

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CISCO SYSTEMS, INC.	)	IPR2024-00505
Petitioner	)	
v.	)	U.S. Patent No.
PORTSMOUTH NETWORK CORP.	)	6,917,986
Patent Owner	)	

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The Videotaped, Virtual Zoom deposition of
DOCTOR HENRY H. HOUH was held on Tuesday, October 8,
2024, commencing at 9:30 a.m., at the Home of Doctor
Henry Houh, 15 Ballard Terrace, Lexington,
Massachusetts 02420 before Susan Wootton, Notary
Public.

REPORTED BY: Susan Wootton, RPR, CLR



1 REMOTE APPEARANCES:

2 ON BEHALF OF PETITIONER

3 THEODOROS KONSTANTAKOPOULOS, ESQUIRE

4 DESMARAIS LLP

5 230 Park Ave

6 New York, NY 10169

7 Telephone: 212-808-1060

8 Email: tkonstantakopoulos@desmaraisllp.com

9

10 ON BEHALF OF THE PATENT OWNER:

11 KATHERINE CAPPAERT, ESQUIRE

12 BENJAMIN HO, ESQUIRE

13 Steptoe, LLP

14 1330 Connecticut Avenue NW

15 Washington, DC 20036

16 Telephone: 202.439.3000

17 Email: kcappaert@steptoe.com

18

19 ALSO PRESENT:

20 John Vitali, Videographer

21 (Via Zoom)

22

23

24

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1 THE VIDEOGRAPHER: We are now on
2 record. This begins Videotape Number One in the
3 deposition of Doctor Henry Houh in the matter of
4 IPR2024-00505, Cisco Systems, Incorporated versus
5 Portsmouth Network Corporation.

6 Today is Tuesday, October 8th, 2024.
7 The time is 9:36 a.m. This deposition is being
8 taken remotely at the request of Steptoe, LLP.

9 The videographer is John Vitali of
10 Magna Legal Services and the court reporter is
11 Susan Wootton of Magna Legal Services.

12 Will counsel and all parties present
13 please state their appearances and whom they
14 represent?

15 MS. CAPPAERT: Kate Cappaert -- I can
16 go first.

17 MR. KONSTANTAKOPOULOS: Sure.

18 MS. CAPPAERT: Kate Cappaert from
19 Steptoe, LLP on behalf of patent owner and with me
20 is my colleague, Ben Ho.

21 MR. KONSTANTAKOPOULOS: And Theodoros
22 Konstantakopoulos from Desmarais, LLP on behalf of
23 petitioner, Cisco.

24 THE VIDEOGRAPHER: Will the court
25 reporter please swear in the witness?



1 Whereupon,

2 HENRY HOUH,

3 called as a witness, having been first duly

4 remotely sworn to tell the truth, the whole truth,

5 and nothing but the truth, was examined and

6 testified as follows:

7 THE VIDEOGRAPHER: I'm sorry,

8 Dr. Houh, I did not hear the answer.

9 THE WITNESS: I do.

10 THE VIDEOGRAPHER: Thank you. Counsel
11 proceed.

12 EXAMINATION BY MS. CAPPAERT

13 Q Good morning, Dr. Houh. Can you
14 please state your full name for the record?

15 A Good morning. My name is Henry,
16 H-O -- and that's spelled, H-O-U-H.

17 Q Do you understand that you are here
18 today to be deposed?

19 A Yes.

20 Q And that means that you will tell the
21 truth?

22 A Yes.

23 Q Where are you taking today's
24 deposition from?

25 A I'm at my home in Lexington,



1 Massachusetts.

2 Q Do you have anyone with you in the
3 room today?

4 A No.

5 Q Do you have any materials or documents
6 in front of you today?

7 A Yes.

8 Q What do you have with you?

9 A I have a copy of my Declaration. I
10 have a copy of the 986 Patent, the one I opined
11 about in my Declaration.

12 THE REPORTER: Excuse me. I'm sorry,
13 excuse me. Could we go off the record one second?

14 MS. CAPPAERT: Yep.

15 THE VIDEOGRAPHER: We're going off
16 record at 9:38 a.m.

17 (An off record discussion was held.)

18 THE VIDEOGRAPHER: We're back on
19 record at 9:39 a.m. Counsel proceed.

20 Q Dr. Houh, I believe you were stating
21 the materials that you have in front of you.
22 Could you please let me know what materials you
23 have in front of you today?

24 A Yes. I have the 986 Declaration, the
25 Declaration I wrote in this matter for the 986



1 Patent, a printout, they're clean.

2 I have a copy of the 986 Patent. I
3 have a copy of the 194 patent to Gai, and I have a
4 copy of the institution decision. That's all I
5 have.

6 Q I believe you said that those are all
7 clean copies; is that right?

8 A Yes.

9 Q Okay. Do you have any Windows open on
10 your computer other than this Zoom and Ignite?

11 A I don't have Ignite open. I just have
12 Zoom on this desktop.

13 Q Okay.

14 A I was sharing documents through that.

15 Q I may share -- I may mark some
16 documents through Ignite, so it may make sense for
17 you to do that.

18 Otherwise, I can also share them in
19 the Zoom window, whichever is easiest for you.

20 A Well, it will take me a minute to go
21 open up a window, a browser window and find the
22 link. Should I do that?

23 MS. CAPPAERT: Yes. Why don't we do
24 that. Let's go off the record for a minute.

25 THE VIDEOGRAPHER: We are going off



1 record at 9:40 a.m.

2 (A discussion was held off the record.)

3 THE VIDEOGRAPHER: We're back on
4 record at 9:42 a.m. Counsel, proceed.

5 Q Dr. Houh, when we were off the record,
6 you opened the Ignite browser on your computer and
7 you confirmed that that is the only window that
8 you have open on your computer, other than this
9 Zoom, correct?

10 A On this desktop, I only have Zoom and
11 the Ignite browser. No other tabs in this browser
12 window that I have than Ignite.

13 Q Great. Have you ever been deposed
14 before?

15 A Yes.

16 Q About how many times?

17 A I've lost count. Probably 150 times.

18 Q Okay. What types of proceedings have
19 those depositions been in?

20 A They're mostly in IPRs. I do a lot of
21 IPR declarations; but there is also some district
22 court litigation.

23 I've been deposed in probably state
24 court cases as well, I think. I don't remember
25 them all, and in ITC proceedings. I think I was



1 deposed in some of those.

2 But they're all related to my work as
3 an expert witness, although one time I was deposed
4 as a fact witness, I believe.

5 Q In your work in IPR proceedings, are
6 you more often on the petitioner's side or the
7 patent owner's side?

8 A I'm on both, but I'm more often on the
9 petitioner's side.

10 Q Have you been virtually deposed
11 before?

12 A Yes.

13 Q I don't want to go over all of the
14 ground rules for depositions, because I think you
15 know them. But in general, we should just try to
16 make sure that we don't talk over each other,
17 okay?

18 A Yes. I'll do my best. Thank you.

19 Q If you need a break, please let me
20 know.

21 A Will do.

22 Q Is there any reason that you cannot
23 testify truthfully and accurately today?

24 A No.

25 Q You're aware that today's deposition



1 relates to IPR2024-00505, which is between Cisco
2 Systems, Inc. and Portsmouth Network Corp.,
3 correct?

4 A Yes.

5 Q Did you prepare for today's
6 deposition?

7 A I did.

8 Q How much time did you spend preparing?

9 A Probably around 8 to 10 hours.

10 Q Did you meet with anyone as part of
11 that preparation?

12 A Yes.

13 Q Who did you meet with?

14 A I met with Theodoros.

15 Q Anyone else?

16 A No.

17 Q Did you review any documents as part
18 of your preparation?

19 A Yes.

20 Q What documents did you review?

21 A I reviewed my Declaration. I reviewed
22 the 968 Patent, the Gai Patent, the patent on
23 preliminary response, and the institution
24 decision.

25 Q Any other documents?



1 A Not -- not within the last few days
2 for preparation for today.

3 Q How many hours would you estimate that
4 you have spent working on this IPR, to date?

5 A I don't really know how to estimate
6 that. I don't have that number memorized.

7 Q On the order of 50 or more hours?

8 A I mean, probably not, but I'm not
9 really sure. I work on a lot of different IPRs
10 and they kind of meld together and some take a lot
11 longer than others.

12 Q How many IPRs are you currently
13 working on with counsel of record in this case
14 right now?

15 A You mean between Cisco and Portsmouth
16 Networks -- Network, sorry.

17 Q Just -- well -- let's just say with
18 counsel, and I apologize in advance,
19 Mr. Konstantakopoulos. Sorry, Theodoros.

20 A With Theodoros --

21 Q Yes.

22 A I know there is -- there might be, I
23 think -- I'm not totally sure. I think I may have
24 submitted two other declarations with respect to
25 other cases involving Portsmouth networks.



1 I think that's right. I'm not totally
2 sure and I'm not sure if I worked with Theodoros
3 on all of those or not.

4 I just don't remember. But I think --
5 I think there are at least two other matters, if
6 I'm -- if my memory serves me correct right now.

7 Q Okay. How many IPRs are you working
8 on currently on behalf of Cisco Systems?

9 A I don't really know how to -- I mean,
10 there may be a few other outstanding matters that
11 are still maybe awaiting institution decision, but
12 I don't -- I would have to check my records. I'm
13 not sure.

