

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CISCO SYSTEMS, INC.,

Petitioner

v.

PORTSMOUTH NETWORK CORP.,

Patent Owner

Case IPR2024-00503

Patent 7,035,279

REMOTE VIDEOGRAPHED

DEPOSITION OF NADER MIR, PH.D.

CALIFORNIA

FRIDAY, OCTOBER 18, 2024

Reported by: LAURA A. RUTHERFORD, RPR

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5 CISCO SYSTEMS, INC.,

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7 v.

8 PORTSMOUTH NETWORK CORP.,

9 Patent Owner

10 -----
11 Case IPR2024-00503

12 Patent 7,035,279
13 -----

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16 Remote videographed deposition of NADER MIR,
17 PH.D., taken on behalf of Petitioner, at California,
18 beginning at 9:01 a.m., and ending at 12:14 p.m., on
19 Friday, October 18, 2024, before LAURA A. RUTHERFORD,
20 RPR, Certified Shorthand Reporter No. 9266.
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22
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1 APPEARANCES (VIA ZOOM):

2

3 For Petitioner:

4 HAYNES BOONE

BY: EUGENE GORYUNOV, ESQ.

5 BRIAN C. KWOK, ESQ.

108 N. LaSalle, Suite 2215

6 Chicago, IL 6061

(312) 216-1620

7 eugene.goryunov.ipr@haynesboone.com

8 For Patent Owner:

9 STEPTOE, LLP

BY: KATHERINE CAPPAERT, ESQ.

10 SADAF MISBAH, ESQ.

1330 Connecticut Avenue NW

11 Washington, DC 20036

(202) 429-3000

12 kcappaert@steptoe.com

13

14 Videographer:

15 ALEJANDRO SOLORZANO, VIDEOGRAPHER

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BY MS. CAPPAERT

6

EXHIBITS

EXHIBIT NO.

DESCRIPTION

PAGE

1001 279 PATENT

10

1003 MIR DECLARATION

27

1005 113 PATENT

39

1006 912 PATENT

64

INFORMATION REQUESTED

(None)

INSTRUCTION NOT TO ANSWER

(None)

1 CALIFORNIA; FRIDAY, OCTOBER 18, 2024

2 9:01 A.M. - 12:14 P.M.

3 ---oOo---

4

5 THE VIDEOGRAPHER: Good morning. We are
6 now on the record. This begins videotape number one in
7 the deposition of Nader Mir, Ph.D., in the matter of
8 Cisco Systems, Inc., versus Portsmouth Network Corp.,
9 in the United States Patent and Trademark Office, case
10 number IPR2024-00503.

11 Today's date is October 18, 2024, and the
12 time on the monitor is 9:01 a.m. This deposition is
13 being taken remotely at the request of Steptoe, LLP.

14 The videographer is Alejandro Solorzano of
15 Magna Legal Services, and the court reporter is Laura
16 Rutherford of Magna Legal Services.

17 Will counsel and all parties present state
18 their appearances and whom they represent?

19 MS. CAPPAERT: Kate Cappaert, from
20 Steptoe, LLP, on behalf of patent owner Portsmouth
21 Network Corporation. And with me is my colleague Sadaf
22 Misbah.

23 MR. GORYUNOV: Good morning. Eugene
24 Goryunov on behalf of Cisco from the Law Firm of Haynes
25 and Boone. I'm joined by my colleague Brian Kwok.



1 THE VIDEOGRAPHER: Okay. Thank you all.

2 Will the court reporter please swear in the
3 witness, after which we may proceed.

4

5 NADER MIR, PH.D.,
6 having been first duly placed under oath,
7 was examined and testified as follows:

8

9 EXAMINATION

10 BY MS. CAPPAERT:

11 Q. Good morning, Dr. Mir?

12 A. Dr. Mir.

13 Q. Would you please state your full name for
14 the record?

15 A. My first name is Nader or Nader,
16 N-a-d-e-r, and my last name is Mir, M-i-r.

17 Q. And where are you sitting for today's
18 deposition, Dr. Mir?

19 A. I am from home office.

20 Q. And where is your home office located?

21 A. In San Jose, California.

22 Q. Is there anyone else in your office with
23 you?

24 A. No, and the door is locked -- is closed.

25 Q. And other than your computer screen, do



1 you have anything else open -- or other than the window
2 on your computer screen, do you have anything else open
3 on your computer?

4 A. The -- Firefox windows that I need to keep
5 it open for this session. Other than that, there is
6 nothing is open. Let me close the .pdf's of -- all of
7 the .pdf's will be closed now. I assume we don't need
8 those.

9 Q. To the extent there's anything that you
10 need, I'll mark it as an exhibit, and if there's
11 anything else, you can ask me.

12 A. Hopefully, yes. I closed that. There is
13 nothing else.

14 Q. Great.

15 Do you have any printout paper copies of
16 anything with you?

17 A. I do. And I want to ask for permission to
18 use the blank copy of my report and patents.
19 Sometimes, it would be easier and faster to answer the
20 questions, if you don't mind.

21 Q. And when you say the "blank copy of your
22 report," do you mean a blank copy of your expert
23 declaration in this IPR?

24 A. Yes, Counsel.

25 Q. I'm fine if you use that. And you also



1 said that you had blank copies of patents. Which
2 patents?

3 A. The asserted patent, 279, and Kovvali and
4 Kalman.

5 Q. And those are also blank; correct?

6 A. That is correct.

7 Q. Okay.

8 I'm fine if you refer to those during this
9 deposition.

10 A. Sure, thank you.

11 Q. Dr. Mir, you've been deposed before;
12 correct?

13 A. Yes.

14 Q. About how many times?

15 A. I don't recall.

16 Q. Over 10?

17 A. For sure over 10, yeah.

18 Q. Over 50?

19 A. No, for sure not over 50.

20 Q. Okay.

21 I'll go over very quickly some ground
22 rules for this deposition. I know that you're familiar
23 with them, so I won't spend too much time on it.

24 During the deposition, I will ask
25 questions, and you will provide answers. It's possible



1 that your counsel will object on the record. Unless
2 you are instructed not to answer, I am entitled to your
3 best and most complete answer to my question.

4 Do you understand that?

5 A. Yes, I do.

6 Q. Do you understand that you are under oath
7 today?

8 A. Yes.

9 Q. The court reporter can only record one
10 person at a time, so it's important for us to try not
11 to talk over each other. Please wait until I'm
12 finished asking my question before you answer, and I'll
13 try to do the same with your answer.

14 Okay?

15 A. Sounds good.

16 Q. If you don't understand any of my
17 questions, please ask. If you answer my question, I
18 will assume you understood it.

19 Okay?

20 A. Okay.

21 Q. We can take a break whenever you'd like,
22 unless there's a pending question. All right?

23 A. Yes.

24 Q. And I'll try to take a break about every
25 hour.



1 A. Thank you.

2 Q. Is there anything that would prevent you
3 from answering my question today truthfully and fully?

4 A. No.

5 Q. I'm going to start by -- I'll enter what
6 has previously been marked as Exhibit 1003.

7 (Exhibit Number 1003 was marked for
8 identification.)

9 Q. BY MS. CAPPAERT: If you refresh the
10 Ignite window, you should see Exhibit 1003 in that
11 window.

12 A. Shall I open it?

13 Q. Yes. You can open it. It's up to you. I
14 find it easier to download it to my computer and use it
15 from there, but you can also use it from the window if
16 you prefer to do that.

17 A. What if I need to access multiple files,
18 exhibits?

19 Is there any way that I can see it
20 altogether?

21 Q. You should be able to download each of
22 them, and they will open as .pdf's on your computer.

23 A. Okay.

24 Why don't I do this, then.

25 THE VIDEOGRAPHER: Counsel, may I butt in



1 for a second?

2 MS. CAPPAERT: Sure.

3 THE VIDEOGRAPHER: Dr. Mir, upper
4 right-hand corner, there's a download button.

5 THE WITNESS: Yeah, of course.

6 THE VIDEOGRAPHER: Sorry, Counsel.

7 MS. CAPPAERT: It's all right.

8 Q. BY MS. CAPPAERT: Do you have Exhibit 1003
9 open?

10 A. Yes. And I clicked on the download, and
11 I'm seeing still the -- I see it, so this is downloaded
12 already.

13 Is this the .pdf?

14 So should I -- should I separate the
15 downloaded one in a different window?

16 Is this what you mean?

17 Q. I am fine with you viewing it on your
18 computer, however it easiest for you, as long as you're
19 able to look at the Exhibit.

20 A. So I dragged it over my window, and it
21 popped up. And now, I have two windows. One is the
22 original one, one is the -- I don't know if this is
23 .pdf or not.

24 Q. I believe it is a .pdf?

25 A. If it's a .pdf, where is the -- I see.



1 This is the search. Let me try search, for example,
2 United. Make sure that this is -- yeah. Okay.

3 Sounds good. So I already downloaded this
4 exhibit in a different window. It's now open.

5 Q. Okay.

6 And Exhibit 1003 is the expert declaration
7 that you submitted in IPR2024-00503; correct?

8 A. It looks correct.

9 Q. And if you turn to the last page of this
10 exhibit, it's page 150, you're signature is on that
11 page; correct?

12 A. Yes. I'm seeing my signature.

13 Q. Do you have any reason to believe that
14 this is not a true and accurate copy of the declaration
15 you submitted in this case?

16 A. Assuming the other pages are the original,
17 no.

18 Q. During the deposition, I may refer to
19 Exhibit 1003 as your "declaration." Is that all right?

20 A. That's all right.

21 Q. Who wrote your declaration?

22 A. It was a collaborative work from the
23 beginning. I discussed many hours of discussions with
24 the counsel on the Zoom calls, and I developed my idea.
25 I discuss it with counsel. And once I was ready, I



1 asked counsel to give me some help in writing.

2 That was necessary because some parts of
3 the report had some legal sections, legal related
4 sections, such as legal standards, level of ordinary
5 skill in the art, and so on, so I just asked for some
6 help.

7 And then I carefully reviewed those
8 collaborative works, and I confirmed that these are all
9 my opinion. And at the end, I just signed it. That
10 shows that this is entirely my opinion.

11 Q. About how many hours would you say you
12 spent discussing the subject matter that's included in
13 your declaration with counsel?

14 A. I don't recall any number.

15 Q. Over five?

16 A. I cannot say over five or below 10, or
17 whatever. There were many hours of my time I spent on
18 thinking, developing theories, discussing with
19 the -- with counsel.

20 It is both hard for me to estimate any
21 hours unless I -- the invoices are in front of me to
22 add all of those numbers to give you a bulk number. So
23 I cannot give you any number, because I don't know. I
24 don't recall it.

25 Q. So you know that you spent many hours, but



1 you're not able to recall a ballpark amount of how many
2 hours that is?

3 A. That's correct.

4 Q. Okay.

5 How many words in your declaration did you
6 personally write?

7 A. How many words, you mean?

8 Q. Yep.

9 How many words in your declaration did you
10 personally write?

11 A. I don't recall how many words. I didn't
12 count the number of words.

13 Q. Did you write multiple paragraphs on your
14 own in your declaration?

15 A. Yes. As I said, that, you know, I
16 developed the report by myself. I asked some help from
17 counsel to help me on certain parts. In the meantime,
18 I reviewed all of those parts that was collaborative to
19 make sure that these are reflecting exactly my opinion.

20 Q. Which portions of the report did you
21 personally write paragraphs for?

22 A. So as I mentioned -- I think I have to
23 repeat my statement. I created this report by myself,
24 and various parts of this was written by me. There's
25 some sections of this report I asked for help only on



1 writing part, only on writing part.

2 There's some special parts that it was
3 related to legal aspects. I asked them to summarize
4 the discussion we had in advance. And then I made sure
5 that I understand those parts, legal parts, such as the
6 legal standards, for example. That's not my area.

7 I asked them to write it for me, and then
8 I discuss it with them to make sure that I understand.
9 And then at the end, I signed the whole thing.

10 Q. So did you personally write all portions
11 of your declaration that are not the legal standard
12 section?

13 A. No. Some parts of it -- some other parts,
14 I don't remember which parts, I asked them for help to
15 put some meticulous -- some parts together, and forward
16 to me, and then I just edit it, made some corrections,
17 and then put them into my original file.

