

FREEWHEEL MEDIA, INC.,)
)
)
Petitioner,)
)
vs.) No. IPR2024-00419
)
ALMONDNET, INC.,)
)
)
Patent Owner.)
)

DEPOSITION OF ERIK DE LA IGLESIA taken at
12424 Wilshire Boulevard, Twelfth Floor, Los
Angeles, California, at 8:44 a.m. Pacific
Time, Monday, February 17, 2025, before
Theresa JoAnn Phillips-Blackwell, CSR 12700.

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I N D E X

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DEPONENT	EXAMINED BY	PAGE
Erik de la Iglesia	Mr. Dike	4
	Mr. Milkey	49

EXHIBITS

DESCRIPTION	PAGE
1001 - United States Patent No. 11,564,015	9
2001 - Declaration Of Erik de la Iglesia In Support Of Patent Owner's Response To The Petition	12
2003 - Document Entitled (Computer Networking: A Top-Down Approach Featuring the Internet) "	20
2004 - Document Entitled "Web Proxy Servers"	16

1 (Erik de la Iglesia, deponent, was sworn, examined and
2 testified as follows:)

3

4 DEPOSITION OFFICER: Hello, everyone. My name
5 is Theresa Phillips-Blackwell. I'm a California
6 certified shorthand reporter, CSR No. 12700.

7 Raise your right hand, please.

8 You do solemnly state that the evidence you
9 shall give in this matter shall be the truth, the whole
10 truth, and nothing but the truth?

11 THE WITNESS: I do.

12

13 EXAMINATION

14

15 BY MR. DIKE:

16 Q. Good morning, Mr. de la Iglesia. Can you
17 please state your name and address for the record.

18 A. Sure. Erik de la Iglesia. My address is 400
19 Mountain Laurel Court in Mountain View, California.

20 Q. Okay. And do you understand that you're here
21 today to answer questions about the declaration that you
22 submitted to support AlmondNet's patent owner response
23 and an inter partes review for U.S. Patent 11,564,015?

24 A. That is correct.

25 Q. Okay. If I refer to U.S. Patent No. 11,564,015

1 as "the '015 patent," would you understand, again, that
2 I'm referring to U.S. Patent No. 11,564,015?

3 A. That's how I refer to it, so yes.

4 Q. The case number for this proceeding or this IPR
5 of the '015 patent is APR 2024-00419. If I refer to
6 "this proceeding," "this case," or "this IPR," will you
7 understand I'm referring to IPR 2024-00419?

8 A. I will understand all your questions to be
9 referring to this declaration.

10 I have, of course, submitted other declarations
11 in other proceedings regarding these patents; so to the
12 extent your -- to the extent your -- to the extent your
13 questions cover material that is general, I will
14 understand all your questions to be referring to my
15 opinions in this declaration for this proceeding.

16 Q. Right. And "this proceeding," again, referring
17 to IPR 2024-00419?

18 A. That is correct.

19 Q. Okay. And have you ever been deposed before?

20 A. Yes, I have.

21 Q. Okay. About how many times have you been
22 deposed?

23 A. I would say mid 30s.

24 Q. And have you ever been deposed for the '015
25 patent?

1 A. Not that I recall.

2 Q. Okay. And about roughly how many times have
3 you been deposed as an expert for AlmondNet?

4 A. So I think the -- I was definitely deposed a --
5 as a two-day deposition for infringement and validity.
6 I don't know whether that's one deposition or two, but
7 it was a two-day affair.

8 I'm trying to remember if I've been deposed on
9 anything since that. I -- I would have to check.

10 Q. Okay.

11 A. It doesn't really -- I would have to check.
12 I'm sorry.

13 Q. Sure. In the two-day deposition that you were
14 referring to, which case or proceeding was that?

15 A. That was the case against Microsoft. It should
16 be on my CV. If you look at AlmondNet v. -- v.
17 Microsoft, you'll be able to see the case number there.

18 Q. And do you know or do you recall roughly when
19 that deposition occurred?

20 A. I would like to say it was at some point toward
21 the middle of last year, I -- I think; but, again, if it
22 is relevant, we can perhaps take that up during a break
23 and try to track it down. That's my recollection.
24 Because I was doing discovery -- I was doing discovery
25 through most of the spring on that case. And then there

1 were reports, and then there were depositions. So I
2 think it would have happened at some point during the
3 middle of the year.

4 Q. And do you understand that you're under oath
5 today for the deposition?

6 A. Yes, I do.

7 Q. Okay. And I guess, do you understand if your
8 attorney objects to the form of a question, you're still
9 required to answer the question?

10 A. Unless he instructs me not to answer a
11 question, I understand it's my obligation to answer the
12 question.

13 Q. Okay. And do you understand that while I'm
14 asking questions today you're not allowed to communicate
15 with your counsel regarding your testimony?

16 A. That is my understanding, and that is my -- my
17 practice.

18 Q. Okay. And do you also understand that if we
19 take any breaks today, again, you're not allowed to
20 communicate with your counsel during those breaks?

21 A. That is my understanding.

22 Q. Okay. Did you do anything to prepare for
23 today's deposition?

24 A. Yes.

25 Q. Okay. And what did you do to prepare?

1 A. I met with counsel.

2 Q. Okay. Roughly, how many times did you meet?

3 A. It was one time, so yesterday. I'm going to
4 ballpark it maybe two -- two hours and change.

5 Q. Sure. And did you speak with anyone else
6 outside of counsel for AlmondNet to prepare for today's
7 deposition?

8 A. No, I did not.

9 Q. Okay. And did you review any materials to
10 prepare for today's deposition?

11 A. Well, I -- I looked at my declaration.

12 Q. Okay. Beyond your declaration, did you review
13 any additional materials?

14 A. I think it was mostly my declaration.

15 Q. Okay. So when you say mostly your declaration,
16 were there any other documents that you reviewed beyond
17 your declaration?

18 A. Well, there are -- there are documents that are
19 cited in my declaration. I don't recall pulling those
20 up; but, I mean, once -- once I read it here, of course
21 I remember the material.

22 Q. Okay. I'm handing you a copy of Exhibit 1001
23 in this proceeding.

24 Do you recognize this document?

25 ///

1 (Whereupon the document referred to is marked
2 by the reporter as Exhibit 1001 for identification.)

3 A. I do.

4 I'll just note it's already marked Exhibit 1.
5 There is no yellow sticker on it, so -- I just want to
6 make sure it's marked correctly for the --

7 Q. Correct.

8 A. Okay. Thank you.

9 Yeah. This is the '015 patent. It looks like
10 it has -- I won't line check it, but it looks like it
11 has the same figures. And I remember Column 28 being
12 the last one, so that looks like -- it looks like the
13 right one.

14 Q. Okay. Perfect.

15 Let's talk a little bit about your -- your past
16 work experience. Can you describe your past experience
17 designing network-based content delivery systems.

18 A. Sure. So there -- there were aspects of my
19 work at Intel that related to that field, but I would
20 say that my primary work started at -- that related to
21 network-based content delivery and also NATing solutions
22 began at Webstacks. This was at approximately two --
23 end of '99 or 2000 I think was when I started at
24 Webstacks. And Webstacks built a one million concurrent
25 connection NAT box for content that -- the content

1 delivery super houses. So that would have been your
2 Exodus and your other companies that existed prior to
3 the dot-com implosion.

