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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD

MICROSOFT CORPORATION AND	)	
AFFIRMED NETWORKS, INC.,	)	
	)	
Petitioners,	)	CASE NO. IPR2023-00529
	)	
v.	)	
	)	
LEMKO CORPORATION,	)	
	)	PAGES 1 - 84
Patent Owner.	)	
	)	
	)	

DEPOSITION OF DR. TODOR COOKLEV
Wednesday, March 13, 2024
APPEARING REMOTELY FROM HUNTINGTON BEACH, CALIFORNIA

STENOGRAPHICALLY REPORTED BY:
LINDSAY A. STOKER, RMR, CRR, CRC
CA CSR No. 14373
Job No.

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

MICROSOFT CORPORATION AND)
AFFIRMED NETWORKS, INC.,)
Petitioners,) CASE NO. IPR2023-00529
v.)
LEMKO CORPORATION,)
Patent Owner.) PAGES 1 - 84
_____)

Deposition of Dr. Todor Cooklev, taken on
behalf of the Petitioners Pursuant to Notice via remote
teleconference in Huntington Beach, California,
commencing at 9:05 a.m., on Wednesday, March 13, 2024,
before Lindsay Stoker, RMR, CRR, CRC, Certified
Shorthand Reporter No. 14373 in and for the State of
California.

A P P E A R A N C E S

--oOo--

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WITNESS: DR. TODOR COOKLEV

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1 STENOGRAPHIC REPORTER APPEARING REMOTELY

2 HUNTINGTON BEACH, CALIFORNIA

3 Wednesday, March 13, 2024, 9:05 a.m.

4

5 THE VIDEOGRAPHER: Thank you to everyone for
6 attending this proceeding remotely, which we anticipate
7 will run smoothly. Please remember to speak slowly and
8 do your best not to talk over one another.

9 Please be aware that we are recording this
10 proceeding for backup purposes. Any
11 off-the-record discussion should be had away from the
12 computer. Please remember to mute your mic for those
13 conversations.

14 Please have your video enabled to help the
15 reporter identify who is speaking. If you are unable to
16 connect with video and are connecting via phone, please
17 identify yourself each time before speaking.

18 We will provide a complimentary unedited
19 recording of this deposition with the purchase of a
20 transcript. I apologize in advance for any
21 technical-related interruptions, thank you.

22 MR. RUECKHEIM: Michael Rueckheim on behalf of
23 Microsoft.

24 MR. PRICE: Jeff Price on behalf of Lemko.

25 Todor Cooklev, Ph.D.,

1 called as a witness, having been first duly
2 sworn, was examined and testified as follows:

3 EXAMINATION

4 BY MR. RUECKHEIM:

5 Q. Good morning again, Dr. Cooklev.

6 A. Good morning, Counsel.

7 Q. And I deposed you two days ago with respect to
8 an IPR challenging Lemko's '988 patent; correct?

9 A. Yes.

10 Q. Are there any answers that you would like to
11 change from that testimony?

12 A. I don't think so, sitting here right now. I
13 did not examine the transcript, but as I said, I don't
14 think there's anything that I would like to change that
15 I'm also aware of right now.

16 Q. And do you understand today we are going to be
17 talking about IPR2023-00529, an IPR challenge of Lemko's
18 U.S. Patent Number 7,653,414?

19 A. Yes.

20 Q. Okay. Where are you today?

21 A. I am in one of my offices on campus.

22 Q. And do you have any papers in front of you?

23 A. I only have one hard copy of my declaration
24 that I submitted in connection with the -- for the '424
25 patent.

1 It's -- it is not -- some figures did not print
2 as well in this copy that I have here. So maybe I will
3 be relying a little more on electronic copies that I'm
4 hoping you would make available.

5 Q. Understood. And when you said that -- I think
6 you said the '424 patent. Are you referring to Lemko's
7 '414 patent, the 7,653,414?

8 A. I apologize. It is the '414 patent. You are
9 correct.

10 Q. And when you mentioned declaration, were you
11 referring to the declaration you signed on
12 December 21st, 2023, that has been labeled as IPR
13 Exhibit 2021?

14 A. Yes, the exhibit is 2021. And just -- I will
15 check the date. December 21st of 2023.

16 MR. RUECKHEIM: Okay. And you said that you
17 would like to have an electronic copy, and so I put an
18 electronic copy into the chat that you can download.
19 And let me know when you have it open.

20 (Exhibit No. IPR Exhibit 2021
21 identified.)

22 THE WITNESS: Yes, I see it in the chat and I'm
23 down loading it. Thank you for making it available.

24 Yes, this is my declaration. I have it open.

25 ///

1 BY MR. RUECKHEIM:

2 Q. Other than the Zoom window and your 20- -- your
3 December 2023 declaration, do you have anything else
4 open on your computer?

5 A. No, I do not.

6 Q. Is there anybody else in the room with you?

7 A. No.

8 Q. You submitted two declarations with respect to
9 this 529 IPR; correct?

10 A. I think you are correct.

11 Q. Is there anything that you would like to change
12 in either declaration at this time?

13 A. I'm not aware of anything that's -- I don't
14 think so.

15 Q. Okay. Do you agree that the '414 patent is
16 entitled to a priority date of July 24th, 2006? And if
17 helpful, you can look at paragraph 17 of your
18 declaration, I think.

19 A. And the '414 patent claims priority to
20 February 24th, 2006.

21 Q. And do you see --

22 A. And --

23 Q. I'm -- go ahead.

24 A. My analysis is from the perspective of a person
25 of ordinary skill in the art as of that date.

1 Q. Have you seen any evidence that would lead you
2 to believe that the '414 patent is entitled to an
3 earlier priority date?

4 A. I do not recall, at the moment, whether I've
5 seen evidence. I do not provide an opinion that it is
6 entitled to an earlier priority date.

7 Q. What type of evidence have you seen that may
8 potentially indicate that the '414 patent is entitled to
9 an earlier priority date? Where have you seen evidence
10 that would credibly lead you to believe that?

11 A. Well, I do not -- as far as -- I do not recall
12 at the moment, but as far as type of evidence, maybe the
13 file history.

14 Q. And you reviewed the file history?

15 A. I think I did. I just, at the moment, don't
16 recall it.

17 Q. Is there anything cited in your report that
18 would lead you to believe that the '414 patent claims
19 are entitled to an earlier priority date?

20 A. I don't think so.

21 Q. In paragraph 20 of your declaration, you
22 identify a level of ordinary skill in the art provided
23 by Mr. Proctor. Do you see that?

24 A. I do.

25 Q. Do you agree with this level of ordinary skill

1 in the art?

2 A. You know, I should say that I applied this
3 definition in my declaration, but if -- to the extent
4 your question is what is my opinion, I would say that --
5 normally I need a little bit more time to provide an
6 opinion like this.

7 But since you are asking me, as far as the
8 educational level, a bachelor's degree in electrical or
9 computer engineering and two years of experience is --
10 generally corresponds with my opinion.

11 Mr. Proctor goes on beyond that and -- to say
12 the knowledge should encompass the design, architecture,
13 and operations of mobile telecom networks, including
14 gateway servers and user devices that were compliant
15 with various standards, and how they interact with other
16 components of a radio access network, and I think that
17 my opinion is a little bit different.

18 I think if I -- if I provide a definition on
19 this knowledge, design architecture and operations of
20 networks, gateways, and, etc., compliant with various
21 standards, I think it's -- first, it is a little bit
22 vague as far as "various standards," and maybe it's a
23 little bit -- it goes beyond what one could accomplish
24 in about two years of industry experience.

25 I mean, I -- these are -- these are just some

1 comments that I have regarding the level of person of
2 skill in the art.

3 Q. Based on that discussion, do any of the
4 opinions offered in your report change?

5 A. No, I don't think any of the opinions have
6 changed.

7 Q. And so there's a lot of things listed in this
8 sentence you just pointed to. Are you familiar with
9 people who have had the educational requirement and two
10 years of industry experience related to
11 telecommunications networks?

12 A. Excuse me. Whether I'm familiar with people?

13 Q. Yes. I'm wondering what your experience is
14 with regards to people who have listed educational
15 background and then two years of industry experience,
16 telecommunication industry experience.

17 A. Yes, and -- not only now, but around 2006, I
18 was familiar with people that had this educational
19 level.

20 Typically, I was -- most of the people that I
21 was familiar with had exceeded these qualifications.

22 Q. So when you say most of the people you are
23 familiar, I am focusing on just people who have had the
24 educational background listed under paragraph 20 and
25 then two years of telecommunication network industry

1 experience.

2 And so with that understanding, what aspect of
3 knowledge regarding the design, architecture, operation
4 of mobile telecom networks, and then how they comply
5 with various standards, what aspect of that would these
6 two-year-industry-experience people lack?

7 I am just trying to figure out, like, what is
8 the main disagreement with Mr. Proctor here?

9 A. So the way I understood your question is people
10 that -- not the people whose qualifications do not
11 exceed the stated qualifications in paragraph 20, but
12 just these qualifications, bachelor's degree and two
13 years of experience.

14 Q. Yes.

15 A. And, first, I -- as I said, I am right now, and
16 around 2006 I was familiar with people in the industry.
17 Most of the people that I was familiar with had
18 qualifications exceeding those.

19 So it is a little difficult for me to precisely
20 identify people that I was familiar with and that had
21 exactly two years or approximately two years of
22 experience.

23 But generally, I do think the sentence about
24 such knowledge would encompass the design architecture
25 and operations of mobile telecom networks.

1 This sentence does seem broad, that -- and then
2 it goes on, "including gateways, servers, and user
3 devices that were compliant with various standards."

4 So in two years of experience, some knowledge
5 of the relevant industry standards can be obtained.

6 And I would think that that -- yes. But as far
7 as design architecture and operations of mobile telecom
8 networks, that's a -- and including a number of
9 components and etc., I think that this sentence is more
10 applicable for, like, 5 to 10 years of experience than
11 two years of experience.

12 Q. Okay. But I think we were talking about in the
13 last deposition that it is generally within the skillset
14 of one of ordinary skill in the art to convert
15 hardware-based architecture to software-based
16 architecture?

