UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.
Petitioner
v.
VIRNETX INC. AND APPLICATION INTERNATIONAL CORPORATION
Patent Owner

Case No. IPR2015-00810 (Patent 8,868,705 B2)
Case No. IPR2015-00811 (Patent 8,868,705 B2)
Case No. IPR2015-00812 (Patent 8,850,009 B2)

DEPOSITION OF FABIAN MONROSE, Ph.D.
Washington, D.C.
Thursday, March 3, 2016

Reported by: John L. Harmonson, RPR
Job No. 103298

March 3, 2016

9:32 a.m.

Deposition of FABIAN MONROSE, Ph.D., held at the offices of Paul Hastings LLP, 875 15th Street, N.W., Washington, D.C., before John L. Harmonson, a Registered Professional Reporter and Notary Public of the District of Columbia, who officiated in administering the oath to the witness.

A P P E A R A N C E S

On Behalf of Petitioner, Apple Inc.:

SIDLEY AUSTIN
1501 K Street, N.W.
Washington, D.C. 20005
BY: SCOTT BORDER, ESQ.
THOMAS BROUGHAN III, ESQ.

On Behalf of Patent Owner, VirnetX Inc.:

PAUL HASTINGS
875 Fifteenth Street
Washington, D.C. 20005
BY: DANIEL ZEILBERGER, ESQ.
JOSEPH PALYS, ESQ.

P R O C E E D I N G S

9:32 a.m.

Whereupon,

FABIAN MONROSE, Ph.D.,

after having been first duly sworn or affirmed, was examined and did testify under oath as follows:

EXAMINATION

BY MR. BORDER:

Q. Good morning, Dr. Monrose.

A. Good morning.

Q. This is not the first time you've been deposed in this series of proceedings, correct?

A. That is correct.

Q. So as you know, if you need to take a break, please let me know. If you don't mind, let me finish my line of questioning, but if you need a break, again just let me know.

Give your counsel time to object. To the extent that he does not instruct you not to answer, please answer my question.

All right. Let's start with your

declaration in -- So there's three declarations you've filed, as you might recall, the 810, 811 and the 812 proceedings. Is it okay if we just refer to them as 810, 811, 812?

A. That will be fine.

Q. There's two that involve Beser and there's one that involves Aventail. Do you have copies of them already?

A. I do.

Q. So let's start with the 811. I'll just hand your counsel -- this is Exhibit 216 in the 811 proceeding.

All right. Why don't we -- why don't we turn to Paragraph 30. Do you have it?

A. I do. Paragraph 30.

Q. Why did you bold "in the connection request" in Paragraph 30?

A. As stated here in my declaration, I believe that the petitioner points to the connection request, and I'm responding to that alleged as meeting the limitations. And furthermore, during the deposition of Dr. Tamassia, he in fact indicated that what he was pointing to is in fact the connection request.

And so as I state here, this is indicated in box G in his flow chart during beginning of step 2 in Aventail.

Q. So in your view, the connection request refers solely to the actions identified in box G from Exhibit 2014?

A. I'm responding to what Dr. Tamassia points to as the connection request in box G.

Q. What is your opinion as to what the connection request is in Aventail?

A. So as stated in my declaration, Aventail discloses a series of steps for configuring -- in its administration guide for configuring Aventail Connect. So in particular, the summary of those features are described on pages 11 through 13 in the multiphased approach.

So I would like to go through the multiphase approach to be clear of what's happening here. So the first part, DNS lookup is received at Aventail Connect from a client application. If the DNS -- if the destination host name in the DNS lookup matches the redirection rule or the DNS proxy option is enabled at the domain and the domain cannot be looked up directly, a false DNS entry is created.

It goes on to explain what the purpose of the redirection rules are, and then it specifically mentions that the checking of the redirection rules occur in that claimed step 1. Okay?

Again, on pages 11 to 13 of Aventail, it states in step 2 -- so this is after step 1, "The client application requests a connection to a remote host, and this connection request is checked by Aventail Connect. The connection may contain a previously created false entry that indicates whether the connection should be proxied."

It also mentions that during this stage, this is when a SOCKS negotiation would happen, and more importantly, that Aventail Connect will then send a proxy request to the extranet server. In particular, it says in steps -- let's call it 2B, "When the connection is completed, Aventail Connect begins the SOCKS negotiation."

The third step is that the application at that point then transmits and receives data in step 3.

So there are three explicit steps in

Aventail Connect.

Q. So in your view, the connection request in the Aventail system occurs after the redirection rules are checked?

A. So if my memory serves me correctly, and as stated in the declaration, in part 1, Aventail states: "If the destination host name in the DNS lookup matches a redirection rule, or the DNS proxy option is enabled and the domain cannot be looked up directly, a false entry is created by Aventail Connect and returned to the application."

It says: "A redirection rule," and we'll expand on it, "defines for destination what type of traffic, in particular whether it's TCP or UDP, will be allowed to be routed to that destination and the type of proxy redirection."

Aventail is specific in providing a table that says what the proxy redirection fields relate to. And as shown in the declaration, copied from Aventail, it provides some options including the ability to redirect, and that's redirect all traffic through its extranet server, perform no redirection, or deny service. In this case, deny service is to a specific destination.

So in step 1, the redirection rules are checked.

Q. Okay. I'm going to ask that question again because I don't think you answered it.

Is it your opinion that the connection request in Aventail is checked after the redirection rules are checked? Let me restate that.

Is it your view that the connection request occurs after the redirection rules are checked?

MR. ZEILBERGER: Objection to form.

THE WITNESS: I think you asked exactly what I answered.

BY MR. BORDER:

Q. You never told me that the connection request occurs after the redirection rules are checked. Is that your testimony?

MR. ZEILBERGER: Objection; form.

BY MR. BORDER:

Q. To be clear, is it your opinion that the connection request in Aventail occurs after the redirection rules are checked?

MR. ZEILBERGER: Objection; form.

THE WITNESS: What I give an opinion

to was the petitioner's claim that in their specified connection request, which again Dr. Tamassia pointed to in his deposition what he was referring to, that in that case the redirection rules are not checked.

BY MR. BORDER:

Q. Dr. Monrose, my question is: Is it your opinion that the connection request in Aventail occurs after the redirection rules are checked?

MR. ZEILBERGER: Objection; form.

THE WITNESS: In my declaration I responded to the petitioner's alleged meeting of that limitation and showed that in fact the request, whether it is the proxy request that they're responding to or the connection request that they point to, are not checked against the redirection rule.

BY MR. BORDER:

Q. So you have no independent opinion as to when the connection request occurs in Aventail, correct?

MR. ZEILBERGER: Objection; form.

THE WITNESS: I don't know what you mean by "independent," but Aventail

specifically says that it happens after step 1.

BY MR. BORDER:

Q. So you would agree that, in your opinion, the connection request occurs after step 1 in Aventail?

MR. ZEILBERGER: Objection; form.

BY MR. BORDER:

Q. Let me ask it a different way: In your opinion, are the redirection rules checked in step 1 as laid out in pages 11 and 12 of Aventail?

A. In step 1, Aventail does disclose conditions where the redirection rules are checked.

Q. And in your view, the connection request occurs after those actions, correct?

MR. ZEILBERGER: Objection; form.

THE WITNESS: In my opinions expressed in the declaration, I responded to the alleged meeting of those limitations and argued why I disagreed with their expert's opinion that in fact this is not checked in those cases.

BY MR. BORDER:

Q. So you agree with me that you don't have your own opinion as to when the connection request occurs in Aventail?

MR. ZEILBERGER: Objection; form. Foundation.

THE WITNESS: My opinion is based on what is stated in Aventail Connect. They are separate steps. So maybe I just don't understand your question.

BY MR. BORDER:

Q. My question is: Do you, in your opinion, believe that the connection request in Aventail occurs after the redirection rules are checked?

MR. ZEILBERGER: Objection to form.

BY MR. BORDER:

Q. Is there something you don't understand about that question?

A. I thought I've answered your question. I said given the interpretation of what's specified by Aventail Connect, that step 2, this connection request happens after step 1.

Q. And step 1 includes checking the redirection rules?

A. That is correct.

Q. And that's your opinion?
A. That is correct.
Q. Okay. Now, when you stated that you -- Well, let's go back to Paragraph 30. When you stated that you were responding to what Dr. Tamassia points to as the connection request in box G, do you agree that you're relying solely on Dr. Tamassia's deposition testimony for that opinion?
MR. ZEILBERGER: Objection; form.
THE WITNESS: So back to Paragraph 30, you said?
BY MR. BORDER:
Q. Yes.
A. So in Paragraph 30 and 31, Apple's -- Dr. Tamassia gave a clarification of where this step -- what is meant by -- what his understanding of what is meant by the connection request. I did an analysis based on what Dr. Tamassia points to and, as explained in the declaration, that logic, in my opinion, is flawed because the redirection rules are not checked at that point.
Q. And in Paragraphs 30 and 31 you don't cite to any portion of Dr. Tamassia's

declaration, correct?

A. In Paragraph 30, I do refer to his depo and the statements made about box G.

Q. Okay. Let me repeat that question.

In Paragraphs 30 and 31, you don't cite to any portion of Dr. Tamassia's declaration, correct?

A. His declaration, that is correct.

Q. And the only testimony you rely on are two lines on page 234 of his deposition, correct?

MR. ZEILBERGER: Objection; form.

THE WITNESS: His deposition, in my opinion, was clarifying statements made in his declaration. So the fact that I looked -- reviewed his deposition to see how he's clarifying the declaration means I'm relying on more than just his deposition.

BY MR. BORDER:

Q. Well, Dr. Monrose, I don't think there's any page limits on your declaration, and I don't see any citations to his declaration here, correct?

MR. ZEILBERGER: Objection.

BY MR. BORDER:

Q. I think you answered that before.

MR. ZEILBERGER: Objection; argumentative.

BY MR. BORDER:

Q. Let me just ask a question.

A. You guys -- Again, I'm not a lawyer. I put this on the table. I'm not a lawyer. My understanding of how this works is the petitioner makes an alleged -- shows where they believe the limitations are met. An expert in certain cases provides his or her opinion in respect to that limitation that the petitioner points out.

In this particular case, Dr. Tamassia clarified a statement or his understanding of statements made in the declaration, and I reviewed those statements. And under that understanding -- what he points to in his deposition, which I will agree with you in my declaration, I don't specifically cite to his declaration but I do cite to his deposition which clarifies statements made in his declaration and says he's referring to box G.

Q. And in your view, the entire basis of your opinion is based on just two lines of Dr. Tamassia's deposition?

MR. ZEILBERGER: Objection;

foundation. Form.

BY MR. BORDER:

Q. Correct?

A. I think that's a stretch. I think it's the context of what was -- He specifically points to that in those two lines, but the surrounding context points to his understanding of what the connection request is, and he says that's indicated by box G.

Q. But you don't cite to any of this additional context that you just mentioned, correct?

A. Again, maybe if I had more experience in this and realized that lawyers would -- I had to say exactly where it matches his declaration -- I just said looking at what he said in his deposition, and what he points to in that deposition, my understanding of what he said there implies that box G is the connection request. And in that case, the redirection rules are not checked.

Q. Did you review the entirety of Dr. Tamassia's deposition?

A. I went through looking for the places in which he was trying to justify what he said

here. So not with a fine-tooth comb. I didn't go through all the pages in here. I went through, I looked, and I tried to understand the context in which he made those statements.

Q. So to be clear, you did not review the entire deposition transcript of Dr. Tamassia?

A. I read the transcript to try and understand what was being said here. And I'm sure if -- and it's a painful exercise reading these transcripts because this thing jumps all over and so I had to focus it. At one point he was asked where is the connection request. And that's the point where he says that, the way he says that's the connection request.

I don't know how you guys do it as lawyers, but it's difficult to keep track of everything that's going on here. So I had to review it, and then I looked at the portion in which he says this is where I believe the connection request is.

Q. Do you agree that he at least discusses this issue in other parts of his deposition?

MR. ZEILBERGER: Objection; form. Foundation.

THE WITNESS: To be honest, I would have to go back and look specifically.

BY MR. BORDER:

Q. And of course you don't cite to any of the other portions of his testimony where he discusses what his view is as to the connection request?

MR. ZEILBERGER: Objection.

BY MR. BORDER:

Q. In Aventail, correct?

MR. ZEILBERGER: Objection; form.

THE WITNESS: I believe here, in my view, I turn to what I felt was the clearest statement of what box G was referring to.

