

ROUGH DRAFT

1 ROUGH DRAFT

2

3 N O T I C E

4 This transcript is an UNCERTIFIED ROUGH DRAFT

5 TRANSCRIPT ONLY. It contains the raw output from

6 the court reporter's stenotype machine translated

7 into English by the court reporter's computer,

8 without the benefit of proofreading. It will

9 contain untranslated steno outlines, mistranslations

10 (wrong words), and misspellings. These and any

11 other errors will be corrected in the final

12 transcript. Since this rough draft transcript has

13 not been proofread, the court reporter cannot assume

14 responsibility for any errors.

15

16 This rough draft transcript is intended to assist

17 attorneys in their case preparation and is not to be

18 construed as the final transcript. It is not to be

19 read by the witness or quoted in any pleading or for

20 any other purpose and may not be filed with any

21 court.

22

ROUGH DRAFT

1 (Witness sworn.)

2 WHEREUPON:

3 JEAN RENARD WARD,

4 called as a witness herein, having first affirmed,

5 was examined and testified as follows:

6 EXAMINATION

7 BY MR. MEYER:

8 Q. Good morning, Mr. Ward. Could you please

9 state your full name for the record?

10 A. Jean Renard Ward.

11 Q. And you understand you're under oath or that

12 you've affirmed to an oath?

13 A. I affirmed, yes, sir.

14 Q. And is there any reason that you cannot give

15 truthful complete and accurate testimony today?

16 A. Not that I am aware of although I'm still

17 trying to get the volume turned up on this a little

18 bit.

19 Q. Okay. I will try to speak up and speak

20 clearly and just let me know if you need me to

21 repeat anything.

22 Before the deposition, I provided 11 PDFs

ROUGH DRAFT

1 that are potential exhibits to your attorneys.

2 Do you have those 11 PDFs?

3 A. I have 11 PDFs. I would assume they are the

4 correct ones and I've just lost the Zoom window.

5 Q. I can wait a moment if you need to

6 troubleshoot that.

7 A. Okay. You're back.

8 Q. Great. If you have anything open besides

9 Zoom and the directory containing those 11 PDFs,

10 please close them and confirm that they are closed

11 and can you agree that you will not open anything

12 during the deposition unless expressly asked to do

13 so?

14 A. Yes, sir.

15 Q. Approximately how many times have you been

16 deposed as an expert witness?

17 A. I would have to check my CV but it's at

18 least 15 times.

19 Q. About how many of those depositions were in

20 the context of an IPR?

21 A. Perhaps the majority of them. I'm not sure.

22 Q. Do you see that several of the 11 PDFs have

ROUGH DRAFT

1 file names starting with their exhibit number, such

2 as EX dot 1006?

3 A. Yes, I see seven like that.

4 Q. Okay. In your directory, please open

5 Exhibit 1003. And let me know when you have it

6 open.

7 (Exhibit 1003, previously marked, is

8 attached to the transcript.)

9 A. It's open and we've just lost Zoom again.

10 THE WITNESS: Nathan, do you remember how we

11 got it back up?

12 MR. SPEED: Just click this and then --

13 sorry, guys.

14 THE WITNESS: Okay. I see it's Zoom in a

15 tab.

16 MR. SPEED: Yeah I'm gonna move it here so

17 it will just stay there.

18 THE WITNESS: Okay. I'll have to look

19 sideways to see you sir.

20 MR. MEYER: That's fine.

21 BY MR. MEYER:

22 Q. Are you familiar with Exhibit 1003?

ROUGH DRAFT

1 A. It appears to be my declaration on this

2 patent, '907.

3 Q. And that would be the declaration that you

4 submitted in IPR 2024-00714?

5 A. Yes, sir, that's what it says on the first

6 page and I'm -- still would like to get this volume

7 turned up. Okay. Let's continue.

8 Q. Okay. About how long did you spend

9 preparing this declaration?

10 A. Oh, well, I spent a lot of time working on

11 the declarations in the other matters too. I would

12 guess perhaps 50 or 100 hours. I really don't know.