4 So we built a hardware implementation of TCP/IP
5 protocol and HTTP parsing -- so all hardware-based --
6 that was able to do a noid and concurrent connections.
7 That was the product that was bought by Extreme
8 Networks. And our competition at the time was in the
9 fifty to seventy thousand concurrent connection. That
10 would have been your F5s and a couple of others. So we
11 could stream and fill gigabit line rate, which nobody
12 else could do in the industry at the time. So that
13 gigabit up and gigabit down full -- full duplex -- that
14 would have been the first such case. But I'll let you
15 probe into which portions you would like to have more
16 information.

17 Q. Sure. And when you discussed the
18 implementation of TCP/IP protocol and HTTP hardware, by
19 "HTTP" you're referring to Hypertext Transfer Protocol?

20 A. Hypertext, I think, Transport Proto --
21 hypertext -- yes. It is the -- it is the transport
22 protocol by which hypertext requests and responses are
23 sent in a client service environment.

24 Q. Okay. And during your time at Webstacks, did
25 you use the particular version of HTTP during that

1 implementation?

2 A. That is a great question. During that time,
3 industry had just started switching, had -- had -- was
4 in the process of adopting. And the industry was in the
5 process of reacting to the option of HTTP/1.1, so --
6 whereas previous boxes could be -- and implementations
7 could be relatively simple with HTTP/1.0, where, you
8 know, connections are torn down -- they're expected to
9 be torn down immediately by the originating party.

10 HTTP/1.1 introduced persistent connections and
11 also introduced pipelining, and those were speci --
12 those were incredibly difficult for software
13 implementations to do at the time because of the
14 processing constraints. So that's one of the reasons we
15 had to move to a hardware-based implementation.

16 Most of the browsers at the time were -- had
17 started using HTTP/1.1, and they were also -- they also
18 had the approach of multi -- multi-tab concurrency, just
19 to say that the threads backing the browsers were shared
20 among all of the open tab elements, so -- whereas in
21 previous browsers, if your element -- if your tab was
22 out of focus, it might actually shut down all
23 communication on that tab and just not -- not process
24 the response threads.

25 And so starting with the browsers in HTTP/1.1,

1 you started getting -- like, even if a tab was not your
2 focus tab, there might be something coming back -- some
3 content come back, or a JavaScript could be tickling a
4 timer for that thread.

5 Q. Okay. Thank you.

6 I'm handing you a copy of Exhibit 2001 in this
7 case. Do you recognize this document?

8 (Whereupon the document referred to is marked
9 by the reporter as Exhibit 2001 for identification.)

10 A. I do. And we can use this one because I have
11 an unmarked copy here on the desk.

12 Q. Sure.

13 A. I recognize this as my declaration that I
14 provided that contains my opinions on this matter with
15 respect to the '015 patent signed December 11th, 2024,
16 responsive to Dr. Lett's declaration Items D and E.

17 Q. And do you see at the bottom of the document
18 that it's marked "Intent IQ, LLC, Exhibit 2001"?

19 A. I do.

20 Q. Okay. Perfect.

21 How would you describe the process of preparing
22 your declaration?

23 A. Well, a declaration is -- is essentially a -- a
24 formalization of opinions that somebody has -- somebody
25 has asked me to provide opinions on a specific subject

1 matter. So the way that a declaration like this arises
2 is counsel may ask me to look at specific portions of
3 another expert's declaration and offer my opinions with
4 respect to either -- sometimes the entirety of a -- of a
5 specific ground or a specific subset of those opinions
6 or specific aspects.

7 So in this case I was asked specifically to
8 consider the use of Dr. Lett's proposed IP port
9 combination as an identifier within the grounds D and E
10 in his -- in his declaration.

11 Q. Okay. And who did most of the writing for your
12 declaration?

13 A. Well, a lot of the writing that came in this
14 declaration was -- so the subject matter I think I have
15 offered a declaration on before on another patent. I'm
16 trying to remember now if it was -- to come back to your
17 earlier question, I think I've offered a declaration
18 earlier on -- on -- on this -- the same subject matter,
19 the use of IP Import. And so a lot of the technical
20 description here is -- is mine. You know, I write it.
21 And it comes from -- it's already analysis that I was
22 familiar with.

23 The specifics of Dr. Lett's opinion -- that's a
24 joint effort with counsel because I want to make sure
25 that I'm accurately capturing Dr. Lett's opinion so that

1 I can address those aspects directly.

2 Q. Okay. And in the previous declaration that you
3 referred to that dealt with IP Import, did that deal
4 with a case where FreeWheel Media, Incorporated, was the
5 petitioner?

6 A. So that -- that, I do not know. I do believe
7 that the patent at stake in that case was -- was a
8 different patent, but I believe it had the same
9 specification. So it would have been a family member in
10 that. Who was doing the petition, that I don't recall
11 off the top of my head.

12 Q. Sure. Did you review the entirety of your
13 declaration before signing it?

14 A. Oh, absolutely.

15 Q. Okay. And when preparing for today's
16 declaration, you noted that you did review your
17 declaration?

18 A. Yes.

19 Q. Can we turn to Paragraph 5 of your declaration.

20 A. I'm there.

21 Q. Paragraph 5 lists the various materials that
22 you considered when preparing your declaration?

23 A. That is correct.

24 Q. Okay. And the materials you considered include
25 each document cited in your declaration; correct?

1 A. Yes. The materials cited in my declaration,
2 which includes, of course, Dr. Lett's original
3 declaration. So the materials that he is discussing and
4 those materials that I have cited.

5 Q. Sure. And the materials that you cited -- did
6 you find those documents yourself?

7 A. Do you have any specific citations in -- in
8 mind? It's not -- it's not a long declaration. I'm
9 sure we can go --

10 Q. Sure. So for example?

11 A. The one I can tell you that's definitely mine
12 would be the Luotonen reference. That's my go-to book
13 for sort of the state of HTTP and proxy servers at the
14 time.

15 Q. Sure.

16 A. It was -- it was a book that I used while I was
17 at Webstacks.

18 Q. Do you recall any other documents that you
19 cited in your declaration that you provided yourself?

20 A. I would have to check through them.

21 Q. Sure. So, for example, in Paragraph 33 of your
22 declaration, Exhibit 2003 refers to the Worldwide Web
23 HTTP (excerpted from Computer Networking: A Top-Down
24 Approach).

25 Did you provide that document yourself?

1 MR. MILKEY: Object to form.

2 THE WITNESS: I -- sitting here today, I don't
3 recall who came up with that document. I know that it
4 was a document that I reviewed, and I believe it was
5 also in the -- in the other declaration that I made on
6 the subject matter, but I -- I reviewed that document
7 and believe the citations that I'm showing here are
8 consistent with my opinions.

9 BY MR. DIKE:

10 Q. Okay. And how about Exhibit 2004, the Luotonen
11 reference? That's the reference you referred to
12 previously; correct?

13 (Whereupon the document referred to is marked
14 by the reporter as Exhibit 2004 for identification.)

