

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LENOVO (UNITED STATES) INC.,
Petitioner,

v.

INTELLECTUAL VENTURES II, LLC,
Patent Owner

IPR2024-00109 (Patent 8,474,016 B2)
IPR2024-00124 (Patent 7,325,140 B2)

Record of Oral Hearing
Held: November 19, 2025

Before HYUN J. JUNG, JOHN D. HAMANN, and STEPHENE. BELISLE,
Administrative Patent Judges.

IPR2024-00109 (Patent 8,474,016 B2)

IPR2024-00124 (Patent 7,325,140 B2)

APPEARANCES:

ON BEHALF OF THE PETITIONER:

JAMES M. HEINTZ, ESQ.
DLA Piper LLP
11911 Freedom Drive
Suite 300
Reston, VA 20190
(703) 773-4000
jim.heintz@us.dlapiper.com

ON BEHALF OF THE PATENT OWNER:

BRANDON R. THEISS, ESQ.
EMILY DENISCO, ESQ.
Volpe Koenig
30 S 17th Street
18th Floor
Philadelphia, PA 19103
(215)568-6400
btheiss@vklaw.com
edenisco@vklaw.com

The above-entitled matter came on for hearing on November 19, 2025, commencing at 12:59 p.m., at the United States Patent and Trademark Office's headquarters in Alexandria, Virginia.

P R O C E E D I N G S

- - - - -

JUDGE JUNG: Thank you. Please be seated.

JUDGE HAMANN: Good afternoon. This is the consolidated hearing in IPR 2024-00109 and IPR 2024-00124. I am Judge Hamann, joined by Judges Jung and Belisle.

I'd like to begin with getting the parties' appearances. Who is appearing on behalf of Petitioner, please?

MR. HEINTZ: Your Honor, James Heintz from DLA Piper, on behalf of Petitioner. With me here is Mr. Anthony Del Monaco, who is senior IP counsel litigation for Lenovo.

JUDGE HAMANN: Thank you. And who is appearing on Patent Owner's behalf?

MR. THEISS: Your Honor, Brandon Theiss, representing the Patent Owner, Intellectual Ventures, and I'm being assisted today by Ms. Emily Denisco.

JUDGE HAMANN: How do you pronounce your last name?

MS. DENISCO: Denisco.

MR. THEISS: Denisco.

JUDGE HAMANN: Thank you. I'd like to also remind the parties, in addition, that there is a public line for today's hearing, so nothing confidential should be discussed. I don't believe that'll be an issue. I don't think there's anything confidential that's been filed as such in the record, but I remind the parties, nonetheless, of that.

As per the hearing order, each party will have 90 minutes of total

1 argument time. Petitioner will begin and will go first, as it bears the burden
2 of persuasion. Thereafter, Patent Owner will provide its response, and that
3 will be followed by any rebuttal and surrebuttal, to the extent time is
4 reserved for such. A reminder that arguments made during rebuttal and
5 surrebuttal must be in response to arguments that were made initially by the
6 opposing party, and it's not an opportunity to initiate new arguments.

7 I expect that we'll take a quick break after the parties' initial
8 arguments, in light of the three-hour total allotted time, but we'll play that by
9 ear as it progresses. That's my plan.

10 For the benefit of the judges, opposing counsel, and the court
11 reporter, we ask that you please identify yourself when you begin your
12 argument and speak clearly into the microphone. And this goes for
13 everyone, when you're not speaking, please do not speak or make
14 unnecessary noise that will detract from who is speaking.

15 We have the entire record, including demonstratives, before us.
16 When referring to demonstratives, papers, or exhibits, please do so clearly
17 and explicitly by slide number or paper number or whatever reference is
18 relevant and appropriate. This will help with the preparation of an accurate
19 transcript and allow us to review that transcript more easily.

20 To the extent appropriate, if you're referring to a document or
21 exhibit, particularly if it's outside what's shown on the slide, please give us a
22 moment to find that as we may, as I said, I'll try to locate that in the
23 documents we have before us.

24 Again, please bear in mind that the purpose of this hearing is to
25 present a case based on the arguments of the record, and new arguments or
26 evidence should not be introduced at this time. We do not permit objections

1 to be raised during the opposing party's arguments. If an advocate has an
2 objection, they may make that known to the panel during their argument
3 time.

4 You may find it effective to track your time so you can pace your
5 own arguments. But as you can see, there's a clock above the present judges'
6 heads there that you can see the time that you have, as well as, there's
7 warning lights that are provided. Judge Jung is kind enough, he's going to
8 be running that clock for us.

9 To the extent you bleed into your rebuttal, or surrebuttal time, it's
10 certainly your prerogative. We'll just adjust your remaining time
11 accordingly.

12 Before we begin, I'd just like to check if there's any questions
13 about anything I've stated so far. Petitioner?

14 MR. HEINTZ: No, Your Honor.

15 JUDGE HAMANN: And for Patent Owner, Mr. Theiss?

16 MR. THEISS: No, Your Honor.

17 JUDGE HAMANN: Okay. Great. With that, how much time,
18 Petitioner, would you like to reserve for rebuttal?

19 MR. HEINTZ: I'd like to reserve 30 minutes, Your Honor.

20 JUDGE HAMANN: Thank you. You may proceed when you are
21 ready, sir.

22 MR. HEINTZ: Thank you, Your Honor. May it please the Board,
23 again, James Heintz from DLA Piper for Petitioner, Lenovo U.S., Inc. Your
24 Honor, I'm going to start my presentation today with an issue that's central
25 and perhaps even dispositive between both the parties. Before I get going, I
26 will note that there appear to be no claim construction disputes between the

1 parties in either one of these two IPRs.

2 So, the first issue I'll address is the question about whether Neufeld
3 discloses or renders obvious in-band remote management communications.
4 In-band here means that the management communications are received over
5 the same network interface as the normal user data server messages are
6 received. In contrast, out-of-band means they are received on a different
7 network that's separate from this typical user data interface. You will see, in
8 Patent Owner's papers, they use the term comingled to refer to this in-band
9 concept.

10 Your Honors, Neufeld expressly discloses both in-band and out-of-
11 band remote management messages between a remote PC at which a system
12 administrator sits and an RMC, or remote management controller, that's
13 located in the server that's being managed. IV disputes that Neufeld
14 discloses both forms of communications, but their basis for doing so is
15 flawed. It rests on the false premise that Neufeld disparages these in-band
16 communications and that somehow these in-band communications are
17 mutually exclusive and that Neufeld is solely directed toward out-of-band
18 communications and not at all toward in-band communications.

19 As I will show, that's expressly contrary to Neufeld's teachings.
20 I'm going to go to Slide 3. Before I get into depth on this argument, I want
21 to make a couple of simple points. The first point is that including in-band
22 communications, as well as, out-of-band communications, as we -- as is
23 taught by Neufeld, provides all of the benefits of a system that does out-of-
24 band communications. That simple truth cannot and is not credibly disputed
25 by Patent Owner.

26 The second point I want to make, again, is that in-band and out-of-

1 band communications are not mutually exclusive alternatives. You can have
2 both in a system. There are good reasons why you'd want to have both, and,
3 as we'll see, Neufeld discloses both.

4 On Slide 4 now, we show Figure 1 of Neufeld. As we can see,
5 there's a remote management PC on the right, and there's a managed server
6 on the left. There are two connections, two separate connections between
7 the remote management PC and the managed server. The first is a
8 connection via network N, as in Nancy.

9 The second is a connection -- and that's the one that's highlighted
10 on Slide 4. And the second connection is a connection via a network M, as
11 in Mary.

12 The network M is a dedicated management network. That's the so-
13 called out-of-band network over which management messages can be
14 exchanged between the remote PC and the server. The network N is the one
15 I mentioned earlier that I'll refer to as the in-band network. That's the one
16 that regular, normal user data comes into the server on and also management
17 messages that, as we'll see, are going to be in encrypted form.

18 On Slide 5 now, I show Figure 2 from Neufeld. The network N is
19 highlighted in the lower right-hand corner. Connected to network N is a
20 NIC 110. NIC here stands for network interface card. It's a common
21 acronym in the industry.

22 And as shown in the figure, the NIC 110 is connected to a PCI bus
23 that's labeled as 33/32 in Figure 2. And that PCI bus is connected to several
24 devices, one of which is the remote management controller 116. And that's
25 the device we're going to be talking a lot about today.

26 That's the device that receives management messages and acts on

1 them and communicates with the remote console that we talked about
2 earlier, the remote management PC.

3 JUDGE HAMANN: Counsel?

4 MR. HEINTZ: Yes?

5 JUDGE HAMANN: This is Judge Hamann. I believe, isn't 16 the
6 label for that PCI bus? I recognize --

7 MR. HEINTZ: I'm sorry. You're right, Your Honor. It is 16. I
8 apologize. So, that PCI bus in Figure 2 is 16.

9 JUDGE HAMANN: Thank you.

10

11 MR. HEINTZ: Okay. I'm going to go to Slide 6 now. Here, we
12 have a passage from paragraph 43 of Neufeld. This passage states that the
13 remote management controller 116 connects to the network N and/or the
14 network M so that the remote management PC can access, interact with, and
15 monitor the remote -- I'm sorry, the managed server 2. Note the word
16 connects there. That's not snooping, which we're going to hear about from
17 Patent Owner. That's connecting to that interface 110.

18 This is an express disclosure in Neufeld that the remote
19 management controller 116 can connect to the remote PC via the network N.
20 That's because the network N is connected to NIC 110, and it's only
21 connected to NIC 110. There is no connection between N, management
22 -- I'm sorry, network N and the Ethernet controller that you'll hear my
23 colleagues talk about today.

24 This passage discusses accessing, monitoring, and interacting with
25 the managed server 2. Those are remote management communications.
26 And conducting them over the network N, as discussed in paragraph 43, is

1 in-band communication.

2 Slide 7 now, I show paragraph 47 of Neufeld. Paragraph 47 has an
3 error in there. You can see in the last part of the highlighted section, there's
4 a reference to the NIC 110, which may be coupled to the network M. As we
5 saw in Figure 2, the NIC 110 is only coupled to the network N, as in Nancy,
6 not M, as in Mary. It is perfectly --

7 JUDGE HAMANN: Counsel?

8 MR. HEINTZ: Yes.

9 JUDGE HAMANN: This is Judge Hamann. I recognize,
10 obviously, that Slide 7, paragraph 47, here that the parties, I think, agreed
11 that there's some type of typographical error as to this paragraph. There's a
12 question of what would be the correction or what was meant is my
13 understanding.

14 My question is this: Let's assume that we find that Patent Owner
15 was correct as to paragraph 47's disclosure. I recognize Petitioner disagrees,
16 but to the extent that is what we find, does the Petition rely on other parts of
17 Neufeld that would support sufficiently the in-band communication; or is,
18 you know, does paragraph 47, I believe, you know, that is correct, is sort of
19 what turns on these Neufeld grounds and not carries through, or is it not that
20 dispositive?

21 MR. HEINTZ: It is not dispositive, Your Honor. As I just
22 discussed, paragraph 43 of Neufeld discloses connections between the
23 RMC-116 and the remote management PC that occur over the network end.
24 And that -- those connections, as I discussed, are for monitoring, accessing,
25 and interacting with the RMC-116.

26 So, paragraph 43 itself discloses the requisite in-band

1 communications. We're also going to turn to paragraph 48 in a few minutes.
2 That's another paragraph that supports our position. And paragraph 15,
3 which is in the background section, also discusses the desirability of in-band
4 remote management communications. So, even if the Board were to decide
5 that paragraph 47 should be corrected, as Patent Owners suggest, which, of
6 course, we dispute, that is not dispositive at all, and our position does not
7 rely entirely on paragraph 47.

8 Paragraphs 43, 48, and 15 are very important paragraphs, and those
9 make clear that in-band communications occur.

10 JUDGE HAMANN: Thank you.

11 JUDGE BELISLE: Counsel, before we move off on that, this is
12 Judge Belisle. Is there anything in the prosecution history or the original
13 spec that would suggest that this M is N and that there's just an error when
14 the PTO printed this patent?

15 MR. HEINTZ: Your Honor, I did not see anything in the
16 prosecution history that there was an error during printing. It looks like this
17 was their -- a latent error. That's correct.

18 Okay. So, one point to make here is that this paragraph 47 is
19 discussing the communication of keystrokes from, in one example, the
20 remote management PC, which are going to be provided to the keyboard
21 controller 38. Those keystrokes from the remote management PC are
22 remote management data. What's happening is the administrator on the PC
23 is typing things in, and those commands are going to be relayed to the
24 keyboard controller in the managed server to allow the remote administrator
25 to perform commands via the OS on the managed server. Those are remote
26 management communications. No question about that.

1 So, the question, as Your Honor mentioned, how do we resolve
2 this error? One simple point is that, when you look on your keyboard, N and
3 M are right next to each other, and it's an easy enough mistake to make. It's
4 a far more significant correction to change the NIC 110 to the Ethernet
5 interface 180, as my colleague suggests. The correction of network M also
6 makes sense because, as we saw a few minutes ago, Figure 2 shows NIC 110
7 connected to network N, not network M.