13 Could be more.

14 Q. Let me direct you to paragraph 21 of

15 Exhibit 1003, which starts on page 14 and let me

16 know when you're there.

17 A. Yes, sir, I see if.

18 Q. Do you see that paragraph 21 contains a

19 table that lists 111 exhibits?

20 A. Yes, sir.

21 Q. And are these exhibits the only materials

22 that you relied on for your declaration?

ROUGH DRAFT

1 A. That and my general -- the only exhibit,
2 yes, but I also relied on my experience and
3 knowledge.

4 Q. Okay. Do you see that the first exhibit,
5 1001 is U.S. patent number 10,627,907?

6 A. Yes, sir, I see that here.

7 (Exhibit 1001, previously marked, is
8 attached to the transcript.)

9 Q. And were you familiar with that document
10 prior to your work in this IPR?

11 A. I don't know. It could have been something

12 that I had occasion to read or read something in the
13 same patent family that would have the same or
14 overlapping specification.

15 Q. In your declaration, you sometimes refer to
16 Exhibit 1001 as the '907 patent; correct?

17 A. That's my recollection, yes, sir.

18 Q. Okay. And do you see also in this table
19 Exhibit 1006 is U.S. patent application publication
20 number 2007/0152988?

21 A. Yes, sir, I do.

22 (Exhibit 1006, previously marked, is

ROUGH DRAFT

1 attached to the transcript.)

2 Q. And were you familiar with that document

3 prior to your work in this IPR?

4 A. Again, I don't know. It's quite possible I

5 might have had occasion to look at it or something

6 in the same patent family with the same or

7 overlapping specification.

8 Q. And in your declaration, you sometimes refer

9 to Exhibit 1006 as Levin, which is the name of one

10 of its listed inventors; correct?

11 A. I believe so, yes.

12 Q. And Levin is spelled L-e-v-i-n; correct?

13 A. That's what it says here, yes, sir.

14 Q. Okay. And looking at Exhibit 1016 in the

15 table, it says U.S. patent application publication

16 number 2004/0032395. Were you familiar with that

17 document before your work in this IPR?

18 A. Again, I don't know for sure. It's quite

19 possible I might have had occasion to see that

20 patent or something in the same or similar family.

21 (Exhibit 1016, previously marked, is

22 attached to the transcript.)

ROUGH DRAFT

1 Q. And in your declaration, you sometimes refer
2 to Exhibit 1016 as Goldenberg which is the name of
3 one of its listed inventors; correct?

4 A. Yes, sir, I believe so.

5 Q. Okay. And the next Exhibit 1017 is listed
6 as U.S. patent application publication number
7 2007/0139375.

8 Were you familiar with that document before
9 your work in this IPR?

10 A. Again, sir, it's difficult for me to
11 recollect. I may have seen it or something in the

12 same patent family with same or similar or some

13 overlapping content in the specification before.

14 (Exhibit 1017, previously marked, is

15 attached to the transcript.)

16 Q. And in your declaration, you sometimes refer

17 to this Exhibit 1017 as Rosenberg, which is the name

18 of one of its listed inventors; correct?

19 A. Yes, sir. There have been quite a few

20 Rosenberg references in these proceedings.

21 Q. Yes, there have.

22 Did you conduct a prior art search to find

ROUGH DRAFT

1 exhibits 1006, 1016, and 1017?

2 A. I conducted a prior art search, yes, sir.

3 Q. And did you find those three -- the

4 documents corresponding to those three exhibits in

5 your search?

6 A. At this point, I don't recollect which I

7 found independently in my search and which I might

8 also have been provided to me by counsel.

9 Q. Okay. So these could have been provided to

10 you or you could have found them or both?

11 A. At this point, I couldn't say either way.

12 Q. Okay. About how much time did you spend

13 preparing for this deposition?

14 A. Perhaps 20, 25 hours. I'm not sure. There

15 were other matters I was working on about the same

16 time, so.

17 Q. What did you do to prepare?

18 A. I reviewed some of the documents in this

19 case.