BY MR. BORDER:

Q. And you obviously have no other testimony -- Strike that.

And you obviously have no testimony as to the other testimony that Dr. Tamassia gave with respect to box G and the connection request in Aventail, correct?

MR. ZEILBERGER: Objection; form.

THE WITNESS: The only statements I've made in my declaration with respect to his deposition on this particular matter is

referenced in Paragraph 30.

BY MR. BORDER:

Q. Did you review the entirety of Dr. Tamassia's declaration?

A. I did. It's very long.

Q. How do you define "connection request"?

MR. ZEILBERGER: Objection; form.

THE WITNESS: Are you asking this in the abstract? In something specific? In deposition?

BY MR. BORDER:

Q. I'm asking with respect to your bolded cite -- With respect to Paragraph 30, you've bolded "in the connection request." What is your definition of "connection request"?

A. In that bolded paragraph, it's what he says box G is the connection request. His bolded is just that he specified the connection request is box G. It's not my opinion, and I'm not saying anything else. He specified box G is the connection request.

Q. And if your opinion is wrong -- in other words, if he did not specify that box G is the connection request -- you agree that the

conclusions you've reached, at least with respect to Paragraphs 30, 31, 32 and 33 are not valid, correct?

MR. ZEILBERGER: Objection; form.

THE WITNESS: You asked a very compound question. Can you repeat, please?

BY MR. BORDER:

Q. Well, you just told me that your analysis here is based on what you think Dr. Tamassia has testified to. Correct?

A. In Paragraph 30, I'm referring to what he points out in his declaration -- in his deposition to be connection request via box G.

Q. So if there are other portions of his testimony where he elaborates on what he believes that connection request is, and that it is not solely confined to box G, you agree that your analysis here is incorrect?

MR. ZEILBERGER: Objection; form.

THE WITNESS: I do not. Because I would have to look at all the other claimed analysis that he also pointed to something else as the connection request. I looked at what he claimed is the connection request there in box G.

And I believe that my duty is to assess his opinion, and I did, and, one, I respectfully disagree with what it said, and more specifically for box G pointed to that part of the deposition. It's clear that the redirection rules are not checked. I can't say more than that.

BY MR. BORDER:

Q. So I'm handing you what is previously marked Exhibit 2013 in the 811 proceeding. I'm sure you recognize that.

And I'm looking at step 1 here. It states: "The application does a DNS lookup to convert the host name to an IP address."

Do you agree that at least in one example, that host name would come from a user attempting to communicate with a remote host?

MR. ZEILBERGER: Objection; form.

THE WITNESS: So step 1 says the application does a DNS lookup. And remember that in Aventail, the application -- I mean Aventail Connect does a DNS lookup to convert the host name to an IP address.

BY MR. BORDER:

Q. So in your view, the application

that's mentioned there is Aventail Connect?

A. This says, "How does Aventail Connect work?"

Q. In your view, in step 1, when it says "the application," that's referring to Aventail Connect and not other software on the computer?

MR. ZEILBERGER: Objection; form.

THE WITNESS: As stated in my declaration, Aventail Connect is simply an administration guide for configuring Aventail Connect, which is an application designed to run on a workstation and which routes traffic, network traffic from an application to a proxy server.

BY MR. BORDER:

Q. Okay. My question is: When it states "the application" in step 1 on the first page of Exhibit 2013 that I just handed you, you believe that's Aventail Connect?

A. The administration guide says Aventail Connect is an application designed to run on a workstation.

Q. Is that a yes?

MR. ZEILBERGER: Objection; form.

THE WITNESS: It's an application

designed to run on a workstation.

BY MR. BORDER:

Q. The specific reference to "the application" in step 1 on page 11 of -- or page 1 of Exhibit 2013, "the application," in your view, refers to Aventail Connect and not any other software running on the client computer? That's your view?

MR. ZEILBERGER: Objection; form.

THE WITNESS: In my declaration, to the best of my recollection, I did not opine on that matter and said what Aventail discloses, and it is a guide for configuring Aventail Connect, which the guide says it's an application designed to run on a workstation.

BY MR. BORDER:

Q. So you don't know one way or the other what "the application" actually refers to in step 1 in Exhibit 2013?

A. It says it's Aventail Connect. How does Aventail Connect work? It's an application designed to run -- Aventail Connect is an application designed to run on a workstation.

Q. The host name that's mentioned in that first step, you agree that would come from a user?

A. So the broader context of what the Exhibit 2013 -- so if I go back to page 7 on Exhibit 109, Aventail Connect is a client component of the Aventail intranet center.

Your question about in the proceedings at hand, I don't recall any discussion -- opinions on my part on whether or not there was a user there.

Q. Well, so now we're talking about Exhibit 1009.

A. Yes.

Q. So let me hand this to your counsel. This is the full Aventail Connect document. This is Exhibit 1009 in the 811 proceeding.

You've got a copy, correct?

A. Yes.

Q. Let me have you go to the top of page 8, please. It says: "Windows TCP/IP networking applications such as Telnet, e-mail, web browsers and FTP use Winsock (Windows sockets) to gain access to networks or the Internet."

You agree that these networking applications, could that be what Aventail is referring to when it says, "The application does a DNS lookup to convert the host name to an IP address," in step 1 of Exhibit 1009?

MR. ZEILBERGER: Objection; form. Foundation.

BY MR. BORDER:

Q. Could that be the application that it's referring to?

MR. ZEILBERGER: Same objections.

THE WITNESS: I've done no analysis of whether or not the TCP/IP-enabled network applications pointed to here, e-mail or web browsers, are the same applications referred to in step 1.

BY MR. BORDER:

Q. Did you read Exhibit 1009?

A. I had to go through Exhibit 1009.

Q. Did you read the entirety of 1009?

A. I had to go through the parts which the petition was pointing to met the alleged limitations.

Q. Do you believe you have an understanding of how the system described in

Aventail works?

A. I do. It's an admin guide.

Q. So do you agree that Aventail Connect works with Windows TCP/IP applications?

MR. ZEILBERGER: Objection; form.

THE WITNESS: It says it can work with TCP or UDP.

BY MR. BORDER:

Q. And one of those applications would be a browser, for example?

MR. ZEILBERGER: Objection; form. Scope.

THE WITNESS: I mean, hypothetically speaking, it -- I don't know the context in which you're asking me this, so I need context. But it does say, as in the guide, the TCP networking applications, and it gives examples. Your example is a web browser, and a web browser is listed here.

BY MR. BORDER:

Q. And so at least one of the places that Aventail Connect -- at least in the steps -- Let me strike that.

Let's stay on Exhibit 1009, page 11, and it says: "The application does a DNS lookup

to convert the host name to an IP address."

Could one example of that host name come from a user entering a host name into a browser?

MR. ZEILBERGER: Objection; form. Scope.

THE WITNESS: So again, to the best of my recollection, that specific example that you point to, the administration guide does not provide that example.

BY MR. BORDER:

Q. Dr. Monrose, you're holding yourself out to be a person of ordinary skill in the art, correct?

A. Uh-huh.

Q. And you read the entirety of this administrator's guide?

A. I read the guide.

Q. And you understand how the system works.

A. I do. And you said there's a web browser, and I'm saying I didn't give an opinion on whether or not there is a user -- it says there's a user sitting at the web browser and that's the same application mentioned in 1A.

Q. So you have no idea where the host name mentioned in step 1A could come from?

MR. ZEILBERGER: Objection; form.

THE WITNESS: There are possibilities.

BY MR. BORDER:

Q. What possibilities?

A. It says there it converts the host name.

Q. Where does the host name come from?

MR. ZEILBERGER: Objection; form.

THE WITNESS: Aventail says it will connect its -- Aventail Connect is a client component. So it receives it from the client.

BY MR. BORDER:

Q. In this case, what is the client?

MR. ZEILBERGER: Objection; form. Scope.

BY MR. BORDER:

Q. Let me ask this: Do you agree that one place it could receive it from is a regular browser?

MR. ZEILBERGER: Objection; form. Scope.

THE WITNESS: Hypothetically, without

any other context, yeah, it could be a browser.

BY MR. BORDER:

Q. Now, if a user were to enter a host name into a browser, would you call that a connection request?

MR. ZEILBERGER: Objection; form. Scope.

THE WITNESS: I made no statements about what a connection request is. I pointed to what Dr. Tamassia and the petition said is the connection request and I outlined there are several steps in Aventail. The first being a DNS lookup to convert the host name. We went through that. And the second being the application requests a connection. Two different steps.

BY MR. BORDER:

Q. So you haven't formed your own opinion as to what a connection request is in Aventail?

MR. ZEILBERGER: Objection; form.

BY MR. BORDER:

Q. Correct?

MR. ZEILBERGER: Same objection.

THE WITNESS: My opinion is that step

1 and step 2 are two different steps. It says so on page 11 and 12.

BY MR. BORDER:

Q. I did not ask you whether step 1 and step 2 are different requests. I asked you: You have not formed your own opinion as to what a connection request is in Aventail, correct?

MR. ZEILBERGER: Objection; form.

THE WITNESS: So my analysis in the declaration only states that what is pointed to by the petitioner as a connection request, and whether that connection -- that alleged connection request can satisfy the limitations, in my view they do not. That's all I said.

BY MR. BORDER:

Q. Now, a second ago you said that your opinion is that step 1 and step 2 are two different steps. Would you characterize step 1 at least as a domain name conversion request?

MR. ZEILBERGER: Objection; form. Foundation.

THE WITNESS: I don't know what you mean by "domain name conversion request" specifically other than it says step 1 does

a DNS lookup to convert the host name to an IP address.

BY MR. BORDER:

Q. So you agree that is a request to convert a host name to an IP address? You agree with that, correct?

MR. ZEILBERGER: Objection; form.

THE WITNESS: Again, maybe I don't understand your question. But I'm not sure you're saying anything different or asking anything different than what's stated, that the application does a DNS lookup to convert the host name to an IP address.

BY MR. BORDER:

Q. So you agree that the step 1 is responsive to a request to convert a host name to an IP address?

MR. ZEILBERGER: Objection; form.

THE WITNESS: I agree that step 1 says it does a DNS lookup to convert the host name to an IP address.

BY MR. BORDER:

Q. And in your view that's just a spontaneous DNS lookup; it's not responsive to anything?

MR. ZEILBERGER: Objection; form. Foundation.

THE WITNESS: What do you mean, it's spontaneous?

BY MR. BORDER:

Q. I'm asking you whether -- I'm asking you whether the application does a DNS lookup to convert the host name to an IP address, whether in your opinion that would be responsive to a request to convert the host name to an IP address.

MR. ZEILBERGER: Objection; form.

THE WITNESS: From where?

BY MR. BORDER:

Q. From the application.

MR. ZEILBERGER: Same objection.

THE WITNESS: It is doing a lookup to convert that host name to an IP address.

BY MR. BORDER:

Q. And why would it be doing that?

MR. ZEILBERGER: Objection; form. Scope.

THE WITNESS: As you said, there -- I'm not going to sit here and guess all the reasons why --

BY MR. BORDER:

Q. Would you agree that one example would be it's responding from a request to convert the host name to an IP address? That's at least one example of why it would be doing that?

MR. ZEILBERGER: Objection; form. Scope.

THE WITNESS: Aventail doesn't disclose that as a specific example, but I would agree it's a possibility.

BY MR. BORDER:

Q. Okay. Sticking with --

MR. BORDER: This is a good spot.

(Recess taken.)

BY MR. BORDER:

Q. Let's stick with Exhibit 1009. Actually, strike that.

Let's go back to your declaration, the 811 declaration. So let's go back to Paragraph 30 in your 811 declaration. And let me just say this. If you are mistaken about what Dr. Tamassia identifies as the connection request in Aventail, then do you agree your conclusions in Paragraphs 30 to 33 are incorrect?

MR. ZEILBERGER: Objection to form.

THE WITNESS: So I think we went over this before. As I said in responding to Dr. Tamassia's indication of what this connection request is in box G, that's what my analysis here refers to. And I'm not making any statements beyond that about any additional conclusions.

BY MR. BORDER:

Q. So then you agree that if you are mistaken about what Dr. Tamassia identified, then your analysis in Paragraphs 30 to 33 are not valid, correct?

MR. ZEILBERGER: Objection; form.

THE WITNESS: I agree that all I'm saying here is that what's pointed to by Dr. Tamassia has a flaw in the logic with respect to when the connection -- the redirection rules are checked.

