 in
14 your declaration, you indicate that assuming the
15 person described by the POSA's definition had
16 some training in networking -- and I'll ask you,
17 did you mean to say by the patent owner's
18 definition before I continue with my question?

19 A. I think I did mean that. I'm
20 sorry, based on your clarification, I think the
21 context was clear, but, yes, I do believe I
22 meant the patent owner.

23 Q. So with that correction, so
24 assuming the person described by the patent
25 owner's definition had some training in

1 networking, you say your analysis, conclusions
2 and opinions would not change if you applied
3 your definition rather than the one from the
4 patent owner,

5 Have you seen that?

6 A. I see that, yes.

7 Q. So my question is: What if the
8 POSA did not have training in networking, under
9 the patent owner's definition, would your
10 conclusions change?

11 A. So as I also say a little earlier
12 in paragraph 34, I cannot comfortably say that a
13 person with only a Master's degree in electrical
14 engineering, for example, but no training
15 whatsoever in networking, would have been able
16 to understand, let alone apply the teachings of
17 the '319 patent, and likewise for the '510, and
18 I clarify here that -- in electrical engineering
19 or for these different degrees that are listed
20 by the patent owner's definition of a POSA,
21 which again are electrical engineering, computer
22 engineering, or computer science.

23 Electrical engineering, for
24 example, one could complete a Master's degree in
25 electrical engineering without ever taking a

1 networking class. You can take electrical --
2 you can choose electrical engineering courses
3 that are one hundred percent hardware and maybe
4 never learn the terms about networking.

5 So in that regard, if one doesn't
6 have -- didn't have, as I mentioned, at least
7 something equivalent to at least undergraduate
8 level class in networking, I'm not sure that
9 they would understand or be able to apply the
10 '319 patent's teachings.

11 Q. In connection with your analysis
12 in this matter, have you ever heard of the
13 patent owner either by its current name, Bright
14 Data, or its former name, Luminati?

15 A. I have heard of Luminati.

16 Q. What knowledge did you have of
17 Luminati?

18 A. As a company, no real familiarity
19 with the company. One of their products, as I
20 understand it, in one of my papers that I
21 published prior to even learning about this
22 case, some of my collaborators had, for one of
23 the experiments in that paper, had used
24 Luminati, and again, I don't know the specific
25 name of the product, especially used Luminati.

1 I mean, that there was some
2 Luminati products, I don't know, to perform some
3 internal measurements. I wasn't involved in
4 running that experiment, so I don't know the
5 details. But to the extent that Luminati has a
6 product that allows for that type of
7 experimentation, that was my level of
8 familiarity. But I -- I, myself, had not used
9 it.

10 Q. Do you know whether Luminati's
11 products have been successful in the market?

12 A. I'm not sure what -- what you
13 mean by success. Again, my only familiarity was
14 that, for one of the experiments in my paper,
15 some of my colleagues had used some Luminati
16 products to -- to run an experiment, but I'm not
17 familiar with -- I can't really express any
18 familiarity with the products or what -- any
19 degree of success or not of -- in the market.

20 MR. DUNHAM: Okay. I promised
21 you a break every hour. We've been going just
22 over an hour, so why don't we take a ten-minute
23 break.

24 THE WITNESS: I appreciate that.
25 Thank you.

1 THE VIDEOGRAPHER: The time is
2 10:04 a.m., and we're now off the record.

3 (Recess taken.)

4 (Discussion off the record.)

5 THE VIDEOGRAPHER: The time is
6 10:14 a.m., and we're now back on the record.

7 BY MR. DUNHAM:

8 Q. Dr. Levin, during the break, did
9 you discuss your testimony with anyone?

10 A. No.

11 Q. I'd like you to turn to paragraph
12 41 of your declaration, please.

13 A. Is this still the declaration for
14 the '319 patent?

15 Q. Yes. I'm using that one as a
16 proxy.

17 A. Right. I'm on paragraph 41.

18 Q. I'm sorry, did you say 41?

19 A. 41, yes.

20 Q. In paragraph 41, you state: "Any
21 host that makes a request of another host could
22 be considered a 'client.'"

23 Do you see that clause in the
24 paragraph?

25 A. I see that, yes.

1 Q. Is that statement, that: "Any
2 host that makes a request of another host could
3 be considered a client," is that consistent with
4 your understanding of how a POSA understands the
5 term "client device" as used in the claims of
6 the '319 and '510 patent?

7 A. So I've been asked to apply a
8 particular Court's construction of client device
9 as it pertains to these patents. In my
10 declaration, I also apply the patent owner's
11 construction, so that's the analysis that I was
12 -- that's the analysis that I did as it pertains
13 to the claim.

14 Q. Well, under what you've referred
15 to as the Court's construction, would you agree
16 that any host that makes a request of another
17 host could be considered a client?

18 A. The terms -- the constructions
19 that I used that start on page 43 of that
20 declaration, where the Court construed client
21 device to be a communication device that is
22 operating in the role of a client.

23 So I just want to make sure that
24 we're being really clear with the terms. I want
25 to make sure I'm understanding the question

1 correctly.

2 So a POSA would understand that a
3 host that makes a request of another host would
4 be acting in the role of a client.

5 Q. Okay. And that's what I'm trying
6 to get to.

7 And then in paragraph 41, your
8 declaration continues and says: "Any host that"
9 requests -- I'm sorry -- "Any host that services
10 the request of another could be considered a
11 server."

12 Do you see that language?

13 A. I do see that language.

14 Q. Based on the Court's
15 constructions from this case for the '319 and
16 '510 patents, would you agree that the Court's
17 -- that your statement that: "Any host that
18 services the request of another could be
19 considered a server," would that be consistent
20 with the way you applied the Court's
21 construction?

22 A. Again, just to make sure that we
23 get the language just right, that I would say,
24 as I put it, a POSA would understand that any
25 host that services the request of another host

1 would be acting in the role of a server.

2 Q. Okay. Thank you.

3 What I'd like you to do is take
4 out a copy of the '319 patent, if you have that,
5 sir. And that's Exhibit 1001 from the 135 IPR.

6 A. Would that be in your Sir Speedy
7 box?

8 Q. Yes, it would be.

9 And I'm sorry, the video is
10 frozen again, so we are unable to see what
11 you're doing, so I apologize for not knowing
12 that you were trying to retrieve it.

13 A. I'm just -- should be coming
14 back. I'm just going through it and getting the
15 '319 patent. I've obtained this document.

16 Q. Great. So in performing your
17 analysis, did you review the '319 patent?

18 A. Yes, I did.

19 Q. And did you review the entirety
20 of the '319 patent in performing your analysis?

21 A. Yes, I did.

22 Q. I would ask you to turn to figure
23 1 of the '319 patent.

24 A. I'm on figure 1.

25 Q. And in particular, I want to ask

1 you some questions about the relationship of
2 certain of the elements that are shown, and I'll
3 call your attention to those particular
4 elements.

5 So if you could look at client
6 device 14, client device 16, proxy server 6, and
7 web server 32.

8 Do you see those particular
9 elements?

10 A. I do.

11 Q. And, sir, when I direct you to
12 something like that, please feel free to review
13 any other portions of the document that you'd
14 like that will be helpful. I'm not trying to
15 prevent you from looking at anything, I'm just
16 trying to help focus your attention. Is that
17 understood?

18 A. Yes, thank you. I appreciate
19 that.

20 Q. So again, with reference to
21 figure 1, is it your understanding that
22 according to the '319 patent, client device 14
23 can send a request for content to proxy server
24 6?

25 A. Can I have the question read back

1 to me, please?

2 Q. Certainly. Is it your
3 understanding that, according to the '319
4 patent, client device 14 can send a request for
5 content to proxy server 6?

6 A. I'm not sure I completely agree
7 with that characterization, because I'm not sure
8 what part of the '319 patent you're referring
9 to.

10 As the '319 patent notes at the
11 bottom of column 3 of the '319 patent, it says
12 that: "Figure 1 is a schematic diagram
13 providing prior art example of use of a proxy
14 within a network."

15 So if you're referring to -- I'm
16 not sure which part of the '319 patent you're
17 talking about. If you're talking about the
18 invention or the claims, then I'm not sure that
19 it is applying to this figure. I wouldn't
20 necessarily characterize it that way, because it
21 clearly says that -- this is talking about prior
22 art.

23 But if your question is about
24 what prior art did, I can try to answer that
25 question.

1 Q. Sure. My question is trying to
2 get your understanding of figure 1.

3 And my question is: Reviewing
4 figure 1 of the '319 patent, do you understand
5 that client device 14 can send a request for
6 content to proxy server 6?

7 A. My understanding is, in the
8 context of this prior work that, yes, a client
9 device would send a request to proxy server 6.

10 Q. Okay. Thank you.

11 At the point in time when client
12 device 14 sends a request for context to proxy
13 server 6, would it be your opinion that client
14 device 14 was operating in the role of a client?

15 A. At that particular time on
16 sending the request, I would say client device
17 14 at that particular point, in that particular
18 context, again, as it pertains to this prior
19 work would be acting in the role -- I'm sorry,
20 operating in the role of a client.

21 Q. Okay. And when proxy server 6
22 receives a request for content from client
23 device 14, would proxy server 6 be operating in
24 the role of a server?

25 A. I'm not sure I completely agree

1 with that characterization, just receiving a
2 request alone. I wouldn't say it means that
3 somebody is necessarily operating in the role of
4 a server. I could send a packet hypothetically
5 to some computer that is not running any
6 software that influences a server, and if I had
7 just received it, that alone might not be acting
8 in the role as a server, but as part of like a
9 bigger set of things -- so just receiving alone
10 would not necessarily constitute that. It kind
11 of depends on the context, but I would say
12 that's part of -- part of that process.

13 Q. Let me see if this helps. I want
14 to give some more context to you.

15 A. All right.

16 Q. So if client device 14 sends a
17 request for content to proxy server 6, at the
18 time that proxy server 6 receives the request
19 for content, would you understand that proxy
20 server 6 is acting in the role of -- of a
21 server?

22 A. It's part of the role of acting
23 as a server.

24 Q. Okay. Now, is it your
25 understanding of figure 1 that when proxy server

1 6 receives a request for content from client
2 device 14, proxy server 6 can send that request
3 for content on to web server 32?

4 A. Again, in this context of this
5 being a figure from describing prior art, that
6 is my understanding.

7 Q. Okay. At the point in time that
8 proxy server 6 sends a request for content to
9 web server 32, would you agree that proxy server
10 6 is acting in the role of a client?

11 A. Yeah. And this is -- just to be
12 clear, this is a figure from -- describing prior
13 art, but when proxy server 6 sends a request and
14 so much as proxy server 6 sends a request to web
15 server 32, yes, I would say that is acting in
16 the role of a client at that point in time.

17 Q. Okay. And is it your
18 understanding, then, that web server 32 can
19 receive requests for content from proxy server
20 6?

21 A. That is my understanding.

22 Q. Okay. At the point in time when
23 web server 32 receives a request for content
24 from proxy server 6, is web server -- is web
25 server 32 acting in the role of a server?

1 A. As I mentioned previously, that's
2 part of -- part of it acting in the role of a
3 server.

4 Q. Well, would you say that web
5 server 32 is acting in the role of a client
6 device when it receives a request for content
7 from proxy server 6?

8 A. I'm sorry for speaking over you a
9 little bit there.

10 No, I would not say that.

11 Q. Okay. Now, is it your
12 understanding that, according to the system
13 shown in figure 1, web server 32, upon receiving
14 a request for content from proxy server 6, would
15 send a response to proxy server 6?

16 A. It's my understanding, of course,
17 if it's a well-formed request and there aren't
18 any other issues, that generally speaking, in
19 this figure describing prior art, that the web
20 server would respond back with a -- with a
21 response to the request that the proxy server
22 had sent.

23 Q. At the point that web server 32
24 sends a response back to proxy server 6 in
25 response to the request for content that web

1 server 32 received, would it be your
2 understanding that web server 32 is operating in
3 the role of a server?

4 A. That would be my understanding,
5 that -- when it's sending the response, yes.

6 Q. And when proxy server 6 receives
7 the response from web server 32 and then in turn
8 sends that response back to client device 14,
9 would it be your understanding that proxy server
10 6 is then acting in the role of a server?

11 A. Well, you -- your question sort
12 of combined two different steps.

13 When the proxy server is
14 receiving the response from the web server 32,
15 there, it's -- I would say it's acting in the
16 role of a client, and then when it sends that
17 response -- I think you said that it would be
18 forwarding that response, if I recall your --
19 your wording, when it sends that response to
20 client device 14, at that point, for that step,
21 it would be acting in the role of a server.

22 Q. Okay. Thank you. And thank you
23 for that clarification.

24 Can we turn to figure 3 of the
25 '319 patent, please.

1 A. Yes, I'm there.

2 Q. And just to help focus our
3 discussion, feel free to refer to anything you'd
4 like to, but I wanted to focus initially on
5 client 102, agent 122, and web server 152.

6 Do you see that?

7 A. I see that, yes.

8 Q. Is it your understanding then
9 that as shown in figure 3, client 102 can send a
10 request for content to agent 122?