20 Q. And by some of the documents in this case,

21 do you mean the documents listed in the table in

22 paragraph 21 of your declaration or are you

ROUGH DRAFT

1 referring to other documents as well?

2 A. I don't think I had occasion to review every

3 single document listed in this paragraph, no, sir.

4 Q. To prepare for this deposition, did you

5 review any documents other than those listed in

6 paragraph 21?

7 A. Not that I recollect, but I was also working

8 on some things in the other patents that are in the

9 related IPRs. And I have occasion to review things

10 in the field of the art, which I wouldn't think

11 would be necessarily done because of this case but I

12 may have reviewed something there.

13 Q. Okay. Please go to paragraph 89 on page 53

14 of your declaration and let me know when you're

15 there.

16 A. Did you say paragraph 89?

17 Q. Paragraph 89 on page 53 of your declaration.

18 A. Yes, I am there.

19 Q. Okay. And do you see that in the first

20 sentence of that paragraph, you wrote Goldenberg's

21 method use force profiles which define, among other

22 things, position and range information that is used

ROUGH DRAFT

1 to determine appropriate output actuator signals?

2 A. Yes, sir.

3 Q. And this paragraph talks about Exhibit 1016,

4 which is also referred to as Goldenberg; correct?

5 A. Without going back to check, I'll take your

6 word for it, yes, sir.

7 Q. Now, Goldenberg doesn't state that the force

8 profiles you reference in paragraph 89 are defined

9 during use, does it?

10 A. Could you give me a moment to check

11 Goldenberg to see what it says?

12 Q. Sure.

13 A. I think so force profiles in this case may

14 have been a quote from the '907 patent. I would

15 want to check that.

16 If it's all right with you, I'll just make a

17 short note while I'm doing my search.

18 Q. Sure.

19 A. Could I have the question read back to me,

20 please?

21 Q. Sure.

22 Goldenberg doesn't state that the force

ROUGH DRAFT

1 profiles you reference in paragraph 89 are defined

2 during use, does it?

3 A. Has -- I'm a little unsure on the meaning of

4 the question because if they are used, they have to

5 have been defined.

6 Q. But does it disclose that the force profiles

7 were defined during use of the device?

8 A. I'm still puzzled by your phrasing, sir.

9 They have to have been defined for them to be used,

10 so they -- in that sense, they are defined during

11 use.

12 Q. Are they -- but Goldenberg doesn't disclose

13 a way for a user to create force profiles during

14 use, does it?

15 A. This document is searchable, but the search

16 results are not lining up with the text. I believe

17 we had this same problem in an earlier deposition.

18 So it's making it difficult to use this searchable

19 PDF.

20 Q. I apologize for that. These are the

21 as-filed versions, so they are what was filed with

22 the patent office. So it's possible that there's

ROUGH DRAFT

1 some issue there.

2 And Mr. Ward?

3 A. Yes.

4 Q. Are you still searching for disclosure in

5 Goldenberg of a way to create force profiles during

6 use by an end user?

7 A. I don't think that's the original question.

8 What is the question I'm being asked to answer?

9 Could I have the previous question read

10 back?

11 MR. MEYER: Could the court reporter please

12 read back the previous question?

13 (Record read as requested.)

14 A. Those aren't same question. Which question

15 am I supposed to respond to? I'm not sure.

16 Q. Okay. Let me ask the question again, and

17 please respond to it.

18 The question is Goldenberg doesn't disclose

19 a way to create profiles during use, does it?

20 A. I believe that's a different question from

21 either of the previous two.

22 Q. Nevertheless, could you please answer the

ROUGH DRAFT

1 question I just asked?

2 A. Okay.

3 Q. Mr. Ward, is this the first time you've

4 tried to determine whether Goldenberg discloses a

5 way to create force profiles during use?

6 A. I do not believe the word create appears in

7 the claims, sir, and I was examining -- studying

8 this document with respect to the claims. If I --

9 I'm happy to respond to the question right now, sir,

10 based on what I can find in the document --

11 Q. Please do.

12 A. -- so far.

13 Could I have the question read back to me,

14 please, before I respond?

