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UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT AND TRIAL APPEAL BOARD
Case Nos. IPR2018-00342, IPR2018-00343,
IPR2018-00344, IPR2018-00345
U.S. Patent Nos. RE44,326, 7,047,196

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COMCAST CABLE COMMUNICATIONS, LLC,
Petitioner,

v.

PROMPTU SYSTEMS CORP.,
Patent Owner.

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VOLUME I

DEPOSITION OF CHRISTOPHER SCHMANDT
Tuesday, August 28, 2018, 9:03 a.m.
Finnegan, Henderson, Farabow, Garrett & Dunner, LLP
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1 I N D E X

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3 WITNESS: Christopher Schmandt

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5 EXAMINATION Page
6 By Mr. Bell 5

7

8 EXHIBITS FOR IDENTIFICATION:

9 Comcast Description Page
10 Exhibit 1001 U.S. Patent 7,047,196 26
11 Exhibit 1019 Witness's declaration re 7
12 the '196 patent in support
13 of Petition 1 of 2
14 Exhibit 1019 Witness's declaration re 7
15 the '196 patent in support
16 of Petition 2 of 2
17 Exhibit 1023 Witness's declaration re 8
18 the '326 patent

19

20 Promptu Description Page
21 Exhibit 2001 MIT Media Lab web page re 12
22 member companies

23

24 Original exhibits retained by reporter to be
25 returned to Finnegan Henderson

1 MR. BELL: I'm Cory Bell from Finnegan
2 Henderson. With me is my colleague, Joshua
3 Goldberg, also from Finnegan Henderson on behalf of
4 Promptu.

5 MR. DAY: And James Day of Farella
6 Braun + Martel for the petitioner Comcast and the
7 witness.

8 CHRISTOPHER SCHMANDT,
9 having been satisfactorily identified by the
10 production of his driver's license, and
11 duly sworn by the court reporter, was deposed
12 and testified as follows:

13 EXAMINATION

14 BY MR. BELL:

15 Q. Good morning.

16 A. Good morning.

17 Q. Can you please state your full name for the
18 record.

19 A. Christopher Schmandt.

20 Q. What is your address?

21 A. 4 Longfellow Road, Winchester, Massachusetts.

22 Q. Do you understand that you're under oath?

23 A. I do.

24 Q. Do you understand that you're sworn to tell
25 the truth?

1 **A. The whole truth, and nothing but the truth.**

2 Q. If you do not understand a question, please
3 ask me to clarify it, okay?

4 **A. Yes.**

5 Q. Otherwise, if you answer, I will assume
6 that you understood the question. Understood?

7 **A. Understood.**

8 Q. If you provide an answer to the question,
9 I will assume that it's complete unless you indicate
10 otherwise, okay?

11 **A. Okay.**

12 Q. Please answer my question with words, not
13 gestures or nonverbal cues so that the record is
14 complete, okay?

15 **A. Yes. Occasionally I mumble a little bit.**
16 **If so, just tell me to speak up, please.**

17 Q. If you need a break, just say so and we'll
18 take one as needed. I'll just want to finish the
19 open question if there is one.

20 **A. Of course.**

21 Q. And I will try to take a break about every
22 60 minutes. During the breaks, do you understand
23 that you may not discuss the substance of your
24 testimony with Comcast counsel or anyone else?

25 **A. Yes, I do.**

1 (Exhibit 1019 (Petition 1 of 2)
2 was marked for identification.)

3 BY MR. BELL:

4 Q. I'm handing you what was previously labeled
5 as Exhibit 1019 in IPR2018-00344. And on the front
6 it says, "(in support of Petition 1 of 2)."

7 Is this your declaration?

8 A. Yes, it looks like it.

9 Q. Can you please turn to page 231.

10 A. Yes. That's the signature page.

11 Q. Is that your signature?

12 A. Yes.

13 Q. And that signature is accompanied by a
14 statement saying that the statements in your
15 declaration are true under the penalty of perjury,
16 correct?

17 A. Yes.

18 (Exhibit 1019 (Petition 2 of 2)
19 was marked for identification.)