18 Q. Did you review the legal standard section
19 in your declaration?

20 A. I'm sorry. When you say did I review,
21 what do you mean?

22 That did I review it before writing,
23 before signing it, or after signing it, or yesterday
24 reviewing it?

25 What exactly do you mean?



1 Q. Let's start with, did you review the legal
2 standard section before you signed your declaration?

3 A. Yes, I did.

4 Q. Do you have an understanding of the legal
5 theories laid out in that section?

6 A. When I read the legal standards, I
7 discussed it with counsel, and I tried to understand
8 the legal standards, and I believe that I did my best,
9 and I have a good idea.

10 Q. How much time did you spend reviewing the
11 evidence cited in your declaration?

12 A. Without having invoices in front of me, I
13 can't -- it is almost impossible for me to, kind of,
14 separate the number of hours and section parts. Even
15 the invoice in front of me doesn't say exactly which
16 part is done during this invoice item. It is hard to
17 answer the question. I don't know.

18 Q. So sitting here today, you don't know how
19 much time you spent reviewing the evidence that's cited
20 in your declaration?

21 A. Are you saying that the reviewing the
22 declaration to prepare for --

23 Q. Sure. I can clarify.

24 A. Okay.

25 Q. Prior to submitting your declaration, do



1 you know how much time you spent reviewing the evidence
2 that is cited in your declaration?

3 A. And by "submitting the declaration," means
4 something submitting to who?

5 Q. Before you signed your declaration for its
6 submission to the Patent Trial and Appeal Board as part
7 of this IPR proceeding, do you know how much time you
8 spent reviewing the evidence that is cited in that
9 declaration?

10 A. As I said, I don't recall how many hours
11 spending on reviewing. But I can tell you that I
12 reviewed it numerous times to make sure that the
13 entirety of this report reflects my opinion.

14 Q. And I understand you say that you reviewed
15 your declarations multiple times. How much time did
16 you spend reviewing the underlying evidence that is
17 cited in your declaration before signing your
18 declaration?

19 A. As I just explained to you, the number of
20 hours is very hard to guess. And I'm not here to guess
21 or anything. If the invoice is in front of me, I can
22 give you a better idea. But without that, I cannot
23 provide you with any number that reflects the number of
24 hours of my review.

25 But I can tell you that I -- numerous time



1 I reviewed all sections of my report to make sure there
2 is no error, or there is nothing that does not reflect
3 my opinion.

4 Q. In paragraph two of your declaration,
5 which is on page 4, of Exhibit 1003?

6 A. I'm sorry. There's a pop-up error on my
7 screen that says "Refresh, Browse, Pause." What am I
8 supposed to do?

9 Q. I do not know.

10 A. It says, "Browsing session pause. For
11 security, your proof point isolation browsing session
12 has been paused. Please refresh to continue browsing."

13 THE VIDEOGRAPHER: Doctor, can you try
14 refreshing it and see if it works?

15 THE WITNESS: It works. Okay.

16 So it seems that for the rest of the
17 deposition, I should sometimes refresh it.

18 Q. BY MS. CAPPAERT: Okay.

19 A. Well, that's what I meant.

20 Okay. I'm sorry.

21 What exactly was the question was?

22 Q. I'm sorry. If you look on page 4 of your
23 declaration, Exhibit 1003, paragraph two?

24 A. Page 4 -- okay. I'm on page 4.

25 I'm sorry. Before we continue, can I ask



1 you a question?

2 So, sometimes, in my previous depositions,
3 there is a window that shows the transcript of the
4 questions or -- pending questions.

5 Am I having access to that?

6 Q. No. If you have a question regarding
7 my -- what I'm asking you, you can ask me to repeat the
8 question.

9 A. Okay.

10 So I don't have access to depending
11 questions in writing? Okay.

12 I'm sorry to interrupt.

13 Q. No. Totally fine.

14 If you look at page 4, paragraph two, do
15 you see that?

16 A. I do.

17 Q. And it says, "I am being compensated for
18 my work in this matter at my standard rate." Do you
19 see that?

20 A. Yes.

21 Q. What is your standard hourly rate?

22 A. My standard hourly rate is \$450 per hour.

23 Q. And is that the standard hourly rate that
24 you apply in all cases in which you are serving as an
25 expert witness?



1 A. Yes. I have a flat rate for any kind of
2 consulting that I need to spend time.

3 Q. And in this case, you submitted a
4 declaration in support of an IPR filed by Cisco
5 Systems, Inc.; correct?

6 A. Yes.

7 Q. Have you ever served as an expert witness
8 in other Cisco Systems cases?

9 A. I believe so.

10 Q. How many cases have you served as an
11 expert witness for Cisco Systems?

12 A. I'm sorry. I don't recall how many cases.
13 Could be several cases.

14 Q. Okay.

15 Have you ever received -- or going back.

16 You're currently a tenured professor in the
17 electrical engineering department at San Jose State; is
18 that right?

19 A. Yes.

20 Q. Have you ever received funding from Cisco
21 for your work as a professor at San Jose State
22 University?

23 A. To the best of my knowledge, I don't think
24 so.

25 Q. Okay.



1 A. To the best I can remember, I don't think
2 I received any funding -- research funding from Cisco.

3 Q. And prior to your work at San Jose State,
4 you were assistant professor at the University of
5 Kentucky; is that right?

6 A. That's correct.

7 Q. Did you ever receive funding from Cisco
8 for your work while serving as an assistant professor
9 at the University of Kentucky?

10 A. I don't recall if I did.

11 Q. So you're not sure whether you did or you
12 didn't?

13 A. I don't think I received any funding at
14 all at any time from Cisco.

15 Q. Okay.

16 How many times have you served as an
17 expert witness in IPR?

18 A. What are you specifically talking about,
19 IPR or any case?

20 Q. Just IPRs?

21 A. That's hard to really know, even though
22 the -- the CV is in front of me, it is hard to say.
23 Because sometimes there is a case in my CV that
24 includes multiple IPRs. It is very difficult to answer
25 the question unless all of the records of my consulting



1 is in front of me to count it for you.

2 Q. So you're -- are you able -- strike that.

3 Are you able to provide a ballpark
4 estimate of how many times you have served as an expert
5 in IPR proceeding?

6 A. The ballpark can be estimated using the
7 current CV that you have it in this proceeding. Just I
8 have mentioned IPR in any case that required IPR. But
9 I don't mention how many times of IPR in this
10 particular case.

11 It can be counted. If you want me to
12 count it, let's pop up my CV, and then count it
13 together. I don't know.

14 Q. So I think my understanding is that in
15 order to calculate it, you could look at your current
16 CV. But that if your CV mentions IPR, it means that
17 there was at least one IPR associated with that case,
18 but there could, potentially, have been more in which
19 you served as an expert; is that right?

20 A. Absolutely correct.

21 Q. Okay.

22 Do you know in the times that you have
23 served as an expert in IPR proceeding how many times
24 you were serving as an expert on the side of the
25 petitioner?



1 A. Again, you're asking a question that
2 requires the entire record of -- or professional record
3 of my consulting. It should be in front of me to count
4 it. It is -- I cannot recall how many times I was at
5 the petitioner's side or patent owner side.

6 A. Again, the CV -- my CV shows, to some
7 extent -- I guess to some extent, the answer to this
8 question for that timing of the CV prepared.

9 Q. And are there any other cases that
10 you -- in which you are currently serving as an expert
11 that are not requested in this CV that you submitted
12 with your expert declaration in this case?

13 A. Yes, there are.

14 Q. How many?

15 A. I just this morning looked at the timing
16 of my CV. It may be missing a couple of cases. I have
17 to make sure of that, you know, by going back to my
18 records to find out. But there are a couple of cases
19 that are, kind of, inactive. We're in a waiting period
20 from PTAB, but there is no active cases.

21 Q. Okay.

22 A. This is the only active case is today's
23 case.

24 Q. Okay.

25 So today's case is the only active case



1 that you currently have in front of the PTAB?

2 A. Assuming the meaning of "active" means
3 that there is no work required until we hear from PTAB.

4 Q. Okay.

5 Did you spend time preparing for today's
6 deposition?

7 A. Yes.

8 Q. How much time did you spend preparing?

9 A. Well, I cannot tell you how many hours or
10 how many minutes. What I can tell you is that, you
11 know, I reviewed my report a couple of times yesterday
12 and in the beginning of this week. I don't know how
13 many hours. I haven't collected the number of hours
14 with regards to the invoice or anything else.

15 Q. Okay.

16 So despite the fact that you spent time
17 reviewing and preparing -- or reviewing your expert
18 declaration and preparing for today's deposition this
19 week, you're not sure how much time you spent on that
20 preparation?

21 A. I'm sorry. I didn't get your question.
22 What do you mean by --

23 Q. Well, if I understood what you just said
24 correctly, you reviewed your expert declaration a few
25 times yesterday, and you also may have read it earlier



1 this week, but you are not sure how much time you spent
2 this week doing that review; is that right?

3 A. That is correct.

4 Q. Okay.

5 Did you meet with anybody in preparation
6 for today's deposition?

7 A. Could you tell me what you mean by
8 "meeting"? Meeting as a virtual or in person?

9 Q. Either virtually or -- did you meet anyone
10 virtually or in person in preparation for today's
11 deposition?

12 A. Let me refresh it. It just pops up again.
13 Okay. I'm sorry. Just could you repeat
14 your question?

15 Q. Sure.

16 Did you meet with anybody, either
17 virtually or in person, in preparation for today's
18 deposition?

19 A. Not in person, but virtually, yes.

20 Q. Who did you meet with virtually to prepare
21 for today's deposition?

22 A. Counsel, Cisco counsel.

23 Q. And when you say, "Cisco counsel," do you
24 mean Mr. Goryunov and Mr. Kwok, who are currently on
25 this call -- or this deposition?



1 A. I have been working with Cisco counsel,
2 three of them. And sometimes when I meet virtually,
3 two of them are present or maybe three of them. I
4 don't recall recently which ones. Yesterday, there
5 were two of them.

6 Q. And who were the two that you met with
7 yesterday?

8 A. I just mentioned the first names, and last
9 names are Brian and Theo are the two counsel members.
10 And Eugene also briefly --

11 Q. Okay.

12 A. -- for yesterday.

13 Q. Okay.

14 How many hours would you say you spent
15 talking to counsel yesterday?

16 A. Yesterday was close to two and a half to
17 three hours of virtual communication we had. But other
18 than that, before yesterday, I don't recall the number
19 of hours. Yesterday was supposed to be a session for
20 two to three hours, and we just finished it within that
21 time frame.

22 Q. Okay.

23 Did you meet with counsel for Cisco in
24 preparation for today's deposition before yesterday?

25 A. Yes.



1 Q. When did you meet with counsel in
2 preparation for today's deposition before yesterday?

3 A. It was earlier in this week. I believe it
4 was Tuesday, if I'm not mistaken.

5 Q. And how much time did you spend on Tuesday
6 meeting with counsel for Cisco to prepare for today's
7 deposition?

8 A. About the same time, just in the morning,
9 a couple hours in the morning.

10 Q. Okay. Okay.

11 Dr. Mir, I'm going to enter another
12 exhibit. Give me one minute.

13 If you refresh -- well, depending on what
14 is shown on your screen, you may need to go back to the
15 main share folder for today's deposition in Ignite.
16 And if you do that, you should see that Exhibit 1001 is
17 now there.

18 (Exhibit Number 1001 was marked for
19 identification.)

20 THE WITNESS: Exhibit -- it still shows
21 Exhibit 1003.

22 Q. BY MS. CAPPAERT: There should be a back
23 arrow on the top of that -- of your web browser, which
24 should take you back to the share folder that you were
25 originally in.



1 A. Oh, okay.

2 I see.

3 Q. And do you see Exhibit 1001 in there?

4 A. Yes, I do.

5 Q. Okay.

6 If you could download or open that
7 exhibit?

8 A. Let me open it, and then download it, and
9 then -- okay.

10 Actually, I don't want to open it
11 separately, because it may take so many exhibits, but
12 that's fine.

13 Okay. I just opened it. That's -- for
14 now, it's okay.

15 Q. Okay.

16 And Exhibit 1001 is U.S. Patent Number
17 7,035,279; correct?

18 A. Correct.

19 Q. And if I refer to that as the '279 patent,
20 will you know what I'm referring to?

21 A. That's fine.

22 Q. Great.

23 As part of your work in this case, you
24 have reviewed the '279 patent; correct?

25 A. Yes.



1 Q. Were you familiar with the '279 patent
2 before you began working on this case?

3 A. I had not seen this patent before I
4 started this case.

5 Q. Okay.

6 So I want to start by looking at Figure 1
7 of the '279 patent, which is on page 2.

8 A. Figure 1, yes.

9 Q. Yep.

10 And Figure 1 shows a network 20 that
11 includes nodes 22 interconnected by links 1 through 6
12 to form counterclockwise and clockwise paths; correct?

