

In the Matter Of:
APPLE INC. V. FINTIV, INC.

IPR2023-00399

HENRY H. HOUH, PH.D.

February 02, 2024



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1 UNITED STATES PATENT AND TRADEMARK OFFICE

2 BEFORE THE PATENT TRIAL AND APPEAL BOARD

3 Case No. IPR2023-00399

4 - and -

5 Case No. IPR2023-00398

6 U.S. Patent No. 9,208,488

7 APPLE INC.,)
8)
9 Petitioner,)
10 v.)
11 FINTIV, INC.,)
12 Patent Owner.)

13
14 DEPOSITION OF HENRY H. HOUH, PH.D.

15 APPEARING REMOTELY

16 VIA ZOOM

17 Friday, February 2, 2024

18 10:10 a.m. to 4:24 p.m.

19
20
21 Reported by:

22 Dawn Mack-Boaden

23 Registered Professional Reporter; CSR# 153120

24 APPEARING REMOTELY FROM NORFOLK COUNTY, MA

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* No exhibits marked.

* Reference to previously marked exhibits only.

P-R-O-C-E-E-D-I-N-G-S

HENRY H. HOUH, a witness first having
been satisfactorily identified by the
production of his Massachusetts Driver's
License, was sworn and testified as follows:

DIRECT EXAMINATION

BY MR. GOLUB:

Q. Good morning, Dr. Houh.

A. Good morning.

Q. Where are you today?

A. I am in Lexington, Massachusetts, in my
home.

MR. GOLUB: Is anyone else having
trouble hearing Dr. Houh?

MR. GORYUNOV: A little bit.

(Off the record discussion.)

BY MR. GOLUB:

Q. Let me go back. Where are you today?

A. I am at my home in Lexington,
Massachusetts.

Q. Is anybody with you?

A. No.

1 Q. Do you have any chats or instant messaging
2 or e-mail open on your computer?

3 A. No, my desktop bar -- or I have the web
4 page that I started the deposition from. I can
5 close that.

6 Q. Do you have access to all of the exhibits
7 and the two IPRs from your desktop?

8 A. Yes, I do. I should anyway.

9 Q. Is there anything preventing you from
10 providing accurate answers today?

11 A. No.

12 Q. What did you do to prepare for today's
13 deposition?

14 A. I reviewed some of the documents in the
15 case and I spoke with the attorney -- an attorney.

16 Q. Did any of those documents refresh your
17 recollection about anything?

18 A. Well, I mean, I don't have a perfect
19 memory; so when I review a document, it does -- it
20 does refresh my memory about the document that I'm
21 reviewing.

22 Q. Did you review the prosecution history of
23 the '196 Patent and the '488 Patent in preparation?

24 A. Not in preparation for this deposition, no.

1 Q. Dr. Houh, both sides have agreed to a
2 combined deposition on both the '196 and '488
3 patents. Do you understand that?

4 A. Yes.

5 Q. Do -- the '196 and the '488 patents have a
6 common specification; right?

7 A. Yes, I believe that's true.

8 Q. And you prepared a supplemental declaration
9 in connection with both the '196 and the '488
10 patents; correct?

11 A. Yes.

12 Q. Now, the analyses in your supplemental
13 declarations for the two patents are the same except
14 that your declaration on the '488 Patent includes
15 comments relating to a hardware SIM card that are
16 not in your other declaration; is that right?

17 A. I mean, that sounds right. The -- the case
18 is not identical because there are -- I believe
19 there are cites to the patent specifications
20 themselves for the appropriate patents, but the
21 analysis would be the same except for the hardware
22 SIM card phrase or whatever the exact phrase is.

23 Q. In terms of chronology, the '488 Patent
24 comes first, and the '196 Patent is a continuation

1 of the '488 Patent; correct?

2 A. I don't remember off the top of my head.
3 I'd have to take a look at the -- oh, I've left my
4 printouts in my office. But I can take a look at
5 the files.

6 The '196 says it's a continuation of the
7 '488 Patent.

8 Q. So in terms of the prosecution history, the
9 '488 Patent comes first and then comes the
10 prosecution history of the '196 Patent; right?

11 A. Yeah; I believe that's right, yes.

12 Q. Okay. Now, when you prepared your
13 supplemental declaration, you reviewed both of those
14 file histories; correct?

15 A. At the time I did that, I -- I reviewed the
16 file histories.

17 Q. At the time you prepared your supplemental
18 declarations?

19 A. I may have -- I don't have a specific
20 recollection, but I may have reviewed part of it.

21 Q. Well, maybe it would be helpful if we just
22 pull up your -- one of your declarations. I'm going
23 to try and share my screen.

24 Any chance you can see my screen?

1 A. I can, yes.

2 Q. Okay. So I'm going to decrease the zoom.

3 So this is your declaration from the '196
4 Patent, and it's marked Exhibit 1021; correct?

5 A. This is from the '196 case -- the IPR
6 ending in 398.

7 Q. I'm sorry, I couldn't hear your answer.

8 A. This is from case number ending in 398 for
9 the '196 Patent, and it is marked Exhibit 1021.

10 Q. Okay. And this is your supplemental
11 declaration in the 398 IPR; correct?

12 A. Yes, that's right.

13 Q. Now, in Paragraph 4, it says "In the
14 preparation of this supplemental declaration, I have
15 reviewed..." and it lists a bunch of documents.

16 Do you see that?

17 A. Yes.

18 Q. And one of them is the prosecution history
19 of the '196 Patent; correct?

20 A. Yes.

21 Q. So you reviewed the prosecution of the '196
22 Patent at the time you prepared this supplemental
23 declaration?

24 A. At the time I prepared, I had reviewed the

1 -- portions of the prosecution history, as I said
2 earlier.

3 Q. Did you do that as part of your preparation
4 of the supplemental declaration?

5 A. I'm -- I'm not sure what you mean by that.

6 Q. Well, do you see in the beginning of
7 Paragraph 4 is the phrase, "In preparation of this
8 supplemental declaration, I have reviewed"?

9 A. Yes.

10 Q. What do -- what do you mean when you say
11 that you do this in the preparation of this
12 supplemental declaration?

13 A. It means that what -- when I prepared this,
14 that I have reviewed these documents because I
15 consider things from the various references in
16 preparation of this particular document.

17 Q. So if you had reviewed the file history of
18 the '196 Patent when you prepared your original
19 declaration but you hadn't looked at it since that
20 time, would you still have written Paragraph 4 the
21 same way?

22 A. I believe that I took all of this under
23 consideration. I'm not sure how -- how differently
24 I'd write it; but that's -- it is what it says, and

1 I did review portions of the prosecution history.

2 Q. Did you do that in the preparation of the
3 supplemental declaration, as you swore under oath
4 that you did?

5 A. I did --

6 MR. GORYUNOV: Object to form.

7 THE WITNESS: I did say this language in
8 Paragraph 4, and I stand -- I stand by that.

9 BY MR. GOLUB:

10 Q. Is it true?

11 A. It is true.

12 Q. Do you recall on what date you last
13 reviewed the prosecution history of the '196 Patent?

14 A. Not off the top of my head.

15 Q. Do you recall what month it was in?

16 A. Again, as I said, I don't have a specific
17 recollection; but the statement is it true that I
18 did review, in preparation of this supplemental
19 declaration, these documents.

20 Q. Do you remember that I took your deposition
21 in the case previously?

22 A. Vaguely, yes.

23 Q. Since the time of that deposition, have you
24 reviewed the prosecution history of the '196 Patent?

1 A. I've looked at a lot of prosecution
2 histories for a lot of different reasons. I work on
3 a lot of different cases. So I have memories of
4 reviewing prosecution histories.

5 I don't recall whether -- I don't recall
6 exactly when we last had a deposition either. So
7 it's hard to place all these things in the right
8 timeframe.

9 Q. So sitting here today, you can't say one
10 way or another if you reviewed the prosecution
11 history of the '196 Patent since your last
12 deposition in this matter?

13 MR. GORYUNOV: Objection; form.

14 THE WITNESS: I specifically don't
15 remember reviewing these specific -- this
16 specific prosecution history, but I have
17 reviewed a number of prosecution histories
18 and taking a quick look through some in the
19 last few weeks.

20 So, again, I do a lot of cases. I --
21 I don't have specific memories of the exact
22 documents that I -- I look at sometimes
23 because I review a lot of different
24 documents for a lot of different cases.

1 MR. GOLUB: Dr. Houh, I object to that
2 answer as nonresponsive.

3 I am going to ask the court reporter to
4 read it back and ask you to provide a
5 responsive answer.

6 Can you please read back the question.

7 THE STENOGRAPHER: Yes; one moment.

8
9 (The question was read back as follows:
10 "Sitting here today, you can't say one way
11 or another if you reviewed the prosecution
12 history of the 196 Patent since your last
13 deposition in this matter?")
14

15 THE WITNESS: I -- as I said, I don't --
16 I don't know exactly what date we last had a
17 deposition in this matter.

18 I reviewed a lot of prosecution
19 histories in -- in the past few months, and
20 I don't remember if this deposition was in
21 the past few months or even that recent.

22 BY MR. GOLUB:

23 Q. Dr. Houh, about how many prosecution
24 histories have you reviewed?

1 A. I have a vague memory of reviewing this
2 particular file history because I don't remember
3 every file that I've looked at and every prosecution
4 history that I've looked at because I look at a lot
5 of different ones. I do a lot of different cases.

6 And so what I said was I didn't have a
7 specific memory of when the last time I would have
8 looked at this one is because the -- I do a lot of
9 different cases. So -- and I don't even know when
10 the last deposition was for this case off the top of
11 my head. I don't remember that date.

12 Q. How many cases are you working on at the
13 moment?

14 MR. GORYUNOV: Objection; form,
15 foundation, relevance.

16 THE WITNESS: Well, at this very moment,
17 I'm just working on this case right now.

18 BY MR. GOLUB:

19 Q. In your last answer, didn't you mention
20 that you were working on a lot of cases?

21 A. Yeah; right now, I'm attending this
22 deposition. So I'm only -- I'm only working on one
23 thing -- I'm only working on one thing right now.

24 Q. Did you mention, in response to one of my

1 questions, that you were working on a lot of cases
2 right now? What did you mean by that?

3 A. Well, I mean, at present, I have a lot of
4 different cases open. But at this very moment, I'm
5 only attending this deposition.

6 Q. How many cases do you have open at the
7 moment?

8 MR. GORYUNOV: Objection; form,
9 foundation, relevance.

10 THE WITNESS: I don't remember -- I
11 don't know an exact number; but probably
12 dozens or more.

13 BY MR. GOLUB:

14 Q. So about how many file histories have you
15 reviewed in the last two months?

16 A. I wouldn't know an exact number there; but
17 maybe, you know, half a dozen or more.

18 Q. When you review a prosecution history, can
19 you tell me what your methodology is?

20 A. There are several. I often focus on the
21 office actions and the office action replies. And
22 if there's a reason to look at IBSSs, review that,
23 but -- but I focus in on -- on office actions and
24 office action replies and sometimes interview

1 summaries and/or the notice of allowance.

2 So those are the kind of things that I
3 focus on when I review a prosecution history.

4 Q. Do you read the prosecution history from
5 cover to cover?

6 A. I don't do that. I mean, there's a lot
7 of -- I don't do that, no.

8 Q. The prosecution history often includes many
9 prior art references, does it not?

10 A. Sometimes they do. Sometimes they don't.

11 Q. How about the '196 file history; does it
12 include a lot of prior art?

13 A. I don't remember from memory.

14 Q. Well, would you like to look at it -- it's
15 Exhibit 1002 -- and then answer my question?

16 A. I'm not sure which document you -- I
17 haven't -- I see it in the form that -- I don't know
18 if that's what you're referring to.

19 Q. Dr. Houh, how many pages is the file
20 history for the '196 Patent?

21 A. I have 1,641 pages.

22 Q. And how many of those pages, approximately,
23 did you read?

24 A. Do you want me to try to calculate the

1 exact number or are you looking for an approximate
2 number?

3 Q. If you can calculate a number, that would
4 be great.

5 A. (Pause: 10:28 a.m. to 10:33 a.m.)

6 I can't remember the exact number, but my
7 best estimate is around two --

8 THE STENOGRAPHER: Did you, I'm sorry,
9 how many pages? I couldn't hear you.

10 THE WITNESS: Two to four dozen pages.

11 MR. GOLUB: I can't hear you either.

12 THE STENOGRAPHER: Yeah, it's really
13 bad. I'm not getting this.

14 THE WITNESS: I can try to switch to my
15 phone, if we take a minute. I don't know
16 what's wrong. I just did a deposition
17 yesterday, and it was fine.

18 MR. THEISS: Can we go off the record
19 while Dr. Houh is sorting out his audio
20 issue?

21
22 (Brief recess was taken in the proceedings.)

23
24 THE WITNESS: Can you hear me?

1 MR. GORYUNOV: That's much, much, much
2 better.

3 MR. GOLUB: Let's go back on the record
4 then.

5 THE STENOGRAPHER: Yes, we're back on.

6 MR. GOLUB: Thank you.

7 BY MR. GOLUB:

8 Q. Dr. Houh, my last question was
9 approximately how many pages of the file history of
10 the '196 Patent did you read?

11 A. So I can't give you an exact number, but my
12 best estimate is around two to four dozen pages.

13 Q. So somewhere between 24 and 48 pages?

14 A. Yeah, that's an estimate.

15 Q. Can I ask you to make the same estimate
16 with respect to the prosecution history of the '488
17 Patent?

18 A. (Pause: 10:39 a.m. to 10:44 a.m.)

19 I can only give you an estimate. The
20 number is probably about the same range.

21 I just want to be clear, though, you know,
22 the specification is in the -- is filed in the
23 prosecution history, but I don't read that version.
24 I read the -- I read the -- the issued patent.

1 So, you know, I'm reading -- some materials
2 are duplicative, but not from the prosecution
3 history. But with respect to the office actions and
4 replies and various amendments and things like that,
5 it's probably a couple dozen to four dozen pages,
6 around that range.

7 Q. Dr. Houh, do you have the file history for
8 the '488 Patent up?

9 It was divided into four parts in the
10 exhibits, and I want to ask you some questions about
11 Part 1.

12 A. Okay. Yes. I was looking -- I looked
13 through those four parts, but I will get -- I have
14 Part 1 open.

15 MR. GORYUNOV: Counsel, I'm sorry, you
16 dropped. You're talking about the '488;
17 correct?

18 MR. GOLUB: Yes.

19 BY MR. GOLUB:

20 Q. So I am talking about Part 1 of
21 Exhibit 1002 in the 399 IPR.

22 Dr. Houh, do you recall how many --

23 A. I got that.

24 Q. I'm sorry, I didn't mean to interrupt you.

1 A. I'm sorry. I -- I just was saying that I
2 have it open.

3 Q. Thank you. Dr. Houh, do you recall how
4 many independent claims were filed with the '488
5 Patent?

6 A. No, not from memory.

7 Q. Can you go to page 57.

8 A. Okay.

9 Q. Now, pages 57 to 69 reflect the claims
10 originally filed in the '488 Patent; correct?

11 A. I don't have reason to disagree with that.

12 Q. The original claims that were filed, there
13 were three independent claims, Claims 1, 13, and 19;
14 correct?

15 A. Yeah, I believe that's right.

16 Q. Dr. Houh, are you familiar with the
17 concepts of genus and species as they're used in
18 patent law?

19 A. You know, I mean, I've heard that generally
20 before. I'm not sure in what context you're asking
21 me about specifically.

22 Q. Well, what's your understanding of the term
23 species in this context?

24 A. Well, I'm not a lawyer; and, actually, I

1 can never remember which is a superset of the other
2 one. I'd -- I'd have to usually read the
3 explanation or ask someone or look it up, generally.

4 Q. Did you understand that Claims 1, 13, and
5 19 were directed to distinct species when you
6 reviewed the prosecution history?

7 A. I'm not sure I'd even look at that from an
8 eye of the question you're -- you're asking about.
9 So I -- I don't -- I'm not an attorney. I -- and I
10 focus on the office actions and the replies and the
11 -- and the amendments and things like that.

12 Q. Okay. Let's go to the first office action,
13 which I believe is on Part 3, at page 1214.

14 MR. GORYUNOV: And this is still the
15 '488 Patent; correct?

16 MR. GOLUB: That's correct.

17 MR. GORYUNOV: Thank you, Counsel.

18 THE WITNESS: Okay. I'm on page 1214.

19 BY MR. GOLUB:

20 Q. Page 1214 is the beginning of an office
21 action dated March 20th, 2014; is that correct?

22 A. Yes.

23 Q. And this is the first office action in the
24 file history of the '488 Patent; correct?

1 A. That may be the case. I --

2
3 (Reporter technical difficulty.

4 Break from 10:52 a.m. to 10:54 a.m. was
5 taken in the proceedings.)

6
7 THE STENOGRAPHER: I fell off Zoom. I'm
8 back, but I see you kept going. I can let
9 you know where I stopped.