11 A. Yes, it's my understanding client
12 102 can send a request to agent 122.

13 Q. Okay. At that point in time,
14 sir, when client 102 sends a request for content
15 to agent 122, is client 102 operating in the
16 role of a client device or a server?

17 A. At that point in time, it is
18 acting in the role of a client.

19 Q. Okay. And when agent 122
20 receives a request for content from client 102,
21 is it your understanding that agent 122 is
22 operating in the role of a server?

23 A. As I mentioned, the context of
24 figure 1, that is part of agent 122 acting in
25 the role of a server.

1 Q. Okay. And then further,
2 sir, again, with reference to figure 3, when
3 agent 122 sends a request for content to web
4 server 152, is it your understanding that agent
5 122 is now operating in the role of a client
6 device?

7 A. Yes.

8 Q. Okay. So when web server 152
9 receives a request for content from agent 122,
10 is it your understanding that agent -- I'm
11 sorry, that web server 152 is operating in the
12 role of a server?

13 A. As part of its -- as part of its
14 actions, it's operating in the role of a server.

15 Q. And you would agree that web
16 server 152 at that point in time is not
17 operating in the role of a client device?

18 A. Yes.

19 Q. Now, if -- when -- at the point
20 in time when web server 152 sends a response to
21 agent 122, what role is web server 152 operating
22 in?

23 A. When 152 sends a response to
24 agent 122, it's operating in the role of a
25 server.

1 Q. And when agent 122 receives a
2 response from web server 152, what role is agent
3 122 operating in?

4 A. At that point in time, when it's
5 receiving a response from web server 152, I
6 would say it is operating in the role of a
7 client.

8 Q. Okay. And then if agent 122
9 returns that response back to client 102, at
10 that point in time, what role is agent 122
11 operating in?

12 A. When 122 is sending a response to
13 client 102, at that point, it is operating in
14 the role of a server.

15 Q. Okay. And when client 102
16 receives the response from agent 122, what role
17 would you understand client 102 to be operating
18 in?

19 A. At that particular time, client
20 102 would be operating in the role of a client.

21 Q. So would it be your
22 understanding, then, that agent 122 is operating
23 in the role of a server when it receives
24 requests from client 102, but agent 122 is
25 operating in the role of a client device when it

1 sends requests to web server 152?

2 A. Yes.

3 Q. Okay. Would you please take out
4 the Exhibit 1010, which is the published patent
5 application, that I think today we're referring
6 to as Plamondon.

7 A. I have that.

8 Q. Okay. We've been calling it
9 Plamondon, so if I mispronounce it, I'm not sure
10 which one is correct, please understand whether
11 I say Plamondon or Plamondon, my intent is to
12 refer to published United States Patent
13 Application 2008/0228938, which has been marked
14 as Exhibit 1010 in these proceedings.

15 Can we agree that either
16 pronunciation will refer to this same particular
17 reference?

18 A. I can agree to that. I think I
19 tend to call it Plamondon.

20 Q. Okay. We'll have three
21 variations, but I will understand also if you
22 refer to it in that fashion.

23 In connection with performing
24 your analysis in this matter, did you review the
25 Plamondon reference?

1 A. Yes, I did.

2 Q. And did you review the entirety
3 of the reference?

4 A. Yes, I did.

5 Q. Okay. I'd like you to turn to
6 figure 1C of Plamondon.

7 A. Okay. I'm on 1C.

8 Q. And initially, I'd like to focus
9 on the top portion, the upper portion of figure
10 1C, and just for reference, the portion that
11 shows client 102 communicating through network
12 104 with appliance 200, which in turn
13 communicates to network 104 prime with server
14 106.

15 Do you see that portion of the
16 figure?

17 A. I see that, yes.

18 Q. Again, feel free to refer to any
19 other portions of the document as helpful to you
20 in answering my questions, but I just wanted to
21 focus you for orientation purposes on what I'm
22 going to focus my questioning on.

23 Is it your understanding that
24 according to Plamondon, as shown in figure 1C,
25 client 102 can send requests for content

1 directed to server 106?

2 A. My understanding is that it can
3 send requests for content directly to server
4 106, yes.

5 Q. Okay. And if client 102 sends a
6 request for content that is directed to server
7 106, is it your understanding that appliance 200
8 intercepts that request?

9 A. That it can intercept that
10 request, yes.

11 Q. Okay. At the point in time when
12 client 102 sends a request for content, is
13 client 102 acting in the role of a client device
14 or a server?

15 A. At that particular time, it is
16 operating in the role of a client.

17 Q. Okay. Now, if client 102 sends a
18 request for content and appliance 200 intercepts
19 that request, at the time that appliance 200
20 intercepts the request, would you say appliance
21 200 is operating in the role of a client or a
22 server?

23 A. As I mentioned in the previous
24 questions, I would say that that's part of its
25 role of operating in the role of a server.

1 Q. Okay. Is it further
2 your understanding, then, that after appliance
3 200 has intercepted a request from client 102,
4 appliance 200 can send that request on to server
5 106?

6 A. Yes, that's my understanding.

7 Q. At the point in time when
8 appliance 200 sends a request for content to
9 server 106, is appliance 200 operating in the
10 role of a client device or a server?

11 A. At that point in time, I would
12 say it's operating in the role of a client.

13 Q. And then it's your understanding
14 that server 106 will receive the requests that
15 were transmitted by appliance 200; is that
16 right?

17 A. Generally speaking, yes.

18 Q. Okay. At the point in time that
19 server 106 receives a request for content from
20 appliance 200, would server 106 be operating in
21 the role of a server or a client?

22 A. At that point, I would say it's
23 part of its operations as -- part of its role of
24 operating in the role of a server.

25 Q. Okay. And is it your

1 understanding, then, that server 106 can send a
2 response to appliance 200, and meaning a
3 response after receiving a request for content?

4 A. Yes, generally speaking, yes.

5 Q. At the point in time that server
6 106 provides a response to appliance 200 for a
7 request for content, what role would you say
8 server 106 is operating under, within the
9 meaning of these client device and server terms
10 that we're discussing?

11 A. Within this context, I would say
12 that server 106 is operating in the role of a
13 server.

14 Q. Okay. And when appliance 200
15 receives a response from server 106, is
16 appliance 200 then operating in the role of a
17 client or a server?

18 A. It's operating in the role of a
19 client.

20 Q. Okay. And then at the point in
21 time that appliance 200 sends that received
22 response back to client 102, is appliance 200
23 operating in the role of a client or a server?

24 A. At that point in time, when
25 appliance 200 sends the content or the response

1 to client 102, appliance 200 is operating in the
2 role of a server.

3 Q. Okay. And then when client 102
4 receives the response with the content from
5 appliance 200, is client 102 operating in the
6 role of a client or a server?

7 A. At that point in time, client 102
8 would be operating in the role of a client.

9 Q. Okay. I'd like you to turn now
10 in Plamondon to figure 1A.

11 A. I'm on that figure.

12 Q. And again, for convenience, I'm
13 going to identify particular network elements so
14 we can sort of walk through the same flow, but
15 feel free to review -- refer to as much of the
16 document as you need, but I'd like to initially
17 focus on the pathway from client 102B through
18 network 104, to appliance 200, through network
19 104 prime to appliance 200 prime, through
20 network 104 double prime to server 106B.

21 Do you see that particular
22 pathway?

23 A. Yes, I do.

24 Q. Is it your understanding that in
25 Plamondon, client 102B can send requests for

1 content directly to server 106B?

2 A. Yes, that's my understanding.

3 Q. At the point in time that client
4 102B sends a request for content, is client 102B
5 acting in the role of a client or a server?

6 A. At that point in time, it's
7 acting -- it's operating in the role of a
8 client.

9 Q. Okay. Is it your understanding
10 that appliance 200 can intercept a request that
11 client 102B has directed to server 106B?

12 A. That is my understanding.

13 Q. At the point in time when
14 appliance 200 intercepts a request for content
15 that originated at client 102B, is appliance 200
16 operating in the role of a client or a server?

17 A. As I mentioned in -- with these
18 previous questions pertaining to the previous
19 figures, I would say that's part of its role as
20 operating as a server.

21 Q. Okay. Is it your understanding
22 further that once appliance 200 has received --
23 strike that. Let me start that question again.

24 Is it further your understanding
25 that once appliance 200 has intercepted a

1 request for content from client 102B, that
2 appliance 200 will forward that request for
3 content to appliance 200 prime?

4 A. My understanding is that it can
5 do that, yes.

6 Q. Okay. At the point in time that
7 appliance 200 forwards a request for content to
8 appliance 200 prime, what role would appliance
9 200 be operating in?

10 A. At that point, I would say
11 appliance 200 is operating in the role of a
12 client.

13 Q. Okay. And when appliance 200
14 prime receives a request for content that was
15 sent by appliance 200, what role is appliance
16 200 prime operating in?

17 A. At -- at that point, it would, I
18 think, depend on what -- what role 200 prime is
19 serving in that particular embodiment.

20 Q. Would you agree that when
21 appliance 200 prime receives a request for
22 content from appliance 200, that appliance 200
23 prime would be operating in the role of a server
24 insofar as appliance 200 prime has to figure out
25 how to generate a response for appliance 200?

1 MR. WICHMAN: Objection.

2 THE WITNESS: Again, it depends
3 on the -- the specific embodiment of what 200
4 prime is doing.

5 BY MR. DUNHAM:

6 Q. I'm sorry. I'll wait to see if
7 you're finished.

8 A. But to the extent that 200 prime
9 in this particular embodiment would be trying to
10 service -- assist in servicing this request, I
11 would say that receiving that request from
12 appliance 200, when appliance 200 prime receives
13 that request, at that point in time, that's part
14 of it operating in the role of a server.

15 Q. Okay. And if appliance 200 prime
16 having received a request from appliance 200, if
17 appliance 200 prime thereafter sent that request
18 to server 106B for content, what role would
19 appliance 200 prime be operating in?

20 A. Similarly, depending on the
21 embodiments, but supposing that 200 prime is
22 trying to help service this request, at that
23 point, I would say appliance 200 prime is
24 operating in the role of a client.

25 Q. And when server 106B receives

1 that request from appliance 200 prime, would you
2 agree server 106B is operating in the role of a
3 server?

4 A. As part of its operation in the
5 role of a server.

6 Q. Okay. And when server 106B
7 responds with content to appliance 200 prime,
8 what role would you say server 106B is operating
9 in?

10 A. When server 106B is sending back
11 a response to that request, server 106B at that
12 time is operating in the role of a server.

13 Q. Okay. And when appliance 200
14 prime at the point in time that it receives a
15 response with content from server 106B, would
16 you agree that appliance 200 prime is operating
17 in the role of a client?

18 A. Again, insofar as appliance 200
19 prime is assisting in resolving this, then, when
20 receiving this content, this response from
21 server 106B, I would say appliance 200 prime, at
22 that point in time, is operating in the role of
23 a client.

24 Q. Okay. And obviously, I'm going
25 to work my way back through the path. So when

1 appliance 200 prime returns that response with
2 the content to appliance 200, what role would
3 appliance 200 prime be operating in?

4 A. In the matter that we've been
5 discussing, 200 prime at that point -- appliance
6 200 prime at that point in time would be
7 operating in the role of a server.

8 Q. Okay. And when appliance 200
9 receives the response with content from
10 appliance 200 prime, what role is appliance 200
11 operating in?

12 A. At that point in time, appliance
13 200 is operating in the role of a client.

14 Q. Okay. And if appliance 200
15 thereafter sends that response with the content
16 back to client 102B, what role is appliance 200
17 operating in?

18 A. At that point in time, appliance
19 200 would be operating in the role of a server.

20 Q. And when appliance 102B receives
21 the content from appliance 200, what role would
22 client 102B be operating in?

23 A. I'm sorry, I think you may have
24 said "appliance 102B," is that what you said?

25 Q. Let me withdraw that question,

1 then, so the record is clear. Thank you for
2 catching that. Let me withdraw my question and
3 ask it again.

4 When client 102B receives the
5 response from appliance 200 with the content
6 that client 102B has requested, what role is
7 client 102B operating in?

8 A. At that point in time, client
9 102B would be operating in the role of a client.

10 Q. I'd like to turn back to your
11 declaration. We can use the declaration from
12 the 135 patent if that's convenient for you --
13 I'm sorry, the declaration from the 135
14 proceeding.

15 A. Okay.

16 Q. Okay. And if you can turn to
17 paragraph 168 of your declaration.

18 A. Okay. I'm on that paragraph.

19 Q. If you'd like, please take a
20 moment to review that paragraph.

21 A. Yes, I've reviewed it.

22 Q. Is it your opinion that appliance
23 200 of the Plamondon reference corresponds to
24 the quote: "First client device of the '319
25 patent claims"?

1 A. Yes, Plamondon appliance 200 is
2 the first client device.

3 Q. And is that -- is that because
4 when appliance 200 requests its content from
5 server 106, that appliance 200 is acting in the
6 role of a client?

7 A. Well, it -- that's part of it.
8 Appliance 200 is the first client device. I
9 applied the Court's construction of this term
10 first client device to be, as I mentioned again
11 on page 43 of my declaration, it --

12 (Court reporter seeks
13 clarification.)