15 A. Yes. Luotonen. So I'm trying to remember -- I
16 think it's Ari Luotonen. He was -- I think he was one
17 of the original architects -- it could have been at
18 Netscape. His book on proxy servers is considered sort
19 of a -- a seminal work in that early 2000 time frame for
20 how to -- how to cache and process HTTP.

21 Q. Okay.

22 A. It's a very famous book; so I have that on my
23 shelf, so to speak.

24 Q. Let's go ahead and turn to Paragraph 27 of your
25 declaration.

1 A. Okay. I will -- I will wait for your question
2 before I --

3 Q. Sure. Can you --

4 A. -- anything.

5 Q. -- take some time to review the paragraph.

6 A. Sure. Okay. I have reviewed it.

7 Q. And Paragraph 27 of your declaration recites
8 the level of skill in the art proposed by Mr. Lett;
9 correct?

10 A. That is correct. That's what we -- I guess
11 what -- what -- what he called a POSA, I usually call a
12 POSITA; but it's the same person of ordinary skill in
13 the art.

14 Q. Perfect. And Mr. Lett alleges that a person of
15 ordinary skill in the art as of the priority date of the
16 '015 patent would have had two years of experience with
17 the design and/or implementation of network-based
18 content delivery systems; correct?

19 A. That is his opinion. I don't -- I don't think
20 it's an allegation but -- that is his opinion, and I --
21 for my purposes, I -- I adopt it.

22 Q. Sure. And he also opines that the person of
23 ordinary skill in the art would have had a skill that
24 included knowledge of HTTP; correct?

25 A. Certainly. He says "Knowledge of the Hypertext

1 Transfer Protocol."

2 Q. And do you have any reason to believe that a
3 person of ordinary skill in the art wouldn't have
4 knowledge of HTTP?

5 A. Which person of ordinary skill in the art are
6 we talking about?

7 Q. A person of ordinary skill in the art as of the
8 priority date of the '015 patent.

9 MR. MILKEY: Object to form.

10 THE WITNESS: So I think -- I think it's
11 reasonable that a -- to say -- and I adopt Dr. Lett's
12 position -- that a person of ordinary skill in the art's
13 skill set would have included knowledge of the Hypertext
14 Transfer Protocol.

15 I -- I think we -- we can -- there are many
16 aspects of that protocol. Not -- not many people have
17 gone in as -- as deep into that protocol as, say, people
18 who designed, you know, hardware engines to actually
19 process it at line rate. The average programmer may
20 know that to -- you issue a GET or a post and you get
21 back either a 200 or non-200. They would have basic
22 knowledge of a Hypertext Transfer Protocol.

23 Somebody who was deep in proxy or hardware
24 development on the Internet would know all of the
25 different stateful transitions that occur in hypertext,

1 what the various different result codes mean, the
2 difference between a 200 and a -- and a -- and a 204,
3 the different -- how redirects work, the 302, 305, and
4 307. They understand the difference between 400 and 500
5 responses and would also understand all of the different
6 parsing differences that were -- existed in terms of
7 different browsers.

8 There are different ways to conform to the
9 Hypertext Transfer Protocol that -- at the time,
10 especially when not all browsers were always friendly
11 with all content servers.

12 BY MR. DIKE:

13 Q. And let's now turn to Paragraph 32 of your
14 declaration.

15 A. Okay. That's a long one. Maybe if we do your
16 question first, I'll figure out whether I have to read
17 it.

18 Q. Sure. And maybe you can just take a quick look
19 at the second full sentence, review that, and then I'll
20 ask my question.

21 A. Okay. Okay. I have reread the second
22 question -- second sentence.

23 Q. And in Paragraph 32 of your declaration, you
24 state that for network address translation, each
25 individual TCP connection is assigned an ephemeral port

1 number; is that right?

2 A. That is correct.

3 Q. Okay. And then further down in that paragraph
4 you state, in the next sentence, "A given port number is
5 only used for data transfer during that specific
6 connection"; correct?

7 A. And must be quickly recycled to support other
8 users after use. That's correct.

9 Q. Perfect. I'm handing you a copy of
10 Exhibit 2003 in this proceeding.

11 Do you recognize this document?

12 (Whereupon the document referred to is marked
13 by the reporter as Exhibit 2003 for identification.)

14 A. Well, this looks like -- one minute.

15 This looks like one of documents I reviewed and
16 cited here in Paragraph 33.

17 Q. Okay. And do you see at the bottom of the
18 document what's been marked as "Intent IQ, LLC,
19 Exhibit 2003"?

20 A. I do.

21 Q. And can you turn to Page 2 of Exhibit 2003.

22 Do you see the last paragraph at the bottom of
23 Page 2 that begins with "HTTP"?

24 A. Yes.

25 Q. Okay. This paragraph states that "HTTP defines

1 how Web clients, i.e., browsers, request Web pages from
2 servers, i.e., Web servers and how servers transfer Web
3 pages to clients"; correct?

4 A. That's -- you're reading that correctly.

5 Q. Okay. And this same paragraph continues on to
6 Page 3 of Exhibit 2003 and states that "Through 1997
7 essentially all browsers and Web servers implemented
8 version HTTP/1.0, which is defined from RFC 1945";
9 correct?

10 A. I think you're reading that correctly.

11 Q. Okay. And then the next sentence states,
12 "Beginning in 1998, Web servers and browsers began to
13 implement version HTTP/1.1, which is defined in RFC
14 2068"; correct?

15 A. That is correct.

16 Q. Okay. Do you have any reason to dispute that
17 the statements in this paragraph of Exhibit 2003 are
18 correct?

19 A. Well, I don't have the RFC numbers in front of
20 me; but those -- those do look correct.

21 And just in -- in reference to your question, I
22 have -- I have no doubt that this is -- this is
23 reasonable text for Web clients. The subject here is
24 "Web Clients." The subject in my Paragraph 32 here is
25 "Wi-Fi Access Points."

1 Q. Sure. And do you have any reason to dispute
2 that HTTP defines how Web clients, i.e., browsers,
3 request Web pages from servers, i.e., Web servers, and
4 how servers transfer Web pages to clients?

5 A. It is -- it is a -- it is a correct statement.
6 And we'll just say that the HTTP involves the request
7 and the response at the GET POST to response level, and
8 TCP is the connection protocol under that. This
9 document is specifically describing HTTP. It is -- I
10 don't see a discussion here yet -- hopefully, we're
11 getting there -- in this first paragraph of the
12 underlying TCP. That looks like it's being discussed
13 later in the document.

14 Q. Sure. And do you have any reason to dispute
15 that beginning in 1998 essentially all Web browsers and
16 Web servers began to implement HTTP/1.1?

17 A. That -- that is -- not only do I not have a
18 dispute; that's my personal recollection of the -- what
19 was going on at the time.

20 Q. Okay. So one of ordinary skill in the art at
21 the time of invention would have understood that, again,
22 beginning in 1998 Web servers and browsers began to
23 implement version HTTP/1.1?