10 MR. GOLUB: Can you please read back the
11 last question.

12
13 (The testimony was read back as follows:
14 Question: "And this is the first office
15 action in the file history of the '488
16 Patent; correct?")

17 Answer: "That may be the case. I --")

18
19 THE WITNESS: And then I think I added,
20 but I can't tell just by looking at this
21 page.

22 BY MR. GOLUB:

23 Q. Okay. Let's look at the next --

24 A. That's what I recall saying.

1 Q. Let's look at the next page, which is page
2 1215 of the exhibit.

3 And my question is: On that page, do you
4 see an X next to the number nine?

5 A. Yes, I see that.

6 Q. And can you read the language to the right
7 of that X?

8 A. It says, "Claims 1 through 20 are subject
9 to restriction and/or election requirement."

10 Q. Do you have an understanding of what
11 restriction and/or election requirement means?

12 A. So I'm not an attorney, but kind of my
13 high-level understanding is that there's some issue
14 with them where they may -- they may be claiming
15 somehow different inventions that might be subject
16 to additional or -- or -- or, again, I don't recall
17 exactly, but I vaguely recall some of these issues;
18 that maybe they're directed to different inventions
19 so those patent examiners -- then you have to pick
20 some subset of the claims to go forward with in
21 prosecution, or something like that.

22 So, again, I'm not a patent lawyer. But I
23 think I vaguely recall some of this from -- from
24 working on other cases and managing the patent

1 portfolio before.

2 Q. Can you turn to the next page of the
3 exhibit. This is page 1216.

4 A. Okay.

5 Q. The first paragraph begins with a passage
6 that says, "This application contains claims
7 directed to the following patentably distinct
8 species."

9 Do you see that?

10 A. Yes.

11 Q. Do you have an understanding of what the
12 phrase "patentably distinct species" means?

13 A. I mean, what it's saying here is -- is kind
14 of like what I've just said, which is it may be
15 directed to different inventions that the patent
16 office wants you to select some subset of the claims
17 to go in regard with in prosecution, and this
18 particular restriction action separates them out
19 into Claims 1 through 12, 13 through 18, and 19 to
20 20.

21 Q. Dr. Houh, do you recall which claims the
22 applicant elected to prosecute?

23 A. Not from memory. But I can look through
24 the file history.

1 Q. Let's go to page 1232. Let me know when
2 you're there.

3 A. Okay. I'm on 1232.

4 Q. What's the title of this document?

5 A. It says: Response to Restriction
6 Requirement.

7 Q. And on the next page -- on the next page,
8 do you see which species and claims the applicant
9 elected?

10 A. They elected to go forward with Claims 1
11 through 12, Species A.

12 Q. And at the time they made that election,
13 didn't they also make some amendments to the claims?

14 A. That's consistent with what I'm seeing.

15 Q. Let's turn to page 1235.

16 A. Okay.

17 Q. What's that document titled?

18 A. It says: Preliminary Amendment.

19 Q. And then on the next page, do you see a
20 listing of claims?

21 A. Page 1236 does start a listing of claims.

22 Q. And do you see Claim 1?

23 A. Yes.

24 Q. At the time of this preliminary amendment,

1 did Claim 1 recite an integration tier?

2 A. I don't see that in Claim 1 on this page.

3 Q. Do you know one way or another whether, at
4 the time of this preliminary amendment, the claims
5 included a recitation of the integration tier?

6 A. Well, I -- I don't see those words. I
7 don't see the phrase "integration tier" used in
8 Claim 1 on this page. Was that what you're asking?

9 Q. That's what I'm asking.

10 A. I mean, did I miss something? I don't -- I
11 don't think I see it.

12 Q. Do you remember what happened next in the
13 prosecution history?

14 A. Not from memory, no.

15 Q. Do you recall whether there was an office
16 action rejecting the claims?

17 Why don't we just turn to page 1258.

18 A. Okay.

19 Q. Do you recognize the office action that
20 starts on page 1258?

21 A. I mean, I've seen a lot of these office
22 action covers before. So I recognize the form, but
23 I -- I don't recall this one specifically. I
24 probably don't recall any of the ones specifically

1 that I've actually looked at covers to office
2 actions.

3 Q. In this office action, the examiner
4 rejected the claims over prior art, didn't he?

5 A. Claims 1 through 12 and 21 through 35 were
6 rejected under cross at least, as shown on page
7 1260.

8 Q. 1 through 12 and 21 through 35 were all of
9 the pending claims at the time; correct?

10 A. Well, 13 through 20 were withdrawn because
11 of the restriction action.

12 So I believe that those were all of the
13 pending claims at the time, 1 through 12 to 21
14 through 35.

15 Q. Do you recall how the applicant responded
16 to this prior art rejection?

17 A. Not from memory, no.

18 Q. Let's go to page 1409 of the exhibit.

19 A. Okay.

20 Q. What's the title of this document?

21 A. Amendment A and Response After Nonfinal
22 with 3-Months Extension of Time.

23 That's three-month extension of time.

24 Q. Do you recall whether or not this is the

1 response that the applicant filed to the first
2 office action?

3 A. You're asking me do I remember if this is
4 what again?

5 Q. Do you recognize this document, the one
6 that starts on page 1409?

7 A. I mean, I've looked at a lot of office
8 action replies before. I mean, the form looks
9 similar to other ones I've seen. I don't have a
10 specific recollection of this particular page.

11 That's not how I remember things. And
12 that's why I write reports and -- and, you know,
13 write -- write things into reports.

14 Q. Let's turn to the next page, page 1410.

15 A. Okay.

16 Q. Do you see -- do you see the phrase
17 "listing of claims"?

18 A. Yes.

19 Q. And under that, there's a listing of
20 Claim 1. That's the first claim that's listed.

21 Do you see that?

22 A. Yes.

23 Q. And there's some underlined language in
24 Claim 1 that's being added to the claim by the

1 applicant.

2 Is that your understanding?

3 A. That would be my understanding.

4 Q. Now, in connection with the response to the
5 first office action that we're looking at, did the
6 applicant amend the claims to recite an integration
7 tier?

8 A. I don't see the phrase "integration tier"
9 in any of the added language for Claim 1.

10 Q. So at this point in the prosecution
11 history, there's no integration tier recited in
12 Claim 1; correct?

13 A. Yeah, I -- I would say that's correct, up
14 to this point.

15 Q. Do you recall what happened next in the
16 prosecution history after the applicant filed a
17 response to the first office action?

18 A. Not from memory, no.

19 Q. Let's go to page 1456 of the exhibit.

20 A. Okay.

21 Q. Page 1456 is the first page of an office
22 action; correct?

23 A. It looks like it.

24 Q. And then on the next page, do you see a box

1 checked next to 2A that says, "This action is
2 final"?

3 A. I do see that.

4 Q. In the final office action -- excuse me.

5 Do you see that in the final office action,
6 the examiner rejected all of the claims again based
7 on prior art?

8 A. It looks like all the pending claims were
9 rejected.

10 Q. Do you recall what happened next in the
11 prosecution history?

12 A. Not from memory, no.

13 MR. GOLUB: Okay. I'd like to take a
14 five-minute break, if that's okay. If
15 somebody wants a longer break, that's fine
16 too, but how do people feel about coming
17 back at, say, 11:16?

18 MR. GORYUNOV: Henry, does that work for
19 you?

20 THE WITNESS: Yes; works for me.

21 MR. GOLUB: Okay. Let's go off the
22 record.

23
24 (Break from 11:11 a.m. to 11:16 a.m. was

1 taken in the proceedings.)

2

3 BY MR. GOLUB:

4 Q. Dr. Houh, we were talking before the break
5 about the final rejection in the '488 Patent file
6 history, and do you recall -- do you recall that the
7 applicant filed a response to that rejection?

8 A. I mean, not from memory, but I -- I assume
9 they did.

10 Q. Can we go to page 1746 of Exhibit 1002 in
11 the 398 -- I'm sorry, in the 399 IPR.

12 A. Is that the '488 Patent?

13 Q. Yes. For the '488 Patent, for the 399 IPR.

14 A. Page 17 what?

15 Q. 1746. Let me know when you are there.

16 Okay?

17 A. Okay. I'm there.

18 Q. Do you recognize this document?

19 A. Again, I -- I see a lot of documents that
20 look like this. I don't necessarily have specific
21 recollections of specific documents.

22 Q. Looking at the portion of the document
23 right after "Dear Sir," it starts out, "In response
24 to the final office action."

1 Do you see that?

2 A. Yes.

3 Q. And so this document is the response that
4 the applicant filed to the final rejection we just
5 talked about; correct?

6 MR. GORYUNOV: Objection; form.

7 THE WITNESS: I mean, this appears to be
8 the responsive document with amendments and
9 remarks and whatnot. I think there were
10 other filed documents on the same day with a
11 different cover sheet that I saw.

12 BY MR. GOLUB:

13 Q. At the time of this amendment, Amendment B,
14 the one that was responsive to the final office
15 action, Claim 1 was amended, wasn't it?

16 A. I do see that.

17 Q. Can you turn to page 1748 of the exhibit,
18 if you're not there already.

19 A. Okay.

20 Q. And do you see that one of the amendments
21 to Claim 1 was the recitation of an integration
22 tier? Do you see that?

23 A. I do.

24 Q. The recitation of the integration tier

1 that's shown in the response to the final office
2 action is, verbatim, the recitation of the
3 integration tier in the issued '488 Patent; correct?

4 MR. GORYUNOV: Objection; form.

5 THE WITNESS: That -- that integration
6 tier element that's set apart from the other
7 ones that -- that does appear to be the same
8 language as issued in the '488 Patent, and
9 it's cited at lines -- Column 23 of the '488
10 Patent, from lines 29 through 36.

11 BY MR. GOLUB:

12 Q. Upon that the applicant amended the claims
13 to include the integration tier, the applicant also
14 submitted some remarks to the patent office; isn't
15 that right?

16 A. Yes, that's right.

17 Q. And those remarks begin on page 1760 of the
18 exhibit. Do you see that?

19 A. Yes.

20 Q. And on page 17 -- I'm sorry.

21 On page 1760, there's a heading: 35 USC,
22 Section 1 of 2, Rejections. Do you see that?

23 A. Yes.

24 Q. And under that heading, the applicant is

1 responding to the prior art rejection; correct?

2 A. Well, I think the comments kind of support
3 the argument as to why, as amended, the applicant
4 felt that there -- that the claims did get around
5 the -- the prior art cited in the previous
6 rejection.

7 Q. Can we go to the next page of the exhibit,
8 page 1761.

9 A. Okay.

10 Q. Can you read into the record the paragraph
11 that starts out, "By this paper"?

12 A. "By this paper, the claims have all been
13 amended to clarify some of the system structure for
14 facilitating the management of mobile wallet
15 transactions. In particular, the claims have all
16 been amended to clarify that the claimed systems and
17 embodiments are limited to embodiments in which the
18 operating system is configured with: one or more
19 processors, system" --

20 Q. That was as far as I wanted you to --

21 A. Okay.

22 Q. I just wanted you to read up to the list.
23 I'm sorry.

24 And below that quote are several new

1 limitations that are being included in the claim,
2 and one of those is the integration tier; correct?

3 A. Well, I mean, one of them is the
4 integration tier, and this is not the complete
5 claim, by the way. This is at least some of the new
6 elements. I think -- I think the following four
7 elements are also newly added.

8 I mean, it's hard for me to have both up at
9 the same time, but I just went to look back and it
10 appears that it's a notification service extension,
11 a payment handler, a security services engine, and a
12 rules engine were all added to Claim 1. And
13 there -- there actually might be -- oh, okay.

14 So it's -- services -- service connector
15 that are -- they are kind of hidden. I think it was
16 tabbed, but it's embedded in the notification
17 service engine.

18 So the -- the bulk of what language is
19 there -- the only -- what's added in the amendment,
20 except for one or -- one or more processors and
21 system memory, I think, which was -- hold on -- oh,
22 right.

23 So from the language in -- in that
24 paragraph, from "an integration tier" all the way

1 down through the end of "a rules engine," all those
2 elements were newly added in the amendment.

3 Q. And as a result of those newly added
4 amendments, the claim got narrower; correct?

5 A. I would agree, yes.

6 Q. And then focusing on the sentence before
7 the one or more processors, it says, "In particular,
8 the claims have all been amended to clarify that the
9 claims systems and embodiments are limited to
10 embodiments in which the operating is configured
11 with..." and then it lists the newly added
12 elements.

13 My question is: Wasn't the applicant
14 explaining, as a result of the amendments, the
15 claims were limited to certain embodiments?

16 A. I mean, the applicant is saying right here,
17 "The claims have all been amended to clarify that
18 the claim systems and embodiments are limited to
19 embodiments in which the operating system is
20 configured with," and the following items, the bulk
21 of which were newly added in the amendment.

22 Q. So the applicant is clarifying that the
23 claim doesn't cover all embodiments, it's limited to
24 embodiments in which the operating system is

1 configured with the listed elements; correct?

2 A. I mean, I understand the argument they
3 made, but the -- the claim is issued via the
4 computing system, and now they're -- they're saying
5 that this is an operating system configured with
6 these things.

7 So -- so we're using slightly different
8 words from the preamble here, but what they're
9 claiming is that the computer -- the operating
10 system is configured with -- with these things, and
11 it's only limited to embodiments in which the
12 operating system is so configured.

13 Q. So it doesn't include embodiments where the
14 operating system is not so configured; correct?

15 A. You've got a double negative in that
16 question. Could you repeat it, please.

17 Q. The applicant amended the claims to clarify
18 that it no longer covered embodiments which lacked
19 an operating system that was configured with all of
20 the limitations that are specified here?

21 A. Yeah, I mean, what they're saying is that
22 the claim has been amended to clarify that the claim
23 system and embodiments are limited to embodiments in
24 which the operating system is configured with these

1 following things, and there are also further things
2 they added to the amendment, which are not listed
3 here, which still relate to Claim 1.

4 Q. Isn't this language of the applicant
5 implying that the new claims, as they've been
6 amended, claim some embodiments but not all
7 embodiments?

8 MR. GORYUNOV: Objection; form.

9 THE WITNESS: I mean, it's -- they're
10 arguing what they're arguing. I'm not
11 disputing the words here, but it's -- they
12 are saying that it's limited to embodiments
13 in which the operating system is configured
14 with. And they use the language of the
15 claim.

16 So the claims are only covering the
17 embodiments in which the language -- the --
18 I'm -- I mean, the claims are -- the claims
19 that they're arguing are the claims that
20 they're arguing here, and these are part of
21 the claims that are arguing.

22 So I think the claims are only covering
23 what -- what they say they cover, and this
24 is being described as the embodiments in

1 which the operating system is configured
2 with, and they use basically the same
3 language as -- as -- as in the amendment and
4 then in Claim 1.

5 So I'm -- I'm not sure if you're making
6 some legal distinction here that I -- that
7 this is what they're saying.

8 BY MR. GOLUB:

9 Q. Do you understand that a specification of a
10 patent can disclose multiple embodiments?

11 A. Yes.

12 Q. As a result of the amendment that we've
13 been talking about, do you have an opinion about
14 whether amended Claim 1 covers everything single
15 embodiment disclosed in the specification of the
16 '488 Patent?

17 A. I mean, you'd have to give me time to look
18 through the '488 Patent.

19 Q. So sitting here today, you don't have an
20 opinion about whether or not the claim, as it was
21 amended in response to the final rejection, covers
22 every embodiment in the claim?

23 MR. GORYUNOV: Objection.

24 BY MR. GOLUB:

1 Q. In the specification?

2 MR. GORYUNOV: Objection; form,
3 foundation.

4 THE WITNESS: So I don't have the '488
5 specs memorized. I don't know every -- from
6 memory, every embodiment it's discussing.

7 So without some further analysis, I -- I
8 can't answer the question you asked off the
9 top of my head.

10 BY MR. GOLUB:

11 Q. You interpreted the claims of the '488
12 Patent; correct?

13 A. I provide some rebuttal to -- to -- I think
14 it was Dr. Shamus' claim construction opinions that
15 he set forth, and -- and that was pretty much the
16 bulk or almost the entirety of my supplemental
17 declaration.

18 Q. As part of your work on this case, didn't
19 you interpret the claims of the '488 Patent? Didn't
20 you need to do that in order to --

21 MR. GORYUNOV: Objection.

22 BY MR. GOLUB:

23 Q. -- reach your conclusions?

24 MR. GORYUNOV: Objection; form.

1 THE WITNESS: So I think I did provide,
2 in my opening declaration, a proposed claim
3 instruction or specifically discussed the
4 phrase and discuss what a POSITA would
5 understand that phrase to mean.

6 But -- but I couldn't anticipate all the
7 disputes that may arise over the -- the
8 plain and ordinary meaning of words as
9 interpreted -- of the claim terms as
10 interpreted by a POSITA.