14 Q Okay. In your time serving as an
15 expert witness, do you know how many times you've
16 worked on behalf of Cisco Systems as an expert
17 witness?

18 A I would not know an exact count.

19 Q Are you able to estimate how many?

20 A Yeah. Probably over a dozen, maybe
21 two dozen-ish times. It's hard to -- I have a lot
22 of clients and do a lot of work for a lot of
23 different clients.

24 But I think for Cisco, I've done one
25 to two dozen, around there. But again, I'm -- I

1 would have to check my records to be sure how
2 many.

3 Q Okay. I am going to upload to Ignite.
4 Give me one minute. Let me know if you see
5 Exhibit 1004, the host CV in your folder right
6 now.

7 (Houh Exhibit 1004 was marked for
8 purposes of identification.)

9 A I do see it.

10 Q Okay. Exhibit 1004 is your CV; is
11 that right?

12 A Let me open it up. Yes. It was a
13 copy, it looks like, that I probably submitted
14 with the original Declaration.

15 Q Have there been any updates to your CV
16 since you submitted Exhibit 1004 with your
17 Declaration?

18 A Yes.

19 Q What is that?

20 A I mean, I think I probably added some
21 more cases to the list of cases that I've worked
22 on. And I think I added some new activities and
23 interests and leadership positions.

24 Q What activities have you added?

25 A As part of the MIT Alumni Association

1 Board of Directors, I've now joined the Annual
2 Giving Board. I think there may be a few other
3 things that I --

4 I'd have to check my current copy of
5 my CV to look at, to know for sure, but I think at
6 least that was one of them.

7 Q I just realized that I was drinking
8 from my MIT mug.

9 A Great.

10 Q Coincidence.

11 A Oh, great.

12 Q I think you said you also changed --
13 you updated your interests; is that right?

14 A I mentioned updates in that whole
15 section, "leadership activities and interests."

16 Q Okay. You currently work for Houh
17 Consulting, Inc., correct?

18 A Yes. That's right.

19 Q What is your job title at Houh
20 Consulting, Inc.?

21 A Well, it's one person, so I'm the
22 president, and any other -- and the -- and the
23 room cleaner.

24 Q Sounds good. So nobody else works at
25 Houh Consulting?

1 A No.

2 Q Have you ever worked with other
3 contractors as part of Houh Consulting?

4 A No.

5 Q Okay. Do you work for any other
6 companies besides Houh Consulting?

7 A Well, let me explain further. I
8 actually hire like an accountant and CPA to do my
9 taxes and stuff like that, so -- but that's it,
10 really.

11 Q Okay. Do you work for any companies
12 beside Houh Consulting?

13 A No. I'm not employed -- I don't have
14 a W2 -- I don't get W2 wages from -- from any
15 other company.

16 Q Okay. Looking at page 2 of
17 Exhibit 1004, there is BlocksCAD Inc. Do you see
18 that?

19 A Oh, yes. Yes.

20 Q What is BlocksCAD Inc.?

21 A BlocksCAD is a spinout of my -- I used
22 to own a shop called Einstein's Workshop. It
23 actually was HPXL Inc. and we had a stem facility
24 called Einstein's Workshop, which is a physical
25 facility in which we provided science, technology

1 engineering, art and math activities for kids.

2 Like, we had classes on Minecraft,
3 Lego robotics, Scratch Programming, Python
4 Programming, for kids of all ages, K through,
5 really, 9th and 10th grade.

6 As part of that we created a -- our
7 own 3D CAD tool for kids because we didn't really
8 like the CAD tools that were out there in terms of
9 how educational they were and how we could teach
10 them in our facility.

11 So we came up with a little prototype.
12 We actually got some funding from DARPA to extend
13 and, you know, feature complete a lot of things we
14 wanted to do, and then we spun it off in a
15 separate company call BlocksCAD Inc.

16 So I am on the board. I don't really
17 think of -- you know, I don't get W2 wages from
18 them, but I am a member of the board.

19 And BlocksCAD now is used around the
20 world. It's a kind of freewear, premium wear, and
21 it's a Scratch-like programming environment that
22 kids -- and actually adults, too -- can make 3D
23 models with them, that they can then 3D print on a
24 3D printer.

25 It's designed to be easy to use, very

1 educational, and so that's what -- that's what
2 BlocksCAD is.

3 It -- it owns the software and
4 provides services and classes around use of the
5 software and the premium -- the teacher based
6 upgrade, so it can be use in the classrooms.

7 Q Okay. That's great. You said you're
8 on the board of BlocksCAD Inc; is that right?

9 A Yes.

10 Q Okay. You mentioned Einstein's
11 Workshop and said, I believe, that BlocksCAD Inc.
12 was a spinout from your work at Einstein's
13 Workshop; is that right?

14 A Yes.

15 Q Are you still involved with Einstein's
16 Workshop?

17 A No, not officially. So, I sold the
18 company back to my -- one of the original people
19 who helped me start the company a few years ago.

20 Q You said "not officially." What do
21 you mean?

22 A Well, I mean, I still talk to her and
23 if she has questions, I'll answer them. But she's
24 off on her own now.

25 And I mean, I spoke with her within

1 the last week, but other -- you know, I don't
2 really -- I'm not employed by them.

3 Q Okay. Did that -- did your employment
4 with Einstein's Workshop stop in 2022?

5 A Yeah. I mean, I received W2 wages for
6 some of my time when I was working at -- with the
7 shop, but most of the time I didn't.

8 But, so, I mean, officially my
9 capacity ended when I sold it all. I still own
10 the holding company. It doesn't really do
11 anything, but I have to figure out how to shut
12 that down, too. It was an asset sale, so --

13 Q Okay.

14 A -- so the bulk remained.

15 Q Okay. But your capacity at Einstein's
16 Workshop ended in 2022; is that right?

17 A Yeah. That's right.

18 Q I want to now -- I'm going to enter --
19 and I know you have a physical copy, but I'll put
20 an electronic one in as well -- Exhibit 1003,
21 which is the Declaration that you submitted.

22 (Houh Exhibit 1003 was marked for
23 purposes of identification.)

24 Q Give me one second. Let me know if
25 you can see that?



1 A Yeah. I see it now. I'll download
2 it.

3 Q Let me know when you have it up.

4 A Okay. I have it open now.

5 Q Do you recognize Exhibit 1003?

6 A Yes. I do. It's a copy of my
7 Declaration in this case.

8 Q Okay. If you scroll to page -- the
9 last page, is that your signature on page 134 of
10 the Declaration?

11 A Yes. It is.

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

15 A No.

16 Q During today's deposition, I may
17 interchangeably refer to this document as both
18 Exhibit 1003 and as your Declaration; is that
19 okay?

20 A Yes. That's fine.

21 Q Okay. Who wrote your Declaration?

22 A I mean, it was a collaborative effort
23 with the attorneys; but in the end I signed it.
24 These are my opinions and I stand by them.

25 Q Do you know what percent of the words



1 in your Declaration you personally wrote?

2 A So, I mean, I reviewed all the words
3 very carefully before I submitted it and signed
4 it, signed it and submitted it.

5 But in terms of what might have been
6 originally from me, maybe 10 percent.

7 Q Did you say 10 percent?

8 A Yes.

9 Q Okay.

10 A They are my opinions. I stand by
11 them.

12 Q Okay. So you think approximately
13 10 percent of the words were originally from you;
14 is that right?

15 A Well, they were based on discussions I
16 had with -- that were turned into a draft by the
17 attorneys, and I provided some original text for.

18 Q So you provided 10 percent of the
19 actual written words in the Declaration; is that
20 correct?

21 A Probably about -- thereabouts, sure,
22 in terms of what's here. But again, I review all
23 my declarations very carefully. They are my
24 opinions and I stand by them.

25 Q How much time did you spend working on



1 your Declaration?

2 A I mean, I don't have -- I don't
3 remember all the different declarations I've
4 worked on, how much time I spent on each of them.

5 Q So you don't know how much time you
6 spent working on your Declaration?

7 A Well, I don't have that committed to
8 memory. I would have to look at my records, but I
9 can probably give you a ballpark.

10 Q Sure. If you could ballpark how much
11 time you spent working on your Declaration, that
12 would be great.

13 A I mean, probably roughly around, you
14 know, 15 hours, give or take, 15 or 16 hours
15 probably.

16 Q How much time did you -- did that --
17 strike that.

18 Did that 15 to 16 hours of time
19 include time that you spent reviewing the evidence
20 cited in your Declaration?

21 A No. I think -- I don't think so.

22 Q How much --

23 A As it pertains to when I'm not working
24 on it? Like, if I'm working on it and I have to
25 look at these other references, I would probably



1 count that, but not just reviewing them
2 separately.

3 Q How much time did you spend separately
4 reviewing the evidence cited in your Declaration,
5 if you can ballpark that?

6 A Maybe about a day's worth of time.
7 But again, that's just an estimate. I don't -- I
8 don't have the exact hours I, you know, spent on
9 this matter memorized.

10 Q When you say "a day's worth of time,"
11 do you mean like a 24 hour time period or 8 hour
12 time period?

13 A I mean a workday. About 8 hours, but
14 over a number of different days, probably.

15 Q When did you begin working on your
16 Declaration?

17 A Probably at least a month or more
18 before the -- I submitted it.

19 Q Okay.

20 A A couple months maybe. Again, I don't
21 have that memorized and I would have to look at my
22 records, but that's probably a fair guesstimate or
23 estimate.