24 A. I think a person of ordinary skill in the art
25 at the priority date of the patent that we're talking

1 about -- so in the 2006 time frame -- would have been
2 aware that Web servers had been using HTTP/1.1 for some
3 time. This is -- HTTP/1.1 is a transition that happened
4 in the 2000 time frame when we talk about a POSITA in
5 the time of the -- at the time of the invention. Now
6 we're thinking about the priority date of the patent.

7 Q. Right. But, again, my question was, would a
8 person at the time of the invention understood that
9 essentially all browsers and Web servers implemented
10 HTTP/1.1 beginning in 1998?

11 MR. MILKEY: Object to form.

12 THE WITNESS: I would say a person of ordinary
13 skill in the art at the time of the invention would
14 have -- would have known that HTTP/1.1 would have been
15 the predominant HTTP protocol version in use at that
16 time and would have been the predominant version of the
17 protocol in use for several years prior to the priority
18 date.

19 BY MR. DIKE:

20 Q. Okay. Let's turn to Section 2.2.2 of
21 Exhibit 2003. That's toward the bottom of Page 3.

22 Do you see --

23 A. Okay. That's a bit long, so I'll let you ask
24 your question first.

25 Q. Sure. And Section 2.2.2 of Exhibit 2003 is

1 titled "Nonpersistent and Persistent Connections";
2 correct?

3 A. That is correct.

4 Q. And the first paragraph in this section states,
5 "HTTP can use both nonpersistent connections and
6 persistent connections"; correct?

7 A. HTTP client browsers --

8 Q. Sorry. My question was, does the first
9 sentence after Section 2.2.2 state, "HTTP can use both
10 nonpersistent connections and persistent connections"?

11 Correct?

12 A. The first sentence in this discussion about Web
13 client browsers says, "HTTP can use both nonpersistent
14 connections and persistent connections."

15 Q. And it also states in that same paragraph,
16 "Nonpersistent connection is the default mode for
17 HTTP/1.0"; correct?

18 A. Yes. For Web clients, that is to say,
19 non-WAPs, nonpersistent connections is the -- is the
20 default mode for HTTP/1.0. And, conversely, persistent
21 connections in Web clients are the default mode for
22 HTTP/1.1.

23 Q. You're not reading directly from Exhibit 2003;
24 correct?

25 Exhibit 2003 simply states, "Nonpersistent

1 connections is the default mode for HTTP/1.0"; correct?

2 A. I'm reading from the document which is a
3 document about Web clients. To suggest otherwise is to
4 misread the document.

5 Q. Right. But my question to you is what the
6 section of the specific paragraph after 2.2.2 states.

7 It states, "HTTP can be used for both
8 nonpersistent connections and persistent connections";
9 correct?

10 MR. MILKEY: Object to form.

11 THE WITNESS: That is what the document says in
12 the context of Web clients.

13 BY MR. DIKE:

14 Q. Okay. So do you have any reason to believe
15 that the statements in this first paragraph under
16 Section 2.2.2 are incorrect?

17 MR. MILKEY: Object to form.

18 THE WITNESS: I have every reason, including
19 personal knowledge, to understand the difference between
20 Web clients and wireless access points or proxies or
21 other kinds of intermedia technologies. They are very
22 different.

23 BY MR. DIKE:

24 Q. And would a person at the time of the
25 invention -- would have they understood that

1 nonpersistent connection is the default mode for
2 HTTP/1.0?

3 A. A person of ordinary skill at the time of the
4 connection would have understood that nonpersistent
5 connections would have been the default mode for Web
6 clients in HTTP/1.0.

7 Q. And would a person of ordinary skill in the art
8 at the time of invention have understood that persistent
9 connections is the default mode for HTTP/1.1?

10 A. Again, they would have understood -- a person
11 of ordinary skill in the art at the time of the
12 connection would have understood that a Web client
13 would, as its default mode, attempt an HTTP/1.1
14 persistent connection.

15 MR. DIKE: Okay. I think this is a good time
16 for a first break. We can go off record.

17 (A recess is taken.)

18 BY MR. DIKE:

19 Q. Can you turn to Paragraph 5 of your
20 declaration.

21 A. Okay. I'm at Paragraph 5.

22 Q. Right. So here you indicate that the scope of
23 this declaration is limited to Dr. Lett's analysis for
24 his invalidity theory presented under Ground D of his
25 declaration; is that correct?

1 A. That is correct. And as I -- as I think I
2 indicated earlier, Dr. Lett sort of combined his D and
3 E -- his Section D analysis of Grounds D and E is
4 combined. And so I'm really addressing -- I'm really
5 addressing the -- the use of IP Import in BAIG, which is
6 Dr. Lett's D and E.

7 Q. Right. But here you state specifically that
8 the scope of your analysis is limited to Ground D of his
9 declaration?

10 A. That's what it says. I used a joint analysis
11 for his joint analysis.

12 Q. Okay. I'm handing you what is marked as
13 Exhibit 2004 in this proceeding.

14 Do you recognize this document?

15 A. I do.

16 I'm glad I got Mr. Luotonen's first name right
17 and his title.

18 Q. And what is this document?

19 A. This is one of the formative works on Web proxy
20 servers. There have been several different iterations
21 of this book. I'm trying to remember when the first one
22 came out. I think that -- well, this particular version
23 is the book that I used when I was at Webstacks. So it
24 would have been one that was out in either '98 or '99.

25 Q. Sure. Can you turn to Page 3 of the document.

1 A. I can. And just to be clear, let's line up
2 also --

3 Q. Correct.

4 A. -- the page numbers of the -- of the -- the
5 documents' page numbers.

6 Q. I'll be referring to the marked page numbers at
7 the bottom of the page.

8 A. Gotcha. So I'm looking at marked Page 43,
9 which is book Page 47.

10 Q. Do you see at the bottom it specifically states
11 in the last paragraph, "Due to TCP's three-way
12 handshake, there's a fair amount of latency in
13 establishing each new connection"?

14 Do you see that?

15 A. Yes.

16 Q. And then the next sentence states, "Therefore,
17 it would be beneficial to reuse the TCP connections to
18 make multiple HTTP requests over a single connection."

19 Do you see that second sentence?

20 A. I see where you're reading that.

21 Q. Yes. Did I read that correctly?

22 A. You did. You did not -- you did not discuss
23 the -- the difference between "beneficial" and
24 "possible" under the scenarios relevant to this patent.

25 Q. Well, do you have any reason to believe that

1 due to TCP three-way handshakes, there is a fair amount
2 of latency in establishing each new TCP connection?

3 A. In a -- in a WAP scenario there is significant
4 amounts of latency in a number of different aspects.
5 Channel reacquisition. This -- this statement has
6 additional context in the -- in the specific --

7 Q. But my question --

8 A. -- combination described by Dr. Lett.

9 Q. My question is specifically about statements in
10 this document.

11 Do you have any reason to believe that TCP
12 three-way handshakes caused a fair amount of latency
13 when establishing a new TCP connection?

14 A. That is a correct statement. That is not the
15 only thing that causes delay.

16 Q. Sure. Do you have any reason to believe that
17 it would be incorrect to say that it would be beneficial
18 to reuse the TCP connection to make multiple HTTP
19 requests over a single connection?