14 THE WITNESS: I'll try to start
15 over. Can I have the question read back to me?

16 BY MR. DUNHAM:

17 Q. Sure. I'll just restate the
18 question. My question is -- I had asked you
19 that when -- I asked you first, whether you --
20 it was your opinion that appliance 200
21 corresponded to the first client device of the
22 '315 patent claims, and I believe you said, yes;
23 is that correct?

24 A. That is correct.

25 Q. And then my follow-on question

1 where we had the audio glitch was: Is it
2 because when appliance 200 requests content from
3 server 106, that appliance 200 is operating in
4 the role of a client under the Court's claim
5 construction?

6 A. So that's part of the reason why
7 Plamondon's appliance 200 is the first claim
8 device in these -- in these patent claims. I
9 applied the Court's construction, which is on
10 page -- I recap on page 43, starting on page 43
11 of that declaration for the '319 patent, that a
12 client device is a communication device that is
13 operating in the role of a client.

14 So I do know that appliance 200
15 at some parts does operate in the role of a
16 client, but I see that Plamondon's appliance 200
17 is the first client device because it meets all
18 of the claim limitations. It does everything
19 that the claims say that a first client device
20 does.

21 Q. If you could look at paragraph
22 186 of your declaration as well. And please
23 take a moment to review that paragraph.

24 A. Yeah, I've reviewed paragraph
25 186. I'm sorry, did you say 186?

1 Q. Yes, sir.

2 A. Okay. I've reviewed 186.

3 Q. Is it your opinion that client
4 102 of Plamondon corresponds to the second
5 server of the '319 patent claims?

6 A. Yes, Plamondon's client 102 is
7 the second server from the '319 patent claims,
8 yes.

9 Q. I'm sorry, did you say something
10 extra after your answer? I heard a noise.

11 A. Oh, I think we're still talking
12 about claim 1 from this patent, so -- but client
13 102 corresponds to this second server in this
14 claim 1 that we've been discussing.

15 Q. And that would be claim 1 of the
16 '319 patent, correct?

17 A. Correct.

18 Q. So I'd like you to turn back then
19 to the '319 patent, Exhibit 1001, and I'd like
20 to go to claim 1 with you.

21 A. Okay.

22 Q. Please take a moment to review
23 the claim.

24 A. Okay, I've reviewed the claim.

25 Q. Is it your understanding that

1 claim 1 of the '319 patent recites a method
2 performed by the first client device?

3 A. That is my understanding, yes.

4 Q. If we could look at the first
5 step of claim 1 that recites: "Receiving, from
6 the second server, the first content
7 identifier."

8 Do you see that method step?

9 A. I see that, yes.

10 Q. Based on your understanding of
11 claim 1 -- I'm sorry, strike that.

12 Based on your review of claim 1,
13 is it your understanding that the first client
14 device receives the first content identifier
15 from the second server?

16 A. Yes, that's -- that's what it
17 says, yes.

18 Q. Okay. Can we turn to paragraph
19 192 of your declaration in the 135 IPR.

20 A. I'm at that paragraph.

21 Q. And please take a moment to
22 review it, if it's helpful to you.

23 A. Okay. All right. I've reviewed
24 it.

25 Q. There's a parenthetical you've

1 included that says: "At step 605, the appliance
2 200 intercepts or otherwise receives a request
3 for an object from a client 102."

4 Do you see that language?

5 A. I see that, yes.

6 Q. Is it your opinion that Plamondon
7 discloses appliance 200 receiving the first
8 content identifier from client 102?

9 A. Yes. As I say in my declaration,
10 in that paragraph, the appliance 200 intercepts
11 or otherwise receives a request for an object
12 from a client 102, and I describe that this
13 request -- that the request from a client to a
14 server to obtain the content or object
15 identified via the URL. And I explained that
16 that URL is the first content identifier.

17 Q. Okay. And then consistent with
18 your earlier testimony, at the point in time
19 when appliance 200 receives a request for
20 content from client 102, we can agree that
21 appliance 200 is operating in the role of a
22 server, correct?

23 A. When appliance 200 receives the
24 request from client 102, at that point in time,
25 appliance 200, that is part of its role of

1 operating in the role of a server.

2 Q. And at that same point in time,
3 appliance 200 is not operating in the role of a
4 client, correct, when it receives that request
5 for content from client 102?

6 A. At that point in time, it's
7 operating in the role of a server and not
8 operating in the role of a client with respect
9 to that message exchange.

10 Q. And I'm still talking about the
11 same message exchange.

12 At the point in time when client
13 102 sends a request for content and that request
14 is intercepted by appliance 200, client 102 is
15 operating in the role of a client, right?

16 A. At that point in time, client
17 102, when it sends that request to appliance 200
18 is operating in the role of a client.

19 Q. Okay. Can we go back to the '319
20 patent, please, for the moment?

21 A. Yes.

22 Q. Back to claim 1, and I want to
23 focus on the last step, if you can take a moment
24 to review that step.

25 A. Okay. I've reviewed that last

1 step.

2 Q. Okay. So again, just for context
3 for both of us, the last step of claim 1 of the
4 '319 patent recites: "Sending, the first
5 content by the first client device to the second
6 server, in response to the receiving of the
7 first content identifier."

8 Do you see that language?

9 A. I see that, yes.

10 Q. Based on the claim language, is
11 it your understanding that the first client
12 device sends the first content to the second
13 server?

14 A. Yes. My understanding of that
15 language is that the first -- the first client
16 device is sending the first content to the
17 second server.

18 Q. Okay. If we could turn to
19 paragraph 206 of your dec in the 135 proceeding,
20 and please take a moment to review paragraph
21 206, sir.

22 A. I've reviewed it.

23 Q. Okay. I'd like to call your
24 attention to the portion of paragraph 206 where
25 you state, quote: "Plamondon describes several

1 embodiments in which appliance 200 sends
2 requested content to client 102 in response to
3 receiving the URL comprising the content
4 identifier."

5 Do you see that language?

6 A. I see that language.

7 Q. At the point in time when
8 appliance 200 sends the requested content to
9 client 102, would you agree that appliance 200
10 is operating in the role of a server?

11 A. At that point in time, when
12 sending the requested content to client 102, it
13 is operating in the role of a server.

14 Q. And at the point in time when
15 client 102 is receiving the requested content
16 from appliance 200, would you agree that client
17 102 is operating in the role of a client?

18 A. At that particular time when
19 receiving that content, client 102 is operating
20 in the role of a client.

21 Q. I'd like you to take out the
22 other patent, which -- the '510 patent, which is
23 in the red box, but confusingly, it's also going
24 to have the same exhibit number on it, I
25 believe. Because it's a different proceeding.

1 It will be Exhibit 1001 from the 138 IPR.

2 A. I have what I believe to be that
3 document in front of me.

4 Q. Okay. So this should be United
5 States Patent Number 10,484,510, marked as
6 Exhibit 1, correct?

7 A. When you say Exhibit 1 --

8 Q. I'm sorry, Exhibit 1001.

9 A. Yes. This seems to be that
10 document, yes.

11 Q. Thank you. In performing your
12 analysis in this case, did you review the '510
13 patent?

14 A. Yes, I did.

15 Q. Okay. And did you read all of
16 the patent?

17 A. Yes, I did.

18 Q. Okay. I'd like you to turn to
19 claim 1 of the '510 patent and please feel free
20 to take a moment and review it for yourself.

21 A. Okay. I've -- I've read it.

22 Q. Thank you. Could you please turn
23 now also to paragraph 166 of your declaration.

24 A. I'm sorry, which declaration are
25 we talking about now, because we've switched to

1 a different patent.

2 Q. Sure. Let me just make sure I've
3 correlated the page numbers.

4 I believe it's the same paragraph
5 of your 138 declaration. So for you, the
6 right-hand binder on the desk, I believe.

7 MR. WICHMAN: Objection.

8 Counsel, can you just tell us
9 which declaration do you want him to look at?

10 MR. DUNHAM: Yes, I said the 138
11 declaration.

12 THE WITNESS: Just to remind me,
13 that's the declaration pertaining to the '510
14 patent, is that --

15 BY MR. DUNHAM:

16 Q. Yes, sir.

17 A. Okay. I have that in front of
18 me.

19 Q. And paragraph 166, sir.

20 A. Yes, I have that in front of me.

21 Q. And this, for the record, is
22 Exhibit 1003, which is the declaration of
23 Dr. Levin -- Levin, I apologize -- in support of
24 the petition for the '510 patent.

25 So if you'd like to take a moment

1 to look at paragraph 166 in the 138 declaration,
2 that would be fine.

3 A. Okay. I've reviewed it.

4 Q. It's your opinion that appliance
5 200 of Plamondon corresponds to the first client
6 device of the '510 patent claim; is that right?

7 A. Yes. Plamondon's appliance 200
8 is the first claim device in this -- in this
9 first patent.

10 Q. And is it further your opinion
11 that client 102 of Plamondon corresponds to the
12 second server of the '510 patent claims?

13 A. It corresponds -- I'm sorry.
14 Client device 102 for Plamondon corresponds to
15 the second server in this claim 1 that we're
16 looking at, in the '510 patent.

17 Q. Okay. So let's -- let's look
18 specifically now at claim 1 of the '510 patent.

19 Do you have that in front of you,
20 sir?

21 A. I do.

22 Q. Would you agree that the method
23 of claim 1 of the '510 patent is a method
24 performed by a first client device?

25 A. Yes, I see that here.

1 Q. And I'd like you to look at the
2 first step of claim 1 of the '510 patent that
3 reads: "Establishing a transmission control
4 protocol (TCP) connection with a second server."

5 Do you see that?

6 A. I see that.

7 Q. Now, if it helps you to refer, we
8 can look at paragraph 187 of your 138
9 declaration.

10 A. I see paragraph 187 from my '510
11 declaration.

12 Q. Is it your opinion that Plamondon
13 describes appliance 200 establishing a TCP
14 connection with client 102 via network stack
15 267?

16 A. Yes, that's a quote from
17 paragraph 187 of my declaration, yes.

18 Q. Would you agree that Plamondon
19 only discloses establishing a TCP connection in
20 the context of client 102 requesting content
21 from a server 106?

22 A. I'm not sure I would agree with
23 that characterization.

24 Q. Are you able to point me to any
25 disclosure in Plamondon where client 102

1 establishes -- well, strike that.

2 Are you able to point me to any
3 disclosure in Plamondon where a TCP connection
4 is established between client 200 and client
5 102, other than when client 102 makes a request
6 for content that is intercepted by appliance
7 200?

8 A. Can I have that question read
9 back to me one more time, please?

10 Q. Sure. Are you able to point me
11 to any disclosure in Plamondon where a TCP
12 connection is established between client 102 and
13 appliance 200, other than when client 102 is
14 requesting content from server 106 that is
15 intercepted by appliance 200?

16 A. Yes. So in paragraph -- I'm
17 sorry, on page 77 of my declaration, paragraph
18 90 and further down the quote, that's a little
19 bit lower from -- it's a quote from Plamondon,
20 says -- I'll read a little bit of that: "When
21 an end node, such as the client 102 opens a new
22 TCP connection with another end node, such as
23 the server 106," and then it continues to
24 describe aspects of establishing the connection.

25 Also, on the next page, paragraph

1 191, I have another quote from Plamondon that
2 talks about appliance 200 establishing a TCP
3 connection with client 102, but all of these --
4 this establishment of the connection at this
5 point is happening at this TCP establishment --
6 during the TCP establishment stage, and that can
7 come before the client has issued a request for
8 the content.

9 So I word it -- the way I
10 believe, if I recall correctly, that you
11 characterized it was that it only establishes a
12 connection upon the client issuing the request,
13 but one of ordinary skill would have understood
14 that -- that generally speaking, from each TCP,
15 one first establishes a connection and then
16 issues the request.

17 There are some other variants
18 that one of ordinary skill would have understood
19 that might not directly always apply, but it
20 does not have to be -- this establishment of the
21 TCP connection does not itself have to be as a
22 direct result of the request being sent by the
23 client. The establishment can happen before the
24 client has issued the request.

25 Q. In terms of the portions of

1 Plamondon that you have cited in your report,
2 would you agree that the establishment of the
3 TCP connection between client 102 and appliance
4 200 occurs as part of the process of client 102
5 issuing a request for content directed to server
6 106?

7 A. I'm not sure I would necessarily
8 characterize it that way.

9 Again, for some -- for many of
10 the initiations of TCP, it would be a necessary
11 precursor to it, but I don't know that I would
12 necessarily characterize it as it being part of
13 sending that request.

14 Q. Well, can you point me to any
15 disclosure in Plamondon that indicates that a
16 TCP connection will be established between
17 client 102 and appliance 200 and appliance --
18 I'm sorry, and client 102 will not thereafter
19 issue a request for content directed to server
20 106?