8 Now, Your Honor has mentioned --

9 JUDGE HAMANN: Counsel, I'm sorry, this is Judge Hamann
10 again. Just looking at what we were referencing in paragraph 47, part of the
11 relevant phrase says modem or NIC 110, which may be coupled to network,
12 and then M is maybe what's written. What modem did Petitioner put, or
13 import did Petitioner put on the word modem in that context? I'm trying to
14 understand how that may influence the reading of the sentence.

15 MR. HEINTZ: Your Honor, I'm sorry. I missed part of your
16 question. If I could beg Your Honor's indulgence, would you please repeat?

17 JUDGE HAMANN: Yes. I'll try to be clearer. I appreciate the
18 opportunity. This sentence has the phrase modem or NIC 110 in it as part of
19 the sentence that contains a typographical error. And I'm trying to
20 understand if Petitioner put any import in the sentence to the word modem.
21 Because it is modem or NIC 110, so does that in any way help us understand
22 where the error is? If so, did Petitioner address that in the papers?

23 MR. HEINTZ: We did not address that in the paper. I did give
24 that some thought. I don't think it bears very much in either direction,
25 honestly, Your Honor, because what we're talking about, whether it's via a
26 modem or a network N, or a network M, we're talking about some remote

1 console that's communicating with the RMC 116. So because both cases are
2 remote communications, whether it's N or M, right, I don't know that the
3 idea that the modem is there makes a significant difference. And it's
4 certainly not something we put in our papers.

5 JUDGE HAMANN: Thank you.

6 MR. HEINTZ: Thank you, Your Honor. Oh, I'm sorry. I'm now
7 going to turn to Slide 8. This passage also bears on this issue. Now, in Slide
8 8, there's a discussion of the RMC 116, that's, again, the thing inside the
9 managed server, is going to transmit video data in some instances to the
10 remote console 5 and, as disclosed in paragraph 48, that's going to be either
11 via the modem or the NIC 110.

12 This is another passage that supports our point. Here, we have,
13 undisputably, the remote management controller 116 actively transmitting
14 this video data over the NIC 110, which, again, is network N, to the remote
15 management PC. That's a clear disclosure in 48, and that's another kind of
16 management data. In this case, it's going outbound, but it's being used to
17 allow the user at the remote console to monitor what's going on and to
18 understand the situation at the managed server.

19 Now, on Slide 9, we show for the first time Figure 3. And just to
20 make this clear, in the passage we just saw, there's a reference to IOP 156
21 sending this data. As shown in Figure 3, IOP 156 is inside the RMC 116. In
22 this figure, everything inside those dashed lines is the RMC 116. So we
23 have the IOP, which is shown connected to a local bus, then to an ATB, and
24 then to the PCI interface, and that PCI -- sorry, PCI bus. That PCI bus is the
25 same PCI bus we saw in Figure 2 that the RMC was connected to.

26 So, there is a clear connection between the IOP 156 and the NIC

1 110 and the network N disclosed in Neufeld. That is entirely consistent with
2 the disclosure in paragraph 48 that that IOP 156 will transmit data, actively
3 transmit data, to the remote management console via the in-band network N.

4 JUDGE BELISLE: Counsel, this is Judge Belisle again. Let's just
5 go back one slide to where it said paragraph 48.

6 MR. HEINTZ: Is this the one you want, Your Honor?

7 JUDGE BELISLE: Yes. What do you -- Judge Hamann had just
8 asked a question about whether there was any import to the word modem
9 being used next to the NIC 110. What do you make of the fact that
10 paragraph 48 also uses that same combination as communication devices?
11 So, paragraph 47 says via the modem or NIC 110. Paragraph 48 also says
12 the communication devices, i.e. the modem or NIC 110. Would that not
13 support not replacing NIC 110 with something else in paragraph 47?

14 MR. HEINTZ: Well, to be clear, Your Honor, the question in
15 paragraph 47 is -- ah, I see your point. Yes, Your Honor, of course it would.
16 That's right. NIC 110 is used in both paragraphs, and so that certainly is an
17 indication that NIC 110 in paragraph 48 means that NIC 110 in paragraph 47
18 also belongs there, which, of course, means that the M needs to be changed
19 to N. I wish I had thought of that, Your Honor. Thank you.

20 All right. Let me go back to -- I'm sorry, Figure -- I'm sorry, Slide
21 9. So, we had shown the connections were there. Now I want to go to
22 paragraph 15 of Neufeld, and now we're on Slide 10. So this is the other
23 paragraph I mentioned, Judge Hamann, in response to your question.
24 Paragraph 15 discusses in Neufeld that an important goal in the development
25 of these remote server management tools is to increase the number of
26 problems that may be analyzed and repaired remotely, so analysis and repair.

1 And Neufeld goes on to disclose that it's highly desirable to have all four
2 forms of communication that are listed there, including form one, in-band
3 online. So, in-band we already talked about. Online here simply means that
4 the operating system is online while these in-band communications are
5 occurring.

6
7 Now, the end of this passage, and you'll see the word control
8 underlined in red, is talking about not just collecting data but allowing
9 control of the managed server, which is directly tied to the beginning of the
10 paragraph where they're talking about remote repair. So, my colleagues say
11 that, oh, this is only talking about collecting data, but nowhere in Neufeld is
12 there any hint, any suggestion, that you're going to be collecting data over
13 the network N and then suddenly switching over to the network M to control
14 the server based on that data. There is simply no disclosure or suggestion of
15 that anywhere; and, quite frankly, it doesn't make a lot of sense.

16 So, I'm going to go on to Slide 11 now. Here, we see a portion
17 from Dr. Meldal's declaration. Dr. Meldal was Petitioner's expert. Dr.
18 Meldal understood paragraph 15 to be referring to not just the collection of
19 data but allowing the control of data, the control of the managed server, to
20 be occurring in Neufeld in the in-band communications, the in-band online
21 communications.

22 So, again, just to go back to the question, it's not just paragraph 47.
23 It's paragraph 43, it's paragraph 48, and it's paragraph 15, which we believe
24 and I think is clear, clearly show that Neufeld is contemplating in-band
25 remote management communication.

26 All right. I'm going to move to Slide 12 now. Here, I show a

1 declaration from Dr. Noubir. Now, I'll be going back and forth between the
2 two IPRs a little bit because Patent Owner's and Petitioner's positions are
3 pretty constant on this point across the two. There's no real distinction,
4 except one, which I'll mention in a little bit.

5 So here on Slide 12, we show an excerpt from Dr. Noubir's
6 declaration in which he testified that Neufeld does not disclose in-band
7 communications. What Dr. Noubir says is that the only reason the RMC 116
8 is at all connected to the NIC 110, which, again, is the in-band network, is to
9 allow for snooping. He says very clearly that it's all that goes on on network
10 N for the remote management controller 116. He specifically says, and you
11 can see that in the last highlighted passage, that there are no active
12 transmissions between RMC 116 and the remote management PC via the
13 NIC 110 and the network N.

14 Now, I asked Dr. Noubir about this at his deposition, and he
15 doubled down on this position. He said emphatically there is no disclosure
16 of that anywhere in Neufeld.

17 On Slide 14, we again go back to paragraph 48 of Neufeld, which
18 says explicitly that there are communications of video data by the RMC 116
19 to the remote management PC that occur via the NIC 110. So, Dr. Noubir's
20 position that there is no such disclosure in Neufeld is simply wrong based on
21 the express disclosure in paragraph 48.

22 Now, another thing --

23 JUDGE BELISLE: Counsel, Judge Belisle. Was this presented
24 during deposition to the witness, and did he have a response to what you just
25 said?

26 MR. HEINTZ: He had a response, and his response was this just

1 makes no sense, Neufeld is all about out-of-band communications. There
2 are all these inconsistencies that he sees. Your Honor, it's all based on his
3 belief that, number one, Neufeld disparages in-band communications and is
4 solely directed to out-of-band, and there's proof of that. You'll see, and
5 we're going to talk about this in a little bit, there's a disclosure in Neufeld
6 that says something to the effect that these in-band communications can't
7 work while the OS is down, and so he takes that to mean that these in-band
8 communications are terrible, they're a bad idea, and Neufeld says, don't do
9 them, just do out-of-band. And as I will show you, that's exactly wrong.

10 Okay. So, one other point I want to debate here, and this goes to
11 one of the points I made at the beginning of the presentation. Here, in the
12 deposition of Dr. Noubir, I asked him, you know, if you were a remote
13 management, if you were at a remote management PC, you're a system
14 administrator, you're sitting at home in front of your remote management
15 PC, and something happens to your network connection N. That's the
16 management network connection. Let's say the NIC that you use to connect
17 to that network goes down, wouldn't you want the ability to communicate
18 with the server via network N for remote management? His answer you see
19 highlighted is the only one anybody could credibly give. Of course, you'd
20 want that.

21 Now, he says that there's no disclosure of that in Neufeld. We've
22 seen that it is. Then he mentions that there are trade-offs associated with
23 that. Our response is, sure, there are trade-offs. That doesn't mean it's not
24 obvious. In addition to our position that Neufeld discloses these in-band
25 communications, we also say it makes them obvious, in part because of what
26 paragraph 15 tells us and for information like this.

1 All right. On Slide 16, we start discussing some other reasons why
2 Dr. Noubir's opinion is flawed. He says that Neufeld discloses that in-band
3 communications are only possible when the OS is online, and he goes on to
4 assert that Neufeld's invention is limited to discussions of system operation
5 when the OS is not running. That's obviously not true, and he basically says
6 the same thing, that, you know, Neufeld is only concerned with these
7 communications that occur when the OS is down.

8 And on Slide 18, we show another reason why Dr. Noubir is
9 wrong. Paragraphs 73 and 74, this is again part of Neufeld, are talking about
10 a situation where a VCD, which is a virtual call device that's implemented
11 using UARTs -- sorry, universal asynchronous receiver transmitters, in the
12 RMC 116. What paragraph 74 is saying is that virtual VCD can be shared
13 between the OS and the remote console 5. It makes no sense to say that
14 these communications are only occurring if the OS is down, and then you
15 look at paragraph 74 and you're talking about the OS and the remote
16 management PC sharing this device. Clearly, Neufeld is contemplating that
17 there are going to be these communications both when the OS is down and
18 when it's not down.

19 Here's another flaw that's in Dr. Noubir's opinion. Now, he says
20 that Neufeld cannot be using in-band communication because that's only
21 possible when the OS is operable, but as we know from paragraph 43, there
22 are communications when the OS is online. Right. We're seeing that
23 paragraph 43 tells us that the NIC 110 is going to be used for
24 communications between the RMC and the managed server. If he's right
25 that those things are only possible when the OS is online, if you take that
26 and combine it with paragraph 43, it means only one thing: That, of course,

1 there are communications while the OS is online with the remote
2 management PC.

3 JUDGE HAMANN: Counsel?

4 MR. HEINTZ: Yes.

5 JUDGE HAMANN: This is Judge Hamann. And, obviously, it's
6 certainly Petitioner's time to argue how he feels fit, but I think we're
7 approaching half the original allotment. I know we spent a lot of time in this
8 argument. I know it's an important argument, but I know there's also other
9 issues that have a bearing upon. I just toss that out for your consideration.

10 MR. HEINTZ: Thank you, Your Honor. I'm going to take the
11 hint, and I'm going to move on now to Slide 30.

12 At Slide 30, I'll address a second issue, and that's in the 124 IPR,
13 which is the question of whether Neufeld renders obvious the use of a point-
14 to-point VPN. On Slide 31, we see Dr. Meldal's declaration, where he
15 explains that an administrator at a remote management PC that's located
16 physically remote from the managed server, a different building, not a place
17 where you can run wires like you might be able to in the same room or even
18 the same building, that user will typically use a VPN between the remote
19 management PC and the RMC 116. And Dr. Meldal explains that a POSITA
20 would have understood that these are remote management communications,
21 they are going to be with the RMC 116. That's the purpose of the RMC 116
22 for remote management.

23 Now, here on Slide 21, we see a discussion of a VPN in Neufeld's
24 paragraph 22, yeah.

25 JUDGE BELISLE: Sorry. Which slide, Counsel?

26 MR. HEINTZ: Sorry. Yes. Slide 32, Your Honor.

1

2 JUDGE BELISLE: Thank you.

3 MR. HEINTZ: And we're showing an excerpt from paragraph 22
4 of Neufeld where Neufeld is disclosing that the remote administrator must
5 typically use the internet or a VPN to access the system. So, there's a clear
6 disclosure of a VPN in Neufeld at paragraph 22.