20 MR. MILKEY: Object to form.

21 THE WITNESS: I would say in the context of a
22 Web client talking directly to a Web server, that is a
23 generally correct statement. And whether it applies in
24 other situations is situational.

25 ///

1 BY MR. DIKE:

2 Q. Would a person of ordinary skill in the art
3 understand that a TCP three-way handshake would cause a
4 fair amount of latency in establishing a new TCP
5 connection?

6 MR. MILKEY: Object to form.

7 THE WITNESS: A person of ordinary skill in the
8 art would -- would consider the term "fair amount" in
9 the context of the specific architecture being used and
10 would not make this is -- this is a general statement.
11 It is generally correct. And it's general -- it would
12 be generally known by a person of ordinary skill in the
13 art who would apply specific analysis to a specific
14 system.

15 BY MR. DIKE:

16 Q. Sure. And would a person of ordinary skill in
17 the art at the time of the invention have understood
18 that it would be beneficial to reuse a TCP connection to
19 make multiple HTTP requests over a single TCP
20 connection?

21 A. From a client perspective, that would be --
22 that would be generally understood --

23 Q. Okay.

24 A. -- if it is possible given the deployment
25 scenario.

1 Q. The next paragraph on Page 4 -- well, this
2 paragraph continues on. It's the same paragraph at the
3 bottom of Page 3 of Exhibit 2004.

4 It states, "For this reason, an extension to
5 the HTTP/1.0 protocol was made, the so-called keep-alive
6 feature."

7 Is that correct?

8 A. That -- that is -- that was in 1.0, if memory
9 serves. Yes. That was an extension to 1.0.

10 Q. And then that next paragraph on Page 4 of
11 Exhibit 2004 states, "The keep-alive persistent
12 connection feature allows the same connection to remain
13 open for multiple requests"; correct?

14 A. If it is implemented by the server directly, it
15 will allow the connection to keep open. Most servers
16 did not respect it.

17 Q. Okay. But specifically looking at
18 Exhibit 2004, it states, "The keep-alive persistent
19 connection feature allows the same connection to remain
20 open for multiple requests"; correct?

21 A. If it's supported by the server, then the --
22 that document indicates that this -- this feature allows
23 the behavior described.

24 Q. Right. Again -- but if you could answer the
25 question that I'm asking.

1 The first paragraph in Exhibit 2004 on Page 4
2 states, "The keep-alive persistent connection feature
3 allows the same connection to remain open for multiple
4 requests"; correct?

5 MR. MILKEY: Object to form.

6 THE WITNESS: If -- if a server allows it and
7 is configured to support it, then the keep-alive feature
8 allows the same connection to remain open for multiple
9 requests.

10 BY MR. DIKE:

11 Q. Okay. So would a person of ordinary skill --
12 strike that.

13 So isn't it the case that a person of ordinary
14 skill in the art at the time of the invention would have
15 understood that the keep-alive persistent connection
16 feature allows the same connection to remain open for
17 multiple requests?

18 A. I think, to the contrary, a person of ordinary
19 skill in the art at the time of the invention would
20 know, for example, that the predominant server,
21 Microsoft Internet server, did not respect keep alive
22 and actually reset pounded connections to not allow them
23 to stay open.

24 Q. So it's your opinion that a person of ordinary
25 skill in the art at the time of invention wouldn't have

1 understood that the keep-alive feature allowed a same
2 connection to remain open for multiple requests?

3 A. A person of ordinary skill in the art at the
4 time of the -- at the time of the invention would
5 understand the intent and operation of the keep-alive
6 feature, if supported, and would also know whether it
7 was supported by the predominant server architectures at
8 the time.

9 Q. That -- again, if you could respond to the
10 question that I'm asking, I would greatly appreciate it.

11 The question that I asked was, again, a person
12 of ordinary skill in the art at the time of the
13 invention -- would they have understood that the
14 keep-alive feature allowed the same connection to remain
15 open for multiple requests?

16 MR. MILKEY: Object to form. Asked and
17 answered.

18 THE WITNESS: A person of ordinary skill in the
19 art at the time of the invention would have known that
20 the keep-alive feature would not have had an impact on
21 the majority of the servers being deployed.

22 BY MR. DIKE:

23 Q. Are you familiar with TCP slow start?

24 A. I am familiar with TCP slow start, but there --

25 Q. Okay. So the question that I have is, was slow

1 start a feature for TCP?

2 MR. MILKEY: I'll just note for the record that
3 Mr. de la Iglesia was not permitted to finish his
4 previous answer.

5 THE WITNESS: Could you restate the previous
6 question.

7 BY MR. DIKE:

8 Q. Yes. If we looked at Exhibit 2004 at the
9 second paragraph, it states, "TCP is also a feature
10 called 'slow start.'"

11 A. The protocol has a feature named "slow start."
12 That is correct.

13 Q. Sure. And the next sentence says, "Basically,
14 it is a flow control mechanism that slows down the speed
15 at which data is sent until the protocol determines how
16 fast the network link between the sender and the
17 receiver is"; correct?

18 A. I think you're reading that correctly.

19 Q. Okay. Do you have any reason to believe that
20 the statements in this paragraph are incorrect?

21 A. The descriptions of the features are correct,
22 and the descriptions of whether those features were
23 possible to be used are not present.

24 Q. Okay. And due to TCP slow start, a TCP
25 connection takes a fair amount of time to reach full

1 throughput; correct?

2 A. It can under such implementation -- some
3 implementations. The -- the goal of the -- the goal as
4 stated in the RF -- in the RF -- in the RFC is to reach
5 the maximal level of transition as quickly as possible,
6 just not assume it from the beginning.

7 Q. Right. But, again, the question is, due to TCP
8 slow start, a TCP connection takes a fair amount of time
9 to reach full throughput; correct?

10 A. It can. If the channel is particularly lossy
11 or slow, it will take a long time to converge towards
12 the maximum throughput rate. That's the two round-trips
13 for the ACK flank.

14 Q. And a person of ordinary skill in the art at
15 the time of the invention would have understood that due
16 to slow start, TCP connections take a fair amount of
17 time to reach full throughput; correct?

18 A. I think a person of ordinary skill in the art
19 at the time of the connection would -- at the time of
20 the patent would have -- would be unlikely to have to
21 have dealt with slow start. It was only used, I think,
22 on FTP transfers.

23 Q. But, again, would a person of ordinary skill in
24 the art at the time of the invention understood that due
25 to slow start, a TCP connection takes a fair amount of

1 time to reach full throughput?

2 MR. MILKEY: Object to form.

3 THE WITNESS: I think, again, a person of
4 ordinary skill in the art would have understood the
5 functionality of slow start and understand that
6 depending on the specific situation and implementation,
7 it could take a long time to reach the maximal
8 attainable bandwidth.

9 BY MR. DIKE:

10 Q. Further down in Exhibit 2004, the next header
11 is titled "Persistent Connections in HTTP/1.0."

12 Do you see that?

13 A. I do.

14 Q. Okay. And this first paragraph states that
15 "The keep-alive feature in HTTP/1.0 is invoked by the
16 client first sending the following header in the request
17 the connection keep alive"; is that correct?