Again, I am making no broader statement here.

BY MR. BORDER:

Q. And if you are mistaken as to what you believe he has pointed to as the connection request, do you agree your conclusions in Paragraphs 30 to 33 are incorrect?

MR. ZEILBERGER: Objection; form.

THE WITNESS: No, I do not.

BY MR. BORDER:

Q. Well, your analysis in Paragraph 30 is based on the assumption that Dr. Tamassia identifies the connection request in -- excuse me, the request in box G as the connection request, correct?

A. Correct.

Q. And you have no analysis as to any other boxes that Dr. Tamassia has identified as a connection request, correct?

A. In my declaration, I do not point to any others. But that doesn't mean that the conclusion would be invalid.

Q. But your conclusion is based on your view that Dr. Tamassia has only identified box G as the connection request, correct?

A. My view is based on him identifying box G as a connection request and a response to that indication.

Q. And if you are mistaken as to what he has identified as the connection request, do you agree that there is at least a flaw in your analysis in Paragraphs 30 to 33?

A. So I think your proposition --

MR. ZEILBERGER: Objection; form.

THE WITNESS: Again, your proposition assumes that I'm mistaken. I would have to go through, take my time to go back and look at your proposition that there is more identified by Dr. Tamassia.

BY MR. BORDER:

Q. So you agree if Dr. Tamassia identified another step in Aventail as the connection request, that you would need to perform further analysis to determine whether your conclusions in Paragraphs 30 to 33 are accurate?

MR. ZEILBERGER: Objection; form. Foundation. Scope.

THE WITNESS: So I would have to see whether or not these contradict what he points to as box G. But under my understanding of what he indicates, then Paragraphs 30 and 31 hold.

BY MR. BORDER:

Q. And you agree you have not done that additional analysis, correct?

MR. ZEILBERGER: Objection; form.

THE WITNESS: I have not expressed anything additional in my declaration on that.

BY MR. BORDER:

Q. All right. Let's go to -- We're sticking with Exhibit 1009. Can you please turn to page 10.

A. Okay.

Q. Just below the note at the top of the page, will you read that first sentence out loud, please, starting with "When..."

A. "When the Aventail Connect LSP receives a connection request, it determines whether or not the connection needs to be redirected to an Aventail extranet server and/or encrypted NSSL."

Q. So in this description in Aventail, the connection request occurs before any determination is made with regard to redirection rules, correct?

MR. ZEILBERGER: Objection; form. Scope.

THE WITNESS: Can you repeat your question?

BY MR. BORDER:

Q. I'll restate it.

In this description in Aventail on page 10, the connection request occurs before the redirection rules are checked, correct?

MR. ZEILBERGER: Same objections.

THE WITNESS: I would need to do an analysis. It doesn't say that here. I don't see -- it says when the Aventail Connect LSP receives a connection request, it determines whether or not the connection needs to be redirected or encrypted.

BY MR. BORDER:

Q. And in order to make that determination, it obviously would have had to have received the connection request first, correct?

MR. ZEILBERGER: Objection; form. Scope.

THE WITNESS: So I'm reading what's said on page 10. I'm not going to guess there is any implied indication. It says that when the LSP receives a connection request, it determines whether or not the connection needs to be redirected.

BY MR. BORDER:

Q. And so you agree, at least in this description, a connection request is received prior to the redirection rules being checked?

MR. ZEILBERGER: Objection; form. Foundation. Scope.

THE WITNESS: Again, I can't say more than what is said in this example. Right? It says when Aventail Connect receives a connection request, in this case it determines whether or not the connection needs to be redirected.

BY MR. BORDER:

Q. You've considered this paragraph in drafting your declaration, correct?

A. I have to consider what's stated in the administration guide and specifically look at the arguments put forth in the petition.

Q. So why don't you turn to Paragraph 35 of your declaration in the 811 proceeding. At the very bottom of that page --

A. One second, please.

Q. Are you there?

A. Uh-huh.

Q. So at the very bottom of page 27, Paragraph 35, you agree that you have quoted from

portions of the sentence we were just discussing, correct?

A. I agree with respect to whether or not a particular limitation was met.

Q. So you provided analysis on this particular sentence that we've been discussing, correct?

A. With respect to a particular limitation pointed to by the petitioner.

Q. Okay. So this isn't the first time you've seen this sentence on page 10?

A. That's correct.

Q. Okay. So I'm going to go back to my question.

A. Uh-huh.

Q. As a matter of grammar, do you agree that in this first sentence on page 10 that a connection request is received prior to redirection rules being checked?

MR. ZEILBERGER: Objection; form. Foundation.

BY MR. BORDER:

Q. And just so it's clear, let me ask the question more simply. In this description of the Aventail system --

A. On page 10.

Q. On page 10. In this description of the Aventail system, the connection request is received before redirection rules are checked, correct?

MR. ZEILBERGER: Objection; form. Foundation.

THE WITNESS: So I agree with your statements regarding grammar, and what it says is that it receives a connection request, it determines whether or not the connection request needs to be redirected.

BY MR. BORDER:

Q. So you agree that in order to make that determination, Aventail Connect would have received the connection request?

MR. ZEILBERGER: Objection; foundation.

THE WITNESS: The sentence says "When Aventail Connect receives a connection request..."

BY MR. BORDER:

Q. So you agree that the receipt of the connection request comes before the determination, correct?

MR. ZEILBERGER: Same objection.

BY MR. BORDER:

Q. Do you agree that the receipt of the connection request by Aventail Connect occurs before the determination?

MR. ZEILBERGER: Objection; form. Foundation.

BY MR. BORDER:

Q. Let me state it a little bit more clearly. Do you agree that Aventail Connect receives a connection request before it determines whether or not the connection needs to be redirected? Do you agree with that?

MR. ZEILBERGER: Objection; form. Foundation.

THE WITNESS: Again, I'm reading what is stated in those -- in that sentence that you pointed me to, and I agree that the sentence says when the Aventail Connect LSP receives a connection, it determines whether or not the connection needs to be redirected.

BY MR. BORDER:

Q. Dr. Monrose, I'm not asking you to read the sentence to me. I'm asking, in your

expert opinion do you agree that Aventail Connect receives a connection request, it then determines whether or not the connection needs to be redirected? Do you agree with that?

MR. ZEILBERGER: Objection; form. Foundation.

THE WITNESS: I would have to do an analysis of whether that sentence is in keeping with the entire context of what Aventail discloses.

BY MR. BORDER:

Q. Limiting your context to what is stated on page 10, when Aventail Connect receives a connection request, it then determines whether or not it needs to be directed. At least that's how it's explained on page 10. Do you agree with that?

MR. ZEILBERGER: Objection; form. Foundation. Scope.

THE WITNESS: Again, you were asking me -- If I understand what you're asking, it's that I need to take the limited context of that sentence and whether or not it specifies that when the connection -- when Aventail receives a connection request, it

determines whether or not the connection needs to be redirected. And I'm saying in that limited context, that's what the sentence says.

BY MR. BORDER:

Q. And by that, you mean the sentence says a connection request is received by Aventail Connect prior to determining whether or not the connection needs to be redirected, correct?

MR. ZEILBERGER: Objection; form. Foundation.

THE WITNESS: There's no indication of it -- explicit as it's prior. It just says when it receives it, it determines whether or not the connection needs to be redirected.

BY MR. BORDER:

Q. We've already covered the fact that you analyzed this page in your declaration.

A. For a different limitation.

Q. You analyzed this page in your declaration, correct?

A. I pointed to this page in the declaration for a different limitation.

Q. In fact, you pointed to the specific

sentence in your declaration, correct?

A. The sentence in -- The paragraph in which this sentence appears, correct.

Q. And I'm not asking you any questions about limitations right now. Correct?

A. Correct.

Q. All I'm asking you is, as an expert, do you agree that this sentence states that the connection request is received by Aventail Connect prior to determining whether or not the connection needs to be redirected?

MR. ZEILBERGER: Objection; form.

THE WITNESS: And I agree that in this limited context that it receives a connection request and determines whether or not it needs to be redirected.

BY MR. BORDER:

Q. And you're not aware of any -- Strike that.

You're not aware that Aventail Connect is describing a different system on page 10, are you?

MR. ZEILBERGER: Objection; form. Scope.

THE WITNESS: Can you be more

explicit? What do you mean by "describing a different system"?

BY MR. BORDER:

Q. Well, you just said in this limited context. I'm asking, what limited context are you speaking of?

A. Well, I have to take what's said here and look at the rest of the specification -- well, the rest of what is stated in the admin guide.

Q. Dr. Monrose, you've already analyzed this sentence. It's in your declaration.

A. For a different context.

Q. I'm not asking any context. I'm asking you to explain what that sentence means.

MR. ZEILBERGER: Objection.

BY MR. BORDER:

Q. And you have no facts that suggest that this is describing a different system than what's described on pages 11 and 12, correct?

MR. ZEILBERGER: Objection; form. Scope.

THE WITNESS: Sitting here right now, I can't answer that question. I have to go back and look with respect to your specific

question on whether it's something different.

BY MR. BORDER:

Q. So you agree that you have no evidence, sitting here today, that suggests this is describing a system that's different than the system described on pages 11 and 12?

MR. ZEILBERGER: Objection; form. Scope.

THE WITNESS: What I'm saying is under the conditions right now in this stressful environment, I will have to go back and see whether or not I'll be better able to answer your question.

BY MR. BORDER:

Q. That wasn't my question. My question is: Sitting here right now under this stressful situation, you have no evidence that is describing a different system than what is described on pages 11 and 12, correct?

MR. ZEILBERGER: Objection; form. Foundation. Scope.

THE WITNESS: For the matters at hand, I have not made any declaration thereof that this is the same or a different system.

That's all I can tell you right now.

BY MR. BORDER:

Q. You don't know one way or the other?

MR. ZEILBERGER: Same objections.

THE WITNESS: I said I have to go back and look.

MR. BORDER: All right. Let's shift gears. This is going to be Exhibit 1001 and Exhibit 1003.

BY MR. BORDER:

Q. These are the patents, the '705 and the '009 patents.

Let's open up the '705 patent. So let's take a look at both of these actually.

As far as you're aware, certainly other than the claims, there are no substantive differences between these two patents, correct?

MR. ZEILBERGER: Objection; form. Scope.

BY MR. BORDER:

Q. I'm just trying to save some time.

A. Yeah. They're in the same family. I would have to go back and look specifically are there any embodiments in one and not the other. But the claims are certainly different.

Q. Certainly none of your opinions rely on any differences in the specification of these two patents, correct?

A. For the declarations at hand today, that is correct.

Q. Okay.

A. As far as I recall.

Q. And as far as you're aware, you've submitted declarations in other proceedings involving this family of patents, correct?

A. I have.

Q. And in those, you're not aware or you didn't rely on any differences in the specifications in those either?

MR. ZEILBERGER: Objection; scope.

THE WITNESS: I don't believe that's the case, but your statement is correct. I would have to go back and look at all these.

BY MR. BORDER:

Q. Right.

So the claims are different.

A. Uh-huh.

Q. As far as you know, the specifications are substantially the same?

A. There are some differences across

them.

Q. Right.

So can we, at least for today's proceeding, can we just discuss the '705?

A. Uh-huh.

Q. And can we take your testimony to apply to the '009, at least with regard to the specifications? I'm not talking about the claims here. In other words, so we don't have to go through the same exercise twice.

Now, if there is anything you want to point out that might be different between '705 and '009 as we go through, please open it up and let me know.

A. I would have to go back and look.

Q. Right. It's my intention to cover things that are identical in both of these patents.

So let's look at Figure 26 of the '705 patent. That's page 66.

So this is a high level figure of at least one of the embodiments disclosed in the '705 patent, correct?

MR. ZEILBERGER: Objection; form.

THE WITNESS: Figure 26 is an example

of a high level embodiment.

BY MR. BORDER:

Q. So let's go to I believe it's Column 39, line 58. I think that's where it begins discussing Figure 26. And it may be helpful to keep Figure 26 handy as we step through. Let me know when you're there.

A. Okay.

Q. So let's step through some of these items here. DNS 2602 in Figure 26 is a modified DNS server, correct? And if it helps, I can direct you to lines 62 to 64.

A. I'm reading. I would have to go back and look at the context of all this. Yes, 2606 includes a conventional DNS server function and a DNS proxy.

Q. So modified DNS server includes, I believe as you just stated, two components, 2609, the DNS server, and 2610, a DNS proxy?