13 A. I'm sorry. You just read the caption of
14 the Figure 2 -- Figure 1?

15 Q. I'm asking you a question.

16 Does Figure 1 of the '279 show a network
17 20 including node 22 that are interconnected by links 1
18 through 6 to form counterclockwise and clockwise paths?

19 A. I am seeing Figure 1 of '279. I'm sorry.
20 What you just said, if it is the explanation of
21 this -- or describing this figure, then the answer is
22 yes. But I'm not sure I know what you're asking and
23 what is the purpose of your question with regards to
24 this figure.

25 Q. Okay.



1 Let's -- maybe this will help you out. If
2 you look at Exhibit 1003, which is your declaration,
3 and go to page 12, paragraph 27, and let me know when
4 you're there.

5 A. I'm on page 12 of my declaration.

6 Q. And do you see paragraph 27?

7 A. Yes, I do.

8 Q. Okay.

9 And the last sentence in paragraph 27
10 says, "Figure 1 of the '279 patent illustrates network
11 20 that includes nodes 22 interconnected by links 1 to
12 6 to perform form counterclockwise (inner ring 24) and
13 clockwise," again, you have "(outer ring 26) paths."

14 Did I read that correctly?

15 A. Yes, you did.

16 Q. Okay.

17 A. What is your question?

18 Q. Well, that was my question. It seemed
19 before, when you were looking at just Figure 1 of the
20 '279 patent, you weren't sure if this statement that I
21 just read from your declaration was correct. So I
22 wanted to show you where it was in your declaration.

23 A. Okay. Yes. The answer is yes.

24 Q. Okay.

25 And so looking at Figure 1 again, the



1 counterclockwise paths are on inner ring 24; is that
2 right?

3 A. Let me compare that with my annotations.
4 That would be helpful. So the counterclockwise is the
5 one that is shown in this figure in my declaration with
6 blue color.

7 Q. And that is number -- labeled as 24; is
8 that right?

9 A. That's correct.

10 Q. Okay.

11 So the counterclockwise paths are on inner
12 ring 24; correct?

13 A. 24 is the counterclockwise.

14 Q. Great.

15 And the clockwise paths are on the outer
16 ring, which is 26; right?

17 A. That's correct.

18 Q. And you mentioned that you were looking at
19 annotated Figure 1, which is on page 13 of your
20 declaration; correct?

21 A. That is correct.

22 Q. And in the annotation, the clockwise path
23 is in orange, and the counterclockwise path is blue; is
24 that right?

25 A. That's what I'm seeing in Figure 1 on page

1 13 of my report.

2 Q. Did you provide color coded annotations in
3 Figure 1?

4 A. We discussed the color codes with counsel,
5 and we just picked two colors. And these two colors
6 are not necessarily indicative of any particular
7 concept. It could have been green and purple.

8 It doesn't really matter, as long as they
9 are two distinct colors that would be -- would have
10 been fine. I think we discussed the colors blue and
11 orange to be acceptable there.

12 Q. And did you personally annotate this
13 figure?

14 A. I asked the counsel to annotate it for me.
15 I don't have the correct tool to do so.

16 Q. Okay.

17 The '279 patent discusses how resources
18 are assigned to node -- nodes 22. Is that a fair
19 characterization of the '279 patent?

20 A. Could you repeat your question?

21 Q. Sure.

22 The '279 patent includes discussions about
23 how resources are assigned to nodes 22; correct?

24 A. Could you show me where I -- opined on
25 this topic?



1 I want to refresh my memory and to see
2 where exactly I said such a thing.

3 Q. So without looking at either the '279
4 patent or your declaration, you're not able to say
5 whether the '279 patent discusses how resources are
6 assigned to nodes 22?

7 A. This is not about a memory test. I just
8 want to discuss or consult my report to see how I
9 summarized '279. I'm pretty sure that, in the summary
10 part, I can find the answer to your question.

11 Q. Let's look at the '279 patent itself.

12 A. Okay.

13 Q. So if -- the '279 patent is Exhibit 1001.
14 And if you look at column 5, starting at line 59?

15 A. Column 5, 60 --

16 Q. 59, it starts with "Fig. 3"?

17 Do you see that?

18 A. 59? Figure 3, yes.

19 Q. And the '279 patent states "Fig. 3 is a
20 flow chart that schematically illustrates a method for
21 assigning resources to nodes 22, in accordance with a
22 preferred embodiment of the present invention."

23 Do you see that?

24 A. Yes.

25 Q. So in a preferred embodiment of the



1 invention of the '279 patent, there is a
2 discussion -- or the '279 patent illustrates a method
3 for assigning resources to nodes 22?

4 A. It says what it says, a method for
5 assigning resources to nodes 22.

6 Q. Okay.

7 And the '279 patent discusses the method
8 for assigning resources to nodes 22; is that right?

9 A. It continues explaining it. It says, "In
10 preparation for this method" -- I'm assuming that the
11 "method" refers to the method for assigning resources.
12 -- "A dispatcher entity is chosen," and then it
13 continues.

14 Q. Okay.

15 So the '279 patent discusses a method for
16 assigning resources to nodes 22; right?

17 A. As far as I see, that's the sentence of
18 line 59, column 3.

19 Q. And if you look at column 6 of the '279
20 patent, line 11, it's the paragraph that starts with
21 "When a node."

22 Do you see that?

23 A. Yes.

24 Q. And the '279 patent states that, "When a
25 node receives a request from one of its clients to send



1 data through another node, the node first checks to
2 determine whether it has sufficient resources already
3 allocated to it in order to service the request."

4 Do you see that?

5 A. Yes.

6 Q. So the '279 patent is discussing that a
7 node -- the first step, the node receives a request
8 from one of its clients to send data to another node;
9 is that right?

10 A. I wouldn't change the wording of this. So
11 you seem to summarize it, and I'm not comfortable to
12 confirm it. Because the sentence I just read from a
13 column 6 is pretty clear, and I can read out to you
14 again, as you read for me.

15 Yeah, go ahead.

16 Q. So what I understand you saying is that
17 this sentence in column 6, that, "When a node receives
18 a request from one of its clients to send data to
19 another node, the node first checks to determine
20 whether it has sufficient resources already allocated
21 to it in order to service the request," is clear as
22 written; correct?

23 A. It is clear, yeah.

24 Q. And it's clear that it is a node that is
25 receiving a request from one of its clients to send



1 data to another node; correct?

2 A. I don't know what you're saying, why you
3 are rephrasing the sentence?

4 Q. I don't believe that I rephrased it just
5 then. I believe that I said it is clear that it says,
6 "a node receives a request from one of its clients to
7 send data to another node"; correct?

8 A. All I can say is when a node receives a
9 request from one of the -- one its clients to send data
10 to another node, the node first checks to determine
11 whether it has sufficient resources already allocated
12 to it in order to service the request." That's
13 pretty -- clear what it is.

14 Q. So in that disclosure, a node is receiving
15 a request from one of its clients to send data to
16 another node; correct?

17 A. Do you mean when a node receives a request
18 from one of its clients? That's correct, yes, if
19 that's what you mean.

20 Q. Okay.

21 And then I believe we discussed this, but
22 the node first checks to determine whether it has
23 sufficient resources already allocated it in order to
24 service the request; right?

25 A. The node first checks to determine whether



1 it has sufficient resources. That's, again, pretty
2 clear.

3 Q. Okay.

4 And then if the allocated resources are
5 inadequate, the node is going to -- the node submits a
6 resource request to the dispatcher; is that right?

7 A. That's correct, yes. That's clear, yes.

8 Q. So this portion of the '279 patent is
9 explaining that a node -- that after a node receives a
10 request from one of its clients to send data to another
11 node, that node that received the request checks to
12 determine whether it has sufficient resources.

13 And if it does not, it submits a resource
14 request to the dispatcher; is that right?

15 A. You just roughly read the same sentence, I
16 would say. And if you just read the entire sentence as
17 is that you see in the specifications, I would be more
18 comfortable to answer "yes" or "no."

19 But when you just rephrase it to some
20 extent, I need to compare what you said to what I see
21 and then answer the question; otherwise, either I waste
22 time or just -- it takes time.

23 Q. What is concerning you with what I
24 stated?

25 A. What concerns me is that, you know, when



1 you rephrase it -- I would say that you rephrase it,
2 basically. I want to make sure that, you know, the end
3 result of your rephrasing is actually the same as what
4 I read in this specification. It may take time for me
5 to confirm it.

6 Q. So --

7 A. Why don't we just stick with what we read
8 in the specifications? It's so clear to me.

9 Q. Okay.

10 And then -- okay.

11 So I want to move on a little bit from the
12 '279 patent.

13 In your declaration, you assert that a
14 combination of two references render obvious claims 1
15 through 5 and 9 to 18; correct?

16 A. Can you tell me where I said this?

17 Q. Sure.

18 You look at page 17 of your declaration,
19 Exhibit 1003?

20 A. Page 17. I'm on page 17. Okay.

21 Q. Okay.

22 And there's a heading, heading 8, that
23 states, "The combination of Kovvali and Kalman renders
24 obvious claims 1 through 5, 9 to 18."

25 Do you see that?



1 A. I see it.

2 Q. Okay.

3 I want -- I'm going to enter another
4 exhibit now. I'm going to enter exhibit -- what was
5 previously marked as Exhibit 1005.

6 (Exhibit Number 1005 was marked for
7 identification.)

8 Q. BY MS. CAPPAERT: And let me know when you
9 have Exhibit 1005.

10 A. I've got it now.

11 Q. Okay.

12 A. Let me just make it a separate window.
13 Okay.

14 Okay. Go ahead.

15 Q. And Exhibit 1005 is U.S. patent number
16 6920113. Do you see that?

17 A. I do.

18 Q. And if I refer to it as just "Kovvali,"
19 the first named inventor, will you understand what I'm
20 talking about?

21 A. Yes.

22 Q. And as we just discussed, Kovvali is one
23 of the patents that you rely -- or that you assert
24 rendered obvious claims 1 through 5 and 9 to 18;
25 correct?



1 A. Correct.

2 Q. Kovvali in combination with Kalman?

3 A. Correct.

4 Q. Okay.

5 And looking at Kovvali, I want to go to
6 Figure 4, which is on page 5 of Exhibit 1005.

7 A. Okay.

8 Let me just -- Figure 4, you said?

9 Q. Yes, Figure 4.

10 A. Okay.

11 I'm seeing it.

12 Q. And in Figure 4, you see that there are
13 four nodes that are shown; right?

14 A. That's right.

15 Q. And in between those nodes are optical
16 links labeled 422; correct?

17 A. I see 422 number there, yes.

18 Q. Okay.

19 And Figure 4 is showing a SONET ring 410;
20 right?

21 A. Could you repeat your question?

22 Q. Sure.

23 What is shown in Figure 4 is a SONET ring
24 410?

25 A. If you said SONET ring, I have to check



1 whether this is a SONET ring or not.

2 Q. Well -- sure. If you look in the center
3 of Figure 4, it says "SONET ring"; right?

4 A. I do see that's -- that phrase, but I
5 would like to ask for just a minute to double check
6 something.

7 Q. Sure. And if it helps, I think it may
8 help you if you look at column 8 of Exhibit 1005,
9 starting around line 19.

10 A. So when I go to the description of the
11 invention in Kovvali, on column 8, the "Description"
12 starts with, "Referring to Figure 4, in one embodiment,
13 a number of SONET nodes 420 (Labeled A to D) are
14 coupled over optical links 420 to SONET ring 410."