20 BY MR. BELL:

21 Q. I am handing you what was previously marked
22 as Exhibit 1019 in IPR2018-00345. Is this your
23 declaration?

24 A. It looks like it.

25 Q. Could you please turn to page 199.

1 **A. Yes. I'm there.**

2 Q. Is that your signature?

3 **A. It looks like it.**

4 Q. And is that signature accompanied by a
5 statement saying that the statements in your
6 declaration are true under penalty of perjury?

7 **A. This is true.**

8 **(Exhibit 1023 was marked**
9 **for identification.)**

10 BY MR. BELL:

11 Q. I'm handing you what was previously marked
12 as Exhibit 1023 in IPR2018-00342 and IPR2018-00343.
13 This is your declaration, correct?

14 **A. Yes.**

15 Q. Please turn to page 237.

16 **A. Yes.**

17 Q. That is your signature, correct?

18 **A. Yes.**

19 Q. And your signature is accompanied by a
20 statement saying that the statements in your
21 declaration are true under penalty of perjury,
22 correct?

23 **A. Yes.**

24 Q. Have you been an expert witness before
25 these Promptu cases?

1 **A. Before this case, you said?**

2 Q. Yes.

3 **A. Yes.**

4 Q. About how many times?

5 **A. Half a dozen to ten.**

6 Q. Have you been deposed before?

7 **A. Yes, I have.**

8 Q. Do you recall about how many times?

9 **A. 15 to 20.**

10 Q. Have you ever been a witness for Comcast
11 before?

12 **A. I'm not sure.**

13 Q. In your declaration marked as Exhibit 1023,
14 can you turn to paragraph 5. It states in
15 paragraph 5 of Exhibit 1023, "I am currently
16 employed as a principal research scientist at the
17 Media Laboratory at the Massachusetts Institute of
18 Technology (MIT)," correct?

19 **A. Yes.**

20 Q. And you're still employed at the Media Lab?

21 **A. Yes, I am.**

22 Q. What is the Media Lab?

23 **A. So it's an interesting question. MIT has a**
24 **research management structure and an academic**
25 **structure. So there are labs -- there are what we**

1 call labs at MIT that are basically entities for
2 funding purposes.

3 So a lab can receive funding. And the
4 faculty associated with the lab are responsible for
5 the funding of the lab. The old AI lab was an
6 example of a lab. And the Media Lab is one of those.

7 So within MIT, we are a research entity.
8 But we are also an academic entity. Labs are rarely
9 the equivalent of departments. But we are the
10 equivalent of a close-to department called Media
11 Arts and Sciences, which is in the School of
12 Architecture and Planning. So we have both a
13 research presence and an academic presence within
14 the MIT structure.

15 Q. How is the Media Lab funded?

16 A. The vast majority of it is sponsored
17 research projects. Well, I should be more specific.
18 The Media Lab is a somewhat unusual lab at MIT in
19 that actually the bulk of our funding comes from
20 corporate sponsors but through research consortia.

21 So the consortium model is that a
22 consortium publishes broad research goals/guidelines,
23 a couple pages really. Companies join the consortium
24 for a relatively small amount of money. "Relative"
25 is a relative term, of course. And the companies

1 don't specify the research that we do.

2 Of course, part of our job is to try to
3 keep at least some of these companies happy. But
4 there is no research contract that says in return
5 for this much funding, this project will be done
6 according to this proposal, which is usually about a
7 10-pager kind of thing.

8 Media Lab has on the order of 50 of
9 these -- we call them corporate research partners.
10 And they come and they go. There's a certain amount
11 of churn.

12 Other work, which is the minority, is
13 funded through what we call sponsored programs or
14 sponsored projects, which fit the other definition
15 that I mentioned where there is a commitment to do a
16 particular body of research that will be funded, and
17 there is one -- one particular sponsor, either
18 corporate or federal, so money that comes from NSF,
19 for example, is done -- is done in this.