MR. ZEILBERGER: Objection.

BY MR. BORDER:

Q. Correct?

MR. ZEILBERGER: Scope.

THE WITNESS: The paragraph points to two functionalities.

BY MR. BORDER:

Q. Okay. And moving to Column 40, lines 38 to 40, do you agree -- You agree that the DNS proxy 2609 and DNS 2610 can be combined into a single server, correct?

MR. ZEILBERGER: Objection; foundation.

THE WITNESS: What are you referring to? Excuse me. Sorry.

BY MR. BORDER:

Q. Column 40, lines 38 to 40.

A. It says it can be for convenience run on a single server.

Q. Okay. And moving to the top of Column 40, you could please read into the record the first sentence.

A. Paragraph 40?

Q. Column 40.

A. Sorry, Column 40, line 1.

Q. Yes, please.

A. "According to one embodiment, DNS proxy 2610 intercepts all DNS lookup functions from client 2605 and determines whether access to a secure site has been requested."

Q. So you agree in at least this

embodiment that the DNS proxy intercepts all DNS lookup functions from the client, correct?

MR. ZEILBERGER: Objection; form. Scope.

THE WITNESS: Line 1 says the DNS proxy intercepts all DNS lookup functions from the client.

BY MR. BORDER:

Q. And real quick, your counsel gave a scope objection. Have you reviewed this portion of the '705 patent?

A. For these proceedings, I don't recall offhand. I would have to go back.

Q. Why don't we give you your 810 declaration.

A. Sure.

Q. Or maybe you already have it. So let me give this to your counsel here.

Let's go to Paragraph 19 in your 810 declaration. And so if you turn to Paragraph 19, you see sort of about halfway through that paragraph you're talking about embodiments in the '705 patent, and you include cites to Column 40. Correct?

MR. ZEILBERGER: Objection; form.

THE WITNESS: The citations are with respect to direct communications.

BY MR. BORDER:

Q. Okay. And you cite to Figure 26; is that correct? The very bottom of Paragraph 19.

A. That's correct.

Q. And the description of Figure 26 in the '705 patent spans from Column 39, line 58, to Column 40, line 43. Do you agree with that?

A. So Figure 26 is referenced in Column 39 and the discussion continues, though I'll have to double-check whether this is the only place that this Figure 26 is referred to.

Q. Okay. But it's at least described in those --

A. 39 and 40.

Q. So let's go back to the top of Column 40. And I think you agreed with me that as described here in line 1 of Column 40, the DNS proxy intercepts all DNS lookup functions from the client. Correct?

MR. ZEILBERGER: Objection; foundation.

THE WITNESS: I agree that the statement says -- this particular statement

says the DNS proxy intercepts all DNS functions from the client.

BY MR. BORDER:

Q. So at least in this embodiment, that's the way the system is designed, correct?

MR. ZEILBERGER: Objection; form.

BY MR. BORDER:

Q. In other words, in this embodiment, the system that's described is designed so that the DNS proxy intercepts all DNS requests, correct?

A. In line 1 of Column 40, the DNS proxy does -- it says that in that embodiment the DNS proxy intercepts all DNS lookup functions from the client.

Q. Right. And so in other words, this system is designed to intercept all DNS lookup functions, correct?

MR. ZEILBERGER: Objection.

THE WITNESS: As stated in that line.

BY MR. BORDER:

Q. Okay. And this passage goes on to state that after it intercepts a request, DNS proxy 2610 determines whether access to a secure site has been requested, correct?

MR. ZEILBERGER: Objection; form.

THE WITNESS: The continuation of that sentence says that.

BY MR. BORDER:

Q. And you would agree that determining whether access to a secure site has been requested is an evaluation related to establishing a secure connection? Correct?

A. I'm not sure I understand your question.

Q. What don't you understand?

A. Whether it's an evaluation.

Q. What do you understand evaluation to be?

A. I don't know -- you know, are you speaking specific to what '8705 says, some limitations, or just generally?

Q. I'm speaking about what's disclosed in the '705 patent. I'm asking whether you would agree that determining access to a secure site has been requested is an evaluation related to setting up a secure connection.

MR. ZEILBERGER: Objection; form.

THE WITNESS: I just want to be specific about what you're asking, because

to me it sounds like you're asking something about a claim term with respect to performing an evaluation as it relates to establishing a connection. So this is coming out of something that's not in my declaration. I'm just trying to get a sense of what we're talking about.

BY MR. BORDER:

Q. Okay. Well, let's turn to Paragraph 24 of your 810 declaration and your alternative proposed construction of "intercepting."

A. So, I'm sorry, where did you jump to?

Q. This is page 16, it's Paragraph 24 of the 810. And at the top left you see you've proposed an alternative construction for "intercepting," and in it you use the term "evaluation."

MR. ZEILBERGER: Objection; form. Foundation. Scope.

THE WITNESS: So again, what you're pointing to is the VirnetX proposed construction which does reference for intercepting. That means a request to look up an Internet protocol address and apart

from resolving it, and to perform an address, perform an evaluation on it related to establishing an encrypted communications channel.

And in the past I have looked at that proposed construction and believe it's -- it's my opinion that it's in keeping with the specifications and the claim language.

BY MR. BORDER:

Q. Okay. With that in mind, do you agree that determining whether access to a secure site has been requested is an evaluation related to establishing a secure connection?

MR. ZEILBERGER: Objection; form.

THE WITNESS: So part of that determining step is performing an evaluation.

BY MR. BORDER:

Q. Part of the determination of whether access to a secure site is being requested is an evaluation. Is that what you said?

MR. ZEILBERGER: Objection; form.

BY MR. BORDER:

Q. I'm just trying to clarify what your answer was.

A. I said with respect to the construction you pointed to on intercepting, part of it is performing an evaluation on it related to establishing the encrypted communication channel.

Q. Okay. So with respect to the '705 patent, would you agree that determining whether access to a secure site has been requested is an evaluation related to establishing an encrypted communications channel?

MR. ZEILBERGER: Objection; form.

THE WITNESS: In your question, what's the form of that access?

BY MR. BORDER:

Q. I'm referring to Column 40, lines 3 to 7. So with respect to those lines, would you agree that determining whether access to a secure site has been requested is an evaluation related to establishing a secure channel?

MR. ZEILBERGER: Objection; scope.

THE WITNESS: So I have not given an opinion on whether or not, to the best of my recollection, that in just -- only determining whether an access to a secure site has been requested, as you pointed to

in line 1, is enough to make that determination.

BY MR. BORDER:

Q. So you've given the opinion that the intercepting step includes performing an evaluation related to establishing an encrypted communications channel?

A. Uh-huh.

MR. ZEILBERGER: Objection; foundation.

BY MR. BORDER:

Q. So what can you point me to in the '705 patent that is consistent with your construction?

MR. ZEILBERGER: Objection; form.

THE WITNESS: So I believe in past declarations I've gone through and have shown why that is substantiated. You're asking me to sit here today and go through the whole thing and come back and tell you exactly why this opinion is there.

BY MR. BORDER:

Q. So in order to understand what your opinion is, I would have to consult the declarations you have filed in related

proceedings?

MR. ZEILBERGER: Objection; form. Scope.

THE WITNESS: As I said before, that construction, which I agreed with in previous declarations, I believe I also pointed to there are examples that substantiate that. If memory serves me correctly, some of these examples dealt with having sufficient security privileges to access the site. As one such example, the fact that they were not standard domain names, et cetera.

So I believe I've given evidence in the past that supports my opinion with respect to the construction that VirnetX has adopted.

BY MR. BORDER:

Q. Okay. So we would have to consult those prior declarations to grasp what you've stated before, correct?

MR. ZEILBERGER: Objection; form. Scope.

BY MR. BORDER:

Q. In other words, you've laid out more

detail in those prior declarations, correct?

MR. ZEILBERGER: Objection; form.

BY MR. BORDER:

Q. On this issue?

MR. ZEILBERGER: Objection; form. Foundation.

THE WITNESS: On that specific issue that you pointed me to, I believe I have opined on that before in the past, and those details that you're looking for are not in this specific dec at hand.

BY MR. BORDER:

Q. Okay. And you gave testimony on those declarations too?

MR. ZEILBERGER: Objection; form. Foundation.

THE WITNESS: Sitting here right now, I can't tell you which ones. You said if I gave testimony on that. I don't remember which ones there were.

BY MR. BORDER:

Q. You were deposed on those prior declarations, correct?

MR. ZEILBERGER: Objection; scope.

THE WITNESS: I was. But which ones,

I would have to go back and look.
BY MR. BORDER:
Q. All right. So let's -- we've got a stopping point coming up in just a couple more questions.
So let's move on in this. It says -- Do you agree that after the DNS proxy 2610 evaluates the request --
A. Where are we reading? Where are you looking at?
Q. I'm asking a question based on this disclosure, but generally I'm -- Where is this? Generally, I'm looking at lines 14 to 19.
A. Of what?
Q. Of Column 40 of the '705 patent.
After the DNS proxy 2610 evaluates the request and determines that access to the site may be granted, DNS proxy 2610 returns an address to the client computer. Correct?
MR. ZEILBERGER: Objection; form. Scope.
THE WITNESS: So what's your question? You just read out what's in Column 40.
BY MR. BORDER:
Q. It's a little bit of a generalization.

So let me ask it again.

After the DNS proxy 2610 evaluates the request and determines that access to the site may be granted, DNS proxy 2610 returns an address. Correct?

MR. ZEILBERGER: Objection; form. Scope.

THE WITNESS: So the DNS proxy would transmit the message to the gatekeeper. That requests the virtual private network be created between the user computer and secure target, and thereafter at some point the DNS proxy returns to the user the result addressed.

BY MR. BORDER:

Q. And the address that's returned, that may not be the actual address of the destination computer, correct?

MR. ZEILBERGER: Objection; scope.

THE WITNESS: So in this embodiment that you point to, and I would have to go back and look at the entire context, it does say that the address could be different from the actual target computer.

BY MR. BORDER:

Q. Obviously, it's got to be associated with the destination computer in some way, correct?

MR. ZEILBERGER: Objection; form. Scope.

THE WITNESS: In the context of '8705, it's associated with the target computer.

MR. BORDER: Want to take a lunch break? Does that work for you?

(Recess taken.)

AFTERNOON SESSION

12:34 p.m.

BY MR. BORDER:

Q. Let's go to Exhibit 2013, which I believe you have. Let's focus on this first step. It says that the application does a DNS lookup to convert the host name to an IP address. Do you see that?

A. Uh-huh.

Q. Do you agree that that host name would be that of a remote host, as an example?

A. In that example, it's a host name, so it could be remote.

Q. And it's related to a remote host? Would you agree with that?

MR. ZEILBERGER: Objection; form.

THE WITNESS: It's a host name so...

BY MR. BORDER:

Q. Go to step 2. It says the application requests a connection to the remote host. I guess what I'm getting at is, the host name identified in step 1, is that associated with the remote host that the application is attempting to

establish a connection with?

MR. ZEILBERGER: Objection; form. Foundation.

THE WITNESS: So in step 2 in Aventail the client application requests a connection to the remote host, and this connection request is checked by Aventail Connect. The connection request maybe previously created the false DNS entry and does not include a domain name.

BY MR. BORDER:

Q. Okay. Now, if you move on to step 2B, and in fact 2B3 if you're following me, it says it then sends the proxy request to the extranet SOCKS server. This includes either the IP address provided by the application or the DNS entry host name provided in step 1.

Is the host name referred to in step 2B3 the same as the host name referred to in step 1?

A. So the proxy request in step 2B3 may include a host name. That's what it says here. Which is sent after the -- which begins when the connection is complete.

Q. And so you agree that the host name

that is transmitted to the Aventail extranet server in 2B3 is the same as the host name that is received by Aventail Connect in step 1?

MR. ZEILBERGER: Objection; form.

BY MR. BORDER:

Q. Correct?

A. So again, in 2B this proxy request may include a host name. It doesn't say it's the same host name in 2A1 that you asked.

Q. I'm asking, is it your opinion that it is the same as the host name in step 1?

MR. ZEILBERGER: Objection; form.

THE WITNESS: As I said here, again Aventail Connect just says it may include a host name.

BY MR. BORDER:

Q. So you don't know?

A. It doesn't say whether it's the specific -- you're asking does it have to be the same.

Q. I didn't ask whether it has to be the same. I'm asking whether it's your opinion that it's the same.

MR. ZEILBERGER: Objection; form.