21 A. I'm not sure I can recall, off
22 the top of my head, precisely where Plamondon
23 would have articulated exactly that, but I can't
24 recall a part -- a specific quote that would
25 have said exactly that, but -- but a person of

1 ordinary skill would have understood that --
2 that there's TCP establishment, you know,
3 there's also sending a request and that -- that
4 these are two different things, one would
5 understand that claim could have failed, that
6 after issuing that request, the request from the
7 user's perspective, for example, could have been
8 cancelled.

9 So I can't recall off the top of
10 my head a specific place in Plamondon where it
11 would have said specifically that, but one of
12 ordinary skill would have understood that it can
13 happen.

14 Q. Well, is there anyplace in your
15 report, sir, of your analysis here that we're
16 looking at, that you can point me to, where you
17 described the establishment of a TCP connection
18 between client 102 and appliance 200, other than
19 related to client 102 issuing a request for
20 content directed to server 106?

21 A. Where I discuss the establishment
22 of the TCP connection?

23 Q. My question, sir: Is there
24 anyplace in your report, in your declaration,
25 that you can point me to, where you describe

1 establishing a TCP connection between client 102
2 and appliance 200 other than in connection with
3 client 102 issuing a request for content
4 directed to server 106?

5 A. The specific quotes that I had
6 just mentioned from paragraphs 190 and 191 from
7 my declaration in the '510 patent discuss
8 establishing a TCP connection, and as I'm
9 looking through this, does not explicitly
10 mention sending the request in the broader
11 context of -- of these claims, and being the
12 claim limitations, the -- that established TCP
13 connection is what's -- is what's used at least
14 for sending the first content, that's a final
15 step of that -- I'm sorry, I'm not quite
16 understanding the question.

17 Q. Well, would you agree in
18 paragraph 190 -- let me start it again.

19 Would you agree that in your
20 report in paragraph 190, as captured by the last
21 sentence to the initial part before the block
22 quote, you say: "Plamondon describes in detail
23 the process by which client 102 and server 106
24 established a TCP connection via appliance 200."

25 A. I say that, yes.

1 Q. Is there any other part in
2 paragraph 190 or anywhere else that you can
3 point me to, where client 102 and server 106
4 established a TCP connection via appliance 200,
5 other than in connection with client 102 sending
6 a request for content?

7 A. Again, I would point you to
8 paragraph 191, where I discuss another way in
9 which appliance 200 establishes a TCP connection
10 with 102 and a TCP connection with server 106.

11 And here, I'm not -- in this
12 example, I'm not explicitly mentioning the
13 request for it, but I think generally speaking,
14 this would -- this would precede the client --
15 if the client was sending a request, this would,
16 in most --

17 Q. Would precede what, sir?

18 A. Would precede the client sending
19 that request. The client 102 sending that
20 request.

21 Q. So let's go back to the '510
22 patent and my question for you, sir, is: Would
23 you agree that when client 102 sends a request
24 for content directed to server 106 and that
25 request is intercepted by appliance 200, client

1 102 is operating in the role of a client?

2 MR. WICHMAN: Objection.

3 Misstates the record.

4 Actually, Counsel, can we just
5 clean this up? Before -- you said, you want to
6 refer to the patent -- the '510 patent and you
7 referred to a request being intercepted by
8 appliance 200, but I think you meant to say
9 something different, because appliance 200 is
10 Plamondon.

11 MR. DUNHAM: I'm happy to ask
12 another question. I disagree that my question
13 was inappropriate or improper, but I will ask a
14 fresh question.

15 BY MR. DUNHAM:

16 Q. Dr. Levin, when client 102 of
17 Plamondon sends a request for content and that
18 request is intercepted by appliance 200, would
19 you agree that client 102 is operating in the
20 role of a client?

21 A. In Plamondon, when client 102
22 sends a request for content, that --

23 (Court reporter seeks
24 clarification.)

25 THE WITNESS: When client 102 is

1 sending a request for content to appliance 200,
2 or if it's intercepted by appliance 200, at that
3 point in time, client 102 is operating in the
4 role of a client.

5 BY MR. DUNHAM:

6 Q. Okay. And if we could go, then,
7 to the '510 patent, claim 1, and in particular,
8 to the last step, which reads: "Sending the
9 received first content, to the second server
10 over the established TCP connection, in response
11 to the receiving of the first content
12 identifier."

13 Do you see that language?

14 A. I see that language, yes.

15 Q. Based on that claim language, is
16 it your understanding that the first client
17 device sends the first content to the second
18 server?

19 A. First client device sends the
20 first content to the second server. That's my
21 understanding, yes.

22 Q. And could you please turn to
23 paragraph 211, 211 of your '510 dec from the 138
24 IPR. And please feel free to review that
25 paragraph.

1 A. I've reviewed that paragraph.

2 Q. In the first sentence, do you see
3 the language that reads, quote: "Plamondon
4 describes several embodiments in which appliance
5 200 sends received content to client 102 in
6 response to receiving the URL comprising the
7 content identifier."

8 Do you see that?

9 A. I see that language, yes.

10 Q. At the point in time when
11 appliance 200 sends the requested content to
12 client 102, would you agree that appliance 200
13 is operating in the role of a server?

14 A. At that point in time, I would
15 say appliance 200 is operating in the role of a
16 server.

17 Q. And at the point in time when
18 client 102 receives the requested content from
19 appliance 200, would you agree that client 102
20 is operating in the role of a client?

21 A. At that point in time, that
22 client 102 is operating in the role of a client.

23 MR. DUNHAM: I try to be honest
24 with everyone. I see I've gone actually a
25 little bit over my hour, so why don't we take

1 another ten-minute break.

2 THE WITNESS: Okay, thank you.

3 THE VIDEOGRAPHER: The time is
4 11:20 a.m. and we're now off the record.

5 (Recess taken.)

6 THE VIDEOGRAPHER: The time is
7 11:32 a.m. and we are now back on the record.

8 BY MR. DUNHAM:

9 Q. Dr. Levin, would you agree that
10 the Plamondon reference is directed to
11 prefetching objects for caching using QOS?

12 A. Some of Plamondon's embodiments
13 involve that.

14 Q. In Plamondon, do you agree that
15 they describe appliance 200 being an
16 intermediary for a client in a branch office and
17 a server on a corporate LAN?

18 A. Can you point me to a specific
19 paragraph for Plamondon that you might have had
20 in mind?

21 Q. First, I'd like to know if that's
22 your understanding of Plamondon, and then I will
23 point you to a portion of the reference.

24 A. Okay. Could you say it one more
25 time?

1 Q. Sure. Would you agree that
2 Plamondon discloses appliance 200 being an
3 intermediary between a client and a branch
4 office and a server on a corporate LAN?

5 A. I would agree that that's one of
6 the many embodiments and architectures and
7 setups so to speak that Plamondon describes.
8 One of many.

9 Q. If we could flip back to your 135
10 declaration from the '319 patent.

11 A. Okay.

12 Q. And specifically paragraph 154.
13 This is citing Plamondon, but I'm
14 just thinking you might be more comfortable in
15 your report. So it's your paragraph 154.

16 A. Yes, I see that paragraph.

17 Q. And I guess I'll ask it this way.
18 If you could review paragraph
19 154, I just want to ask if you stand by what you
20 wrote in paragraph 154.

21 A. Okay, I've reviewed it, and yes,
22 I stand by it.

23 Q. Okay. Could you look at
24 paragraph 2 of Plamondon, and I'm kind of
25 bouncing back and forth a little bit between the

1 patent and your report.

2 A. Okay, I've -- I've read paragraph
3 2 of Plamondon.

4 Q. With reference to the second
5 sentence of paragraph 2 in the Plamondon
6 reference, would you agree that as of the date
7 of Plamondon, back in 2008, 2009, it would be a
8 fair statement that many business entities
9 desired to consolidate their computing
10 infrastructure to a single geographic location
11 in order to simplify maintenance and
12 administration?

13 A. I see that Plamondon mentions
14 that, and I can understand, and I think one of
15 ordinary skill at the time would have understood
16 that there are some benefits conferred by
17 consolidating computing infrastructure in that
18 way, sure.

19 Q. In connection with the opinions
20 that you render in this case that you describe
21 in your report, you -- I believe you testified
22 earlier, and please correct me if I'm wrong,
23 that all of the assessments you made were from
24 the perspective of a person of ordinary skill in
25 the art; is that right?

1 A. Yes, that's what I -- that's how
2 I attempted to do my analysis, yes.

3 Q. And when you applied the analysis
4 -- strike that.

5 When you performed your analysis
6 from that perspective, what timeframe were you
7 using, like, reading the references as of what
8 timeframe?

9 A. I mentioned that in my
10 declaration -- just a moment.

11 So I mentioned -- in that -- my
12 declaration for the '319 patent on paragraph 18,
13 I mentioned that I applied that analysis, you
14 know, in reference to the October 2009
15 timeframe.

16 Q. Now, in the analysis of Plamondon
17 that you discussed in your declarations -- so I
18 want to focus you carefully to the analysis that
19 you performed and discussed of Plamondon.

20 Would you agree that in each of
21 the notes that you discuss, all traffic from
22 client 102 destined to server 106 would pass
23 through appliance 200?

24 A. In -- in all of the scenarios
25 that involves client 102 communicating through

1 appliance 200 in order to reach server 106,
2 then, yes, the -- the relevant traffic, at least
3 particularly the traffic as it pertains to the
4 claims goes through appliance 200.

5 Q. Okay. Thank you for that
6 clarification.

7 Further in the analysis of
8 Plamondon that you discuss in your declarations,
9 is it your understanding that client 102 sends
10 requests with a destination address of server
11 106?

12 A. My understanding -- give me just
13 a moment, please.

14 Q. Certainly.

15 And the camera, sir, has frozen,
16 so if you could please just tell us what
17 materials you are referring to, I would
18 appreciate it.

19 A. Oh, sure. I'm looking through my
20 declaration.

21 Q. All right. Thank you.

22 A. Would you mind repeating the
23 question or could I have that read back to me?

24 Q. Sure, I'll repeat it. What I'm
25 trying to get to is, in the analysis that you

1 describe in your report, do you agree that the
2 client 102 sends requests with a destination
3 address of server 106?

4 MR. WICHMAN: Objection. Form.

5 THE WITNESS: It's my
6 understanding that at least in some embodiments,
7 that can involve client 102 sending a packet
8 where the destination address is server 106, but
9 it's not clear to me that it precludes other --
10 other kinds of embodiments.

11 BY MR. DUNHAM:

12 Q. My question, sir, is: In the
13 analysis that you performed and discussed in
14 your declaration, is there anyplace where you
15 discussed client 102 sending packets for -- with
16 request for content that are -- that do not have
17 a destination address of server 106?

18 A. I think I specifically stated
19 exactly what the destination address is in all
20 cases, but there are instances where an
21 embodiment, as one of ordinary skill in the art
22 at the time would have understood, it could
23 involve client 102 sending a packet with server
24 106 as the destination address.

25 Q. But my question is -- is a little

1 bit different, which is: In the analysis that
2 you described in your report, is there anyplace
3 where you discuss client 102 sending a request
4 for content with a destination address with
5 something other than server 106?

6 A. This is a little bit hard
7 question to answer because a -- so I think of a
8 request in this context of HTTP, for example.
9 This request, an HTTP request, that application
10 layer request message is the payload of another
11 packet at, for example -- for example, the
12 payload of, say, the TCP packet which could in
13 turn be a payload of an IT packet.

14 Of course, as one of ordinary
15 skill would understand at the time, that request
16 could be in the payload of an IT packet, but
17 that IT packet could itself be the payload of
18 another IT packet, and those could both
19 potentially have different destination IP
20 addresses. This would be an example of -- what
21 I think I called tunneling in my background
22 section on networking.

23 So I'm having a little bit of
24 trouble answering your question because the
25 given request could be associated with more than

1 one destination IP address, as -- I've
2 understood what Plamondon has taught.

3 As I think one of ordinary skill
4 in the art would have understood at the time,
5 that it can intercept messages in many different
6 ways.

7 One way would be where the
8 client, or there's, say, a single destination IP
9 address, in which case the client would put --
10 in this example, the server 106's IP address as
11 the destination IP address in that single IP
12 header, but it also teaches interception in a
13 way that one of ordinary skill in the art would
14 understand could include, that it would have
15 that IP packet with the IP header of the server
16 106 -- with the server 106's IP address in the
17 destination IP address, but that could be
18 encapsulated inside of another IP packet where,
19 for example, appliance 200 could have been the
20 destination IP address.

21 So I just want to be really
22 careful in answering the question that -- which
23 destination IP address are you talking about,
24 and what -- what exactly do you -- are you
25 referring to when you say associating that

1 request with a -- with a destination IP address.

2 And I believe you said
3 destination IP address, if I'm recalling
4 correctly from the question.

5 Q. Would you agree that in the
6 embodiments that you relied upon in your
7 declaration, that when server 106 receives a
8 request for content that originated with client
9 102, the request received by server 106 would
10 include the IP address of server -- of client
11 102?

12 A. I'm not sure I would necessarily
13 agree with that characterization.

14 Q. Let me make sure the question is
15 clear because I made a mistake at the end of it.
16 So let me reask it and just listen carefully,
17 please.