11 And so -- so I do review the patent
12 specification, all those things, and I
13 consider what the plain and ordinary meaning
14 of various claim terms are in the context of
15 that. And that's how I interpreted a number
16 of those claim terms for the purpose of my
17 initial analysis.

18 And then Dr. Shamus has now proposed his
19 understanding of some claim terms that I
20 have now responded to in my supplemental
21 declaration.

22 And so I -- I do -- I do interpret the
23 plain -- I do try to -- I do -- part of my
24 analysis includes, from the point of view of

1 a POSITA in the case, what would the POSITA
2 understand these meanings -- the claim terms
3 to -- to cover in the light of the
4 specification and prosecution history. So I
5 do consider that.

6 BY MR. GOLUB:

7 Q. In this case, when you were doing that
8 analysis, did you assume that the claims needed to
9 cover every embodiment disclosed in the
10 specification?

11 A. I -- I don't understand that, generally. I
12 don't think that's -- that has to be the case. I
13 think -- my understanding -- and, again, I'm not a
14 patent lawyer -- is that -- that if it's a preferred
15 embodiment, it -- it generally would be expected to
16 cover a preferred embodiment, but not necessarily
17 every other embodiment described in the
18 specification.

19 And, again, that's -- I don't know if I've
20 opined specifically to that. That's my high-level
21 understanding. I don't know if -- I don't recall
22 specifically, you know, discussing this particular
23 issue in my supplemental declaration or having to
24 respond to any assertions by Dr. Shamus with respect

1 to this issue.

2 Q. It's your understanding that the claim in
3 the '488 Patent need not cover every single
4 embodiment disclosed in the specification?

5 A. Again, I'm not a lawyer. At a high level,
6 that's kind of my understanding.

7 Q. Okay. I'd like to change from the '488
8 file history to the '196 file history that comes
9 next. And so I'd like to turn to Part 1 of
10 Exhibit 1002 in the 398 IPR.

11 A. Did you say a particular page number or am
12 I still waiting for that?

13 Q. I didn't. But the page number that I would
14 like to turn to is 57.

15 A. I don't have -- I mean, I'm on page 57. I
16 hope they match your pages.

17 Q. Do you see at the bottom there's a footer
18 that will say "page of 1640"?

19 A. The version of the file history I have
20 doesn't appear to have -- have those stamps. I saw
21 them in the '488 parts that I had, but I have a file
22 labeled AAPL-1002 196 File History, 14928521.

23 And I don't see those -- that marking in my
24 version. And if you want to provide me one that was

1 filed, I may -- I may have an earlier version before
2 it was filed, so -- that I'm looking at now. So if
3 you want to send that so we're looking at the exact
4 same version, that would be great.

5 Q. I could just share my screen. Maybe.

6 MR. GORYUNOV: The test of technology is
7 about to come.

8 BY MR. GOLUB:

9 Q. Dr. Houh, can you see my screen?

10 A. I can, but I don't see the stamp at the
11 bottom that you were talking about.

12 Q. Can you see it now?

13 A. Now I do, yes.

14 Q. So this is -- yeah. So this is page 57 of
15 Exhibit 1002 in the 398 IPR. And this page is the
16 beginning of the claims as they were originally
17 filed for the '196 Patent.

18 Can you see that?

19 A. Yes, I see that.

20 Q. And originally filed Claim 1 included an
21 integration tier; correct?

22 A. I do see that, plus all the other added
23 elements at the end of the '488 prosecution, going
24 down to the rules engine. Although I haven't

1 compared them to see if it's identical to the -- to
2 the previous claims.

3 Q. The integration tier recited in Claim 1 of
4 the application for the '196 Patent is just from the
5 integration tier recited in the '488 Patent.

6 Do you agree with that?

7 A. One of the words in your question partially
8 dropped out, and I think it was an important word.
9 So if you could repeat -- repeat the question,
10 please.

11 Q. We are looking at Claim 1 as filed in the
12 application for the '196 Patent, and my question is:
13 In that version of Claim 1, the recitation of the
14 integration tier is worded differently from the way
15 the integration tier was worded in Claim 1 of the
16 '488 Patent.

17 And my question is: Do you agree with
18 that?

19 A. I do see that it's slightly different.

20 Q. How is it different?

21 A. Well, at least one difference I saw was
22 that the -- it's -- the '488 Patent recites at
23 Column 23, line 31, 32, 33-ish, "For interfacing
24 with a mobile wallet application installed on a

1 hardware SIM card, as well as with" -- and this one,
2 as filed on page 57 of the prosecution history file
3 we're looking at, it's "for interfacing with a
4 mobile wallet application and a plurality of
5 different device types."

6 So it's lacking the requirement that an --
7 what's being interfaced with is a mobile wallet
8 application installed on a hardware SIM card, and --
9 and they both go on, but that's -- that's at least
10 one of the differences.

11 Q. Do you see any other differences that are
12 differences in substance?

13 A. Well, there's some differences in the
14 notification services engine element.

15 Q. I was -- I should have -- I meant to limit
16 my question to the integration tier.

17 Did you see any other differences in the
18 language of the integration tier?

19 A. I mean, not when I was looking at it just
20 now. It was -- it was really with respect to that
21 hardware SIM -- the application installed on the
22 hardware SIM card.

23 And the language after that is slightly
24 different, but I think it includes the same

1 different device types.

2 Q. Dr. Houh, I want to ask you some questions
3 on Part 2 of this exhibit in the 398 {sic} patent,
4 and I think -- do you have Part 2 in the same -- in
5 a format where the footers are numbered?

6 A. I don't think -- well, let me look in my
7 files. I opened one that everything was in one file
8 that was 1,641 pages. I -- I don't -- I'd have to
9 look to see if I have this in parts.

10 Q. I'm going to try and send it to you on the
11 chat, but it's big and I don't know whether it's
12 going to come through.

13 A. Oh, wait. Okay. I do -- I do find one --
14 I do see one where I have two parts. It's in a
15 different directory. But do you want me to pull
16 Part 2 of 2?

17 Q. Yes, please.

18 A. Okay. And this one does have the stamps at
19 the bottom.

20 Q. Can you go to page 1441 of that exhibit.

21 A. Okay.

22 Q. Do you recognize this document, the
23 document that starts on page 1441?

24 A. You know, I've seen a lot of documents in

1 this form. So I don't have specific memories of the
2 particular versions. So I -- I don't know -- I
3 mean, I generally recognize the form.

4 Q. Isn't this the first office action in the
5 '196 Patent?

6 A. I mean, that -- that appears correct with
7 -- without further -- you know, on its face.

8 Q. The substance of their rejection starts on
9 page 1443 of the exhibit. Can you turn to that.

10 A. Okay.

11 Q. Do you see the reference to double
12 patenting there?

13 A. Yes.

14 Q. What's your understanding of double
15 patenting?

16 A. Well, I'm not a lawyer; but I understand
17 that there's -- it's generally the case that you
18 can't claim an invention that's not patently --
19 patentably distinct from previous patents that you
20 have.

21 Again, I'm not a lawyer. That's -- that's
22 what I can recall.

23 Q. Do you recall how the applicant responded
24 to the double patenting rejection?

1 A. I mean, I don't remember. I mean, vaguely,
2 I -- maybe people, like, file a terminal disclaimer.
3 I don't know if that's what gets around. Again, I'm
4 not a lawyer, but I may have seen something like
5 that. I'm not sure if I'm remembering correctly or
6 not.

7 Q. Let's turn to page 1477.

8 A. Okay.

9 Q. I'm sorry, that's just the transmittal.

10 Let's turn to 1484.

11 A. Okay.

12 Q. This is the response to the office action
13 we just looked at; correct?

14 A. That appears correct, just looking at this
15 now.

16 Q. Are you still looking at it, Dr. Houh?

17 A. I mean, I thought I provided an answer. I
18 was waiting for another question.

19 Q. Okay. I'm sorry. Can we turn to page
20 1498, the remarks that go with this office action.

21 A. Okay.

22 Q. Do you see the heading: Obviousness-Type
23 Double Patenting Rejection?

24 A. Yes.

1 Q. And so the applicant is responding with a
2 terminal disclaimer; correct?

3 A. They say that they're submitting with this
4 terminal disclaimer.

5 Q. And they requested, based on that, that the
6 rejection be withdrawn; correct?

7 A. Yes.

8 Q. Do you recall what happened next in the
9 prosecution history?

10 A. Not from memory, no.

11 Q. Let's go to page 1507. Let me know when
12 you're there.

13 A. Okay.

14 Q. On 15 -- page 1507 is the next office
15 action in the prosecution history; correct?

16 A. I mean, I'd have to take a look at what's
17 intervening, but we didn't jump over that many
18 pages; so I have no reason to doubt that at the
19 moment.

20 Q. And in this next office action, the
21 examiner rejects the claims on a new ground;
22 correct?

23 A. I mean, I see -- I see additional claim
24 rejection that I didn't previously look at, but

1 sometimes -- I know a lot of things are repeated.
2 So I -- I mean, if you're referring to what's on
3 page 1509 and you're saying that, you know, appeared
4 for the first time here, but I'd have to take a look
5 through previous -- another look in the previous
6 office action.

7 Q. Well, we looked at the previous office
8 action a minute ago, and it was a double patenting
9 rejection; correct?

10 A. I think I looked at the page, but I didn't
11 look at all the rest of it. I don't know if that
12 was -- I don't remember if that was it, just looking
13 at that one page.

14 Q. Well, I'll represent to you that that was
15 it in the prior office action; it was just a double
16 patenting rejection.

17 A. Okay.

18 Q. In the office action that we're looking at
19 that's on page 1509, the Office rejects all of the
20 claims based on 35 USC, Section 101.

21 Do you see that?

22 A. Yes.

23 Q. Now, this is not a prior art rejection;
24 correct?

1 A. That's -- that's my understanding.

2 Q. What is your understanding of a rejection
3 under Section 101?

4 A. My understanding -- and I'm not a patent
5 lawyer; but my understanding is that these are
6 things that -- that are described here, like a law
7 of nature, a natural phenomenon, or an abstract
8 idea. Those types of things cannot be patented
9 under whatever this -- 101. And I understand that
10 there's some exceptions to this abstract idea
11 concept.

12 But -- but that's my understanding of
13 that -- that -- that these types of things, as
14 listed here, are -- are -- are not patentable. It's
15 not patentable subject matter.

16 Q. Do you recall how the applicant responded
17 to the 101 rejection?

18 A. Not off the top of my head.

19 Q. Let's go to page 1536 of the exhibit.

20 A. Okay.

21 Q. Now, starting on page 1536 is the response
22 to the office action we were discussing a second
23 ago, the one with the 101 rejection; correct?

24 A. I think that appears correct, just looking

1 at it right now.

2 Q. Do you recall that in the remarks in this
3 response, the applicant discussed the integration
4 tier?

5 A. I mean, I can look at it now. I don't -- I
6 don't remember everything I read.

7 Q. Can you turn to the remarks that start on
8 page 1549. Let me know when you're there.

9 A. Okay. I'm there.

10 Q. And in the middle of the page, there's a
11 section that starts, "35 USC, Section 101
12 rejections."

13 Do you see that?

14 A. Yes.

15 Q. And then if you turn to the next page, as
16 part of the 101 discussion, there's a paragraph --
17 the very first paragraph on the next page that
18 begins "The integration tier."

19 Do you see that?

20 A. Yes.

21 Q. Can you read into the record the first
22 paragraph?

23 A. "The integration tier is specially
24 configured to manage mobile wallet sessions with a

1 mobile device. The tier includes certain web
2 services communication mechanisms for interfacing
3 with a mobile wallet application and multiple
4 different device types over different communication
5 channels. The tier is also configured to receive
6 binary and text messages from a mobile device."

7 Q. So that paragraph has three sentences;
8 correct?

9 A. Yes.

10 Q. And all three of those sentences are
11 referring to the integration tier; correct?

12 A. I wouldn't dispute that.

13 Q. The second sentence says that the
14 integration tier includes certain web services
15 communication mechanisms.

16 Do you see that?

17 A. Well, you inserted a word that's not in the
18 second sentence. I don't know --

19 Q. What word --

20 A. -- if you were trying to do it verbatim.

21 Q. What word did I insert? Let me try it
22 again.

23 A. You inserted --

24 Q. The second sentence -- the second sentence

1 begins with the phrase "the tier includes certain
2 web services communications."

3 Do you see that?

4 A. Not exactly, no. It's not exactly as you
5 read it.

6 Q. How do you read it?

7 A. I read it as the words that are there. You
8 -- you changed one of the words in your latest
9 reading of it.

10 Q. Well, why don't you read the first phrase
11 out loud?

12 A. "The tier includes certain web services
13 communication mechanisms."

14 Q. The applicant there used the word
15 "includes"; correct?

16 A. I mean, I believe that that word is in the
17 claim as well at issue.

18 Q. And the applicant was referred to --

19 A. Actually, it doesn't --

20 Q. -- at this point -- I'm sorry. It's very
21 difficult because there's a delay.

22 Why don't you say what you were going to
23 say, and then I'll circle back with my next
24 question.

1 A. The issue -- the issued claim uses a
2 slightly different word, but it's -- I think it uses
3 the word "including," but this -- this phrase uses
4 the word "includes."

5 But that's -- that's -- I was just -- I
6 just wanted to -- I might have thought that it was
7 the same, but it's not literally the exact same word
8 after checking the '488 -- no, sorry, the '196
9 claim.

10 Q. If you go back to the previous paragraph,
11 the last paragraph on 1549, do you see that it
12 starts out as, "Claim 1, for example"?

13 A. Yes.

14 Q. And the second sentence starts out, "In
15 particular, a computing system is configured to
16 include an integration tier and then several other
17 elements."

18 Do you see that?

19 A. Yes.

20 Q. And the computing system that's being
21 referred to in the second sentence is the computing
22 system of Claim 1; correct?

23 A. I -- I wouldn't disagree with that, sitting
24 here right now.

1 Q. On the top of the next page, page 1550, the
2 integration tier that's being discussed is the
3 integration tier recited in Claim 1 of the patent;
4 correct?

5 A. I mean, this -- this -- these remarks are
6 discussing Claim 1, which do, at this point, have an
7 integration tier and a number of other things,
8 elements, as you pointed out; and -- and this
9 continues the discussion of the integration tier
10 that -- in the context of still discussing Claim 1.

11 Q. After these remarks, wasn't the application
12 allowed by the examiner?

13 A. I don't recall that from memory; but given
14 that we're close to the end of the file history,
15 that could be -- very well be the case.

16 Q. Do you want to check?

17 A. Yes, I'll check.

18 That appears to be the case.

19 MR. GOLUB: Can we go off the record?

20 MR. GORYUNOV: Yes.

21

22 (Lunch break from 12:15 p.m. to 12:45 p.m.
23 was taken in the proceedings.)
24

1 BY MR. GOLUB:

2 Q. Dr. Houh, you submitted one declaration in
3 the 398 IPR and one declaration in the 399 IPR;
4 correct?

5 A. I don't think that's right. I think I
6 submitted two declarations in each of those cases.

7 Q. You submitted one supplemental declaration
8 in the 398 IPR and one supplemental declaration in
9 the 399 IPR; correct?

10 A. That's correct.

11 Q. I'd like to turn to Paragraph 8 of your
12 declaration in the 398 IPR, which is Exhibit 1021.

13 A. Okay.

14 Q. And the same paragraph appears in
15 Paragraph 8 of your supplemental declaration in the
16 399 IPR; correct?

17 A. Yes. I think that's right.

18 Q. Looking at Paragraph 8, which is the same
19 in both declarations, can you read into the record
20 the very last sentence of Paragraph 8.

21 A. "I understand that it is important not to
22 import limitations from a disclosed embodiment, even
23 if it is the only embodiment disclosed in the
24 specification, into a claim if the claim does not

1 require those limitations, absent a clear indication
2 that the applicant intended the claims to be so
3 limited."

4 Q. So what you're saying there is that it's
5 important not to import limitations from the
6 disclosed embodiments into the claims; correct?

7 A. I mean, it says what it says there. It
8 starts off that way and gives some more -- it goes
9 on in that sentence.

10 Q. It would be erroneous to read limitations
11 from the disclosed embodiment into the claims; isn't
12 it true?

13 A. I think that's what the bulk of this
14 declaration is about, is Dr. Shamus reading in
15 things into the claims that aren't there.

16 Q. And it's erroneous to read into the claims
17 things that aren't in the claims themselves but are
18 otherwise in the specification; correct?

19 A. I mean, I think it's important -- from what
20 I understand, it's important not to import
21 limitations from a disclosed embodiment, even if it
22 is the only embodiment disclosed in the
23 specification, into a claim if the claim does not
24 require those limitations, absent a clear indication

1 that the applicant intended those claims to be so
2 limited.