24 Q Looking at your Declaration on page --
25 give me one minute -- 8 -- it's page 12 of the

1 PDF -- paragraph 17 says that you're being
2 compensated at your normal consulting rate of \$680
3 per hour for your time. Is that accurate?

4 A That probably is, given that is what I
5 wrote in here. I always check that before I
6 submit my declarations.

7 Q Do you have different -- strike that.
8 Is your current consulting rate still
9 \$680 per hour?

10 A No, it's not.

11 Q What is it now?

12 A It's 820.

13 Q When did it change?

14 A I change it every -- every -- well, I
15 don't change it every year, which -- but I changed
16 it probably in the beginning of this year.

17 Q Was it previously 680?

18 A No. I think last year was 720, and --
19 but sometimes I have clients that they just use
20 the rate from the last matter and that was
21 probably the rate; and I didn't really put up a
22 fuss about it.

23 But I sometimes do that for clients
24 that I work over many cases with over years.

25 Q So, Cisco's rate in this case -- of



1 \$680 an hour -- is less than what your current and
2 previous hourly consulting rates are; is that
3 right?

4 A It was -- it was a rate I had at one
5 point probably, two years ago, but I was just too,
6 you know, I probably just didn't push back on it
7 with --

8 I do normally, for some of my clients,
9 but I know that Cisco now has matters at my
10 current rate, so I'm, you know, I'm trying to get
11 everyone up to my current rate.

12 Q Okay. In your Declaration,
13 paragraph 4 -- and I just want to go there. It's
14 on page 5 of the PDF -- paragraph 4, the second
15 sentence says, "I am also president of a company,
16 Einstein's Workshop." Do you see that?

17 A Oh, yes, that -- yes. I do.

18 Q And that wasn't correct as of the time
19 that you signed this Declaration; is that right?

20 A I was still president of its holding
21 company, H3XL but I had sold all the assets of the
22 former Einstein's Workshop.

23 So, I mean it -- it wasn't -- it's
24 probably some old text, but I was still president
25 of the H3XL Inc., doing business as Einstein's

1 Workshop.

2 Q Okay.

3 A Yes.

4 Q Okay.

5 A And I still have that company today.

6 Q You said that it was "probably old
7 text." What do you mean by that?

8 A Well, sometimes I pull some materials
9 from older declarations.

10 Q In your Declaration going down to
11 page -- with paragraph 74, page 43 of Exhibit 1003
12 and page 47 of the PDF.

13 A I'm sorry. What paragraph, again, did
14 you say?

15 Q 74, it's under Heading 7, "Claim
16 Construction."

17 A Yes, I see it.

18 Q In your Declaration, you state that
19 you've reviewed the claims specification and file
20 history of the 986 Patent; is that right?

21 A Yes.

22 Q In paragraph 75, you state that you
23 did not find any explicit definition of claim
24 terms; is that right?

25 A Yes.



1 Q So in the IPR petition and in your
2 Declaration, you applied the ordinary and
3 customary meaning of the claim terms as understood
4 by a POSITA and your analysis; is that correct?

5 A Yeah, and just to clarify, it was at
6 the time of the, you know, priority date of the --
7 of the 986 Patent.

8 Q Okay. And that would have been, I
9 believe, January 7th, 2002 is the effective filing
10 date?

11 A Yes, I believe so.

12 Q And by "POSITA," you mean person of
13 ordinary skill in the art, correct?

14 A Yes.

15 Q Do you consider yourself to be a
16 person of ordinary skill in the art, in the field
17 of the 986 Patent?

18 A So at the time of that priority date,
19 I would have considered myself at least having
20 that level of skill as I've outlined in the
21 previous section.

22 Q Okay. Dr. Houh, what does the term
23 "downstream" mean to you?

24 A Oh, I already talked about it in the
25 context of this, of networking of the 986 Patent.



1 Q Yes. In the context of networking in
2 the 986 Patent, what does the term "downstream"
3 mean to you?

4 A I think one thing it may include is
5 the notion that it's further away from some other
6 node, typically a server or a root node or
7 something that was providing -- something in the
8 network.

9 So it's further -- further -- if you
10 think about the flow of data, it's the direction.
11 And it's a little tricky, because there is
12 bidirectional communications oftentimes, but --
13 but "downstream" is typically the larger flow of
14 data in that direction.

15 So if you're downstream from a WEB
16 server, you're further away from some other node;
17 but the traffic may pass through frequently when
18 receiving data from a WEB server.

19 Q What about the term "upstream" in the
20 context of the 986 Patent and networking? What
21 does the term "upstreaming" mean to you?

22 A Well, I'm not defining them. I'm just
23 talking about things, examples that they may
24 include.

25 So, and upstream would be kind of the

1 opposite of that, as an example, which is -- going
2 towards the WEB server, for example, might be
3 considered an example of what's considered
4 upstream.

5 Q Okay.

6 A The nodes -- that nodes that are
7 closer to the WEB server -- through which your
8 data flows, when a client is sending data to a WEB
9 server -- would be an example of what a POSITA
10 would think of as something that may be more
11 upstream from the end node.

12 Q Okay.

13 A Again, these are just examples. I'm
14 not trying to express or define anything here.

15 Q Understood. But in your examples, the
16 terms "upstream" and "downstream" have different
17 meanings. Is that fair to say?

18 A Yeah. I mean, sure. They're
19 different words, so I think they're usually
20 afforded, you know -- again, I think the notion of
21 upstream and downstream are kind of opposites,
22 generally.

23 Q I want to talk now about the
24 986 Patent, which is Exhibit 1001. And I put that
25 in your folder now so that you have it. It should



1 be there now.

2 A Okay. I see it.

3 (Houh Exhibit 1001 was marked for
4 purposes of identification.)

5 Q Okay. And do you recognize
6 Exhibit 1001?

7 A Yes, I do.

8 Q And Exhibit 1001 is U.S. Patent
9 Number 6917986, correct?

10 A Yes.

11 Q For the purpose of this deposition, if
12 I refer to this exhibit as the 986 Patent, is that
13 okay?

14 A Sure.

15 Q Okay. In your work in this IPR, how
16 much time did you spend reviewing the 986 Patent?

17 A I mean, I -- there's a lot of reasons
18 I refer back and look at it, especially --

19 And part of the time while I'm writing
20 my report, I'm often referring back to it or
21 searching it; but I would probably say a couple of
22 hours, at least.

23 Q Okay. When is the last time you
24 reviewed the 986 Patent?

25 A Yesterday.



1 Q Were you familiar with the 986 Patent
2 before your work on this IPR?

3 A I mean, I don't know for sure, but I
4 don't think I was.

5 Q Okay. I want to look at Column 3 of
6 the 986 Patent starting around Line 15.

7 A Okay.

8 Q Column 3, Line 15 starts with, "U.S.
9 Patent Number 6032194, whose disclosure is
10 incorporated herein by reference, describes a
11 method for rapidly reconfiguring a computer
12 network, based on certain modifications to the
13 standard STP." Do you see that?

14 A Yes.

15 Q U.S. Patent Number 6032194 is the Gai
16 reference that you cite to in these obviousness
17 grounds in your Declaration; is that correct?

18 A Yes, it is.

19 Q All right. In reference -- in
20 continuing in the discussion referring to the Gai
21 reference, U.S. Patent Number 6032194, the
22 986 Patent continues to state that "the method
23 assumes that the switches in the network,
24 including both core and access switches, have
25 multiple trunk ports providing connectivity to the



1 STP root via trunk switches."

2 And then in a parenthetical, it states
3 "these trunk switches are comparable to the core
4 switches and edge switches defined above," and the
5 trunk ports are on the upstream side of each
6 switch, i.e. the side leading towards the root."
7 Do you see that?

8 A Yeah. I mean, I think you read that
9 correctly, but I wasn't looking at it when you
10 first started reading.

11 But I mean, I'm not going to deny what
12 it says. But what people write in the patent
13 doesn't necessarily -- it --

14 I would disagree with some of the
15 characterizations, and it's the -- the description
16 in the specification of the 986 certainly omits
17 teachings of the Gai patent.

18 So I'm not going to deny what it says
19 here. I don't agree with everything it says here,
20 and it certainly omits things. And I've -- I've
21 outlined some of these points in my Declaration.

22 Q Understood. But in -- what I just
23 read is how the 986 Patent describes the Gai
24 reference; is that correct?

25 A I mean, the section you're reading



1 from is where the specification of a 986 is
2 talking about the Gai reference.

3 So, I'm not going to deny that that's
4 what it's trying to do here in this paragraph.
5 But again, I think there are certainly
6 mischaracterizations.

7 Some of the -- some of the statements
8 about the Gai patent itself, I disagree with; and
9 certainly there are things omitted from its
10 discussion within the -- within the 986 Patent;
11 things about the Gai patent that are omitted, that
12 is.

13 Q And I understand your opinion with
14 respect to the 986 Patent's discussions and Gai.
15 But what I'm talking about is just in this
16 section.

17 The Column 3, Lines 15 to 41, are the
18 portion of the 986 Patent where the 986 Patent is
19 discussing and describing the Gai reference; is
20 that correct?