18 Would you agree that the
19 embodiments of Plamondon that you relied upon,
20 when server 106 receives a request for content
21 that originated from client 102, the source
22 address of client 102 would be included as part
23 of the request that was received by server 106?

24 A. I would not necessarily agree
25 with that characterization.

1 (Court reporter seeks
2 clarification.)

3 THE WITNESS: Shall I continue?

4 BY MR. DUNHAM:

5 Q. What I'd like you to do is point
6 me to something in your report where you say
7 that server 106 would receive a request for
8 content that originated from client 102, but the
9 IP address, the source IP address of client 102
10 would not be part of that received request.

11 A. In my declaration for the '510
12 patent, page 78, paragraph 191. I can give you
13 a moment to go there, but I'll --

14 Q. I'm there.

15 A. Okay.

16 I mention paragraph 0256 from
17 Plamondon, which is one of -- it's several
18 embodiments in which appliance 200 establishes a
19 TCP connection with client 102, and what it
20 describes here, I've underlined it, in other
21 embodiments, the appliance 200 terminates the
22 first transport layer connection, such as a TCP
23 connection of a client 102, and establishes a
24 second transport layer connection to a server
25 106 produced by or on behalf of the client 102.

1 For example, the second transport
2 layer connection is terminated at the appliance
3 200 and the server 106.

4 So there are -- one of ordinary
5 skill in the art would understand that there are
6 multiple ways of doing that. One of which
7 involves appliance 200 being the source IP
8 address -- I'm sorry, wait a minute.

9 Appliance 200's IP address as
10 being the source IP address in that TCP
11 connection -- sorry. Let me -- let me make sure
12 I get that right.

13 An appliance 200's IP address is
14 the IP address associated with the TCP
15 connection. The second transport layer
16 connection that appliance 200 establishes with
17 server 106, in that particular embodiment, which
18 would have been pretty well known to someone of
19 ordinary skill in the art, from server 106's
20 perspective, if the -- appliance 200's IP
21 address would be in the source -- would be the
22 source IP address in the packets that the server
23 106 receives over that second transport layer
24 connection.

25 But again, one of ordinary skill

1 in the art would understand that that's one
2 embodiment. There are other embodiments where
3 appliance 200, even while establishing that
4 second TCP connection, it could reuse client
5 102's IP address. It would depend on that
6 particular network's apology and embodiment and
7 Plamondon teaches us that these networks can
8 take on virtually any network's apology.

9 BY MR. DUNHAM:

10 Q. Which declaration are you in,
11 sir, so I'll give you the corresponding
12 paragraph number.

13 A. I'm looking at the -- the
14 declaration pertaining to the '510 patent right
15 now.

16 Q. So could you turn to paragraph
17 158, please, in that particular declaration?

18 A. Yeah, I'm at paragraph 158.

19 Q. And the first -- please take a
20 moment to read the paragraph.

21 A. Okay. I've read that paragraph.

22 Q. My first question is -- and
23 again, I just asked you to read it carefully.

24 Do you stand by everything you
25 stated in paragraph 150, today, as you testify

1 under oath?

2 A. Yes, I stand by this.

3 Q. Could you look to your 135
4 declaration from the '319 patent, please.

5 A. Okay, I'm at the '319
6 declaration.

7 Q. And if you could please turn to
8 paragraph 388 and review that paragraph.

9 A. I've reviewed paragraph 388 in
10 the '319 declaration.

11 Q. I just want to make sure I
12 understand one of the sentences, and it's the
13 second sentence that says: "Like the computing
14 devices in Plamondon and the '319 patent, the
15 Price coordinating computer is a general purpose
16 computer."

17 Do you see that language?

18 A. I see that.

19 Q. Again, just a matter of grammar.
20 I want to make sure I understand it.

21 Is it your opinion that the
22 computing devices in Plamondon, the computing
23 devices in the '319 patent, and the Price
24 coordinating computer are each general purpose
25 computers?

1 A. Yes, that's my position. I would
2 agree with that.

3 Q. Okay. Thank you.

4 If we could turn to Plamondon
5 again for a moment, sir, and in particular, to
6 figure 1A.

7 Please let me know when you're
8 there.

9 A. Okay. I'm there.

10 Q. Did you discuss any embodiments
11 in your declaration where, if appliance 200 were
12 to forward requests for content, they would not
13 be intercepted by appliance 200 prime?

14 A. Just give me a moment.

15 Q. Certainly.

16 A. I'm looking again at my
17 declaration for the '510 patent, paragraph 144.

18 Q. I'm sorry, was that 144?

19 A. 144 on page 57. I mention that
20 it can use one or more network optimizational
21 appliances, 200, 200 prime. Those are what it's
22 referring to, Plamondon paragraph 0202.

23 So in that case, because it's one
24 or more, there could be instances where
25 appliance 200 is operating without appliance 200

1 prime, and, therefore, that appliance 200 prime
2 would not necessarily be intercepting the
3 messages from appliance 200.

4 Q. Sure. What I'm asking is: In
5 the embodiments that you've analyzed where there
6 are both appliance 200 and 200 prime, would you
7 agree that in the conditions where appliance 200
8 forwards a request for content, that that
9 request will always go to appliance 200 prime?

10 A. I wouldn't agree with the
11 characterization in that not all of the
12 embodiments that I reference require an
13 appliance 200 prime.

14 Q. Sure. So let me make sure my
15 question is clear.

16 I'm limiting it to the
17 embodiments where there are both an appliance
18 200 and an appliance 200 prime.

19 And my question is: Where there
20 is both an embodiment -- I'm sorry, both an
21 appliance 200 and an appliance 200 prime, would
22 you agree that in each case where appliance 200
23 forwards a request for content, that request
24 will be intercepted by appliance 200 prime?

25 A. In a specific embodiment where --

1 you're asking in the event where there exists
2 both an appliance 200 and a 200 prime, I believe
3 that question is asking if every single request
4 coming from appliance 200 towards server 106,
5 for example, if every single request necessarily
6 goes through appliance 200 prime.

7 And I wouldn't completely agree
8 with that characterization because Plamondon
9 speaks of, on paragraph -- sorry, on page 59 of
10 my '510 declaration, paragraph 150, I know that
11 he says that these networks can take any form of
12 its apology.

13 So as a result, there can be
14 network forms of apologies where not necessarily
15 every single request coming from appliance 200
16 goes through a appliance 200 prime.

17 So as I mentioned, again, on --
18 my paragraph 144, it could be one or more, 200,
19 200 prime, and that implies that there could be
20 a 200 double prime. So to say that it all
21 necessarily goes through 200 prime, even if --
22 even if it were the case that there was only
23 exactly 200 and 200 prime, as I think your
24 question is trying to establish, even in that
25 case, Plamondon doesn't teach away instances

1 where the requests from appliance 200 would not
2 go through 200 prime, but it also teaches that
3 it could be for network forms of apologies where
4 all requests go from appliance 200 through 200
5 prime, so I don't think it limits it to that,
6 but it also doesn't preclude it.

7 Q. Other than generic statements, as
8 you pointed to in paragraph 150 of your
9 declaration that states: "These networks can
10 take any form of apology."

11 Can you point me to any specific
12 embodiment in Plamondon where a request for
13 content that has been intercepted by appliance
14 200 and it's destined towards server 106, where
15 that request, they forward it towards the
16 server, does not go through appliance 200 prime?

17 A. As the embodiments that I
18 mentioned in 144 where it says there's one or
19 more appliances, 200 and 200 prime.

20 Q. So is that your answer, that just
21 the -- the generic recitation, that there could
22 be many or any of these different devices is --
23 is the support for your contention that requests
24 for content that are forwarded from appliance
25 200 towards server 106, they do not necessarily

1 go through 200 prime. Is that your testimony?

2 A. Not that it's just that, but that
3 also combined with this -- this idea that the
4 networks can take any form of its apology and it
5 describes some network's apologies, and then
6 also says that the network -- I'm sorry,
7 Plamondon, paragraph 204, says network 104 and
8 network's apology may be of any such network or
9 network's apology, as known to those ordinarily
10 skilled in the art or people supporting the
11 operations herein.

12 So it's my opinion that one of
13 ordinary skill in the art would have understood
14 that the embodiments -- where it does -- where
15 the traffic -- the request, going from 200
16 towards server 106 could go through appliance
17 200 prime, or could not go through appliance 200
18 prime.

19 Q. But sitting here today, can you
20 point me to specific words in Plamondon that say
21 that the requests for content that appliance 200
22 may be forwarding on towards server 106, can you
23 point me to any specific language where it says
24 if there was a 200 prime, that those requests
25 would not have to go through it?

1 MR. WICHMAN: Object. Asked and
2 answered.

3 THE WITNESS: I believe I
4 answered that question.

5 BY MR. DUNHAM:

6 Q. Okay. Can you turn to paragraph
7 314, just for reference of your 135 deck which
8 is the '319 patent?

9 A. What was that number again? I'm
10 sorry.

11 Q. 314, and it's really an anchor
12 point for you, and this is of the '319
13 declaration in the 135 proceeding.

14 A. I see that.

15 Q. Is it your understanding that in
16 Plamondon, a cached object may be located on
17 appliance 200 or on appliance 200 prime?

18 A. It's my understanding that in
19 some embodiments, yes, the cached object could
20 be on 200 -- appliance 200 or 200 prime.

21 Q. Okay. And in paragraph 314, are
22 you describing that basic possibility, that a
23 cached object, for example, may not be on
24 appliance 200, but it may be on appliance 200
25 prime?

1 A. That's what I'm describing in
2 this paragraph, yes.

3 Q. Okay. And you're citing in the
4 brackets in paragraph 314 of your declaration,
5 you cite bracket 0446, close bracket.

6 That's paragraph 446 of
7 Plamondon, correct?

8 A. That's what I'm referring to
9 there, yes.

10 Q. Would you agree that in paragraph
11 446 of Plamondon, the reference does not
12 disclose that a request for an object from
13 client 102 is sent directly to appliance 200
14 prime instead of being sent to appliance 200?

15 A. Paragraph 446 is I think building
16 off of the context established in paragraph 444
17 that says that it's appliance 200 -- it says:
18 "The appliance 200 intercepts or otherwise
19 receives a request for an object from a client
20 102."

21 Q. Right. So I'm just trying to
22 make sure that we're clear.

23 In the situation where a cached
24 object of interest is located at appliance 200
25 prime, according to the cited portion of

1 Plamondon, client 102 would direct a request for
2 that object that would be intercepted first by
3 appliance 200 and then forwarded on to appliance
4 200 prime; is that right?

5 A. Yes.

6 Q. Okay. And in that case, where
7 the object of interest by client 102, that
8 object of interest was on appliance 200 prime
9 and appliance 200 forwarded the request to 200
10 prime, would you agree that appliance 200 prime
11 would ultimately return that object via
12 appliance 200 to get it back to client 102?

13 MR. WICHMAN: Object.

14 THE WITNESS: It does -- it does
15 describe an embodiment in which that would
16 happen, yes.

17 BY MR. DUNHAM:

18 Q. Are you aware of any embodiments
19 where, if client 102 made a request for an
20 object, that request was intercepted by
21 appliance 200, that same request was forwarded
22 and intercepted by appliance 200 prime, are you
23 aware of any embodiment where appliance 200
24 prime would return that object directly to
25 client 102 without it passing back through

1 appliance 200?

2 MR. WICHMAN: Objection. Form.

3 THE WITNESS: Can I have the
4 question read back to me, please?

5 BY MR. DUNHAM:

6 Q. Sure. What I'm asking is -- and
7 I'll just repeat it for you, sir.

8 Are you aware of any embodiments
9 in Plamondon that you've discussed where -- when
10 an object of interest by client 102 is located
11 on appliance 200 prime and the request for that
12 object has reached appliance 200 prime through
13 appliance 200, are you aware of any embodiment
14 where appliance 200 prime will return that
15 object to client 102 bypassing client -- I'm
16 sorry, appliance 200?

17 MR. WICHMAN: Objection. Form.

18 BY MR. DUNHAM:

19 Q. Let me ask another question.
20 I'll withdraw that question. Let me ask it this
21 way. I'm trying to get to the same point, but
22 I'd like to ask a clearer question.

23 If client 102 issues a request
24 for an object and that object exists in the
25 cache of appliance 200 prime but not on

1 appliance 200, and the request from client 102
2 reaches appliance 200 prime by coming through
3 appliance 200, are you aware of any disclosure
4 in Plamondon where appliance 200 prime could
5 return that object to client 102 bypassing
6 appliance 200?

7 A. I don't believe that Plamondon
8 teaches that away. I'm just saying, I don't
9 think it says that it cannot happen. On
10 paragraph 447, it just refers to the appliance
11 transmits the cached object to 102, and so in
12 this case, I believe one of ordinary skill would
13 -- could understand that in this case, it could
14 be, as you describe, the cached object going
15 from 200 prime to 200, back to the client.

16 There could potentially be an
17 embodiment where the appliance there refers to
18 200, but in the -- certainly, what you've
19 described is an embodiment that Plamondon
20 describes.

21 MR. DUNHAM: Okay. I'm looking
22 at the clock and I promised you about quarter
23 after, we could take a lunch break, so this is
24 -- in terms of where we are, I think a good
25 point to take that break.