18 A. That's correct. And specifically to the Web
19 client we're talking about.

20 Q. And this section says that "After sending that
21 keep-alive request, the server will not close the
22 connection, which is the default behavior, upon
23 completion of data transfer; but instead it leaves the
24 connection open and waits for the next request to come
25 over that same connection"; correct?

1 A. That -- that is the -- that is the anticipated
2 behavior of the feature. That is not what happens in
3 real life.

4 MR. DIKE: Can we go off the record for a
5 second.

6 (A recess is taken.)

7 BY MR. DIKE:

8 Q. So do you see the next header in Exhibit 2004,
9 Page 4, titled "Persistent Connection in HTTP/1.1"?

10 A. I -- I do. And just for the record, we are on
11 Page 48 of the document.

12 Q. Yes. Marked Page 4.

13 A. Sorry. Marked Page 4, document -- document
14 Page 48.

15 Q. Correct. So the first paragraph under the
16 header "Persistent Connections in Http 1.1" states, "In
17 HTTP/1.1, the persistent connection feature changed so
18 that it became the default."

19 Do you see that?

20 A. Yes. For the -- for the -- for the Web
21 clients, the browsers, that is correct.

22 Q. And the client and server must now explicitly
23 specify they do not want persistent connections by
24 sending the header "Connection Closed"; correct?

25 A. If they are using HTTP to control the

1 connections, which they were not.

2 Q. Do you have any reason to believe that the
3 statements in the bottom of paragraph -- on page marked
4 Page 4 of Exhibit 2004 are incorrect?

5 A. Those statements are correct. That is the way
6 that the features are designed to work in HTTP. And
7 they never get a chance to work that way due to the way
8 that the TCP stacks are implemented on the Web servers.

9 Q. Can you turn to Page 9 of Exhibit 2004.

10 A. So I'm on page -- marked Page 9, which is the
11 documents -- documents Page 53. I'm there.

12 Q. Okay. So looking at marked Page 9 of
13 Exhibit 2004, do you see the header "HTTP/1.1 Request
14 Pipelining"?

15 A. Oh, I do.

16 Q. Okay. And do you see the first sentence
17 states, "To further reduce the latency, request
18 pipelining was added to the HTTP/1.1 protocol to be used
19 with persistent connections"?

20 A. It was added to the HTTP/1.1 specification. It
21 was not added to browsers.

22 Q. Okay. Do you have any reason to believe that
23 the statement at the first paragraph under HTTP/1.1,
24 "Request Pipelining," is incorrect?

25 A. It is a -- it is a correct description of the

1 feature. And I had personal responsibility for -- for
2 implementing compliance with this feature at the
3 Webstacks product as to whether or not pipelining needed
4 to be supported. And we authoritatively determined that
5 none of the browsers support this because this is --
6 this would be basically sending out multiple GETs in a
7 stream, and that is not the way that sockets work on
8 either the Windows or the Linux platforms. You have to
9 basic -- in order to support this, you have -- you can't
10 use an OS socket. You have to send out multiple GET
11 strings within the same packet and then try to -- and
12 then try to demultiplex them in flight. That is not the
13 way that any of the browsers worked.

14 Q. And then the next sentence in the same
15 paragraph on -- marked Page 9 of Exhibit 2004 states,
16 "Pipelining means that the next request is sent over the
17 persistent connection before the previous response has
18 been entirely or at all received"; correct?

19 A. That is a correct description of the protocol's
20 intended capability. That was never -- that was not
21 implemented in browsers.

22 Q. I'm handing you what's been marked as
23 Exhibit 1001 in this case.

24 Do you recognize this document?

25 A. Yes. And you already gave me one.

1 Q. Okay. Perfect.

2 Could you please turn to Column 8, Lines 38 to
3 51.

4 A. Column 8. I'm sorry. Column 8 and what lines?

5 Q. Yes. Line -- starting at Line 38 to 51.

6 Can you review that section.

7 A. So the -- this is a general description of the
8 figures. And there is a lot to review in the figures.
9 I don't want to abuse your time; so if you just ask me
10 the question, I'll figure out what I can -- what I have
11 to go back for.

12 Q. Sure. This section of the '015 patent states
13 that Figures 1 through 14 of the '015 patent illustrate
14 a system for targeting television advertising based on
15 online behavior; correct?

16 A. I think all the figures relate to that. That
17 is correct.

18 Q. Can we turn to Claim 1 of the '015 patent.

19 A. Sure. Okay. I'm on Claim 1, spanning
20 Columns 24 and 25.

21 Q. Okay. Perfect.

22 Let's go to Section 1A.

23 A. Okay. I'm at 1A.

24 Q. Section 1A recites, "The computer system
25 creating an electronic database containing a multitude

1 of associations, each indicating an association between
2 device identifiers of two or more Internet accessing
3 electronic devices of a multitude of Internet accessing
4 electronic devices"; correct?

5 A. I -- I think you've read that correctly.

6 Q. Okay. Can you now turn to Paragraph 31 of your
7 declaration.

8 A. So I have 22 pages in my declaration.

9 Q. Sure. I'm specifically referring to
10 Paragraph 31.

11 A. I'm sorry. Paragraph 31.

12 Okay. I'm at Paragraph 31.

13 Q. Okay. Can you please review Paragraph 31, and
14 I'll ask my question.

15 A. Okay.

16 Q. In Paragraph 31 of your declaration, you
17 reference a device identifier of the sort identified in
18 the '015 patent.

19 Is this paragraph in your declaration referring
20 to the device identifiers recited in Claim 1 of the '015
21 patent?

22 A. It's -- it's referring to the device
23 identifiers that can be used to practice Claim 1 of the
24 '015 patent in the context of Dr. Lett's modified BAIG
25 system.

1 Q. Okay. Can you turn to Figure 1 of the '015
2 patent.

3 A. Okay. I am at Figure 1.

4 Q. Okay. The computer system shown in Figure 1 of
5 the '015 patent includes a C-A-S, or CAS, 40; a computer
6 34; and a STB, or set-top box, 36; correct?

7 A. I see those numerated items.

8 Q. Okay. Can you please take a look through
9 Figures 2 through 14 and let me know if any of the
10 illustrated systems do not include a CAS 40, a computer
11 34, or a set-top box 36.

12 A. So we're looking for 34, 36, and 40?

13 Q. Correct.

14 A. Okay. So I can -- I can confirm that all of
15 the figures include the elements 34, 36, and 40, with
16 some differences of connectivity.

17 Q. Sure. And now let's turn to Figure 7 of the
18 '015 patent.

19 A. Okay. I am at Figure 7.

20 Q. In the computer system shown in Figure 7,
21 STB 36 is an example of the Internet access -- Internet
22 accessing electronic device recited in Claim 1; correct?

23 MR. MILKEY: Object to form.

24 THE WITNESS: So Claim 1 recites the elements
25 in Claim 1. The figures are supportive to the

1 specification. I don't generally -- I don't generally
2 create a -- you know, a 100 percent mapping to a figure
3 and a claim unless -- you know, unless that's called
4 out. I can say that the -- the set-top box of Figure 7
5 is -- you know, can access the Internet via Link 35 in
6 Figure 7.