3 Q. Can you turn to Paragraph 13 of this
4 declaration.

5 A. Okay.

6 Q. Now, the second sentence of this paragraph
7 starts out with "The '196 Patent describes."

8 Do you see that?

9 A. Yes.

10 Q. Okay. In the next sentence, you provide an
11 opinion of what the phrase, quote, "can also
12 include," close quote, means; correct?

13 A. Yes.

14 Q. Now, I'd like to go back to Paragraph 11 of
15 your declaration.

16 A. Okay.

17 Q. There you quote the claim language for the
18 integration tier. Do you see that?

19 A. Well, I -- I've underlined it. That's what
20 I see.

21 Q. Paragraph 11 contains the entire recitation
22 of the integration tier set forth in the claim;
23 correct?

24 A. I would say that's not the entire

1 discussion of -- of the integration tier in Claim 1.

2 Q. Is it the part that's relative to your
3 claim construction?

4 A. This is with respect to what a person of
5 ordinary skill would understand the plain and
6 ordinary language to be, but my point here is that
7 -- that other elements also discuss integration
8 tier.

9 So this is not the entire recitation of
10 integration tier that I've cited.

11 Q. Well, the preface -- the preface to
12 Paragraph 11 in your declaration says, "The relevant
13 limitation recites in full," and then there's a
14 quote that sets forth recitation of an integration
15 tier.

16 So my question is: Have you quoted in full
17 the relevant limitation?

18 A. As pertaining to what I'm discussing. But
19 my point here is that integration tier is also used
20 in some of the other elements.

21 Q. Okay.

22 A. At least -- at least one of the other
23 elements, as I recall.

24 Q. But the integration tier, as it's initially

1 recited in the claim, is set forth in Paragraph 11;
2 correct? And then it's referred to later in the
3 claim?

4 A. Yeah; what I've cited to as the integration
5 tier element in Claim 1, it is referred to later in
6 other elements, at least one other element.

7 Q. I'd like to focus on the language that you
8 quoted in Paragraph 11 of your declaration.

9 Does that language include the phrase,
10 quote, "can also include," close quote, anywhere?

11 A. The claim language doesn't use that phrase.
12 I did cite to the portion of the specification with
13 some reasoning, I believe, in the later paragraph.

14 Q. The phrase can also include -- strike that.
15 The phrase, quote, "can also include,"
16 close quote, that you cite in the specification is
17 part of the description of the disclosed
18 embodiments, is it not?

19 A. "Can also include" is in the specification.

20 Q. And you would agree that it would be
21 improper to incorporate limitations in the disclosed
22 embodiment into the claim, don't you?

23 A. We talked about this earlier with respect
24 to the paragraph on the legal understanding section,

1 but this is -- I don't think -- you kind of have it
2 opposite.

3 Dr. Shamus sets important limitations
4 impermissibly in -- into the number of his analyses
5 where -- what his -- what he says the plain -- the
6 plain and ordinary meaning as understood by a
7 POSITA. I'm not -- I don't see why you think I'm
8 employing a limitation here.

9 The spec is permissive and "can also
10 include," and that -- that portion of the spec is
11 the only place in the spec that talks about any
12 mechanism.

13 And so it's Dr. Shamus that's employing a
14 limitation. The limitation is something that
15 narrows the claim scope.

16 Q. Does the phrase, quote, "can also include,"
17 closed quote, appear in the claim?

18 A. Those three words aren't used -- together
19 as a phrase are not in the claim.

20 Q. Is the word "can" by itself used anywhere
21 in the claim?

22 A. So I don't see the word "can," and,
23 furthermore, I don't see the word "must," which Dr.
24 Shamos says in his -- his declaration; that the

1 mechanisms must interface with mobile wallet
2 application.

3 So my point here is that it's Dr. Shamus
4 that's importing language not even in the
5 specification. I don't -- I don't think that
6 discussion -- it doesn't say must. I don't know
7 that the word must -- well, I don't know that the
8 word "must" is used in the specification at all.
9 Yet, that's the limitation that Dr. Shamos is
10 importing into his understanding of the plain and
11 ordinary meaning.

12 The portion of the spec that talks about
13 any mechanism at all is what I cited to in that
14 paragraph, I think, or right around that area, where
15 I cited to "can" -- the language "can". I forget
16 what the exact language is.

17 And now Dr. Shamus has somehow turned that
18 into a -- a must, and -- and that's not -- it's --
19 the limitation, it's Dr. Shamus importing the
20 limitation. That isn't even described in the spec
21 as a must.

22 Q. Can you pull up the '196 Patent, Exhibit
23 1001, in the 399 IPR.

24 A. Okay.

1 Q. And I'd like you to turn to Claim 1. It
2 starts on Column 23 of the patent.

3 A. Okay. I'm there.

4 Q. And do you see that the claim starts out
5 with a preamble that says, "A computer system for
6 facilitating management of a mobile wallet."

7 Do you see that?

8 A. Yes.

9 Q. And then after that is the word
10 "comprising."

11 Do you see that?

12 A. Yes.

13 Q. What's your understanding of the word
14 "comprising" in this context?

15 A. Well -- well, my understanding is that
16 it's -- it's a -- well, what's being claimed here
17 are the system that has -- that is made up of at
18 least the following elements, and that when
19 comprising is used that way, you can do more things
20 than what's claimed, and that's totally fine.

21 It's just that this is -- this is saying
22 what the computer system for facilitating management
23 of a mobile wallet is made up of.

24 Q. And the claim is made up of what you

1 referred to as elements; correct?

2 A. I mean, the claim has various elements. I
3 would agree.

4 Q. And the word "comprising" means that each
5 of those elements must be present in order for the
6 claim language to be met; isn't that correct?

7 A. Well, I don't know if they're talking about
8 infringement or -- or invalidity.

9 Q. Do you need me to clarify the question?

10 A. Yes, if you would.

11 Q. Claim 1 includes a number of elements.
12 Those elements start with one or more processors and
13 continue on to the next column until the beginning
14 of Claim 2.

15 Do you see that?

16 A. Yes.

17 Q. Now, in order for Claim 1 to be
18 un-patentable over the prior art, all of the
19 elements recited in the claim must be represented or
20 suggested by the prior art; isn't that correct?

21 MR. GORYUNOV: Objection; form,
22 foundation.

23 THE WITNESS: I mean, I think there are
24 things that -- that are not necessarily

1 present that a POSITA would deem would be
2 necessarily present. So I'm not sure if
3 you're capturing that idea in -- in what
4 you're asking.

5 BY MR. GOLUB:

6 Q. You said Dr. Shamus read into the claims
7 the word "must." Doesn't the word "must" follow
8 from the word "comprising"?

9 MR. GORYUNOV: Objection; form,
10 foundation.

11 THE WITNESS: I mean, you're reading
12 comprising there in a different way, I
13 think, than Dr. Shamus is requiring the
14 must. I mean, you can have words that are
15 used, you know, if I -- if I put comprising,
16 you know, software that talks to a user
17 computer, that doesn't mean the user's
18 computer is included in the software. In
19 fact, that's not what it suggests at all.

20 So you have to look at the language to
21 decipher what -- what the -- the claim
22 system parts are as claimed. Just because I
23 use the word doesn't necessarily mean that
24 it has to be part of -- that it is part of a

1 claim system.

2 BY MR. GOLUB:

3 Q. Is it your opinion that any of the elements
4 in Claim 1 are optional?

5 A. I mean, the claim words are what the claim
6 words say they are, and the elements are what the
7 elements say.

8 But if you're claiming a system that
9 interfaces with, you know, a third-party computer,
10 the third-party computer, as written there, isn't --
11 isn't necessarily part of the claim system unless
12 there are other elements that require -- require
13 that. So just because the words are there -- you
14 have to analyze the actual words themselves of the
15 claim. You can't just say, oh, it says comprising
16 at the top and every word is part of the computer
17 system. You have to analyze the words of the claim.

18 And like an example I just gave you, this
19 third party -- I forget what I exact said -- the
20 third-party computer or user computer, if the claim
21 is, you know, a computer system comprising software
22 that interfaces with a third-party user computer, it
23 has to have the software, but the third-party user
24 computer isn't necessarily part of the computer

1 system as claimed.

2 So you have to look at the words of the
3 claim. You can't just say comprising means that
4 every word following comprising must somehow be part
5 of the system. You have to -- and that's why you do
6 an element-by-element breakdown and -- from the
7 point of view of a POSITA, because it's not an
8 automaton; it's not a computer. You're not just
9 going to do a word search for the word in the prior
10 art.

11 You're going to look at how a POSITA would
12 look at the prior art and -- and -- and the -- and
13 how they would interpret the claims themselves in
14 view of specification and prosecution history of the
15 -- of the patent.

16 Q. Doesn't the word comprising mean that all
17 of the elements of the claim are essential?

18 MR. GORYUNOV: Objection; form,
19 foundation.

20 THE WITNESS: It just means that what's
21 recited are part of what the computer system
22 would comprise.

23 And, again, you have to look at the
24 actual language of the elements to

1 understand what is part -- what is part of
2 the claimed computer system, and some things
3 might not be part of the claimed computer
4 system.

5 You have to look at the language of the
6 claim, and then you have to look at that
7 from the perspective of a person with
8 ordinary skill in the art at the time of the
9 invention in the -- in view of the
10 specification and prosecution history.

11 BY MR. GOLUB:

12 Q. Dr. Houh, is it your opinion that the
13 integration tier with regard to Column 20 to 23 --

14 THE STENOGRAPHER: I'm sorry, Mr. Golub,
15 you're breaking up really bad.

16 MR. GOLUB: Okay. Thanks for telling
17 me. Let me start again.

18 BY MR. GOLUB:

19 Q. Dr. Houh, is it your -- is it your opinion
20 that the integration tier --

21 MR. THEISS: Dan, you're garbled again.
22 You might need to dial in.

23 MR. GOLUB: Can you hear me now?

24 MR THEISS: No. It's just scrambled.

1 MR. GORYUNOV: Let's go off the record.

2

3 (Break from 1:12 p.m. to 1:15 p.m. was taken
4 in the proceedings.)

5

6 BY MR. GOLUB:

7 Q. Looking at Claim 1 of the '196 Patent, the
8 integration tier recitation of that claim element
9 begins on line 64 of Column 23 and continues until
10 line 3 of Column 24. Do you see that?

11 A. Yes.

12 Q. Is it your opinion that that integration
13 tier, as it's described there, is optional?

14 MR. GORYUNOV: Objection; form.

15 THE WITNESS: It's an integration tier.
16 What I'm -- what I'm saying is that you have
17 to analyze the element itself. Because when
18 you say the word "comprising," it sounds
19 like you're saying every word in there must
20 be found somewhere.

21 And I gave you an example of a computer
22 system comprising software that interfaces
23 to a third-party user computer. Just
24 because the word third-party user computer

1 are part of the language under comprising in
2 this hypothetical claim doesn't mean that
3 the computer system itself includes and must
4 include that third-party user computer. You
5 have to look at what the claim elements say
6 to determine -- to determine that.

7 And so an integration tier is listed as
8 an element under comprising in Claim 1. But
9 there's this whole multiple lines that you
10 just pointed me to that describes further
11 requirements for the integration tier,
12 and -- and -- and that would be understood
13 by a person of ordinary skill in the art at
14 the time in the context of the spec and the
15 prosecution history.

16 BY MR. GOLUB:

17 Q. Dr. Houh, I don't think you answered my
18 question.

19 I simply asked whether or not the
20 integration tier element that I identified was
21 optional.

22 A. The integration tier is an element that's
23 part of the claimed computing system, but the very
24 specifics about what the integration tier is laid

1 out further. You have to actually look at the
2 language therein, just like you actually have to
3 analyze the language of the hypothetical claim to --
4 to realize that even though an element uses the word
5 third-party user computer, that it's actually not
6 required to be part of the computer system in that
7 hypothetical claim that I -- I gave an example of
8 earlier.

9 Q. Dr. Houh, the integration tier that I'm
10 referring to is not a hypothetical question;
11 correct? That language is before us.

12 A. Yeah.

13 Q. And my question -- my question is: Is the
14 integration tier, as I've identified it in Claim 1,
15 optional?

16 A. It's claiming a computer system for
17 facilitating management of a mobile wallet
18 comprising an integration tier. That's part of what
19 is claimed. That's listed as an element.

20 But the very specifics of that integration
21 tier are -- are also described, and the words -- the
22 words dictate how the integration tier needs to be
23 configured in -- in part.

24 Q. Dr. Houh, are you unable to answer yes or

1 no the question of whether or not the integration
2 tier that I've identified is optional?

3 MR. GORYUNOV: Objection; form,
4 foundation, relevance.

5 THE WITNESS: I gave you an example. I
6 just -- of -- I'm trying -- rather, I'm
7 trying to explain what I'm -- you know, my
8 answer, which is it absolutely says the
9 computing system for facilitating management
10 of a mobile wallet comprising. And
11 integration tier is one of the elements
12 that's there, that's listed, but the full
13 requirements of the integration tier and --
14 and how it's configured and things, you have
15 to actually look at -- further at the
16 language.

17 And so an integration tier is an
18 element, just like system memory is, but
19 it -- it simply says system memory and --
20 but not every integration tier might be
21 what's required. It's an integration tier
22 because there's further language. It just
23 doesn't say an integration tier and leave it
24 at that altogether.

1 It uses integration tier with respect to
2 multiple lines of -- of describing the
3 configuration of the integration tier and --
4 and other things, but not any integration
5 tier is required to -- you know, it's --
6 it's integration tier as claimed here and
7 that -- and that further meets the
8 requirements in other places and other
9 elements that describe -- that also use
10 integration tier.

11 So that's the claimed integration tier;
12 not any integration tier is the claimed
13 integration tier.

14 BY MR. GOLUB:

15 Q. Dr. Houh, let me be as precise as I can.

16 The claimed integration tier is described
17 in Column 23, line 64, to Column 24, line 3, and
18 when I speak about the claimed integration tier, I
19 am referring to that language as a whole, from
20 line -- from Column 23, line 64 to Column 24,
21 line 3.

22 With that definition of the integration
23 tier, is it your opinion that the claimed
24 integration tier is optional?

1 A. That -- whatever integration tier that --
2 that meets that language also has to meet other
3 language. So if it was just that language and --
4 and that's what it -- it might -- it might not -- if
5 it met all the language, it still might not be the
6 claimed integration tier unless it met further
7 requirements.

8 For example, that the -- that the
9 notification services engine configured to interface
10 with the integration tier and defend the plurality
11 of -- and it goes on; but if it -- if there's no
12 notification services engine in whatever you're
13 looking at that isn't configured to interface with
14 an integration tier, then even if the integration
15 tier met all of what you said in -- in your bounds
16 of those lines, then it still might not be the
17 claimed integration tier.

18 Q. With all due respect --

19 A. Because it doesn't meet -- because it
20 doesn't meet further requirements imposed on the
21 integration tier or other elements that -- that --
22 that connect to the integration tier.

23 Q. With all due respect, Dr. Houh, you are not
24 answering my question.

1 My question is whether all of the
2 limitations of the integration tier as they are set
3 forth in Column 23, line 64 to Column 24, line 3,
4 are required?

5 A. The claim language requires what it
6 requires, and it may require additional things
7 outside of those lines with respect to the
8 integration tier, but --

9 Q. But every --

10 A. But --

11 Q. But -- go ahead.

12 A. But the language -- the language of the
13 claim is the language of the claim. And when I do
14 the analysis, I do show how, in the prior art, the
15 prior art discloses or renders obvious everything in
16 the claim and everything in the language of the --
17 of the claim as I'm analyzing it from a POSITA's
18 point of view.

19 Q. Dr. Houh, let's focus again on the claim
20 language that begins on Column 23, line 64, and goes
21 to Column 24, line 3. Is any of that claim language
22 optional?

23 A. That -- under it -- well, I mean, the words
24 are there in the claim. I don't -- is it optional,

1 what do you mean? For what purpose?

2 Q. Does every single limitation described
3 between line 23 -- I'm sorry, strike that. Let me
4 start again.

5 Does every limitation of the integration
6 tier that's described starting at Column 23, line 64
7 and continuing to Column 24, line 3 need to be
8 present or are some of those limitations optional,
9 in your opinion?

10 A. I mean, I -- I'm not sure I understand the
11 exact context of the question. The claims claim
12 what they claim.

13 Are you talking about what the claims say
14 or are you talking about analysis with respect to
15 prior art? Are you talking about analysis with
16 respect to infringement? What's the context?

17 Q. The context of your declaration.

18 A. Well, in the context of my declaration, I'm
19 explaining what my opinion about what a POSITA would
20 understand the claim language and why Dr. Shamos is
21 -- is wrong for importing requirements into the
22 claim language that aren't even described in the --
23 that way in the specification.

24 So I'm -- it's Dr. Shamos that's importing

1 limitations. It's -- I'm not importing limitations.