7 Slide 33, we show another excerpt from Dr. Meldal's declaration,
8 and here we see Dr. Meldal's testimony that a POSITA would have found it
9 obvious to use an L2TP with IPsec encryption for the VPN, and his opinion
10 that this technology was well-known and, in fact, was the most common
11 method for a point-to-point VPN at the time of the '140 Patent. On Slide 35,
12 I show an excerpt from a textbook, a prior art textbook, which specifically
13 mentions L2TP and IPsec for VPN tunneling technology.

14 Dr. Meldal discusses in a paragraph shown on Slide 36 that this
15 point-to-point VPN with tunneling would be used for the communication of
16 the management data between the RMC and the remote PC. And if it's used
17 for that, it performs the identical function performed by the VPN technology
18 of the '140 Patent, which is providing us logical separation of user data.
19 Because the management messages are encapsulated by the VPN, they're
20 logically separate from anything else that's occurring on network N, the
21 regular user data.

22 On Slide 37, we show that such a point-to-point VPN would
23 connect the remote management PC to the RMC 116. And, again, that
24 makes perfect sense because we're talking about remote management data.
25 Now, this is important. Dr. Noubir admitted that L2TP was a well-known
26 VPN technology at the time of the '140 Patent. This is shown on Slide 37.

1 It's an excerpt from Dr. Noubir's deposition. In fact, both L2TP and IPSec
2 are discussed in the very book relied on by Dr. Noubir for some of his
3 opinions. That's on Slide 39.

4 And now we see on Slide 40 another important point. On Slide
5 40, we see one of the figures that Dr. Noubir relied on in his declaration. I'm
6 not quite sure where this figure comes from. It doesn't appear to be in the
7 document that Dr. Noubir cites. But what's important about this document is
8 that this evidence shows that it's entirely possible for a VPN tunnel to
9 terminate at an individual computer rather than a network. As you recall,
10 my colleagues argue that Neufeld is only disclosing what they refer to as
11 general-purpose VPNs, which are the kind of thing shown on the left-hand
12 side of the figure, where the VPN tunnel terminates at a VPN gateway and
13 then messages travel to other devices behind that gateway. But if you look
14 on the right-hand side, what we see is another endpoint of a tunnel that's at
15 an individual client computer.

16 JUDGE HAMANN: Counsel?

17 MR. HEINTZ: Yes.

18 JUDGE HAMANN: This is Judge Hamann. You say it terminates
19 at a client computer. Is that specific enough for the client? Obviously,
20 you've also made earlier reference to terminating at the RMC 116, I believe
21 it is.

22 MR. HEINTZ: That's correct, Your Honor. And the point here is
23 that my understanding of Patent Owner's position is that the VPNs that are
24 discussed in Neufeld, and they kind of imply, generally, always terminate
25 outside a single device. If you can have a VPN terminate at a client
26 computer, you can obviously have it terminate at a device inside the client

1 computer. Of course, there's going to be a processor in the computer of
2 some kind. The RMC is a processor, and, as we've shown, the RMC can
3 communicate with the remote management PC5 via that NIC 110. So,
4 although this isn't specific to a device inside the computer, it stands for the
5 simple proposition that you don't have to have these VPN tunnels terminate
6 at some kind of device outside the PC.

7 What my colleagues talk about in their briefing repeatedly is that
8 Neufeld only discloses a VPN that terminates outside the NIC. Here, if the
9 client computer is the server, the termination is obviously inside or in front
10 of the NIC, not outside of it.

11 JUDGE HAMANN: Thank you.

12 MR. HEINTZ: Okay.

13 JUDGE BELISLE: Counsel, this is Judge Belisle. Do you know
14 why a VPN would terminate prior to its final destination?

15 MR. HEINTZ: I think the idea is that all of the traffic coming in
16 would go to various places. And I assume the designers of the system
17 shown on the left-hand side of Figure 3 kind of make the assumption that
18 everything beyond this VPN gateway might be co-located in a single
19 building, and there might be physical security that's enough where you don't
20 have to worry about the interception of messages on the other side of the
21 VPN gateway.

22 Those are assumptions. There's not a real discussion of this. And,
23 of course, you know, as we've seen throughout these IPRs, these
24 management communications are particularly concerning. Neufeld talks a
25 lot about the various requirements you've got to have, even for people inside
26 the building. So, the simple point is it would have been obvious to a

1 POSITA to use a point-to-point VPN and not just have that data unencrypted
2 floating around inside a building somewhere, as my colleague suggests
3 would be taught.

4 I'm going to go to Slide 41 now. This is a critical admission.
5 When I talked to Dr. Noubir at the deposition, I asked him if it was possible
6 to have VPN tunnels between two client computers going through the
7 internet at the time of the '140 Patent, and he said it was. And that's what
8 would be described as a point-to-point VPN, where you have two separate
9 computing devices at either end of a VPN tunnel, and Dr. Noubir admits that
10 you could do that.

11 And now, on Slide 42, he further admits that it would be entirely
12 possible to include encryption technology, and our example, again, is IPsec,
13 to encrypt the communications over this VPN tunnel. And Dr. Noubir
14 admits that's entirely possible. That admission really guts their case. As
15 soon as that admission is made, there's no reason why what Dr. Meldal said
16 couldn't be implemented and wouldn't be obvious to a POSITA. You can
17 have individual devices at the end points of VPN tunnels and have that
18 communication encrypted as it goes over the internet and anything else in
19 between on their way to the final destination.

20 Now, part of my colleague's argument is that these VPNs are these
21 general-purpose VPNs that access systems or, I'm sorry, access networks
22 rather than, like, an individual server, an individual endpoint. But you can
23 see that that's not true because in the surreply, they're talking about, the very
24 surreply says a virtual private network to access the system. That's not a
25 network, that's a system. And, obviously, what they're talking about here is
26 the server. On Slide 44, we show a passage from paragraph 88 of Neufeld

1 where, again, there's a discussion of using a VPN, but that's accessing the
2 managed server 2, not some network on which the managed server 2 resides.

3 All right. I'd now like -- if there aren't any questions on this issue
4 for 124, I'll move over to the 109 IPR. There's a second issue in that. The
5 question here is whether Neufeld renders obvious the receipt of encrypted
6 management messages via the local bus 166 at the RMC 116. In reality, this
7 is an argument about whether Neufeld discloses in-band management
8 messages, but, just for the sake of it, we'll go through to address Patent
9 Owner's arguments.

10 On Slide 46, I show Figure 3 from Neufeld again. Limitation 1.a
11 requires a processor. The Petition maps that to the IOP 156 we talked about
12 earlier. Limitation 1.d of Claim 1 requires a first bus. That's the local PCI
13 bus that's inside the RMC 116. Limitation 1.e requires a bus controller.
14 That bus controller is in the ATB 170. That's an address translation and
15 bridging unit. And to the extent that Neufeld doesn't make that obvious, we
16 show that it would have been obvious with Neufeld in combination with, for
17 example, Huckins or PCI Bridge Spec. And then, finally, the ATB 170,
18 which is inside the RMC, is connected to that PCI bus we talked about
19 earlier, and that's the second bus of the claim. The Petition makes all this
20 clear, and so does Dr. Meldal.

21 On Slide 47, I just show a brief excerpt from Dr. Meldal's opinion
22 talking about the obviousness of this. On Slide 48, we show another excerpt
23 from Dr. Meldal's declaration at paragraph 99, where he explains that the
24 ATB 170 receives the encrypted requests from the remote management PC 5
25 through the NIC 110 via the PCI bus 172.

26 In paragraph 100, again, Dr. Meldal explains that the ATB 170 is

1 connected to the IOP 156, which, again, is the processor, via the first bus
2 166, that internal PCI bus in the RMC 116.

3 Finally, Limitation 1.h requires that these messages be encrypted
4 and that they're received by the IOP 156. Here on Slide 50, we show Dr.
5 Meldal's declaration in paragraph 101 where he explains that when those
6 messages come into the RMC on that first bus, they're going to go to the IOP
7 156 because that's the device that's a processor and that's the device that's
8 performing tasks like this in the RMC. To the extent it's not explicit, it's
9 certainly obvious in view of Neufeld, and the obviousness of that is further
10 discussed on Slide 51 in paragraph 102 of Dr. Meldal's declaration.

11 Finally, I'll try to finish this up quickly. On Slide 52, we again see
12 that Dr. Mishra testified that the IOP 156 cannot transmit data over NIC 110.
13 This is his declaration. But on Slide 53, we see that it runs smack into
14 paragraph 48, which we've discussed several times already. It's just not
15 correct, and this is really the dispute. If the Board accepts the proposition
16 that Neufeld is disclosing in-band communication and management
17 messages, what that means is Dr. Mishra's testimony just doesn't hold water.

18 I think, with that, I will pause here and ask if there's any questions.
19 Given the little time I have left, I'll stop there. I will ask the Board if you
20 have any questions about the IPMI grounds.

21 JUDGE HAMANN: This is Judge Hamann. I do, actually. And
22 I'm focused on the '109 case at this point and, particularly, I'm trying to
23 understand. I'm looking at the Petition. I'll give you a page.

24 The Petition from the '109 case, page 55 of the Petition.

25 MR. HEINTZ: I'm sorry, Your Honor. What page was that?

1 JUDGE HAMANN: Fifty-five and then carry over to 56 probably.

2 MR. HEINTZ: Okay.

3 JUDGE HAMANN: And this is the preamble and then one from
4 May.

5 MR. HEINTZ: Yes.

6 JUDGE HAMANN: I'm really trying to understand, and 56 makes
7 -- you can see has this figure of 1-2 that's been referenced from IPMI. I'm
8 really trying to understand what Petitioner has set forward as the apparatus
9 and what is the network device. I'll note that for 1.a, you know, this
10 introduction of a network device, for what it's worth, I don't think Petitioner
11 set forward the claim limitation in the heading or whatnot. So this
12 (INAUDIBLE) of the following, you know, from earlier, the very top of the
13 Petition is what that element is.

14 And so it's unclear, potentially, and I think this argument is
15 unclear, as to what Petitioner has identified as the apparatus as this whole
16 claim is directed to in the preamble and what is the network device which
17 was introduced in 1.a, limitation 1.a.

18 MR. HEINTZ: Okay. So on page 55, what the Petition is saying,
19 and I know there was some confusion about this in Patent Owner's briefing,
20 our position is that the BMC is the claimed processor in limitation 1.a.
21 That's the processor that's different from the processor of the managed
22 device. That essentially is like the RMC 116 in Neufeld. This is the device
23 that's going to be used, the processor that's going to be used, to process
24 remote management communications and control the managed server.

25 JUDGE HAMANN: Well, and I don't mean to interrupt, and I'm
26 certainly looking at pages 55 and 56, and I am trying to understand what the

1 Petitioner is identifying as the network device, for example, and/or the
2 extent, you know, an apparatus is sort of the preamble, so I'm not sure that it
3 needs to be called out separately itself. But certainly the network device is a
4 claim limitation, and it's a little unclear sort of the metes and bounds of what
5 the Petitioner has identified that network device is according to Patent
6 Owner's arguments, I believe.

7 MR. HEINTZ: So on page 55, under 2, limitation 1.a, we identify
8 three things. The BMC, which is the baseboard management controller,
9 that's one device. And then the components that correspond to the first bus
10 and the bus controller identified below, all of that -- sorry. All of the
11 contents of Figure 1-2, other than those three things, are the claimed network
12 device. So we're excluding the BMC; we're excluding the first bus, and
13 that's going to be that sideband interface in Figure 1-2; and we're also
14 excluding the bus controller, which as we'll see later is going to be part of
15 the network LAN controller.

16 So if you take those three pieces, we're saying everything in Figure
17 1-2, other than those three, are the claimed network device. And then we
18 also make the point that the LAN connector and the LAN controller is the
19 claimed network interface. Does that answer your question, Your Honor?

20 JUDGE HAMANN: Yes. Thank you.

21 MR. HEINTZ: Okay. And while I'm here, since we've started
22 down this road, I would like to direct the Board's attention to Slide 59 for a
23 moment. I just want to discuss this because what we've alleged in our
24 Petition is that the LAN controller, which is shown in the Figure 1-2 we
25 looked at a few minutes ago, there's not a disclosure of how to implement
26 that in IPMI. That's left to the devices of the people who are going to

1 implement the system.

2 And so the Board agreed with us in the institution decision that it
3 would be obvious for a POSITA to go look at prior art references to figure
4 out how to do that. I'm going to go now to Slide 60 where we show a
5 portion of Your Honors' institution decision where you agree with Petitioner
6 that, in that Figure 1-2, what we are seeing are in-band management
7 communication messages coming over the LAN, through the LAN
8 controller, and over that sideband interface to the BMC. So so far, so good.

9 On Slide 61, we now make the point that there is no express
10 disclosure at IPMI as to how to implement that network LAN controller with
11 that sideband interface. And so we say you'll look to prior art, the Board
12 agreed with us there. On paragraph 62, we cited to Huckins, which is a
13 device that's a non-PCI bus-to-PCI bus bus bridge. And Huckins tells us that
14 when you have one of these bus bridges across these different kind of
15 devices, these different kind of buses, that you would put a bus controller in
16 what Huckins calls the secondary, for the secondary bus, which in this case
17 would be the non-PCI bus.