7 BY MR. DIKE:

8 Q. Do you mean Link 32? Oh, sorry. Link 35.

9 But Link 35 is connecting the set-top box to
10 Modem 32?

11 A. That is correct. So I don't -- I'm -- we -- we
12 can discuss Figure 7, or we can discuss Claim 1, but
13 I -- I don't -- I'm -- I'm -- I'm not discussing them
14 as -- as -- as equal or -- or equivalent.

15 Q. Sure.

16 A. They are -- the figures are informative --

17 Q. Sure.

18 A. -- and exemplary.

19 Q. So looking at example Figure 7, the Set-Top
20 Box 36 is connected to Modem 32 via Link 35; correct?

21 A. I'm sure there is a discussion of it in the
22 specification that we could read, but that's -- that's a
23 reasonable understanding.

24 Q. Sure. And, again, referring to Figure 7,
25 Computer 34 is connected to Modem 32 through some link?

1 A. Through some capability, yes.

2 Q. Okay. And then to access the Internet,
3 Computer 34 would do so via Modem 32; correct?

4 A. The -- the assumption is that the communication
5 between Computer 34 and Internet 10 would traverse
6 Modem 32 and ISP 22 using whatever conversions and --
7 and such forth are necessary to -- to make that happen.
8 Obviously, Computer 34, unless you specifically asked
9 your ISP for it, is not going to be a publicly routed IP
10 address.

11 Q. Sure. And the Set-Top Box 36 would also access
12 the Internet through the same means?

13 A. It would access it through the same -- through
14 the same path. Whether it's using the exact same
15 protocols or not, that would be -- that would be
16 implementation-specific.

17 Q. Sure. Referring to Figure 7, Set-Top Box 36
18 and Computer 34 would access the Internet using the same
19 or a common IP address; correct?

20 A. So the traffic of Computer 34 and Set-Top
21 Box 36, when observed in the Internet, would appear to
22 have the same IP address. On the -- on the -- on the
23 land boundary of modem, they can, of course, have their
24 own usually unroutable Internet addresses. So, like, a
25 192.168 or a -- what is it? -- something dot 17.

1 Q. Sure.

2 A. 102.17.

3 Q. Let me restate it.

4 From the perspective of ISP 22, the traffic
5 being routed from the modem would have the same IP
6 address for traffic from Set-Top Box 36 and traffic from
7 Computer 34?

8 A. I'm sorry. Could you repeat that.

9 Q. Sure. From the perspective of ISP 22, the
10 traffic coming from Set-Top Box 36 and Computer 34 would
11 have the same IP address?

12 A. The -- the general -- the general assumption is
13 that the ISP has provided a -- a one DHCP lease to -- to
14 30 -- to the Block 30. And that's the IP -- that's the
15 IP that would serve as the source IP address for all
16 packets traversing the 32 to 22 link.

17 Q. Okay. And then if we look at Figure 7, CAS 40
18 also connects to the Internet; but that's through -- let
19 me take a step back.

20 CAS 40 would use a different IP address to
21 connect to the Internet; correct?

22 A. Different than what?

23 Q. Different than the IP address that's assigned
24 to Block 30.

25 A. Well, how -- how CAS -- how CAS accesses the

1 Internet in this case is completely dependent on what
2 kind of server situation they are -- they are using. If
3 an Internet address is publicly routable, then the
4 assumption is there are no two IP addresses from
5 different devices that are both the same because,
6 otherwise, the routing tables would -- would get --
7 would get crossed. So there would have to be a
8 different publicly routable IP address from CAS usually
9 behind their co-location provider or their server
10 provider, what we today call the cloud, versus what the
11 Modem 32 is going to use. And I -- it's -- I don't
12 think it's -- I don't think it's discussed in this
13 patent; but, of course, Modem 32 could also tunnel into
14 the ISP and, you know, the -- the NATing performed
15 there.

16 Q. Sure. But you would agree that the publicly --
17 strike that.

18 So you would agree that the publicly routable
19 IP address for CAS 40 would be different than the
20 publicly routable IP address for Modem 32?

21 A. I think the two -- two publicly routable IP
22 addresses for two different devices have to be
23 different. Otherwise, you have a running problem.

24 Q. So in Figure 7, Modem 32 would have a publicly
25 routable IP address that's different than the publicly

1 routable IP address of CAS 40?

2 A. I think -- I think by definition, it has to;
3 but exactly how CAS is using its -- its IP is -- is
4 different; right? The CAS system might not be a DHCP
5 solution. The CAS system could also be a shared
6 solution. It could be a load balance solution with
7 multiple people sharing an IP address.

8 Q. But would you agree that they both have
9 different publicly routable IP addresses -- the CAS 40
10 and the Modem 32?

11 A. I think as disparate devices, they have to.

12 Q. Okay. So if you could take a look through
13 Figures 1 through 14 and determine whether or not CAS 40
14 would have a different publicly routable IP address than
15 that of Modem 32 in each of the figures.

16 A. So I think that's -- that's going to be the
17 case in all practical implementations.

18 Q. Okay. So you would agree that in each of the
19 computer systems shown in Figure 1 through Figure 14,
20 the CAS 40 would have a different publicly routable IP
21 address than that of Modem 32?

22 A. I think in any system that is functional, yes.
23 I'm -- as a network architect, I can -- I could -- I
24 could actually -- I could create a system where they had
25 different -- or say there was port separation or

1 policy-based routing. But I think in any practical
2 implementation, they're going to have different publicly
3 facing IP addresses.

4 Q. Okay. But my question was specifically
5 referring to the computer systems shown in Figures 1
6 through 14.

7 Do each of the computer systems shown in
8 Figures 1 through 14 show a CAS 40 that would have a
9 different publicly routable IP address than that of
10 Modem 32?

11 MR. MILKEY: Object to form.

12 THE WITNESS: So the -- the figures are not
13 describing the -- the IP address assignment. As I said,
14 any practical implementation of such an architecture
15 with two devices that are both on the Internet, so to
16 speak, will -- will necessitate them having different
17 publicly facing IP addresses or different publicly
18 routable IP addresses.

19 MR. DIKE: Okay. I think we can take another
20 break.

21 (A recess is taken.)

22 BY MR. DIKE:

23 Q. Earlier in the deposition we discussed some of
24 your time at Webstacks.

25 A. Yes.

1 Q. And you worked at Webstacks from roughly 2000
2 to 2003; correct?

3 A. So it was -- it was Webstacks through, I think,
4 2001; and then that was acquired by Extreme. So I
5 worked and supported the Webstacks product up through
6 2003. I was also a -- like, a -- I think it's switch
7 design manager at Extreme for pipeline --

8 Q. Okay.

9 A. -- after the acquisition.

10 MR. DIKE: Thank you. I think those are all
11 the questions that I had for today.

12 MR. MILKEY: Okay. I -- let's go off the
13 record.

14 MR. DIKE: Sure.

15 (A recess is taken.)