BY MR. BORDER:

Q. Is your response that you don't know?

MR. ZEILBERGER: Objection; form.

THE WITNESS: It can be included -- it can be that host name in step 1.

BY MR. BORDER:

Q. The host name in step 2B3 can be the same as the host name in step 1?

A. It says may include a host name. If you look --

Q. So if the --

MR. ZEILBERGER: Scott, you have to let Dr. Monrose answer.

BY MR. BORDER:

Q. All right. I'm going to strike that question and I'll ask you another one.

Referring to step 2B3, if the proxy request contains a host name, that host name will be the same as the host name identified in step 1, agreed?

MR. ZEILBERGER: Objection; form.

THE WITNESS: 1C says if the DNS proxy option is enabled -- which you're referring to -- later on Aventail Connect creates a fake DNS entry that it can recognize later and returns this to the calling application.

This false entry tells Aventail Connect that the DNS lookup must be proxy.

In 2B3, it sends the proxy request to the extranet server. This includes either the IP address provided by the application or the DNS entry host name provided in step 1.

BY MR. BORDER:

Q. Is that your answer?

A. Yeah.

Q. Well, you didn't answer my question.

A. As I said, it may be the one in step 1.

Q. Where do you see "may"?

MR. ZEILBERGER: Objection; form.

THE WITNESS: So in step 1, as I said, this could be a false entry. So in 2B, the DNS entry host name provided in step 1 could be the false entry.

BY MR. BORDER:

Q. So it's your opinion that the DNS entry host name provided in step 2B3 is the false DNS entry?

MR. ZEILBERGER: Objection; form. Foundation.

THE WITNESS: I don't believe I've expressed whether it has to be the one -- the same in step 1, but I need to go back and take a closer look.

BY MR. BORDER:

Q. So sitting here right now, you have no idea?

MR. ZEILBERGER: Objection; form. Foundation.

THE WITNESS: I said I need more time to go back and take a closer look.

BY MR. BORDER:

Q. So right now you don't know?

MR. ZEILBERGER: Objection; form. Foundation.

THE WITNESS: I didn't say I don't know. I said I need to -- Subject to what's in my declaration, I need to sit and take a deeper examination of that with respect to your specific question.

BY MR. BORDER:

Q. Okay. Well, let's look at step 1B. Maybe this will help. It says, Aventail Connect will forward the host name to the extranet SOCKS server in step 2 and the SOCKS server performs

the host name resolution.

Does that help you understand what the host name is that it sent to the extranet SOCKS server is in step 2B3, to the extent it includes a host name?

A. I said it could include that host name. Your question whether it can only be that, I said I need to sit back and think about it.

Q. Okay. So we at least agree that the host name in step 2B3 and the host name in step 1 can be the same host name, correct?

A. As said, I think I need to take a closer look at whether or not it restricts it to that case.

Q. I think my question was a little bit different. The question was: Can we at least agree that the host name in step 2B3 and the host name in step 1 can be the same host name?

MR. ZEILBERGER: Objection; form.

THE WITNESS: So there might be some specific detail that's missing me right now sitting looking at Exhibit 1009 that I need to think about further. But I believe it could be.

BY MR. BORDER:

Q. Okay. And the host name in step 1 is the host name that is matched against a redirection rule, correct?

MR. ZEILBERGER: Objection; form.

THE WITNESS: In step 1, a host name provided, it can be checked against -- will be checked against a redirection rule.

BY MR. BORDER:

Q. Okay. I think we can put Aventail away.

Let's look at your 812 declaration. Let's go to Paragraph 25.

In Paragraph 25 you discuss both address hopping and encryption, correct?

A. So in Paragraph 25 it speaks about address hopping, and my opinion with respect to the statements made under Apple's proposed construction.

Q. And it's your opinion that encryption hides information on the path while moving from address to address, correct?

A. Encryption hides information on the path.

Q. And you also state that address hopping alone does not preclude an eavesdropper

from reading the contents of a communication, correct?

A. I do.

Q. But you would agree that address hopping does make it difficult for an eavesdropper to obtain all the packets transmitted between two devices that are communicating, correct?

MR. ZEILBERGER: Objection; form. Foundation.

THE WITNESS: So I state in my declaration address hopping may make it difficult to detect who is talking to whom. But that's the only extent. It doesn't hide anything about the conversation.

BY MR. BORDER:

Q. But you would agree that the '009 patent uses address hopping to hide the -- Strike that.

You would agree that the '009 patent uses address hopping to hide the identities of the parties to a communication, correct?

A. It is part of what the '009 patent does.

Q. So certainly you would agree that

address hopping and encryption are different, right?

A. Yes.

Q. And they address different aspects of securing communications?

MR. ZEILBERGER: Objection; form.

THE WITNESS: In view of '009, address hopping and encryption are used differently.

BY MR. BORDER:

Q. Okay. Let's open up the '009 patent. This is Exhibit 1003. I think we gave you this before.

Are you aware of any disclosure in the '009 patent stating any concerns about the -- Strike that.

Are you aware of any disclosure in the '009 patent stating that there are concerns about the computing power needed to encrypt packets?

MR. ZEILBERGER: Objection; form. Foundation.

THE WITNESS: If you are asking do I recall in '009 whether Larson, et al., the patent owners disclosed whether computational power is an issue, off the top of my head right now, I don't recall.

BY MR. BORDER:

Q. Well, let's turn to the back of the '009 patent, the claim sections.

Claim 15 in particular, it states: "The method of Claim 14, wherein the secure communications service" -- oh, I'm sorry. Let me let you get there.

A. I'm there.

Q. So Claim 15 states: "The method of Claim 14, wherein the secure communications service includes a video conferencing service, and communicating includes communicating at least one of encrypted video data and audio data with the second network device via the encrypted communication link using the secure communications service."

Do you see that?

A. I do.

Q. This is the flavor of my earlier question. You're not aware of any disclosure in this patent where the authors are concerned about the feasibility of sending encrypted video data or audio data via the encrypted communication link, correct?

MR. ZEILBERGER: Objection; form.

Scope.

THE WITNESS: So sitting right here today, I don't recall specific mentions off the top of my head in '009 that it addresses this computational issue that you've raised. Though the prior art referenced in this case, Beser, specifically teaches that there are computational challenges with using encryption.

BY MR. BORDER:

Q. More broadly, do you believe that a person of ordinary skill in the art in February 2000 would have been able to configure a system to encrypt streaming video data or audio data similar to what is described in Claim 15?

MR. ZEILBERGER: Objection; scope.

THE WITNESS: By looking at what references in particular? You asked a general question. So back in circa 2000 whether I saw if one skilled in the art, sort of broad statement, that they need to include video conferencing services and at least one encrypted video data and audio, would they be able to do what?

BY MR. BORDER:

Q. I'll ask the question again.

Do you believe that a person of ordinary skill in the art in February 2000 would have been able to configure a system to encrypt video data and audio data within an encrypted communication link?

MR. ZEILBERGER: Objection; scope. Objection to form.

THE WITNESS: I've made no statement as to whether or not someone skilled in the art would be able to do this other than saying that with respect to Beser, Beser teaches away from the use of encryption, which is the reference pointed to here, primarily because of computational limitations pointed to by Beser.

BY MR. BORDER:

Q. So your testimony is you don't know?

MR. ZEILBERGER: Objection; form.

THE WITNESS: I didn't say that.

BY MR. BORDER:

Q. I'll ask you the question again.

A. Uh-huh.

Q. As someone who holds himself out to be a person of ordinary skill, correct -- you are a

person of ordinary skill, correct?

A. Correct.

Q. Would a person of ordinary skill in the art in February 2000 have been able to configure a system to encrypt video and audio data within an encrypted communication link?

MR. ZEILBERGER: Objection; scope. Objection; form.

THE WITNESS: You're asking a lot there. I said circa 2000, one of ordinary skill in the art would know how to do that.

BY MR. BORDER:

Q. Now, with respect to Claim 15, would a person of ordinary skill in the art in February 2000 have been concerned about the feasibility of sending encrypted video data and audio data via the encrypted communication link?

MR. ZEILBERGER: Objection; scope. Objection; form.

THE WITNESS: That depends on a number of factors, right? What type of encryption they're trying to do, what their understanding of it is.

BY MR. BORDER:

Q. Well, let's take the '009 patent.

What type of encryption is disclosed in the '009 patent?

A. In the '009 patent, in the "Background" section -- Sorry. Did you say in the reference or in the --

Q. In the '009 patent.

A. In the '009 patent.

So the '009 patent refers to several encryption schemes, including the use of both symmetric or asymmetric schemes. So as stated in Column 1, line 60 to 65. There's also a discussion of zero knowledge systems. And in Column 43 there's also a discussion of IPSec and message authentication, code HMAC, among others.

Q. Let's just pick one of those as an example. So do you agree that with respect to Claim 15, a person of ordinary skill in the art would not have been concerned -- Excuse me. Let me strike that.

Would a person of ordinary skill in the art in February 2000 have been concerned about the feasibility of sending video and audio data encrypted with IPSec via the encrypted communication link?

MR. ZEILBERGER: Objection; outside

the scope.

THE WITNESS: Again, I'm giving my opinion, and it all depends on their detailed knowledge. But IPSec, as an example, encompasses both symmetric and asymmetric crypto of which for asymmetric crypto there are performance implications. So it depends.

BY MR. BORDER:

Q. And the '009 patent does not identify any concerns about using either asymmetric or symmetric cryptography for its encryption, correct?

MR. ZEILBERGER: Objection; outside the scope of the witness's direct testimony and his declaration.

THE WITNESS: These matters at hand, I have not looked at that. I need more time to see through whether or not those statements hold.

BY MR. BORDER:

Q. What do you need to look at?

A. You said -- I will have to go through all the specifics of '009 and see whether or not there is ability for that computation is an

issue. That's outside of what we're discussing here.

Q. Okay. Well, let's move outside the scope of the '009 patent and just focus on your opinion as a person of ordinary skill in the art in February 2000.

Do you know whether a person of ordinary skill in the art in February 2000 would have been concerned about encrypting video and audio data using IPSec?

MR. ZEILBERGER: Objection; outside the scope of the witness's direct testimony.

THE WITNESS: As I said before, it depends on a number of factors. I don't know what else you want me to tell you. There are computational issues with respect to cryptography.

MR. ZEILBERGER: Scott, can we take a quick break?

MR. BORDER: Yes. This is a good stopping point.

(Recess taken.)

BY MR. BORDER:

Q. Let's go to Paragraph 40 in your 812 declaration. My question is: In reviewing

Dr. Tamassia's testimony, how do you know what Dr. Tamassia meant when he said "the DNS protocol for such requests"?

MR. ZEILBERGER: Objection; form. Also object to the extent this question calls for privileged or work product information.

But to the extent you can answer that without providing such information, the witness may answer.

THE WITNESS: So I can say that I was -- as part of my services, I was asked to respond to a statement made by Dr. Tamassia in his cross-examination.

BY MR. BORDER:

Q. How do you know that Dr. Tamassia was not referring to the DNS protocol described in the '009 patent in this passage that you quote in Paragraph 40?

MR. ZEILBERGER: Objection; form. Objection; foundation.

THE WITNESS: So I just said my understanding is that he explained that he understood that the domain name service request to look up a network address as

recited in Claim 1 was a request that follows the DNS protocol for such request. That's his understanding.

BY MR. BORDER:

Q. What do you understand the DNS protocol to refer to?

MR. ZEILBERGER: Objection; form.

THE WITNESS: This is specific to the -- on the Claim 1 whether the request follows a DNS protocol for such request. I took his understanding and I looked to see whether or not these requests follow -- and that's how they follow the DNS protocol, and I could not find that. So...

BY MR. BORDER:

Q. What protocol is the DNS protocol?

MR. ZEILBERGER: Objection; form.

THE WITNESS: The domain name service protocol. His statement is more specific, that he made an argument that he believes they follow the DNS protocol for such requests. I have not evaluated -- I haven't made any statements beyond that. The limitation is alleged to have been met, and I looked for whether that could be the case

under his understanding put forth by Apple's own expert, and I could not find it. That's all I'm saying in Paragraph 40.

BY MR. BORDER:

Q. Would a person of ordinary skill in February 2000 understand what the DNS protocol was?

A. Yes.

Q. And do you ever challenge Dr. Tamassia as not being a person of ordinary skill?

MR. ZEILBERGER: Objection; scope.