20 The Media Lab is also unusual in that
21 our IP policies are that any company that is
22 contributing to the lab has access to all of our IP
23 regardless of which group does it or whether their
24 particular group does it, and whether a particular
25 group that they're interested in or working with

1 **does it. And, of course, there's also gift money,**
2 **which is money either in dollars or in kind that has**
3 **no strings attached.**

4 Q. Does Comcast fund any of the sponsored
5 programs?

6 A. It has sometimes in the past, but I don't
7 think we've had them as a sponsor for quite a few
8 years.

9 Q. Is Comcast a corporate research partner?

10 A. Not that I'm aware of.

11 (Exhibit 2001 was marked
12 for identification.)

13 BY MR. BELL:

14 Q. So I've now handed you what I've marked as
15 Exhibit 2001. On the bottom you will see it says
16 "https://www.media.mit.edu/posts/member-companies/"?

17 A. I see.

18 Q. Have you seen this information before?

19 A. Not particularly. I assume it's from our
20 website. I don't look at the website regularly.

21 Q. And on page 2 of 5, does it list Comcast as
22 a consortium lab member?

23 A. It does.

24 Q. What is a consortium lab member?

25 A. They are one of the companies that I

1 described as a research partner. So they're a
2 company that contributes to the research consortium
3 as opposed to a particular sponsored project.

4 I see there's quite a few companies
5 here, some of which I've never heard of.

6 Q. And you previously said that they pay a
7 relatively small amount of money. Is that to be a
8 member?

9 A. Yes.

10 Q. And about how much is the relatively small
11 amount of money?

12 A. I think it's about 200K a year.

13 Q. Do you know how long Comcast has been a
14 member?

15 MR. DAY: Object to the form.

16 THE WITNESS: Well, since I didn't know
17 they were a member, I wouldn't know the answer to
18 that question. Probably not a long time, because I
19 think I might have heard of it. On the other hand,
20 I have had no personal interactions with anyone from
21 Comcast, so I wouldn't know.

22 BY MR. BELL:

23 Q. You are being compensated for your
24 testimony in this case against Promptu; is that
25 correct?

1 **A. Yes, I am.**

2 Q. And Comcast is paying you to provide your
3 opinions, correct?

4 **A. That is correct.**

5 Q. What is your hourly rate?

6 **A. \$450 an hour.**

7 Q. How does your rate here for Comcast compare
8 to the rate you've been paid for other clients?

9 **A. It's my standard rate. It's been my**
10 **standard rate for five years or so.**

11 Q. About how many cases have you worked
12 against Promptu to date on behalf of Comcast?

13 **A. This is the only one that I can recall.**

14 Q. You're aware that there is a related
15 District Court litigation in addition to these cases
16 before the PTAB; is that correct?

17 **A. Yes.**

18 Q. Have you done any work for the District
19 Court case?

20 **A. No.**

21 Q. How many hours have you spent preparing
22 your declarations for these cases?

23 **A. You mean up until the time of publishing**
24 **these?**

25 Q. Um-hum.

1 A. That was months ago. That was nine months
2 ago. Do you want me to guess? I can't give you a
3 real number because I don't remember and I don't
4 have the data at my hand.

5 Q. Do you know on an order of magnitude?

6 A. Sure. Order of magnitude, 30. 30 hours.

7 Q. When did you first hear of Promptu?

8 A. When I started working on this matter,
9 which would have been November 2017, I believe,
10 although it's possible that the attorneys had
11 contacted me in October.

12 Q. Have you ever heard of a company called
13 Agile TV?

14 A. Only in the reading of the patent.

15 Q. Have you done any research for a competitor
16 of Agile TV?

17 A. Since I never heard of Agile TV, I couldn't
18 answer that question. Sorry.

19 Q. Have you done any work relating to voice
20 recognition in set-top boxes?

21 A. Other than this?

22 Q. Other than this.

23 A. Not that I can remember at the moment.

24 Q. Would there have been any difficulties in
25 providing speech recognition in a set-top box in the

1 year 2000?

2 A. It depends on what form of speech
3 recognition.

4 Q. What do you mean by "what form of speech
5 recognition"?

6 A. Well, the patent tries to differentiate
7 various forms of speech recognition rather vaguely.
8 So it would depend on -- Typically with speech
9 recognition, some of the ways we might classify a
10 recognizer would be vocabulary size.