21 MR. KONSTANTAKOPOULOS: Objection.

22 A I mean, a lot of the concepts that
23 this, this whole patent claims is really about
24 concepts that were originally in the -- that are
25 also in the Gai patent as well.

1 So I would not agree that the
2 discussion of the Gai patent concepts are confined
3 to only that paragraph.

4 Q The portion -- okay. The portion that
5 I just read -- and I can read it again -- the
6 method --

7 It begins at Column 3, Line 18, "the
8 method assumes that the switches in the network,
9 including both core and access switches, have
10 multiple trunk ports providing connectivity to the
11 STP root via trunk switches" and then the
12 parenthetical.

13 "These trunks switches are comparable
14 to the core switches and edge switches defined
15 above, and the trunk ports are on the upstream
16 side of each switch, i.e. the side leading toward
17 the root." Did I read that correctly?

18 A Yes. I think so.

19 Q The beginning of that sentence, words
20 as "the method" is referring to Gai's method; is
21 that correct?

22 A I believe that's how it would be read
23 because it's discussing in the previous sentence
24 you didn't read, is that -- how the 194 Patent
25 describes a method for rapidly --

1 THE REPORTER: I'm sorry. For
2 rapidly? You faded out.

3 MS. CAPPAERT: And --

4 THE REPORTER: I'm sorry, Doctor. You
5 faded out at the end of that. Say it again?

6 A I think I was saying how the previous
7 sentence -- prior to the one that was read into
8 the record -- describes how the 194 Patent
9 discloses a method for rapidly reconfiguring a
10 computer network, based on certain modifications
11 to the standard STP; and that the following
12 sentence then refers to "the method," which was
13 what is initially laid out as one of the things
14 taught in the 194 Patent or disclosed in the 194
15 Patent.

16 But I just want to add that, you know,
17 the 194 discloses a number of things and it's not
18 just disclosing one -- one thing or one way to do
19 things. There is a number of examples that were
20 omitted in -- in the characterizations of the --
21 of what Gai says.

22 Q Understood. But again, the portion
23 that I just read or that I read into the record --
24 from Column 3, Line 18 to 24 -- is discussing
25 Gai's method for rapidly reconfiguring a computer



1 network; is that correct?

2 MR. KONSTANTAKOPOULOS: Objection.

3 A Well, I think I'd -- I'd say -- and my
4 Declaration kind of lays this out a little more, I
5 think -- but there is a method. I mean, but
6 limited to only -- saying that Gai is only
7 teaching one thing I think is erroneous.

8 I think there are other teachings in
9 Gai that are omitted from the discussions herein,
10 in the 986 Patent. But I mean, again, the 986
11 Patent says what it says.

12 When a patentee submits a patent to
13 the patent office, they can say anything they want
14 in the specification. They can say "the sky is
15 green." They can say, you know, "the earth is
16 flat." That doesn't make these things that, you
17 know, are written in the specifications, true.

18 So you still have to see if they are.
19 And -- again, so this is characterizing the 984 --
20 sorry, the one -- I'm getting my numbers mixed
21 up -- the 194 Patent, the Gai Patent, as teaching
22 something.

23 But it's omitting other teachings
24 that -- those discussions are omitting other
25 teachings of the Gai patent, and there are some

1 mischaracterizations as well.

2 I could take time to point some of the
3 things out to you if you want me to, but -- but
4 that's all I'm saying is that the
5 986 specification says what it says. I'm not
6 denying the words that are in the 986 Patent
7 specification.

8 I'm just saying that there are some
9 omissions of what the Gai patent is teaching and
10 there are some mischaracterizations of what -- of
11 what Gai is teaching as well.

12 So with that, I mean, the 986
13 specification says what it says. I'm not denying
14 what it says. And it's characterizing the
15 194 Gai Patent in a certain way, which I sometimes
16 disagree with.

17 Q Okay. I want to look at your
18 Declaration, Exhibit 1003, Paragraph 80 for a
19 moment.

20 A Okay.

21 Q In Paragraph 80 at the end of the
22 second sentence, you cite to Exhibit 1001 at
23 Column 3, Lines 16 to 24. Do you see that?

24 A Yes.

25 Q Then you include a quotation and in it



1 you start with, in a -- or in a bracket, Gai, and
2 then you said describes the method for rapidly
3 reconfiguring a computer network, based on certain
4 modifications to the standard STP. "The method
5 assumes that the switches in the network including
6 both core and access switches, have multiple trunk
7 ports providing connectivity to the STP root via
8 trunk switches."

9 Then in a parenthetical, "these trunk
10 switches are comparable to the core switches and
11 edge switches defined above, and the trunk ports
12 are on the upstream side of each switch, i.e. the
13 side leading toward the root." Did I read that
14 quote correctly?

15 A Yes. I think so.

16 Q So you felt that Column 3, Lines 16 to
17 24 of Gai was reliable enough to cite to it and
18 quote it in Paragraph 80 of your Declaration; is
19 that correct?

20 MR. KONSTANTAKOPOULOS: Objection.

21 A Well, for the purposes of the points
22 that I was making, which is with respect to the
23 access switches and edge switches that -- that --
24 that the 986 specification is pointing out, that
25 are within the Gai reference. That's why I used



1 this citation.

2 But I'm not using it to support other
3 points that are -- that may have come up later.
4 This is just about the disclosure of access
5 switches and edge switches, which is -- which is
6 what's highlighted in red and blue there.

7 And it's because it's about the
8 discussion of claim elements 1A, and 12A, which
9 require edge switches, access switches, our first
10 bridge and a second bridge.

11 So those are the reasons that I cited
12 to that section, was with respect to the 986's
13 discussion of what's in Gai, which include edge
14 switches and access switches.

15 Q You included the entirety of Column 3,
16 Lines 16 to 24 of Exhibit 1001 -- which is the 986
17 Patent -- in Paragraph 80 of your Declaration; is
18 that correct?

19 A Yeah. I did cite lines 16 to 24, and
20 pretty much included the previous sentence, the
21 one you read earlier and the portion you read
22 earlier. I did.

23 But that -- again, it's because of the
24 disclosure in that section of the characterization
25 within the 986 Patent -- that discusses how Gai

1 has edge switches and access switches -- is the
2 reason I cited that.

3 Q I'm not asking you why you cited it.
4 I am asking what I think is a fairly
5 straightforward question, which is just you
6 included a quote -- the entirety of the quote from
7 Column 3, lines 16 to 24 of Exhibit 1001 -- which
8 is the 986 Patent in Paragraph 80 of your
9 Declaration, correct?

10 A I didn't include the whole cited
11 section. For the -- the reason is for the
12 disclosure of what's in the 986 Patent, about how
13 Gai is talking about edge switches and access
14 switches.

15 I wouldn't take it to indicate what
16 you asked about earlier, which is I believe
17 everything in this -- in the 986 that I cited --
18 is reliable. Because again, as I said earlier,
19 there are numerous characterizations of the
20 Gai Patent within the 986 that I disagree with.

21 Q I understand. Again, I'm not asking
22 you why. I am just asking a simple question,
23 which is that you included a quote from
24 Column 3 -- lines 16 to 24 of Exhibit 1001, the
25 986 Patent -- in Paragraph 80 of your Declaration?



1 MR. KONSTANTAKOPOULOS: Objection.

2 MS. CAPPAERT: Yes or no?

3 MR. KONSTANTAKOPOULOS: Objection.

4 A I think that I've answered that
5 numerous times that I have included that.

6 Q Okay.

7 A It's right here. No. I'm not denying
8 the words that are in my Declaration. I did cite
9 to Column 3, lines 16 to 24, and I included the
10 whole block quote with a substitution of the Gai
11 for the patent number, as is in the brackets.

12 Q Thank you. I want to talk now about
13 some of the language of the challenged claims. So
14 looking at Claim 12 of the 986 Patent.

15 Claim 12 of the 986 Patent includes a
16 claim limitation requiring that dummy traffic is
17 sent downstream; is that correct?

18 A If you're referring to what's in
19 Column 12 of the 986 Patent -- starting around
20 Line 4 -- there is an element in Claim 12 that is
21 sending dummy traffic from the first bridge over
22 the second link, downstream to the second bridge
23 so as to cause the second bridge to modify its
24 database responsive to the second port being --

25 THE REPORTER: I'm sorry --

1 THE WITNESS: (Sotto voce.)

2 (Overlapping speakers.)

3 THE WITNESS: Is that what you are
4 referring to?

5 MS. CAPPAERT: That is.

6 THE REPORTER: I'm sorry. Doctor --

7 MS. CAPPAERT: So for at least
8 Independent Claim 12, there is a requirement that
9 dummy traffic is sent downstream; is that right?

10 THE REPORTER: Excuse me, Doctor.

11 MR. KONSTANTAKOPOULOS: Objection.

12 THE REPORTER: Sometimes you are
13 fading out, and on the last answer you faded out
14 at the end again.

15 You said to cause the bridge not --
16 it's database responsive to, and then it faded
17 out.

18 A Okay. That is the sentence -- I'm
19 reading from the patent claim, "responsive to the
20 second port being in the active state."

21 I'm sorry. Could you repeat the
22 question, please?

23 Q Sure. So, at least Independent
24 Claim 12 recites the downstream transmission of
25 dummy traffic; is that correct?

1 MR. KONSTANTAKOPOULOS: Objection.

2 A Well, it's not as broad as what you're
3 characterizing, because the claim element itself
4 is very specific about sending dummy traffic from
5 the first bridge -- over the second link --
6 downstream to the second bridge. That's -- that's
7 part of the claim.