THE WITNESS: I have no reason to challenge him.

BY MR. BORDER:

Q. So you agree that Dr. Tamassia would understand what the DNS protocol entails?

MR. ZEILBERGER: Objection; scope.

BY MR. BORDER:

Q. Correct?

A. As I said, all I'm saying here is he's made a statement that that request in 1 follows the DNS protocol for such requests, and I find that in Beser's tunnel request it's silent on whether or not it follows the DNS protocol.

Q. But you agree that he would understand

what the DNS protocol actually is, correct?

MR. ZEILBERGER: Objection; scope.

THE WITNESS: I agree he should.

BY MR. BORDER:

Q. And is that the DNS protocol specified in RFCs 1034 and 1035?

MR. ZEILBERGER: Objection; form. Objection; outside the scope of the witness's direct testimony.

THE WITNESS: Again, as I said before, Dr. Tamassia during cross-examination was -- I was informed he made a statement. I needed to evaluate that statement and see whether or not the alleged limitations were met. And what is referred to I cannot -- All I'm saying is Beser is silent as to whether these requests follow the DNS protocol.

BY MR. BORDER:

Q. So is it your opinion that a prior art reference only teaches what is explicitly in the reference?

MR. ZEILBERGER: Objection; outside the scope of the witness's direct testimony.

THE WITNESS: I have given no such

opinion.

BY MR. BORDER:

Q. So you agree that a person of ordinary skill -- Strike that.

You agree that a prior art is viewed from the perspective of a person of ordinary skill, correct?

A. At the time of the invention.

Q. And that certain aspects of that prior art need not be explicit. Do you agree with that?

MR. ZEILBERGER: Objection; form.

THE WITNESS: Again, I think we're going at this -- we're speaking past each other. Here Dr. Tamassia said that he believed that those requests needed to follow the DNS protocol. And under that understanding, his understanding, I see Beser being silent on that.

BY MR. BORDER:

Q. And when you state that you see Beser being silent on that, your expectation is that Beser would have to explicitly say DNS protocol in order to follow DNS protocol, correct?

MR. ZEILBERGER: Objection; form.

Objection; foundation.

THE WITNESS: Whether the tunneling request --

MR. ZEILBERGER: Hold on. Let me make my objections.

THE WITNESS: Oh, sorry.

MR. ZEILBERGER: Objection; form. Objection; foundation.

THE WITNESS: As I said here, it's just silent on whether the tunneling requests follow the DNS protocol.

BY MR. BORDER:

Q. But you agree that a prior art reference can be silent as to certain particular issues because it's not what is explicitly disclosed but what is understood by a person of ordinary skill in the art. Do you agree with that?

A. Given --

MR. ZEILBERGER: Objection; form. Objection; outside the scope of the witness's direct.

THE WITNESS: My understanding is given what the prior art teaches and the specifications thereof.

BY MR. BORDER:

Q. So you have no opinion whether a person of ordinary skill would understand that Beser's tunneling requests follow the DNS protocol, correct?

MR. ZEILBERGER: Objection; form.

THE WITNESS: My opinion is that Beser is silent as to whether the tunneling requests follow the DNS protocol.

BY MR. BORDER:

Q. And when you say it's silent, you mean it explicitly does not state that it follows the DNS protocol, correct?

A. It makes no connection to the tunneling requests following the DNS protocol, as far as I can tell.

Q. It makes no explicit connection as far as you can tell, correct?

A. I don't believe it makes an implicit or explicit connection.

Q. Do you know what a recursive approach to resolving DNS queries is?

MR. ZEILBERGER: Objection; scope and form.

THE WITNESS: In general, I know that

DNS has iterative and recursive approaches.
BY MR. BORDER:
Q. And do you know how a recursive approach works?
MR. ZEILBERGER: Objection; outside the scope of the witness's direct testimony.
THE WITNESS: Sitting right here today, I can't recall all the specifics of all of the transactions that happen in a recursive.
BY MR. BORDER:
Q. Can you tell me generally how a recursive approach works?
MR. ZEILBERGER: Same objection.
THE WITNESS: So generally speaking, you make a request to a local resolver that attempts to walk through the DNS name space.
BY MR. BORDER:
Q. In the recursive approach to resolving a DNS query, a DNS server that receives a request from a client will contact other servers to obtain an IP address associated with the domain name in the request, correct?
MR. ZEILBERGER: Objection; foundation. Objection; outside the scope of

the witness's direct testimony.

THE WITNESS: So generally speaking, without going through and recalling all the specifics of the recursive method in DNS, other resolvers may be relied upon.

BY MR. BORDER:

Q. One more question and we'll move on. By "resolvers," do you mean other DNS servers?

MR. ZEILBERGER: Objection; outside the scope of the witness's direct. Objection; form.

THE WITNESS: So again you asked a very general question. As I said before, the intricacies of whether it's iterative or a recursive approach -- in fact, every time I teach that, which I do teach, I have to go back and look at the specifics of the two. They involve things that might be considered local, stub resolvers, DNS servers. It could be a host of things. I'm not going to be able to sit here and tell you exactly what the resolvers are in each case.

BY MR. BORDER:

Q. Let's go to Exhibit 1007. It's Beser. Do you have a copy?

I've handed you Exhibit 1007, which is United States patent to Beser, Patent Number 6,496,867. Do you recognize this?

A. I do.

Q. I think the first thing I would like to do is understand the general processes described in Beser. I would say let's turn to Figure 6. Are you there?

A. Uh-huh.

Q. So the first step in establishing a tunnel between the originating telephony device and the terminating telephony device -- so the first thing that happens is the originating telephony device will issue a timely request to communicate with the terminating telephony device, correct?

MR. ZEILBERGER: Objection; foundation. Objection; form.

THE WITNESS: So it's disclosed, the tunnel association between the originating end and the terminating end here in Beser is facilitated by an intermediary. And when that device you mentioned, 24 wants to communicate with 26, it sends a tunnel initiation request to 14. And this request

includes a unique identifier for the terminating end of the tunnel association.

BY MR. BORDER:

Q. So I'll ask the question again. When the originating telephony device 24 wants to communicate with the terminating telephony device 26, it issues a request that includes the unique identifier of the terminating telephony device, correct?

MR. ZEILBERGER: Objection; foundation. Form.

THE WITNESS: The request includes a unique identifier for the terminating end of the tunnel association.

BY MR. BORDER:

Q. And that request is not received at the terminating telephony device 26 but is received at the first network device 14, correct?

MR. ZEILBERGER: Objection; form.

THE WITNESS: The originating -- The request 112, as depicted in Figure 6, refers to the request to initiate a tunnel that is sent from 24, element 24, to element 14.

BY MR. BORDER:

Q. My question was a little bit

different. That request is received at the first network device, correct?

MR. ZEILBERGER: Objection; form.

THE WITNESS: That request is addressed to the first network device 14.

BY MR. BORDER:

Q. That's not my question. My question is: The request is received at the first network device, correct?

MR. ZEILBERGER: Objection; form.

THE WITNESS: The request is addressed to and sent to the first network device 14. I think we're saying the same thing.

BY MR. BORDER:

Q. We're not saying the same thing.

Is the request for a tunneling association by originating device 24 received at the first network device 14?

MR. ZEILBERGER: Objection; form.

THE WITNESS: It is addressed to network device 14 and processed by network device 14.

BY MR. BORDER:

Q. Dr. Monrose, I'm not asking you what it's addressed to. I'm asking you whether the

first network device receives the tunneling request, yes or no?

A. It is addressed to it. So how do you mean?

Q. So you agree that the first network device receives the tunneling request?

A. It's addressed to it, yes.

Q. You agree that the first network device receives the tunneling request?

A. Again, the tunneling request is sent from device 24 to device 14.

Q. And is it received by device 14?

A. It's received by device 14 then. 24 sends a request 112 to 14.

Q. And the unique identifier identified in that request is of the terminating telephony device 26, correct?

MR. ZEILBERGER: Objection; foundation.

THE WITNESS: It includes a unique identifier for the terminating end of the tunnel association.

BY MR. BORDER:

Q. Let's go to Paragraph 37. Hold on a second. I may be able to skip that.

Let's go to Paragraph 38 instead. This is your 812 -- 810, which I do not have in front of me.

So let's look at your 810 declaration. And I'm looking at Paragraph 38. Do you agree that the originating device does not address tunneling requests to the trusted third-party network device?

MR. ZEILBERGER: Objection; form.

THE WITNESS: So can you repeat your question now that I've read 38?

BY MR. BORDER:

Q. Sure.

You would agree that the originating device does not address tunneling requests to the trusted third-party network device, correct?

MR. ZEILBERGER: Objection; form.

THE WITNESS: So the request, the inform request that goes to the trusted third party, is from the first network device 14, and it's addressed to the trusted third party. Which as I say here, Beser explains that when the first network device 14 informs trusted third-party network device 30 of a request, it constructs an IP

packet where the header of the IP packet contains the public network address of the trusted third-party network device in the destination field and the public network address of the first network device 14 in the source field.

BY MR. BORDER:

Q. So it's your opinion that when the first network device receives the tunneling request, it creates a new IP packet that is addressed to the third-party network device, correct?

A. It's a different request. It says they get a request to initiate a tunnel, and then the first network device sends an inform message.

Q. So then it is your opinion that the tunneling request is not addressed to the third-party network device, correct?

MR. ZEILBERGER: Objection; form. Objection; foundation.

THE WITNESS: I don't know what you mean here by "the tunneling request."

BY MR. BORDER:

Q. Well, let me put a little finer point on it.

So you would agree that the originating device does not address tunneling requests to the third-party network device, correct?

A. I would agree that the originating device 24 sends a request labeled here 112, to the first network device. There is a second request from that first network device which it refers to in Beser as the inform message that goes to the trusted third party.

Q. So what you refer to as the first request, which is the request from the originating device, that request does not have the address of the trusted third-party network device, correct?

MR. ZEILBERGER: Objection; form.

THE WITNESS: Column 7 and 8 of the '867 says the --

BY MR. BORDER:

Q. Which line?

A. Column 8, first line: "...the request includes a unique identifier for the terminating end of the tunnel association." And here we're talking about request 112.

Q. So you agree it does not include the

address of the trusted third-party network device, correct?

MR. ZEILBERGER: Objection; form.

THE WITNESS: So again, subject to what's in my declaration, but I do believe that those requests only include the unique identifier for the terminating end of the tunneling association and not the trusted third-party network device.

BY MR. BORDER:

Q. It's possible that the recording here didn't quite capture your answer. I just want to confirm.

So again, subject to what's in your declaration, you believe that the tunneling request only includes the unique identifier for the terminating end of the tunneling association and not the address of the trusted third-party device, correct?

MR. ZEILBERGER: Objection; mischaracterizes the witness's testimony.

THE WITNESS: What I said was, subject to what's in my declaration, that I believe that this request includes a unique identifier for the terminating end of the

tunneling association.

BY MR. BORDER:

Q. But it does not include the address of the third-party -- of the trusted third-party network device, correct?

A. And as I said, offhand I don't recall statements that it does or does not include the trusted third party.

Q. Sitting here today, you don't know one way or the other?

A. As far as I recall from the specifications of Beser, it includes a unique identifier for the terminating end of the tunneling association.

Q. But you don't know whether it has -- whether or not it has the address of the trusted third-party network device?

MR. ZEILBERGER: Objection to form.

THE WITNESS: I don't recall commenting on whether or not that request includes the trusted third party.

BY MR. BORDER:

Q. What do you mean by you don't recall commenting? Is that in your declaration?

A. I have said subject -- I don't recall

that in my declaration sitting here right now.

Q. What about in Beser, do you recall any disclosure in Beser that suggests that the third-party network device -- that the address of the third-party network device is in the tunneling request from the originating device?

MR. ZEILBERGER: Objection to form.

BY MR. BORDER:

Q. Let me strike that question. I think I can see the confusion here.

You agree that the originating device does not address the tunneling request to the third-party network device, correct?

A. Correct.

Q. Okay. Let's move to Paragraph 33 of the 810 declaration.

Is it your opinion that the trusted third-party network device does not look up a private IP address for the terminating device?

A. So as I stated -- and this is in Paragraph 34, which is connected to Paragraph 29 and the info message -- that the trusted third-party network device 30 associates a public IP address of the second network device with the unique identifier of the terminating telephony

device.