17 A. I don't exactly remember the -- this
18 discussion. If you will, my recollection is a little
19 bit vague about it. But a person of skill -- of
20 ordinary skill in the art at that time was capable of --
21 given a task, was capable of writing software that would
22 implement that task in software.

23 Q. Just to make sure we are talking about the same
24 thing, a person of ordinary skill in the art at the time
25 was capable of writing software that would implement

1 tasks that were previously performed in hardware network
2 architecture; correct?

3 A. I think I disagree with -- with this -- at
4 least because of the way it is -- the question is
5 phrased.

6 Q. What do you disagree with?

7 A. It was, at the time, a considerable challenge
8 to implementing software tasks that previously were
9 implemented in hardware.

10 And we cannot make a blanket statement that
11 just a person of skill could directly accomplish that.

12 Innovative solutions were needed, and so once a
13 person of skill was told of an innovative approach how
14 to do that, then they could have implemented that
15 innovative approach.

16 Q. Well, let's talk about the '414 patent's
17 independent claims. And do you believe that there is
18 functionality provided in the independent claims that
19 was previously provided in hardware before Lemko's
20 inventions?

21 (Reporter Clarification.)

22 A. Yes. To -- just in general, this is part of
23 the -- Lemko's invention.

24 Q. Okay. And with respect to those alleged
25 hardware functionalities, was it within the skillset of

1 one of ordinary skill in the art to convert those
2 functionalities into software implementations?

3 A. Well, the way I understand the question wasn't
4 within the skillset, no. A person of ordinary skill in
5 the art at the time of the invention, given Lemko's
6 inventions, they knew how to implement them.

7 Q. When you say "given Lemko's invention," what do
8 you mean?

9 A. I'm not sure how to re-phrase that. If -- what
10 I mean is a person of skill in the art reading Lemko's
11 patent -- in Lemko's patents. But reading the '414
12 patent, they knew how to go about implementing this.

13 Q. Do you believe it was in the skillset of one of
14 ordinary skill in the art to combine the functionality
15 of an MSC and a BSC into a single unit as software
16 modules?

17 (Reporter Clarification.)

18 A. I don't think a blanket statement like that
19 would be correct. A person of skill in the art at the
20 time would realize that there were significant
21 challenges to this type of implement ation.

22 Q. You offer a proposed construction for the term
23 "distributed mobile architecture," DMA, in your
24 paragraph 53, correct?

25 A. Yes, I believe you are correct. And I don't

1 remember the paragraph number. Thank you for pointing
2 this.

3 Yes, I offer here an opinion how this term
4 should be understood.

5 Q. Can we agree that the '414 patent does not
6 provide an express definition of the term "DMA"?

7 A. Well, I should say that I don't have the -- I
8 don't have memorized -- have memorized the patent.

9 But I think that just, having said that, based
10 on my recollection, I think you are correct that maybe
11 this doesn't precisely say or gives a definition of what
12 this term means. But it talks about it enough that one
13 could understand this term.

14 MR. RUECKHEIM: And just for reference, I am
15 going to put the '414 patent, which is actually U.S.
16 Patent Number 7,653,414 into the chat so you can have
17 it, if you would like, for any reference.

18 (Exhibit Patent No. 7,653,414
19 identified.)

20 THE WITNESS: Yes, I got it.

21 BY MR. RUECKHEIM:

22 Q. Yeah, the declaration didn't really need to be
23 marked, but we can mark this.

24 Okay. And the definition you offer in your
25 declaration of DMA is different than the -- than the

1 definition of DMA you offered in the IPR challenge to
2 Lemko's '988 patent; correct?

3 A. Different?

4 Q. Correct.

5 A. Well, let's see. No, I don't think that it's
6 different, Counsel.

7 Q. And if you turn to your paragraph 54, you
8 explained that the proposed construction you use in
9 here -- I'm sorry, the proposed construction you used in
10 the IPR with respect to the '988 patent includes a
11 further limitation. Do you see that?

12 A. Yes. I do see this.

13 Q. Okay. And that limitation related to legacy
14 communication networks?

15 A. Yes.

16 Q. Okay. So am I correct that you are not
17 proposing that the definition of DMA with respect to the
18 '414 patent excludes legacy communication networks?

19 A. Well, I do state in paragraph 54 that this
20 additional limitation is not relevant to the grounds
21 asserted in this IPR. But I do think that the DMA is
22 not a legacy communication network.

23 It is just that I'm not -- not using this
24 aspect of my understanding in what I think a person of
25 skill would have understood about DMA. I am just not

1 using it. But I do think that it is correct to say that
2 DMA is not a legacy communications network.

3 Q. Okay. So you would propose that the board can
4 adopt the same claim construction for the term "DMA" for
5 the current IPR in the IPR challenging the '988 patent?

6 A. I think that would be fine.

7 Q. If you turn to paragraph 56 in your
8 declaration, the last sentence.

9 A. Yes, I am there.

10 Q. There, you refer to DMA servers that form a DMA
11 network appear as a single coherent system to any UE
12 interacting with the network?

13 A. Yes.

14 Q. Are you proposing that the board construe the
15 term "DMA" such that the nodes must appear as a single
16 coherent system to any UE interacting with the network?

17 MR. PRICE: Objection.

18 THE WITNESS: Whether the board should construe
19 this term like this, that is not exactly what I'm saying
20 in paragraph 56. I think we went over how I -- what my
21 opinion is about how the term should be construed.

22 So I am not saying that this -- it should be
23 construed so that the -- the DMA servers appear as a
24 single coherent system. If it is, then maybe we need to
25 explain what is a single coherent system.

1 But, yes, I do think that -- and the patent
2 makes it clear that the DMA servers appear as a single
3 coherent system to any mobile device.

4 BY MR. RUECKHEIM:

5 Q. Are you basing your construction of DMA on this
6 understanding or opinion that a POSITA would understand
7 that DMA servers form a DMA network, appear as a single
8 coherent system to UEs interacting with the network?

9 A. So the first aspect of the construction that I
10 propose, or the -- how this term should be understood,
11 the first aspect is -- isn't that -- it is a network
12 architecture. And I am, just for the record, looking at
13 my declaration here again, paragraph 53 -- where DMA
14 systems here distributed call-routing functionality.

15 So it's really the distributed call-routing
16 functionality is the first aspect of how this term
17 should be understood.

18 And, yes, this -- there is -- the packet
19 specification here explains that the controlling logic
20 can be distributed and decentralized.

21 And so this is the basis for my opinion that
22 the DMA is a network architecture with distributed
23 call-routing functionality.

24 There's more -- there are more instances in the
25 specification that also support this understanding.

1 Q. You mention distributed call-routing
2 functionality. Does the '414 patent discuss
3 distributing HLR registration information between
4 multiple DMA servers as an example of distributed
5 call-routing functionality?

6 A. And I switched now to the electronic copy of my
7 declaration. Yes. I state in paragraph 45 that the
8 '414 patent teaches that the HLR and VLR are fully
9 distributed among the DMA servers.

10 Q. You agree that DMA servers are nodes within a
11 DMA, correct?

12 A. Yes.

13 Q. And we discussed at the last deposition that
14 DMA servers are nodes that are distributed within a DMA
15 at different locations; correct?

16 A. So this question is that they are at different
17 locations. Yeah, they are distinct.

18 Q. And we discussed the meaning of the term
19 "mobile" in your prior deposition; correct?

20 A. We probably did. I think the term "mobile" is
21 clear to a person of skill. I don't exactly recall what
22 we discussed about "mobile."

23 Q. Well, is it fair to say that "mobile" -- the
24 term "mobile" relates to an architecture for mobile
25 telephony, like cell phones, or UEs?

1 A. Yes.

2 Q. And then you discussed the term "peer-to-peer"
3 in your declaration; correct?

4 A. Yes.

5 Q. Is it fair to say that "peer-to-peer" generally
6 means that devices are connected together and operate
7 similarly?

8 MR. PRICE: Objection.

9 THE WITNESS: I mean, that's close. The
10 devices are connected and, for the purpose of the
11 connection, they operate as peers.

12 BY MR. RUECKHEIM:

13 Q. What do you mean "operate as peers"?

14 A. Well, for example, a master-slave connection
15 may not be a peer-to-peer connection. So that's, like,
16 an example. I'm not sure how I can re-phrase or explain
17 operate as peers.

18 Q. And we agree that peer-to-peer connections can
19 encompass both wired and wireless applications?

20 A. Applications?

21 Q. How about this: Can we agree that peer-to-peer
22 connections can encompass both wired and wireless
23 connections?

24 A. I think in a general sense, yes.

25 Q. And peer-to-peer connections can encompass

1 communications sent over the worldwide web IP networks?

2 A. There could be peer-to-peer connections over an
3 internet protocol network.

4 Q. Turn to Figure 3 in the '414 patent. Sorry.

5 A. Figure 3?

6 Q. Yes.

7 A. Yes.

8 Q. Figure 3 looks like it shows two boxes
9 connected to three base transceiver stations. Do you
10 see that?

11 A. You said two boxes?

12 Q. Correct. Maybe I should say Figure 3 shows a
13 small box at the bottom of the figure that looks like it
14 is labeled 106. Do you see that?

15 A. I do.

16 Q. And 106 is discussed as the -- as a DMA.
17 Correct?

18 A. Yeah, it's a DMA server.

19 Q. Look at column 4, line 22.

20 A. Yes, I am looking at column 4 and exact line,
21 around 22. And in this paragraph, the specification
22 does refer to element 106 as just DMA.

23 Q. And you believe the patent should be talking
24 about 106 as a DMA server?

25 A. Well, first, if we look at column 1, line 64 --

1 63, -4, there it says Figure 3 is a block diagram of a
2 distributed management architecture server. So that's a
3 DMA server. That's how Figure 3 is described.

4 And also, if we look at the figure itself, the
5 figure itself, you said -- there's a bunch of boxes, but
6 you said it is maybe two to like -- that you pointed,
7 two boxes.

8 So if you look at the smaller box at the bottom
9 of Figure 3, that's element 106, and it says the DMA
10 server.

11 So you are correct that column 4 just says DMA,
12 but it is -- in this case, it is maybe more accurate to
13 say DMA server 106.

