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Transcript of Jean Renard Ward

Date: January 10, 2025

Case: Valve Corporation -v- Immersion Corporation (PTAB)

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WORLDWIDE COURT REPORTING & LITIGATION TECHNOLOGY

Valve Corp. v. Immersion Corp.

IPR2024-00714

Immersion Exhibit 2009

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

VALVE CORPORATION,

Petitioner

V.

IMMERSION CORPORATION,

Patent Owner.

Case IPR2024-00714

Patent 10,627,907

Virtual Deposition of JEAN RENARD WARD

Friday, January 10, 2025

9:05 a.m. CST

Job No.: 564051

Pages: 1 - 39

Reported Stenographically by:

Tiffany M. Pietrzyk, CSR RPR CRR

1 Virtual deposition of JEAN RENARD WARD,
2 pursuant to notice, before Tiffany M. Pietrzyk, a
3 Certified Shorthand Reporter in the States of
4 Illinois, Texas, and California, Registered
5 Professional Reporter, Certified Realtime Reporter,
6 and a Notary Public in and for the State of
7 Illinois.

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P R O C E E D I N G S

(Witness sworn.)

WHEREUPON:

JEAN RENARD WARD,

called as a witness herein, having first affirmed,
was examined and testified as follows:

EXAMINATION

BY MR. MEYER:

Q. Good morning, Mr. Ward. Could you please
state your full name for the record?

A. Jean Renard Ward.

Q. And you understand you're under oath or that
you've affirmed to an oath?

A. I affirmed, yes, sir.

Q. And is there any reason that you cannot give
truthful, complete, and accurate testimony today?

A. Not that I am aware of, although I'm still
trying to get the volume turned up on this a little
bit.

Q. Okay. I will try to speak up and speak
clearly, and just let me know if you need me to
repeat anything.

1 Before the deposition, I provided 11 PDFs
2 that are potential exhibits to your attorneys.

3 Do you have those 11 PDFs?

4 A. I have 11 PDFs. I would assume they are the
5 correct ones. And I've just lost the Zoom window.

6 Q. I can wait a moment if you need to
7 troubleshoot that.

8 A. Okay. You're back.

9 Q. Great.

10 If you have anything open besides Zoom and
11 the directory containing those 11 PDFs, please close
12 them and confirm that they are closed.

13 And can you agree that you will not open
14 anything during the deposition unless expressly
15 asked to do so?

16 A. Yes, sir.

17 Q. Approximately how many times have you been
18 deposed as an expert witness?

19 A. I would have to check my CV, but it's at
20 least 15 times.

21 Q. About how many of those depositions were in
22 the context of an IPR?

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

2 Q. Do you see that several of the 11 PDFs have
3 file names starting with their exhibit number, such
4 as Ex. 1006?

5 A. Yes, I see seven like that.

6 Q. Okay. In your directory, please open
7 Exhibit 1003, and let me know when you have it open.

8 (Exhibit 1003, previously marked, is
9 attached to the transcript.)

10 A. It's open. And we've just lost Zoom again.

11 THE WITNESS: Nathan, do you remember how we
12 got it back up?

13 MR. SPEED: Just click this and then --
14 sorry, guys.

15 THE WITNESS: Okay. I see it's Zoom in a
16 tab.

17 MR. SPEED: Yeah, I'm gonna move it here so
18 it will just stay there.

19 THE WITNESS: Okay. I'll have to look
20 sideways to see you, sir.

21 MR. MEYER: That's fine.

22 ///

1 BY MR. MEYER:

2 Q. Are you familiar with Exhibit 1003?

3 A. It appears to be my declaration on this
4 patent, '907.

5 Q. And that would be the declaration that you
6 submitted in IPR2024-00714?

7 A. Yes, sir, that's what it says on the first
8 page, and I'm -- still would like to get this volume
9 turned up.

10 Okay. Let's continue.

11 Q. Okay. About how long did you spend
12 preparing this declaration?

13 A. Oh, well, I spent a lot of time working on
14 the declarations in the other matters too. I would
15 guess perhaps 50 or 100 hours. I really don't know.
16 Could be more.

17 Q. Let me direct you to paragraph 21 of
18 Exhibit 1003, which starts on page 14, and let me
19 know when you're there.

20 A. Yes, sir, I see it.

21 Q. Do you see that paragraph 21 contains a
22 table that lists 111 exhibits?

1 A. Yes, sir.

2 Q. And are these exhibits the only materials
3 that you relied on for your declaration?

4 A. That and my general -- the only exhibit,
5 yes, but I also relied on my experience and
6 knowledge.

7 Q. Okay. Do you see that the first exhibit,
8 1001, is U.S. Patent Number 10,627,907?

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

10 (Exhibit 1001, previously marked, is
11 attached to the transcript.)

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

14 A. I don't know. It could have been something
15 that I had occasion to read or read something in the
16 same patent family that would have the same or
17 overlapping specification.