11 Another way we might class a recognizer
12 is whether it was speaker dependent: designed for a
13 particular person or made to accommodate a
14 particular person. Or speaker independent.

15 Another way we might differentiate
16 speech recognizers would be whether it was isolated
17 speech, one word at a time; connected speech, three-
18 to six-word utterances; or continuous speech, which
19 is what I'm doing now.

20 Q. For any of those types of speech
21 recognition, would there have been difficulties?

22 A. I'm not sure I understand the question.
23 Are you asking for any in this three-dimensional
24 array, would it have been difficult, or for any in
25 this three-dimensional array, would it have not been

1 **difficult?**

2 **I'm not quite sure.**

3 Q. For any of the various types of speech
4 recognition forms you listed, would there have been
5 difficulties?

6 **A. Yes.**

7 Q. What would those difficulties have been?

8 **A. Computational complexity.**

9 Q. Any others?

10 **A. That's probably a broad enough term that it**
11 **covers it.**

12 Q. What do you mean by "computational
13 complexity"?

14 **A. How much processing -- how much processing**
15 **power and storage it takes to perform the recognition**
16 **in bounded -- reasonable enough amount of time --**
17 **to create a satisfying user experience.**

18 Q. What would be necessary to create a
19 satisfying user experience?

20 **A. That's an excellent question and one for**
21 **which there's no easy answer. One way of answering**
22 **it is it would probably be satisfying if it was more**
23 **effective than using a nonspeech interface, whatever**
24 **the competition was. Could be a joystick or cursor**
25 **buttons on a remote or a touchscreen on a remote or**

1 a touchscreen on the TV screen itself. So if we
2 have a less satisfying user experience with speech,
3 then we haven't achieved the goal.

4 Other than that, you might look at
5 recognition rate. And when you look at recognition
6 rate, we generally talk about two numbers. One is
7 precision and one is recall.

8 Precision is for the number of times
9 that a user says a word which the recognizer should
10 understand, does the recognizer understand it --
11 I'm sorry. That's recall.

12 And precision is for the number of times
13 that the user said a word, is the proper word
14 recognized or an erroneous word? That would be a
15 factor. Vocabulary size would be a factor. The
16 range of utterances that one could give would be a
17 factor.

18 The more things you can say, the longer
19 it's going to take to figure out the answer, and the
20 less -- the lower the likelihood that the recognized
21 result will be correct. And, of course, the time it
22 takes to perform that -- to perform the recognition.

23 Q. By "the time it takes to perform
24 recognition," do you mean the time between when the
25 user would speak and when they would receive

1 feedback from the recognition?

2 **A. Well, specifically I'm talking about the**
3 **time between when the user starts speaking and when**
4 **the system -- since we're talking about speech**
5 **recognition, when the recognition component of the**
6 **system produces an output. Other things may cause**
7 **other delays in the system, but we're not**
8 **considering those right now.**

9 Q. In building a system that implemented
10 speech recognition, would those other delays be
11 potential problems that a user would perceive with
12 the system?

13 **A. In terms of building the speech recognition**
14 **component? No.**

15 Q. How about in terms of usability?

16 **A. Yes, they would.**

17 Q. In the year 2000, would there have been any
18 difficulties with releasing a commercial speech
19 recognition system implemented through a set-top box?

20 MR. DAY: I'm sorry. Could you read
21 that back.

22 (Record read as requested.)

23 THE WITNESS: Can you clarify what you
24 mean by "difficulties."

25

1 BY MR. BELL:

2 Q. What does the word "difficulties" mean to
3 you?

4 A. Things that are hard.

5 Q. Using that definition, in the year 2000,
6 would there have been any difficulties with
7 releasing a commercial speech recognition system
8 implemented through a set-top box?

9 A. Absolutely.

10 Q. What would those have been?

11 A. So you have a large number of set-top boxes
12 out there. You have some really cool software.
13 How do you get that software on the set-top box?
14 You first have to -- So the first question is, who
15 is developing this software? Is this a cable box
16 manufacturer like Motorola or Scientific Atlanta, or
17 is it some other party? If it's some other party,
18 clearly you have a lot of difficulty to negotiate a
19 business relationship, of whatever form, with the
20 set-top box manufacturer.