1 MR. WICHMAN: How long, 30
2 minutes, 20 minutes?

3 MR. DUNHAM: 30 minutes is fine
4 by me, 30 or 45, certainly, either of those will
5 work. Whatever is good for Dr. Levin.

6 MR. WICHMAN: Why don't we shoot
7 for 30.

8 MR. DUNHAM: Okay.

9 MR. WICHMAN: If that's agreeable
10 to everybody. So 12:45 -- by local time, 12:45
11 local here, we'll resume.

12 MR. DUNHAM: It works.

13 THE WITNESS: Thank you.

14 THE VIDEOGRAPHER: The time is
15 12:14 p.m. and we are now off the record.

16 (RECESS TAKEN)

17 THE VIDEOGRAPHER: The time is
18 12:47 p.m. and we are now back on the record.

19 BY MR. DUNHAM:

20 Q. Dr. Levin, did you discuss your
21 testimony with anyone during the lunch break
22 that we took?

23 A. No, I did not.

24 Q. Sir, I meant to ask you earlier,
25 are you the named inventor on any patents?

1 A. I believe I -- I do have a patent
2 where I'm one of the named inventors.

3 Q. Do you know if that patent has
4 issued?

5 A. I don't know exactly. This was
6 -- this would have been work as a result of one
7 of my internships with Microsoft Research. So
8 they -- Microsoft was the one who filed for that
9 patent and I never really tracked the status of
10 it.

11 Q. I understand that you have
12 retrieved from the box of materials that we
13 provided, two particular documents. One is
14 Exhibit 1023, which is United States Patent
15 Publication to Price, and that's document No.
16 2006/0026304, and the other document is
17 Exhibit 1024, another United States Patent
18 Publication to Kozat, publication No.
19 2009/0055471.

20 Do you have those two exhibits
21 before you, sir?

22 A. I have what appear to be those
23 exhibits, yes.

24 Q. Do you have some reason to
25 believe you do not have complete copies of

1 Exhibits 1023 and 1024?

2 A. No, not that I can tell, but just
3 flipping through it, it looks like it's all
4 there, but if it -- it looks like it's all
5 there.

6 Q. Let's start with Exhibit 1023
7 which is the Price reference.

8 Can we refer to this as Price,
9 would that be acceptable?

10 A. Sure.

11 Q. Have you reviewed the Price
12 reference before?

13 A. Yes, I have.

14 Q. And was that in connection with
15 preparing your declaration in this matter?

16 A. Yes.

17 Q. Did you read all of the Price
18 reference?

19 A. Yes, I have.

20 Q. Is the Price reference something
21 that had been provided to you for your work in
22 this matter, or was this something that you
23 uncovered in connection with your work?

24 A. This particular reference was
25 provided to me. I was -- I was -- it was

1 provided to me.

2 Q. Okay. Would you agree that the
3 Price patent publication is directed to a system
4 and method for updating software in electronic
5 devices?

6 A. Yes.

7 Q. With reference to the Plamondon
8 patent publication, can you -- strike that. I
9 apologize.

10 If you could turn in your
11 declaration, and the '319 declaration is fine,
12 to paragraph 388.

13 A. Okay. I'm at that paragraph.

14 Q. Would you agree as recited in the
15 first paragraph -- I'm sorry, the first sentence
16 of your paragraph 388, that the Price
17 publication generally describes a software
18 versioning system involving a coordinating
19 computer that automatically or semiautomatically
20 keeps software on subscribing devices updated?

21 A. Yes, that's a quote from my
22 declaration and I stand by that.

23 Q. So would you agree that in the
24 embodiments disclosed in Price, they basically
25 talk to software versioning and software

1 patching as ways to keep software updated on
2 subscribing devices?

3 A. Generally speaking, they pertain
4 to the -- Price and pertains to updating
5 software.

6 Q. Can you point me to any
7 disclosure in the Plamondon reference for the
8 embodiments that you are relying on in your
9 declaration where Plamondon states that it's
10 needed a solution for software versioning and
11 software updating problems?

12 A. It's my opinion that a person of
13 ordinary skill in reading Plamondon would have
14 given what was well known at the time, would
15 have inferred that there was a problem, a
16 potential problem of having to maintain
17 consistent and up-to-date versions of software
18 and that -- and that Price would have offered a
19 solution to that problem that one of ordinary
20 skill would have inferred.

21 Plamondon does refer to version
22 numbers of -- well, it does at some point refer
23 to version numbers of software. But what I
24 believe one of ordinary skill would have
25 inferred that problem from Plamondon.

1 Q. Would the embodiments in
2 Plamondon that you relied on, in forming your
3 opinions, would those embodiments in Plamondon
4 work for their intended purpose without adding
5 any solutions that may be proposed in Price?

6 MR. WICHMAN: Objection. Form.

7 THE WITNESS: Are you referring
8 to any particular -- copies of a particular
9 claim or a particular part of Plamondon?

10 BY MR. DUNHAM:

11 Q. No. You relied -- you said
12 you've read the entirety of Plamondon, correct?

13 A. Yes.

14 Q. And you selected certain
15 embodiments from Plamondon that you discuss in
16 the analysis in your declaration, correct?

17 MR. WICHMAN: Objection. Form.

18 THE WITNESS: Can you repeat the
19 question, please?

20 BY MR. DUNHAM:

21 Q. Sure. I believe you testified
22 you read the entirety of Plamondon, correct?

23 A. Yes.

24 Q. And you discussed certain
25 embodiments from Plamondon as part of your

1 analysis in your declaration, correct?

2 A. In my declaration, I do speak
3 about various different embodiments of
4 Plamondon.

5 Q. Sure. And the question is: For
6 the embodiments of Plamondon that you reference
7 in your declaration, would those embodiments
8 work for their intended purpose without adding a
9 solution for software versioning and updating as
10 described in Price?

11 A. It depends on the setting that
12 one is in, as I mentioned, one of ordinary skill
13 in the art, when applying Plamondon in a
14 practical setting would have, you know, would
15 have, as I describe in my declaration, would
16 have known that there are software updates that
17 happen to address, for instance, security issues
18 that might arise in a particular implementation
19 of a particular piece of functionality for some
20 software.

21 And so in that sort of practical
22 setting, where we are constantly evolving our
23 software, adapting our specific implementations
24 of functionality that -- in those cases, it is
25 important to keep software up to date, and as I

1 mention in my declaration, I pointed to the fact
2 that it was well known at the time that ideally
3 the software updates would be automated.

4 So in terms of sort of
5 theoretical, idealized version of Plamondon, if
6 one were to assume a perfect, flawless
7 implementation, which is essentially impossible,
8 or not impossible, I don't want to say
9 impossible, but essentially, you know, very
10 rare, it's not expected in a practical setting,
11 but in that very theoretical scenario where one
12 did not need to ever update any software, then
13 -- then one wouldn't need any more versions of
14 software, but I don't know, I'm not really
15 familiar with any software in a practical
16 setting where when we're trying to apply the
17 teachings of Plamondon, that one would not have
18 observed the need to keep the software up to
19 date.

20 It's -- Plamondon is a very
21 powerful and feature-full system with many
22 different functions, and moreover, even -- even
23 if the implementation of Plamondon itself were
24 perfect, it makes use of -- of HTTP, for
25 example, TCP, for example, and even in these

1 cases, there are -- there are updates and there
2 are also, as Plamondon -- you know, specific
3 versions of operating systems, and I think it's
4 well known -- it was well known to -- it was
5 well known to one of ordinary skill in the art
6 that there are operating system versions of
7 these as well, and so -- so I think in a very
8 practical setting like that, it would be
9 recognized by one of ordinary skill at the time
10 that they would have recognized how important it
11 would be to have software updates.

12 Q. I may come back to the Price
13 reference, but I'd like now for you to turn to
14 the Kozat reference for the moment, Exhibit
15 1024.

16 A. I have that reference in front of
17 me.

18 Q. In connection with the work that
19 you've done in this matter, was the Kozat
20 reference something that was provided to you, or
21 is this something that you uncovered or brought
22 to you in the process of performing your
23 analysis?

24 A. I don't recall.

25 Q. Do you recall bringing any

1 references to the attention of counsel in this
2 particular matter, references that were not
3 provided to you?

4 A. Yes, absolutely. For example,
5 I'm just going to turn back to the exhibit list.
6 I'll provide some examples.

7 Exhibit Number 1033, Peterson
8 text, 1034, I believe -- actually, sorry, I take
9 that back.

10 1038, that NIST publication; I
11 believe 1041, Prem Ramaswami -- I'm sorry, I
12 take that back.

13 1045, Ratnasamy; 1044, Rowstron;
14 1046, the Padmanabhan; and 047, the Freedman
15 reference and several others.

16 So there were quite a few that I
17 had brought to lawyers, but as for Kozat
18 specifically, I just don't recall off the top of
19 my head.

20 Q. Did you review the Kozat
21 reference in its entirety?

22 A. Yes, I did.

23 Q. Would you agree that the Kozat
24 patent publication is directed to a system and
25 method for media streaming in a peer-to-peer

1 network?

2 A. A system, method and apparatus,
3 just to be clear, these are some legal patent
4 terms, I just want to make sure that I'm not
5 agreeing to something that -- that's not there.
6 I was just saying that --

7 (Court reporter seeks
8 clarification.)

9 THE WITNESS: I just want to make
10 sure that some of the legal patent terms, that
11 I'm not confusing or shortcutting anything. It
12 describes the system, method and apparatus for
13 media streaming with online caching and
14 peer-to-peer forwarding.

15 BY MR. DUNHAM:

16 Q. I'm sorry, could you please
17 repeat that answer because some of the audio cut
18 out for me.

19 A. Sorry. I wanted to be clear, so
20 as not to get any of the patent language wrong.
21 I believe you mentioned a system and method. I
22 just want to make sure I'm not shortcutting
23 anything or misrepresenting this Kozat
24 reference. It mentions that it's a system,
25 method and apparatus for media streaming with

1 online caching and peer-to-peer forwarding.

2 Q. Okay. Can you point me to any
3 disclosure in Plamondon for the embodiments you
4 relied on that stated that Plamondon needed a
5 solution for caching and streaming media content
6 to and from peers in a peer-to-peer network?

7 A. I can point you to a couple
8 things. First paragraph, 0439, of Plamondon
9 mentions the techniques or portions thereof of
10 method 500 and 550 described above, may be
11 performed together in the same appliance 200, or
12 in a plurality of appliances acting in
13 conjunction or cooperation with each other.

14 One of ordinary skill at the time
15 would have recognized that as -- as being
16 implementable by a peer-to-peer system.

17 As for -- you mentioned media
18 streaming, if I can have just one more moment --

19 (Court reporter seeks
20 clarification.)

21 THE WITNESS: Just give me one
22 moment to address that other part.

23 In the -- sorry. In my '319
24 declaration on page 92, paragraph 243, I mention
25 that when Plamondon -- paragraph 0246, that it

1 discloses streaming video and/or audio.

2 BY MR. DUNHAM:

3 Q. Would the embodiments of
4 Plamondon that you relied on in your declaration
5 work for their intended purpose without adding
6 any solutions that may be presented in the Kozat
7 reference?

8 A. If -- so what -- what one of
9 ordinary skill in the art would have recognized
10 as a problem with Plamondon's architecture is
11 what might happen if an appliance alone would
12 not have sufficient capacity to cache as much
13 content as one might want to achieve the
14 performance of -- of improvements that
15 Plamondon's architecture tries to achieve, and
16 that's where the motivation to combine with
17 Kozat would have been clear to one of ordinary
18 skill in the art at the time.

19 However, provided that there is
20 enough storage capacity at a, say, given
21 appliance 200, it may not strictly need it.

22 It would somewhat depend on what
23 the -- what the context of the deployment is and
24 what the desired performance improvements would
25 be.

1 Q. I'd like you to turn to paragraph
2 61 of your declaration from the '319 patent and
3 I'm really pointing you there by way of
4 reference.

5 A. Paragraph 61 of the -- of my '319
6 declaration; is that correct?

7 Q. Yes. I'm interested in the
8 section entitled: "Proxies and middle boxes,"
9 that starts I guess at paragraph 61.

10 A. I'm at that section.

11 Q. Okay. Would you agree that in
12 October of -- do you need a minute to review,
13 sir, I'm happy to wait.

14 A. Just a moment.

15 Q. Certainly.

16 A. I've reviewed that section.

17 Q. Great. Is it your opinion that
18 in October of 2009, a person of ordinary skill
19 in the art would have known how to use a proxy
20 server as an intermediary between a client
21 device and a web server?

22 A. One of ordinary skill would have
23 known of -- of some ways to use a proxy server
24 as an intermediary between a client and a web
25 server.

1 Q. And when a proxy server, as of
2 October 2009, was used as an intermediary
3 between a client device and a web server, would
4 that proxy server be forwarding packets that it
5 received from the client device and then
6 forwarding those packets to the web server?

7 A. As I describe in this section, it
8 depends. There are some proxies that do
9 essentially forward packets and there are
10 others, as I describe in this section, that
11 would not necessarily just forward packets
12 exactly as they are.