15 Q. So Figure 4 is showing optical links 422
16 as part of a SONET ring 410; correct?

17 A. That's correct.

18 Q. Okay.

19 And in Figure 4 and SONET ring 410, SONET
20 ring 410 is a UPSR; correct?

21 A. I'm sorry. Where did I say that?

22 Q. If you look at line 30, in column 8?

23 A. Yes, okay.

24 Q. And in line 30, it says, "In Fig. 4, SONET
25 ring 410 is a UPSR"; correct?

1 A. So SONET ring 410 -- I'm reading just a
2 little bit further. It might have -- it might be two
3 different topologies. The first one is UPSR,
4 Unidirectional Path Switched Ring.

5 And I'm reading, after that, the other
6 type of ring is BLSR, Bidirectional Line Switched Ring.
7 So, yes, SONET could be two types, UPSR and BLSR.

8 Q. Okay.

9 So, I guess, let's look at this entire
10 paragraph, and we can talk about it. So, "Referring to
11 Figure 4, in one embodiment," as we just talked about,
12 "it is showing a number of SONET nodes 420 are coupled
13 over optical links 422 in a SONET ring 410"; correct?

14 A. You just read that sentence; right?

15 Q. Right.

16 So Figure 4 is showing one embodiment;
17 correct?

18 A. Figure 4 shows an embodiment of the
19 invention; that is correct.

20 Q. Okay.

21 And if you look then at column 8, line 30,
22 it says, "In Fig. 4, SONET ring 410 is a UPSR." And
23 then in the parenthetical, "Unidirectional Path
24 Switched Ring," "in which all communication between
25 nodes traveled in one direction."

1 Did I read that sentence correctly?

2 A. Yes, you did.

3 Q. Okay.

4 And then going on, it states, "In
5 alternative embodiments, other types of rings, such as
6 BLSR," and then in parentheses, "Bidirectional Line
7 Switched Ring," "in which communication between nodes
8 on the ring travels in both clockwise and
9 counterclockwise directions are viewed"; correct?

10 A. Correct.

11 Q. So the patent -- so Kovvali is
12 distinguishing between Figure 4 as a UPSR, and
13 alternative embodiments, where there are other types of
14 rings, such as a BLSR; correct?

15 A. Did you say "distinguishing"?

16 Q. It's talking about different embodiments;
17 correct?

18 A. My understanding is that Figure 4, SNET
19 ring can be of two types, either UPSR or BLSR. That's
20 just what the purpose of this paragraph is.

21 Q. But that's not what this paragraph says,
22 Dr. Mir. I believe, as we just read, it said, starting
23 at the Figure 4, it is talking about one embodiment;
24 correct?

25 A. I'm sorry. You just -- you just



1 misunderstood me. My paragraph, I meant the one that
2 starts, "In Figure 4, SONET ring 410," not from the
3 beginning of this paragraph. I probably I should have
4 said "phrase" instead of "paragraph."

5 Q. So -- but Figure 4 -- are you saying that
6 Figure 4 is defined as encompassing multiple different
7 things within the same paragraph?

8 MR. GORYUNOV: Objection. Form.

9 THE WITNESS: Well, could you rephrase
10 your question? I just --

11 Q. BY MS. CAPPAERT: Sure. So the beginning
12 of this larger paragraph, I believe as we've discussed,
13 says, "Referring to Figure 4, in one embodiment, a
14 number of SONET nodes 420 are coupled over optical
15 links 422 in a SONET ring 410"; correct?

16 A. That is correct.

17 Q. Okay.

18 And then in line 30, it says, "In Fig. 4,
19 SONET ring 410 is a UPSR"; correct?

20 A. Correct.

21 Q. It does not say in column 8, line -- after
22 line 31, that SONET ring 410 is also a BLSR; correct?

23 A. Counsel, can you -- we just see the
24 sentence -- you're ignoring this one. That's not a
25 complete coverish (phonetic) of the inventor stating



1 the embodiment.

2 It says, "In alternative embodiments,
3 other types of rings, such as BLSR, in which
4 communication between nodes on the ring travels in both
5 clockwise and counterclockwise directions are used."
6 But that teaches me that the SONET ring can be UPSR or
7 it could be BLSR.

8 Q. But the Figure 4 SONET ring, which is one
9 embodiment, is expressly described as being a UPSR;
10 correct?

11 MR. GORYUNOV: Objection. Form.

12 THE WITNESS: I'm not reading it that way
13 that you just interpreted it. It is just -- you are
14 just focusing on one sentence only, and that sentence
15 has a follow up that says, "In alternative
16 embodiments." That shows that, you know, the
17 alternative embodiments.

18 And by the way, if you look back, Figure
19 4, the topology of Figure 4 -- let's just take a look
20 at the Figure 4. The links between the nodes are
21 bidirectional. That's part of the embodiment.

22 This figure is part of the embodiment and
23 shows bidirectional. And you can use it as
24 unidirectional as well by just ignoring the arrows on
25 the other direction.

1 Q. BY MS. CAPPAERT: You agree that the
2 beginning of the sentence, beginning at line 32 of
3 column 8, starts with "In alternative embodiments";
4 correct?

5 A. I'm sorry. I don't know what your
6 question is.

7 Q. You agree that the sentence at column 8,
8 line 32, begins with "In alternative embodiments";
9 correct?

10 A. The sentence starting at line 32 starts
11 with, "In alternative embodiments." I agree on this.

12 Q. Okay.

13 And then it continues, and the next clause
14 states, "other types of rings"; correct?

15 A. That is correct.

16 Q. And "other types of rings" is referring to
17 rings that are different or other than the UPSR ring
18 discussed in the prior sentence; is that right?

19 A. When you say differ, why not just spell
20 out exactly what the specific specification says, "such
21 as BLSR"?

22 Q. So this portion of the specification is
23 saying that a BLSR ring is an example of another type
24 of ring from the UPSR ring; correct?

25 A. If the meaning of "such as is an example



1 of," you change -- again, you rephrased it. I would
2 say the "such as" is the perfect word for that, so --

3 Q. Do you take issue --

4 MR. GORYUNOV: Counsel, please let him
5 finish.

6 THE WITNESS: Let me just finish it.

7 And "In alternative embodiments, other
8 types of rings, such as BLSR," is plain and clear to
9 me, and you don't -- you don't need to rephrase it.
10 That's what this is.

11 Q. BY MS. CAPPAERT: BLSR is a type of ring;
12 correct?

13 A. Yes.

14 Q. Okay.

15 And BLSR is a different type of ring than
16 a UPSR ring; correct?

17 A. BLSR is a Bidirectional Line Switched Ring
18 that requires the traffic in both directions -- or they
19 allow the traffic in both directions. And while UPSR
20 is a Unidirectional Path Switched Ring, that allows the
21 traffic to go only to one direction.

22 Q. So I think answer to my question, that a
23 BLSR ring is different from a UPSR ring is "yes"; is
24 that right?

25 A. Different in a sense that BLSR encompasses



1 the functionality of UPSR, or UPSR is a subset of BLSR,
2 one direction -- or one directional traffic link versus
3 bidirectional traffic link. You're talking about one
4 is being a subset of the other.

5 Q. But a UPSR ring is not a BLSR ring;
6 correct?

7 A. That is correct.

8 Q. Okay.

9 Why don't we take -- we've been going for
10 over an hour. Why don't we take a short break.

11 A. Sure.

12 MR. GORYUNOV: Sounds good.

13 THE VIDEOGRAPHER: Okay. The time is
14 10:10 a.m., and we're off the record. One second
15 please.

16 (Pause in proceeding.)

17 THE VIDEOGRAPHER: Okay. The time is now
18 10:16 a.m., and we are back on the record.

19 Q. BY MS. CAPPAERT: Okay.

20 I want to continue looking at the Kovvali
21 reference, Exhibit 1005, but turn now to column 4.

22 A. Okay.

23 Q. Let me know when you're looking there.

24 A. Column 4, yes.

25 Q. In column 4, around line 25, just under



1 the "Summary" section, there's a sentence that starts
2 with, "Traditional SONET equipment."

3 Do you see that?

4 A. Yes.

5 Q. And in this section, Kovvali is talking
6 about the desirable features of traditional SONET
7 equipment; correct?

8 A. Let me just review this whole paragraph
9 first to answer.

10 Q. Sure.

11 A. Okay.

12 My understanding from this paragraph,
13 almost half -- upper half of the paragraph, is that the
14 traditional SONET equipment has several desirable
15 features, and it says what the features are. And it is
16 just showing that what SONET is good for.

17 If you want me to read the entire
18 paragraph, I would be more than glad to do so.

19 Q. Well, it's saying that SONET equipment, as
20 you said, some of the desirable features include
21 interoperability and speedy fault recovery; right?

22 A. That's right. That's the examples of the
23 features.

24 Q. And the -- in "The SONET framing
25 structure, and the defined transport and path overhead



1 bytes provide the basis for interoperability, and
2 provide mechanisms for the fault management and
3 protection switching"; right?

4 A. That's part of the sentence that starts
5 with, "The SONET framing structure." If that's part of
6 the -- that sentence, I agree.

7 Q. These features, the interoperability and
8 speedy fault recovery, are achieved by using one ring
9 for data transmission. And in case of a fault, for
10 relying on a second ring for fault recovery.

11 Is that your understanding of how the
12 SONET framing structure works?

13 A. Could you point me to where exactly
14 unidirectional is used for these -- to provide these
15 features?

16 Q. I'm -- I'm just asking about your
17 understanding, based on your experience of SONET
18 equipment and structures and discussion in this
19 paragraph.

20 A. I did not to opine on this concept that
21 you just explained to me, that the unidirectional ring
22 provides these features. I need to do the research
23 before I answer your question. And I don't see -- this
24 is in front of me, to make any -- any comments.

25 Q. So you're not able to say whether these



1 features of the SONET equipment that are discussed in
2 column 4, the paragraph starting with line 25 of
3 Kovvali, are achieved by using one ring for data
4 transmission and, in the case of a fault, relying on a
5 second ring for fault recovery?

6 A. When you were telling me your sentence,
7 where did you find the one ring and two ring?

8 Did you add it by yourself, or just where
9 did you find that?

10 Q. I'm asking a question. I'm not reading
11 anything directly from the patent right now, Dr. Mir.

12 A. Sure. So, no. I would not be able to
13 answer the question before without having my
14 professional resources in front of me.

15 I need to know, what, for example, BLSR
16 require to offer these features, versus the
17 unidirectional feature -- or type, what features that
18 offers.

19 So I wouldn't be able to answer the
20 question without having all the references of SONET in
21 front of me to answer the question.

22 Q. Did you review any references related to
23 SONET when preparing your declaration in this case?

24 A. SONET is one of the technologies in my
25 field of expertise. SONET is an optical technology



1 that is used in computer networks, and that's part of
2 my expertise.

3 I don't need to review anything, unless I
4 need to know specifically a specific kind of feature.
5 I typically teach these in my classroom as part of a
6 syllabus of the courses. So your question requires
7 research, and I haven't done that research yet.

8 Q. When you teach -- strike that.

9 You said that you teach the concepts of
10 SONET in your classes; is that right?

11 A. SONET is an old technology, but it is
12 still part of the syllabus of the basic computer
13 networking course. So we go over SONETs briefly in our
14 courses to the extent to show that this is an optical
15 technology.

16 Q. Do you go over UPSR and BLSR rings as part
17 of your -- as part of your syllabus with your students?

18 A. I don't recall exactly if this is UPSR or
19 BLSR. But, typically, I teach in the classroom that
20 the ring in SONET could be bidirectional or
21 unidirectional, depending on the need of the any -- any
22 system.

23 Q. Do you discuss the differences between
24 bidirectional and unidirectional?

25 A. As I just said, the unidirectional is a



1 subset of bidirectional; however, if you want to
2 completely understand the differences between these
3 two, you need to get into the detail of the node and
4 connectivity of the node that -- to which the links are
5 connected to understand how bidirectional works versus
6 unidirectional.

7 I teach it briefly, because this an old
8 technology. There are newer technologies coming to
9 computer networking. So it's -- my discussions are
10 really minimal in the classroom, but it is part of the
11 syllabus of computer networks.

12 Q. What are reasons why a SONET network or a
13 SONET ring would be unidirectional?

14 A. Would you tell me where exactly in my
15 report I opine on where unidirectional is needed versus
16 two directional?

17 Q. I am asking in your expert opinion, as a
18 professor who just discussed that you teach your
19 students about bidirectional and unidirectional SONET
20 ring, why, sitting here today, if you can explain why a
21 unidirectional ring would be beneficial or would be
22 used?