21 Then once that is done, you have a
22 distribution problem, okay? So -- Well, first we
23 get to another problem though, which is, you see,
24 it's not really -- the customer relation -- the
25 customer doesn't have the relationship with the

1 set-top box manufacturer. The customer has the
2 relationship with their cable supplier, their cable
3 provider.

4 So really it's -- the most important
5 thing is you've got to convince the cable provider
6 to be able to do this. So the cable provider has to
7 be convinced that this is beneficial. They also
8 have to be convinced that it is a good business
9 relationship for them to have with whoever is making
10 this speech recognizer. And, of course, they're
11 also concerned about operating costs: maintenance,
12 all that kind of stuff.

13 So assuming you iron all that out, then
14 the question is, does the cable provider have a
15 single vendor set-top box or do they have multiple
16 vendor set-top boxes that they support? Obviously
17 if I'm going to take speech recognition and make it
18 work on one vendor's set-top box, I'm going to have
19 to redo that to make it work on another vendor's
20 set-top box.

21 And then, of course, there's the issue
22 of set-top boxes maybe of different generations.
23 Unlike cell phones these days where vendors assume
24 we're going to throw our phones away every two years,
25 set-top boxes tend to have a longer lifetime.

1 So some of those set-top boxes that are out there in
2 your 2 million customer-installed base are going to
3 be of different models than others and have
4 different processors and different capabilities.

5 So you have that problem. And that's
6 harder, as you can see, than simply saying, you
7 know, I'm compatible with MacOS Sierra, right, where
8 everybody who's running MacOS is running Sierra --
9 well, now they're going to go to Mojave. But it's
10 more complicated. Because, of course, the customer,
11 the subscriber, doesn't even know or care about what
12 model set-top box you've got.

13 So assuming you worked all of those out,
14 then you have to do an installation. I don't know
15 personally how network management of set-top box
16 software worked in 2000. I presume new stuff could
17 be downloaded from the head-end by that point.
18 I don't know whether that would happen automatically
19 under the operator's control. I suspect it would.
20 I don't know whether you need any subscriber
21 intervention in order to do that.

22 These are, of course, all parts of the
23 difficulties. One of the big difficulties is
24 educating the user. Once you got it installed and
25 you have to show that it can work, educating the

1 users -- the subscribers as to what they can do with
2 voice. When you work with speech recognition, one
3 of the classic problems is, What can I say? How do
4 I phrase an utterance to the system? What's its
5 vocabulary?

6 Back when Apple released Siri -- you
7 know, Siri, S-i-r-i -- when Apple released Siri,
8 they had a lot of advertisements. And I watched my
9 son follow this because the advertisements all
10 showed people using Siri. The advertisements were
11 very cleverly teaching people how to talk to Siri.
12 People don't know how to talk to their recognize --
13 or equipped set-top box. We have to teach them.
14 These are all difficulties.

15 Q. Were there any technical difficulties?

16 A. Well, I think I said, you know, solving the
17 possibly cross-vendor problem or cross-generation --
18 different generations of set-top box, those are
19 technical difficulties.

20 Actually, you know, there's another
21 technical difficulty. Another technical difficulty
22 is the microphone. Where is the microphone?
23 Because set-top box didn't come with microphones.
24 The remote controls didn't come with set-top boxes.
25 And set-top boxes didn't come with microphone jacks.

1 **So, yes, this is a really big technical**
2 **difficulty because I can't do speech recognition if**
3 **I can't hear you.**

4 Q. Any others?

5 **A. I'm sure there's others.**

6 Q. What makes you sure that there would be
7 others?

8 **A. Because life is complicated. And any**
9 **technology is complicated.**

10 Q. Do you recall when the first commercially
11 available voice recognition in a set-top box was
12 released?

13 **A. No, I don't.**

14 Q. Do you know if there were any commercially
15 available speech recognition systems implemented
16 through a set-top box in the year 2000?

17 **A. Can you repeat that.**

18 Q. Do you know if there were any commercially
19 available speech recognition systems implemented
20 through a set-top box in the year 2000?