13 In fact, I even mention here, I
14 mention this notion of a web proxy -- I mention
15 paragraph 64, for example, a web proxy can store
16 copies of web pages it has obtained on behalf of
17 clients and then when a future request asks for
18 the same content, the proxy may simply return
19 its copy rather than forward the request to the
20 ultimate destination.

21 So it's not always necessary that
22 it simply forwards the packets. In fact, it may
23 not send any packets along to another -- another
24 server at all, but these proxies in general
25 don't necessarily have to precisely forward

1 packets. Some do, but not all of them.

2 Q. I'm sorry?

3 A. I was saying some do but not all
4 of them.

5 Q. So in the case of an intermediary
6 proxy that does not have any content cached on
7 it, would that type of proxy forward packets
8 received from a client device on to a web server
9 that would have the desired content?

10 A. Again, not necessarily in every
11 embodiment of a proxy. So they might issue a
12 slightly different request, for example.

13 Q. I see. You mentioned something
14 in paragraph 64 I'm interested in.

15 Would you agree that because
16 proxy servers operate at a higher level of
17 abstraction, a route or a switch, proxy servers
18 can perform additional processing that a router
19 or switch cannot?

20 A. That doesn't completely
21 characterize what I said. I said proxies
22 typically operate at a higher level of
23 abstraction, and that they -- as a result, that
24 they can operate at those higher levels of --
25 I'm sorry, I'm sorry, I think I just misspoke.

1 I think I just said at a higher
2 level of abstraction. I meant at a higher layer
3 in the networking stack.

4 (Court reporter seeks
5 clarification.)

6 THE WITNESS: Routers and
7 switches operate at layer 3. Proxies typically
8 operate at layer 4 or above. Not always
9 necessarily, but they can, and also, just to --
10 just to clarify, I'm speaking to the extent that
11 your question referred to operating at a higher
12 layer than -- than routers or switches, for
13 example.

14 So they can operate at this
15 higher layer and doing so does allow them to do
16 additional processing that something operating
17 strictly at a lower layer would not able to do.

18 BY MR. DUNHAM:

19 Q. I'd like you to turn back to the
20 Plamondon reference, please, and I would draw
21 your attention just as a reference point again
22 to paragraph 9.

23 A. Paragraph 9 of Plamondon or of my
24 declaration?

25 Q. Of Plamondon, sir.

1 A. Oh, I'm sorry. Okay. I'm in
2 paragraph 9.

3 Q. So I'm interested in the
4 prefetching technique that is disclosed in
5 Plamondon. For example, as mentioned in
6 paragraph 9.

7 And my question is: Would you
8 agree that Plamondon teaches this prefetching
9 technique to be used before a client has made a
10 request for the particular content?

11 A. I'm not sure I would necessarily
12 agree with that characterization. It's possible
13 that that client had requested it in the past,
14 and this is another request -- and then later in
15 the future, prefetching is applied in
16 anticipation of that client potentially making
17 that request, which might be the first time
18 they're making the request, it might be a
19 subsequent time that they've made the request,
20 but that the goal specifically with prefetching
21 is to try to, as it explains, is to try to
22 anticipate what that client will request in the
23 hopes of getting it ahead -- ahead of that
24 request.

25 Q. Okay. Would you agree, sir, that

1 the challenged claims in this case relate to
2 fetching content after a client has made a
3 request for the content?

4 MR. WICHMAN: Objection. Form.

5 THE WITNESS: I would not
6 necessarily characterize it as such.

7 May I have this question read
8 back to me one more time.

9 BY MR. DUNHAM:

10 Q. All right. I'd like to wait
11 until the sirens clear, if we could.

12 A. Oh, sure, sure.

13 Q. My question, sir, is: Would you
14 agree that the challenged claims in these
15 matters relate to fetching content after the
16 client has made a request for the content?

17 MR. WICHMAN: Objection. Form.

18 THE WITNESS: I would not
19 necessarily characterize it as such, no.

20 BY MR. DUNHAM:

21 Q. If you look at the '319 patent,
22 claim 1.

23 Do you have that in front of you,
24 sir?

25 A. I do.

1 Q. Do you see the first step, it
2 says: "Receiving from the second server, the
3 first content identifier"?

4 A. I see that step, yes.

5 Q. Do you understand that that is
6 the first client device receiving request for
7 content?

8 A. I understand that's the first
9 client device receiving the first content
10 identifier from the second server.

11 Q. So would the first client device
12 receive that first content identifier before
13 there was a request for content?

14 A. I don't see that the claim
15 necessarily limits it to that.

16 Q. So what is your understanding of
17 the claim, then? Your understanding of the
18 claim that the -- let me make sure I quote the
19 language. Is your understanding of claim 1 of
20 the '319 patent that the -- receiving from the
21 second server, the first content identifier step
22 will occur before there's a request for content.

23 MR. WICHMAN: Objection.

24 THE WITNESS: So my understanding
25 in reading claim 1 of the '319 patent is that it

1 does not necessarily say the order in which all
2 of these steps occur.

3 It says, for example, you're
4 referring to this first step, receiving from the
5 second server, the first content identifier, and
6 you're referring to the next step, sending to
7 the first server over the internet, a hypertext
8 transfer protocol request, HTTP request, that
9 comprises the first content identifier.

10 And if I understand your question
11 correctly, you're asking if that -- the
12 receiving of these two steps, you're asking if
13 the receiving step must always happen before the
14 sending step, and I would say the claim does not
15 limit it to happening precisely in that order.

16 It just says that these two steps
17 have been. And I think if it -- if it were
18 requiring that they happen in the order in which
19 they're listed, then -- then I wouldn't
20 understand the need for claim 27, which says the
21 -- it's a dependent claim on claim 1, the
22 method, according to claim 1 wherein the steps
23 are sequentially executed.

24 So because there was nothing in
25 claim 1 that says that the receiving from the

1 second server in the first content identifier
2 has to happen before sending to the first server
3 over the internet, a hypertext transfer protocol
4 request that comprises the first content
5 identifier.

6 That -- the way that you put it,
7 that the second server would first be sending
8 the request for the first content identifier,
9 that -- I don't see that that step has to come
10 before the first client device sends the first
11 content identifier to the first server.

12 BY MR. DUNHAM:

13 Q. Well, can the fourth step of
14 claim 1 of the '319 patent occur before the
15 first step, under your understanding?

16 A. Under my understanding, that
17 fourth step, just to make sure it's clear to
18 everybody, is -- says: "Sending, the first
19 content by the first client's device to the
20 second server, in response to the receiving of
21 the first content identifier."

22 My understanding of -- of the --
23 of the language in this is that when it says:
24 "In response to the receiving of the first
25 content identifier," that at that point, it is

1 talking about that first step, receiving from
2 the second server, the first content identifier,
3 in which case that last step would have to be in
4 response to the first step.

5 So in that case, as I would read
6 it, in response to that would mean that that
7 last step happens after the first step, but not
8 necessarily -- it doesn't confer where steps --
9 where step 2 would have to -- where in step 2
10 would have to happen in relation to step 1.

11 Q. So is it your position, then,
12 that according to your understanding, the claim
13 step 4, which is the sending step, second
14 sending step could -- could occur before step 2,
15 the first sending step, as the claim is drafted?

16 A. I don't see the claim limiting
17 it, so that step 2 could not happen after the
18 fourth step.

19 Q. I'd like you to turn back to your
20 135 declaration, please, and tell me when you're
21 there, please.

22 A. Yeah, I have that declaration in
23 front of me.

24 Q. I'm sorry, your video keeps
25 freezing. So basically, I see a still image of

1 you and I'm not aware of what's happening after
2 that.

3 A. Sorry. I have the declaration in
4 front of me. Was there a particular paragraph?

5 Q. Yes. I'd like you to look at 444
6 and maybe if you could read that through 448 and
7 let me know when you've reviewed those.

8 A. Okay. I've -- I've reread those
9 paragraphs.

10 Q. Thank you. I have some questions
11 about something you refer to in here as
12 Plamondon-Price, the Plamondon-Price
13 combination.

14 Do you see that reference?

15 A. Yes, I do.

16 Q. By that Plamondon-Price
17 combination, are you referring to Plamondon as
18 modified by certain teachings from Price as you
19 describe in your declaration?

20 A. I describe, you know, specific
21 elements, the specific components of Plamondon,
22 the appliance 200, appliance 102, 102, AB6
23 support. I'm taking on the additional
24 functionality of Price as described in my
25 declaration.

1 Q. So I'm just trying to get to
2 common vocabulary with you.

3 A. Sure.

4 Q. If I refer to Plamondon-Price
5 combination, will you understand that to mean
6 the combination as you envisioned Plamondon
7 modified by Price?

8 A. Yes, I'll agree with that.

9 Q. Okay. Under your understanding
10 of the Plamondon-Price combination that you
11 envision, when appliance 200 intercepts a
12 request for updated software that was requested
13 by client 102A, will the appliance 200 download
14 the software from a web server and then forward
15 that software to client 102A?

16 A. As I mention in paragraph 448,
17 page 156, if the requested updated software
18 version is not already in appliance 200's cache,
19 appliance 200 downloads it over the internet
20 from the web server and forwards it to client
21 102A.

22 Q. Okay. So let's -- let's work
23 with that embodiment as you've described it,
24 where the requested updated software was not
25 already in the cache of appliance 200, so

1 appliance 200 downloaded that software from a
2 web server and forwarded it to client 102A.

3 Are you with me?

4 A. I'm with you.

5 Q. In that example of
6 Plamondon-Price as you envision it, when
7 appliance 200 downloads the updated software
8 from the web server and forwards it to client
9 102A, would appliance 200 also cache a copy of
10 that updated software in its cache?

11 A. Potentially, yes.

12 Q. Under what circumstances would
13 appliance 200 not cache the updated software
14 when it retrieved it from the web server and
15 forwarded it to client 102A?

16 A. It depends how exactly the
17 caching would be implemented. Or if, for
18 example, there was an error in writing into the
19 cache -- there could be some exceptions to it,
20 but it, generally speaking, as a caching proxy,
21 it -- you know, barring some of these
22 exceptions, that's when -- it certainly could
23 cache it.

24 Q. Okay. So once that sequence has
25 occurred, is it your position that in the

1 Plamondon-Price combination, client 102A would
2 be acting as the coordinating computer?

3 A. Would you mind repeating the
4 question, please.

5 Q. Sure. So after that sequence has
6 occurred -- strike that.

7 Let me ask you this as a
8 prefatory question. Is it your understanding --
9 strike that. Let me really try again.

10 In your envisionment of the
11 Plamondon-Price computer, would client 102A from
12 Plamondon be operating as the coordinating
13 computer?

14 A. Client 102A in the
15 Plamondon-Price combination that I described in
16 my declaration, acts as the coordinating
17 computer that's described by Price.

18 Q. So under the scenario we were
19 discussing, where client 102A has requested
20 updated software and appliance 200 did not have
21 that software in cache, so appliance 200 went
22 out to a web server, downloaded the software and
23 forwarded it back to client 102A, client 102A
24 would be receiving that software as the
25 coordinating computer, correct?

1 A. I'm not quite understanding the
2 question. If client 102A -- because it is the
3 coordinating computer in the Price-Plamondon
4 combination, because of that, in this particular
5 embodiment, it -- it -- that caused it to make
6 the request, at the point where it is issuing
7 that request, at the point where it's receiving
8 the data from appliance 200 in this case.

9 It's -- at that point, that's
10 where it's acting in the role of the client 102A
11 from -- from Plamondon, but this is in that
12 broader context of it doing this because of its
13 -- because of its functionality as the
14 coordinating computer.

15 Q. Well, I'm interested in the
16 sentence at the start of paragraph 449 that
17 says: "Subsequently," so that's following from
18 paragraph --

19 (Court reporter seeks
20 clarification.)

21 BY MR. DUNHAM:

22 Q. So let me start again so we have
23 a clear record.

24 So I'm interested in the first
25 sentence of paragraph 449 that reads:

1 "Subsequently, Price's coordinating computer
2 embodied in Plamondon's client 102A in the
3 Plamondon-Price combination, proceeds per
4 Price's method which Plamondon-Price carries out
5 to transmit the updated software version to
6 appliance 200 functioning as a managed device in
7 Price's method" -- I'm sorry, let me strike that
8 because I messed up my quote of your dec and I
9 don't want to have that in the record so let me
10 begin again, please.

11 Looking at paragraph 449 and I'm
12 interested in the first sentence that's
13 following the discussion we've had from
14 paragraph 448, where that first sentence reads:
15 "Subsequently, Price's coordinating computer
16 embodied in Plamondon's client 102A in the
17 Plamondon-Price combination, proceeds per
18 Price's method which Plamondon-Price carries out
19 to transmit the updated software version to
20 appliance 200 so that appliance 200 functioning
21 as a managed device in Price's method can
22 install it."

23 Do you see that language?

24 A. I see that language, yes.

25 Q. I'm just making sure I understand

1 the flow, and -- between paragraph 448 and
2 paragraph 449 that we just reviewed, is it your
3 understanding that when appliance 200 downloads
4 software that client 102A has requested it and
5 appliance 200 forwards that software to client
6 102A, acting as the coordinating computer,
7 client 102A is going to transmit that updated
8 software back to appliance 200.