23 A. I said that I teach the SONET summary in
24 the classroom as part of the syllabus. And I didn't
25 say that I opine on unidirectional versus bidirectional

1 in my report of '279 IPR.

2 I don't believe and I don't recall if I
3 had been asked to offer any opinion on the benefits or
4 functionality of bidirectional versus unidirectional in
5 this report.

6 And as a result of that, I don't feel
7 comfortable to answer your question without having my
8 class notes in front of me, my PowerPoint that I teach
9 through in front of me. Nothing is available to me,
10 and I haven't been asked to opine on.

11 Q. How many years have you been teaching
12 SONENT networks to your students -- or to students?

13 A. Well, it's hard to say which one was the
14 first course that contained SONENTs in the syllabus. I
15 think it was back to University of Kentucky in -- I
16 would say, before 19- -- it's hard to remember. 1999
17 or 2000, something like that.

18 Since then, the syllabus of basic computer
19 networks require teaching optical technologies, such as
20 SONENT. I can tell you that the syllabus has been
21 shrinking because of the -- the technology is getting
22 older since then.

23 Q. So you've been teaching about SONENT
24 networks -- doing some rough math -- for over 20 years;
25 is that right?



1 A. Yeah. I would say, over 20 years, this
2 has been part of the syllabus of my courses.

3 Q. But sitting here today, you're not able to
4 provide an opinion as to what benefits of using a
5 unidirectional SONET ring would be?

6 MR. GORYUNOV: Objection. Form.

7 THE WITNESS: Counsel, I'm sorry that you
8 misunderstood me. I didn't say that. I don't know the
9 materials related to SONET. I did say that I do not
10 recall if I've been asked to provide any opinion on one
11 ring versus two rings, the benefits of each or the
12 other.

13 And as a result of that, I won't be able
14 to make any comments today. I'm under oath. I cannot
15 guess. And I cannot provide opinions that is not
16 reliable. Again, I'm under oath. It's not
17 appropriate.

18 So if I have my notes, my class notes in
19 front of me, I should be able to answer you pretty
20 quickly.

21 Q. BY MS. CAPPAERT: But without those class
22 notes, you're not able to answer my question. Is that
23 fair to say?

24 A. It's fair to say that that may -- will
25 require memory, and then this is not about memory test.



1 Q. Okay.

2 In your declaration, you assert that the
3 combination of Kovvali and Kalman renders obvious
4 claims 1 to 5 and 9 to 18; right?

5 We discussed that a little earlier?

6 A. Are you on page 17 of my report?

7 Q. Sure. We can start there.

8 A. Okay.

9 What's your question?

10 Q. In your declaration, you assert that, "The
11 combination of Kovvali and Kalman renders obvious
12 claims 1 through 5 and 9 to 18 of the '279 patent";
13 correct?

14 A. Correct.

15 Q. So you recognize that Kovvali alone does
16 not disclose every element of claims 1 to 5 and 9 to 18
17 of the '279 patent; right?

18 A. Would you refer me to where exactly I just
19 mentioned this? I wanted to read more carefully.

20 Q. Your understanding -- strike that.

21 Do you understand that by relying on two
22 references in an obvious miscombination, you are
23 relying on the combination of those references to
24 assert that those claims are invalid?

25 A. But I need to go back to combining two



1 references under relevant legal standards. And I just
2 listed from what counsel provided me under what
3 condition. There's several -- rationales are there for
4 combining the references.

5 Did you mention those?

6 Q. No. I'm not asking you about the
7 rationales for combining Kovvali and Kalman. I am just
8 saying your declaration did not assert that claims 1
9 through 5 and 9 to 18 are anticipated by Kovvali;
10 correct?

11 A. I believe "anticipated" is a kind of
12 legal-related word. Am I correct?

13 Q. I -- how do you understand -- what do you
14 understand "anticipated" to mean in the context of your
15 report?

16 A. Counsel, if you don't help me understand
17 the "anticipation" term, then I want you to refer me to
18 where exactly this is true in my -- and I state it in
19 my report.

20 Q. Your report only alleges that two
21 references, Kovvali and Kalman together, render obvious
22 claims 1 through 5 and 9 to 18; correct?

23 A. That is correct.

24 Q. Okay.

25 You do not argue that Kovvali by itself



1 renders obvious claims 1 through 5 and 9 to 18;

2 correct?

3 A. By itself, no. It has to be combined with
4 Kalman.

5 Q. And the reason it needs to be combined
6 with Kalman is that because Kovvali, by itself, did not
7 disclose all of the elements of claims 1 through 5 and
8 9 to 18; correct?

9 A. To answer your question, I refer you to
10 page 24 of my report, paragraph 51. I mention that,
11 "because it represents," the combination, of course,
12 "represents merely the use of Kalman's known technique
13 for selecting a preferred path on a ring network to
14 improve Kovvali's multi-path ring network for
15 transmitting dynamic rings in the same way."

16 So it fills the gap, one versus the other.
17 So one fills the gap of the other. That's what it is.

18 Q. So Kovvali has gaps that you fill with
19 Kalman. Is that a fair understanding of what you just
20 said?

21 A. Probably this was not something that I
22 really like to say, even though I said. I just wanted
23 to say maybe I should clear myself that.

24 Kovvali and Kalman should be combined in
25 order to show that they disclose exactly '279. Where



1 Kalman's known technique, which was selecting preferred
2 path or selecting the rank, was, kind of, included in
3 the teaching of Kovvali, where transmitting dynamic
4 frames, if these two features are added together, then
5 that invalidates the -- those claims.

6 Q. In your declaration, you do not rely just
7 on Kovvali; correct?

8 A. Let me check quickly something before I
9 answer.

10 So I think in this case, for example,
11 Claim 1, and I just put a numeric indication on 1.0 on
12 page 27. So I refer to paragraph -- I refer to Kovvali
13 in paragraph 57, and I refer to Kovvali in paragraph
14 60. I refer to Kovvali in paragraph 61, and that's it.

15 So this part of limitations -- I believe
16 this is preamble. It is about Kovvali only. So that's
17 not true then. It's not correct, to answer your
18 question.

19 Sorry. Go ahead.

20 Q. You understand that Claim 1 has several
21 limitations; correct?

22 A. That's correct.

23 Q. And while you may rely on Kovvali alone
24 for some of those limitations, you do not rely on
25 Kovvali alone for all of those limitations; correct?



1 And if it's helpful, I can point you to
2 where you do not rely on Kovvali alone.

3 A. Please help me show -- and show it to
4 me.

5 Q. Sure. So we can do a comparison here. If
6 you look on page 31, paragraph 62?

7 A. Yes.

8 Q. You say, "Kovvali renders the limitations
9 obvious"; correct?

10 A. Correct.

11 Q. If you go to page 69 of your declaration,
12 paragraph 104? Let me know when you are there.

13 A. 69, I'm there now.

14 Q. There, you say, "The combination of
15 Kovvali and Kalman renders this limitation obvious";
16 correct?

17 A. Correct.

18 Q. Okay.
19 Limitation -- that's for limitation 1.6;
20 correct?

21 A. That's correct.

22 Q. 1.6 is part of Claim 1; right?

23 A. That's right.

24 Q. So for Claim 1, you are relying on the
25 combination of Kovvali and Kalman, and not just Kovvali



1 by itself, as disclosing the entirety of Claim 1?

2 A. Oh, okay. You're talking about the
3 entirety. You're right. Yes, yes.

4 Q. Okay. Okay.

5 I want to look at paragraph 52.

6 A. Okay.

7 52.

8 Q. Okay.

9 And in paragraph 52, you are talking about
10 why you assert the combination of Kovvali and Kalman
11 would have been obvious; correct?

12 A. That's correct.

13 Q. Okay.

14 You first -- the first sentence -- and
15 I'll read it into the record, because I think it may be
16 missing a word or something, and I just want to
17 understand what -- what you're trying to state here.

18 So it says, "The combination would have
19 also been obvious, because the application of Kalman's
20 technique (selecting a preferred path on a ring
21 network) to improve Kovvali's method (transmitting
22 dynamic frames on a multi-path ring) ready for
23 improvement would yield predictable results."

24 Do you see that?

25 A. Yes.



1 Q. Can you explain what the "ready for
2 improvement" refers to?

3 A. Okay.

4 So I start with the feature that Kalman
5 has. I want you to know that -- I'm sorry, Kovvali.
6 Let's start with Kovvali. Kovvali discloses arbitor,
7 and arbitor is a central controller in the ring.

8 And back to paragraph 52, when I say the
9 "application of Kalman's technique," which is selecting
10 a preferred path on the ring, "improves Kovvali's
11 method," well, Kovvali's method includes a method that
12 arbitor performs.

13 And if arbitor has a chance to include the
14 feature of selecting a preferred path, then, of course,
15 the end result is an improvement for -- and it would
16 yield predictable results, obviously.

17 Q. So what does the word "ready for" mean?

18 I understand that you're saying that it
19 would be an improvement that would yield predictable
20 results.

21 A. "Ready" probably is not the best word
22 there. It could be "providing," maybe.

23 Q. Okay.

24 A. But "ready" is also fine. It's just not
25 the best word, of course.



1 Q. Okay.

2 And I believe what you just said is that
3 you're relying -- in your proposed combination of
4 Kovvali and Kalman, you're relying on Kovvali's arbitor
5 node; correct?

6 A. Well, that's the central controller system
7 for Kovvali that assigns resources, increases the
8 resources, reduces the recourses and controls the
9 resources, basically.

10 Q. So in your proposed combination of Kovvali
11 and Kalman, you are relying on Kovvali's arbitor node
12 in that combination; correct?

13 A. For that particular method, which is
14 transmitting dynamic frames, resources -- assigning
15 resources, I'm relying on arbitor. That's correct.

16 Q. And it's your assertion that the arbitor
17 is disclosed in Kovvali; correct?

18 A. That's correct.

19 Q. You're not relying on Kalman for the
20 arbitor; right?

21 A. I don't understand your question then.

22 Q. You're not asserting that Kalman teaches
23 an arbitor node; correct?

24 A. Did I say that the Kalman teaches arbitor?

25 Q. No. I'm asking you to confirm that you're



1 not relying on Kalman teaching the arbitor?

2 A. Okay.

3 Yes, I confirm.

4 Q. Okay. Great. Okay.

5 I want to, kind of, switch over from
6 Kovvali over to Kalman now.

7 A. Okay.

8 Q. Okay.

9 I'll enter it as an exhibit, so that you
10 have it. I can say that it was previously marked as
11 Exhibit 1006.

12 (Exhibit Number 1006 was marked for
13 identification.)

14 THE WITNESS: Okay.

15 Give me a second. I guess Kovvali is gone
16 when I went back. It doesn't let me keep Kovvali. It
17 covers with Kalman.

18 Q. BY MS. CAPPAERT: That should be okay for
19 right now. And then when we go back to Kovvali, we can
20 look at it. I don't think that I will have you looking
21 at both of them at the same time. But if we need to,
22 we can always address it when we get there.

23 A. I have a hard copy anyway, yeah. You're
24 all right. Okay.

25 Q. Great.



1 A. So Kovvali is there.

2 Okay. Go ahead, please.

3 Q. Okay.

4 Kalman?

5 A. Kalman, okay.

6 Q. Exhibit 1006?

7 A. 1006. Okay.

8 Go ahead. Kalman is in front of me.

9 Q. Okay. Okay.

10 So -- it's your opinion, if you look at
11 your expert declaration, at page 21, paragraph 46?

12 A. Page 21 of my report; right?

13 Q. Yep.

14 A. Okay.

15 Q. Paragraph 46?

16 A. 46, okay.

17 Q. "Kalman relates to directing traffic in a
18 ring network topology." Is that a fair statement of
19 your opinion regarding Kalman?

20 A. That's a correct sentence, yeah.

21 Q. Okay.

22 And Kalman describes a -- you
23 state -- strike that.

24 You state that, "Kalman describes a
25 technique for selecting the preferred output direction



1 for traffic from the source to any destination on a
2 bidirectional network -- bidirectional ring network";
3 right?

4 A. Correct.

5 Q. Okay.

6 "Kalman discloses selecting the least cost
7 physical route as the preferred direction for a given
8 data flow"; is that right?

9 A. Where did you read that from?

10 Q. If you go to paragraph 48 of your
11 declaration?

12 A. Oh, you jumped to 48. Okay.

13 Read it, please.

14 Q. It says, "Typically, the 'least-cost
15 physical route' is selected at the preferred direction
16 for a different data flow"; correct?