8 So any traffic being sent downstream,
9 is what I kind of got your -- the gist in your
10 question.

11 But the claim element requires sending
12 dummy traffic from the first bridge over the
13 second link, downstream to the second bridge.

14 And those refer to the second link and
15 second bridge that are recited earlier, the
16 antecedents earlier in the claim? I think they
17 are.

18 Q Okay. Can you turn to your
19 Declaration again, Exhibit 1003. And going to,
20 it's paragraph 64, page 35 of the Declaration,
21 page 39 of the exhibit and PDF?

22 A You said paragraph 64?

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

24 A Okay. I'm there.

25 Q Okay. The third sentence begins with,



1 "for example." Do you see that?

2 A Yes.

3 Q It says, "for example, only claims 11,
4 12, 23 and 24 recite such -- it quotes --
5 downstream transmission of dummy traffic." Do you
6 see that?

7 A Yes.

8 Q Did I read that portion of your
9 Declaration correctly?

10 A Yes. I think so, but it's in the
11 context of the overall discussion here, but sure.

12 Q Okay. I want to look now at claim --
13 going back to Exhibit 1001 -- Claim 24.

14 Claim 24 states in part, "first and
15 second downstream port adapted to be coupled, via
16 first and second redundant link, to a further
17 bridge device located downstream in the network,
18 relative to the spanning tree root." Do you see
19 that?

20 A Yes.

21 Q Then in the following limitation,
22 Claim 24 further states "a protocol processor,
23 which is adapted to place the first downstream
24 port in an active state, while placing the second
25 downstream port in a blocking state, so that



1 communication traffic is conveyed over the first
2 downstream link, while the first port is in the
3 active state, thereby causing the bridge devices
4 to build respective databases for use in
5 forwarding the traffic," correct?

6 A I think you read that correctly. Yes.

7 Q So, for at least Independent Claim 24,
8 there is a requirement that traffic is conveyed
9 downstream over the first downstream link; is that
10 correct?

11 A I mean, those words are part of the
12 limitation that we just read.

13 Q So there is a requirement -- for
14 Claim 24 -- that traffic is conveyed downstream
15 over the first downstream link, right?

16 A Yeah. And it's referring to the first
17 downstream link, which has an antecedent earlier
18 in the claim, but, sure. So, yeah, I mean, the
19 words are there. I see those words in the claim.

20 Q Okay. Claim 24 continues with "the
21 protocol processor being further adapted,
22 responsive to a failure associated with the first
23 link, to place the second downstream port in the
24 active state, and to send dummy traffic over the
25 second link, downstream to the further bridge



1 device, so as to cause the further bridge device
2 to modify its database responsive to the second
3 downstream port being in the active state,"
4 correct?

5 A Yes. I think you read that correctly.
6 That's part of the claim.

7 Q So -- for at least Independent
8 Claim 24 -- there is a requirement that dummy
9 traffic is sent over the second link, downstream
10 to a bridge device; is that correct?

11 A I mean, the claim requires what the
12 claim says it says. So those words that you said
13 are part of the overall Claim 24.

14 Q Okay. Switching gears a little bit --
15 and I think it came up in our previous
16 conversation some -- the 986 Patent discusses
17 different types of switches; is that right?

18 MR. KONSTANTAKOPOULOS: Objection.

19 A (Sotto voce.) What you're thinking
20 of and --

21 Q Sure. If you look at Exhibit 1001,
22 the 986 Patent, Column 1, Line 26 to 38, that
23 paragraph.

24 The second sentence says, switches can
25 be roughly classified as access switches or core



1 switches; do you see that?

2 A Yes.

3 Q Then it goes on to state "an access
4 switch has ports that connect to land and/or to
5 other network end points, such as user computer
6 systems," correct?

7 A Yes.

8 Q And then it discusses -- the next
9 sentence says, "core switches interconnect the
10 access switches into a wide area network, (WAN),
11 by direct connection between the core switch and
12 access switches and/or by connection to other core
13 switches." Do you see that?

14 A Yes.

15 Q Okay. So the 986 Patent is in this
16 paragraph discussing different types of switches
17 or different classifications of switches.

18 A Yes. And it continued on to talk
19 about dead switches. But, yeah, I mean the
20 986 Patent does provide certain characteristics of
21 the -- of various switches that it's discussing.

22 Q Okay. Through access switches -- as I
23 read -- the 986 Patent says "an access switch has
24 ports that connect to LANs and/or to other network
25 endpoints such as user computer systems." Did I

1 read that correctly?

2 A Yes.

3 Q So the access switch -- discussed in
4 the 986 Patent -- can connect to an endpoint, such
5 as a user's laptop or a computer, for example; is
6 that right?

7 A I mean, the example that it talks
8 about -- when it's discussing other network
9 endpoints -- is a user computer such as user
10 computer systems.

11 So I think that is an example given of
12 another -- another network endpoint. But that --
13 if -- if a switch has a port that's connected to
14 such a device, that is an example of what
15 986 Patent is talking about as an access switch.

16 Q Okay. So an access switch could
17 provide a user with access to the network; is that
18 a fair characterization?

19 A Or another user -- another network
20 endpoint, but -- but I just want to clarify that
21 like, this is not saying that switches can only be
22 one type.

23 So a switch could be an edge switch
24 and an access switch that met the examples given
25 here, and characterization, in the 986 Patent.

1 So that's how I -- I think I pointed
2 back to some of these characterizations in my
3 discussion of what I found to be the relevant
4 switches within the Gai reference.

5 Q Understood. But talking about this
6 discussion of access switches in the 986 Patent,
7 access switches could provide a user with access
8 to a network; is that correct?

9 A Well, I mean, what it's saying here is
10 an access switch has a port that connects to --
11 have ports that connect to LANs.

12 So one thing that could make a -- an
13 access -- make a device an access switch -- is if
14 it has ports that are connected to LANs or local
15 area networks.

16 But another -- but it also says
17 "and/or to other network -- network endpoints,
18 such as user computer systems."

19 So if a switch had a port that was
20 connected to a user computer system, that -- under
21 this example -- that, would be an example of what
22 would be considered by the 986 Patent to be an
23 access switch.

24 And so, I think you're assigning some
25 sort of purpose for the connectivity. I'm just

1 saying that the port here, this is just about what
2 ports and what they're connected to. So that's
3 what this is saying.

4 Q Okay. And then, in the 986 Patent,
5 the last one which I think you referred to briefly
6 before, is that it says -- the last sentence of
7 this paragraph, Column 1, Line 36 -- starts with
8 core; and it's says, "core switches that are
9 directly connected to access switches are referred
10 to herein as edge switches." Do you see that?

11 A Yes.

12 Q Okay. And the previous sentence had
13 said "core switches interconnect the access
14 switches into a wide area network, (WAN,) by
15 direct connection between the core switch and
16 access switches and/or by connection to other core
17 switches," correct?

18 A Yes.

19 Q So a core switch is connected to one
20 or more access switches or other core switches; is
21 that right?

22 A Well, one of the examples it's giving
23 here of what it calls the core -- a core switch,
24 is if it's interconnecting the access switches
25 into a wide area network.



1 And one of the ways it can do that is
2 by direct connection between the core switch and
3 access switches or, and/or, by connection to other
4 core switches.

5 So, a core switch could be connected
6 to other core switches and/or it could be
7 connected to access switches as well. And it is
8 and/or, so it could be both; it could be one of
9 the two types that was there.

10 Q So a core switch can be connected to
11 other core switches and/or access switches; is
12 that right?

13 MR. KONSTANTAKOPOULOS: Objection.

14 A I mean -- I mean, it says what it says
15 there. So it's saying how core switches
16 interconnect the access switches.

17 I'm just going to skip over the --
18 into why, but -- and I do that by direct
19 connection between the core and access switches
20 and/or by connecting to other core switches which
21 are then presumably connected to access switches,
22 because it's talking about its core switches
23 interconnect to access switches.

24 So there have to be access switches
25 that are interconnected through these core

1 switches, as this example of what it's saying
2 here.

3 Q Okay. As discussed in this Column 1,
4 the paragraph at Column 1 -- Lines 26 to 38 of the
5 986 Patent -- "edge switches are all core
6 switches;" is that correct?

7 MR. KONSTANTAKOPOULOS: Objection.

8 A I mean, I don't think it's -- it's
9 limiting it that -- that -- in what it's saying
10 here.

11 It's simply saying that core switches,
12 that are directly connected to access switches,
13 are referred to herein as edge switches.

14 So, if a core switch is interconnected
15 to an access switch, and they're directly
16 connected, that core switch is what the 986 Patent
17 will refer to as an edge switch. It doesn't say
18 that that's the only thing it could be, at least
19 not in that sentence.

20 So there could be other edge switches.
21 But it's not providing examples of that here.
22 It's only saying that a core switch, that is
23 directly connected to an access switch, is going
24 to be referred to as an edge switch.

25 I think what you asked is kind of -- I

1 don't know the logic, right term, but contra --
2 I'm not going to guess, but it's not the same.
3 It's not the same as what this is saying.

4 This is saying a core switch that's
5 directly connected to an access switch will be
6 referred to as an edge switch.

7 Q So in the context of the 986 Patent,
8 core switches that are directly connected to
9 access switches are referred to as edge switches;
10 is that correct?