2 Q. Did my question have anything to do with
3 importing limitations?

4 A. You asked about the context of my
5 specification. That's the context of -- of my
6 specification.

7 Sorry, declaration. My supplemental
8 declaration.

9 Q. In the context of your supplemental
10 declaration, are any of the limitations of the
11 integration tier that are described starting at
12 Column 23, line 64 and going to Column 24, line 3
13 optional?

14 A. In the context of my supplemental
15 declaration, what I'm discussing, in part, is this
16 phrase "integration tier..." including web services
17 communication mechanism.

18 And in that context, I'm describing what a
19 person of ordinary skill would understand that
20 Dr. Shamus is not correct by importing limitations.
21 Because Claim 1 does not contain any explicit or
22 implicit requirement that the claimed web services
23 communication mechanism must be included in, i.e.
24 are part of, the integration tier, as Dr. Shamus

1 suggests.

2 Q. Dr. Houh, do you see the claim element one
3 or more processors that follows the word
4 "comprising"?

5 A. Yes.

6 Q. In your opinion, must one or more
7 processors be present in order for the claim
8 limitations to be met?

9 A. In the context of my supplemental
10 declaration, I don't think I'm really ever raising
11 that. I don't think there's a dispute about --
12 about that. That's Dr. Shamus --

13 Q. I'm -- I'm asking you whether you have an
14 opinion about whether one or more processors must be
15 present in order for the limitations of the claim to
16 be satisfied?

17 A. In my -- in the context of my supplemental
18 declaration, I don't believe I -- I address that
19 issue because that wasn't the disputed issue.

20 Q. Do you have an opinion on whether one or
21 more processors must be present in order for the
22 limitations of the claim to be met?

23 A. I'm pretty sure that in all the prior art
24 that I analyzed for -- for the -- in my opening

1 declaration, I showed where all that prior art
2 discussed and disclosed one or more processors.

3 Q. Is it your opinion --

4 A. That's the analysis I did.

5 Q. Is it your opinion that one or more
6 processors must be present in order for the claim to
7 be satisfied?

8 A. What I showed in my opening declaration was
9 that in my -- the language in the claim -- and I
10 think I provided some discussion about a particular
11 phrase and the -- a POSITA's plain and ordinary
12 understanding of that phrase, and everything else
13 was plain and ordinary meaning.

14 And what I showed in my opening declaration
15 was how the various -- the -- in the various
16 challenges, the prior art disclosed one or more
17 processors, and I laid that out. And I laid that
18 out because that's my understanding of how to do a
19 proper analysis, to go through claim element by
20 claim element and showing how the prior art or
21 combinations of prior art disclose and/or render
22 obvious.

23 And I'll just refer again to my declaration
24 for the exact language because I don't remember

1 exactly those -- the words I used to describe that.
2 But the prior art would disclose and/or render
3 obvious this claim element, the next claim element.
4 And I go claim by claim.

5 And in the analysis I did, I did go through
6 claim element by claim element. I didn't skip
7 anything because I didn't think it was -- because I
8 think the proper analysis is to go claim element by
9 claim element and show how that's disclosed or -- or
10 rendered obvious by the prior art.

11 Q. So your understanding is that every claim
12 element must be present in order for the claim, as a
13 whole, to be met by the prior art; correct?

14 A. Well, I have to show as -- as a person of
15 ordinary skill would interpret these elements; I do
16 go through the prior art.

17 And so now there's a dispute because
18 Dr. Shamus is arguing, you know, certain
19 understandings of the -- of the claim language,
20 which -- which I didn't discuss because I -- because
21 I -- I was -- I had -- I had described maybe one
22 phrase in at least one of my opening reports that I
23 described how a person of ordinary skill would
24 understand that.

1 Now Dr. Shamus has come back with a number
2 of different claim terms, and he's saying how a
3 person of ordinary skill would understand those, and
4 he's the one that's -- that's improperly importing
5 limitations into what I think are the correct plain
6 -- the correct interpretations by a POSITA of what
7 they would mean in their plain and ordinary meaning
8 to be. It's Dr. Shamus that's importing these
9 limitations.

10 And that's what the bulk of my supplemental
11 declaration is about, as to why I disagree with him
12 and why he -- he -- you know, he's importing,
13 improperly, limitations into the plain and ordinary
14 meaning as understood by a POSITA of the -- of
15 certain claim terms.

16 Q. Dr. Houh, how come you analyzed all the
17 elements of Claim 1?

18 A. In my -- in my opening declaration?

19 Q. Yes.

20 A. To show how -- to show why the -- the
21 claims were un-patentable.

22 Q. Because every claim element must be
23 satisfied in order for the claim to be
24 un-patentable; correct?

1 A. I showed on a element-by-element basis, and
2 I don't recall whether -- what I said about the
3 preamble, whether it's limiting or not; but I showed
4 by an element-by-element basis how things were found
5 in the various grounds in the prior art, those
6 grounds. And I -- and I understand that's the
7 proper way to do the analysis.

8 So I went element by element. And I
9 also -- I don't recall about what I said about the
10 preamble; but, typically, even if it's not limiting,
11 I may show why I will analyze that typically as
12 well.

13 So that's generally what I do in -- in --
14 in these kinds of declarations where I'm showing
15 un-patentability of challenged claims.

16 Q. Can you turn to claim -- I'm sorry.

17 Can you turn to Paragraph 13 of your
18 declaration.

19 A. For which claim?

20 Q. 398.

21 A. Okay.

22 Q. And in that paragraph, you refer to the
23 phrase, quote, "can also include," closed quote;
24 correct?

1 A. I do refer to that phrase in -- in the
2 spec.

3 Q. And the language, quote, "can also
4 include," closed quote, is permissive language;
5 correct?

6 A. Yeah, I don't think I disagree in -- for
7 most cases, that that's permissive language.

8 Q. I'd like to look back at Paragraph 8 of
9 your declaration.

10 A. Yes. I'm there.

11 Q. Can you read the second and third sentences
12 of Paragraph 8 into the record?

13 A. "I understand that claim terms are
14 generally to be construed quoting to their plain and
15 ordinary meaning from the perspective of a POSITA at
16 the time of the invention in the context of the
17 patent's disclosure unless the inventor provided an
18 expressed definition for a claim term, i.e., the
19 inventor acts as his or her own lexicographer, or
20 the applicant disavowed or disclaimed the full scope
21 of a claim term either in the specification or
22 during prosecution. I understand that when the
23 inventor acts as lexicographer, the definition must
24 be definition for a term, and that definition must

1 be set forth in the specification with reasonable
2 clarity, deliberateness, and precision."

3 Q. In your opinion, did the inventor of the
4 '196 Patent provide an express definition for the
5 term, quote, "including," closed quote?

6 A. I don't recall that they did, no.

7 Q. And then the same question with respect to
8 the '488 Patent: In your opinion, did the inventor
9 of the '488 Patent provide an express definition for
10 the term, quote, "including," closed quote?

11 A. I didn't -- I don't think I saw that in the
12 spec, in either of the specifications -- of the '196
13 or '488.

14 Q. In your opinion, did the inventor of the
15 '196 Patent provide an express definition for the
16 term, quote, "web services communication
17 mechanisms," closed quote?

18 A. I don't think I saw an express definition
19 in the spec for mec- -- for that phrase either.

20 Q. In your opinion, did the inventor of the
21 '488 Patent provide an express definition for the
22 term, quote, "web services communication
23 mechanisms," closed quote?

24 A. What was the phrase again, please?

1 Q. Quote, "web services communication
2 mechanisms," closed quote.

3 A. I don't recall an express definition of
4 that in either spec.

5 Q. Let's look back at Paragraph 8 of your
6 declaration.

7 At the end of the first sentence, you make
8 reference to the Phillips standard. Do you see
9 that?

10 A. Yes.

11 Q. Do you have an understanding of what the
12 Phillips standard is?

13 A. My understanding is that the -- the plain
14 and ordinary meaning or the ordinary and customary
15 meeting from the perspective of a POSITA at the time
16 of the invention in light of the specification and
17 -- or in light of the intrinsic evidence for the
18 specifications and prosecution history. That's my
19 understanding.

20 Q. Do you know where the Phillips standard
21 came from?

22 A. I mean, it -- I -- I don't -- I generally
23 understand that Phillips standard probably came from
24 a case where one of the parties was Phillips.

1 Q. Have you read that case?

2 A. I may very well have. I don't -- I don't
3 remember. I don't remember right as I'm sitting
4 here right now.

5 Q. How did you get your understanding of the
6 Phillips standard?

7 A. Well, I've been doing this over the years
8 and -- and it's -- it's at least been explained to
9 me what that standard is in numerous cases. And
10 I've written here of my understanding here.

11 And -- and I'm often provided with cases,
12 you know, that relate to these things to read, which
13 I very well may have. I don't -- I just don't have
14 a specific memory of that sitting here right now.

15 Q. Does Paragraph 8 set forth, in sum and
16 substance, your understanding of the Phillips
17 standard.

18 A. It does. It goes on to say that I
19 understand that "the claim terms are generally to be
20 construed according to their plain and ordinary
21 meaning from the perspective of a POSITA at the time
22 of the invention in the context of the patent's
23 disclosure, unless the inventor provides an express
24 definition of this claim."

1 And I read this earlier, but that's my
2 understanding.

3 Q. Can you see my screen?

4 A. Yes.

5 Q. This is the Phillips versus AWH case
6 decided by the Federal Circuit at 415 F 3rd 1303,
7 and I'm going to show you a piece of it.

8 Okay. I'm showing you a piece of the
9 Court's language that starts on page 1327, and I
10 have a red box around it.

11 Can you see the red box?

12 A. Yes.

13 Q. So I'm going to read the first two
14 sentences in the red box.

15 It says, "In some cases, the ordinary
16 meaning of claim language as understood by a person
17 of skill in the art may be readily apparent even to
18 lay judges, and claim construction in such cases
19 involves little more than the application of the
20 widely accepted meaning of commonly understood
21 words. In such circumstances, general purpose
22 dictionaries may be helpful."

23 Did I read that right?

24 A. I think you -- I mean, I think you skipped

1 over the citation, but I -- aside from that, I -- I
2 didn't see an error in your reading.

3 Q. So in those sentences, the Court is talking
4 about the application of the widely accepted meaning
5 of commonly understood words; correct?

6 A. It does use -- it does use those words.

7 Q. Now I'm going to read the next sentence.

8 "In many cases that give rise to
9 litigation, however, determining the ordinary and
10 customary meaning of the claim requires examination
11 of terms to have a particular meaning in the field
12 of art. Because the meaning of a claim term as
13 understood by persons of skill in the art is often
14 not immediately apparent and because patentees
15 frequently use terms idiosyncratically, the Court
16 looks to those sources available to the public that
17 show what a person of skill in the art would have
18 understood the disputed claim language to mean."

19 Now, in that passage, isn't the Court
20 referring to terms that have a particular meaning in
21 a field of art?

22 MR. GORYUNOV: Objection; form,
23 foundation, relevance.

24 THE WITNESS: Well, I mean, it seems

1 that that is where we are having a
2 disagreement in this -- in this case, which
3 is Dr. Shamus says one thing and I disagree
4 with him about what the plain and ordinary
5 meaning would have been understood by the
6 reader to be.

7 BY MR. GOLUB:

8 Q. I wasn't asking about that. I asked
9 whether the Court was referring to terms that have a
10 particular meaning in a field of art.

11 A. I mean, I don't -- I'm only reading the
12 words I see here. I don't see -- see that exact
13 meaning in these words.

14 It's simply saying that "In many cases that
15 give rise to litigation, however, determining the
16 ordinary and customary meaning of the claim requires
17 examination of terms of a particular meaning in a
18 field of art. Because the meaning of a claim term
19 is understood by persons of skill in the art is
20 often not immediately apparent and because patentees
21 frequently use terms idiosyncratically, the Court
22 looked to those sources available to the public that
23 show what a person of skill in the art would have
24 understood the disputed claim language to mean."

1 Q. When you read this paragraph as a whole,
2 isn't the Court drawing a distinction between
3 situations where all that is required is the widely
4 accepted meaning of commonly understood words on the
5 one hand versus the requirement of understanding a
6 term that has a particular meaning in a field of
7 art?

8 MR. GORYUNOV: Objection; form,
9 foundation, relevance.

10 Counsel, this is a legal question.

11 THE WITNESS: I mean, I see what the
12 words are here. You're asking me what the
13 Court saw? I -- I only can read the words
14 that are here.

15 And I don't remember the last time I saw
16 this, if I have. I very well could have
17 read this before, but I just don't remember.

18 BY MR. GOLUB:

19 Q. Do you have an understanding of what the
20 language in this red box means?

21 MR. GORYUNOV: Objection; form,
22 foundation, relevance.

23 THE WITNESS: Well, I've explained in my
24 supplemental declaration my understanding

1 of -- of the -- of -- you know, in
2 Paragraph 8. That's what we're looking at.
3 That's my understanding. I don't see
4 anything that's inconsistent here.

5 I don't see -- if you're asking me why
6 that I may be wrong in my application, I'm
7 not -- I'm not seeing anything that's
8 inconsistent with -- with my understanding
9 and what this is saying.

10 BY MR. GOLUB:

11 Q. Dr. Houh, the quote, "integration tier,"
12 closed quote, in the patent uses the term, quote,
13 "including," closed quote.

14 When you interpreted, quote, "including,"
15 closed quote, in the claim, did you apply the widely
16 accepted meaning of that word as it is commonly
17 understood?

18 A. You know, so I discuss it in -- in my
19 Paragraph 13, and, you know, I have -- I have
20 seen -- I have seen before -- so I think Dr. Shamus
21 is improperly applying and importing a limitation
22 which isn't in the specification into the -- into
23 the plain and ordinary meaning of a claim phrase.

24 And I applied -- I applied what a POSITA

1 would understand the language to be in the light of
2 the specification and prosecution history. And I
3 cited portions of the spec, and -- and I heard the
4 phrase "including" used in, you know, in -- in a
5 manner that -- that Dr. Shamus' interpretation could
6 be at odds with.

7 And so I think it's he that's improperly
8 imported limitations into the claim.

9 MR. GOLUB: I object to that answer as
10 unresponsive.

11 BY MR. GOLUB:

12 Q. I'm going to ask you again the same
13 question and ask you to provide a responsive answer.
14 It is a question that can be answered with a simple
15 yes or no.

16 The integration tier in the patent claims
17 uses the term, quote, "including," closed quote.

18 When you interpreted, quote, "including,"
19 closed quote, in the claims, did you apply the
20 widely accepted meaning of that word as it is
21 commonly understood?

22 MR. GORYUNOV: Objection; form.

23 THE WITNESS: So I looked at the whole
24 phrase, "including web services

1 communication mechanisms for interfacing
2 with a mobile wallet application and the
3 plurality of different" -- and it goes on.
4 And I examined what a person of ordinary
5 skill would have understood that phrase to
6 mean.

7 Actually, the phrase as -- as I -- ends
8 at -- ends with communication mechanisms.
9 But I looked at that whole phrase, and in
10 light of the specification and prosecution
11 history, I'm -- and I -- and I cite to the
12 specification where it's discussing
13 mechanisms and -- and use that as a basis to
14 inform the POSITA of what the meaning of
15 what's plain -- of the plain phrase is.

16 And that's -- that's -- it's different
17 than what Dr. Shamus is asserting that
18 meaning to be.

19 And, furthermore, for that word
20 "including," for example, I have used
21 that -- I've heard that phrase in -- in use
22 in a manner inconsistent with Dr. Shamus'
23 application.

24 And so -- so I -- in light of all -- all

1 of that and, in particular, the -- what the
2 specification says about mechanisms and that
3 section that I cited to, that's how I came
4 up with my -- what I'm saying is the correct
5 plain and ordinary understanding of that --
6 that whole phrase.

7 MR. GOLUB: I object to that answer as
8 unresponsive as well.

9 BY MR. GOLUB:

10 Q. Dr. Houh, sitting here today, do you have
11 an understanding of the widely accepted meaning of
12 the term, quote, "including," closed quote, as it is
13 commonly understood?

14 A. So it's -- the whole phrase, I think,
15 Dr. Shamus is interpreting it, including the word
16 "including," in a manner that's overly restrictive
17 than what's supported by the spec and, furthermore,
18 in -- in other uses of the word including that I've
19 heard of before.

20 And so what I think what it's --
21 Dr. Shamus, I think, is using it in a term that's
22 inconsistent with the -- with many uses that I've
23 heard before. And it's -- it's also not
24 consistent -- there's nothing in the spec that talks

1 about -- about must and the way he's interpreting
2 it.

3 And so he's the one importing limitations
4 and -- of the claim language. If you look at whose
5 interpretation is more narrow, it's Dr. Shamus', not
6 mine; and, therefore, the more limiting one is
7 Dr. Shamus' interpretation.