17 A. Correct.

18 Q. So -- and that's your characterization of
19 what Kalman is describing; correct?

20 A. That's the sentence I entered into -- in
21 my report about Kalman.

22 Q. Okay.

23 And if you look at Kalman, Exhibit 1006,
24 we can look at the portion that you're citing in
25 Kalman, which is column 4, lines 49 to 50.



1 A. Okay.

2 Column 4, and 49 -- okay.

3 Yes. That's -- that's the quote
4 from -- that's not a quote. That's a summary of the
5 paragraph from column 4.

6 Q. What column 4 says is, "'the least-cost
7 physical route' is typically used for protected
8 traffic"; right?

9 A. Correct.

10 Q. Okay.

11 And Kalman -- in Kalman, "nodes monitor
12 the status of each link for which they are at a
13 receiving end"; is that right?

14 A. Where am I saying this?

15 Q. Well, have you reviewed Kalman before?

16 A. Yes.

17 Q. You're aware that Kalman discloses nodes
18 monitoring the status for links?

19 A. Could you remind me where, exactly, in
20 this is?

21 Q. Sure. You look at -- well, look at the
22 bottom of column 2, first going to column 3, so column
23 2 starts with "Summary."

24 I just want you to see that.

25 A. Yes, I see that.



1 Q. And when you go to column 3, still part of
2 that "Summary" section?

3 A. Yes.

4 Q. Looking at around line 10, "A node
5 monitors"?

6 A. Yes. Okay.

7 Q. So Kalman states, "A node monitors the
8 status of each link for which it is at the receiving
9 end"; right?

10 A. Yes.

11 Q. Okay.

12 And if you look further down at Kalman,
13 Kalman discloses that there is "a routing table within
14 each node."

15 Do you see that at around line 15?

16 A. "Processing at each node of the
17 information contained in the link status broadcast
18 message results in reconfiguration of a routing table."

19 This is what you're referring to?

20 Q. Yes.

21 A. Okay.

22 And then -- what is your question now?

23 Q. So Kalman discloses that there's a routing
24 table within each node; right?

25 A. Well, it says, "Processing at each node of

1 the information contained in a link status broadcast
2 message results in reconfiguration of a routing table
3 within each node."

4 So this tells me that, you know, the
5 routing table of each node does the reconfiguration,
6 and -- so to identify the optimal routing of source
7 traffic to the destination node after default.

8 So if your question is about the routing
9 table exists within the node, yes. That's what I'm
10 reading from the specification and confirm.

11 Q. And I believe you also just read that the
12 routing tables were reconfigured within each node?

13 A. Yeah. The routing table is
14 configured -- or, in general, reconfiguration of the
15 routing table is done as --

16 Q. Okay.

17 And then looking at the next sentence, it
18 begins with, "Hence," it continues, then, to state,
19 "All nodes know the status of the network, and all
20 independently identify the optimal routing path to each
21 destination node when there's a fault in any of the
22 links"; correct?

23 A. Correct.

24 Q. Okay.

25 So Kalman is stating that all of the nodes



1 know the status of the network; right?

2 A. Well, I can read the exact same sentence.

3 It's so plain and clear. It says "Hence, all nodes

4 know the status of the network." That's enough for me.

5 That's --

6 Q. Okay.

7 A. -- I don't think you need to reinterpret

8 it.

9 Q. Okay.

10 And I'm not asking you to.

11 A. Okay.

12 Q. It then goes on to say, so -- so this

13 sentence is stating that, "All nodes independently

14 identify the optimal routing path"; right?

15 A. The rest of the sentence says, "And all

16 independently identify" -- I would say "all" refers to

17 all nodes.

18 Q. So all nodes "independently identify the

19 optimal routing path to each destination node";

20 correct?

21 A. "Each destination node," that's -- that's

22 what it says exactly.

23 Q. Okay. Okay.

24 This portion of Kalman, there's no

25 discussion in the sentences we just read of a means for



1 any of the nodes to request additional resources; is
2 that right?

3 A. Where does it say?

4 Q. I'm saying it doesn't say that; right?
5 There's nothing -- backing up.

6 As we just discussed, if the nodes that
7 are in Kalman that are independently identifying the
8 optimal routing path to each destination node; right?

9 A. I'm sorry. I don't know what you're
10 asking.

11 Q. So what we just talked about -- let's just
12 start there and make sure we're all on the same page.

13 What we just talked about is that Kalman
14 discloses that "all nodes independently identify the
15 optimal routing path to each destination node when
16 there's a fault in any of the links"; right?

17 A. That's exactly what you read from, the
18 specification, and I confirm.

19 Q. Kalman does not state that there is a
20 means for any of those nodes to request additional
21 resources in identifying the optimal routing path to
22 each destination node; correct?

23 A. I cannot tell from reading this sentence
24 that each node requests additional resources. I have
25 to read the entire patent to answer the question.



1 You can -- I mean, we can base this
2 paragraph from line 15 through 22. In that paragraph,
3 what you're asking is correct. But the rest of the
4 patent, I cannot comment on unless I review the whole
5 thing.

6 Q. Okay.

7 But based on this paragraph, what I was
8 saying was correct, is that, Kalman did not disclose a
9 means for any of the nodes discussed in this paragraph
10 to request additional resources to identify the optimal
11 routing path to each destination node; correct?

12 A. Only based on this paragraph, yes.

13 Q. Okay.

14 I want to turn back to Kovvali, which is
15 Exhibit 1005.

16 A. (Witness complies.)

17 Q. And I want to go back and look at Figure 4
18 for a minute again.

19 A. Okay.

20 Q. So Figure 4, I think, as we talked about
21 earlier, shows four nodes; correct?

22 A. What I'm seeing is nodes A, B, C and D,
23 four nodes.

24 Q. Okay.

25 And node A says "Node A Arbitor"; correct?



1 A. That's what it says in the figure.

2 Q. Okay.

3 And then it's just node B, node C and node
4 D; right?

5 A. What do you mean not -- you mean --

6 Q. They don't include "arbitor"; is that
7 correct?

8 A. That's fine.

9 Q. Okay.

10 And if you look in the specification
11 discussion of Figure 4 on -- give me a minute.

12 A. Column 8?

13 Q. Yes. But I'm looking for a specific line.
14 One second.

15 If you go to column 9, actually?

16 A. Yes.

17 Q. And line 5?

18 A. Yes.

19 Q. Okay.

20 It says, "In Fig. 4, node A is the arbitor
21 node, and the remaining nodes are client nodes";
22 correct?

23 A. Correct.

24 Q. Okay.

25 And then Kovvali goes on to explain in the



1 rest of this portion of column 9 that, "Requests to
2 assign dynamic channels for communication between
3 particular nodes are sent from a client nodes to the
4 arbitor"; right?

5 A. So far; correct.

6 Q. And then it continues, "The arbitor
7 responds to the request by is assigning dynamic
8 channels to particular nodes and by adjusting the
9 allocated rates for the dynamic channels"; right?

10 A. That's what it says exactly.

11 Q. So as discussed in this section, "Requests
12 to assign dynamic channel for communication between
13 particular nodes are sent from client nodes to the
14 arbitor"; correct?

15 A. It says in the paragraph you just read,
16 "Requests to assign dynamic channels for communication
17 between particular nodes are sent from a client node to
18 the arbitor." And that's pretty clear.

19 Q. Okay.

20 So the request to assign dynamic channels
21 for communication between particular nodes are sent
22 from client nodes to the arbitor; right?

23 A. Yeah.

24 Q. Okay.

25 A. From client node to the arbitor, yeah.



1 Q. Okay.

2 A. That's the specification language. I'm
3 not changing it.

4 Q. Okay.

5 I want to talk about Figure 11.

6 A. Of Kovvali?

7 Q. Yes. Have you reviewed Figure 11 before?

8 A. Yes.

9 Q. Okay.

10 And Figure 11 is a flow chart of the
11 channel assignment step; is that right?

12 A. Let me make sure that, you know, the
13 caption says the same thing. Figure 11 is the flow
14 chart of the channel assignment step. Okay.

15 Q. Okay.

16 And then in discussing Figure 11, which
17 occurs at column 13, around line 29.

18 A. Okay.

19 Q. Kovvali states that, "The requesting node
20 requests a request to establish a new communication
21 session to the arbitor over the OAM&P channel";
22 correct?

23 A. Yes.

24 Q. It then goes on to state that, "The
25 arbitor node receives the request and first determines



1 whether the request has the same terminal nodes and
2 priority as an already assigned dynamic channel"; is
3 that right?

4 A. Did you just read the rest of it?

5 Q. I skipped a sentence but read the third
6 sentence in that.

7 A. I'm lost. Could you please tell me where
8 it was?

9 Q. Sure. So third sentence of that
10 paragraph.

11 A. Which line is it?

12 Q. Line 33?

13 A. Okay.

14 Please go ahead and read.

15 Q. It states, "The arbitor node receives the
16 request and first determines whether the request has
17 the same terminal nodes and priority as an already
18 assigned dynamic channel"; correct?

19 A. Okay.

20 Q. And then it continues, "If it does not,
21 the arbitor node picks the next available channel
22 number that is not currently assigned to a
23 communication session and assigns sub-channel number 0
24 to the new stream and communicates the assignment to
25 the requesting node over the OAM&P channel"; right?



1 A. I'm reading it the same.

2 Q. Okay.

3 So in Kovvali, the requesting node is
4 communicating to the arbitor node regarding the request
5 to carry data; is that right?

6 A. Again, you just read the exact teaching of
7 Kovvali. I need to make sure that what you said
8 is -- matches with the specification.

9 Where was it exactly?

10 Q. So if you look at column 13, lines 29 is
11 where the requesting node is mentioned.

12 A. 29.

13 Q. That sentence is stating that the
14 requesting node is communicating to the arbitor node;
15 right?

16 A. Requesting nodes -- communicates the
17 request to establish a new communication session to the
18 arbitor.

19 This is what you said?

20 Q. That the requesting node is communicating
21 to the arbitor?

22 A. The issue is that, with all due respect,
23 Counsel, when you rephrase the teaching of this patent,
24 or any patent, then I get confused, and I need to make
25 sure that what you rephrase is the original -- matches



1 to the original.

2 So if you don't rephrase exactly, or with
3 the phrase, teaching, it would take much faster for me
4 to answer the question.

5 Q. Understood.

6 And I'm --

7 A. The choice is yours, though. The choice a
8 yours.

9 Q. Understood.

10 I'm not trying to confuse you. My -- the
11 sentence that we just read, in it, it includes -- it
12 discloses that the requesting node is communicating to
13 the arbitor; right?

14 A. The requesting node communicates a request
15 to establish a new communication session. That's what
16 it is.

17 Q. So the requesting node is communicating to
18 the arbitor; right?

19 A. It says what it says, that the requesting
20 node communicates a request. "Communicates a request"
21 is plain and ordinary.

22 "To establish a new communication session
23 to the arbitor." So it is requesting to establish a
24 new communication with the arbitor, if it is enough for
25 you. I mean, there's nothing to rephrase, to change

1 the sentence.

2 Q. I'm not trying to change the sentence.
3 I'm just trying to confirm that in this discussion
4 within Kovvali, it's saying that the requesting node is
5 communicating the request to the arbitor; right?

6 A. "A requesting node communicates a request
7 to establish a new communication session to arbitor."
8 Obviously, this communication is between a requesting
9 node and arbitor. I think this is enough to summarize.

10 Q. Okay.

11 And the communication relates to
12 establishing -- or what is being communicated relates
13 to establishing a new communication session; right?

14 A. That's what it says, a new communication
15 session, as does the original request.

16 Q. Okay.

17 MR. GORYUNOV: Counsel, time for a break?

18 MS. CAPPAERT: Yeah. That sounds good.

19 MR. GORYUNOV: Excellent. I'm sorry. Can
20 we do, like, a 10-minute? Would that be possible?

21 MS. CAPPAERT: Sure.

22 MR. GORYUNOV: Thank you.

23 THE VIDEOGRAPHER: Okay. The time is now
24 11:15 a.m., and we are off the record.

25 (Pause in proceeding.)