14 Q. And then so there's the bottom Box 106 that is
15 labeled "DMA Server." What is the box that's connected
16 to that? It doesn't have a separate number that I can
17 see. It has the CGW module, the PDSN module and a bunch
18 of other modules.

19 A. I was scrolling the patent. So your question
20 is what is -- which box?

21 Q. There's a larger box with all the modules
22 within it. Is this a blowout view of the DMA server or
23 is it something that's connected to a DMA server, or is
24 it a processor or something else?

25 A. I -- and I'm sorry, I -- I did not understand

1 which exactly box.

2 Q. So there is one large box that has a line going
3 to Box 106.

4 A. Yes.

5 Q. Yeah. And so that box has a lot of smaller
6 boxes within it. What is that large box? Is it a -- is
7 it an expanded view of a DMA server, or is it something
8 connected to a DMA server or something else?

9 A. I think it is an expanded view.

10 Q. And we talked about these modules within the
11 larger box -- and I'll just label the four on the
12 left -- the CGW, the PDSN, the SIP, and the SS7GW, in
13 the last deposition. Do you remember that?

14 A. I do.

15 Q. And the PDSN stands for packet data service
16 node; correct? And it looks like it is listed in
17 column 6, line 39, if it helps.

18 A. Yes. Packet data service node.

19 Q. And the SIP stands for session initiation
20 protocol; correct?

21 A. Yes.

22 Q. And these are both gateways that allow the DMA
23 to have peer-to-peer connections over the internet,
24 correct?

25 A. Yes.

1 Q. And the PDSN and SIP both have different types
2 of information?

3 A. Whether the PDSN and the SIP gateway -- do I
4 think?

5 Q. Well, let me give you an example. The patent
6 discusses the PDSN transmitting packet data over the
7 internet in column 6, line 38. Do you see that?

8 A. Just a second. I am scrolling between the
9 figures and the texts. Column 6, line 38, you said?

10 Q. Correct. Yes.

11 A. Yeah, line 38 is the beginning of a paragraph.
12 So the -- and this paragraph is saying that the PDSN
13 gateway, 316, and the SIP gateway, 318, can provide
14 connectivity to an IP internet protocol interface 320.

15 Q. And it looks like the PDSN transmits packets
16 for CDMA or -- well, strike that.

17 It looks like the PDSN transmits packets for
18 CDMA. Do you see that?

19 A. Yes. Yes, it says for CDMA or -- or a gateway
20 GPRS support node.

21 Q. Understood. Do you know what the SIP gateway
22 transmits?

23 A. The SIP is the session information protocol, so
24 the SIP gateway is transmitting messages that are called
25 SIP messages.

1 MR. RUECKHEIM: Okay. Let's take our first
2 break.

3 (Recess).

4 THE REPORTER: We're back on the record.

5 BY MR. RUECKHEIM:

6 Q. Dr. Cooklev, I lost you. I put into the chat
7 the Waylett reference. Let me know when you get it.

8 A. Yes, I opened what you just put into the chat.

9 Q. Okay, great. Did you open what appears to be
10 U.S. Patent Number 8,184,603?

11 A. Yes. This is the Waylett reference.

12 Q. Okay. Can you turn to Figure 11 in the Waylett
13 reference.

14 A. I am looking at Figure 11.

15 Q. Do you see that Waylett's Figure 11 discloses
16 two network in a box, 224A and 224B, connected by a
17 peer-to-peer connection?

18 MR. PRICE: Objection.

19 THE WITNESS: Figure 11 is described in
20 column 17. This is what I had been looking at. And
21 just in response to your question, there are two network
22 interface boxes for NIBs 224A and 224B, but they are not
23 described as connected in a peer-to-peer fashion. It
24 says link by a PWAN 366. And the PWAN 366 -- just a
25 second. I think I know what a PWAN is, but I want to

1 make sure.

2 Yeah, so a PWAN is a private wide-area network.

3 So this is how the network interface boxes are
4 linked.

5 BY MR. RUECKHEIM:

6 Q. And you are not offering the opinion that --
7 well, strike that.

8 So Figure 11 does show two network interface
9 boxes, NIBs 224A and 224B, correct?

10 A. Yes.

11 Q. Okay. And they are linked over a PWAN,
12 correct?

13 A. Yes. Private wide-area network.

14 Q. Okay. And you are not offering the opinion
15 that these NIBs operate in a master-slave relationship,
16 correct?

17 MR. PRICE: Objection; foundation.

18 THE WITNESS: Well, I think all the way it is
19 saying is they are connected by this private wide-area
20 network.

21 BY MR. RUECKHEIM:

22 Q. Okay. And when -- it also says that NIBs it is
23 disclosing have HLR registration information distributed
24 among them; correct?

25 A. So this is in connection with Figure 12, also

1 in column 17. There is a passage in column 17 about
2 Figure 12, and towards the -- towards the end of this
3 passage, it says that in this embodiment, each of the
4 distributed private HLRs, 316A, 316B. So in this
5 embodiment, the HLRs are distributed, according to
6 Figure 12.

7 Q. Okay. And then also with respect to Figure 11,
8 we're looking at the two different NIBs, correct, 224A
9 and 224B?

10 A. So this is a question whether we were looking
11 at the two NIBs in Figure 11?

12 Q. Correct.

13 A. Yes.

14 Q. You are discussing Figure 12 disclosure in
15 general, and we are also discussing the Figure 11
16 disclosure, correct?

17 A. I did not understand the last -- the
18 relationship between Figure 11 and 12. I mean,
19 Figure 12, it says, is a plot diagram of yet another
20 alternative embodiment.

21 Q. Okay. Well, I can -- let me -- look at the
22 paragraph right above it. It is column 17. It starts
23 around line 7. And it starts with the word "Figure 11."

24 A. Yes.

25 Q. And do you see about five sentences down -- or

1 five lines down -- sorry -- it talks about distributing
2 HLR registration and authentication loads?

3 A. Yes, I do see this. Yes.

4 Q. Okay. So basically -- and my question is, the
5 Waylett reference discloses the concept of distributing
6 HLR registration information among more than one NIB,
7 correct?

8 A. So to the part of the question about
9 distributing HLR registration and authentication, yes.
10 It does say -- yeah, clearly, column 17 says this.

11 But whether it is distributed among the NIBs --
12 and maybe I don't remember everything in the Waylett
13 reference right now. But I don't think we can, from
14 this -- at least from this passage, we can't make this
15 conclusion.

16 Q. Can we agree that Waylett discloses the concept
17 of using multiple NIBs to provide cellular and wireless
18 communications over an extended service area?

19 A. Multiple NIBs to provide coverage over an
20 extended service area.

21 Well, some extension of the service area will
22 be obtained even by a single NIB. So there would be
23 some extension. These NIBs are like an addition, like
24 an adjunct to a cellular network, and there will be some
25 extension of -- or some improvement of a service area

1 obtained by the use of these NIBs.

2 Q. And Waylett, it discloses adding multiple NIBs
3 to environments with existing WLANs, correct?

4 MR. PRICE: Objection.

5 THE WITNESS: Well, it is close to being right.
6 I mean, there are -- there is a NIB and there is a
7 wireless local area network.

8 So there can be a connection between the NIB
9 and the wireless local area network.

10 BY MR. RUECKHEIM:

11 Q. And is a wireless local area network a cellular
12 network, or something different?

13 A. No. A wireless local area network is not a
14 cellular network.

15 Q. How is it different than a cellular network?

16 A. In a number of ways.

17 Q. Go ahead.

18 A. Yes, I can -- I can list these ways, or at
19 least I can list the main aspects of the difference.

20 Well, as far as coverage, a cellular network is
21 a wide-area network. And generally speaking, it's
22 ubiquitously available. This was, again, in a general
23 sense, this -- a cellular network, the coverage is
24 nationwide.

25 A wireless local area network, the -- being a

1 local area network, the coverage is -- it depends. It
2 depends on the power that is used and on the frequency
3 that's used, but as a guidance, about 300 meters is --
4 in some cases, it could be -- it could be more. It
5 could be more than that. But it is a -- there's a very
6 significant difference in coverage.

7 But that's just very -- that is just one
8 aspect. Wireless local area network operates over
9 spectrum that's unlicensed, doesn't cost anything to be
10 used, and so we use wireless local area networks without
11 paying monthly fees.

12 And the protocols, the protocols also are very
13 different between a cellular network and a wireless
14 local area network.

15 So in a cellular network, because there is
16 blanket coverage, there are handoffs, for example.

17 And so these are at least some of the ways --
18 some of the major ways in which cellular networks and
19 wireless local area networks are different.

20 Q. In column 17, it looks like it is line 14, of
21 Waylett discusses corporate LANs. Do you see that?

22 A. Column 17.

23 Q. Line 14.

24 A. Line 14, yes.

25 Q. And it discusses corporate LANs, L-A-N-s,

1 correct?

2 A. Yes.

3 Q. How are corporate LANs, L-A-N-s, different than
4 WLANs?

5 A. Well, we can look at Figure 11, but corporate
6 LANs are -- they don't have to be wireless.

7 Q. Did you say "wireless"?

8 A. Yes. They don't have to be. Corporate LANs.
9 They -- or another way to look at it is that a corporate
10 local area network is a combination of a wireless local
11 area network and a wired network, such as internet.

12 Q. And column 17 discusses using multiple NIBs
13 with respect to enterprises operating a number of
14 different WLANs or corporate LANs at a number of
15 different sites, and then it identifies a chain of
16 hotels, recreational parks, or business centers. Do you
17 see that?

18 A. Yes.

19 Q. Okay. Can we agree that it is unlikely that
20 each hotel in a chain of hotels will be within the same,
21 I guess, base station transceiver cell wireless coverage
22 area?

23 A. Whether each hotel would be covered by the same
24 base station?

25 Q. Correct.

1 A. I think -- I think we can agree on this.

2 Q. Turn to page -- sorry, paragraph 87 of your
3 declaration.

4 A. Yes.

5 Q. And the last four words of paragraph 87 state,
6 "distributed mobile architecture networks."

7 A. Yes.

8 Q. What's the difference, high level, between a
9 distributed mobile architecture and a distributed mobile
10 architecture network?