21 **A. I don't know if anything was on the market**
22 **in 2000.**

23 Q. Are you aware of any systems that were on
24 the market?

25 MR. DAY: Object to the form.

1 THE WITNESS: Any -- any -- what kind of
2 systems?

3 BY MR. BELL:

4 Q. Are you aware of any commercially available
5 speech recognition systems implemented through a
6 set-top box?

7 A. In 2000?

8 Q. At any time.

9 A. There certainly were systems. I can't
10 recall specifics. I can't name them specifically.

11 Q. Can you turn in Exhibit 1019, which is the
12 one labeled "(Submitted in support of Petition 1 of
13 2)," to paragraph 91. It's on page 51.

14 A. Thank you.

15 Q. Did you write the text in paragraph 91?

16 A. You mean did I write every word? I don't
17 know. I can't recall.

18 Q. Also in Exhibit 1019 labeled "(Submitted in
19 support of Petition 1 of 2)," paragraph 117, did you
20 write the text of that paragraph?

21 MR. DAY: So now you're talking about
22 the other declaration, right?

23 MR. BELL: No. It's the same one.

24 MR. DAY: Okay. Sorry. And sorry, what
25 paragraph?

1 MR. BELL: Paragraph 117.

2 MR. DAY: Thank you.

3 THE WITNESS: So I can't tell you for
4 any paragraph whether I wrote every word in it or
5 not. I'm happy to talk about the process whereby
6 this declaration was created, if you wish. But I
7 don't know if that's an answer to your question.

8 MR. BELL: Why don't we take a quick
9 break before I jump into the next line of questions.

10 THE WITNESS: Okay.

11 MR. DAY: Sure.

12 (Recess at 9:45 a.m.,
13 resumed at 10:03 a.m.)

14 BY MR. BELL:

15 Q. So in Exhibit 1019, the one labeled
16 "(Submitted in support of Petition 2 of 2)," can you
17 turn to paragraph 271.

18 So you'll have it handy, I am also going
19 to hand you Exhibit 1001, which is the '196 patent.

20 (Exhibit 1001 was marked
21 for identification.)

22 BY MR. BELL:

23 Q. In Claim 14 of the '196 patent, the claim
24 recites, "a speech recognition system coupled to a
25 wireline node in a network," correct?

1 A. It says, "A program system controlling at
2 least part of a speech recognition system coupled to
3 a wireline node in a network" unless that was
4 changed in the corrections, but I don't think it
5 was.

6 Are we in the same place?

7 Q. Yes. And in Claim 14 of the '196, the
8 claim recites, "wherein each of said program steps
9 reside in memory accessibly coupled to at least one
10 computer included in said speech recognition system,"
11 which requires that the speech recognition system
12 include a computer, correct?

13 A. Yes. I.e., we use the term "computer"
14 broadly.

15 Q. And that means "coupled to" in the first
16 lines of the claim where the claim recites "a speech
17 recognition system coupled to a wireline node in a
18 network" means that two physical components are
19 connected together, correct?

20 A. I'm sorry. This is based on the preamble,
21 or did you just read the preamble or did you read --

22 Q. Yes.

23 A. So could you repeat the question, please.

24 Q. Sure. And that means that "coupled to" in
25 the first lines of the claim where the claim recites

1 "a speech recognition system coupled to a wireline
2 node in a network" means that two physical
3 components are connected to each other, correct?

4 A. In the broadest sense of the term
5 "connected," which is perhaps meant to be less vague
6 than "coupled," which is even more vague because the
7 processor that does the controlling could be inside
8 the wireline node. I would think that still meant
9 it was coupled to the wireline node.

10 Q. But you would agree that "coupled to"
11 refers to a physical connection?

12 A. I don't think so. It's just too vague a
13 word.

14 Q. What is an example in the claim of how it
15 would not be a physical connection?

16 A. "Coupled" could mean anything if the claim
17 doesn't tell us. The claim overuses the term
18 "coupled." Memory is coupled to the computer.
19 Memory is coupled to the computer. Users are
20 coupled to the wireline. Processor -- or the speech
21 recognition system is coupled to the wireline node.