1 THE VIDEOGRAPHER: Okay. The time is now
2 11:27 a.m., and we are back on the record.

3 Q. BY MS. CAPPAERT: Okay.

4 So, Dr. Mir, I think we can put Kovvali
5 and Kalman aside, and we're going to talk a little bit
6 more about the '297 patent.

7 A. Okay.

8 Q. So I want to look at Claim 1 of the '279
9 patent. It's on page 12 of Exhibit 1001.

10 A. Yeah, Claim 1. Also move to Claim 1.
11 Okay. I'm all set.

12 Q. Great.

13 Now, Claim 1 includes several steps that
14 occur if in response to a request received at the first
15 node use a portion of the resources, the resources that
16 are allocated to the first node are insufficient;
17 right?

18 A. Are you -- it would be nice to show me
19 using the numbering 1.-something.

20 Q. Sure.

21 A. That would help me a lot.

22 Q. We're talking about 1.6. Well, I'm
23 talking more about 1.- -- it's before 1.6. Give me a
24 minute.

25 We're eventually going to talk about 1.6,



1 but I want to talk about -- we'll start with 1.4.

2 A. Okay.

3 If the resources are already allocated?

4 Q. Yep.

5 So --

6 A. Okay.

7 Q. -- Claim 1 has -- and backing up.

8 While we're talking about 1.4, your
9 understanding is that Claim 1, you start with receiving
10 a request at a node; right?

11 A. 1.2 says, "receiving a request at the
12 first node to use a portion of the resources."

13 Q. Okay.

14 And then in response to that request, if
15 the resources that are already allocated are
16 insufficient, dated directed flow from the first node
17 to the second node over one of the paths without
18 requesting additional resources; right?

19 A. That is what 1.3 is about.

20 Q. Right.

21 And then 1.4 goes into if the resources
22 already allocated are insufficient, there are several
23 steps that are proposed?

24 A. Yes.

25 Q. Okay.



1 And one of those steps in 1.6 is a
2 determining step; correct?

3 A. Right after 1.4 and 1.5, 1.6 is
4 determining for the links comprised by each of the
5 paths, and then continues.

6 Q. Right.

7 A. Um-hum.

8 Q. Now, in a network, there are several
9 potential paths over which data flow could be carried;
10 is that right?

11 A. I don't know what you mean by that.

12 Q. In a network, you have nodes that are
13 connected by links; correct?

14 A. Which network? Which links? Which nodes?

15 Q. In the Claim 1, communication network,
16 there are nodes interconnected by links; correct?

17 A. Claim 1 -- let's read Claim 1. "In a
18 communication network that includes a plurality of
19 nodes interconnected by links," if you referring to
20 this one, the answer is yes.

21 Q. Okay.

22 So in Claim 1, there's a communication
23 network that includes a plurality of nodes
24 interconnected by links; right?

25 THE REPORTER: Can you slow down just a



1 little, please?

2 MS. CAPPAERT: Sure. Sorry about that.

3 Q. BY MS. CAPPAERT: So in the communicate,
4 Claim 1 has "a communication network that includes a
5 plurality of nodes interconnected by a link"; right?

6 A. That's part of number one; right.

7 Q. Okay.

8 And if you look down to the "receiving a
9 request" step that we talked about previously, I
10 believe it's 1.2 in your breakdown?

11 A. Right.

12 Q. There is a request received "at the first
13 node use a portion of the resources so as to carry the
14 data flow between the first and second nodes over one
15 of a plurality of paths therebetween"; right?

16 A. That's what it says.

17 Q. Okay.

18 So in the communication network of Claim
19 1, there is a plurality of paths between a first and a
20 second node; right?

21 A. There are the plurality of paths. The
22 plurality of nodes are there. And the plurality of
23 paths in 1.2 is used in a sentence I need to read
24 again. I'm going to read it to myself.

25 So it says, "Receiving a request at first



1 node to use a portion of the resources so as to carry
2 the data flow between first and second nodes over one
3 of the plurality of paths therebetween."

4 Well, the word "therebetween," that shows
5 that it refers to the paths between the nodes.

6 Q. So there are a plurality of paths between
7 the first and second nodes; right?

8 A. That's a different way of saying, but it
9 is plain and ordinary. Again, it's really clear what
10 it says.

11 Q. So if it's really clear, I mean, is my
12 statement incorrect, that there's a plurality of paths
13 between the first and second nodes?

14 A. I would say that the word -- the term
15 "therebetween" as one word refers to the first node and
16 the second node. So the paths between the first node
17 and second node are the plurality of paths.

18 Q. Okay.

19 So going back to the determining step,
20 1.6.

21 A. Uh-huh.

22 Q. The determining steps refers to "for the
23 links comprised by each of the paths." Do you see
24 that?

25 A. Correct.

1 Q. So the paths that are being referred to
2 there are the plurality of paths; right?

3 A. So from the legal standpoint, is -- I'm
4 just wondering if each limitation has independent
5 meaning, or they are related. For example, if I see
6 "the" paths, before paths, you put t-h-e, it refers to
7 the paths of 1.3?

8 Q. Are you asking me that question?

9 A. Well, then I need to say that the
10 limitation -- if you cannot answer the question for me
11 and clarify for me, then I would say that this is the
12 paths that 1.6 is referring to.

13 Q. What are the paths?

14 A. The paths.

15 Q. What are the paths that 1.6 is referring
16 to?

17 A. "Determining for links comprised by each
18 of the paths," the paths that Claim 1 refers to.

19 Q. What are the paths that Claim 1 refers to?

20 A. Whatever the paths are.

21 Q. What do you understand that to be?

22 A. So I'm getting some help from my own
23 information report, page 69. Under 1.6, I said,

24 "First, as discussed in 1.2, Kovvali
25 teaches a BLSR network, where each pair of



1 nodes are connected with two unidirectional
2 optical links traveling in opposite direction.
3 As shown in Figure 4, below, the resulting BLSR
4 network includes two paths for transmitting
5 data between nodes."

6 So -- and then I continue.

7 "The first path includes the sequence of
8 links between any two nodes in the clockwise
9 direction through. The second path includes
10 the sequence of links between any two nodes in
11 the counterclockwise direction."

12 So it shows that there are two nodes, two
13 paths, and exactly in the opposite directions.

14 Q. Are you finished?

15 A. I am finished.

16 Q. So I'm not sure that that answered my
17 question. What -- you answered my question by pointing
18 to what is shown in the -- what you discuss as being
19 shown in Kovvali.

20 What I'm asking you is what do you
21 understand the paths, as disclosed in Claim element
22 1.6, as referring to within Claim 1?

23 A. Well, the paths are the paths that
24 interconnects the nodes of Claim 1.

25 Q. Okay.

1 So it is the plurality of paths that we
2 talked about in Claim limitation 1.2 that are
3 interconnecting the first and second nodes; is that
4 right?

5 A. And the plurality of paths could be two,
6 the number could be two, and depending on where in
7 specification it refers to.

8 Q. Right. And I'm not asking about the
9 number. I'm just saying what we're -- what the Claim
10 is referring to is the paths in 1.6 are referring to
11 the plurality of paths; correct?

12 A. That's what the Claim says, right.

13 Q. Okay.

14 And the paths comprise or made up with
15 nodes that are interconnected by links; is that right?

16 A. Where is it?

17 Q. Well, as we talked about a little while
18 ago, the communication network includes a plurality of
19 nodes that are interconnected by links; right?

20 A. I want to see it again. I just forgot.

21 Q. The beginning of Claim 1.

22 A. The beginning of Claim 1 states, "In a
23 communication network that includes the plurality of
24 nodes interconnected by links"?

25 Q. Um-hum.



1 A. Are you trying to confirm this?

2 Q. I'm -- and then let's go back to 1.2,
3 where we talked about the plurality of paths; right?

4 If you continue, it says, "Each such path
5 comprising a respective sequence of the link"; right?

6 A. That's right.

7 Q. So the plurality of paths each comprise a
8 respective sequence of the link; right?

9 A. Again, you rephrase it. Just I'm not
10 comfortable.

11 Q. What were you not comfortable with with
12 what I just said?

13 A. Because you rephrase the clear language.
14 I don't -- I don't feel comfortable.

15 Q. I believe that I said it as it is, which
16 is that the "plurality of paths, each such path
17 comprises a respective sequence of the link."

18 A. I thought you just misstate
19 "therebetween." That's --

20 Q. But the "therebetween" is referring to the
21 fact that the paths are between the first and second
22 nodes; correct?

23 A. That is correct, but I just wanted to hear
24 that one. Why did you miss it?

25 Q. Because I'm talking about the fact that

1 the paths are comprised of a respective sequence of the
2 link.

3 A. Okay.

4 That's "a plurality of paths therebetween,
5 each such path comprising a respective sequence of the
6 links."

7 Q. So each of the plurality of paths
8 comprising -- is comprising a respective sequence of
9 the link; right?

10 A. "Each such path comprising a respective
11 sequence of the links." I don't see why we should
12 change the structure of the sentence.

13 Q. I'm not trying to change the structure,
14 but part of understanding what the Claim requires, I'm
15 asking you what the paths refer to, and if the paths in
16 "each such path" refers to the paths that we just
17 talked about in the plurality of paths; right?

18 A. "Receiving a request at the first node to
19 use a portion of it -- of the resources so as to carry
20 the data flow between the first and second nodes over
21 one of the plurality of paths therebetween, each such
22 path comprising a respective sequence of links."

23 That's so obvious, so clear to me. I
24 cannot really change the structure of the sentence.

25 Q. What -- okay. I'm not going to ask you to

1 change the structure.

2 When it says "each such path," what does
3 "each such path" refer to?

4 A. It refers to the plurality of paths.

5 Q. Great.

6 And "each such path comprises a respective
7 sequence of links"; right?

8 A. Yes.

9 Q. Okay.

10 And going back to 1.6, in limitation 1.6,
11 it's "determining for the links comprised by each of
12 the paths"; right?

13 That's what the plain language states?

14 A. Sure. "Determining for the links
15 comprised by each of the paths." And then your
16 question is?

17 Q. What do you understand the "links
18 comprised by each of the paths" to be referring to?

19 A. So this is in view of '279 patent, of
20 course, the "links comprised by each of the paths,"
21 that means that the paths that includes the links.

22 Q. Okay.

23 And the paths that include the links,
24 we're talking about the plurality of paths again;
25 right?

1 A. It refers, in a way, to that limitation,
2 of course.

3 Q. Okay.

4 And in the determining step, it is
5 determining the "respective levels of use of the
6 requested resources due to communications in progress
7 over the network"; right?

8 A. Again, you need to -- please repeat your
9 question.

10 Q. So it is "determining, for the links
11 comprised by each of the paths, respective levels of
12 use of the requested resources due to communication in
13 progress over the network"; right?

14 A. That's what the limitation 1.6 is.

15 Q. Okay.

16 And the "respective levels of use of the
17 requested resources due to communications in progress
18 over the network" relate to determining what, in your
19 opinion?

20 A. So my opinion is really long, and I
21 expressed it in my report. We need to go to the
22 report, and then see what exactly I say.

23 Q. Well, what do you understand "respective
24 levels of use of the requested resources due to
25 communications in progress over the network" relate to?



1 A. That's -- that's exactly what it is.

2 There is nothing more, nothing less. It is clear what
3 it is.

4 Q. So what -- you can't provide any
5 additional meanings besides the words that are in that
6 Claim?

7 A. No. It is so clear to me. I can show you
8 the equivalent of this disclosed in Kovvali and Kalman.

9 Q. Let's look at the patent itself, so let's
10 look at column 6, 11 through 34.

11 A. Column 6, and line what?

12 Q. 11 through 34.

13 A. (No audible response.)

14 Q. And column 6, 11 through 34, begins with,
15 "When a node receives a request from one of its clients
16 to send data to another node, the node first checks to
17 determine whether it has sufficient resources already
18 allocated to it in order to service the request";
19 right?

20 A. I can see that, yes.

21 Q. Okay.

22 And what we were talking about with
23 respect to Claim 1 was if the portion of the Claim
24 discussing if the allocated resources were inadequate.

25 And in column 6, around, like, 14, it

1 says, "If the allocated resources are inadequate, the
2 node submits a resource request to the dispatcher,
3 indicating the destination node, at a request step 34."

4 Do you see that?

5 A. Yes.

6 Q. It goes on to state, "The dispatcher then
7 checks whether there are resources available to the
8 node on either the inner or the outer ring, at an
9 availability checking step 36"; right?