11 A. Excuse me. If I can have the question
12 repeated.

13 Q. Sure. The claimed term is "distributed mobile
14 architecture," correct?

15 A. I think you are correct.

16 Q. What does -- why did you refer to "distributed
17 mobile architecture networks"? What does "networks"
18 add?

19 A. Well, the claims recite DMA system. And, for
20 example, claim 1, DMA system of a DMA network.

21 And, obviously, what is common between this is
22 "DMA," but my point is that both "DMA system" and "DMA
23 network" appear in the -- in the claims.

24 And in the last sentence of paragraph 87, what
25 I am saying is that, in my opinion, the petition

1 contends that -- or it identifies networks without
2 demonstrating that these networks are DMA networks.

3 Q. If you turn to -- back to the '414 patent,
4 column 7, around line 56.

5 A. Yes, I am looking at it.

6 Q. It discusses that a DMA system or a DMA device
7 can include a DMA server or a DMA onboard processor. Do
8 you see that?

9 A. Yes.

10 Q. What is the difference between a DMA server and
11 a DMA onboard processor?

12 A. If we look at column 6, lines 17 through 19,
13 there is a sentence saying in an alternative
14 environment, the DMA 106 -- and this is the same
15 element, 106, we were discussing earlier.

16 This DMA 106 can be a single board processor
17 that does not require a fan. So here the specification
18 is talking about how can the DMA element 106 be
19 implemented.

20 And I think that this language is -- in
21 column 7 that you pointed out is similar.

22 Q. What is a single board processor that does not
23 require a fan?

24 A. What is a single board processor?

25 Q. Correct.

1 A. So it is some type of a processor architecture
2 that is on a single board and also, as it says, doesn't
3 require a fan. So the -- the heat dissipation is
4 different from a single chip processor.

5 Q. And we can agree that the Lemko patents are
6 distinguishing between functionality included on a board
7 processor -- a DMA board processor as compared to a DMA
8 server?

9 Let me strike that.

10 The Lemko patents are distinguishing between
11 what is a DMA server and what is a DMA board processor,
12 correct?

13 A. Well, the patents, when they describe different
14 embodiments, how the -- and, in particular, the '414
15 patents, discussing different embodiments, how can the
16 '414 invention be implemented.

17 And, as I -- as I pointed out in column 6,
18 lines 13 to -- no, excuse me, lines 17 through 19, it
19 says the DMA 106 can be -- in an alternative environment
20 can be a single board processor.

21 And it is -- the language in column 7 is
22 similar, column 7, lines 56 through 59, saying the DMA
23 can be implemented as a system or a device.

24 And a DMA system or a DMA device can include
25 the DMA server or as published should be a DMA onboard

1 processor.

2 So that's -- that's how the DMA can be
3 implemented.

4 Q. The patent is saying that a DMA system or a DMA
5 device can be implemented in two different ways;
6 correct? A DMA server or a DMA onboard processor?

7 MR. PRICE: Objection.

8 THE WITNESS: Well, the patent extensively
9 describes "DMA server."

10 BY MR. RUECKHEIM:

11 Q. Sorry. Have you finished the answer?

12 A. I think I'm done. In support, I was going to
13 recite from column 7 the same -- the same passage,
14 stating that a DMA system or a DMA device can include a
15 DMA server or a DMA onboard processor.

16 Q. Yeah, my question is just with regards to that
17 language, it looks like the patent, to me, is describing
18 two different ways to implement a DMA system, either a
19 DMA server or a DMA onboard processor, and I want to see
20 if we agree.

21 MR. PRICE: Objection; form.

22 THE WITNESS: I think this is a little
23 misleading, and the misleading aspect is that the patent
24 extensively discusses "DMA server."

25 All the figures are directed at the DMA server,

1 the specification is directed to the DMA server. And I
2 think the DMA server 106 in Figure 3 -- and just -- I
3 will scroll up to Figure 3.

4 So the DMA server 106 in Figure 3, as stated in
5 column 6, can be a single board processor in an
6 alternative environment.

7 So that's -- that is -- so the DMA server can
8 be implemented as a single board processor, is what I
9 think the -- the patent is saying.

10 BY MR. RUECKHEIM:

11 Q. Okay. So you are saying that, in your opinion,
12 Lemko's patent is contemplating a DMA server being
13 implemented as an onboard processor?

14 A. I think that that's -- I think that would be
15 right, yes.

16 MR. RUECKHEIM: Okay. Let's take another
17 break.

18 (Recess).

19 THE REPORTER: We're going back on the record
20 at 11:12 a.m.

21 BY MR. RUECKHEIM:

22 Q. Can you return to paragraph 83 in your December
23 declaration?

24 A. 83. Yes, I am there.

25 Q. There, you discuss a Figure 11 from Waylett; am

1 I correct?

2 A. I believe you are correct.

3 MR. RUECKHEIM: So just so I'm clear, there's a
4 figure in your paragraph 83 that is actually on page 44
5 of the document. Underneath the figure, it says
6 Exhibit 1006 at Figure 11. And then the sentence
7 preceding that says, "This setup is illustrated below,
8 which is a diagram based on Exhibit 1006 at Figure 11."

9 Do you see that?

10 (Exhibit No. 1006 identified.)

11 THE WITNESS: Yes.

12 BY MR. RUECKHEIM:

13 Q. Okay. So is this diagram on page -- or this
14 figure on page 44 of your declaration something you
15 created based on Waylett's disclosure?

16 A. Yes.

17 Q. Okay. So just using this figure, we can agree
18 that Waylett discloses multiple cell phones
19 communicating with radio transceiver stations, correct?

20 A. If I may, I will ask the question to be
21 repeated.

22 Q. Sure. We can agree that Waylett discloses
23 multiple cell phones communicating with multiple radio
24 transceiver stations, correct?

25 A. It could be.

1 Q. Okay. So Waylett discloses a mobile
2 architecture, correct?

3 A. In this sense, yes.

4 Q. Okay. And in this mobile architecture Waylett
5 discloses, there are one or more NIBs distributed
6 through the system, correct?

7 MR. PRICE: Objection.

8 THE WITNESS: Well, in Figure 11 that I used,
9 there are -- there are two NIBs.

10 And I will answer the next question -- if I
11 may, just one-minute break after that.

12 MR. RUECKHEIM: If you need to take another
13 break, we can take another break.

14 THE WITNESS: Okay.

15 MR. RUECKHEIM: No problem. You want two
16 minutes?

17 THE WITNESS: Two minutes. Thank you very
18 much.

19 MR. RUECKHEIM: Okay. However long you need,
20 just let me know.

21 (Recess).

22 THE REPORTER: Going on at 11:21 a.m.

23 BY MR. RUECKHEIM:

24 Q. Okay. Talking about this figure on page 44 of
25 your declaration.

1 A. Yes.

2 Q. Okay. And then we were talking about the two
3 NIBs that are shown in that figure, correct?

4 A. Yes.

5 Q. Okay. And so Waylett discloses that its mobile
6 architecture can include NIBs that have MSC, BSC, and
7 BTS functionality; correct?

8 A. Yes.

9 Q. And you have shown in your -- in the diagram on
10 page 44 of your declaration that these NIBs are
11 connected over a public network; correct?

12 MR. PRICE: Objection.

13 THE WITNESS: Yes, that's what I am showing in
14 my figure.

15 BY MR. RUECKHEIM:

16 Q. Okay. And we read earlier that Waylett, with
17 regards to Figure 11 specifically, discusses that the
18 NIBs are connected over a -- a private wide-area
19 network, correct?

20 A. That is correct. But -- so you are -- you are
21 correct. But it is not going to change much, my figure,
22 other than the network is, or can be, private.

23 MR. RUECKHEIM: I will object to everything
24 after "that is correct" as nonresponsive.

25 BY MR. RUECKHEIM:

1 Q. Do you know what an ICP card is?

2 A. I --

3 Q. ICP.

4 A. ICP?

5 Q. Correct.

6 A. I mean, at the moment, I don't recall. Maybe
7 if I see more context, I will remember.

8 Q. Look at Waylett column 8, line 36.

9 A. Yes, it does mention here an E1 card, a T1
10 card, or an ICP card.

11 Q. Do you know what an ICP card is?

12 A. No, I don't at the moment.

13 Q. We can agree that Waylett is discussing
14 multiple connections to a public network between a
15 public network and the NIBs, correct?

16 MR. PRICE: Objection.

17 THE WITNESS: Not really, because T1, E1, is --
18 these are not multiple connections, so they're not
19 multiple -- they are basically the same -- the same
20 standard, just one is used -- one is used in North
21 America and the other standard's used in the rest of the
22 world. So that's what Waylett is saying.

23 BY MR. RUECKHEIM:

24 Q. Well, isn't the paragraph of Waylett in
25 column 8 around lines 34 to 36 discussing that you can

1 use a number of different cards for interfacing with the
2 public network, including E1 cards, T1 cards, or an ICP
3 card?

4 A. Yeah, specifically, clearly, it does say E1,
5 T1, and ICP.

6 But T1 and E1 are not much different.

7 Q. Okay. And Waylett hasn't identified these
8 various types of connections to a public network in a
9 nonlimiting way, correct?

10 MR. PRICE: Objection.

11 THE WITNESS: I think I would agree with that.

12 BY MR. RUECKHEIM:

13 Q. And would you agree with me that private
14 wide-area networks do not require expensive E1 or T1
15 connections?

16 A. No, I do not agree with that.

17 Q. Private wide area --

18 MR. PRICE: I am sorry, can you let the witness
19 finish his answer, please.

20 MR. RUECKHEIM: Sure.

21 THE WITNESS: I was going to add that T1, E1
22 connections not only could be used for private wide-area
23 networks, but for -- they were extensively used for
24 private wide-area networks by companies. And they were
25 fairly expensive.