18 Now, the Board noted that we argue that Huckins says that this
19 non-PCI bus may be one of the many types of bus protocols available. And
20 the Petition also said that the I2C was exactly one of those kind of available,
21 different kinds of non-PCI buses available at the time.

22 In the institution decision, the Board noted that we did not argue
23 that Huckins teaches a known implementation of a bridge between a PCI bus
24 and an I2C bus. That's true. Huckins doesn't disclose exactly how to
25 implement the I2C bus. But on Slide 64, I'll note that Huckins tells us,
26 again, that this non-PCI bus can be any one of the many types of bus

1 protocols available.

2 On Slide 65, we make the point, the Board makes the point that
3 Petitioner does not cite any art that evidences -- I'm sorry. I think I missed a
4 slide.

5 Okay. On Slide 65, the Board made the point that we did not cite
6 any art that I2C bus requires a controller. Your Honors, we cited PCF8584
7 in the Petition. That was sort of in the introductory part of this ground.
8 PCF8584 is a PCI bus -- sorry -- an I2C bus controller that is a bridge
9 between a parallel bus to an I2C bus. And, of course, PCI is a parallel bus
10 architecture. We're talking about the original PCI, not the PCI express that
11 came later. Original PCI is a parallel bus.

12 So we discussed that a POSITA would have known about
13 PCF8584, which is an I2C bus controller. And as you see the highlighted
14 passage on the slide, PCF8584 certainly talks about that I2C bus controller
15 doing the kinds of things that bus controllers do, including arbitration.

16 Now, another important event happened. Again, this was at Dr.
17 Mishra's deposition. I asked Dr. Mishra if, in fact, there's going to be a bus
18 controller for every I2C bus, and his answer was, yes, there will necessarily
19 be at least one. Now, that admission is critical here because if there is an
20 I2C bus controller on every I2C bus, the Petition pointed to a bridge that
21 goes from a parallel bus, like PCI, to a non-parallel bus, namely the I2C.
22 And there must be a controller on that bus; and, of course, PCF8584 includes
23 that controller.

24 I'll just make one more point. The '109 institution decision notes
25 that Petitioner didn't explain why it was appropriate that the I2C bus would
26 be one of the many available types of protocols in Huckins. I'm not exactly

1 sure what the point was, but I suspect what was going on is why would
2 somebody choose an I2C bus among the many types of protocols that
3 Huckins talks about? And the point I want to bring Your Honors' attention
4 to is we're not relying on Huckins for the disclosure of the I2C bus. That's in
5 IPMI. We've got Figure 12-1 there, and you can see that, for the sideband
6 interface, IPMI specifically tells us that one of the possibilities, one of only
7 two, is an I2C bus.

8 So what we've got in the Petition is IPMI telling us to implement a
9 sideband interface using an I2C bus. We've got PCF8584; that's a bus
10 controller for an I2C bus. We now have Dr. Mishra admitting you must
11 have a bus controller for an I2C bus. And we've got Huckins, which is
12 talking about -- telling us that you're going to put a bus controller. When
13 you have a bridge between a PCI bus and a secondary bus, you're going to
14 have a bus controller for that second bus.

15 My colleagues argue that -- I think they make the point that it's not
16 proper to rely on this evidence, namely Dr. Mishra's admission and
17 deposition in a reply. That's incorrect, Your Honor. It's entirely proper
18 because that additional evidence is exactly what we argued in the Petition.
19 The argument was and always was, as you see here on Slide 70, that you're
20 going to include as a way to implement this LAN controller that's going to
21 have this sideband interface that's going to connect to the BMC over an I2C
22 bus, this is a way to do it. And the idea that every bus, every I2C bus needs
23 a controller is entirely consistent with that.

24 And I'll direct, Your Honors, to my last slide, which is 82, where
25 we cite a couple of cases there that are applicable here. I'm sorry, Your
26 Honors. I'm not controlling my PC properly, but on Slide 82 we show a

1 couple of cases, including the *Rembrandt* case, which say that evidence like
2 that that's consistent with our theory, even though it's additional evidence, is
3 entirely proper on reply.

4 I've got five minutes left, so I'll stop there, unless the Board has
5 any questions.

6 JUDGE HAMANN: I have one question. This is Judge Hamann.
7 And I think it's trying to orient myself into the slides that we may have
8 skipped over, but it basically has to do with the question for the first bus in
9 this IPMI grounds where, between the BMC and the LAN controller, the
10 question of why that would be encrypted, I believe, is an argument that's
11 made, and I'm just trying to understand the Petitioner's position as to that.

12 MR. HEINTZ: Sure. So IPMI does not -- it says that the
13 information is not encrypted, but it doesn't say don't encrypt it. The Petition
14 relied on a combination of IPMI and Frantz, F-R-A-N-T-Z. And that
15 reference talks about encrypting remote management communications and
16 explains that it's a very good idea. The Petition also notes that a later
17 version of IPMI, which is also prior art, does talk about encrypting that
18 sideband interface.

19 It's the simple nature of what's going on, Your Honor. These are
20 management communications that are going to be acted upon by the BMC.
21 It's critical that those things remain secure. That's taught in Frantz. It's also
22 taught in Neufeld, and it's recognized in IPMI 2.0, which is also referenced
23 in the Petition. So particularly the Frantz reference tells us to encrypt those
24 communications.

25 JUDGE HAMANN: Thank you.

26 MR. HEINTZ: Thank you, Your Honor.

1 MR. THEISS: I apologize to the Court for being a bit of a fuss.

2 JUDGE HAMANN: Please, take your time. Let me know when
3 you're ready to proceed, and I'll ask you a quick question then.

4 MR. THEISS: I'm ready to proceed, Your Honor. I'll make my
5 appearance and answer your question, Your Honor.

6 JUDGE HAMANN: Yes. It was just how much time, if anything
7 --

8 MR. THEISS: Oh, yes, Your Honor. I would like, just like
9 Petitioner, 30 minutes for rebuttal.

10 JUDGE HAMANN: Great. If you just give Judge Jung a moment
11 to adjust the clock, you can begin when you're ready. Thank you.

12 MR. THEISS: Yes, Your Honor. Brandon Theiss for the Patent
13 Owner, Intellectual Ventures. Opposing counsel just spent his time making
14 his case-in-chief and spent a lot of time talking about the references and not
15 talking about what the invention is here. And the invention here is important
16 because that is what patents are about. Counsel spends his time and never
17 walked through the claims. As Judge Rich makes very clear, the name of
18 the game is the claims. Counsel never walked you through the claims.

19 But let's start with what we're talking about with the invention
20 here, and the invention is true for both of the patents at issue here. The
21 present invention addresses the foregoing problems, as well as other
22 problems, by providing an exemplary embodiment of a Secure Management
23 Access Control for Computer Chipset for inclusion in devices that are
24 enabled for remote management.

25 Your Honors, you asked questions about where the VPN
26 terminates. Our position, as clearly as we can say, is the VPN must

1 terminate at that SMACC. It is insufficient because the SMACC is inside of
2 the device to be monitored, the network device. It is insufficient for the
3 VPN to terminate at what the patent refers to as the user interfaces.

4 How do we know that the SMACC is intended to be inside? The
5 patent makes it very clear. An additional exemplary embodiment invention
6 implements the SMACC and supporting chips on a card that can be inserted
7 into the managed device. Reading further, the administrator will be able to
8 connect to the SMACC card through the VMI -- we'll spend a lot of time
9 talking about what the VMI is -- or directly through an SMACC interface on
10 the card.

11 We can see further within the device, the SMACC sets up a
12 separate processor for receiving management information and interacting
13 with control functions of the device. So, fundamentally, Your Honors, we
14 are talking about a device in a device.

15 Now, how does this get encapsulated in the claims? So looking
16 first at Slide 3, related to the '140 patent, we've annotated figure 19 and
17 overlaid that onto the claim. The first element highlighted in green is at least
18 one Secure Management Access Controller, that SMACC that we were
19 talking about. And it's connected to one or more data buses of the managed
20 network device. The managed network device, we're going to be very clear
21 here, is the entirety. This is the larger computer that the board is installed
22 into. Then we have an out-of-band connection means for connecting one or
23 more network services or remote users with the SMACC. That is
24 highlighted in that amber color, Your Honors.

25 Then at least one virtual management interface connection for
26 connecting said one or more network services or remote users with the

1 SMACC. We go further to define what that VMI is, wherein said VMI
2 interface connection means provides logical separation of management from
3 user data and utilizes user interfaces of said managed network element. So,
4 Your Honors, it specifically has to utilize the user interfaces, so that network
5 interface card of the larger server, to get in the management commands.

6 Specifically, there was a lot of discussion in the prior -- Petitioner's
7 case-in-chief about VPNs and about where the VPNs are, what VPN
8 technology is being used, tunneling, lots of those words, Your Honor. The
9 patent appreciates that, and the patent expressly says it. The VMI interface
10 between the SMACC's chipset and the user interfaces, the VMI utilizes
11 existing and developing technology such as a VPN, to build secure tunnels
12 between the SMACC chipset and the management center while utilizing user
13 data interfaces of the managed device and the user network to provide the
14 transport of the management. And we see that illustrated in figure 3, Your
15 Honors. So the data needs to go through the user interfaces that are part of
16 the device to be managed and then connect to the SMACC.

17 JUDGE HAMANN: Mr. Theiss, you're on Slide 4?

18 MR. THEISS: I'm on Slide 4. I apologize, Your Honor.

19 JUDGE HAMANN: No worries. If you could just periodically try
20 to --

21 MR. THEISS: Absolutely.

22 JUDGE HAMANN: -- to help flow with the transcript later.

23 MR. THEISS: Absolutely.

24 JUDGE HAMANN: Thank you.

25 MR. THEISS: And, specifically, if we look at Slide 4 as well, the
26 VMI allows the SMACC processor to utilize the network ports to securely

1 tunnel management traffic to the management center. The SMACC will run
2 a suitable VPN protocol, such as IPSec over VMI. Your Honors, nowhere in
3 Neufeld is there any idea that the RMC runs a VPN. There's no testimony
4 on that. The reference doesn't have it. There's just -- it's just not there.

5 What Petitioner is standing up here and telling you that the VMI is,
6 I, quite frankly, don't know because the VMI needs to connect to the
7 SMACC and provide logical separation. The VPN, as we understand it, will
8 connect to the user data interfaces and that's where it ends. And that's what
9 the patent describes as part of being the innovation is they're providing this
10 VMI that's going to allow for that connection to extend from a device inside
11 a device.

12 JUDGE HAMANN: Counsel?

13 MR. THEISS: Yes.

14 JUDGE HAMANN: This is Judge Hamann. I'm trying to
15 understand what you said. I think you said you understand the position of
16 the VPN terminating at the user interface is what Neufeld teaches; is that
17 what you suggested?

18 MR. THEISS: I'm saying that a standard VPN, such as what is
19 described in the background of Neufeld, would terminate at the user
20 interface. A VPN allows a replacement of a physical cable. So instead of an
21 Ethernet cable plugging into the back of your computer, you can create a
22 virtual cable that, in the place of the VPN, to make that connection. That's a
23 traditional VPN.

24 JUDGE HAMANN: Okay. Well, I'm trying to understand what
25 you mean by user interface because with certain (INAUDIBLE PHRASE)
26 you may just have, you know, the physical connector or some form factor,

1 you may have, you know, transformer or whatever (CROSSTALK) --

2 MR. THEISS: Oh, absolutely. Going to Slide 6, I think it
3 illustrates the point, Your Honor. The connection, that secure VPN
4 connection, without any further decoding to encoding, the connection is
5 established between the SMACC on Slide 6 that is running the VPN, and it's
6 connecting through the system where it is resident. So it is using the
7 interface that is already there. That isn't what is done in Neufeld, that isn't
8 -- what is traditionally done in VPNs is you would connect to the server, you
9 wouldn't be able to create a VPN connection to the circuit board, the PCI
10 card inside the server. That's what's unique, Your Honor. That is what the
11 VMI is. The VMI is that bit of software that allows there to be a VPN
12 connection to the computer within a computer, using potentially standard
13 VPNs, but it's that VMI that provides that bridge between what's fairly
14 conventional in VPNs and point-to-point VPNs and to a computer within a
15 computer. And that isn't anywhere in the Neufeld reference, it's not
16 anywhere in the testimony, and that is what our invention is.

17 That is what the claims say when, if you look at the claims on
18 Slide 3 where it said virtual management interface connection means
19 provides logical separation of management data from user data and utilizes
20 user interfaces of said management network for connecting said one or more
21 network services or remote users with the SMACC. That's what the claim
22 says, Your Honor, is that we need to have a secure connection that goes
23 through the user interfaces, but that secure connection needs to connect to
24 our secure management access controller. That's what the claim says, Your
25 Honor.