15 Q. Sure.

16 Goldenberg doesn't state that the force

17 profiles you referenced in paragraph 89 are defined

18 during use, does it?

19 A. That's a different question.

20 Q. Which question are you referring to?

21 A. I believe you've switched back and forth

22 between the words create and define and you've made

ROUGH DRAFT

1 other changes in the question as you've asked

2 repeated. Could I please have the question I'm

3 supposed to respond to.

4 Q. I'll give it to you one more time. This is

5 the question. Goldenberg doesn't -- excuse me.

6 Goldenberg doesn't disclose a way to create

7 force profiles during use, does it?

8 A. I believe Goldenberg describes calibration

9 methods and that the user can adjust parameters and

10 settings of the device during use that may include

11 changing some settings of user preferences related

12 to profiles or whether such profiles are used. The

13 patent does disclose that the user can select sets

14 of profiles by changing the mode of operation.

15 Q. And your -- the response you just gave, are

16 you quoting from a part or parts of the Goldenberg

17 reference?

18 A. I believe I'm paraphrasing if you will give

19 me a moment.

20 In paragraph 56, it discusses that the

21 processor may store instructions for the

22 microprocessor, temporary and other data calibration

ROUGH DRAFT

1 parameters, adjustments to compensate for sensor

2 variations and/or the state of the device. From

3 that a person of skill in the art would understand

4 that that could affect definitions or some of the

5 values used in -- for its profiles.

6 Q. Does Goldenberg state that that could change

7 force -- does Goldenberg explicitly state that the

8 disclosure that you just read could change force

9 profiles?

10 A. A person of skill in the art would

11 understand that if, for example, you calibrate for

12 the range of motion of a particular physical

13 control, that that would change the positions of the

14 control -- things need to be normalized or scaled or

15 the range change affected otherwise, that would

16 affect its operation force or force models.

17 Q. That isn't explicitly stated in Goldenberg

18 though; correct?

19 A. I don't see it in this paragraph but if

20 you'll give me a moment, I can go check the rest of

21 the reference again.

22 Q. Let's go on to a different set of questions.

ROUGH DRAFT

1 Let's go back to your --

2 A. Excuse me. Excuse me. There's something

3 else that occurred to me. Goldenberg -- this is

4 Goldenberg, yes, also discusses re-setting rest

5 positions of controls, which would affect the

6 positions at which force effects are applied. I can

7 go through and look for those references and

8 citations for you, sir.

9 Q. Could you instead go to -- back to your

10 declaration, which is Exhibit 1003, and go to

11 paragraph 90, please? And let me know when you're

12 there.

13 A. Yes, sir.

14 Q. Okay. And do you see that the first

15 sentence of paragraph 90 says figure 8 below depicts

16 Goldenberg's jog shuttle force model? Do you see

17 that?

18 A. Yes, sir.

19 Q. And in that sentence, when you say figure 8,

20 are you referring to the figure at the end of

21 paragraph 90?

22 A. Yes, sir.

ROUGH DRAFT

1 Q. And is that --

2 A. I am.

3 Q. And is that figure a reproduction of figure

4 8 from Goldenberg?

5 A. Yes, sir, I believe it is.

6 Q. Okay. And if we go back to -- if we go to

7 Goldenberg, which is Exhibit 1016, the jog shuttle

8 model is described at paragraphs 115 -- sorry --

9 0115, 0116, and 0117; correct?

10 A. Yes, sir. Without taking time to check to

11 see where else it might also be referenced.

12 Q. Do you see that in those three paragraphs,
13 which is 0115 to 0117, describing the jog shuttle
14 model, the patent doesn't actually reference figure
15 8 in those paragraphs; correct?

16 A. I believe it does, sir. If you will refer
17 to my declaration, I point out there were obvious
18 typographical errors in the patent. And as I
19 recollect, the board agreed that that was the case.

20 Q. Okay. So my next question was going to be
21 where paragraph 0116 references figure 7, is it your
22 understanding that it's actually meant to refer to

ROUGH DRAFT

1 figure 8 rather than figure 7?