16

17 EXAMINATION

18

19 BY MR. MILKEY:

20 Q. Mr. de la Iglesia, you were asked if your
21 opinions were limited to Dr. Lett's Ground D.

22 Do you recall that?

23 A. I do.

24 Q. What opinions of Dr. Lett does your declaration
25 address?

1 A. So I address his Section D, which covers
2 Grounds D and E that he addresses. He addresses them
3 together, so I address them together. So I -- I'm
4 addressing all opinions from Dr. Lett that involve the
5 use of IP Import as the alleged device identifier in the
6 BAIG system.

7 Q. And how do your opinions with regard to Dr. --
8 what Dr. Lett describes as his Ground D relate to your
9 opinions with regard to what Dr. Lett describes as his
10 Ground E?

11 MR. DIKE: Objection. Outside the scope of
12 redirect.

13 THE WITNESS: Well, it's -- it's the same
14 opinions because, as I've said, Dr. Lett is merging his
15 analysis of D and E. They both involve BAIG, and they
16 both involve the use of IP Import as the identifier.
17 And so my opinion applies equally to both.

18 BY MR. MILKEY:

19 Q. Do you recall being asked about persistent
20 connections in the context of Exhibit 2003?

21 A. Yes. I remember being asked about Exhibit 2003
22 and persistent connections in Web clients.

23 Q. So you mentioned -- I believe you mentioned Web
24 client behavior as opposed to wireless access point
25 behavior; is that correct?

1 A. Well, I -- in my -- in answering the questions,
2 I made it a point that the document here is describing
3 Web clients and that whether or not what Web clients can
4 do is dictated also by the Web servers and by any
5 intermediate device, such as the devices that I'm
6 discussing in my declaration, the wireless access point
7 of Dr. Lett's alleged combination.

8 Q. Okay. And why is the -- how is the description
9 of Web -- strike that.

10 How is the behavior of Web clients as opposed
11 to the behavior of other devices relevant to your
12 analysis?

13 MR. DIKE: Objection. Outside the scope of
14 redirect.

15 THE WITNESS: Well, the Web clients can attempt
16 to perform any -- any action within the RFC and within
17 the specification. Whether or not actual clients do
18 that in terms of whether actual browsers do that is a
19 separate question. So whether browsers use a specific
20 feature -- I think one of the examples I gave was
21 pipelining -- is -- that's not something that browsers
22 used at the time and has really never taken off.

23 The second aspect of that is that whether or
24 not a client wants to use a persistent or nonpersistent
25 connection is completely secondary to whether any of the

1 downstream devices, such as the WAP or the server,
2 allows or supported persistent connections.

3 BY MR. MILKEY:

4 Q. And how would an understanding of what a server
5 allows or supports be relevant to Dr. Lett's Grounds D
6 and E?

7 MR. DIKE: Objection. Outside the scope of
8 redirect.

9 THE WITNESS: As an example, I was asked about
10 a client using the a keep-alive or a persistent
11 connection request. There is no requirement on behalf
12 of the server to respect that. And, in fact, servers
13 did not. The predominant server at the time was the
14 IIS -- the Microsoft server. And after a request was
15 finished, regardless of whether there was a persistent
16 request, it would reset pound the connection by sending
17 three TCP reset packets back, thereby closing down the
18 connection. Because the server has to recycle its
19 resources as well. And that's also the case for
20 intermediate devices, such as wireless access points.

21 Whether or not the client wants to keep a
22 connection open is secondary to whether the wireless
23 access point can and has the resources to keep the
24 connections open, which they do not.

25 ///

1 BY MR. MILKEY:

2 Q. Would a person of ordinary skill in the art
3 have been aware of these distinctions?

4 MR. DIKE: Objection. Outside the scope of
5 redirect.

6 THE WITNESS: A person of ordinary skill in the
7 art should be intimately aware between the difference of
8 potential client behavior with respect to a protocol and
9 actual system behavior that involves clients, servers,
10 and wireless access points and understands specifically
11 the restrictions of resources of both wireless access
12 points and servers that would prevent the use of
13 persistent connections in -- in specifically the
14 architecture that Dr. Lett maps with respect to BAIG and
15 its -- and the wireless access points from, for example,
16 a coffee shop.

17 BY MR. MILKEY:

18 Q. Okay. And you recall earlier you were asked
19 about request pipelining?

20 A. Yes.

21 Q. And how is request pipelining relevant to any
22 issues in this case?

23 MR. DIKE: Objection. Outside the scope of
24 redirect.

25 THE WITNESS: Request pipelining, as I said in

1 my earlier answer, is not something that the -- the
2 clients could use because it was not supported by the
3 servers. The -- the way that the HTTP parsing works in
4 the server is that you get one request and the server
5 responds to it. The server parses up until the HTTP, up
6 until the first double care return line feed, and then
7 stops. So any -- any subsequent HTTP requests that are
8 in a -- in a TCP transmission are -- are simply ignored.

9 BY MR. MILKEY:

10 Q. Okay. And do you recall being asked about slow
11 start functionality?

12 A. Yes, I do.

13 Q. Okay. And how is slow start functionality
14 relevant to any issues in this case?

15 MR. DIKE: Objection. Outside the scope of
16 redirect.

17 THE WITNESS: Slow start functionality is --
18 is -- is not relevant to the Web browsing. Slow start
19 was used in some cases during parallel FTP transfers in
20 order to not abuse bandwidth in -- in -- inside
21 corporations. The -- the general mode of all browsers
22 is to get data as quickly as they can given the
23 restrictions downstream, and the browsers would not
24 implement slow start because it's contrary to their
25 intended purpose.

1 MR. MILKEY: I pass the witness.

2 MR. DIKE: No additional questions.

3 DEPOSITION OFFICER: Would you like to order a
4 copy? You had realtime, so --

5 MR. MILKEY: We'll order just on the normal
6 timeline.

7 (Deposition session concluded at 10:35 a.m. Pacific
8 Time)

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1 I have read the foregoing and by signing hereafter,
2 approve same.

3

4 Dated _____.

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6 _____
(Signature of Deponent)

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STATE OF CALIFORNIA }
 } ss.
COUNTY OF LOS ANGELES }

I, THERESA JOANN PHILLIPS-BLACKWELL, hereby
certify:

I am a duly qualified Certified Shorthand Reporter in the State of California, holder of Certificate Number CSR 12700 issued by the Court Reporters Board of California and which is in full force and effect. (Fed. R Civ. P. 28(a)).

I am authorized to administer oaths or affirmations pursuant to California Code of Civil Procedure, Section 2093(b) and prior to being examined, the witness was first duly sworn by me. (Fed. R. Civ. P. 28(a), 30(f)(1)).

I am not a relative or employee or attorney or counsel of any of the parties, nor am I a relative or of such attorney or counsel, nor am I financially interested in this action. (Fed. R. Civ. P. 28).

I am the deposition officer that
stenographically recorded the testimony in the foregoing
deposition and the foregoing transcript is a true record
///

1 of the testimony given by the witness. (Fed. R. Civ. P.
2 30(f)(1)).

3 Before Completion of the deposition, review of
4 the transcript { } was { } was not requested. If
5 requested, any changes made by the deponent (and
6 provided to the reporter) during the period allowed, are
7 appended hereto. (Fed. R. Civ. P. 30(e)).

8

9 Dated: _____, 2025

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Theresa Joann Phillips-Blackwell

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