26 JUDGE HAMANN: Understood. I understand your position.

1 This is Judge Hamann. I just want to make sure I'm following some of the
2 things you're stating. I think you're saying, traditionally, and traditionally
3 may be more used, forgive me if it's not, but about VPN connections to
4 servers, I'm trying to understand what you're suggesting where that
5 terminates. I don't think it terminates at the user interface. It may terminate
6 at some other point inside of the server traditionally. Obviously, I think
7 you're suggesting not to --

8 MR. THEISS: Your Honor, by the user interface, I mean the
9 operating system. I mean what is ever-resident on the server. The patent
10 talks about being the part that is the thing being managed. It's the resident's
11 information, the resident system, the driver stack that allows the server to
12 exist. The idea is it's the thing the user is interacting with, that if you walked
13 up and logged into that computer what you would see, as compared to the
14 board inside of that board that is separately a nested computer inside that
15 you could not see. And that's sort of the point, and that is the whole idea of
16 the invention is that we have that physical port that allows for that out-of-
17 band connection directly to that board, that computer inside of a computer,
18 and then we can use the host computer where our board is almost parasitic
19 and use it to connect out through. We have both of those ways.

20 When we look at Neufeld, and what is actually shown in Neufeld,
21 we see the reverse architecture. So if we go to what is actually shown in
22 Neufeld, going to Slide 11 of the demonstratives, we have in Neufeld it's
23 teaching that the ethernet interface provides the main external
24 communication interface between the remote management server 116 and
25 the outside world. For example, this connection is typically used for
26 coupling the remote management controller to the management network M.

1 Now, if you look at Figure 3 in the bottom, that is the RMC in
2 Neufeld. Now, Your Honors had asked about the modem and is the modem
3 important. And, yes, Your Honors, the modem is extremely important. And
4 I would direct the Board to -- give me one second -- to paragraph 60 of
5 Neufeld, which, hopefully, I can put on the screen. There's a bit of lag, I
6 apologize. So we're talking about the output of the UART interfaces 174,
7 which is a part of the RMC. It's in the lower portion. So if we see the RMC,
8 it is -- oh, you can't see my cursor. I will actually walk over to it. It is right
9 there. And how is it being described? Those of ordinary skill in the art
10 would appreciate that the RS-232 interface 176 may be connected to a wide
11 range of industry standard modems, terminals, servers, and the like.

12 In one exemplary embodiment, the RS-232 interface or 176, 178
13 are accessible to the user from the external chassis or managed server. A
14 user may, accordingly, use an external communication device to engage in
15 out-of-band communication sessions with the remote management server
16 116 via the UART interface 176 or the ICMB interface 178.

17 Your Honors, it's clearly explaining in paragraph 60 what the
18 discussion was with paragraph 43 and why it keeps saying the modem.
19 Well, the modem is one of the options you can connect to 176 for the RMC,
20 as shown in Figure 3, to communicate with the management network.

21 This paragraph doesn't stand in isolation when we're talking about
22 paragraph 60. I'm going to direct the Board to paragraph 51 of Neufeld.

23 JUDGE BELISLE: Counsel, this is Judge Belisle.

24 MR. THEISS: Yes.

25 JUDGE BELISLE: Just on a logistics matter, I do need you to
26 slow down a little bit.

1 MR. THEISS: Okay.

2 JUDGE BELISLE: Our poor court reporter's head is going to
3 explode.

4 MR. THEISS: I apologize.

5 JUDGE BELISLE: And it makes the transcript usually not clean.
6 So, please, slow down a little bit.

7 MR. THEISS: I apologize, Your Honors. We have a lot to cover,
8 but, yes, I will.

9 So if we go to paragraph 51 of Neufeld, we have another
10 discussion of how the modem is used. And this specifically is in the context
11 of Figure 3. Additionally, any client computers that may be connected
12 directly or indirectly to the managed server may establish communication
13 with the remote management server through its network connection as fully
14 set forth below. Users may further interface with the remote server
15 management 116 through additional communication interfaces, such as a
16 modem. That is specifically in discussion with Figure 3.

17 So Neufeld is making very clear in both paragraph 51 and
18 paragraph 60 that an option for the RMC board is for it to have a modem.
19 And that modem can be used for out-of-band communication.

20 JUDGE HAMANN: Counsel, this is Judge Hamann. I'm trying to
21 understand the import of that. Now, obviously, we're talking more about the
22 '124 case, which has out-of-band communications, and the '109 case has, at
23 least in the Claim 1, have an in-band communication. I'm trying to
24 understand the import we're putting on modem as opposed to -- because, you
25 know, in part of Neufeld, it talks about modem or the NIC 110. And so
26 though that can be read as, in one sense, two very different technologies or

1 two examples of two of the same type of technology, I'm trying to get an
2 import you're putting to the word modem in this context.

3 MR. THEISS: Yes, Your Honor. I'm trying to explain and
4 respond to the earlier question about what's going on in Figure 3 because
5 what we have is an express teaching in Neufeld that the system is going to
6 operate in out-of-band. Counsel for the Petitioner has stood up here and
7 said, well, no, there are instances where we're talking about potentially in-
8 band. There is a typo in paragraph 43 that we all agree upon. And what I
9 was discussing is how these descriptions related to the UART interface 174
10 further reinforce is that the RMC has a means to connect with the outside
11 world, either through the Ethernet interface or through a modem, that allows
12 it to connect to the management network. And paragraph 60 was
13 highlighting that fact is that it's connecting to the management network.

14 There is no evidence in Neufeld or in our record before us that has
15 any command that is received from the network N, as in Nancy. There
16 -- isn't there. The green line as shown on Slide 11 doesn't exist. There is no
17 evidence in the record, there's no -- nothing in Neufeld that shows
18 commands coming from the network N, through the NIC 110, over the PCI
19 bus, and then giving a command to the RMC. It isn't there, Your Honors.
20 It's just not there.

21 JUDGE HAMANN: Counsel, so what do you suggest?
22 Obviously, Figure 1 shows a connection between the remote management
23 PC and the managed server, for example, of the network N; and, obviously,
24 in Figure 2, there is NIC 110 and network N that goes to the PCI bus 16.
25 What would Patent Owner suggest Neufeld discloses as to those?

26 MR. THEISS: Oh, yes, Your Honor. With regard to Figure 1

1 specifically, it's just showing that these are two discrete networks where N is
2 the normal network, perhaps the internet, perhaps a corporate LAN, that is
3 where the normal traffic is going. Figure 1 is showing how there's a second
4 network that is discrete from that.

5 JUDGE HAMANN: And then Figure 2, though, is showing that
6 network N connects directly into the PCI bus 16.

7 MR. THEISS: Oh, yes, Your Honor. All computers use, at least at
8 the time, would use a PCI bus for components to communicate. That's how
9 the CPU was able to access any peripheral. That's not really in dispute,
10 Your Honor.

11 What is in dispute, Your Honor, is that the claim, and, again, the
12 name of the game is the claims, require that in both patents that the
13 commands be received over that interface, and that's where the problem lies
14 with Petitioner's mapping is that, if the commands are not received through
15 that correction in paragraph 43, we don't have the last claim element in the
16 '140, wherein said virtual management interface connection means provides
17 logical separation of management data from user data and utilizes user
18 interfaces of said managed network element.

19 Your Honor, if it's not using, if the commands in Neufeld are not
20 coming through 110, which there's no evidence that there is, it can't meet the
21 claim limitation because the claim limitation clearly says that it has to use
22 the user interfaces of the managed network element. If it's not coming in
23 110 and there's no testimony, there's nothing in the record that shows that a
24 command comes in.

25 There was a discussion about paragraph 48. Let me move to that.
26 I'm going to paragraph 48 of Neufeld. And Counsel, actually, I think, made

1 quite a big deal about what came out in the deposition regarding paragraph
2 48 of Neufeld. And, Your Honor, what Dr. Mishra and Dr. Noubir both said
3 is that it's really unclear what's being meant here. But, Your Honors, even if
4 we take the paragraph 48 in the most reasonable read, it says that, in
5 operations of the remote management controller, the I/O processor may
6 periodically read the video graphics data from the frame buffer to determine
7 whether data has changed. And if it changed, the I/O processor may
8 compress the video graphics and transmit to the remote console. Not to be
9 pedantic, but it says transmit, not receive. The claim requires reception.

10 And Counsel said that there's no reason why you would necessarily
11 want to put the video traffic over the public network and the management
12 commands over a different network. Your Honor, there's a lot of reasons for
13 that. Just being able to see what is going on on the screen is a different level
14 of security than being actually able to affect what is going on in that
15 computer. It actually makes perfect sense from an architectural standpoint
16 that you have the commands coming in under one interface and the output
17 coming out under a different interface because it's just not that important.

18 But, again, even if you take what Counsel stood here and said, it
19 says transmit. It does say transmit, Your Honor. But the name of the game
20 is the claims, and the claim says receive.

21 Your Honors, is it easier if we talk about Neufeld and then move to
22 the IPMI, or we talk about the patents independently? Which is easier for
23 our discussion today?

24 JUDGE HAMANN: I would suggest we focus on the grounds like
25 Neufeld and focus on that in its entirety before the IPMI. I have one
26 question.

1 MR. THEISS: Yes, absolutely.

2 JUDGE HAMANN: About Neufeld, about paragraph 47, and it's
3 similar to what I asked Petitioner's Counsel, my understanding certainly is
4 the parties agree that there is a typographical error in paragraph 47, although
5 they disagree as to what the correction should be or what one of skill in the
6 art would have understood it to be or shouldn't be.

7 To the extent that we find that Petitioner is correct, which, again, I
8 recognize Patent Owner disagrees with, but to the extent that it is network N
9 as in Nancy, not network M as in Mary, would paragraph 47 be sufficient to
10 teach the in-band communication of management requests?

11 MR. THEISS: Absolutely not, Your Honor, because it's just not
12 more than communication. Both claims require more than just a connection.
13 It requires that the commands are received that way, and there's nothing in
14 Neufeld that shows that the commands are received over N. It might show
15 that there's a connection there, but it doesn't say that the commands are
16 there. It doesn't say that they're encrypted commands. There's a large jump
17 from what the claim language says to what is actually disclosed in Neufeld,
18 even if you make the correction the way that Petitioner has outlined. And --

19 JUDGE HAMANN: Second -- I'm sorry. I didn't mean to cut you
20 off.

21 MR. THEISS: I was going to say, specifically for the '140, even if
22 you were to say, okay, fine, that's there, well you don't have a VPN that is
23 connecting specifically to the SMACC or, in the case of Neufeld, there's no
24 teaching that the RMC runs a VPN. There isn't. There's a generic
25 discussion in the background that VPNs existed, no one disputes that VPNs
26 existed. Our patent expressly says that VPNs existed.

1 What our patent explains is what's so cool and innovative about the
2 VMI is we have this computer inside of a computer that can run a VPN,
3 maintain that connection, while being inside of another computer. And that
4 is not anywhere in Neufeld. It's not in any of the other references. It's just
5 not there, Your Honor, where you can have a VPN connection to a particular
6 board inside the computer. It's not there.

7 So as it relates to the '140 patent, Your Honor, absolutely not. It's
8 almost immaterial whether or not how you correct the typo because, even if
9 you correct the typo, it doesn't explain how you get to the connection that is
10 provided by the VMI. A simple VPN doesn't get you there, and how do we
11 know that? Because the patent itself expressly says that we're using a
12 standard VPN.

13 JUDGE HAMANN: Counsel, I think that may be a slightly
14 different argument as to whether the VPN terminates and what paragraph 47
15 may teach. But something else you said earlier that I want to make sure I
16 understand what the Patent Owner is arguing, for example, I think you said it
17 in the next paragraph, 48, but there's a disclosure of the transmission versus
18 reception. I recognize what the claims are. But if you have A transmit to B,
19 for example, doesn't that suggest at least that B receives from A?

20 MR. THEISS: Well, Your Honor, in paragraph 48, it is saying
21 that, the network device that's being monitored, we're going to send its video
22 output out through 110 to the remote management console. The claim,
23 however, requires that the command come from the remote management
24 console and be transmitted inside to, in the case of Neufeld, to the RMC.
25 The direction is completely wrong, and one does not inherently cause the
26 other. I can receive my over-the-air television. That's the reception of a

1 video signal. I can't transmit anything back to ABC. Transmission and
2 reception are fundamentally different. And as I just highlighted, in the
3 context of video, it is very common for it to be asymmetric.

4 JUDGE HAMANN: Understood to your position. Thank you
5 very much.

6 MR. THEISS: Specifically, again, when Counsel stood up here, he
7 didn't talk about the claims. The claims are extremely important in the '016
8 patent, as well. So there's a discussion about what is the apparatus. It is
9 Patent Owner's position that the apparatus is the SMACC. The first element
10 is a processor configured to control one or more functions of a network
11 device, so that is the larger computer in which the SMACC is located. The
12 network device has to have a network interface, wherein the network device
13 is configured to receive data requests and encrypted forms of management
14 requests via the network interface, wherein the management requests are
15 from a remote administrator.