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

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

21 Q. Okay. And do you see also in this table,
22 Exhibit 1006 is U.S. Patent Application Publication

1 Number 2007/0152988?

2 A. Yes, sir, I do.

3 (Exhibit 1006, previously marked, is
4 attached to the transcript.)

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

7 A. Again, I don't know. It's quite possible I
8 might have had occasion to look at it or something
9 in the same patent family with the same or
10 overlapping specification.

11 Q. And in your declaration, you sometimes refer
12 to Exhibit 1006 as Levin, which is the name of one
13 of its listed inventors; correct?

14 A. I believe so, yes.

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

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

17 Q. Okay. And looking at Exhibit 1016 in the
18 table, it says U.S. Patent Application Publication
19 Number 2004/0032395.

20 Were you familiar with that document before
21 your work in this IPR?

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

1 possible I might have had occasion to see that
2 patent or something in the same or similar family.

3 (Exhibit 1016, previously marked, is
4 attached to the transcript.)

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

8 A. Yes, sir, I believe so.

9 Q. Okay. And the next Exhibit 1017 is listed
10 as U.S. Patent Application Publication Number
11 2007/0139375.

12 Were you familiar with that document before
13 your work in this IPR?

14 A. Again, sir, it's difficult for me to
15 recollect. I may have seen it or something in the
16 same patent family with same or similar or some
17 overlapping content in the specification before.

18 (Exhibit 1017, previously marked, is
19 attached to the transcript.)

20 Q. And in your declaration, you sometimes refer
21 to this Exhibit 1017 as Rosenberg, which is the name
22 of one of its listed inventors; correct?

1 A. Yes, sir. There have been quite a few
2 Rosenberg references in these proceedings.

3 Q. Yes, there have.

4 Did you conduct a prior art search to find
5 Exhibits 1006, 1016, and 1017?

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

7 Q. And did you find those three -- the
8 documents corresponding to those three exhibits in
9 your search?

10 A. At this point, I don't recollect which I
11 found independently in my search and which I --
12 might also have been provided to me by counsel.

13 Q. Okay. So these could have been provided to
14 you or you could have found them or both?

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

16 Q. Okay. About how much time did you spend
17 preparing for this deposition?

18 A. Perhaps 20, 25 hours. I'm not sure. There
19 were other matters I was working on about the same
20 time, so.

21 Q. What did you do to prepare?

22 A. I reviewed some of the documents in this

1 case.

2 Q. And by some of the documents in this case,
3 do you mean the documents listed in the table in
4 paragraph 21 of your declaration, or are you
5 referring to other documents as well?

6 A. I don't think I had occasion to review every
7 single document listed in this paragraph, no, sir.

8 Q. To prepare for this deposition, did you
9 review any documents other than those listed in
10 paragraph 21?

11 A. Not that I recollect, but I was also working
12 on some things in the other patents that are in the
13 related IPRs. And I have occasion to review things
14 in the field of the art, which I wouldn't think
15 would be necessarily done because of this case, but
16 I may have reviewed something there.

17 Q. Okay. Please go to paragraph 89 on page 53
18 of your declaration and let me know when you're
19 there.

20 A. Did you say paragraph 89?

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

22 A. Yes, I am there.

1 Q. Okay. And do you see that in the first
2 sentence of that paragraph, you wrote "Goldenberg's
3 method use 'force profiles' which define, among
4 other things, 'position and range information' that
5 is used 'to determine appropriate output actuator
6 signals'?"

7 A. Yes, sir.

8 Q. And this paragraph talks about Exhibit 1016,
9 which is also referred to as Goldenberg; correct?

10 A. Without going back to check, I'll take your
11 word for it, yes, sir.

12 Q. Now, Goldenberg doesn't state that the force
13 profiles you reference in paragraph 89 are defined
14 during use, does it?

15 A. Could you give me a moment to check
16 Goldenberg to see what it says?

17 Q. Sure.

18 A. I think force profiles in this case may have
19 been a quote from the '907 patent. I would want to
20 check that.

21 If it's all right with you, I'll just make a
22 short note while I'm doing my search.

1 Q. Sure.

2 A. Could I have the question read back to me,
3 please?

4 Q. Sure.

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

8 A. Has -- I'm a little unsure on the meaning of
9 the question because if they are used, they have to
10 have been defined.

11 Q. But does it disclose that the force profiles
12 were defined during use of the device?

13 A. I'm still puzzled by your phrasing, sir.
14 They have to have been defined for them to be used,
15 so they -- in that sense, they are defined during
16 use.

17 Q. Are they -- but Goldenberg doesn't disclose
18 a way for a user to create force profiles during
19 use, does it?

20 A. This document is searchable, but the search
21 results are not lining up with the text. I believe
22 we had this same problem in an earlier deposition.

1 So it's making it difficult to use this searchable
2 PDF.

3 Q. I apologize for that. These are the
4 as-filed versions, so they are what was filed with
5 the patent office. So it's possible that there's
6 some issue there.