1 BY MR. RUECKHEIM:

2 Q. Are T1 -- strike that.

3 You said E1 or T1, one of them, was used in
4 North America. Do you remember which one?

5 A. I think it's T1.

6 Q. Was T1 connections the connection of choice for
7 telecom at the time of Lemko's patents?

8 A. Well, for certain connections, yes. And it
9 was, for a number of years, the connection of choice
10 for -- for example, private wide-area networks was the
11 connection of choice for back home, so I did not
12 investigate precisely the market and how the market
13 evolved around that time, but I know that a person of
14 skill at the time knew that T1 connections were
15 extensively used, at least with those applications that
16 I mentioned.

17 Q. Were T1 connections used for peer-to-peer
18 connections at the relevant time?

19 A. I did not investigate this question to be able
20 to give you an answer.

21 Q. Referring again to the figure you included on
22 page 44 of your declaration.

23 A. Yes.

24 Q. Given the disclosure in Waylett of connecting
25 the two NIBs through a private wide-area network, would

1 it be correct to amend this figure to draw a connection
2 between the NIB on the left-hand side and the NIB on the
3 right-hand side directly between the two NIBs, not going
4 through a public network?

5 A. Even if you do this, it is not going to change
6 much because T1/E1 connections and service were provided
7 by the established telecommunications companies.

8 And, like I said earlier, that -- you can
9 indicate that it is a private wide-area network, but
10 this private wide-area network is accomplished using
11 T1/E1 connections that are otherwise public.

12 The telecommunications companies could provide
13 a private connection using these T1 lines that otherwise
14 were part of the public communications infrastructure.

15 And also, if I may, Counsel, a short while ago,
16 we were talking whether it is the ICP connection and
17 whether it is a nonlimiting embodiment. And, yes,
18 the -- I can see that the specification is using the
19 words "for example."

20 But also in my paragraph 83, I provide
21 additional basis for the figure on page 44, and this
22 basis is in Exhibit 2013, which says that a NIB has all
23 E1 or all T1 ports.

24 MR. RUECKHEIM: Objection, nonresponsive.

25 BY MR. RUECKHEIM:

1 Q. My question was, generally, given Waylett's
2 disclosure, would it be correct to amend this figure on
3 page 44 of your declaration to draw a line between the
4 two NIBs to show that the NIBs are connected over a
5 private wide-area network as opposed to a public
6 network?

7 A. I think I -- I think also, I am trying to give
8 a complete answer to the question. And even if a figure
9 like that is drawn, and even if we -- instead of public
10 network, we say a private wide-area network, it is not
11 going to change any of the conclusions because, as I --
12 I said how a private wide-area network was being
13 provided using T1 lines by the major telecommunications
14 service providers. So a private wide-area network was
15 carved out of the public infrastructure.

16 And so it is not going to change any of the
17 conclusions if -- if this figure is sketched, indicating
18 a private wide-area network.

19 MR. RUECKHEIM: Objection, nonresponsive.

20 BY MR. RUECKHEIM:

21 Q. I am not asking about the conclusions you would
22 draw. I am just asking the question of, given Waylett's
23 disclosure, would it be proper to draw a line between
24 the two NIBs showing the figure on page 44 of your
25 declaration to indicate that the NIBs are connected over

1 a private wide-area network as opposed to a public
2 network, as you've depicted previously?

3 A. I'm afraid my answer -- my -- the complete
4 answer would be the same. This can be done -- and,
5 actually, a private wide-area network connection can be
6 added to the figure and say, this is how private
7 wide-area network connection is being provided using
8 T1/E1 lines. I think we can do that to the figure that
9 I have sketched.

10 MR. RUECKHEIM: You mentioned this
11 Exhibit 2013. I will put it in the chat. One second.

12 It should be in the chat. Let me know when you
13 can open it. It is exhibit marked as IPR Exhibit 2013.

14 (Exhibit No. IPR Exhibit 2013
15 identified.)

16 A. I am downloading it.

17 Yes.

18 Q. What is Exhibit 2013?

19 A. What is it?

20 Q. Correct.

21 A. It is a description. I think we can say that
22 it's a marketing material for a product called Wave
23 Express. It is a material that generally supports the
24 sales process, and this -- and, actually, the product
25 name is Wave Express GSM Network-in-a-Box and, in

1 parentheses, NIB.

2 Q. Does Waylett's Network-in-a-Box product provide
3 a distributed architecture?

4 A. Well, it does not provide a distributed
5 architecture in the context of the '414 patent.

6 Q. Would you say generally, though, Waylett's
7 Network-in-a-Box system provides distributed
8 architecture?

9 A. No, I don't think so.

10 Q. Where did you get Exhibit 2013?

11 A. I think I got it from counsel.

12 Q. Do you know if Exhibit 2013 was received off of
13 The Wayback Machine?

14 A. At the moment, I do not know this for a fact to
15 be able to tell you under oath.

16 Q. Did you do your own investigation as to
17 documents describing the Network-in-the-Box product
18 before the priority date of Lemko's patents?

19 A. I mean, I just -- I looked at this document. I
20 think the second page, it says date, June 2003.

21 Q. Did you consider any documents indicating that
22 Waylett's Network-in-a-Boxes can include MSC, BSC, and
23 BTS technologies implemented through software
24 configurations?

25 A. Part of your question uses "software

1 configurations."

2 Q. Well, maybe I can take it at a higher level.

3 Are there any documents you reviewed with
4 respect to the Network-in-a-Box product that were not
5 included in your report?

6 A. I don't think so.

7 Q. Okay. And so I am just wondering if you
8 considered any documents showing that the
9 Network-in-a-Box products can use MSC, BCS, and BTS
10 functionality implemented in software configurations.

11 A. So first, two -- if I may, two aspects of the
12 question that, if I may, I will take an issue with.

13 The first aspect is the "can," whether this
14 product "can." And, I mean, the product is a product.

15 So it's -- it is what it is. So it is not that
16 it can -- it can do something which it doesn't do. It
17 cannot do that.

18 But the second aspect is "software
19 configurations" is just a little bit -- is a little --
20 is unclear, "software configurations."

21 But I think I can -- nevertheless, I can answer
22 the question that the MSC implementation in this NIB and
23 the BSC implementation in this NIB is not a software
24 implementation.

25 MR. RUECKHEIM: Okay. Objection,

1 nonresponsive.

2 BY MR. RUECKHEIM:

3 Q. I was just asking if you have seen any
4 documents indicating that the MSC, BCS, and BTS
5 functionality in the NIB product was implemented through
6 a software configuration.

7 A. Well, again, the "software configuration" makes
8 the question ambiguous --

9 Q. What is the --

10 A. -- and --

11 Q. Sorry.

12 A. -- and maybe -- and maybe even more than
13 ambiguous, because the MSC and BSC, you don't implement
14 them using a software configuration. Maybe you
15 configure them after they are being implemented.

16 So maybe there's a configuration that is
17 separate from the implementation of an MSC and BSC.

18 But these are implemented in hardware.

19 MR. RUECKHEIM: So, again, objection,
20 nonresponsive.

21 BY MR. RUECKHEIM:

22 Q. I was asking -- my question is whether you have
23 seen documents as -- that have shown that the MSC, BSC,
24 and BTS functionality in the NIB product was implemented
25 through a software that could be configured, I guess.

1 A. I have not seen documents about that.

2 Q. And then going back to --

3 A. In fact, I have seen -- I think -- well, maybe
4 I can -- I can give an even more complete answer that
5 not only I have not seen documents that they are
6 implemented in software, but even just based on this
7 document, 2013, I think what this marketing material is
8 saying is that the MSC and BSC are implemented in
9 hardware. That's what the material is saying.

10 And it says that this NIB, the network in a
11 box, integrates all of the elements required for a
12 complete GSM, BCS, or PCS network into a single compact
13 chassis.

14 Q. You are reading from the Exhibit 2013?

15 A. Yes.

16 MR. RUECKHEIM: So objection, nonresponsive for
17 everything after, "I have not seen documents about
18 that."

19 BY MR. RUECKHEIM:

20 Q. Going back to the figure shown in paragraph 83
21 of your declaration.

22 A. Yes.

23 Q. We can agree that Waylett discloses NIBs
24 located at different locations, correct, to serve
25 multiple devices?

1 A. Yeah, you can have -- you can have two NIBs in
2 different locations.

3 Q. Okay. I will put into the chat the petition in
4 this matter. Give me one second. Let me know when you
5 have it.

6 A. It just came. Yes, I downloaded. I am looking
7 at the petition.

8 Q. Okay. The petition is paper 3 in this matter.
9 And if you can turn to page 18.

10 A. Page 18, yes.

11 Q. Page 18 is displaying an entity figure from the
12 Mauer, M-A-U-E-R, reference; correct?

13 A. Yes.

14 Q. And the petition identified that the -- well,
15 strike that.

16 We can agree the Mauer reference discloses two
17 networks, a WWAN network 14 and a WLAN network 12,
18 correct?

19 A. Yes.

20 Q. Okay. And, now, if you can turn to page 10 of
21 the petition.

22 A. I am looking at page 10.

23 Q. Okay. The second paragraph, do you see where
24 the petition described that -- or states that Mauer
25 describes mobile station data records as distributed

1 among various databases in multiple networks?

2 A. I mean, I can see this sentence in the
3 petition.

4 Q. Okay. Did you discuss distributed data records
5 in your declaration? I looked for the word "data
6 records." I didn't see a discussion.

7 A. I think I agree with you that I did not discuss
8 data records. Or maybe I can do a search. But based on
9 my memory, in the declaration, I did not mention data
10 records.

11 Q. Okay. If you could turn to the '414 patent at
12 column 4, line 15.

13 A. Column 4, line 15?

14 Q. Correct.

15 A. Yes.

16 Q. You rely upon this section in the '414 patent
17 for your opinion that the DMA TURN should be construed
18 to have a peer-to-peer connection, correct?

19 A. Column 4, line 15?

20 Q. Correct.

21 A. I think I'm -- first, this is not the only
22 passage, but I think I'm relying on this passage for the
23 first characteristic of a distributed mobile
24 architecture.

25 And where the -- the distributed logic.

1 Q. I guess more generally, can we agree that the
2 portions of the specification you rely upon for your DMA
3 construction are described as exemplary and nonlimiting
4 embodiments?