8 MR. GOLUB: I object to your answer as
9 not responsive.

10 I will give you another opportunity to
11 answer my question.

12 MR. GORYUNOV: Objection to your
13 instruction.

14 MR. GOLUB: Excuse me?

15 MR. GORYUNOV: Objection to your
16 instruction.

17 MR. GOLUB: I didn't instruct him
18 anything. I just said I was going to give
19 him another opportunity.

20 MR. GORYUNOV: Proceed as you will.

21 BY MR. GOLUB:

22 Q. Sitting here today -- I'll start again.

23 Sitting here today, do you have an
24 understanding of the widely accepted meaning of,

1 quote, "including," closed quote, as it is commonly
2 understood?

3 A. I've heard uses that are -- that are
4 outside the bounds of what I -- it appears
5 Dr. Shamus is interpreting this.

6 Let me give you an example. An example of
7 two sides in an included angle. The angle is not
8 included in part -- in any of the sides, but -- but
9 that's -- that's a phrase that I've heard before.

10 And so it's -- it's Dr. Shamus'
11 interpretation that's overly narrowing and,
12 therefore, being more limited than -- than my
13 interpretation. It's -- the importing limitation is
14 more adequately -- more -- better described in
15 Dr. Shamus' reasoning and his proposed constructions
16 as mine.

17 Mine is, like you said, it's a little --
18 it's -- it's -- it's more permissive than
19 Dr. Shamus' more limited interpretation.

20 So I don't see how you can accuse me of
21 importing limitation when it's the opposite.

22 Q. Dr. Houh, I object to your answer as not
23 responsive.

24 What is the widely accepted meaning of,

1 quote, "including," closed quote, as it is commonly
2 understood?

3 A. I think some of the meanings that I've
4 heard are just like that example, two sides that
5 include an angle, which can include -- which also
6 permits that -- that -- that usage is that it's --
7 the angle is not part of the side, but it bounds --
8 it bounds or interfaces with the side. And I think
9 that's -- that phrase I've heard used before, you
10 know, and -- and there may be other instances of --
11 of that use of the word that I've heard that people
12 would understand.

13 You don't -- you don't -- you don't not
14 understand me when I say -- talk about, in math, two
15 sides that include an angle what I'm talking about.

16 I think you do. I think a POSITA would
17 understand that. And I think that's an example of
18 the use that -- that contradicts Dr. Shamus' over --
19 you know, overly limited interpretation.

20 And, certainly, if you look at the
21 specification, the specification is -- is -- is
22 permissive. It can also include. It doesn't say
23 must include. Dr. Shamus is rewriting that to say
24 must include.

1 Q. Do you think that the term, quote,
2 "including," closed quote, has a special meaning in
3 the field of the patent that is different from the
4 common usage of that term?

5 A. I'm just saying what I think the correct
6 interpretation of the -- the whole phrase. I'm
7 not addressing -- the whole phrase that -- that also
8 has the word "including" within it. I'm addressing
9 that whole phrase.

10 And when you look at the plain and -- a
11 person of ordinary understanding of that phrase,
12 it's informed by the specification. The
13 specification says "can also include."

14 And then -- and that's consistent with some
15 of the uses of include that I've heard for that --
16 that -- that include can -- can also be used to --
17 in situations where things bound each other or abut,
18 but are not necessarily contained within.

19 Q. Do you cite any evidence in your
20 declaration of this definition of includes that
21 you're referring to?

22 A. I mean, I don't see one here cited in
23 Paragraph 13, but I do cite to the specification,
24 which -- which uses "can also include" with respect

1 to the -- that's describing a communication, e.g.
2 web services, API.

3 And it's consistent with -- with all other
4 uses of including or include that I've heard outside
5 of this. So that was all consistent. I didn't -- I
6 didn't cite any other dictionary, if that's what
7 you're asking, here in Paragraph 13.

8 Q. Let me pull up your declaration again.
9 Okay. I have Paragraph 11 up on the screen. Do you
10 see it?

11 A. Yes.

12 Q. And in the second line of the blocked
13 quote, there's a phrase that starts out "And
14 including web services communication mechanisms."

15 Do you see that?

16 A. Yes.

17 Q. Did you consider what part of speech
18 "including" is in that phrase?

19 A. I mean, I considered the phrase when I
20 looked at it from a person of ordinary skill's
21 perspective as how they understand it. I'm not an
22 English major. So I don't necessarily have labels
23 attached to things -- to every -- every type of
24 phrase or word in a sentence.

1 Q. Did you consider whether the word
2 "including" was used as a preposition versus being
3 used as a verb?

4 A. I mean, I considered the phrase as a whole
5 as to how a person of ordinary skill would have
6 understood it. I don't think I, you know, attach
7 labels like that in my head when I'm looking at a
8 phrase.

9 What I'm doing is I'm interpreting it from
10 my -- from a person of ordinary skill's point of
11 view at the time of the invention in light of the
12 specification and prosecution history.

13 MR. GOLUB: Now might be a good time to
14 take a five-minute break.

15 MR. GORYUNOV: Sounds good.

16 MR. GOLUB: Okay. So maybe come back at
17 2:15?

18
19 (Break from 2:08 p.m. to 2:16 p.m. was taken
20 in the proceedings.)
21

22 BY MR. GOLUB:

23 Q. Dr. Houh, the, quote, "integration tier,"
24 closed quote, in the patent claim uses the term,

1 quote, "web services communication mechanisms,"
2 closed quote.

3 When you interpreted, quote, "web services
4 communication mechanisms", closed quote, in the
5 claims, did you apply the widely accepted meaning of
6 that term as it is commonly understood?

7 A. I did not in my analysis, my initial
8 declaration.

9 Q. I'm talking about in both your initial
10 declaration and your -- and then in your
11 supplemental declaration. You make comments about,
12 quote, "web services communication mechanisms,"
13 closed quote; correct?

14 A. Well, I mean, in -- in Paragraph 13 of my
15 supplemental declaration, I am talking about how a
16 POSITA would have understood the mentioned
17 communication, e.g. web services, API, and/or other
18 communications mechanisms, to correspond to the
19 claimed web services communication mechanisms.

20 And so -- and then -- and now if you're
21 going to ask me about my initial declaration too,
22 I'll find you an example of -- of -- of the analysis
23 I did.

24 Q. I'm not asking for that. You don't need to

1 find that. I'm just asking more generally.

2 In the context of this case, you have
3 interpreted, quote, "web services communication
4 mechanism," closed quote; correct?

5 A. Well, what I -- what I -- in the context of
6 my supplemental declaration, what I'm saying is that
7 a POSITA would have understood that the mentioned
8 communication, e.g. web services, API, and/or other
9 communications mechanisms, that that disclosure in
10 the spec corresponds to the claimed web services
11 communication mechanism.

12 So that's an example from the spec of -- of
13 what a POSITA would have understood was being
14 disclosed in the -- when the claim is using the
15 phrase "web services communication mechanism," that
16 they can look at the spec and see, oh, it's -- it's
17 this communication, e.g. web services, API, and/or
18 other communication mechanisms.

19 Q. Dr. Houh, in your opinion, is the term,
20 quote, "web services communication mechanisms,"
21 closed quote, a term of art?

22 MR. GORYUNOV: Objection; form.

23 THE WITNESS: I mean, I'm not -- I don't
24 remember every phrase I've ever heard, but I

1 don't remember that as a phrase that was
2 commonly used when talking to website
3 designers or, you know, web services people
4 or people in -- in -- you know, with this
5 level of skill in the art, at least.

6 BY MR. GOLUB:

7 Q. So is it your view that, quote, "web
8 services communication mechanisms" is not a term of
9 art?

10 MR. GORYUNOV: Objection; form.

11 THE WITNESS: I mean, well, I don't
12 recall hearing that bantered about as -- as
13 something -- like you might use the word API
14 and everyone -- and people understand the
15 right -- when -- in the right context,
16 people understand that.

17 What I'm saying here is that the claim
18 uses the phrase "web services communication
19 mechanisms," and a POSITA would have looked
20 to the spec to help inform them of the plain
21 and ordinary meaning.

22 And -- and what's consistent with that
23 is the disclosure that's in the spec that
24 I've cited to; that is, there's a place in

1 the spec that talks about communication,
2 e.g. web services, API, and/or other
3 communications mechanisms.

4 And, really, that's the only place in
5 the spec that talks about mechanisms that I
6 recall; just that -- that -- that phrase
7 that I cited to and the surrounding
8 paragraph.

9 And so -- so a person of ordinary skill
10 is going to look and to see, well, what's
11 one thing that's included in that? Well,
12 here -- here's something from the spec. And
13 they would have understood that
14 communications -- communication, e.g., web
15 services, API, and/or other communications
16 mechanisms, that would correspond to the
17 claimed web services communication
18 mechanisms.

19 BY MR. GOLUB:

20 Q. Dr. Houh, does the specification provide an
21 explicit definition of the term, quote, "web
22 services communication mechanisms"?

23 A. I don't believe so, no.

24 Q. And web services communication mechanisms

1 is not a term that you've heard bandied about; isn't
2 that correct?

3 A. Yeah; I mean, I don't recall every phrase
4 I've heard bandied about, but that doesn't stick
5 out -- even if I have heard it, it doesn't stick out
6 as one that -- that I remember hearing a lot.

7 Q. Dr. Houh, is the phrase, quote, "web
8 services," closed quote, a term of art?

9 MR. GORYUNOV: Objection; form.

10 THE WITNESS: So, I mean, web services
11 is a term that I have heard used. And --
12 and to that extent, I would think of it as
13 more of a term of art than the previous
14 phrase you were talking about.

15 BY MR. GOLUB:

16 Q. Do you agree that the specification does
17 not provide an express definition of the term,
18 quote, "web services," closed quote; correct?

19 A. Yeah; I don't -- I don't recall. And I
20 think that's true, if you're -- if you're referring
21 to an express definition.

22 Q. I'm going to go back to the Phillips
23 standard and change topics for a second and talk
24 about the Phillips standard that you identified in

1 your declaration and I'll pull it back up.

2 Let me know if you can see it.

3 A. I can see it.

4 Q. I want to focus, again, on the paragraph in
5 the red box, and particularly the text following the
6 word "because". Specifically, quote -- I'll read
7 it.

8 Quote, "...because patentees frequently use
9 terms idiosyncratically, the Courts look to those
10 sources available to the public that show what a
11 person of skill in the art would have understood the
12 disputed claim language to mean. Those sources
13 include the words of the claims themselves, the
14 remainder of the specification, prosecution history,
15 and extrinsic evidence concerning relevant
16 scientific principles, the meaning of technical
17 terms, and the state of the art."

18 You follow me so far?

19 A. Well, I didn't initially because I was
20 looking at the "because" a few lines above that that
21 was actually capitalized, and you started in, I
22 think -- it took me a while to figure out you
23 started in the middle of the sentence.

24 So I followed you maybe at the end a little

1 bit, but not at -- definitely not at the beginning.

2 Q. Should I read it again or do you understand
3 it?

4 A. If you give me a minute to read it because
5 it's -- I can try to answer your question.

6 Q. Okay. Why don't you read it again and then
7 I'll ask you whether you understand it.

8 A. Okay. I read it.

9 Q. So there the Court is discussing four
10 sources for claim construction, which are, first,
11 the words of the claims themselves; second, the
12 remainder of the specification; third, the
13 prosecution history; and, fourth, extrinsic evidence
14 concerning relative -- relevant scientific
15 principles, the meaning of technical terms, and the
16 state of the art; correct?

17 MR. GORYUNOV: Objection; form.

18 THE WITNESS: I think that's what the
19 words here say.

20 BY MR. GOLUB:

21 Q. In your claim construction methodology,
22 what do you do to discern the meaning of a term of
23 art that is not explicitly defined in the claims,
24 the specification, and the prosecution history?

1 MR. GORYUNOV: Objection; form.

2 THE WITNESS: Not defined where? What
3 were the three things you said again?

4 BY MR. GOLUB:

5 Q. Not defined in the claims, the
6 specification, and the prosecution history.

7 A. Well, I mean, I may do this in other cases;
8 but if -- if I didn't find something -- you know, if
9 it was a term of art, then I would probably find
10 something that -- that gives some of this extrinsic
11 evidence concerning relevant scientific principles,
12 or the -- more appropriately, the meaning of
13 technical terms. And then -- and then maybe also
14 the state of the art, like people used it in this
15 way, other patents used it in this way, you know, at
16 the time of the invention; they used it in a similar
17 way. And there might be -- oftentimes I have
18 technical dictionaries I consult for the definition
19 of terms.

20 But -- but my supplemental declaration is
21 mostly in rebuttal to Dr. Shamus' point and -- and
22 saying why I think he's improperly included --
23 imported limitations. That -- that, as we
24 discussed, is not -- not correct to import -- I

1 don't remember the exact language we were looking
2 at. We looked at that earlier. To import
3 limitations into the claim language -- into the
4 interpretation of the claim language.

5 So if it's not expressly disclosed in those
6 three places, then, you know, certain terms may just
7 be well understood by POSITAs, in which case I
8 wouldn't just necessarily say that. I would often
9 find a back-up reference or references that --
10 that -- that supported the meaning in that case.

11 But -- but my -- my -- a lot of my opinions
12 in my supplemental declaration are really in
13 rebuttal to Dr. Shamus' opinions about the meaning
14 of certain terms and -- and why I think it was
15 improper for him to import limitations into those
16 meaning.

17 Q. Dr. Houh, in your rebuttal, did you cite
18 any technical literature describing the term, quote,
19 "web services," closed quote, that did not involve
20 machine-to-machine interactions?

21 A. Well, there are a number of points I
22 disagree with Dr. Shamus on, which is one was -- was
23 that the -- that the -- the overall phrase, "web
24 services communication mechanisms."

1 There's no requirement for that -- for the
2 overall phrase to involve machine-to-machine
3 interactions or to require an automatic action that
4 excludes the request of the user.

5 And -- and -- and that's my -- that's the
6 whole point with respect to that as opposed to just
7 part -- what you're asking about with
8 machine-to-machine. My point -- my point overall is
9 that -- that the proper interpretation -- or that a
10 POSITA would have understood that the plain and
11 ordinary meaning of this term only requires that the
12 web services communication mechanisms interface with
13 a mobile wallet application that resides on a mobile
14 device. And that's -- that's what I believe, you
15 know, that the proper understanding by a POSITA
16 would be.

17 And -- and, again, Dr. Shamus is importing
18 these requirements into the claims, such as
19 requiring machine-to-machine interaction and
20 requiring an automatic action that -- that excludes
21 a request of the user.

22 And -- and so that's what I'm discussing in
23 my supplemental declaration.

24 Q. I object to your response as nonresponsive,

1 and I will ask the question again.

2 My question is specific to your
3 declaration. In your -- in your supplemental
4 declaration, do you identify any examples in the
5 technical literature of, quote, "web services,"
6 closed quote, that did not involve
7 machine-to-machine interactions?

8 A. So I understand -- no, I -- I did cite to
9 this. I refer to the document that Dr. Shamus cited
10 to in his support for the machine-to-machine part,
11 but -- and -- and so I do see that.

12 But the real -- the -- the further
13 objection that I have is that Dr. Shamus is now
14 requiring that a computer-to-computer function
15 invoked automatically and not at the request of a
16 user by clicking on a hyperlink. And that's what he
17 says is -- is not present in Dill; that somehow,
18 like, you have to do this without the user taking an
19 action and then also have a computer-to-computer
20 function.

21 That -- if you look at what I'm saying here
22 in my declaration, there -- he says the
23 machine-to-machine supports it; but then Dr. Shamus
24 throws in this other part of it, which is it can't

1 be initiated by a user taking an action by clicking
2 on a link. And -- and -- and he appears to apply
3 that to the system of my analysis for Dill, which
4 somehow isn't machine-to-machine interaction
5 somehow, which I disagree with. Even -- even if it
6 requires that, you know, there's still
7 machine-to-machine interaction in Dill.

8 He's -- he's also further imported
9 limitations that I didn't see -- I don't recall him
10 citing to in any of those exhibits, 2009 to 2016,
11 now saying that it has to be done not at the request
12 of a user by clicking on a hyperlink.

13 And he says because of that, there's no
14 hint of web services in Dill. I think his analysis
15 is just wrong there. You know, Dill clearly has
16 machine-to-machine interaction.

17 The point he's objecting to, which is not
18 supported by any of the references that Dr. Shamus
19 has cited to, 2009 to 2016, I think, none of those
20 say anything about how a web service can't become --
21 a machine-to-machine interaction can't come about
22 because a user requested something.

23 And -- and -- and its overall
24 characterization of -- of -- that Dr. Shamus is

1 making about machine-to-machine interaction not at
2 the request of a user, that's the objectionable
3 part. And -- and -- I don't -- I don't remember him
4 being very clear about all about where this "not at
5 the request of a user" part comes in.

6 Q. In Paragraph 23 of your declaration, you
7 say -- you give your opinion about, quote, "web
8 services communication mechanisms," closed quote;
9 right?