And Beser states that the database entry on the trusted third device may include the public IP address of the terminating device referenced in Paragraph 29. Beser does not disclose that this structure is looked up when the request is received. It only teaches that when the trusted third-party network device is informed of the request, it associates a public address of the second network device with the unique identifier of the terminating device.

Q. So do you agree -- do you at least degree that Beser will return to the first public network device a public IP address of the second network device?

MR. ZEILBERGER: Objection; foundation.

THE WITNESS: What is your question? I'm sorry.

BY MR. BORDER:

Q. I'm looking at the first question -- I'm sorry, the first sentence in Paragraph 34. You quote look up and return to the first network device.

I'm wondering, is it your opinion that

Beser both does not look up and does not return to the first network device a public IP address for the second network device, or that it simply does not look up?

A. It --

MR. ZEILBERGER: Let me object.

THE WITNESS: Sorry.

MR. ZEILBERGER: Objection; form. Objection; foundation.

THE WITNESS: So what I'm commenting on is what the petitioner alleged happens, which is look up and return of the first network device. And my declaration, in response to that argument, I'm saying that Beser does not disclose such a lookup happens.

BY MR. BORDER:

Q. Okay. So you're only focused on the lookup?

MR. ZEILBERGER: Objection; form.

BY MR. BORDER:

Q. You're not disputing that an address is returned, right?

MR. ZEILBERGER: Objection; form. Mischaracterizes testimony.

THE WITNESS: All I'm saying is that a lookup -- I don't see Beser teaching that a lookup is performed.

BY MR. BORDER:

Q. So it's your opinion that Beser is silent about how the trusted third-party network device associates a public IP address for the second network device, correct?

MR. ZEILBERGER: Objection; form.

MR. BORDER: Let me restate that.

BY MR. BORDER:

Q. So it is your opinion that Beser is silent about how the trusted third-party network device associates a public IP address for device 16, the second network device, with the unique identifier, correct?

A. So as I stated before, Beser states that the database entry in the trusted third-party network device may include the public IP address for the terminating device. How this -- It does not teach when the device 30 is informed of the request to initiate the tunnel, how it associates the public IP address to the second network.

Q. All right. Well, let's turn to

Column 9 of Beser, line 64. And this is describing Figure 5, correct?

A. You said Column 9?

Q. Column 9, line 64. So this passage begins the description of Figure 5, correct?

A. It does.

Q. And it states that Figure 5 illustrates method 110 for initiating a VoIP association between an originating device 24 and a terminating device 26, correct?

A. Yes.

Q. So let's turn to Figure 5. And you see it has four steps numbered here, steps 112, 114, 116 and 118, correct?

A. I see those four steps.

Q. So let's go back to Beser's description at Column 10, lines 2 to 4. And the passage starting at Column 10, line 2 to 4 of Beser is describing step 112 of Figure 5, correct?

A. The second line on Column 10 discloses -- includes receiving a request to initiate the VoIP association on the first network device 14 at step 112.

Q. So that begins the description of the

action that takes place at step 112, correct?

A. Correct.

Q. And then moving down to Beser at Column 11, line 9 and 10, this passage describes step 114 of Figure 5, correct?

A. Column 11, line 9 to 25 refers to step 114.

Q. Okay. And then moving on to the next paragraph beginning at line 26 of Column 11, this begins the description of step 16, correct? I'm sorry, step 116.

A. Can you repeat your question?

Q. Yeah, sorry about that.

So moving down in Column 11 of Beser, starting at line 26, this passage begins the description of step 116 in Figure 5, correct?

A. That paragraph is referring to step 116.

Q. And step 116 in Figure 5 is labeled associate a public IP address for a second network device on the trusted third-party network device, correct?

A. That's what it is labeled.

Q. So let's skip down to line 59 in Column 11. The passage starting at line 59 of

Column 11 is describing step 118 of Figure 5, correct?

A. Line 59 to 67 in Column 11 is referring to the negotiation of the private addresses on the first network device and the second network device.

Q. And the description of step 118 continues through to Column 12, line 19, right?

MR. ZEILBERGER: Objection; foundation.

THE WITNESS: Again, Column 12, lines 1 to 19 do seem to be referring to step 118.

BY MR. BORDER:

Q. Okay. Let's skip back a little bit. You testified earlier that Column 11, line 26, and the paragraph that follows, is describing step 116, correct?

A. Can you point me to where you're referring to, please?

Q. Sure. Column 11, line 26.

MR. ZEILBERGER: Objection; foundation.

THE WITNESS: So Column 11, as we discussed before, line 26, is discussing the

steps -- the step -- it's discussing step 116.

BY MR. BORDER:

Q. And the discussion of step 116 continues until line 58, correct?

MR. ZEILBERGER: Objection; form.

THE WITNESS: The discussion continues until that line.

BY MR. BORDER:

Q. All right. Let's go to Paragraph 15 through 17 of your 810 declaration. Let's take a look at your construction of secure domain name.

A. Is this a different question altogether?

Q. No, no. We're looking at 15, Paragraph 15.

A. But you stopped your line of questioning on Figure 116?

Q. Yes.

A. Okay. I'm trying to keep it all in my head here.

Q. So in Paragraph 15 you provide a construction of secure domain name, correct?

MR. ZEILBERGER: Objection.

THE WITNESS: I don't provide a

construction. I said VirnetX proposed a construction which says it's a nonstandard domain name that corresponds to a secure computer network address and cannot be resolved by conventional DNS service. And in light of the specifications in the claim language, it seems in keeping with what's there.

BY MR. BORDER:

Q. So you agree with that proposed construction of "secure domain name"?

A. I agree it's in keeping with what the patent teaches.

Q. Okay. Well, let's go to Beser at -- let's go to Beser at Column 10, line 38 to 41. And --

A. You've got to slow down. Sorry.

Q. Sorry about that. In fact, let's look at line 38. It says: "In another exemplary preferred embodiment of the present invention, the unique identifier is any of a dial-up number, an electronic mail address, or a domain name."

Do you see that?

A. I do.

Q. Did you consider whether a dial-up

number could be a secure domain name when forming your opinion?

A. So again, I agree that the -- with the patent, specifics are given that it's a nonstandard domain name that corresponds to a secure computer address. And I believe in this declaration I've pointed to some examples of that.

Q. But did you consider whether the dial-up number specified in lines 38 to 41 of Column 10 of Beser is a secure domain name when forming your opinion?

MR. ZEILBERGER: Objection; form.

THE WITNESS: A part of that construction is that it cannot be resolved by conventional DNS.

BY MR. BORDER:

Q. And so it's your opinion that a dial-up number cannot be a secure domain name?

MR. ZEILBERGER: Objection; mischaracterizes the witness's testimony.

THE WITNESS: I did not give an opinion on that. I have not.

BY MR. BORDER:

Q. Is it your opinion that a dial-up

number can be a secure domain name?

MR. ZEILBERGER: Same objection.

THE WITNESS: A secure domain name is a construed term. And to answer your question, I would have to look very closely at the dial-up number and whether it meets all the specifications outlined for a secure domain name.

BY MR. BORDER:

Q. You haven't previously done that analysis, correct?

A. For a dial-up number?

Q. Correct.

A. As far as I recall, that is correct.

MR. BORDER: This is a good stopping point. Why don't we take a break.

(Recess taken.)

BY MR. BORDER:

Q. Can you please turn to Paragraph 3 of your 810 declaration. There you state you have reviewed the exhibits and other documentation supporting the petition that are relevant to the decision and the instituted grounds and any other material that I reference in this declaration.

Do you see that?

A. Where are you reading from? I'm sorry.

Q. That's the last sentence of Paragraph 3.

A. That's correct.

Q. So you agree one of the exhibits you would have reviewed would have been RFC 2401, correct?

A. That's correct.

Q. And that's Exhibit 1108. And you reviewed some of the other exhibits that were referenced in the decision and the instituted grounds, correct?

MR. ZEILBERGER: Objection; form.

THE WITNESS: For this petition, I looked at what was referenced.

BY MR. BORDER:

Q. Now, you reviewed other RFCs throughout your career, correct?

MR. ZEILBERGER: Objection; outside the scope of direct.

THE WITNESS: What do you mean by "reviewed"?

BY MR. BORDER:

Q. Well, you're familiar with what an RFC

is, correct?

A. That's correct, uh-huh.

Q. And you have used them in your work, correct?

A. That's correct.

Q. So would it be fair to say that someone of ordinary skill in the art would be familiar with an RFC generally?

MR. ZEILBERGER: Objection; outside the scope of direct.

THE WITNESS: Based on my knowledge of the educational level of those skilled in the art at the time of the invention, I believe they would be aware of the concept of an RFC.

BY MR. BORDER:

Q. And they would be aware of how they could get a relevant RFC, correct?

MR. ZEILBERGER: Objection; form. Objection; outside the scope.

THE WITNESS: What do you mean by "get"?

BY MR. BORDER:

Q. They would be aware of how they could find and acquire a relevant RFC, right?

MR. ZEILBERGER: Objection; form. Objection; outside the scope of direct.

THE WITNESS: I've not made any opinions as to whether or not the RFC -- how to get hold of an RFC would have been known by one of skill in the art.

BY MR. BORDER:

Q. All right. Well, let me give you Exhibit 1008, it's RFC 2401.

A. Okay.

Q. If a person of ordinary skill in the art in February of 2000 wanted to read about IPSec, do you agree that one of the places they would have looked is to RFC 2401, correct?

MR. ZEILBERGER: Objection; scope. Objection; form.

THE WITNESS: So I agree that -- sorry -- IPSec is disclosed in this RFC, RFC 2401. And so it's one place to look for information about IPSec.

BY MR. BORDER:

Q. And do you know how you would obtain a copy of an RFC?

MR. ZEILBERGER: Objection; outside the scope of direct.

THE WITNESS: Are you asking about now or in the past?

BY MR. BORDER:

Q. Let's start with now.

MR. ZEILBERGER: Same objection.

BY MR. BORDER:

Q. How would you obtain a copy of an RFC today?

MR. ZEILBERGER: Objection; outside the scope of direct.

THE WITNESS: Generally speaking, you look for whether -- you look and see if the RFC is available on the web, as an example.

BY MR. BORDER:

Q. And where do you look to see if the RFC is available?

MR. ZEILBERGER: Objection; form. Objection; outside the scope of direct.

THE WITNESS: I don't understand what you mean, where you look. As an example, look on, you know, on the web, however the RFCs are being distributed.

BY MR. BORDER:

Q. And in February of 2000, where would you look to see if an RFC is available?

MR. ZEILBERGER: Objection; form. Objection; outside the scope of direct.

MR. BORDER: Let me ask a different question.

BY MR. BORDER:

Q. The web was available in February of 2000, correct?

MR. ZEILBERGER: Objection; outside the scope of direct.

BY MR. BORDER:

Q. And you agree that might be a place you would look for an RFC in February of 2000, correct?

MR. ZEILBERGER: Objection; form. Objection; outside the scope of direct.

THE WITNESS: Again, my -- it all depends on how widely distributed that RFC is and where you would look and how you would find it.

BY MR. BORDER:

Q. But you do agree the web was available in February of 2000?

MR. ZEILBERGER: Objection; form. Objection; outside the scope of direct.

THE WITNESS: If you're asking if the

web existed then, the web existed.
BY MR. BORDER:
Q. And by "web," we're talking about the Internet, correct?
MR. ZEILBERGER: Objection; outside the scope of direct.
THE WITNESS: Ask me a general question. Yes.
BY MR. BORDER:
Q. So let's look at Exhibit 1008. Take a look at the top right. Do you see that? Well, let's take a look at the front page of this. Does this look familiar to you generally as an RFC?
MR. ZEILBERGER: Objection; outside the scope of direct. Objection; form.
THE WITNESS: If you're asking me if what's in front of me looks like an RFC, it says RFC 2401.
BY MR. BORDER:
Q. Is this generally the format of what an RFC might look like?
MR. ZEILBERGER: Objection; outside the scope of direct.
THE WITNESS: As I said before, RFCs

that I've looked at, they're in keeping with what is presented here. It's an RFC.

BY MR. BORDER:

Q. And looking at the top right-hand corner, there is a date there, correct?

MR. ZEILBERGER: Objection; form.

THE WITNESS: On the document you handed me, there is a date of November 1998.

BY MR. BORDER:

Q. And what does November 1998 mean to you?

MR. ZEILBERGER: Objection; outside the scope of direct.

THE WITNESS: What do you mean? It's November 1998.

BY MR. BORDER:

Q. What does that mean in the context of this document?

MR. ZEILBERGER: Objection; outside the scope of direct.