22 It means they have some way of
23 communicating perhaps. Even then, I think I'm
24 reading too much into the word "coupled." The claim
25 doesn't tell me anything more than that.

1 Q. Would a person of ordinary skill in the art
2 understand "coupled" to have any meaning?

3 A. They would understand it as I just said it:
4 a very vague term that means there's some influence
5 between the two things that are coupled.

6 "Coupled" is one of those terms that
7 appears a lot in patent claims. It's not a term
8 that an engineer uses very often because it's too
9 vague.

10 Q. If you could, in Exhibit 1023, your
11 declaration, could you turn to paragraph 169.
12 Sorry. It's on page 84.

13 A. Okay. I'm there.

14 Q. And in the third sentence, you state,
15 "A person of ordinary skill in the art would know
16 that the remote node (node 517) would have to
17 determine the particular subscriber system issuing a
18 particular voice command so that the recognized
19 command could be transmitted back to the correct
20 subscriber terminal unit," correct?

21 A. Yes.

22 Q. In paragraph 169, you were saying it is
23 your opinion that the remote node needs to know how
24 to identify the terminal unit, correct?

25 A. Which piece is the terminal unit? Can we

1 look at the figure that we're referring to, please,
2 to make sure I get it right.

3 Q. Yes.

4 A. It may be in the dec, if you want. Page 74,
5 is that the . . .

6 Q. Yes.

7 A. Okay. Thanks. And now I'm sorry. Could
8 you repeat the question.

9 Q. Sure. In paragraph 169 of your declaration,
10 you're saying that it's your opinion that the remote
11 node needs to know how to identify the terminal unit,
12 correct?

13 A. Yes.

14 Q. It is your opinion that it is necessary to
15 determine the particular subscriber system in order
16 to transmit back to the correct subscriber unit,
17 correct?

18 A. Yes.

19 Q. And it is a transmission back to the
20 subscriber unit because the network transmission of
21 the speech information originated from the
22 subscriber unit, correct?

23 A. Yes. Through the wireless remote.

24 Q. Are you saying that the communication is
25 going from the terminal unit through the remote?

1 A. No. I'm saying it goes from the remote
2 through the terminal unit.

3 I'm sorry. When I say "remote," I mean
4 the handheld remote control. I'm not sure. Box 517
5 may sometimes be referred to as the remote node.

6 So I'm sorry if I was confusing there.
7 I can try to clarify that if it's confusing -- my
8 answer's confusing.

9 Q. Is the remote control on the same network
10 as node 517?

11 A. Yes, through the set-top -- through the
12 terminal.

13 Q. What do you mean by "through the terminal"?

14 A. The remote control transmits to the
15 terminal, and the terminal transmits to the node.
16 It's like any network has multiple hops and
17 translations along the way.

18 Q. Can node 517 communicate with the remote?

19 A. I believe as described in the patent, it's
20 a one-way path from the remote control to the
21 terminal unit and to the node, although I'm not sure
22 the patent precludes that -- actually, I can't
23 answer that without taking another look at the
24 patent.

25 Q. What is a hop on a network?

1 A. A path on one medium between two nodes on a
2 network.

3 Q. What is a network?

4 A. A network is a -- Let me check first, if I
5 can, to make sure that it's not a term that I
6 construed. Because if it is, I want to conform to
7 that. I don't think so, but if I did, I would like
8 to start there and then go. No. Speech recognition,
9 set-top box, wireline node, partitioning.

10 A network is a number of nodes, some of
11 which can be endpoints connected to each other in
12 communication.

13 Q. What's an endpoint?

14 A. An endpoint would be a node that has only
15 one path into it.

16 Q. What is a node on a network?

17 A. A node is an entity that receives messages
18 from the network and can put messages on the
19 network. Typically we draw a network as a bunch of
20 lines with dots where those lines connect. The
21 nodes are the dots.

22 MR. BELL: Why don't we take a quick
23 break.

24 THE WITNESS: Okay.

25

1 (Recess at 10:23 a.m.,
2 resumed at 10:33 a.m.)