10 A. Well, I'm saying that the term that we're
11 talking about in this section only require the web
12 service communication mechanisms to interface with a
13 mobile wallet application that resides on a mobile
14 device. That's what I'm saying.

15 Q. Does it also need to have
16 machine-to-machine communication?

17 A. Well, if you look at Dill, there is still
18 machine-to-machine communication.

19 So he's just saying that because a user
20 makes a request by clicking on a hyperlink, that
21 that's somehow not machine-to-machine interaction;
22 but that's -- that's a gross misinterpretation of
23 2009 to 2016 by Dr. Shamus that he cited in his
24 declaration.

1 Those, I don't -- those -- they do talk
2 about machine-to-machine interaction. And, I agree,
3 he cited to those documents that supported that
4 point.

5 But it's this additional point that has the
6 machine-to-machine interaction that he says in, for
7 example, Paragraph 28 of the 398 -- his 398
8 declaration, that he says it's a
9 computer-to-computer function invoked automatically
10 and not at the request of user, like clicking on a
11 hyperlink.

12 And that's the part he -- he -- that --
13 none of those -- I don't think -- I don't recall any
14 of those documents he cited to talking about not at
15 the request of a user. And I don't even know how
16 the spec does this not at the request of a user
17 either in the claimed invention.

18 It doesn't -- that's not correct. That's
19 an improper importation of a limitation, which isn't
20 even described in the specification.

21 Q. Well, you said that the term, quote, "web
22 services," closed quote, was a term of art; right?

23 MR. GORYUNOV: Objection to form.

24 THE WITNESS: I said I've heard it a lot

1 more than -- than the other -- than the
2 whole phrase, web services communication
3 mechanisms, and that that it is more of a
4 term of art, I think, than -- but, again,
5 it's -- the objection -- a lot of -- it's
6 the machine-to-machine invoked automatically
7 and not at the request of a user.

8 And that -- that -- that statement by
9 Dr. Shamus, in Paragraph 28 at least, of
10 opening declaration in the 398 case, that --
11 that -- that's where it's -- he's not just
12 talking about machine-to-machine interaction
13 now. He's now talking about how those are
14 invoked automatically, not at the request of
15 a user.

16 And so while the -- while the document
17 he supports that he's cited to do discuss
18 machine-to-machine interactions, I think
19 that this whole phrase that Dr. Shamus is
20 now trying to insert into the plain and
21 ordinary meaning is improper because it's
22 this "invoked automatically and not at the
23 request of the user" part that's now -- I
24 don't see how that's supported by -- by

1 those documents or the specification.

2 I mean, somehow I'm just going to sit
3 here and someone's going to deduct money
4 from my mobile wallet continuously without
5 any request by me? That doesn't make any
6 sense.

7 BY MR. GOLUB:

8 Q. So you don't dispute that the term "web
9 services" involves a machine-to-machine interaction?

10 MR. GORYUNOV: Objection; form.

11 THE WITNESS: I mean, that's there in
12 Dill.

13 So my understanding of -- of claim --
14 these are more claim construction
15 principles, as I understand that, and I
16 don't know to the extent we're really
17 talking about claim construction or what a
18 person of ordinary skill understands.

19 But my understanding about that kind of
20 statement is that that wasn't the necessary
21 part of the claim that results in any
22 potential dispute here; although, Dr. Shamus
23 appears to be trying to insert that as
24 something that is because there are machines

1 involved and field apps to perform these
2 communications.

3 It appears that the real dispute is
4 about whether or not it happens
5 automatically and not at the request of a
6 user, and that's the part I -- I do dispute.
7 And that's the part he's trying to import
8 into the plain and ordinary meaning or claim
9 construction without any reason to do so.

10 None of those documents, 2006 to 2016,
11 do I recall saying that -- that they can't
12 be done in response to any user. And -- and
13 saying nothing supports it because he cited
14 to in -- in his declaration, don't -- don't
15 seem to say that. He seems to just insert
16 that for some unknown reason and un --
17 un-cited reason.

18 I don't think he provided any citations
19 about -- about that, other than
20 machine-to-machine somehow doesn't involve a
21 user so, therefore, it can't even be done at
22 the request of a user.

23 I mean, that just seems -- that's just
24 incorrect, and that's an improper -- it's

1 another limitation to his plain and ordinary
2 meaning that isn't supported by anything
3 that I -- that I could see. So that's the
4 objection.

5 And -- and I think if you look at the
6 analysis I did in Dill, I do show a
7 machine-to-machine interaction. The real
8 dispute is that Dr. Shamus seems to want it
9 to happen automatically and not at the
10 request of a user.

11 And -- and that's why in my -- my
12 proposal of the proper plain and ordinary
13 meaning, I don't need to have
14 machine-to-machine because that, I don't
15 think, is really the heart of the dispute.

16 BY MR. GOLUB:

17 Q. So if you look at Paragraph 18 of your
18 declaration, the first sentence.

19 "In his substantive analysis, Dr. Shamus
20 claims that web service is a term of art that
21 involves a machine-to-machine interaction over the
22 internet using web protocols?"

23 That part of what Dr. Shamus says you don't
24 dispute; correct?

1 MR. GORYUNOV: Objection; form,
2 foundation.

3 THE WITNESS: Well, if you look at the
4 second half, this is what I'm saying.

5 Where I am disputing is -- is this
6 machine-to-machine interaction amounts to a
7 computer-to-computer function invoked
8 automatically and not at the request of a
9 user, like clicking on a hyperlink.

10 And that's the point. The dispute isn't
11 about, I don't think, at it's core, about
12 machine-to-machine. It's about
13 automatically invoking the function not at
14 the request of a user.

15 And I think -- I think that's the
16 dispute about Dill. So the dispute about
17 Dill -- I mean, I don't think -- I don't
18 remember him -- we can look at his
19 declaration. I don't remember every word of
20 it.

21 But I think he was arguing that it's
22 automatic invocation, not at the request of
23 a user, that somehow makes it
24 machine-to-machine. And that doesn't have

1 anything to do with machine-to-machine,
2 which is already in Dill. He's talking
3 about what Dill is lacking is automatic
4 invocation not at the request of a user.

5 And so -- so I have issue with this
6 whole construction, but I think the real
7 disputed part is that he's trying to import
8 this additional limitation about automatic
9 invocation not request of a user. And
10 that's -- that's -- that's what I'm
11 discussing here in 18.

12 BY MR. GOLUB:

13 Q. Do you cite any evidence in your
14 supplemental declaration of an example of a web
15 service that is invoked at the request of a user?

16 A. And, by the way, there are examples of --
17 of usage of -- in the spec, of user to machine, for
18 example. The -- the spec talks about IVR
19 interaction where a user is interacting with the
20 system. And so -- so I -- for that reason, I also
21 think machine-to-machine is -- I mean, even that is
22 an improper narrowing.

23 I mean, Dill has -- you know, all that
24 stuff was done by machine. So it's not about Dill.

1 But my point is that even the specs showed that it
2 shouldn't necessarily be limited to
3 machine-to-machine.

4 Dill -- Dill is a slightly different issue,
5 and maybe the -- I -- I can look at all of his
6 grounds, but Dill there is -- it is
7 machine-to-machine already. So I don't understand
8 what the dispute about that is.

9 But in the spec itself, it talks about
10 interacting -- interaction with an IVR, which is
11 where a user is speaking to the system, and then
12 that's going through the integration tier.

13 And so even -- even -- even the specs seems
14 to allow for interfacing directly to a human, like,
15 through an IVR. So I think that is an example of
16 where a user is interacting with -- with the system
17 directly through their voice or touchtones that they
18 input on a telephone pad.

19 Q. I object to your answer as not responsive.

20 What I asked, and I'll ask again, is: In
21 your supplemental declaration, do you provide
22 citations, any literature, any examples of web
23 services that are invoked by a user?

24 A. I do cite to Exhibits 2009 through 2016.

1 And if you look at 2009, here's an example.
2 On page 46 of Exhibit 2009, it says, under the
3 explanation heading 2.3.3.1.3, "In the context of
4 web services, the resources being discovered are
5 usually service descriptions. If a request or
6 entity does not already know what service it wishes
7 to engage, the requestor entity must discover one.

8 "There are various means by which discovery
9 can be performed, various things. Human end users
10 or agents may initiate discovery. Requestor
11 entities may find service descriptions during
12 development."

13 So here it's talking about human end users
14 initiating actions in the context of web services.
15 And that's consistent with everything we've been
16 talking about. And I think this is a reason why
17 Dr. Shamus has -- you know, he's selectively cited
18 to the machine-to-machine for support of
19 machine-to-machine, which I -- I disagree is even
20 required because of examples in the spec, such as a
21 user interfacing through an IVR through the
22 integration tier.

23 But here it's saying, in Exhibit 2009,
24 which I -- I did cite to, I believe, in Paragraph

1 22, that -- that he cited to them, there's an
2 example of -- of talking about the human end user
3 initiating the discovery of web services.

4 Q. Dr. Houh, is it your view that when a user
5 is interacting with an IVR, that that involves web
6 services?

7 A. Well, the interaction is between the human
8 -- in that case, it could be voice -- and then
9 the -- the other side.

10 Certainly, the level -- the interaction at
11 that level is with -- when I call into something
12 that -- you know, at the time of the invention, I
13 think there were voice-capable IVR systems. Those
14 go back into the early 2000s, I believe.

15 But these -- you know, you could either
16 talk to it -- and there were various platforms
17 available at the time where you could create IVR
18 applications you could talk to -- and that
19 integrated the speech to -- to -- you know, speech
20 recognition or -- or even a touch pad.

21 And, in that case, that's -- that's --
22 who's interacting with the other end point? It's
23 actually the user. And -- and that's what the IVR
24 provides.

1 Q. Is the IVR a web services communication
2 mechanism?

3 A. Well, if you look at the '196 Patent at
4 Column 12, line 3, it says, "The web interface or
5 mobile wallet application may prompt for and receive
6 enrollment information (e.g. KYC information) for
7 the (unbanked) subscriber 205, over at least one of
8 the plurality of communications channels (e.g. web,
9 point-of-sale (POS), interactive voice response,
10 (IVR, etc.). the web interface or mobile wallet may
11 then send activation instructions over the same or a
12 different channel to activate the (unbanked)
13 subscriber 205 and create a subscriber account for
14 the (unbanked) subscriber."

15 So it's saying that it's the same web
16 interface receiving these -- these things from all
17 these -- all these communication channels, including
18 IVR.

19 Q. You're saying that the passage that you
20 just quoted says that the IVR is going through a web
21 interface?

22 MR. GORYUNOV: Objection; form.

23 THE WITNESS: What this section supports
24 -- is saying that the -- it's the web

1 interface or mobile wallet application may
2 prompt for and receive enrollment
3 information over these different
4 communication channels, including IVR.

5 So whatever it's saying here, it's
6 saying the web interface may prompt for
7 information over the IVR is one thing it's
8 saying.

9 BY MR. GOLUB:

10 Q. But the IVR by itself is not a web service;
11 correct?

12 A. In that case, the interaction is between
13 the user, who may be talking to the IVR, and the web
14 interface.

15 Q. If the user just picks up their phone and
16 dials the web interface and interacts -- I'm sorry,
17 let me strike that.

18 If the user just goes to the phone part of
19 their mobile device, dials the phone number for the
20 IVR and uses their voice to speak to the IVR or uses
21 the keypad buttons on their phone to interact with
22 the IVR, is it your view that that involves a web
23 service?

24 A. I'm going to have to look at another

1 section, Column 10, that partial paragraph at the
2 top. It's talking about notification services and
3 they can be configured through a web services API,
4 but that the notifications can be delivered over
5 notification channels 112. If you look at 112 in
6 Figure 1, it also includes voice.

7 So if you're -- so it's -- it's clear that,
8 like, you can deliver, you know, out call
9 notifications and that they are configured through a
10 web services API. And, you know, the only other
11 place in the spec that I found that uses the word
12 web services is the portion that I cited to in --
13 and we were talking about it earlier; I don't
14 remember exactly what paragraph -- about how -- it
15 can also include communication -- communications,
16 e.g. web services.

17 Those are really the only two parts of the
18 specification that I found uses the phrase "web
19 services," aside from a couple of times in the -- in
20 the claim -- in the claims themselves.

21 Q. So given that limited guidance from the
22 specification, is it your view that when a user uses
23 their telephone to call an IVR and interact with the
24 IVR simply with their voice or the keypad on the

1 phone, that that involves web services?

2 A. I mean, I think you have to look and tell
3 me more about the system.

4 But certainly a lot of the -- the front end
5 can be abstracted down to what's required on the
6 web -- by the web services through a web services
7 API. And -- and there's no reason IVR couldn't
8 interact -- you know, allow the user to interact
9 through the web services API to the -- to the
10 back-end application.

11 And, I mean, that's -- a lot of these voice
12 browsers have mark-up languages that you can use to
13 describe these applications, which interacted with
14 the -- with the right APIs on the -- on the -- for
15 example, like a web service that -- that they could
16 interact with to retrieve data and then convert it.

17 And -- and those things are known as voice
18 XML browsers. And the voice XML language is
19 something that -- that people used that was
20 available at the time to specify how the -- how
21 these applications interacted with the back-end
22 components.

23 Q. Did you include any evidence of these voice
24 activated XML browsers in any of the materials that

1 you included with your declarations in this case?

2 A. I mean, I talked about IVR -- IVR in
3 Paragraph 21; but you asked me a bunch of detailed
4 follow-up questions about my supplemental
5 declaration. So I'm telling you now.

6 But, no, I mean, I don't -- I don't
7 remember any reason why I would have cited to that
8 in response to -- in response to Dr. Shamus, other
9 than what I already cited to, which is that -- that,
10 you know, the spec already talks about IVR, which
11 allows a user to directly interact with the -- with
12 the system. And that's shown in Figure 1. That's
13 described -- you know, that's mentioned in the
14 specs.

15 Q. Dr. Houh, do you draw a distinction between
16 the internet and the Worldwide Web?

17 A. I mean, I think that would depend on
18 context. I mean, some people think they're the same
19 thing; but, technically, they may not be. But in
20 some context, people may use them in casual speech
21 in -- to mean the same thing, but I would have to
22 hear the context.

23 Q. Are you familiar with SS7 channels in
24 telephony?

1 MR. GORYUNOV: Objection; form,
2 foundation, relevance.

3 THE WITNESS: I mean, generally, yeah.
4 I worked in communications for quite some
5 time.

6 BY MR. GOLUB:

7 Q. The claims of the '196 Patent refer to SMS
8 messages, don't they?

9 A. Which patent are you looking at?

10 Q. In '488, for instance.

11 A. I think I do see reference to SMS in maybe
12 Claims 1 and 11, maybe another one. Let's see this
13 one. Twenty-two of the '488 Patent.

14 Q. You asked for my context. That's my
15 context.

16 A. Yeah; I mean, I see -- I see SMS messages
17 referred to in those three claims in -- of the '488
18 Patent.

19 Q. At the time of the '488 Patent in 2011,
20 wasn't it common for SMS messages to be sent from a
21 bay station to a mobile device over the SS7 channel?

22 A. I mean, I think I'd want to look at some
23 reference for that. I -- over what particular
24 channel, I -- I mean, I think at least some of

1 these -- these protocols listed in Figure 1 support
2 SMS messaging.

3 I think -- I'd have to double check, but I
4 think the USSD protocol that's shown right under the
5 number 111 in channels supports SMS messaging. I'd
6 have to look at that spec to see exactly over what
7 channel.

8 Q. Does an SMS message sent from a bay station
9 to a mobile device necessarily use a web service?

10 A. I mean, I would be surprised if the spec
11 necessarily required -- I'd want to do a little
12 research, but I'd be surprised if it was the case
13 where that all SMS messages had to be sent through a
14 web service.

15 Q. If you look at Paragraph 23 of your
16 declaration again.

17 A. I don't know if they're the same in both
18 declarations or if you can give me a specific
19 declaration to look at.

20 Q. I'm talking about Exhibit 1021 in the 398
21 IPR.

22 A. Paragraph 21?

23 Q. Twenty-three.

24 A. Twenty-three. Okay.

1 Q. You stated there, "Therefore, it is my
2 opinion that a POSITA would have understood the
3 plain and ordinary meaning of this term to only
4 require the web services communication mechanisms to
5 interface with a mobile wallet application that
6 resides on a mobile device."

7 And I want to make sure I understand what
8 you're saying there. Is it your position that any
9 mechanism that interfaces with a mobile wallet
10 application that resides on a mobile device meets
11 the plain and ordinary meaning of this term?

12 A. I'm -- I'm not saying that anything that
13 interfaces with the mobile wallet application is web
14 services communication.

15 I'm saying that the term requires the web
16 services communication mechanism to interface with
17 the mobile wallet application that resides on a
18 mobile device. And that's what the plain and
19 ordinary meaning of that -- of the phrase we're
20 talking about would be understood to require.