11 A That's what the last sentence is
12 saying.

13 Q Okay.

14 A It doesn't say that nothing else can
15 be an edge switch. That's all I'm saying here.

16 Q But in the context of the 986 Patent,
17 is it saying that if it is referring to something
18 as an edge switch, it is a core switch that is
19 directly connected to an access switch, correct?

20 A Yes. But I mean, you could further
21 explain it. Here is another edge switch, but it
22 might not meet this one --

23 I mean, it does say what it says here,
24 you know, but it -- it's going to refer to an edge
25 switch later and it's going to use that term as a

1 reference to core switches that are directly
2 connected to access switches.

3 But it doesn't mean it can't say,
4 "well, here is another example of an edge switch,
5 later, that we could give, that might not fit
6 this." But again, I don't recall. I can go look
7 at every disclosure of edge switch that's --
8 that's used in the specification. We can walk
9 through those if you want.

10 Q Well, I want to focus on just this --
11 this paragraph which says, "core switches that are
12 directly connected to access switches are referred
13 to herein."

14 Do you understand that "referred to
15 herein" is referring to in the context of the
16 986 Patent?

17 A Yeah. I would -- I would understand
18 -- I think that that would be understood there as
19 "referred to herein."

20 Q And it says, "core switches that are
21 directly connected to access switches are referred
22 to herein as edge switches," correct?

23 A That's what it says. I'm not denying
24 the words in the 986.

25 Q Okay. Okay. We've been going for

1 about an hour, or over an hour. Do you want to
2 take a short break?

3 A Sure.

4 Q Let's go off the record.

5 THE VIDEOGRAPHER: We're going off the
6 record at 10:46 a.m.

7 (There was a break in the proceedings at
8 10:46 a.m. and testimony resumed at 10:58 a.m.)

9 THE VIDEOGRAPHER: We're back on the
10 record, and the time is 10:58 a.m. Counsel
11 proceed.

12 MS. CAPPAERT: Good. Thank you.

13 THE VIDEOGRAPHER: You are welcome.

14 BY MS. CAPPAERT

15 Q Mr. Houh -- or Dr. Houh, I
16 apologize -- so, in the figure 1 of the
17 986 Patent, if you can look at that when you get a
18 chance. Do you see figure 1?

19 A Yes, I do.

20 MS. CAPPAERT: Okay. And, looking at
21 figure 1, there's access switch A and access
22 switch B; is that right?

23 A Yes, I see that.

24 MS. CAPPAERT: And there is edge
25 switch 28. Do you see that?



1 A Yes. I do.

2 MS. CAPPAERT: And edge switch 28 is a
3 core switch; is that correct?

4 A I say that -- the description of
5 figure 1 in column 7, 8 through 23, doesn't use
6 the term "core switch."

7 But I think you can take into
8 consideration what the patent says -- back in
9 column 1, around line 35 -- that this edge switch
10 is --

11 What the 986 Patent is teaching in
12 this case is that it, because this is a core
13 switch, it's connected to access switches, that
14 it's also a core switch here.

15 MS. CAPPAERT: Okay. So, this edge
16 switch is a core switch in figure 1; is that
17 correct?

18 A Well, figure 1 shows some direct
19 connections to access switches.

20 So I think, you know, given the
21 consistency, you know, between the figure and the
22 labeling -- and the statements made in the 986 --
23 I think it would be understood that that edge
24 switch is one of the examples of a core switch
25 directly connected to access switches.

1 Q I want to turn now to your
2 declaration, Exhibit 1003.

3 And, in your declaration, you state
4 that the challenge claims of the 986 Patents are
5 rendered obvious by Gai; is that right?

6 If it helps, if you look at page 16,
7 Exhibit 1003, which is page 12 of your
8 declaration.

9 A So, I think there are two different
10 embodiments, and two different sub-grounds of
11 Ground 1, that are the reasons why I say that Gai
12 renders obvious the challenge claims, and
13 therefore they're unpatentable.

14 MS. CAPPAERT: And those two grounds
15 are Grounds 1A and 1B, correct?

16 A Yes. That's how I've labeled them.

17 MS. CAPPAERT: And Ground 1A is the
18 referred to as the Gai downstream embodiment; is
19 that right?

20 A Yes.

21 MS. CAPPAERT: And Ground 1B is the
22 Gai upstream embodiment, right?

23 A Yes.

24 MS. CAPPAERT: And both Ground 1A and
25 ground 1B are obviousness-based grounds, correct?



1 A Yes.

2 Q So, it's your opinion that Gai does
3 not fully disclose all of the limitations of the
4 claims at issue, correct?

5 MR. KONSTANTAKOPULOS: Objection.

6 A Well, I mean, are you asking -- it's
7 not a 102 anticipation argument.

8 It's an obviousness argument is -- the
9 grounds are both based on obviousness. So I'm not
10 making a 102 anticipation-based argument on either
11 of these grounds.

12 Q Was it your decision to make
13 Grounds 1A and 1B obviousness grounds?

14 MR. KONSTANTAKOPULOS: Objection, and
15 I would caution my witness to not reveal any
16 privileged communication.

17 THE WITNESS: I don't know how to
18 answer that, given the instruction.

19 MS. CAPPAERT: Okay. Do you believe
20 that Gai anticipates the challenged claims of the
21 986 Patent?

22 MR. KONSTANTAKOPULOS: Objection,
23 scope.

24 THE WITNESS: My opinions in this
25 declaration are that -- under 103, obviousness

1 grounds.

2 MS. CAPPAERT: I would like to turn
3 to, it's page 59 of your declaration. It's
4 page 63 of Exhibit 1003.

5 A Okay.

6 Q In this section, you're discussing
7 Gai's disclosures, in relation to claim
8 limitations 1E and 12E, under Ground 1A; is that
9 right?

10 A I'm not sure I heard the whole
11 question. But I mean this section, starting on
12 page 59 of the page number in the middle bottom,
13 is discussing Elements 1E and 12E together, under
14 Ground 1A.

15 MS. CAPPAERT: Okay. And I note --
16 and I think you mentioned this earlier -- but the
17 claim limitation, and then other portions of your
18 discussion in your declaration are color coded?

19 A Yes.

20 Q Do you see that?

21 A Yes.

22 Q Who was responsible for color coding
23 your declaration?

24 A I think, I think -- you know, the
25 attorneys are good at these types of things, to



1 highlight things.

2 Sometimes I do it, but I don't think I
3 did it in this case.

4 MS. CAPPAERT: Okay. And then, as
5 part of your discussion, you walk through figure 1
6 of Gai, and figure 1 itself is shown on page 61 of
7 the declaration, page 55 of Exhibit 1003. Do you
8 see that?

9 A Yes, I do.

10 MS. CAPPAERT: And, in discussing
11 figure 1, you point out, in paragraph 102, that
12 switch 114 is at the lower most level of the
13 spanning tree. Do you see that?

14 THE WITNESS: I mean, I see what I
15 wrote in paragraph 102.

16 MS. CAPPAERT: And what you wrote in
17 paragraph 102 is that switch 114 happens to be at
18 the lower-most level of the spanning tree with
19 regard to switches, correct?

20 THE WITNESS: That's part of what I
21 say there, yes.

22 Q And then you continued, and you ended
23 with, e.g., there are no other switches downstream
24 of switch 114, correct?

25 A That's what it says, yes.



1 Q And then -- in the annotated figure
2 above paragraph 102 -- there is a purple line and
3 an orange line. Do you see that?

4 A Yes.

5 Q And the purple line is link 128,
6 correct?

7 A Well, they're all labeled. There is a
8 lot of labels 128, so there is a purple line in
9 the diagram on -- the figure on page -- I'll use
10 the right, lower right-hand Exhibit 3 page
11 numbers, page 65 of Exhibit 103, 1003 rather.

12 There is a purple line that's labeled
13 128 in that figure on -- on page 65.

14 There is a lot of -- there is a lot of
15 other labels labeled 128, though. That is my
16 point here.

17 Q Okay. So, the orange link is
18 labeled -- is link 128. And link 128 is orange in
19 figure 1. That is annotated on page 65 in
20 Exhibit 1003.

21 And then you also have a purple link
22 128 in annotated figure 1; is that right?

23 A Yeah, in that figure. I'm just
24 looking though, because, you know, there is
25 another figure on the next page, which I have

1 different purple and orange labels, and I think
2 that's --

3 I'm not sure if the discussion in
4 figure 1 here is with respect to those labels in
5 the color coding here.

6 But I think, if you look at the --
7 there's more discussion later with respect to the
8 same Figure 1, with some different labels on the
9 next page. I'm just pointing that out.

10 Q Okay. But, looking at this specific
11 figure on page 65, and I think that the -- more
12 explanation as to the annotation on page 65 is
13 found in these prior paragraphs.

14 So, if you look at paragraph 101,
15 which is on page 63 of Exhibit 1003, it says, at
16 the end of page 63 going on to page 64: "As shown
17 below, consistent with the 986 Patent admission,
18 Gai discloses one specific example of a failure
19 associated with port 3, (marked with purple X) of
20 switch 114, that transmits packets towards the
21 root, i.e., upstream through the newly activated
22 port 2, (red dot.)" Do you see that?