5 A. Well, first, you used the terms "exemplary" and
6 "nonlimiting."

7 And I'm sure you -- you understand patent law
8 much better than I do. My understanding of patent law
9 comes from counsel here.

10 So the way I understand your question, I do not
11 agree that the distributed mobile architecture that is
12 claimed -- is described in the claims of the '414 patent
13 may not have these -- the characteristics that I
14 identify it has for the purpose of claim construction,
15 for the purpose of construing the term "DMA."

16 I don't agree that it may not have these
17 characteristics.

18 MR. RUECKHEIM: Well, objection, nonresponsive.
19 BY MR. RUECKHEIM:

20 Q. I am just asking generally.

21 If we can agree that you were relying upon
22 disclosures in the '414 patent that are described as
23 nonlimiting exemplary embodiments for your construction
24 of the term "DMA?"

25 A. I think it to be incorrect to make this

1 statement, and I do not agree that I am relying -- maybe
2 now I understand a little bit better your question, and
3 I do not agree that I am relying on nonlimiting
4 exemplary embodiments when I describe essentially how
5 should the term "DMA" be understood.

6 Now, this -- the figure -- excuse me, column 4,
7 line -- around line 15, starting -- I am not sure, 14 or
8 15, but starting right there, it describes -- the patent
9 describes Figure 1. And Figure 1 is a nonlimiting
10 exemplary embodiment.

11 But the system is distributed, it is always
12 distributed and, in this case, it is distributed in
13 associative telecommunications system.

14 So the distributed nature is always present.

15 MR. RUECKHEIM: Objection, nonresponsive.

16 BY MR. RUECKHEIM:

17 Q. In paragraph 54 of your declaration --

18 A. Paragraph 54?

19 Q. Correct.

20 A. Yes, I am looking at paragraph 54.

21 Q. That might not be right. One second.

22 I think we agreed in the prior deposition that
23 Lemko's inventions are a software-only invention;
24 correct?

25 MR. PRICE: Objection, foundation, misstates

1 the testimony.

2 THE WITNESS: I'm not sure we can describe the
3 invention as a software-only invention.

4 MR. RUECKHEIM: I am putting into the chat your
5 prior declaration in this matter from June of 2023. Let
6 me know when you have it.

7 THE WITNESS: I am looking at my June
8 declaration.

9 MR. RUECKHEIM: Okay. The declaration was
10 marked, you can see on the bottom, as IPR Exhibit 2001.

11 (Exhibit No. IPR Exhibit 2001
12 identified.)

13 THE WITNESS: Yes.

14 BY MR. RUECKHEIM:

15 Q. Okay. In paragraph 54 of this declaration, you
16 state that, "a POSITA would recognize that Lemko's DMA
17 implements network functionality such as MSC, BSC, and
18 HLR functionality onto a computer-readable medium
19 running on a standard server." Do you see that?

20 A. I do.

21 Q. Okay. And by "standard server," are you
22 referring to a -- an off-the-shelf PC?

23 A. Some kind of a powerful computer.

24 Q. And then in paragraph 56, you state that you
25 understand that "in addition to successfully

1 developing -- developing these products, Lemko obtained"
2 certain patents, correct?

3 A. Yes.

4 Q. Okay. And I believe we discussed at the last
5 deposition that you have not seen a Lemko product
6 before, correct?

7 A. Yes.

8 Q. Okay. And so you are not aware whether any
9 Lemko products were successfully developed, one way or
10 the other, correct?

11 A. Developed?

12 Q. Correct.

13 A. Well, I state in paragraph 56 that it is my
14 understanding that Lemko's development was successful.

15 Q. Is that an understanding you received from
16 counsel?

17 A. Yes.

18 Q. I think we established in the last deposition
19 that 2G was initially rolled out in --

20 A. Excuse me, if -- just to -- I gave a quick
21 answer. I assume I had discussions with counsel, but
22 that's not the entire basis for my opinion in
23 paragraph -- which was it? -- 56.

24 The basis of my opinion here are the other
25 documents that I cite in this declaration.

1 So there is a -- there is a graphic from a
2 Lemko demonstrative.

3 Q. Which graphic are you referring to?

4 A. It is on figure -- it is a figure on page 23.

5 And so I also -- in paragraph 55, I referred to
6 Exhibit 2010 and Exhibit 2011.

7 So this is the basis for my statement in
8 paragraph 56 that Lemko's development has been
9 successful.

10 Q. So the Exhibits 2010 and 2011 are -- sorry, I
11 want to go back to the previous question. So strike
12 that.

13 We can agree that 2G was initially rolled out
14 in the 1990s?

15 A. Yes.

16 Q. And at the time of Lemko's priority date --
17 strike that.

18 In 2006, the industry was actually
19 transitioning from 3G to 4G; correct?

20 A. Well, a more complete statement would be that
21 in 2006, the industry was deploying 3.5G and
22 transitioning to 3.75G.

23 Sorry, that's the more accurate state. And,
24 still, it was before 4G.

25 Q. Well, you were asked in the last deposition,

1 and we look at paragraph 54 of your declaration, you
2 actually state that in 2006, the industry was
3 transitioning from 3G to 4G, correct, and you answered
4 yes. Do you remember that?

5 A. I think generally I do, and I state by my
6 testimony and I just was -- so at a fairly high level, I
7 think that's accurate.

8 But if we are more -- if we want to be more
9 precise as far as actual deployment timeline and
10 evolution of the -- even before deployment, evolution of
11 the technology, I think it's more precise to say
12 that that's the year that 3.5G and 3.75G were being --
13 were being built and deployed.

14 And that was happening in the process of
15 transitioning -- ultimately transitioning to 4G.

16 Q. Do you know when the industry transitioned from
17 2G to 3G?

18 A. Approximately, yes. I do know that the first
19 3G networks were deployed -- I think 2001 -- around 2001
20 is when the first 3G networks were deployed.

21 Possibly, this was not in North America, so
22 very soon after that in North America. I just don't, at
23 the moment, have the exact timeline.

24 Q. Turn to paragraph 62 in your December
25 declaration, so back to IPR Exhibit 2021.

1 A. 62?

2 Q. Paragraph 62, correct. It spills over to
3 page 29.

4 A. Yes, this is my December declaration.

5 Q. Correct. Do you see, yeah, you copied Figure 1
6 from the '414 patent there on page 29?

7 A. Yes.

8 Q. Is it your -- with respect to your proposed DMA
9 construction, does your construction require that every
10 DMA server in a system is connected to every other DMA
11 server through peer-to-peer connections?

12 A. In Figure 1, every DMA server -- every DMA
13 system is connected to the other DMA systems using
14 peer-to-peer connections.

15 Q. Is it your opinion that the proper construction
16 of DMA requires a peer-to-peer connection between each
17 and every DMA in a system -- correct that -- between
18 each and every DMA server in a system?

19 A. Not necessarily between each and every DMA
20 server.

21 MR. RUECKHEIM: Okay. I think we can break.
22 Go off the record.

23 THE REPORTER: Okay. Going off the record at
24 12:29 p.m.

25 (Luncheon recess taken at 12:29

1 p.m.)

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1 A F T E R N O O N S E S S I O N
2 Commenced at 1:12 p.m.
3 EXAMINATION (Resumed)
4 THE REPORTER: The time is 1:12 p.m., and we
5 are back on the record.
6 BY MR. RUECKHEIM:
7 Q. Welcome back, Dr. Cooklev.
8 A. Thank you, Counsel.
9 Q. Have you spoken with your counsel over any of
10 the breaks today?
11 A. No, I haven't.
12 Q. Can you turn to claim 11 of the '414 patent.
13 A. Claim 11.
14 Q. Correct.
15 A. Yes, I'm there.
16 Q. Can we agree that claim 11 -- well, strike
17 that.
18 Do you see that claim 11 recites a community
19 location register?
20 A. Yes.
21 Q. And claim 11 requires that the community
22 location register stores information associated with a
23 second HLR of a second DMA system; correct?
24 A. Yes.
25 Q. Claim 11 does not require that the CLR store

1 information indicating the location of a device in a
2 coverage area, correct?

3 MR. PRICE: Objection.

4 THE WITNESS: I wouldn't agree with that, and
5 the reason I don't agree, it says information associated
6 with a second HLR of a second DMA system.

7 BY MR. RUECKHEIM:

8 Q. Are you proposing that the board construe the
9 term "information associated with a second HLR of a
10 second DMA system" to include or to require information
11 indicating whether a device is located in a coverage
12 area?

13 A. I think the plain and ordinary meaning here is
14 sufficient in that the community location register
15 stores the information associated with a second HLR. So
16 that's not the first -- it is not the first HLR. It is
17 the second HLR of a second DMA system.

18 And the -- this second HLR stores information
19 associated with the mobile subscriber registered with
20 the second DMA system. So I think I described this
21 in -- generally in, let's say, paragraph 45 of my -- of
22 the most recent declaration that -- and, actually,
23 starting with paragraph 45, but continuing paragraph 47,
24 where I say that each DMA system may include more than
25 one CLR, and each CLR corresponding to the HLR of

1 another DMA system.

2 And the way this -- this CLR is used is -- is
3 that when a mobile subscriber is roaming, it registers
4 with a DMA system, the DMA system that even it is not
5 subscribed to, and then this -- the roaming subscriber
6 information will be made available to the other DMA
7 systems within the DMA network, which store this
8 information in those DMA systems' community location
9 register.

10 MR. RUECKHEIM: Objection, nonresponsive for
11 everything after "I think the plain and ordinary meaning
12 here is sufficient."

13 BY MR. RUECKHEIM:

14 Q. Is the home location register used to determine
15 whether a UE is registered with a network, or whether
16 the UE is roaming, or something else?

17 A. The HLR stores information about the mobile
18 subscriber's register with that DMA system, and I'm
19 talking about the HLR in the context of the '414 patent.

20 Q. When a UE is roaming, that means it is no
21 longer within the coverage area of its home network,
22 correct?

23 A. Yes.

24 Q. So is it fair to say that a home location
25 register can help determine whether a device is located

1 in its home coverage area?