21 Q. Does the term "services" add any meaning to
22 this term?

23 In other words, in your view, would web
24 services communication mechanisms be different from

1 simply web communication mechanisms?

2 A. I mean, I'd have to think about the context
3 and look at this.

4 But what I analyzed was the actual claim
5 language, not alternate, hypothetical other wordings
6 that aren't part of the claim language.

7 Q. I'm trying to understand what meaning you
8 ascribed, if any, to the term services.

9 A. Well, it appears that Dr. Shamus is
10 ascribing web services to be machine-to-machine
11 only, not automated and not in response to a user.

12 Again, I disagree with that, but -- but
13 Dr. Shamus didn't set forth an alternative proposal
14 that eliminated the word services from the claim
15 language. So I think, you know, he could have
16 proposed an alternate -- he could have discussed
17 that, in which case I would have had time to
18 consider it. But this is some hypothetical that's
19 actually not part of the claim language.

20 So I -- there's no reason I would have
21 considered these alternative wordings. And, again,
22 it would depend on a lot of things. What's the
23 spec? Is it -- you know, what -- you know, I'd need
24 more detail and more -- more time to consider

1 alternative hypothetical claim language that's not
2 the actual claim language.

3 Q. I'm going to switch topics, Dr. Houh.

4 When you were an undergraduate, did you
5 take any courses that covered the operation of
6 hardware SIM cards?

7 A. No, I don't believe so.

8 Q. While you were a master's candidate, did
9 you take any courses that covered the operation of
10 hardware SIM cards?

11 A. I mean, I can't recall back then the time
12 frame. There was a part of that time, because I was
13 doing my master's at Bell Labs, that I was taking a
14 number of classes on the network at Bell Labs; but I
15 -- I wouldn't remember what -- what those things
16 covered.

17 Q. Have you done research on the -- I'm sorry.

18 Have you done research on the operation of
19 hardware SIM cards?

20 A. Not -- I mean, they may have come up in
21 some previous cases I worked on, in which case I
22 would have done some investigation. But that's all
23 I can recall.

24 Q. Have you written any papers on the

1 operation of hardware SIM cards?

2 A. No.

3 Q. Have you developed or designed a hardware
4 SIM card?

5 Dr. Houh, what are you reading?

6 A. I'm looking at Dr. Shamus' proposed
7 construction of hardware SIM card importing all
8 these extraneous limitations.

9 So I'm trying to figure out if that's what
10 you're meaning by hardware SIM card, as used in this
11 case.

12 Q. I asked you a question.

13 Have you developed or designed a hardware
14 SIM card?

15 A. So, again, I wanted to read the -- what
16 Dr. Shamus has set forth for what he understands a
17 hardware SIM card to be.

18 Q. Do you have an understanding of what you
19 believe --

20 MR. GORYUNOV: Counsel, he's answering
21 your question.

22 MR. GOLUB: No, he's not.

23 THE WITNESS: I'm trying to answer your
24 question. You -- you asked me what I'm

1 reading; I answered your question.

2 You're asked me a question about some
3 work I've done; I'm trying to answer your
4 question.

5 Based on the express definitions set
6 forth by Dr. Shamus --

7 BY MR. GOLUB:

8 Q. I'm not asking you to do that.

9 A. Well, what definition of hardware SIM card
10 are you asking, then, in the context of these
11 questions are you using?

12 Q. If we look at your declaration in the '488
13 case -- let's look at that.

14 Let's look at Paragraph 36 of your
15 declaration in the 399 IPR.

16 Do you see that?

17 A. I'm not there yet. What paragraph?

18 Q. Thirty-six.

19 A. Paragraph 36?

20 Q. Yes.

21 A. I must be in the wrong paragraph. My
22 Paragraph 36 says, "In a second office action issued
23 on February 6, 2015, the examiner again rejected all
24 the claims as being anticipated by U.S. Patent

1 Publication Number 2012/0290478 to cross. And then
2 I cite to the page of the prosecution history of
3 the -- of the '488.

4 Q. I'm talking about your supplemental
5 declaration, Exhibit 1021 in the 399 IPR. Is that
6 what you're looking at too?

7 A. No, not the supplemental. I was looking at
8 the original declaration.

9 Q. I'm talking about Paragraph 36 of your
10 supplemental declaration.

11 A. Yes, I see that.

12 Q. And there you describe what you call the
13 plain and ordinary meaning of this term to mean SIM
14 card implemented in hardware; correct?

15 So as you used that phrase in Paragraph 36
16 of your declaration, have you developed or designed
17 a hardware SIM card?

18 A. No.

19 Q. Dr. Houh, in your opinion -- I'm sorry?

20 A. Did you say -- could you repeat your
21 question, please?

22 There was one word that I thought I heard
23 that might -- could I get the question read back,
24 please? I just want to make sure I answered

1 correctly.

2 Q. I think your counsel can give you an
3 opportunity on redirect.

4 MR. GORYUNOV: Counsel, he's asking you
5 a question to clarify. Is it that big of a
6 deal?

7 MR. GOLUB: If he wants to clarify his
8 answer, he can.

9 MR. GORYUNOV: Well, he's asking what
10 your question was, Counsel. Are you not
11 going to read him back your question,
12 Counsel?

13 MR. GOLUB: Well, I think he answered
14 the question.

15 THE WITNESS: I'm not sure that I did
16 because there was a word in there that I --
17 I may -- I thought I heard, and then upon my
18 answer, I may -- I'm not sure if I heard --
19 if I -- if I remember the word that I heard.

20 So if I don't know the right question,
21 then I -- if I wasn't thinking of the right
22 question, I'm not sure I answered your
23 question because I'm not sure I heard it
24 all.

1 BY MR. GOLUB:

2 Q. My question was simple.

3 Did you develop or design a hardware SIM
4 card?

5 A. And I think we're in the context of as I
6 define it in Paragraph 36, and the answer would be
7 no.

8 Q. Thank you. Dr. Houh, did the inventor of
9 the '488 Patent provide an express definition for
10 the term, quote, "SIM card," closed quote, in the
11 specification?

12 A. Well, just looking at it now, I don't see
13 what I would consider an express definition.

14 Q. Does the prosecution history of the
15 '488 Patent provide an express definition of a SIM
16 card?

17 A. I mean, I don't have it memorized. Do you
18 want me to look through the prosecution history
19 right now?

20 Q. Is that -- is it something that you don't
21 know the answer to off the top of your head, whether
22 or not the prosecution history provides an express
23 definition for SIM card?

24 A. I don't have these documents memorized, and

1 I don't remember all of the back-and-forth details
2 that -- that went on. So I'm just telling you, if
3 you want me to try to answer your question, I can
4 look through the '488 prosecution history, but I
5 don't have that memorized.

6 Q. Okay. Go ahead and look and let me know
7 whether or not an express definition for SIM card
8 was set out in the prosecution history of the '488
9 Patent.

10 (Pause: 3:33 p.m. to 3:51 p.m.)

11 Q. Excuse me, Dr. Houh, do you know how much
12 longer you might be?

13 A. Well, I mean, it's almost 1,900 pages.
14 You're trying to ask me to find a nugget that might
15 -- may or may not be in there. So I'm looking for
16 it. I'm probably halfway done.

17 Q. Okay. I need to step away for 30 seconds.
18 Please keep reading.

19 (Pause: 3:51 p.m. to 4:06 p.m.)

20 A. So I did not see anywhere in the
21 prosecution history where the patentee argued and --
22 or otherwise stated that there would be an express
23 definition of hardware SIM card.

24 Q. As of the priority date in 2011, was the

1 term, quote, "SIM card," closed quote, a term of
2 art?

3 A. Yeah; I mean, I think, generally, that is a
4 phrase that was used a lot, both in technical terms
5 and even -- even more lay terms as well, I believe.

6 Q. Did the definition differ, in your view,
7 between the way it was used as a technical term and
8 the way it was used as a lay term?

9 A. I mean, with respect to just the term SIM
10 card, I don't -- I mean, the phrase at issue we're
11 talking about is hardware SIM card, which -- which I
12 think the -- the right plain and ordinary meaning is
13 SIM card implemented in hardware rather than
14 software, but -- and I think that would be what the
15 POSITA would have understood it to be.

16 As opposed to Dr. Shamus set forth some
17 sort of secure, tamper resistant -- he set forth
18 what he set forth. I'm not going to -- I can look
19 it up if you want, but I'll just refer to what he
20 set forth.

21 Q. Dr. Houh, I'd like to ask you about what
22 you're saying in Paragraph 36 of your declaration in
23 the 399 IPR. We -- you had that up before.

24 Can you look back at that?

1 A. Okay. I'm there.

2 Q. So your second line of Paragraph 36, you
3 make reference to SIM cards. Do you see that?

4 A. I do.

5 Q. In that sentence, are you using the term
6 SIM card as a term of art?

7 MR. GORYUNOV: Objection; form.

8 THE WITNESS: I mean, I think the issue
9 that's at dispute here is really about
10 hardware SIM card and -- and the additional
11 requirements that Dr. Shamus seems to impose
12 on -- on hardware SIM card; that is, it's a
13 "secure, tamper-resistant smart-chip that is
14 discrete from the mobile device's main
15 memory, that enables a mobile device to
16 access a cellular network."

17 And -- and he's got another -- another
18 -- another part of his -- his declaration
19 where he says it's -- that the plain and
20 ordinary meaning of the term is a "secure,
21 tamper-resistant chip on a mobile device
22 that is separate from the mobile device's
23 main memory, that enables the mobile device
24 to access the cellular network."

1 So what I'm saying is that I don't -- I
2 don't agree with either of them. But
3 he's -- he's -- I'm -- I'm just saying that
4 it should be a SIM card implemented in
5 hardware rather than software.

6 And -- and I think, you know, to the
7 extent "secure, tamper-resistant chip on a
8 mobile device separate from the device's
9 main memory" is actually referring to the
10 hardware part of it, he doesn't break down
11 the hardware part versus the SIM card part.

12 I'm just saying that it should be
13 whatever -- whatever the person of ordinary
14 skill understands SIM card implemented in
15 hardware. That's how they understand
16 hardware SIM card.

17 It's not clear from Dr. Shamus'
18 statements -- although you could try to
19 parse it out; but to the extent that the
20 hardware part is "a secure, tamper-resistant
21 chip on a mobile device that is separate
22 from the mobile device's main memory" is
23 what he imparts into the hardware part of
24 that.

1 I mean, that's -- that's what I have --
2 I mean, there's no -- there's no -- a SIM
3 card is only mentioned a few times in the
4 spec, and there's no discussion anywhere in
5 the spec about how it's secure,
6 tamper-resistant.

7 And so, again, this is another case
8 where Dr. Shamus is importing limitations
9 from -- that are not even found in the spec
10 in to his -- his understanding of the plain
11 and ordinary meaning. And -- and I'm just
12 saying that it should be taken for what it
13 -- what it is, which is just that it's a SIM
14 -- it's a SIM card implemented in hardware
15 rather than software.

16 BY MR. GOLUB:

17 Q. I object to your answer as not responsive.

18 I will give you another opportunity to
19 answer the question.

20 In Paragraph 36 of your supplemental
21 declaration in the 399 IPR, you use the phrase,
22 quote, "SIM cards," closed quote.

23 And my question is: Are you using that
24 phrase as a term of art?

1 MR. GORYUNOV: Objection --

2 THE WITNESS: I'm using --

3 MR. GORYUNOV: -- form.

4 THE WITNESS: I'm using it in the way
5 that a person of ordinary skill would
6 understand it in the light of the
7 specification and the prosecution history,
8 and that's just what the plain and ordinary
9 meaning is.

10 So I'm using -- I'm not -- it's just a
11 SIM card implemented in hardware rather than
12 software. And I think the dispute here is
13 this additional limitations that -- that
14 Dr. Shamus is importing about what it means
15 to be a hardware SIM card, in which the
16 hardware part of that appears to be -- have
17 to be a secure, tamper resistant chip on a
18 mobile device, separate from the device's
19 main memory or discrete from the mobile
20 device's main memory. And that appears to
21 be what he's -- he's calling out as the
22 hardware part of it.

23 And that's what I am really taking issue
24 with is that I don't agree with these -- all

1 these extra requirements that Dr. Shamus is
2 trying to import.

3 And then I'm just saying that, what is a
4 hardware SIM card? Well, it's whatever a
5 person of ordinary skill would have
6 understood a SIM card to be in light of the
7 prosecution history and the specification,
8 implemented in hardware rather than
9 software.

10 BY MR. GOLUB:

11 Q. I object to your answer as not responsive.
12 I'll give you one more try.

13 MR. GORYUNOV: I object to your
14 instructions. Please ask your questions,
15 and we'll move on.

16 BY MR. GOLUB:

17 Q. In Paragraph 36 of your declaration, you
18 refer to the term, quote, "SIM cards," closed quote.
19 Is that term a term of art?

20 MR. GORYUNOV: Objection; form.

21 THE WITNESS: It's a phrase that was
22 used and it was -- whatever the meaning is,
23 a person of ordinary skill would understand
24 the meaning in light of the prosecution --

1 the specification and prosecution history.

2 The only -- I -- from what -- my
3 recollection -- and I don't have a perfect
4 memory -- the phrase SIM card I think is
5 only used a few times in the -- in the
6 entire specification and maybe a few times
7 in -- in the -- in the '488 claim. But it's
8 only a few times in the specification.

9 So in the context of that, it's -- I
10 think the main dispute here is the
11 additional importation of these -- all these
12 extra requirements that Dr. Shamus is
13 throwing in to what a person of ordinary
14 skill would understand.

15 So I'm not sure -- I mean, I think I --
16 I -- I don't remember every bit of his
17 reasoning; but, like, you know, it's not
18 supported by the specs or the -- or the
19 prosecution history. And it's not clear why
20 it should mean anything more than a SIM card
21 implemented in hardware rather than
22 software.

23 BY MR. GOLUB:

24 Q. I object to your --

1 A. I mean, I have a rebuttal opinion of
2 Dr. Shamus. Dr. Shamus is setting forth his opinion
3 of what a person of ordinary skill would mean --
4 would understand hardware SIM card to mean.

5 And I'm saying I disagree. There's no
6 evidence -- I don't see where any reason to read
7 into the term all these additional requirements.

8 And I -- I'm not -- I don't even recall
9 Dr. Shamus -- well, I guess he does cite to some
10 documents. But, you know, to add these additional
11 requirements, I think -- to add these, you would
12 have to show that -- that, you know, not cherry pick
13 documents that -- that might say what he wants, but
14 to show that every recitation might -- and I don't
15 think he's -- he's done that, and I don't -- I don't
16 know that I'd agree with -- with him that those
17 additional requirements should be imported into the
18 meaning. And that's what I'm saying.

19 Q. I object to your answer as not responsive.

20 MR. GOLUB: I have no further questions.

21 MR. GORYUNOV: All right. Let's take a
22 five-minute break. Off the record.

23
24 (Break from 4:17 p.m. to 4:24 p.m. was taken

1 in the proceedings.)

2
3 MR. GORYUNOV: Dr. Houh, no further
4 questions. Thank you for your time.

5 THE WITNESS: Thank you, everyone.
6 Thank you, Ms. Mack, Mr. Golub.

7 MR. GORYUNOV: We'll reserve and sign.

8 THE STENOGRAPHER: Do you want a copy,
9 Mr. Goryunov?

10 MR. GORYUNOV: Yeah; I'll take a copy
11 for Dr. Houh to review, but I don't need
12 anything special.

13 THE STENOGRAPHER: Okay. Thank you.

14
15 (Whereupon, the deposition was concluded at
16 4:24 p.m.)

C E R T I F I C A T E

COMMONWEALTH OF MASSACHUSETTS
Norfolk, SS.

I, DAWN MACK-BOADEN, CSR #153120, RPR, and
a Notary Public duly qualified in and for the
Commonwealth of Massachusetts, do hereby certify
that:

HENRY HOUH, the witness whose testimony is
hereinbefore set forth, was duly sworn by me
pursuant to Mass. R. Civ. 27, 29, 30, 30A, and 31,
and that such testimony is a true and correct
transcription of my original stenographic notes
taken in the forgoing matter, to the best of my
knowledge, skill and ability.

I further certify that I am neither
attorney or counsel for, nor related to or employed
by any of the parties to the action in which this
deposition is taken; and furthermore, that I am not
a relative or employee of any attorney or counsel
employed by the parties thereto or financially
interested in the action.

IN WITNESS WHEREOF, I have hereunto set my
hand and affixed my Notarial seal this 6th day of
February, 2024.

Dawn Mack-Boaden

Dawn Mack-Boaden, RPR
Notary Public

My Commission Expires: August 26, 2027

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ERRATA SHEET

I, HENRY HOUH, do hereby certify that I have read the foregoing transcript of my testimony and further certify that to the best of my knowledge, said transcript is true and accurate (with the exception of the following corrections listed below):

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Dated this _____ day of _____, 2024.

Signed under the pains and penalties of perjury.

Henry Houh

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