2 A. Yes, sir, as stated in my declaration.

3 Q. Now, Goldenberg describes the jog shuttle

4 model as having two spring effects; right?

5 A. Yes, sir.

6 Q. Please take a look at paragraph 91 of your

7 declaration.

8 And do you see in paragraph 91 the second

9 sentence says -- of your declaration states the

10 first spring effect curve 392 is output over the

11 entire rotational range of the knob and has a medium

12 amount of stiffness?

13 A. Yes, sir, I see that.

14 Q. And do you still agree with that statement

15 in your declaration?

16 A. I agree that the quotations I cite are

17 correct, yes, sir.

18 Q. But do you agree with the statement that the

19 first spring effect curve 392 is output over the

20 entire rotational knob and has a medium amount of

21 stiffness?

22 A. I agree that that's what's stated, yes, sir.

ROUGH DRAFT

1 Q. The first spring effect is centered around

2 an origin point; correct?

3 A. It states here that the force resists

4 motions away from the origin and increases in

5 magnitude as the knob is moved away, yes, sir, on

6 that basis.

7 Q. And the first -- and the range of the first

8 spring effect is the entire rotational range of the

9 knob?

10 A. I believe what the patent states is that the

11 spring effect is output over the entire rotational

12 range of the knob.

13 Q. And in the answer that you just gave, when

14 you refer to the patent, you're referring to

15 Goldenberg?

16 A. Yes, sir.

17 Q. Okay. Take a look at paragraph 92 of your

18 declaration.

19 And do you see that the first sentence says

20 the second effect curve 394 overlaps the first

21 effect but is only in effect over a small range

22 between positions negative P1 and P1 around the

ROUGH DRAFT

1 origin position?

2 A. Yes, sir, I see that.

3 Q. So is it your understanding that the range

4 of the second spring effect is only from negative P1

5 to P1?

6 A. What it states is that the first effect,

7 that it overlaps the first effect but is only in

8 effect over a small range between positions minus P1

9 and P1 around the origin position, yes, sir, on that

10 basis.

11 Q. Does that mean that the range of the second

12 spring effect is entirely within the range of the

13 first spring effect?

14 A. It states that the first effect is only

15 effect over a small range between positions minus P1

16 and P1 around the origin position.

17 Q. Is the range of the second spring effect

18 entirely within the range of the first spring

19 effect?

20 A. It's within the -- it appears to be based on

21 the specification that it's within a portion of the

22 entire rotational range of the knob.

ROUGH DRAFT

1 Q. I'm sorry. Could --

2 MR. MEYER: Could the court reporter please

3 repeat back the response that Mr. Ward just

4 provided?

5 (Record read as requested.)

6 MR. MEYER: Thank you.

7 BY MR. MEYER:

8 Q. Mr. Ward, aside from the first spring effect

9 and the second spring effect, Goldenberg doesn't

10 disclose any other spring effects or other force

11 effects for the jog shuttle model, does it?

12 A. As I recollect, it states that the at the
13 transition or at the point P1 or P2 the change can
14 be made acceptable to the user. It could be
15 construed as understood by a person of skill in the
16 art as describing a slightly different spring
17 effect, but these are the two spring effects
18 referred to here, yes, sir.

19 Q. Could you please point me to the disclosure
20 in Goldenberg that -- from which a person of
21 ordinary skill in the art could infer another spring
22 effect or another force effect beyond the first --

ROUGH DRAFT

1 A. It's based on my recollection, so.

2 Q. Never mind, Mr. Ward, I withdraw that

3 question.

4 Could you please go to paragraph 154 on page

5 88 of your declaration?

6 A. Could we take a short break, please, after

7 the next -- after this question?

8 Q. We can take a short break right now if that

9 would be better.

10 A. That will be fine. Thank you.

11 Q. Okay.

12 (A short break was had.)

13 BY MR. MEYER:

14 Q. Mr. Ward, please go to paragraph 154 on page

15 88 of your declaration, and let me know when you're

16 there.

17 A. Yes, sir, I see it.

18 Q. And do you see that the first sentence says

19 Rosenberg's system provides force feedback to the

20 user object 34 using force profiles that are stored

21 in memory?