2 A. In this sense, yes.

3 Q. Claim 11 does not recite any limitation
4 requiring that a determination is made based on
5 information only from the community location register;
6 correct?

7 A. Which -- which determination?

8 Q. Any determination.

9 A. I -- I mean, I don't understand the question.

10 Q. Well, claim 11 recites this community location
11 register and its requirement that it stores information
12 associated with a second HLR; correct?

13 A. Yes. Yes, it recites a community location
14 register that stores information associated with a
15 second HLR, but it is a second HLR of a second DMA
16 system.

17 Q. And then you see claim 12 recites that an AAA
18 module determines something based on information stored
19 in the HLR, VLR, and CLR?

20 MR. PRICE: Objection; form.

21 THE WITNESS: Yeah, I see claim 12 -- I --
22 requiring that the determination -- the destination
23 device that's outside of the DNA network is based on the
24 information stored in all of these location registers,
25 HLR, VLR, and CLR.

1 BY MR. RUECKHEIM:

2 Q. Okay. So my question was: Generally, claim 11
3 doesn't recite any determination step being performed
4 based on -- at all; correct?

5 A. The question is whether claim 11 has or doesn't
6 have the determination step.

7 But the last limitation of claim 11 says, "a
8 call routing component embedded within the
9 computer-readable storage medium, the call routing
10 component comprising processor executable instructions
11 to route the call via a particular reference call path
12 of the one or more preferred call paths stored at the
13 BPR when the AAA module determines that the call is
14 directed to a destination device that is outside of the
15 DMA network."

16 So the only determination here is that when the
17 AAA module determines that the call -- the call is
18 directed to a device outside of the DMA network.

19 Q. Okay. And that determination -- the claim does
20 not require that determination to be made based on
21 information only available in the CLR; correct?

22 MR. PRICE: Objection.

23 THE WITNESS: Only -- based only on the CLR?

24 BY MR. RUECKHEIM:

25 Q. Correct.

1 A. At least the way I understand the question, it
2 doesn't require -- this determination does not require
3 to be made based on information only in the CLR.

4 Q. Turn to your paragraph 63 in your December
5 declaration.

6 A. Yes.

7 Q. There you discuss Figure 2 from the '414
8 patent, correct?

9 A. Yes.

10 Q. Figure 2 is indicating that the entire figure
11 is a network system 200; correct? And if it is helpful,
12 the text talking about Figure 2 that I see starts at
13 column 4, line 61.

14 A. Thank you for this. Yes, column 4, line 61
15 starts the description of Figure 2.

16 Q. Okay. So my question was: Figure 2 shows that
17 the entire figure is labeled 200, which is described as
18 a network system; correct?

19 A. It's a network that includes a plurality of
20 distributed mobile architectures.

21 Q. Are these -- so I see there's parts labeled
22 202, 204, and 206 in Figure 2 of the '414 patent. Do
23 you see that?

24 A. Yes.

25 Q. At least from column 4, the text says that each

1 of those are a distributed mobile architecture. Do you
2 see that?

3 A. I do.

4 Q. Are these distributed mobile architectures, or
5 DMA servers, or something else?

6 A. I think that the specification is using the
7 term "distributed mobile architecture" in the same sense
8 as it's used in connection with Figure 1.

9 Q. Is that as a DMA server?

10 A. Yes.

11 Q. And you see where this network system 200 in
12 Figure 2 connects one of the DMA servers to an MSC?

13 A. Is that -- is that now Figure 3, or --

14 Q. Talking about Figure 2.

15 A. Oh, okay. Yeah, one is connected to an MSC.

16 Q. I think you probably said that because column 5
17 on line 10 states that "Figure 3 further indicates that
18 a mobile switching center (MSC) interface 220..." Do
19 you see that?

20 A. One second. Column 5?

21 Q. Yeah. Line 10.

22 A. Yes.

23 Q. Column 5, line 10, it says, "Figure 3 further
24 indicates that a mobile switching center (MSC) interface
25 220 can be coupled to the first DMA 202." Correct?

1 A. Yes.

2 Q. Okay. And do you believe that this is a typo,
3 and the patent actually meant Figure 2 there?

4 And if it helps, I don't see the numbers 220 or
5 202 in Figure 3.

6 A. It seems to be you are right.

7 Q. Okay. So the patent is describing this network
8 system 200 in Figure 2 having three DMA servers
9 connected to each other, and then one of them is
10 connected to an MSC interface to provide access to a
11 mobile telephone network, such as a cellular telephone
12 network; correct?

13 A. Yes.

14 Q. If we can turn to Waylett Figure 1.

15 A. I am looking at it.

16 Q. I'm sorry, I think I meant Mauer Figure 1.

17 A. Oh, Mauer. I don't have Mauer open.

18 Q. Give me one second. I have it.

19 MR. RUECKHEIM: Okay. I placed into the chat
20 U.S. Patent 7,395,085, which was previously marked as
21 IPR Exhibit 1005.

22 (Exhibit No. IPR Exhibit 1005
23 identified.)

24 BY MR. RUECKHEIM:

25 Q. Do you see this patent?

1 A. Yes, this is the Mauer patent.

2 Q. Okay. If you can go to Figure 1 of
3 Exhibit 1005.

4 A. You said Figure 1 of Mauer?

5 Q. Correct.

6 A. I am looking at it.

7 Q. Is it fair to say with respect to what is
8 indicated as the WWAN 14 that the WWAN is disclosed as
9 having an HLR, a VLR, an MSC, a BSC, and a BTS?

10 A. Yes, those are the conventionally known
11 elements of cellular networks.

12 Q. And is it fair to say with respect to the WLAN
13 that Mauer discloses that its WLAN includes parts
14 numbers 28, 18, 22, 24, 26, and 32?

15 A. I think this is fair.

16 Q. And the mobile phone, the landline phone, and
17 the voicemail server shown in Mauer's Figure 1 are not
18 part of the WWAN or the WLAN, correct?

19 MR. PRICE: Objection.

20 THE WITNESS: So looking at Figure 1 of Mauer,
21 the question is, the phone 24 is not -- it is not a
22 phone on the WW area network.

23 BY MR. RUECKHEIM:

24 Q. I don't see a 24 on Figure 1. I want to make
25 sure I'm looking at the same -- I see the phone, yeah.

1 Okay. So with respect to the phone -- so
2 there's at least three phones I see in this figure, so
3 it's better to use the numbers.

4 With respect to phone 24 that you just
5 discussed, you said that is not a phone -- well, strike
6 that. I'm not talking about that phone.

7 With respect to the phone 16, the phone 56, and
8 the voicemail server 66, those are not components of the
9 WWAN or the WLAN; correct?

10 A. The phone 16, the voicemail server 66, and
11 which else?

12 Q. The phone 56 at the top.

13 A. Oh, the phone 56.

14 The description of Figure 1 in Mauer and what
15 is shown in the figure is -- there are some -- there are
16 some inaccuracies that -- there are some inaccuracies in
17 this figure.

18 If we -- if we want to just examine whether
19 these devices that you asked about, elements 16, 56
20 and 66 and, in general, some other elements -- so these
21 inaccuracies in figure -- in Figure 1 are of the
22 following.

23 So first, Figure 1 says -- says that 10 -- 10
24 is a wireless system, or a wireless communications
25 system.

1 But -- and it says that the voicemail server is
2 part of the wireless system 10.

3 So it -- I think it would be incorrect to
4 exclude -- to exclude the voicemail system -- well,
5 several of the systems don't have voicemail.

6 Q. Object to -- go ahead.

7 A. They do have voicemail. And also, phone 16,
8 that's a cell phone. So -- and the wireless connection
9 between the phone -- the phone 16 and the BTS is shown.
10 So the phone 16 is a device that operates on the
11 cellular network as well.

12 And data on the -- data on the devices, for
13 example, the interface between the public switch
14 telephone network, which I think is element 50, so
15 element 50 is the public telephone switch network which
16 interfaces with the cellular network. And so the -- the
17 cellular network needs appropriate elements that
18 implement these interfaces as well.

19 So I think this would be a -- a complete answer
20 to your question.

21 MR. RUECKHEIM: Objection, nonresponsive.

22 BY MR. RUECKHEIM:

23 Q. You had talked about the system 10, and I am
24 just focusing on WWAN 14 network and the WLAN 12 network
25 indicated in Figure 1 for my question.

1 And so with that preface, phone 16, phone 56,
2 and voicemail server 66 are not components of either the
3 WWAN network or the WLAN network; correct? They merely
4 operate in the networks?

5 MR. PRICE: Objection.

6 THE WITNESS: So you said voicemail server 66
7 and phone 16, they operate on the network, but they are
8 not components of the network?

9 BY MR. RUECKHEIM:

10 Q. Correct.

11 A. There is no distinction between operating on a
12 network and being a component.

13 Q. Okay. Let me limit it to just component.

14 Can we agree that phone 16, phone 56, and
15 voicemail server 66 are not components that make up
16 either the WWAN network or the WLAN network in Mauer?

17 MR. PRICE: Objection.

18 THE WITNESS: I don't think we can agree. And
19 just to -- so first, regarding phone 16, it's -- I think
20 cell phones are components of cellular networks. We
21 can't -- we can't say that a cellphone is not a -- is
22 not a component of a cellular network.

23 Phone 56 -- phone 56, it's an old -- old phone,
24 old-style phone. It is not a component of a cellular
25 network. But between phone 56 and -- more accurately,

1 between the public switch telephone network and the
2 cellular network, there are -- there are complex --
3 there are fairly complex interface elements.

4 Those elements which implement the interface
5 between cellular and PDSN, they -- they are generally --
6 and I think we can consider them to be part of the
7 cellular network even though they are not in this box
8 WWAN here in this figure.

9 And regarding voicemail server 66, it would be
10 incorrect to say, well, it is not part.

11 BY MR. RUECKHEIM:

12 Q. The cell phone 16 is not part of the WLAN
13 network; correct?

14 Well, strike that.

15 The cell phone 16 is not a component that makes
16 up the WLAN network, correct?

17 A. I think that's another incorrect -- incorrect
18 statement because the phone 16 is shown that it can have
19 a wireless connection to a wireless access point, which
20 is the wireless local area network.