16 We then have to have a first bus, then a first bus controller coupled
17 to the processor via the first bus, wherein the bus controller is also coupled
18 to a second bus of the network device that is distinct from the first bus,
19 which makes sense because the network device is something outside of our
20 computer. That's the SMACC.

21 When the bus controller is configured to receive the encrypted
22 form of the management request from the second bus, so the commands
23 need to go over that second bus in an encrypted form and to convey the
24 encrypted form of the management request to the processor, so that is the
25 processor of the apparatus, the SMACC, via the first bus, wherein the
26 processor is configured to decrypt the encrypted form of the management

1 request, wherein the network device includes a processor. So we have two
2 recitations of a processor, there's a processor in the network device, and
3 there is a processor in the apparatus, configured to facilitate operation of the
4 network device, wherein the processor of the apparatus is distinct from the
5 processor of the network device.

6 There's a lot going on there, but if you go to Slide 3 you'll see how
7 we've broken this out. So you have the apparatus on the top that has the first
8 bus, the bus controller, the processor of the apparatus, and then you have the
9 components of the network device that has the second bus, the processor of
10 the network device, and the network interface; that's on Slide 3.

11 So if we take that structure and we overlay what the claim requires,
12 so we need data requests to go into the network interface of the network
13 device and we need management requests to go from the remote
14 administrator through the network device. Those management requests then
15 go over the second bus of the network device where they interact with the
16 bus controller because the bus controller is the bridge between the second
17 bus of the network device and the first bus of the apparatus, the SMACC,
18 and route those commands to the processor of the apparatus, the SMACC,
19 where they're decrypted. That is the flow that the claim requires.

20 Now, we've spent a lot of time talking about what is in Neufeld as
21 it relates to this. Neufeld makes very clear, as we can see on Slide 6, that
22 Ethernet interface provides the main external communication interface
23 between the remote management server, controller 116, and the outside
24 world.

25 Now, a lot has been said about paragraph 47 and the typographical
26 error there. Your Honors, I don't mean to belabor this, but you have to look

1 at the architecture that Neufeld is laying out. Neufeld is teaching all of these
2 components that allow for a connection between the RMC and the outside
3 world. For there to be a connection between that RMC via the computer it's
4 in, there's all layers of software. There's all these components that we talk
5 about on how to implement the VMI in our patent. There's none of that in
6 Neufeld.

7 Now, moving to Slide 8, there's a discussion of paragraph 43,
8 specifically the end of paragraph 43, but I'll read it out loud. Further,
9 attached to the PCI bus 16 is an RMC. The remote management controller
10 connects to the keyboard controller 38, the network N and/or management
11 network M, a keyboard 52, a mouse to provide functionality for accessing,
12 interacting, and monitoring the managed server from the remote console.
13 Your Honor, all that is doing is explaining how things are connected. It's not
14 saying commands are received in any direction. It's not saying commands
15 are transmitted. It's not really in dispute that when we look at what is shown
16 in Figure 3 of Neufeld, as shown in Slide 6, I'm sorry, on Figure 2 on Slide
17 6, that the things are connected via PCI bus. That's not in dispute, Your
18 Honor. But it is a large jump to go from how are these things wired together
19 to we're going to receive secure commands over that bus.

20 And what we do have in the record is a very good explanation for
21 why you would want the RMC to be connected to these things. You would
22 want the RMC to be able to monitor what's going on in the keyboard, the
23 data that's coming over the Ethernet port, over 110. You would want it to be
24 able to monitor everything that is running on the computer because it's a
25 remote monitoring system. Neufeld makes very clear that its whole entire
26 reason for being is to monitor the server, and this is just showing how it can

1 monitor that server.

2 And again, there is this discussion of snooping. And, yes, there's a
3 discussion of snooping in Neufeld. As the name implies, snooping is
4 passively listening on something. It's seeing what data is flowing over that
5 PCI bus without necessarily telling the components in the PCI bus that
6 they're being watched. It is a very large jump, Your Honors, to go from
7 snooping, passively listening on a bus to passively listening on a bus so you
8 know that you can find the management command that's going to tell you
9 how to operate. That's a big jump, Your Honor. The patent specifically
10 requires that you're not going to snoop on it and hope maybe I'm going to
11 hear it. You are going to receive it via that bus. It just doesn't make sense.
12 So there are several ways --

13 JUDGE JUNG: Mr. Theiss, this is Judge Jung. Before you move
14 on, in paragraph 43, there's also the word interacting. What does interacting
15 mean to the Patent Owner? We discussed, you know, the monitoring part of
16 all that, but what about the interacting? What does that mean?

17 MR. THEISS: Your Honor, it can be interpreted a lot of different
18 ways. We have a lot of different listings of things that are there. For
19 example, one of the things that Neufeld talks about and incorporates by
20 reference is another patent, specifically on how you would insert remote
21 keystrokes into the keyboard buffer. So I think that would be an example of
22 interacting. I think pressing buttons, giving inputs into the management
23 computer, would be an example of interacting.

24 JUDGE JUNG: Would data flow going back and forth also be an
25 interaction of some sort?

26 MR. THEISS: Potentially, Your Honor. But I think what's critical

1 about it is what that data is and what data is being transacted.

2 JUDGE JUNG: Given the rest of the disclosure in Neufeld, it
3 seems like whatever data is being passed over under the interacting, it has to
4 pertain to what the remote management controller is doing and what the
5 managed server is doing, right?

6 MR. THEISS: Potentially, Your Honor. There is -- it's unclear.
7 The best I can say is it's unclear. As to what this paragraph means, we have
8 testimony from both of our experts saying, we don't quite know. We don't
9 have great testimony from their experts saying what interacting means or
10 what any of this means.

11 What we do have is a disclosure of an architecture that makes a lot
12 of sense where you're going to have the commands come from an out-of-
13 band network. And what's great about being out-of-band is it can be lights-
14 off. The operating system doesn't have to be running. You don't need the
15 complexity that is provided by our invention with the VMI. The VMI
16 provides additional benefits. And, actually, Counsel pointed out a really
17 good benefit. As you note in our patent, we're talking that you have a
18 dedicated interface, and you also have this virtual VMI interface that allows
19 you to connect both ways. It's a really good idea, and that's what we
20 invented. It's just not there in Neufeld.

21 JUDGE JUNG: Okay. The only thing I'm trying to get across is
22 that it seems like you're trying to ask us to read out a reasonable
23 interpretation of the word interacting. You concentrate on monitoring but
24 kind of gloss over what's happening or what's meant by interacting versus
25 monitoring.

26 MR. THEISS: I understand the tension, but we have three words

1 there. We have accessing, interacting, and monitoring. And we have a large
2 representation of a keyboard controller, the network N, the network M, a
3 keyboard, and a mouse. I would say that interacting is taking the input from
4 the mouse, putting it in. There's lots of different ways that could be
5 multiplexed. It's really hard to understand what this one sentence means.
6 It's very hard, and we don't have testimony that resolves it either way.

7 And I think that's really what this comes down to onto this issue,
8 and the reviewing court makes this really clear: Where a prior reference
9 includes an obvious error of a typographical or similar nature that would be
10 apparent to a person of ordinary skill in the art who would mentally
11 disregard the errant information as a misprint or mentally substitute it for the
12 correct information, the errant information cannot be said to be disclosed in
13 the subject matter.

14 There's clearly multiple ways this could be corrected. We have
15 testimony throughout saying that these references are unclear and there's a
16 bunch of typographical errors, and it just doesn't -- I don't know. That's just
17 not the standard that we use for obviousness. Is it disclosed? Would a
18 person of ordinary skill in the art have appreciated it as there?

19 Best case scenario, Your Honors, we have a dispute. We have two
20 experts on our side saying this is unclear, and it makes a lot of sense in the
21 context of paragraph 60, paragraph 51, and the entire disclosure of Neufeld
22 to correct it as we've highlighted on Slide 9. We have Petitioner saying, no,
23 it needs to be corrected the other way. Petitioner did not proffer an
24 additional expert declaration in either case further clarifying this after we
25 had raised it and made it quite clear that our interpretation was different.
26 Instead, we have just the correction of the term with the word sic, indicating

1 that they made the correction.

2 JUDGE BELISLE: Counsel, this is Judge Belisle. On the slide
3 you were on, Slide 9, what is the purpose of the quote from the case?

4

5 MR. THEISS: Yeah. The purpose of the quote from the case is --

6 JUDGE BELISLE: Why are you giving us that?

7 MR. THEISS: -- is there's clearly an error, Your Honor.

8 JUDGE BELISLE: Okay.

9 MR. THEISS: So if there's clearly an error there and the case is
10 being demonstrative of the fact that we can't draw an inference from what is
11 an error.

12 JUDGE BELISLE: But doesn't your quote right there say that it's
13 the errant information that you can't use to disclose subject matter, meaning,
14 I can't use the M as saying that that teaches something, but I could use the
15 fact that the skilled artisan would recognize the error to be the M and that N
16 should be there, and that discloses something.

17 MR. THEISS: Absolutely, Your Honor. That is very much the
18 crux of our debate here is, as you can see that we have the error on Neufeld
19 on the left, we have one proffered construction of how to correct the error in
20 the middle, and then we have another proffered option to correct the error.
21 What we don't have is anything that conclusively says how to correct the
22 error. Best case scenario, we have a reasonable-people-can-disagree
23 situation, but that isn't -- what we're using the case for is that, if it's a
24 reasonable-people-can-disagree, that is not what a person of ordinary skill in
25 the art would necessarily understand the document to say. Paragraph 15 --

26 JUDGE HAMANN: Counsel?

1 MR. THEISS: Yes.

2 JUDGE HAMANN: This is Judge Hamann, and I'm trying to
3 understand, looking at Neufeld, Figure 2, for example, I know we've looked
4 there before.

5 MR. THEISS: Slide 6, yes.

6 JUDGE HAMANN: Now, so, I'm just trying to -- the management
7 network M is shown in figure 2 as connecting, I think, arguably directly to
8 the management controller 116.

9 MR. THEISS: Completely agree, yes, Your Honor.

10 JUDGE HAMANN: And then there's Figure 3 that, I believe, puts
11 it through to the interface to the 166 bus of the remote management control.
12 But I don't believe management network N connects at all to the PCI bus
13 172; is that correct?

14 MR. THEISS: No, Your Honor. I believe you're mistaken. Figure
15 3 is a blow-up of component 116.

16 JUDGE HAMANN: Right.

17 MR. THEISS: And you'll notice that in the middle of what's
18 labelled as 172 is the PCI bus that is shown in Figure 2.

19 JUDGE HAMANN: That's a local bus 166 that you meant to do,
20 right? Not PCI bus 172 on the left?

21 MR. THEISS: Your Honor, I believe this is another example of
22 one of the typos in Neufeld. The only way it makes sense in the context of
23 what's being presented in Figures 2 and Figures 3 is that what is labeled as
24 the PCI bus -- and, yes, it does have reference numeral 172 -- is the same
25 PCI bus that the remote management controller 116 is connected to in Figure
26 2. I believe it's just a drafting error, Your Honor. There's no other

1 connection that would allow the RMC to connect to the PCI bus as labeled
2 as PCI bus in both places.

3 JUDGE HAMANN: Well, I'm just looking at 2 and 3. You know,
4 2 has PCI bus 16, which, arguably, is the same as PCI bus 172, I think is --

5 MR. THEISS: Yes, that's our position. Yes, you're right.

6 JUDGE HAMANN: Okay. So there's that PCI bus. Looking at
7 Figures 2 and 3, I don't see how management network 10 connects to the
8 PCI bus. It seems to connect, at best, directly to the remote management
9 controller 116, or obviously --

10 MR. THEISS: We're in complete agreement there, Your Honor.
11 By connect, we mean that the RMC is connected to both the PCI bus and to
12 the Ethernet.

13 JUDGE HAMANN: Right. But you're going to the local bus with
14 at least Figure 3. The management network is -- you know, for example, we
15 get to the IOP, it doesn't go through the PCI bus 172 or 116, whatever you
16 want to call it.

17 MR. THEISS: We completely agree about that, Your Honor, yes.

18 JUDGE HAMANN: Okay. And then, I'm trying to understand
19 that interaction with paragraph 57 that talks about, as I understand it, the
20 remote management controller and, you know, using the PCI bus 172 for
21 communication.

22 MR. THEISS: Which paragraph, Your Honor?

23 JUDGE HAMANN: Fifty-seven.

24 MR. THEISS: I have paragraph 57 on the screen. Can you direct
25 me to where in paragraph 57?

26 JUDGE HAMANN: Well, it says the PCI bus 172 serves as the

1 main communication interface between the main communication interface
2 between the main server and the remote service management controller 116.
3 So I understand that, but I'm trying to understand the orientation of, you
4 know, how the PCI bus -- I'm just trying to understand how the PCI bus,
5 looking back at the figures, relates to two separate networks, if at all,
6 because, obviously, network N, you know, connects with the PCI bus, but
7 network M, as in Mary, does not, at least from my --

8 MR. THEISS: Yes. Absolutely, absolutely, Your Honor, yes.

9 The PCI bus that is part of the managed device, the thing being managed, is
10 isolated from the internal bus, yes. I think that's what's shown in Figure 2
11 quite clearly, is that you have the RMC in 116 that has its internal
12 components, which are highlighted in Figure 3. The server, the managed
13 server 2, would work absolutely fine without the RMC even being there. It
14 would do its normal computing things. It would be connected to network N
15 and could provide a file server or be a generic computer.