22 A. Yes, sir, I see that.

ROUGH DRAFT

1 Q. And in that sentence, Rosenberg refers to
2 Exhibit 1017, which is the Rosenberg declaration --
3 or the Rosenberg reference; correct?

4 A. I believe so, yes, sir.

5 Q. Rosenberg doesn't state that the force
6 profiles you reference in paragraph 89 are defined
7 during use, does it?

8 A. Paragraph 89, sir?

9 Q. I'm sorry. Paragraph 154. Let me repeat
10 the question.

11 Rosenberg doesn't state that the force

12 profiles you referenced in paragraph 154 are defined

13 during use, does it?

14 A. Again, as a matter of logic, the values have

15 to be defined before they can be used. So in that

16 sense, they are defined during use.

17 Q. I think you just said that they have to be

18 defined before use?

19 A. They have to be defined when they are used.

20 Q. At the time of use?

21 (Unreportable crosstalk.)

22 Q. Go ahead.

ROUGH DRAFT

1 A. Go on, sir.

2 Q. Is it your contention that there's something
3 in Rosenberg that discloses that during actual use
4 of the device, as opposed to design or manufacture,
5 that the force profiles are defined during that
6 actual use?

7 A. May I bring up the Rosenberg reference?

8 Q. You may. And that's Exhibit 1017.

9 A. Excuse me. I just want to make sure I have
10 the right reference open. In one of the prior
11 depositions, the attorney giving me questions I

12 believe got confused about which reference.

13 I don't believe this is a complete review of

14 what may relate to your question, but before I

15 respond, could I have the question read back to me,

16 please?

17 MR. MEYER: Could the court reporter please

18 recite or quote back the previous question?

19 (Record read as requested.)

20 A. If I can draw your attention to paragraph

21 066, until the middle it says the calibration

22 parameters can be determined and stored by the

ROUGH DRAFT

- 1 manufacturer before the interface device is sold or
- 2 optionally, the parameters can be determined by a
- 3 user of the interface device. A person of skill in
- 4 the art would understand that they may be determined
- 5 during use.
- 6 Q. And just to be clear --
- 7 A. Excuse me, sir. I'm not finished.
- 8 Q. Go ahead.
- 9 A. It says the calibration parameters are used
- 10 by the processor to modify the input sensor signals
- 11 and/or the output force values to actuators to

12 provide approximately the same range of forces on an

13 object.

14 In paragraph 69, it also says that relative

15 sensors only provide relative angle information and

16 thus this usually requires some form of calibration

17 step.

18 A person of skill in the art reading this

19 would understand that this would be quite reasonably

20 or even most likely done by involving the user, so

21 this would be during use.

22 Q. And are you finished with your --

ROUGH DRAFT

1 A. No, sir.

2 Q. -- answer?

3 A. It also states in paragraph 210 that a host

4 processor may request -- issue a request information

5 command -- I'm paraphrasing here -- to obtain

6 information about the device. It says that this

7 information may be necessary so that the commands it

8 outputs to local processor can be adjusted and

9 customized to the particular type of interface

10 device.

11 A person of skill in the art would

12 understand that that would be considered by the
13 device as being used because if it's not being used,
14 why request the commands.

15 Q. Now, for each -- so you've given three
16 quotations or paraphrases from the -- from
17 Rosenberg.

18 And --

19 A. Sir, I was not finished with my response.
20 If you're happy with that response, I will reserve
21 that I might bring up the other points later.

22 Q. Well, my question is with each one you've

ROUGH DRAFT

1 then said what a person of ordinary skill in the art

2 would understand.

3 And just to be clear, that's your contention

4 about what a person of ordinary skill in the art

5 would understand as opposed to something that's

6 explicitly stated in Rosenberg; correct?

7 A. I believe the statement in 66, it's quite

8 explicit where it says optionally the parameters can

9 be determined by a user of the interface device. I

10 believe I've quoted that correctly, sir. So -- and

11 I believe that's an explicit statement. If it is

12 done by a user device, that's while the device is

13 being used because if the device is not being used,

14 there is not a current user of the device.