23 A Yes. I see that.

24 MS. CAPPAERT: So, in the figure that
25 is shown on page 65, the purple X is an example of

1 a failed port, failed port 3; is that correct?

2 A Yeah. What I'm pointing out there is
3 that that's the explicit example of a port failure
4 given in Gai. And that comes from Gai at column
5 11, 41 through 62.

6 And so that's -- that's an example of
7 what Gai is teaching explicitly, that's an example
8 of a failed port and then a newly activated port.

9 Well, that's my discussion there, but
10 the citation talks about this switch 114 having
11 port 3 fail.

12 Q And so, in this example shown in
13 figure 1 on page 65, the purple link would not be
14 working? Is that a fair statement?

15 A Yeah. In the explicit example given,
16 that the -- that --

17 The specific example given in Gai is
18 that the link 128 -- coupled with the port
19 number 3 and switch 114 fails -- and that's the
20 explicit example given in Gai. And I think that's
21 why I'm showing this diagram on page 65 of Exhibit
22 1003.

23 And then I further go on to discuss
24 how, you know, any port on any switch can fail;
25 and give an example that I'm now talking about,

1 you know, in the next -- in the following pages.

2 But the explicit example taught in Gai
3 about link failure is the link 128 connected to
4 port 3 of switch 114.

5 Q Okay. And, in that example, another
6 link -- such as the one that you have shown in
7 orange in the annotated figure 1 on page 65 is
8 what would be used to transmit the packet upstream
9 through port 2; is that correct?

10 MR. KONSTANTAKOPULOS: Objection.

11 A Yeah. I mean, I'm not going to
12 disagree with that. But, in the example, what I'm
13 focusing on is an explicit disclosure of a failed
14 port, yeah, and over which now there's a newly
15 active port.

16 And I do talk about, in paragraph 100,
17 about how Gai -- and the 986 Patent admits this --
18 is that Gai discloses sending dummy traffic from a
19 switch through a new active port, such that the
20 other switches in the network learn of the new
21 active port.

22 But the reason I'm including this
23 example is because this is an explicit example of
24 a specific link failing.

25 But then if you go on to -- if you



1 look at paragraph 103 -- right after this
2 discussion of the explicit disclosure of a failed
3 link in Gai is that a POSITA would have understood
4 that a failure can happen at a port or a link
5 anywhere in the network.

6 And then I go on to discuss and
7 further analyze -- in the following paragraphs --
8 such -- another failure.

9 Q Understood. And we will get to
10 paragraph 103.

11 But for this figure, Figure 1, which I
12 understand you're saying is based on an explicit
13 disclosure in Gai; is that correct?

14 A Well, the failed link is based on
15 explicit disclosure in Gai; and the overall
16 teachings of Gai would indicate that there is a
17 newly active link brought up, over which dummy
18 traffic would be sent.

19 And I guess you could think of that as
20 what the orange, and the newly activated port with
21 the red dot, and the newly active link, the orange
22 link 128 -- in the Figure 1 on page 65 -- would
23 indicate.

24 But the discussion is really more --
25 that is really introducing this explicit failure

1 discussed in Gai.

2 And then, and then I further talk
3 about how any link would be understood by a person
4 of ordinary skill, like this could happen anywhere
5 in the network.

6 Then I go on to discuss -- with
7 respect to further detailed analysis -- about why
8 Gai renders obvious 1E and 12E, also.

9 This is another point of failure in
10 the network -- which I show the figure on page 67
11 of that failure -- and further analyze how the
12 failure there, you know, renders obvious this
13 element.

14 Q Understood. And we will get there.
15 I'm really trying to just talk about this other
16 figure that you have annotated in your declaration
17 right now.

18 And, in your declaration -- and I just
19 want to make sure, so -- the specific example of
20 Gai that you are discussing in your declaration,
21 you state in paragraph 101: "Gai discloses one
22 specific example of a failure associated with
23 port 3, (marked with purple X) of switch 114 that
24 transmits packets towards the root, (i.e.
25 upstream,) through the newly activated port 2,

1 (red dot.)" Is that right?

2 A Yeah. I mean, I think you read that
3 correctly. I wasn't looking at my declaration
4 when you started reading, though, but it sounds
5 right.

6 Q Okay. And looking at the annotated
7 figure 1 on page 65, the purple X is the failure
8 associated with port 3, correct?

9 A Yes. That is indicating the failed
10 port 3, as explicitly disclosed in Gai.

11 Q And the red dot over port 2 is your
12 annotation to show the newly activated port; is
13 that right?

14 A Yes. That's my annotation to show the
15 newly activated port, following the failure of the
16 link attached to port 3.

17 Q And the newly activated port would
18 begin transmitting packets to the root; is that
19 correct?

20 A Well, I mean, I'm not describing here,
21 in detail, some intermediate steps that might need
22 to occur beforehand.

23 But, yeah, I mean, I do say here that
24 then, following a failure, this backup link and
25 port come up, are activated and eventually, yes,

1 packets will be transmitted towards the root via
2 this newly activated port.

3 Q Okay. And then, in paragraph 103 --
4 as you already mentioned -- you discuss that a
5 person of ordinary skill in the art would have
6 understood that failure could happen at any port
7 or link in the network, other than the root port;
8 is that right?

9 MR. KONSTANTAKOPULOS: Objection.

10 A I mean, generally -- you kind of
11 paraphrased what I said. But, yeah, I mean, I
12 think that's fair for the first sentence there.

13 You know, a POSITA would have
14 understood that a failure can happen at a port or
15 a link anywhere in the network.

16 Q Okay. And, in paragraph 103, you
17 refer to a "root port" as a port that is used to
18 transmit packets upstream; is that correct?

19 A Yes. I think a failure can occur at a
20 port other than the root port. That's what I say.

21 Q And then, after "root port" you say,
22 i.e., "a port that is used to transmit packets
23 upstream," correct?

24 A Yeah. I mean the root port is the one
25 that's designated to use for forwarding towards

1 the root, so that would be upstream relative to
2 the root.

3 Q Okay. And you referred to the other
4 type of port as a designated port; is that
5 correct?

6 A Yes. I - Yes. I do refer to that at
7 the next, top of the next page in the same
8 paragraph.

9 Q And, as support for this statement,
10 and I'll quote it: "Such a port is called a,
11 designated port, i.e., a port that is used to
12 transmit packets downstream."

13 You cite to five different exhibits;
14 is that correct?

15 A Well, I think the five different
16 citations are different statements with respect to
17 what I'm saying in 103.

18 But, yeah, there are some citations
19 that use the phrase "designated port" and talk
20 about how it supports my statement here about,
21 that a designated port is a port that's used to
22 transmit packets downstream.

23 Q None of the exhibits, Exhibits 1012,
24 1013, 1006, 1011 and 1014 are the primary Gai
25 references that you are relying on in your two



1 obviousness grounds; is that correct?

2 A That's right. Gai is --

3 Gai is Exhibit 1005, and so neither --
4 Exhibits that are not 1005 are not Gai.

5 And these are merely supportive for
6 background support. I'm not -- they're not used
7 as a second -- I'm not using that as an additional
8 reference in the grounds.

9 They're just stating why POSITAs knew
10 what they knew, and other -- it's just backing up
11 what I've said.

12 Q Okay. And then, in paragraph 1004, or
13 sorry, in paragraph 104, at the end of that
14 paragraph, you cite to Exhibit 1005, which, as you
15 just mentioned is the main Gai reference that you
16 rely on for this ground of rejection; is that
17 right?

18 A I mean, you said "ground of
19 rejection." I'm not sure what you mean by that,
20 but it's a challenged ground of the elements.

21 Q Sure. The main Gai reference that
22 you're relaying on in Ground 1A, of your
23 declaration, is Exhibit 1005, right?

24 A Yes. That's right.

25 Q Okay. And you cite to Exhibit 1005 at



1 the end of paragraph 104 of your declaration,
2 correct?

3 A Yes.

4 Q And the quote that you include from
5 Gai is: "Upon detection of a failure at the
6 active forwarding port, the state of one of the
7 backup ports immediately transitions from block to
8 forwarding, thereby becoming the new active port
9 for the device," correct?

10 A Yes. That's what the cited section
11 says.

12 Q The word "downstream" does not appear
13 in that quote in paragraph 104, correct?

14 A I mean, neither the word upstream nor
15 downstream. It's just generally saying, talking
16 about detecting port failures. It's not being
17 specific to either.

18 Q So, the word "downstream" does not
19 occur -- or strike that. The word "downstream"
20 does not appear in the quote in paragraph 104 of
21 your declaration, correct?

22 A I don't see either the word
23 "downstream" or the word "upstream" appearing
24 anywhere in paragraph 104 of my declaration.

25 Q So, I take that as a yes, correct, the

1 word "downstream" does not appear in paragraph 104
2 of your declaration?

3 MR. KONSTANTAKOPULOS: Objection.

4 A I mean, the word "downstream" doesn't
5 appear; the word "upstream" doesn't appear either.

6 Q I'm not asking about the word
7 "upstream." I'm asking about the word
8 "downstream." It's a fairly specific question.

9 The word "downstream" does not appear
10 in paragraph 104 of your declaration, correct?

11 MR. KONSTANTAKOPULOS: Objection.

12 A There are thousands of words in the
13 English languages that don't appear in 104.
14 Downstream is one of the words that also doesn't
15 appear.