16 In Neufeld, it inserts another management component inside of it
17 that has its own network interface, which is Ethernet 180. And internal to
18 that board, internal to the RMC, is a different bus, which is labeled as the
19 local bus 166. And the way that the RMC is able to communicate with the
20 greater host computer is through the PCI bus, Your Honor.

21 JUDGE HAMANN: Okay. Thank you.

22 JUDGE BELISLE: Counsel?

23 MR. THEISS: Yes.

24 JUDGE BELISLE: There we go. Judge Belisle. So we have
25 Figure 2 and Figure 3 up. As part of your conversation today, are you trying
26 to tell us that, if we look at Figure 3, that we should see that there is no

1 network N through a NIC connecting into the RMC?

2 MR. THEISS: Yes, Your Honor.

3 JUDGE BELISLE: And now, tell me again why and why is that
4 important to us, that there's no connection from the network to the NIC into
5 the RMC?

6 MR. THEISS: Yes, Your Honor.

7 JUDGE BELISLE: At least according to Figure 3.

8 MR. THEISS: Yes, Your Honor. Specifically, it's because where
9 the data needs to come in. In both the patent before us that we're talking
10 about with the '016 and the '140 patent, we need both the device-being-
11 managed data and the management data to be coming over the same
12 interface. So if we have two separate interfaces, one for managing the
13 device, the RMC, and one for the server doing its own usual server things,
14 they're not comingled. We do use the word comingled in our papers. They
15 have to, as the claim requires here, that they have to be able to receive -- or
16 let's read exactly what the claim language says. The network device is
17 configured to receive data requests and an encrypted form of management
18 request via the network interface, and that is the network interface of the
19 network device. So I'm on Slide 2 reading the first claim element.

20 So both the data requests and the management requests need to be
21 received over the same network interface. And, specifically, that needs to be
22 a network interface of the thing we're being managed, the network device.

23 So to relate that back to the question, when we look at Neufeld,
24 and why this is so important is we have that separation. We have the
25 network N, we have M, but our patent specifically requires that that data that
26 comes over N and the management requests that come over M have to be

1 over the same interface, and it's just not there in Neufeld.

2 JUDGE HAMANN: Counsel?

3 MR. THEISS: Yes.

4 JUDGE HAMANN: Can you go back to the figure of that 2 and
5 3?

6 MR. THEISS: Yes, Your Honor, Slide 6.

7 JUDGE HAMANN: Thank you. Slide 6 of the -- I believe this is
8 the '109, is it?

9 MR. THEISS: Yes, Your Honor.

10 JUDGE HAMANN: Thank you. Obviously, looking at Figure 2,
11 the network N in, like, the blue has the NIC card, but it's not been
12 highlighted, the connection, at least in the drawing. I mean, there's a
13 connection to the PCI bus, which is also connected to the remote controller
14 116 also. So I'm trying to understand why that's not highlighted, and why
15 that doesn't suggest that network N can also connect to the remote controller.

16 MR. THEISS: Your Honor, that isn't what is really in dispute.
17 The RMC can clearly monitor anything that's going on in the PCI bus.
18 That's entirely what the concept of snooping relates to.

19 The question before us today is whether or not the RMC receives
20 commands over that PCI bus.

21 JUDGE HAMANN: Right. But network N is connected to that
22 PCI bus via NIC card 110.

23 MR. THEISS: Absolutely, Your Honor. That's not in dispute.
24 What is in dispute is whether or not the management commands come in via
25 network N or they come in via management network M.

26 JUDGE HAMANN: I understand that. But I think it suggests that

1 the network remote computer, management computer, is not connected via
2 network N to 116 is incorrect, to the extent that suggestion is being made.

3 MR. THEISS: Your Honor, I don't quite understand what you just
4 said there. Our question -- we are not disputing that 116 can monitor what is
5 on the PCI bus, and the traffic from the network interface 110 is clearly
6 going to go over the PCI bus. That's not in dispute, so that point is not in
7 dispute.

8 What is in dispute is where the management commands come
9 from.

10 JUDGE HAMANN: I understand that.

11 MR. THEISS: Okay.

12 JUDGE HAMANN: It's Patent Owner's position, clearly, that only
13 network M is what's used for the management request.

14 MR. THEISS: Absolutely, Your Honor. As the name M implies,
15 it is the management network for maintenance. That's the whole reason that
16 exists. And I think --

17 JUDGE HAMANN: Are you suggesting that was chosen that way
18 to denote that?

19 MR. THEISS: I believe so 100 percent, Your Honor. The patent
20 -- Neufeld talks about it being the management network and happens to label
21 it as M. It also talks about the management network being used for
22 maintenance, also having to start with the word M. Yes, Your Honor, I do
23 think it was deliberately chosen.

24 JUDGE HAMANN: What's the N?

25 MR. THEISS: That's a very good question, Your Honor. I think it
26 was just for consistency, but I don't know. We really don't know, and that's

1 what's so frustrating about the Neufeld reference, is we have two experts that
2 are standing up here -- well, sit for their depositions -- and said, I don't know
3 what Neufeld's really saying.

4 If we look at Slide 13, we see kind of the problem here is that,
5 whether or not, and this is what I was just talking through you with, is we
6 definitely know that the management commands go from management M
7 into the remote management controller, RMC. The question is does that
8 blue line exist? Is there a disclosure anywhere in Neufeld where the
9 management commands come in through the blue line? The Patent Owner's
10 position is absolutely, 100 percent, it doesn't. There's nothing there. At
11 most, there's a connection, and a connection does not make the rest of the
12 apparatus, because there's so much testimony in the record here that you
13 need more than a connection for secure management commands to come in.

14 JUDGE HAMANN: But doesn't paragraph 15 suggest that it
15 would be desirable to also have the ability to have in-band communicate that
16 management request?

17 MR. THEISS: Oh, absolutely, Your Honor. And our patent
18 actually specifically has that when we talk about the '140 patent where we
19 specifically have an in-band and the VMI-based interface. Something being
20 identified as desirable doesn't mean you know how to build it or that it
21 discloses how to build it. Simply stating the problem does not constitute a
22 disclosure.

23 JUDGE HAMANN: Thank you.

24 MR. THEISS: So, briefly, if the Board reaches the conclusion that
25 the management commands are coming over the management network,
26 Petitioner's mapping breaks down, because then the buses get reversed. It

1 just doesn't work.

2 So, now, unless there's any more questions about Neufeld, I'd like
3 to talk about the IPMI.

4 JUDGE JUNG: Just one last question, just to clarify your position.
5 So if we agree with Petitioner that commands are being sent out through
6 network N, their mapping still breaks down?

7 MR. THEISS: I'm sorry, Your Honor. When you say, sent out --

8 JUDGE JUNG: Sent from a management controller 116 through a
9 network N to a device connected to network N downstream.

10 MR. THEISS: So as it relates to the patent we're talking about
11 right now with the '109, their mapping would be okay. As it relates to the
12 '140 that we were talking about earlier, it still breaks down, because you
13 need that VPN connection to the internal component, and that just isn't there.

14 JUDGE JUNG: Okay. Thank you.

15 MR. THEISS: I apologize. Putting these two patents together,
16 since they are technically a little bit different, things do get a little bit
17 muddled.

18 So I'd like to talk about the IPMI. Just because the slides are up,
19 I'll start with the patent we've been talking about. So, Your Honors, we have
20 a situation here where we have, on slide 20, we have a situation where
21 Petitioner hasn't explained why you would graft in this additional component
22 into a circuit board, why you would take a LAN controller that is on the
23 same board in the embedded LAN controller, why you would graft that on,
24 take something that's in the embedded LAN controller, put that data onto the
25 PCI bus, and then transport that information over the PCI bus to a PCI bus
26 controller, and then route that information all the way back.

1 What makes even less sense, Your Honors, is, if you look at the
2 IPMI standard, there actually is an implementation that doesn't put the LAN
3 controller on the circuit board and uses the PCI bus as the backhaul. That
4 wasn't the implementation that IPMI -- that Petitioner pointed to, because in
5 that case, the first and second bus collapse. The only way we get to a read
6 that works is what they proposed here, which you get, going to Slide 21, this
7 Rube Goldberg design where we're grafting the two references.

8 So, as proposed, the command would have to go over the network
9 interface controller over the -- this is all within the same circuit board, mind
10 you -- would have to go in the network controller, over the I/O controller, to
11 the non-PCI bus controller, to the non-PCI bus device, and then into the
12 VMC. That just doesn't make any sense, Your Honor. It just doesn't make
13 any sense.

14 What is quite clear from all of the testimony and all of the
15 references is I2C is a low-capacity bus. It's, effectively, a serial line
16 communication for connecting components within a single printed circuit
17 board. Why would you add all of this extra overhead when you could just
18 run the two wires?

19 Now, as it relates to the I2C bus, there is nothing about I2C that is
20 inherently encrypted. It doesn't. The vast majority of implementations of
21 I2C have no encrypted data, would have nothing to do with encrypted. It's
22 just not a concept, because the security of a transmission bus inside of a
23 circuit board is that it's inside the circuit board. There's no real way to hack
24 inside of a circuit board. You're not going over a public network. It's
25 physically wires on a circuit board. Why would you add overhead of
26 encrypting wires on a circuit board? Secondly, no one's going to hack it.

1 No one's going to go there with their multimeter and gaff that way. That's
2 just not what we're talking about here. Petitioner offers no explanation for
3 that. None.

4 So, fundamentally, there is no reason on Earth that a person of
5 ordinary skill in the arts would graft on Huckins into the IPMI standard.
6 That doesn't make any sense. And even if you did it, there's still no evidence
7 in the record that the I2C is encrypted. It just isn't.

8 So, switching back to the other patent, just give me one second to
9 pull up my slides for that. Going to the '140 patent, so now, going to Slide
10 15, going down to Slide 16, so we have how the Petitioner has laid this out
11 as to how a POSITA may or may not have configured the system based on
12 the Petition, and, fundamentally, what the Petition failed to show. And as
13 Your Honors observed in the institution decision, there's no explanation for
14 why a person of ordinary skill in the art would implement a VPN inside a
15 circuit board, to go between components inside of a circuit board. There's
16 nothing in the record there, Your Honors. It just isn't there.

17 And it further highlights the discussion that we were having
18 earlier, is that we are talking about a VPN connection from the SMACC
19 inside the computer. So it's got to go from inside the server and then inside
20 to something beyond that. And it's that instead of going inside the computer
21 and maintaining that VPN connection that the VMI provides, that is really
22 critical.

23 As it relates to Petitioner trying to correct their theory, it's just
24 some cold water, Your Honors. There's still no explanation for why on
25 Earth you would put a VPN inside a circuit board, inside components in a
26 circuit board. We were just talking about the I2C bus and why on Earth

1 would you encrypt it. Well, why would you go for such a high level of
2 encryption requiring a VPN with these handshakes and all of these aspects
3 of -- you can read through the standards that are in the record related to the
4 IPSec and all of those standards. Why would you put all of that overhead
5 into something that is physically wires on the same circuit board, maybe
6 going 6 inches? It just doesn't make any sense.

7 So when we look at the '140 patent specifically, and I think this
8 illustration is helpful for both, is that we have our annotations of Figure 19.
9 And, specifically, as relates to the '140 patent, we specifically require an out-
10 of-band connection and an in-band connection. And that in-band connection
11 needs to traverse the user data interfaces and form a connection to the
12 SMACC. So we need to have both of those interfaces. Your Honor would
13 ask, would it be desirable? Absolutely. It's specifically required in this
14 patent, the '140 patent, for there to be both interfaces.

15 What we have in Neufeld is we have, at most, a VPN that stops at
16 the user interface. It doesn't get to that computer inside of a computer. It
17 doesn't get there. That's even if we assume that Neufeld even teaches in-
18 band versus out-of-band. The Patent Owner is clearly of the position that
19 Neufeld is completely out-of-band. There are typos in Neufeld. Perhaps
20 even reasonable people can disagree on how to correct those typos. But the
21 claim specifically requires logical separation of in-band and has to do with
22 that logical separation, has to make it all the way to the component, the
23 computer inside the computer. It just doesn't do that. It doesn't even get
24 close.

25 And when we look at the IPMI references, well, we just
26 fundamentally have no reason for why on Earth you would graft a VPN

1 inside of a circuit board. It just doesn't make any sense, Your Honor.