15 Q. Could you please go back to your

16 declaration, Exhibit 1003, and go to paragraph 251

17 on page 131?

18 A. Paragraph 253?

19 Q. 251?

20 A. 251, I apologize.

21 Q. Do you see that the first sentence of 251

22 states Levin's method used detent force profiles

ROUGH DRAFT

1 which are pre-defined force effects stored in

2 memory?

3 A. Yes, sir. I'm not sure how to pronounce

4 detent either.

5 Q. Yeah, I'm sure there's more than one way.

6 But my first question is where you're

7 referring to Levin here, is it correct that you're

8 referring to the Levin reference which is

9 Exhibit 1006?

10 A. Yes, sir, I believe that's the case.

11 Q. And do you -- do you still maintain -- do

12 you still agree with the first sentence of paragraph

13 251?

14 A. Yes, sir.

15 Q. Now, let's take a look at Exhibit 1001. Let

16 me know when you have that open.

17 A. Yes, sir.

18 Q. And this is the '907 patent; correct?

19 A. Yes, sir, it appears to be.

20 Q. Okay. Which is the patent at issue in this

21 IPR?

22 A. I believe that's the case, yes, sir.

ROUGH DRAFT

1 Q. Okay. Please go to Claim 1 which starts

2 near the bottom of column 13?

3 A. Excuse me a moment.

4 A. Yes, sir.

5 Q. And do you see that there is a limitation

6 that starts at column 13 line 65 and ends at line 67

7 stating rendering a haptic effect in response to an

8 entry of the user input element to one or more

9 positions within the boundary range of positions?

10 Do you see that limitation?

11 A. Yes, sir, I believe you've read that

12 correctly.

13 Q. Okay. Now my question is in -- as used in

14 that limitation in this patent, do you understand

15 the phrase in response to to connote a cause and

16 effect relationship?

17 A. That's a fair statement, yes, sir.

18 Q. So it's your understanding that in response

19 to, as it is used in this limitation, would require

20 some form of causal relationship between rendering a

21 haptic effect and entry of the user input element to

22 one or more positions within the boundary range of

ROUGH DRAFT

1 positions?

2 A. Yes, sir. That's a fair statement.

3 Q. Would you agree that mere coincidence or one

4 event happening after another would not be enough to

5 qualify -- to meet that limitation unless there is

6 some causal relationship?

7 MR. SPEED: Objection.

8 A. Could you rephrase the question, sir?

9 Q. Sure.

10 So I think that you've stated and correct me

11 if I'm wrong in response to as it is used in the

12 limitation at the bottom of column 13 connotes some

13 sort of causal relationship; is that correct?

14 A. I'm not sure that's phrased exactly the same

15 way but that sounds like a fair statement, yes, sir.

16 Q. And is it your understanding that causal

17 relationship requires something more than mere

18 coincidence or one event happening after another?

19 MR. SPEED: Objection.

20 A. Could you rephrase the question, sir? I

21 think the -- I'm not sure. The question may be

22 compound. I don't know.

ROUGH DRAFT

1 Q. Okay. The question is does in response to
2 require more than mere coincidence or one event
3 happening after another?

4 MR. SPEED: Same objection.

5 A. Could you perhaps break that question up,
6 sir, when you rephrase it?

7 Q. Sure.

8 Does a causal relationship, as connoted by
9 in response to, require more than mere coincidence?

10 A. I think a person of skill in the art would
11 understand it that way, yes, sir.

12 Q. And would it be your -- let me rephrase

13 that.

14 Is it your position that --

15 A. Excuse me. Excuse me. Just to complete, it

16 depends upon how you mean mere coincidence.

17 Q. Is it your understanding that in response to

18 would require more than merely one event happening

19 after another?

20 A. I believe that's how a person of skill in

21 the art would understand it, yes, sir.

22 MR. MEYER: Thank you very much Mr. Ward for

ROUGH DRAFT

1 your time. I have no further questions.

2 MR. SPEED: We have no questions.

3 (Off the record at 10:21 a.m.)

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22