THE WITNESS: It could mean many things. I haven't considered what it means specifically for this document.

BY MR. BORDER:

Q. Do you agree that this document,

November 1998 -- Strike that.

So you're unaware of what the November 1998 -- Strike that.

So you're unaware of what the date on the front page of an RFC signifies, right?

MR. ZEILBERGER: Objection; outside the scope of direct.

THE WITNESS: I didn't say I'm unaware. I said you point me to it. There's a date here. And it doesn't say anything about how widely distributed it is at that date, but there is a date on that RFC. I'm not making any statements as to whether or not I know exactly what that date is referring to.

BY MR. BORDER:

Q. So based on your experience as a person of ordinary skill in the art, you don't know what the date at the top right of an RFC means?

MR. ZEILBERGER: Objection; outside the scope of direct.

THE WITNESS: The date is -- The date is the date on the document. It doesn't say anything -- Your earlier question was about

how do you get it. It doesn't say anything about how available the document may or may not have been by that date.

BY MR. BORDER:

Q. But you agree that it would be available by that date?

MR. ZEILBERGER: Objection; form. Objection; outside the scope of direct.

THE WITNESS: I don't know to whom it's available at that time.

BY MR. BORDER:

Q. I didn't ask to who it was available, Dr. Monrose. I asked whether you agree it would be available by November 1998.

MR. ZEILBERGER: Objection; form.

BY MR. BORDER:

Q. Can we at least agree on that point?

MR. ZEILBERGER: Objection; form. Objection; outside the scope of direct.

THE WITNESS: I have made no statements about that.

BY MR. BORDER:

Q. I'm not asking whether you've made statements about that, Dr. Monrose. I'm asking whether as a person of ordinary skill, whether

you would agree that November 1998 on the front of this document means that it was available in November 1998.

MR. ZEILBERGER: Objection; form. Objection; outside the scope of direct.

THE WITNESS: Your question is loaded because it means a definition of what "available" is. As I've said, I don't know, and I haven't given an assessment of how widely distributed or how available this particular document was then.

BY MR. BORDER:

Q. How about any RFC document? You told me you were familiar with RFCs, correct?

MR. ZEILBERGER: Scott, if you continue this direct line of questioning, can you please point to where this is in his direct testimony? Otherwise we're going to have to call the Board.

MR. BORDER: Call the Board.

(Off the record.)

BY MR. BORDER:

Q. All right. Let's continue with your declaration 810 and 812. So if you can open up your 810 declaration to Paragraph 37. And if you

could also open up your 812 declaration to Paragraphs 45 and 46.

So let's start with 810. And at the end of Paragraph 37 you state: "Therefore, in my opinion, the first network device in Beser" --

A. Can you give me a second, please?

Q. Sure.

A. What paragraph are you referencing?

Q. For 810, let's look at 37. Let me know when you're ready. If you could read 38 as well. I have some questions about it.

A. Okay.

Q. So in Paragraphs 37, 38 and 39, you are analyzing whether or not Beser discloses the interception language in the '705 and '009 patents, correct?

MR. ZEILBERGER: Objection; form. And mischaracterizes testimony.

THE WITNESS: Paragraphs 36, 37 and 38 --

BY MR. BORDER:

Q. And 39.

A. And 39 are about the alleged request in Beser that meets the interception step. In particular, the argument -- the statements again

here made by Dr. Tamassia about what he believed this referred to and his understanding. And so applying his -- so in this context, it's applying his understanding to whether or not the alleged limitations are met.

Q. Okay. So I'm looking at Paragraph 38. You state: "Thus, one of skill would have understood that the packet received by trusted third-party network device 30 is intended for, and ordinarily received by, third-party network device 30 since the destination address of the packet contains the address of the trusted third-party network device 30."

Do you see that?

A. I'm looking for where you are referring to. You said 38?

Q. 38.

A. Uh-huh.

Q. Do you see that sentence I just read?

A. You need to repeat it.

Q. It begins with "Thus" after the citation.

A. Yes, uh-huh.

Q. You agree with me that "intended for" is not part of the petitioner's construction,

correct?

MR. ZEILBERGER: Objection; foundation.

THE WITNESS: So again, that whole discussion is referencing Dr. Tamassia's cross-examination in which he said that his understanding was that it was referring to -- it could either be a scenario in which a request is intended for receipt at the destination other than a destination at which the request is intercepted, or a scenario in which a request ordinarily received by another entity and instead is received at the first entity.

So Paragraph 38 and 39, he's saying under that interpretation, Beser does not teach that either.

BY MR. BORDER:

Q. Okay. I'm going to ask my question again.

A. Uh-huh.

Q. You agree that the term "intended for" is not part of petitioner's proposed construction, correct?

MR. ZEILBERGER: Objection; form. Foundation.

THE WITNESS: The words "intended for" are not part of the proposed construction.

BY MR. BORDER:

Q. And the words "intended for" are not part of the Board's construction in a related proceeding, correct?

MR. ZEILBERGER: Objection; form. Foundation.

THE WITNESS: Which related proceeding?

BY MR. BORDER:

Q. Well, Dr. Monrose, at the bottom of this page you state that in your opinion there is no interception in Beser according to, and you list a number of things. And you say the Board's construction of the term in a related proceeding.

A. Because I believe the -- If I recall correctly, the Board had adopted Apple's construction at some point.

Q. Okay. So then you agree that "intended for" is not part of the Board's construction in a related proceeding, correct?

A. The words "intended for" are not part

of that construction.

Q. And the words "intended for" are not part of VirnetX's construction either, correct?

A. I don't say that they are.

Q. Okay. Just confirming.

Now, same questions. Do you agree that the words "orderly received by" are not part of petitioner's proposed construction, right?

A. I agree that these words, "orderly received by," do not appear in the proposed construction.

Q. And you're not saying that they're a requirement of the proposed construction, are you?

A. I made no statements about whether it's required. Again, 37, 38 and 39 are with respect to what Apple's expert said in -- in doing due diligence, looked at his interpretation and seeing whether or not that could be met by the specification. And as I say in Paragraph 38, I don't see how that can be met.

Q. You agree that the words "ordinarily received by" are also not part of patent owner's proposed construction, correct?

A. "Ordinarily received by" are not part

of the proposed construction.

Q. And you also agree that the words "ordinarily received by" are not part of petitioner's proposed construction, correct?

MR. ZEILBERGER: Objection; form.

THE WITNESS: Again, as far as I recall, they are not. I am responding here to the statements made by the expert for Apple, Dr. Tamassia.

BY MR. BORDER:

Q. But you agree that these statements were not made by the Board, correct?

A. And I don't say that they are.

Q. Well, these statements are the basis for your opinion that the Board's construction of the term in the related proceeding -- or that intercepting doesn't meet the Board's construction of the term in a related proceeding, correct?

MR. ZEILBERGER: Objection; mischaracterizes prior testimony.

BY MR. BORDER:

Q. Let me put it a different way. In analyzing whether the intercepting that's described in Beser satisfies the Board's

construction of that term in the related proceeding, you relied on words "intended for" and "ordinarily received by" to offer your opinion, correct?

MR. ZEILBERGER: Objection; mischaracterizes testimony.

THE WITNESS: Again, I relied on, in this part, the statements made by Dr. Tamassia and evaluated them. And I said under that, I don't see how it can -- these can be met.

BY MR. BORDER:

Q. But you have no analysis in here with respect to the Board's construction of the term, correct?

A. I said under his statements, this is just reflective that -- I see Beser does not express this. I have given no opinion about the Board's construction itself or anybody else's.

Q. So your opinion that it does not satisfy the Board's construction of the term in a related proceeding is based solely on Dr. Tamassia's testimony in this proceeding?

MR. ZEILBERGER: Objection; mischaracterizes testimony.

THE WITNESS: No. The statements made here in Paragraph 38 are saying that given his understanding, I don't see how any of those are met.

BY MR. BORDER:

Q. But you just agreed with me that the Board's construction does not include the terms "intended for" and "ordinarily received by," correct?

MR. ZEILBERGER: Objection; mischaracterizes testimony.

MR. BORDER: It's an improper objection, Dan. Can you do a proper objection, please. Mischaracterizes the testimony is not a proper objection. Object to form. Object to foundation. Object to outside the scope.

BY MR. BORDER:

Q. Do you want me to repeat my question?

A. I would.

Q. Your analysis on whether or not Beser satisfies the intercepting step, or your analysis on whether or not Beser discloses the intercepting step in these patents is based on the words "intended for" and "ordinarily received

by," correct?

A. It's based on -- in Paragraph 38, Dr. Tamassia's understanding of what this means.

Q. So you don't base it on the actual Board's understanding of what that term means, correct?

MR. ZEILBERGER: Objection; form.

THE WITNESS: I made no statements about what the Board's interpretation of those terms are. He has an understanding, and given that understanding, I don't see how it meets receiving a request pertaining to a first entity and another entity under this pertaining -- under his analysis of pertaining. And so my conclusion is that Beser doesn't teach this.

BY MR. BORDER:

Q. And you haven't formed an opinion -- You haven't formed your own opinion about whether Beser discloses the interception step, correct? In other words, your opinion about whether Beser discloses the interception step is based solely on Dr. Tamassia's testimony, correct?

A. In 810 and 812, the analysis on that front is with respect to Dr. Tamassia's

testimony.

Q. And so you have no independent opinion about whether or not Beser discloses that claim limitation, correct?

MR. ZEILBERGER: Objection; form.

THE WITNESS: As I said, I'm responding to comments raised by Dr. Tamassia, and my declaration here is addressing those comments.

BY MR. BORDER:

Q. And your declaration only addresses those comments, correct?

A. In Paragraph 38, with respect to his understanding.

Q. And in Paragraph 37 as well?

MR. ZEILBERGER: Objection; form.

THE WITNESS: As stated in 37, my conclusion is that Beser does not disclose a single scenario in which a tunnel request, as Dr. Tamassia puts it, is ordinarily received by another entity but is instead received by the first network device, nor does it disclose any scenario in which a tunnel request is intended for receipt at another entity but is instead received by

the first device.

So as it clearly says here, in my opinion, the first device in Beser cannot perform interception under his understanding, which is reflected.

BY MR. BORDER:

Q. It can't perform intercepting under what you claim his understanding is. But you do not have an understanding of what the term requires, correct?

MR. ZEILBERGER: Objection; form.

THE WITNESS: I made no opinion of what the term requires.

MR. BORDER: Let's take a quick break. We might be done.

(Recess taken.)

BY MR. BORDER:

Q. Dr. Monrose, during this last break, or during any previous breaks, did you discuss the substance of your testimony with your counsel?

A. I did not.

MR. BORDER: We have no further questions.

MR. PALYS: Let's take a break.

(Recess taken.)

MR. ZEILBERGER: We have no questions.

(Deposition adjourned at 3:30 p.m.)

ACKNOWLEDGMENT OF DEPONENT

I, FABIAN MONROSE, have read or have had the foregoing testimony read to me and hereby certify that it is a true and correct transcription of my testimony with the exception of any attached corrections or changes.

_____

FABIAN MONROSE

[ ] No corrections

[ ] Correction sheet(s) enclosed

SUBSCRIBED AND SWORN TO BEFORE ME, the undersigned authority, by the witness, FABIAN MONROSE, on this the _____ day of _____, _____.

C E R T I F I C A T E

DISTRICT OF COLUMBIA

I, JOHN L. HARMONSON, a Notary Public within and for the District of Columbia, do hereby certify:

That FABIAN MONROSE, the witness whose deposition is hereinbefore set forth, was duly sworn by me and that such deposition is a true record of the testimony given by such witness.

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

IN WITNESS WHEREOF, I have hereunto set my hand this 8th day of March, 2016.

_____

JOHN L. HARMONSON, RPR

My commission expires: 11/14/20

---------- I N D E X ----------

---------- EXHIBITS ----------

(No new exhibits identified)

ERRATA SHEET

CASE: Apple Inc. v. VirnetX Inc.

DATE: March 3, 2016

WITNESS: Fabian Monrose, Ph.D.

Reason Codes:

1. To clarify the record.
2. To conform to the facts.
3. To correct transcription errors.

Pg.	Ln.	Now Reads	Should Read	Reason
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Signature of Deponent

SUBSCRIBED AND SWORN BEFORE ME

THIS ___ DAY OF _____, _____

_____

(Notary Public) MY COMMISSION EXPIRES:_____