2 So I have about 2 minutes left. Are there any additional questions
3 from the Board?

4 JUDGE JUNG: I have no questions.

5 JUDGE BELISLE: None from me.

6 MR. THEISS: Thank you, Your Honors. Let's see if I can do this
7 without tripping over myself.

8 JUDGE HAMANN: Let's take a break. I think it's about an hour,
9 or we might have gone a little over of that, so I'm showing 3:02.

10 JUDGE JUNG: We'll go off the record.

11 JUDGE HAMANN: 3:15. Thank you.

12 (Whereupon, the foregoing matter went off the record at 3:01 p.m.
13 and went back on the record at 3:16 p.m.)

14 JUDGE HAMANN: Back on the record. Judges Belisle, Judges
15 Jung, are you ready to proceed?

16 JUDGE JUNG: Yes.

17 JUDGE BELISLE: Yes.

18 JUDGE HAMANN: And, correct me -- I believe it's 33 minutes
19 for Petitioner for rebuttal; is that correct, Judge Jung?

20 JUDGE JUNG: That's correct.

21 JUDGE HAMANN: Once the clock is set, you can begin when
22 you're ready, sir.

23 MR. HEINTZ: Thank you, Your Honor. I thought I had much less
24 time than that, so we're going to be done a little early, I think. I have four
25 quick comments to make based on what I heard from my colleague.

26 The first of those concerns the meaning of VMI, the construction

1 of the virtual management interface. In the Petition, on page 10 going on to
2 page 11, we put forward a construction for the virtual management interface
3 connection means. And, significantly, on page 11 of the Petition, and, of
4 course, I'm talking about the '124 Petition, we gave the structure as a virtual
5 private network, and that came from the district court. That construction
6 was not contested in the Patent Owner's response.

7 Today, I believe I heard my colleague say that this VMI, this
8 virtual management interface, is not the VPN. It's some sort of software that
9 somehow allows the VPN to work through the interfaces. That is not the
10 construction in the Petition. It's not the construction from the district court.
11 That construction was not disputed in the Patent Owner response. That
12 construction has been waived. The virtual management interface is a VPN.
13 That's the first point.

14 Second point, my colleague discussed the fact that Neufeld
15 discloses that a modem is one option by which you can get commands to the
16 RMC, and he also discussed that the Ethernet interface 180 is a second
17 option. There's no dispute. It's just as simple that the NIC 110 is a third
18 option for doing just that. There are three options in Neufeld, and that is a
19 simple issue.

20 Now, I'm going to refer to Slide 20. Judge Hamann, I think you
21 asked my colleague, if paragraph 47 were to be corrected such that it was the
22 network N rather than network M, would that be dispositive. My colleague
23 said it wasn't. It is dispositive, Your Honor.

24 Let's look at Slide 20 from our slides. We have a discussion there
25 of the operative sentence in paragraph 47, which reads: The remote
26 management controller 116 also includes circuitry to route keystrokes to the

1 keyboard controller 38 from either the local keyboard 52 or from the remote
2 console 5 via the modem or the NIC 110. Those keystrokes from the remote
3 management PC are remote management commands. They're coming from
4 the remote management PC, through the RMC, and then over to the
5 keyboard controller in the managed server.

6 And the context here is also important. The choice here in
7 paragraph 47 is either that keyboard 52 or the remote management PC via
8 the NIC 110. If you look again on Slide 20 in Figure 2, that keyboard is a
9 locally connected keyboard. It's something that's connected right into the
10 RMC via wire. This isn't a keyboard for somebody to play video games on.
11 This is what the remote management -- this is what the administrator is
12 going to do if he happens to be or needs to be in the room or in the same
13 building with the device. That keyboard is clearly for remote management
14 commands.

15 And so when paragraph 47 is telling you that I can route
16 keystrokes from that keyboard or from the remote management PC, that is
17 clear as day we're talking about remote management commands. And that is
18 coming from the remote management PC to the RMC 116. It's the opposite
19 direction of what's discussed in 48.

20 So under any rational understanding of what paragraph 47 is
21 saying, if you correct 47 to read N instead of M, there is a clear disclosure of
22 the commands coming into the RMC 116. And, of course, those are going to
23 be encrypted. They're coming over a public network N via the NIC 110.
24 The last point --

25 JUDGE BELISLE: Counsel, before you move to your last point,
26 so let's just stay right on your last comment, and that is, you know, if we

1 interpret that to be N. Let's say we can't rely on this paragraph. Make the
2 case for receiving commands without us relying on this paragraph.

3 MR. HEINTZ: I would go right to paragraph 43, Your Honor, and
4 paragraph 15. You recall that paragraph 43 talks about the remote
5 management computer and the RMC 116 communicating via NIC 110 for
6 purposes including monitoring and interacting. That interacting is remote
7 management commands. What other kinds of interaction would we be
8 talking about?

9 And with respect to paragraph 15, Neufeld discloses that it would
10 be highly desirable to have this in-band communication online, meaning the
11 OS is up, in-band communication means over the network N, not just for
12 monitoring, but also for repairing problems and interacting with the
13 computer.

14 And I will also point out, this is actually the last point I'm going to
15 make, but it fits in quite nicely. If you go to Slide 25 of our demonstratives,
16 you will see that there is an excerpt here of some deposition testimony, and
17 this was Dr. Mishra. And I asked him to look at Neufeld and tell me if there
18 is anywhere, any place in Neufeld where there is a disclosure of using the
19 remote management PC for anything other than remote management. He
20 could not find anything. The remote management PC is there for remote
21 management. If the remote management PC is interacting with the RMC via
22 network N, it's doing it for management. It's that simplified.

23 If there are no further questions, I'll rest.

24 JUDGE HAMANN: This is Judge Hamann. I have a question,
25 Counsel. Looking at Neufeld's Figure 3, what do you make of it that
26 management network M is shown but network N is not shown in this

1 particular figure?

2 MR. HEINTZ: I think the answer is pretty simple. Figure 3 is
3 talking about, in particular, about the RMC 116 and is showing the internal
4 structure of 116. Figure 3, as I believe you mentioned, Your Honor, does
5 show that the PCI bus extends into the RMC 116 where it connects to the
6 IOP. So the RMC 116 is clearly connected to that PCI bus to which the NIC
7 110 is connected. It's not discussed in Figure 3, because Figure 3 is about
8 the internal components and the NIC 110 is external. But the connection is
9 clearly there. There is clearly the ability for the IOP 156 to communicate
10 out to the NIC 110 with the remote management PC as discussed in
11 paragraph 43 and as suggested, at least, in paragraph 15.

12 The other thing I would mention here is -- well, I'll leave it there.

13 JUDGE HAMANN: I have no further questions. Seeing no other
14 questions, thank you, Counsel.

15 MR. HEINTZ: Thank you, Your Honor. Let's see if I can do this
16 without making a mess this time.

17 JUDGE HAMANN: We have 32 minutes.

18 MR. THEISS: Pursuant to our rules, that would be very difficult
19 for me to use all the time since I'm limited to what we discussed.

20 Your Honors, for clarity, we are maintaining the same claim
21 construction throughout regarding what the VMI is. We are not disputing
22 that the patent clearly says that the VMI utilizes existing and developing
23 technologies such as a VPN to build secure tunnels between the SMACC
24 chipset and the management center while using the data interfaces of the
25 managed device and the user network to provide the transport of the
26 management data costs effectively. That's what the patent says. It's not just

1 what the specification says; it's what the claim says. And at the end of the
2 day, the name of the game is the claims. And where it says, wherein said
3 virtual management interface connection means provides logical separation
4 of the management data from the user data and utilizes the user interfaces of
5 said management network for connecting said one or more network services
6 or remote users with said secure management access controller.

7 Your Honors, we're not disputing that the means for making that
8 connection is a VPN. What is in dispute, particularly in the '140 patent, is
9 what is being connected. The patent is quite clear that what is being
10 connected with a VPN is the computer within a computer, that SMACC.
11 That is why it's connecting via the user interfaces. There is nothing in the
12 record that shows the RMC in Neufeld running a VPN, maintaining a
13 connection. It's not there. It's not proffered. It's not argued. It's just not
14 there. It doesn't work that way.

15 Now, regardless of how you correct the M versus N issue, even if
16 you correct it the way Petitioner has proposed, and somehow, you're now
17 putting the management commands -- instead of being over management
18 network M, you're putting it over N, you still have no disclosure, no teaching
19 that there's going to be a connection over that network into the RMC. It's
20 just not there. And that's exactly what's required in the '140, in that last
21 element. It's just not there, Your Honor.

22 Now, when we look at the claims, again, the claims are what this is
23 about, is that when we look at the claims of the '016, we have to have, again,
24 in the '016, we have to have the network devices configured to receive data
25 requests and encrypted form of management requests via the network
26 interface. So we need the data requests and the management requests to be

1 over the same interface. And, specifically, we need the management
2 requests to be encrypted.

3 Now, even if you correct the M to N, that encryption thing is still a
4 problem. We still have that problem here in the '016 patent because, again,
5 we want to maintain that encryption all the way to the SMACC. That's what
6 the claim says. It has to be encrypted. It has to be decrypted by the
7 processor of that computer inside a computer. But that's not what we have
8 in Neufeld.

9 What we have in Neufeld, and we've spent a lot of time talking
10 about this, going to Slide 6, is the distinction between Figures 2 and 3. We
11 have a management network that the patent -- I'm sorry, that Neufeld, the
12 patent application never granted, perhaps because it has so many errors, that
13 the ethernet interface provides the main external communication interface
14 between the remote management controller and the outside world.

15 Your Honors, why would it have such a clear sentence if the intent
16 of Neufeld was like, oh, under some circumstances the main interface is M,
17 and under other interfaces the main interface is N. It doesn't say that. What
18 it says is the main interface is the interface for receiving the management
19 commands from M, and that makes it very clear, Your Honors, that it is
20 because, in Neufeld, it's an out-of-band system. And every example, when it
21 talks about the modem, it relates to it being another mechanism for there
22 being an out-of-band system. That's why there's the UART 174 there.
23 That's why there's the serial USB interface. That's why there's all those
24 other interfaces that are out-of-band.

25 Your Honors, if it can receive those commands inside, then why
26 wouldn't you just use the USB cable that's plugged into the computer

1 already? Why would you need that? Well, in Neufeld, it needs them
2 because the entire purpose is for it to be out-of-band. That's why it needs an
3 extra keyboard. That's why it needs an extra Ethernet interface. That's why
4 it potentially needs an extra modem because those are the things that you
5 need for an out-of-band system, because you can't use the ones that are
6 already there. Because why can't you use the ones that are already there?
7 Well, that requires an interaction with the operating system. It requires
8 software running on that PC, that server. It requires a situation when, if that
9 operating system has crashed, you can't restart it. You can't do anything.

10
11 The out-of-band system allows you to have that sort of lights-off
12 operation where, if something has gone wrong with the server you're
13 managing, there's no dispute here, that's a really good idea that if the
14 operating system crashes that you have a mechanism to restart the operating
15 system without having to send a technician out there to go push the button.
16 And when we talked about accessing and interacting, that's exactly what we
17 were talking about, interacting being push the button to restart the server.
18 That's what it means by interacting. Monitoring, accessing, and interacting
19 with. Push the button. Make sure the server resets, Your Honors.

20 And, fundamentally, what we have here is an out-of-band system.
21 We don't have any discussion, any teaching anywhere of a VPN that reaches
22 inside of the server to be managed into an internal component inside that
23 server. That is what we have at the '140.

24 Now, in the case of the '016, when we look at the claims, we don't
25 specifically have the VMI, and that's really what these two continuations
26 have in difference. But we have that same idea. We need both the data

1 commands and the encrypted management commands to come out through
2 the same interface, and we just don't have that, Your Honors. We just don't.

3 I see I have about 25 minutes left. I will answer any questions you
4 have.

5 JUDGE HAMANN: I see no questions at this time.

6 MR. THEISS: Then I'm going to rest.

7 JUDGE HAMANN: Thank you. I'd like to thank the parties for
8 their arguments. I think they were very helpful for the panel. I ask that
9 Counsel remain after we adjourn briefly to check and see if the court
10 reporter has any questions as to spellings and whatnot.

11 And with that, the hearing is adjourned.

12 (Whereupon, the above-entitled matter went off the record at 3:32
13 p.m.)

IPR2024-00109 (Patent 8,474,016 B2)

IPR2024-00124 (Patent 7,325,140 B2)

PETITIONER:

James M. Heintz

Gianni Minutoli

DLA PIPER LLP

jim.heintz@us.dlapiper.com

gianni.minutoli@us.dlapiper.com

PATENT OWNER:

Brandon R. Theiss

Daniel H. Golub

Ryan W. O'Donnell

Robert D. Leonard

VOLPE KOENIG

btheiss@vklaw.com

dgolub@vklaw.com

rodonnell@vklaw.com

rleonard@vklaw.com

Russell J. Rigby

INTELLECTUAL VENTURES II LLC

rrigby@intven.com