16 Q Okay. Turning to page 98 of your
17 declaration, it's 102 of Exhibit 1003, and I will
18 represent this is now in Ground 1B of your
19 declaration.

20 A I'm sorry. What numbers? Where are
21 we?

22 Q On page -- let's start here. On
23 page 101 of Exhibit 1003, you can see that there's
24 a section, Section B, Ground 1B, "Gai upstream
25 embodiment." Do you see that?



1 A Yes, I do.

2 Q Okay. And then, on the next page,
3 page 102 of Exhibit 1003, you provide an annotated
4 figure. Do you see that?

5 A Yes. I do.

6 Q Did you create the annotated figure 1
7 shown on page 102 of Exhibit 1003?

8 A No.

9 Q Okay. Who created it?

10 A I mean, it's part of my declaration,
11 and I am saying that it is annotated to add the --
12 this new element 117 and 112E, and those are
13 additions, the annotations.

14 Q But you, yourself, did not create
15 Figure 1; is that right?

16 A I didn't personally create this
17 figure.

18 Q And I should be more clear. You,
19 yourself, did not create the annotated version of
20 Figure 1 that is shown on page 102 of
21 Exhibit 1003, correct?

22 A That is right. I did not personally
23 add that annotation to the existing Figure 1.

24 Q And existing Figure 1 of Gai does not
25 include switch 117 or server 112E, correct?

1 A Well, the figure didn't, but the
2 disclosure of Gai does, does disclose this
3 additional; that switch 114, if you look at just
4 above, is, if it were coupled to another access
5 switch.

6 So, the annotated figure adding this
7 switch 117 is simply illustrating what is already
8 disclosed in Gai.

9 Q I understand your opinion of what's
10 stated in that paragraph.

11 What I'm asking is a simpler question,
12 which is just, Figure 1 of Gai, as it appears in
13 Gai, does not include switch 117 or server 112E,
14 correct?

15 MR. KONSTANTAKOPULOS: Objection.

16 A The original Figure 1 in Gai is just
17 an exemplary figure or embodiment of what's taught
18 in Gai.

19 Gai actually does teach that there is
20 an additional switch that can be connected to
21 switch 114.

22 And the annotated illustration that's
23 here -- that we're discussing -- is simply
24 annotated to show what's explicitly already taught
25 in Gai, that there is another access switch --

1 giving an example of one, another access switch is
2 coupled to switch 17 at port 7. It's actually
3 very specific.

4 The cited portion of Gai is, "If port
5 number 7 at switch 114 were coupled to another
6 access switch, entity 234 would transmit multicast
7 messages," and it goes on.

8 So, that, the fact that it's the
9 switches is disclosed, is already given in Gai,
10 and the fact that these 112 elements generally are
11 connected to access switches is already disclosed
12 in Gai.

13 So, the annotated figure is just
14 giving another example, a different example of
15 what Gai is already teaching.

16 Original Figure 1 -- I will give
17 you -- doesn't have this new 117 and 112E elements
18 on it, but that's just an example of one of the
19 embodiments discussed in Gai.

20 And so I've updated -- my declaration
21 updates the figure to include the teaching, other
22 teachings within Gai.

23 Q So, I want to look now at page --
24 going back a little bit -- we are going to go back
25 to page 20. We'll go to page 31 of Exhibit 1003.

1 A Sorry. What page did you say then,
2 please?

3 Q 31.

4 A Okay.

5 Q And you can see that there's another
6 annotated Figure 1 of Gai, on page 31 of
7 Exhibit 1003, correct?

8 A Yeah. I mean, that's been annotated
9 to show some -- add some colors, but it doesn't
10 have the extra 117 element.

11 Q Okay. So, the Figure 1 shown on
12 Exhibit 1000 -- or strike that.

13 Page 31 of Exhibit 1003 is an
14 annotated version of Figure 1, that includes some
15 colors but does not include 117 and server 112E,
16 correct?

17 A That's right.

18 Q Okay. It is just an annotated --
19 So, the Figure 1 shown on page 31 is
20 just an annotated version of Figure 1 as it
21 actually appears in Gai, correct?

22 A Well, I mean both figures are
23 annotated, based on what originally appears in
24 Gai. They're just annotated in different ways.
25 This one is annotated to add colors.

1 The other one we were talking about was annotated
2 to include a few elements that were, you know,
3 taught as examples in Gai.

4 Q So, the previous version of Exhibit --
5 or the previous version of Figure 1 that we were
6 discussing -- was annotated to include additional
7 elements that are not themselves shown in the
8 Figure 1 that is -- that appears in the Gai
9 reference, correct?

10 A Sure. I mean, that is fair, but this
11 one also doesn't have -- the original one doesn't
12 have coloring.

13 And so the annotations here are
14 referring to the, you know, the blue and red
15 highlights that have been added to this, this
16 version on page 21.

17 Q Okay. And, on the version on page 31,
18 the blue and red highlights, did you add those
19 highlights to this annotated Figure 1?

20 A I didn't personally add the
21 highlighting to this figure for the annotation.

22 Q And, in the annotated version of
23 Figure 1 that's shown on page 31, which is 114,
24 115 and 116, are highlighted with a red border.
25 Do you see that?

1 A Yes.

2 Q And, in your declaration, the switches
3 with the red border are access switches; is that
4 right?

5 A Is that the app -- If you look at
6 paragraph 54, the access switches is also -- the
7 words "access switches" are also highlighted in
8 red; and then the one that says "access switches
9 114 to 116."

10 So, yes, that is the purpose of the
11 highlight, to indicate that those are the switches
12 discussed in Gai as the access switches.

13 Q Okay. And then the blue border is
14 around switches 120, 121, 122 and 123, 124 and
15 125, correct?

16 A I think you read all those numbers
17 between 120 and 125. But, yeah, I mean -- and
18 similarly, there is discussion underneath that
19 figure, in paragraph 54, that I've highlighted,
20 backbone switches 120 to 125 in blue, those words
21 and numbers.

22 And so that's just to match up the
23 figure to the text of Gai, and Gai -- in this
24 case, Gai is calling them the backbone switches.

25 Q Okay. And, in your declaration, you

1 equate at least some of these backbone switches as
2 meeting the claimed edge switch limitations in the
3 986 Patent, correct?

4 MR. KONSTANTAKOPULOS: Objection.

5 A I mean, I think I have a discussion
6 somewhere, if you want to point me to the portion.

7 Q Sure. If we go to paragraph 81 of
8 your declaration, it's on page 50 of Exhibit 1003.

9 A Yes. I'm there.

10 Q And, in paragraph 81, you equate
11 backbone switch 124 with the claimed edge switch,
12 correct?

13 A Yeah. What I say is that these
14 backbone switches -- such as switch 124 -- meets
15 the claimed edge switch/first bridge. I think
16 that is the claim language itself.

17 And I go on to discuss why. So I
18 think I've laid it out there and in the following
19 paragraphs.

20 Q Okay. If you give me like -- we can
21 go off the record for maybe two or three minutes?
22 I think that I'm done, but I just want to check my
23 notes.

24 A Sure.

25 MR. KONSTANTAKOPULOS: Sounds good.

1 THE VIDEOGRAPHER: We were going off
2 record at 11:37 a.m.

3 (There was a break in the proceedings
4 at 11:37 a.m. and testimony resumed at 11:42 a.m.)

5 THE VIDEOGRAPHER: This marks the end
6 of media number 1.

7 We were back on the record. This
8 marks the beginning of media number 2 at
9 11:42 a.m. Counsel proceed.

10 MS. CAPPAERT: Thank you very much,
11 Dr. Houh. I have no further questions at this
12 time.

13 THE WITNESS: Thank you.

14 MR. KONSTANTAKOPULOS: I have no
15 questions either. Thank you, Dr. Houh.

16 THE WITNESS: Thank you, everyone.

17 THE REPORTER: And do you want him to
18 read and sign?

19 THE WITNESS: I'll leave that up to
20 the attorneys.

21 MR. KONSTANTAKOPULOS: What was the
22 question? I'm sorry, Susan.

23 THE REPORTER: Do you want him to read
24 and sign the transcript?

25 MR. KONSTANTAKOPULOS: We will waive



1 it.

2 MS. CAPPART: I think we have a
3 standard order. I will follow up, if we don't.

4 THE VIDEOGRAPHER: Going off the
5 record. This marks the end of media number 2,
6 concluding today's deposition at 11:44 a.m.

7 THE REPORTER: Did you want a copy of
8 the transcript, and what would you like to
9 receive?

10 MR. KONSTANTAKOPULOS: Not really.
11 We're going to receive it when it's filed, so we
12 don't need a copy.

13 (Houh Exhibit 1009 was marked for
14 purposes of identification.)

15 (Deposition concluded at 11:45 a.m.)

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1 State of Maryland

2 County of Baltimore, to wit:

3 I, Susan M. Wootton, a Notary Public of the
4 State of Maryland, County of Baltimore, do hereby
5 certify that the within-named witness remotely appeared
6 before me at the time and place herein set out, and
7 after having been duly sworn by me, according to law,
8 was examined by counsel.

9 I further certify that the examination was
10 recorded stenographically by me and this transcript is
11 a true record of the proceedings.

12

13 As witness my hand this _____ day of
14 _____, 2024.

15

Susan Wootton

SUSAN WOOTTON

16

Notary Public

17

18 My Commission Expires:

19 June 12, 2027

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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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