9 A. Yes, that's what I described
10 here.

11 Q. All right. Why would client 102A
12 need to forward the software back to appliance
13 200 if appliance 200 had just downloaded a fresh
14 copy of that software from the web server?

15 A. Though these -- the facts that,
16 you know, in this -- in this -- in this
17 combination of Plamondon-Price that I described,
18 the fact that client 102A would take on the
19 functionality of Price's coordinating computer
20 does not necessarily mean that we're starting
21 with the Plamondon software and modifying that
22 software. It could mean that we're running the
23 Price software on that same device.

24 And so as a result, this cache
25 that's there in appliance 200 that we described

1 in paragraph 448, that's the cache that's part
2 of the Plamondon software, but it's very, very
3 common to have two different software
4 applications running on the same computing
5 device that might each have their own -- their
6 own, you know, form of optimizations, their own
7 caches, their own, in general, information that
8 these two pieces of software might not know
9 about from one another.

10 For example, you might have a --
11 an email client, for example, that is
12 downloading icons as part of rendering an email,
13 and it's possible those icons are getting
14 downloaded from a web server, for example. It's
15 possible that on your computer, you also have a
16 web browser that has previously downloaded those
17 -- those icons.

18 But if these pieces of software
19 are different, that email software might not
20 know that that content is already locally cached
21 on that computer, because it might not know
22 everything that's going on in that other piece
23 of software.

24 So in this case of the
25 Plamondon-Price combination that I've described

1 here and this particular embodiment of it, this
2 would be a case where -- where the Price
3 software may not be cognizant of -- of Plamondon
4 being there. If anything, what I think that
5 this shows is just how, how -- how easy it would
6 be to combine these two pieces of -- of art,
7 Price and Plamondon, that they compose so well
8 that they could do so without, I think, I think
9 one of ordinary skill in the art at the time
10 would have also thought that you could combine
11 them without them even necessarily having to
12 really know about one another.

13 You wouldn't have to, like,
14 reimplement Price or Plamondon or reimplement
15 Plamondon-Price. These could be two pieces of
16 software running on similar -- similar kinds of
17 communication devices that they described in
18 their respective patents, and -- and that they
19 would compose well in that regard.

20 So -- so that's why, you know,
21 the -- the nice thing about having modularity
22 and having separation in the software that we
23 make, it's fantastic, because that means we can
24 innovate in one without having to necessarily
25 know all of the details of every other piece of

1 software that's running on a computer system.

2 But the one potential downside of
3 these layers of the social abstraction and
4 isolation as it's sometimes referred to in
5 computing terms, as a term of art, one of the
6 potential downsides is that sometimes you do end
7 up missing out on potential optimizations like
8 that.

9 When I describe a particular
10 embodiment that would have been clear to the
11 person of ordinary skill in the art at the time,
12 that would have been a very straightforward way
13 of combining them and one that would have
14 combined them in a way that I think would have
15 conferred reasonable expectations of success.

16 Q. So you would agree that as
17 described in paragraph 448 and 449 of your -- of
18 your declaration, that in the Price-Plamondon
19 combination you envisioned, the coordinating
20 computer transmitting a copy of the updated
21 software that it just received from appliance
22 200 and transmitting it back up to appliance 200
23 would be an unnecessary extra step, right?

24 MR. WICHMAN: Objection.

25 THE WITNESS: I'm not sure I

1 would characterize it that way.

2 BY MR. DUNHAM:

3 Q. Would you agree that in the
4 Price-Plamondon combination that you describe in
5 paragraph 448 and 449, if the client 102A that
6 had just received the updated software from
7 client 200 did not send that software back to
8 appliance 200, then the remainder of the method
9 would continue to operate, correct?

10 MR. WICHMAN: Objection.

11 THE WITNESS: Sorry, the
12 remainder of -- of what method?

13 BY MR. DUNHAM:

14 Q. The -- let me ask it a different
15 way.

16 Would you agree that if Price --
17 if the Plamondon client 102A acting as the Price
18 coordinating computer in the Price-Plamondon
19 combination that you envisioned, if that
20 coordinating computer did not send the updated
21 software back to appliance 200, appliance 200
22 would still have that software in its cache from
23 when it obtained it for client 102 in the first
24 instance?

25 A. As I said earlier, it depends on

1 whether or not it cached it, whether or not it
2 cached it in its entirety. It potentially
3 could, but it's not necessarily guaranteed that
4 it would completely be inside of that cache.

5 Q. So it's your testimony, as an
6 expert today, in the method you envision
7 operating as described in paragraph 448 and 449,
8 if appliance 200 obtained an updated copy of
9 software for client 102, forwarded it to client
10 102 and client 102 forwarded it right back to
11 the appliance 200, that the appliance might not
12 have that software from when it downloaded it,
13 but it would have that software in cache from
14 when client 102 forwarded it right back to it?

15 MR. WICHMAN: Objection.

16 THE WITNESS: A couple of -- a
17 couple things about that -- that question you
18 just said. You referred to 102. Here we were
19 referring to 102A.

20 BY MR. DUNHAM:

21 Q. Sure. So let me ask -- let me
22 ask the question again. I want to make sure on
23 the record your expert testimony, sir, is that
24 in the Plamondon-Price combination that you
25 describe in paragraphs 448 and 449, it is your

1 testimony today here, under oath, that if
2 appliance 200 obtained updated software
3 requested by client 102A, if appliance 200
4 forwarded that updated software to client 102A
5 and client 102A forwarded that software back to
6 appliance 200, it is your testimony that
7 appliance 200 might not have that software in
8 its cache from when it obtained it, but would
9 have its software in its cache from when client
10 102A forwarded it right back to it?

11 MR. WICHMAN: Objection.

12 THE WITNESS: I'm not sure which
13 cache you're referring to when you say that
14 client 102A forwards that software update to
15 appliance 200.

16 I don't think I said anything
17 about when client 102A, acting as the
18 coordinating computer and when it uploads --
19 when it transmits the updated software from
20 client 102A to appliance 200, I don't think that
21 I said anything about that getting put into a
22 cache, I'm not sure which cache that you're
23 referring to there.

24 BY MR. DUNHAM:

25 Q. Well, according to paragraph 449,

1 when client 102A transmits the updated software
2 version to appliance 200, what is appliance 200
3 doing with it?

4 A. It's receiving that transmitted
5 software update.

6 Q. I'd like you to turn to paragraph
7 459 of your declaration.

8 A. You said 459; is that correct?

9 Q. Yes, sir.

10 MR. DUNHAM: And, in fact, I see
11 we've gone another full hour. Would you like to
12 take a short ten-minute break?

13 THE WITNESS: Yes, I would, if
14 that's all right.

15 MR. DUNHAM: Sure.

16 THE VIDEOGRAPHER: The time is
17 1:47 p.m. and we're now off the record.

18 (Recess taken.)

19 THE VIDEOGRAPHER: The time is
20 1:57 p.m. and we're now back on the record.

21 BY MR. DUNHAM:

22 Q. Dr. Levin, if you could turn to
23 paragraph 314 of your declaration in the '319
24 patent, and I'm pointing you there again just
25 for reference purposes.

1 A. Okay. I'm at 314 of my '319
2 declaration.

3 Q. If you'd like to take a moment to
4 review it, please feel free to do so.

5 A. Okay. I've read it.

6 Q. I want to call your attention to
7 the phrase "prefetcher 904," that's right at the
8 start of paragraph 314.

9 Do you see that?

10 A. Yes, I see that.

11 Q. My question, sir, is: Would the
12 prefetcher 904 of Plamondon work to manage
13 caching in Plamondon without the addition of any
14 teachings from Kozat?

15 A. Yes, even without the teachings
16 from Kozat, prefetcher 904 could operate, as I
17 described in paragraph 314, without -- without
18 having to combine with Kozat.

19 MR. DUNHAM: Dr. Levin, I want to
20 thank you for your time today and subject to any
21 redirect by counsel for petitioner, patent owner
22 has no further questions at this time.

23 MR. WICHMAN: Well, Tom, let's go
24 off the record for about ten minutes and think
25 about whether we have any redirect. Does that

1 sound good?

2 MR. DUNHAM: Sounds good. We'll
3 come back at 10 after.

4 MR. WICHMAN: Okay. Thanks.

5 THE VIDEOGRAPHER: The time is
6 2:01 p.m. and we're now off the record.

7 (RECESS TAKEN)

8 THE VIDEOGRAPHER: The time is
9 2:10 p.m. and we're now back on the record.

10 EXAMINATION

11 BY MR. WICHMAN:

12 Q. Dr. Levin, do you recall that
13 Mr. Dunham asked you about your testimony in
14 paragraph 388 of your declaration in support of
15 the petition on the '319 patent?

16 A. Yes.

17 Q. He asked you about the sentence
18 describing computing devices as general purpose
19 computers.

20 Do you recall that?

21 A. I recall.

22 Q. Can you turn to Plamondon
23 paragraph 238, this is Exhibit 1010, which he's
24 been referring to throughout the deposition.

25 Just let me know when --

1 A. Yes, I'm at 238 of Plamondon.

2 Q. So do you see the first sentence
3 of paragraph 238, that this section in Plamondon
4 refers to computing device 100?

5 A. Yes, I see that.

6 Q. It says that: "Computing device
7 100 may have different processors, operating
8 systems and duplicate devices consistent with
9 the device"?

10 A. I see that, yes.

11 Q. Okay. Thank you.

12 And if you drop down to the last
13 sentence of this paragraph, can you read that
14 for me, please.

15 A. This is the sentence starting:

16 "Moreover."

17 "Moreover, the computing device
18 100 can be any work station, desktop computer,
19 laptop or notebook computer, server, handheld
20 computer, mobile telephone, Smartphone, any
21 other computer, or other form of computing or
22 telecommunications device that is capable of
23 communication and that has sufficient processer
24 power and memory capacity to perform the
25 operations described herein."

1 Q. So in that -- in that list of
2 things that the computing device 100 can be,
3 would some of those things fit the description,
4 general purpose computer?

5 A. Some of them would.

6 MR. DUNHAM: Objection. Leading.
7 Sorry, sir. I need to have time to object.
8 Objection. Leading.

9 THE WITNESS: Looking at this
10 paragraph, I'm going to say that some of these
11 could be considered general purpose computing
12 devices -- I'm sorry, I think you said general
13 purpose computers.

14 BY MR. WICHMAN:

15 Q. Would a POSA reading this
16 sentence understand it to describe only general
17 purpose computers?

18 A. I don't believe a person of
19 ordinary skill at the time would have read it to
20 only mean general purpose, particularly given
21 that it says: "Any other computer or other form
22 of computing or telecommunications device that
23 is capable of communications and that has
24 sufficient processor power and memory capacity
25 to perform the operations described herein."

1 So even if it weren't completely
2 general purpose, to the extent that that means a
3 computer that -- to the extent of that being any
4 form of -- to the extent that that is not a
5 special purpose computer is what we call it,
6 then no, I don't think a person of ordinary
7 skill would say that it's strictly limited to
8 what might be termed a general purpose computer.

9 Q. So the person of ordinary skill
10 in the art reading Plamondon, paragraph 238,
11 would they have understood that a computing
12 device 100 is not limited to a general purpose
13 computer?

14 A. That's my opinion, yes.

15 MR. WICHMAN: No further
16 questions.

17 MR. DUNHAM: Nothing further from
18 patent owner.

19 MR. WICHMAN: Can we go off the
20 record.

21 MR. DUNHAM: Yes, please.

22 THE VIDEOGRAPHER: Counsel, can I
23 go off the video record?

24 MR. WICHMAN: Yes, please.

25 THE COURT: Thank you. Or the

1 audio record? The audio record, I apologize.

2 The time is 2:14 p.m. and we're
3 now off the record.

4 MR. WICHMAN: Dr. Levin is going
5 to read and sign.

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1 CERTIFICATE

2
3
4 I, Karen Friedlander, a
5 Certified Court Reporter of the State of New
6 Jersey, do hereby certify that prior to the
7 commencement of the examination, the witness
8 and/or witnesses were sworn by me to testify to
9 the truth and nothing but the truth.

10 I do further certify that the
11 foregoing is a true and accurate computer-aided
12 transcript of the testimony as taken
13 stenographically by and before me at the time,
14 place and on the date hereinbefore set forth.

15 I do further certify that I am
16 neither of counsel nor attorney for any party in
17 this action that I am not interested in the
18 event nor outcome of this litigation.

19
20
21 S/Karen Friedlander
22 Certified Court Reporter
23 License No. XI01282

24 Dated: 7-23-22
25

1 *** ERRATA SHEET ***

2 CASE: The Data Company Technologies
3 v. Bright Data Ltd.

4 DATE: July 22, 2022 JOB NO.: 5325

5 WITNESS: Dave Levin

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20 _____
21 Dave Levin

22 Subscribed and sworn to before me
23 this ____ day of _____, 20__.

24 _____
25 Notary Public

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