3 BY MR. BELL:

4 Q. You previously mentioned the process by
5 which your declaration was drafted. Can you
6 describe that for me.

7 A. Sure. As with most of these, I would say
8 it's a collaborative process that starts with
9 reviewing art. I never have a case where somebody
10 throws a bunch of art at me and says, Hey, this is
11 all cool. You agree on it, right?

12 There's always a -- sometimes I find
13 art; sometimes I'm given art. I have to evaluate
14 that art. I have to figure out how I feel about
15 that art, how I think that art would be known to
16 someone of skill in the art. Something that I'm
17 supposed to know more than the attorneys because I
18 practice.

19 So come up with a set of art that I am
20 comfortable going with, stating whether it's
21 obviousness or anticipation. And then when it comes
22 to actually creating documents, I write some parts.

23 Typically the attorneys write other
24 parts. The attorneys generally own the document.
25 I don't like Microsoft Word, so I don't like using

1 it. And I've never been able to get it to figure
2 out how to number the paragraphs. So I pass that
3 off to them, and they do the formatting and worry
4 about the tables and stuff.

5 There's a fair amount of back-and-forth
6 on the document, no matter who wrote it, such that
7 I've gone through and I have read it multiple times.
8 I've made changes where I want changes to be made.
9 And I end up with something that I think completely
10 reflects my opinion.

11 So although I did not necessarily write
12 every word in this -- and I can't tell you which
13 words I wrote and which words I didn't -- these
14 documents reflect my opinion. And that is why I
15 signed them under penalty of perjury at the end,
16 which I take fairly seriously.

17 Q. Since you were sworn in this morning, did
18 you discuss anything related to this case with
19 anyone during the breaks?

20 A. No, of course not. I'm not allowed to.
21 Except possibly lunchtime.

22 MR. BELL: Jim, do you want to waive the
23 signature requirement on the record? We can do it
24 instead of having it . . .

25 MR. DAY: Are you done?

1 MR. BELL: We're done.

2 MR. DAY: We would like to review and
3 sign.

4 MR. BELL: Okay.

5 MR. DAY: Great.

6 MR. BELL: Okay.

7 MR. DAY: I don't have any questions.

8 (Deposition concluded at 10:36 a.m.)

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1 CERTIFICATE OF REPORTER

2

3 I, Kimberly A. Smith, Certified Realtime
4 Reporter, Certified Realtime Captioner, Registered
5 Diplomat Reporter, Realtime Systems Administrator,
6 and Notary Public in and for the Commonwealth of
7 Massachusetts, the officer before whom the
8 proceedings were taken, hereby certify that the
9 foregoing transcript is a true and accurate record
10 of these proceedings; that said proceedings were
11 taken in stenotype by me on the 28th day of August,
12 2018, commencing at 9:03 a.m. and ending at
13 10:36 a.m.

14 I further certify that present on behalf of
15 Petitioner was James L. Day, Esquire, of Farella
16 Braun + Martel LLP; and on behalf of Patent Owner
17 were Cory C. Bell, Esquire and Joshua L. Goldberg,
18 Esquire, of Finnegan, Henderson, Farabow, Garrett &
19 Dunner, LLP.

20 I further certify that I am not related to, nor
21 associated with any of the parties or their
22 attorneys, nor do I have any disqualifying interest,
23 personal or financial, in the actions within.

24

25

August 28, 2018

37

1 Signed this 29th day of August, 2018, at Suffolk
2 County, Massachusetts.

3 
4

5 KIMBERLY A. SMITH, CRR, CRC, RDR
6

7 My commission expires: November 20, 2020
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25

1 ACKNOWLEDGMENT OF DEPONENT

2

3 I, _____, do hereby
4 acknowledge that I have read and examined the
5 foregoing testimony, and the same is a true, correct
6 and complete transcription of the testimony given by
7 me, and any corrections appear on the attached Errata
8 Sheet signed by me.

9

10

11

(DATE)

(SIGNATURE)

12

13

NOTARIZATION (If Required)

14

15

State of _____

16

County of _____

17

18

Subscribed and sworn to (or affirmed) before me on

19

this _____ day of _____, 20____, by

20

_____, proved to me on the

21

basis of satisfactory evidence to be the person who

22

appeared before me.

23

24

Signature: _____

25

(Seal)

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