21 It would be incorrect to say, well, the phone
22 is not part of the wireless local area network.

23 I mean, actually, the only wireless local area
24 network connection shown in Figure 1 is between the
25 phone -- is connection 20, between the phone and the

1 wireless access point, 18.

2 And even -- even though this box 12 is a
3 wireless local area network, I mean, the -- the 22 is --
4 is -- ethernet connection is just a local area network,
5 and the wireless local area network is formed by the
6 access point 18.

7 Q. Okay. I think you are saying the WLAN 12 is
8 formed by this component wireless access point 18, and
9 the other components that are identified in this box
10 that surrounds wireless access point 18, parts 22, 24,
11 28, 32, and 26?

12 MR. PRICE: Objection, misstates testimony.

13 THE WITNESS: So the question is whether the
14 wireless local area network 12 includes elements 24, 26,
15 32, and 28?

16 BY MR. RUECKHEIM:

17 Q. And 18.

18 A. Well, 18, of course. But I think the wireless
19 local area network in Figure 18 is between the phone 16
20 and the access point 18. Those two devices are the only
21 two devices that have a wireless local area networking
22 capability that are shown.

23 24 is a voice over IP phone. It is not -- it
24 is shown as connected to an ethernet, to a local area
25 network, and it is not -- it is not on the wireless

1 local area network.

2 The -- the -- it is the same for the other
3 elements. 26 is a personal computer and -- a personal
4 computer connected via ethernet. I don't think this
5 computer is -- has a wireless connection to the access
6 point.

7 32 is a modem, and the modem is connected via
8 ethernet as well. And the same is true for element 28,
9 the private batch exchange.

10 So the only two devices, again, like I said,
11 that have a wireless local area network -- networking
12 capability are the phone 16 and the wireless access
13 point 18.

14 Q. What is a network hardware card?

15 A. So this -- the reason I used this term in my
16 declaration is because Waylett is describing cards 140.

17 Q. Well, can we agree that the Lemko product, or
18 at least the Lemko user manuals that you identify in
19 your report, discuss a device that uses network hardware
20 cards?

21 MR. PRICE: Objection; foundation.

22 THE WITNESS: I don't see the '414 patent --
23 which is the only thing that I have -- I don't see it
24 describing hardware cards.

25 ///

1 BY MR. RUECKHEIM:

2 Q. I put into the chat window IPR Exhibit 2037.
3 Let me know when you can open it.

4 (Exhibit No. IPR Exhibit 2037
5 identified.)

6 A. Yes, I have it.

7 Q. If you can turn to page 424.

8 A. 424.

9 Q. Correct -- yeah. PDF and actual page 424.

10 A. I am looking at page 424.

11 Q. Do you see where it shows a picture of this
12 Lemko line controller card?

13 A. Yes. I see this.

14 Q. So we can agree that Lemko's -- well, do you
15 believe this user manual relates to a Lemko product that
16 embodied any of the claims at issue?

17 A. Well, I can agree that this is a user manual
18 that -- does this -- does this --

19 (Reporter Clarification.)

20 A. Comes from Lemko.

21 Q. So let's look at paragraph 140 in your
22 declaration.

23 (Recess).

24 MR. RUECKHEIM: Okay. Let's go back on the
25 record.

1 BY MR. RUECKHEIM:

2 Q. Dr. Cooklev, we were looking at Exhibit 2037,
3 which is a user manual for a Lemko product that you
4 contend practices the challenged claims, correct?

5 A. Yes.

6 Q. And looking at page 424, do you see where it
7 says that the Lemko product uses a network hardware card
8 that is required for the BTS interface? Do you see
9 that?

10 A. You are talking about the Lemko line controller
11 cards?

12 Q. Correct.

13 A. Yes, on this page, it says the LLC card is
14 required for the BTS interface.

15 Q. That is a network hardware card?

16 A. I think we can -- I think we can say -- we can
17 say that. Actually, the following page, if we look at
18 page 425, provides more detail about this Lemko card.

19 Q. And on that page, it also says at the very top
20 of the page that the Lemko product uses the network
21 hardware card to connect to E1 or T1 connections to the
22 public network?

23 A. I'm not sure which top of the page, but the
24 following -- yeah, maybe the page 425 of -- where it
25 says E1 or T1 facilities are used for ISDM

1 interconnection.

2 And a few lines down, it says the node 1 and
3 node 2 will use the same interface module to provide
4 connectivity using T1 or E1 to the PSTN using ISDN or
5 SS7-based call control.

6 Q. Okay. And do network hardware cards include
7 processors?

8 MR. PRICE: Objection; foundation.

9 THE WITNESS: The Lemko line card -- line
10 controller card is -- is used for the interface.

11 It seems to me it is using some digital
12 electronics.

13 BY MR. RUECKHEIM:

14 Q. By "digital electronics," do you mean a
15 processor or something else, or -- it's hard to tell.

16 A. I think so. It is a little bit hard to tell
17 from this, but maybe some digital chip.

18 Q. Okay. Are network hardware cards
19 computer-readable mediums?

20 A. It seems to me that your question is more
21 related to the question of infringement, what -- what is
22 computer-readable medium.

23 Q. Do you have an opinion one way or the other?

24 A. I may give you -- in just a second, give you an
25 answer -- oh, there is the patent. And I'm looking at

1 the '414 patent.

2 So the '414 patent requires computer-readable
3 medium.

4 Sorry. In particular, claim 11 cites a
5 computer-readable storage medium. And this medium
6 comprises -- there are certain elements that it
7 comprises.

8 And the Lemko line controller card that
9 implements an interface to the BTS -- it doesn't have to
10 be comprised, it doesn't have to be included in the
11 computer-readable storage medium.

12 Q. So just so the record's clear, are you saying
13 that a network hardware card could be considered a
14 computer-readable medium, but that other things could as
15 well?

16 A. Huh?

17 MR. PRICE: Objection; misstates testimony.

18 BY MR. RUECKHEIM:

19 Q. I was asking if your opinion is that a
20 network -- a network hardware card could be considered a
21 computer-readable medium, just that the claim is not
22 limited to a network hardware card.

23 MR. PRICE: Same objection.

24 THE WITNESS: Well, what would be considered --
25 I'm not sure the question, as asked, that I investigated

1 that.

2 BY MR. RUECKHEIM:

3 Q. Okay. For the documents that you are alleging
4 show that Lemko had a product that practiced the
5 challenge claims, I have not seen any reference to a DPR
6 or choosing a preferred call path where the user is not
7 within certain wireless areas.

8 And can you show me where you have identified
9 those claim limitations in your report with respect to
10 these user manuals?

11 A. A DPR, and what was the second?

12 Q. The claim limitations that require a preferred
13 call path when the -- when the call -- well, just
14 finding a preferred call path, that claim limitation, as
15 a DPR.

16 MR. PRICE: Objection; form. Objection;
17 foundation.

18 THE WITNESS: I did not -- I did not do a
19 detailed mapping between the claims and this Lemko
20 product to be able to give you an informed opinion right
21 now.

22 BY MR. RUECKHEIM:

23 Q. Okay. Paragraph 144 -- well, strike that.

24 How much money did Lemko make through sales of
25 the products you contend practiced the challenged

1 claims?

2 A. How much money?

3 Q. Yeah.

4 MR. PRICE: Objection; foundation.

5 THE WITNESS: I'm not aware -- I don't know
6 exactly how much money.

7 BY MR. RUECKHEIM:

8 Q. Do you know if they made a profit? Did any
9 incoming they made selling the product exceed the cost
10 of developing it?

11 A. I don't know.

12 Q. And then it looks like you cite to a couple --
13 well, you cite to AT&T in your paragraph 151 of your
14 declaration, which is directed to commercial success;
15 correct?

16 A. Yes, 151 is direct -- paragraph 151 is directed
17 at commercial success of Lemko's products.

18 Q. And you state that AT&T investigated Lemko's
19 technology, correct?

20 A. Yes.

21 Q. And you have not seen any evidence of AT&T
22 making commercial purchases for Lemko, correct?

23 A. I have not seen evidence regarding dollar
24 amounts or profit, at least to the extent that I recall
25 right now.

1 Q. Okay. Well, then in paragraph 153, it looks
2 like you mentioned two customers of Lemko products, a
3 KNET and a TelAlaska. Do you see that?

4 A. Yes.

5 Q. So that's two customers. Do you know how many
6 other customers Lemko has for its product that allegedly
7 practices the patent?

8 A. How many customers?

9 Q. Correct.

10 A. No, I don't know how many customers.

11 MR. RUECKHEIM: Okay. No further questions.

12 MR. PRICE: I have no redirect.

13 THE REPORTER: We're going off the record at
14 2:42 p.m.

15 (The deposition was concluded
16 at 2:42 p.m.)

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1 I certify or declare under declaration
2 under penalty of perjury that the foregoing testimony is
3 true and correct.

4
5 Executed this ____ day of _____,
6 2024, at _____, California.

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10 _____
11 DR. TODOR COOKLEV

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1 STATE OF CALIFORNIA)

2) ss.

3 COUNTY OF ORANGE)

4 I, LINDSAY ANNE STOKER, RMR, CRR, CRC, and
5 Certified Shorthand Reporter and Deposition Notary
6 Public of the State of California, does hereby certify:

7 That the foregoing deposition was taken
8 before me at the time and place therein set forth, at
9 which time the witness was duly sworn by me;

10 That the testimony of the witness and all
11 objections made at the time of the deposition were
12 recorded stenographically by me and were thereafter
13 transcribed, said transcript being a true and correct
14 copy of the proceedings thereof;

15 I further certify that I am neither counsel for
16 nor related to any party to said action, nor in any way
17 interested in the outcome thereof;

18 Further, that if the foregoing pertains to the
19 original transcript of a deposition in a federal case,
20 before completion of the proceedings, review of the
21 transcript was not requested/offered on the record.

22 In witness whereof, I have subscribed my name,
23 this 13th day of March, 2024.

24 

25 _____
Lindsay A. Stoker, RMR, CRR, CRC
CA CSR No. 14373

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