10 A. I'm seeing it.

11 Q. Okay.

12 So checking -- would determining whether
13 there were resources available to the node on either
14 the inner or the outer ring be determining whether
15 there were the different paths between the first node
16 and then the destination node?

17 A. Actually, this is about the functionality
18 of dispatcher. You're talking about a different
19 disclosure of '279.

20 So it is about the node submits a resource
21 request to the dispatcher, indicating the destination
22 node, at a request step 34. And the dispatcher then
23 checks whether there are resources available to the
24 node on either the inner or the outer ring.

25 So the dispatcher, actually, at this



1 point, checks in either direction to see if there are
2 available resources. That's the functionality of the
3 dispatcher.

4 Q. Okay.

5 So the dispatcher's checking whether there
6 are available resources on the inner or outer ring?

7 A. Yes. Yes. You're right.

8 Q. Okay.

9 And as part of checking whether there are
10 resources available on the inner or outer ring, the
11 dispatcher is assessing whether there are "sufficient
12 unallocated resources left in this specific node budget
13 and unused resources left on the appropriate segments
14 of at least one of the rings in order for the
15 dispatcher to grant the node's resource request";
16 right?

17 A. I don't know where it is. Just show me
18 where it is, and I need to read it again.

19 Q. Column 6, line 19.

20 A. Okay.

21 So let's read it together. You just read
22 it, please.

23 Q. "There must be both sufficient unallocated
24 resources left in the specific node budget and unused
25 resources left on the appropriate segment of at least



1 one of the rings in order for the dispatcher to grant
2 the nodes's resource request"; right?

3 A. That's what it is, yes.

4 Q. So the dispatcher is checking whether
5 there are "sufficient unallocated resources left in the
6 specific node budget," one of the aspects of what the
7 dispatcher is checking; correct?

8 A. Did you just rephrase it or just --

9 Q. I am not reading it verbatim. I am asking
10 you if what this is saying is that, as we just said,
11 the dispatcher is checking whether there are resources
12 available; right?

13 A. It says, "There must both be sufficient
14 allocated resources left in the specific node budget
15 and unused resources left on the appropriate segments
16 of at least one of the rings in order to -- in order
17 for the dispatcher to grant the node's resource
18 request."

19 This is the condition under which the
20 dispatcher is to see in order to grant the node's
21 resource request.

22 Q. Right.

23 So one of the conditions is whether there
24 are "unused resources left on the appropriate segment
25 of at least one of the rings"; right?



1 A. Well, there are other conditions, too.
2 You cannot go with that condition alone. So it must be
3 a combination of things, but it uses "and" between the
4 two.

5 Q. So one of the two conditions that are
6 discussed in this portion of the '279 patent is whether
7 there are "unused resources left on the appropriate
8 segment of at least one of the rings"; right?

9 A. So one of them is "sufficient unallocated
10 resources left in the specific node budget." The other
11 one is "unused resources left on the appropriate
12 segments of at least" -- whatever, the rest of it.

13 Q. And these are the -- the conditions or
14 requirements that the dispatcher is looking to in
15 determining whether it can allocate the resources?

16 A. It says so. It says that there must be
17 both. That means there are two conditions.

18 Q. Right.

19 So these are the two conditions that the
20 dispatcher is assessing when determining whether it can
21 allocate the resources; correct?

22 A. It says in this sentence there are two
23 conditions, and it clearly says what the conditions
24 are.

25 Q. Right.



1 And I'm not asking about whether there's
2 one or two. I'm saying that these are the conditions
3 that the dispatcher is assessing in determining whether
4 it can allocate the resources; right?

5 A. At this spot of this specification, it
6 says there are two conditions. If you're talking about
7 the entirety of the patent, I have to think more than
8 take a look at my report to see if these are the only
9 two.

10 Q. No.

11 A. At least here, we can say that these are
12 the two.

13 Q. These are the two conditions discussed in
14 this portion of the '279 patent, that the dispatcher is
15 considering when -- or assessing when determining
16 whether it can allocate the resources?

17 A. In this part of -- in this paragraph of
18 the specification, these are the only two conditions.

19 Q. Okay. Okay.

20 I want to look at your expert report or
21 your expert declaration for a minute. I want to go to
22 24.

23 A. (Witness complies.) Okay. Go ahead.

24 Q. And in paragraphs 51, 52, and 53, you are
25 discussing motivations to combine Kovvali and Kalman;



1 correct?

2 A. That's correct.

3 Q. In paragraphs 51, 52 and 53, you don't
4 cite to any prior art references or any exhibits in
5 those three paragraphs; correct?

6 A. I'm sorry. You said that I'm not
7 referring to any prior art or --

8 Q. You said you're not citing any prior art.
9 You're not cite to any evidence -- or there are no
10 exhibits cited in paragraphs 51, 52 and 53; correct?

11 A. These are the summary of the reasons to
12 combine the two references. The details of the
13 combinations are all over my report with the
14 references, of course, and the citing. But in these
15 three paragraphs, 51, 52 and 53, I did not include any
16 cites.

17 Q. Okay.

18 And then looking at paragraph 116, on page
19 83?

20 A. Okay.

21 Q. You state -- well, I can ask it this way,
22 in paragraph 116, you don't cite any exhibits in
23 paragraph 116; correct?

24 A. In 116?

25 Q. 116?

1 A. Repeat your question, please.

2 Q. You do not cite to any specific exhibits
3 in paragraph 116; correct?

4 A. Remember that the paragraph starts with,
5 "As described in more detail in section IX.C." Greek
6 letter IX.C. So whatever IX.C states is included here
7 too. But explicitly, there is no citing.

8 Q. Okay.

9 I want to talk now, if you look at
10 paragraph 76 of your declaration? Paragraph 76 is on
11 page 45.

12 A. 76. Okay. Go ahead.

13 Q. Hold on a second. Let me -- so let's go
14 back up first to -- I want to look at the actual Claim
15 language first. And the Claim language is on page 31
16 of your declaration.

17 A. (Witness complies.) Okay. Very well.

18 Q. The Claim language for 1.1 is "allocating
19 a respective number of quanta of one or more resources
20 in the network page of the node."

21 Do you see that?

22 A. Yes.

23 Q. And in paragraph 76, then --

24 A. What page?

25 Q. 45.



1 A. Okay. Got it.

2 Q. You state,

3 "Kovvali's disclosure of assigning
4 'dynamic channels' to the nodes in the network
5 ring where the resources in the dynamic
6 channels are allocated in 'units of columns'
7 renders obvious 'allocating a respective number
8 of quanta of one or more resources in the
9 network to each of the nodes.'"
10 Correct."

11 A. That's what it says, yes.

12 Q. So in your analysis, you are equating the
13 term "quanta" with "units of column"; right?

14 A. What I'm trying to say in paragraph 76 is
15 that the resources in the dynamic channels are
16 allocated in 'units of columns, which renders obvious
17 allocating a respective number of quanta of one or more
18 resources in the network to each of the nodes."

19 That was my answer.

20 Q. Are you equating units of columns to the
21 number of quanta of one or more resources?

22 A. So it goes back to my earlier analysis,
23 when I stated that one quantum is equivalent to one
24 column in a dynamic frame.

25 And as a result, one dynamic channel has

1 zero or more number of columns. And those columns are
2 basically quanta, or each column is a quantum.

3 So it really refers to a longer discussion
4 that we just skipped from. That's what "quanta" means,
5 that -- "quanta" means in that respect.

6 Q. And I think that you just said that one
7 quantum is one column in a dynamic frame; is that
8 right?

9 A. That's what I said. That's correct, yes.
10 I need to actually confirm it, because -- however,
11 since I read this a lot, and then I read this a lot, I
12 just remember this one correctly, but --

13 Q. We can look at paragraph 74, which is
14 where I was going to look next, because I think it gets
15 to what we were talking about.

16 Which is, you say at the beginning of
17 paragraph 74, which is on page 43, "A POSITA would have
18 found it obvious that allocating columns of resources,
19 (e.i. bandwidth) is allocating 'quanta' of resources.

20 A. That's right.

21 Q. Right?

22 So you're equating one column to one
23 quantum; right?

24 MR. GORYUNOV: Objection. Form.

25 Foundation.

1 THE WITNESS: No. This is just an example
2 of what quanta would mean. Quanta has its own -- it's
3 plain and ordinary Again. It doesn't need to be
4 construed.

5 But in -- interior obviousness, I said
6 that it is obvious that allocating quantum -- I'm
7 sorry -- columns of resources is allocating quanta
8 resources. So only -- this is just an example of what
9 quanta means.

10 Q. BY MS. CAPPAERT: Okay.

11 Because it's your opinion that, I think
12 you just said, quanta doesn't need to be construed;
13 right?

14 A. Yeah, but this is just an example. It is
15 just an example I presented that allocating quanta
16 means allocating columns of resources.

17 Q. Okay.

18 Let's go off the record for a short break.
19 I think that I may be done. Let me just see if I have
20 anything else.

21 THE VIDEOGRAPHER: Time is now 12:11 p.m.,
22 and we were off the record.

23 (Pause in proceeding.)

24 THE VIDEOGRAPHER: All right. The time is
25 now 12:13 p.m., and we're now back on the record.



1 MS. CAPPAERT: Dr. Mir, I have no further
2 questions at this time. Pass the witness.

3 THE WITNESS: Thank you.

4 MR. GORYUNOV: Thank you, counsel.

5 I have no questions. We'll reserve
6 signature and review.

7 MS. CAPPAERT: Thank you, Dr. Mir.

8 We can go off the record.

9 THE VIDEOGRAPHER: Before we do, counsel,
10 can we please get transcript and video orders on the
11 record?

12 MS. CAPPAERT: I think that I have a
13 standing order. If I can get a rough, that would be
14 great. And I will follow up on terms of timing for
15 final.

16 THE REPORTER: Thank you.

17 MR. GORYUNOV: For me, I don't
18 particularly need a draft, but we need a copy for
19 Dr. Mir to review for his errata, if any, and to sign.

20 THE REPORTER: Okay. Thank you.

21 THE VIDEOGRAPHER: Okay. Thank you all.
22 That concludes today's videotape deposition of Dr. Mir.
23 The time on the monitor is 12:14 p.m., and we are off
24 record.

25 (Ending time: 12:14 p.m.)



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I, NADER MIR, Ph.D, do hereby declare under
penalty of perjury that I have read the foregoing
transcript of my deposition; that I have made such
corrections as noted herein, in ink, initialed by me,
or attached hereto; that my testimony as contained
herein, as corrected, is true and correct.

EXECUTED this ____ day of _____,
at _____, _____.
(City) (State)

NADER MIR, Ph.D

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I, the undersigned, a Certified Shorthand Reporter for the State of California, do hereby certify:

That prior foregoing proceedings were taken completely video before me at the time and place herein set forth; that any witnesses in the foregoing proceedings, prior to testifying, were placed under oath;

That a verbatim record of the proceedings was made by me using machine shorthand which was thereafter transcribed under my direction; further, that the foregoing is an accurate transcription thereof.

I further certify that I am neither financially interested in the action nor a relative or employee of any attorney of any of the parties.

IN WITNESS WHEREOF, I have this date subscribed my name.

Dated: November 2, 2024

Laura A. Rutherford

Laura A. Rutherford, RPR
CSR No. 9266





Magna

Key Contacts

Schedule a Deposition:

Scheduling@MagnaLS.com | 866-624-6221

Order a Transcript:

CustomerService@MagnaLS.com | 866-624-6221

General Billing Inquiries:

ARTeam@MagnaLS.com | 866-624-6221

Scheduling Operations Manager:

Patricia Gondor (E: PGondor@MagnaLS.com | C: 215-221-9566)

Customer Care:

Cari Hartley (E: CHartley@MagnaLS.com | C: 843-814-0841)

Director of Production Services:

Ron Hickman (E: RHickman@MagnaLS.com | C: 215-982-0810)

National Director of Discovery Support Services:

Carmella Mazza (E: CMazza@MagnaLS.com | C: 856-495-1920)

Billing Manager:

Maria Capetola (E: MCapetola@MagnaLS.com | C: 215-292-9603)

Director of Sales Operations:

Kristina Moukina (E: KMoukina@MagnaLS.com | C: 215-796-5028)

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Patent Owner Portsmouth Exhibit 2006-0106

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