7 And Mr. Ward?

8 A. Yes.

9 Q. Are you still searching for disclosure in
10 Goldenberg of a way to create force profiles during
11 use by an end user?

12 A. I don't think that's the original question.
13 What is the question I'm being asked to answer?

14 Could I have the previous question read
15 back?

16 MR. MEYER: Could the court reporter please
17 read back the previous question?

18 THE WITNESS: The court reporter is muted.

19 COURT REPORTER: I was getting the question
20 up.

21 THE WITNESS: Sorry.

22 COURT REPORTER: That's okay.

1 (Record read as requested.)

2 THE WITNESS: It was the question before
3 that.

4 (Record read as requested.)

5 BY THE WITNESS:

6 A. Those aren't same question. Which question
7 am I supposed to respond to? I'm not sure.

8 Q. Okay. Let me ask the question again, and
9 please respond to it.

10 The question is Goldenberg doesn't disclose
11 a way to create profiles during use, does it?

12 A. I believe that's a different question from
13 either of the previous two.

14 Q. Nevertheless, could you please answer the
15 question I just asked?

16 A. Okay.

17 Q. Mr. Ward, is this the first time you've
18 tried to determine whether Goldenberg discloses a
19 way to create force profiles during use?

20 A. I do not believe the word "create" appears
21 in the claims, sir, and I was examining -- studying
22 this document with respect to the claims. If I --

1 I'm happy to respond to the question right now, sir,
2 based on what I can find in the document --

3 Q. Please do.

4 A. -- so far.

5 Could I have the question read back to me,
6 please, before I respond?

7 Q. Sure.

8 Goldenberg doesn't state that the force
9 profiles you referenced in paragraph 89 are defined
10 during use, does it?

11 A. That's a different question.

12 Q. Which question are you referring to?

13 A. I believe you've switched back and forth
14 between the words "create" and "define" and you've
15 made other changes in the question as you've asked
16 repeated. Could I please have the question I'm
17 supposed to respond to?

18 Q. I'll give it to you one more time. This is
19 the question. Goldenberg doesn't -- excuse me.

20 Goldenberg doesn't disclose a way to create
21 force profiles during use, does it?

22 A. I believe Goldenberg describes calibration

1 methods and that the user can adjust parameters and
2 settings of the device during use. That may include
3 changing some settings of user preferences related
4 to profiles or whether such profiles are used. The
5 patent does disclose that the user can select sets
6 of profiles by changing the mode of operation.

7 Q. And your -- the response you just gave, are
8 you quoting from a part or parts of the Goldenberg
9 reference?

10 A. I believe I'm paraphrasing, if you will give
11 me a moment.

12 In paragraph 56, it discusses that the
13 processor may store instructions for the
14 microprocessor, temporary and other data calibration
15 parameters, adjustments to compensate for sensor
16 variations and/or the state of the device.

17 From that a person of skill in the art would
18 understand that that could affect definitions or
19 some of the values used in -- for its profiles.

20 Q. Does Goldenberg state that that could change
21 force -- does Goldenberg explicitly state that the
22 disclosure that you just read could change force

1 profiles?

2 A. A person of skill in the art would
3 understand that if, for example, you calibrate for
4 the range of motion of a particular physical
5 control, that that would change the positions of the
6 control. Like, things need to be normalized or
7 scaled or the range change affected otherwise, that
8 would affect the operation of force profiles or
9 force models.

10 Q. That isn't explicitly stated in Goldenberg,
11 though; correct?

12 A. I don't see it in this paragraph; but if
13 you'll give me a moment, I can go check the rest of
14 the reference again.

15 Q. Let's go on to a different set of questions.
16 Let's go back to your --

17 A. Excuse me. Excuse me.

18 Q. Okay.

19 A. There's something else that occurred to me.
20 Goldenberg -- this is Goldenberg, yes -- also
21 discusses re-setting rest positions of controls,
22 which would affect the positions at which force

1 effects are applied. I can go through and look for
2 those references and citations for you, sir.

3 Q. Could you instead go to -- back to your
4 declaration, which is Exhibit 1003, and go to
5 paragraph 90, please? And let me know when you're
6 there.

7 A. Yes, sir.

8 Q. Okay. And do you see that the first
9 sentence of paragraph 90 says "Figure 8 below
10 depicts Goldenberg's 'jog shuttle force model'?"

11 Do you see that?

12 A. Yes, sir.

13 Q. And in that sentence, when you say figure 8,
14 are you referring to the figure at the end of
15 paragraph 90?

16 A. Yes, sir.

17 Q. And is that --

18 A. I am.

19 Q. And is that figure a reproduction of figure
20 8 from Goldenberg?

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

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

1 Goldenberg, which is Exhibit 1016, the jog shuttle
2 model is described at paragraphs 115 -- sorry --
3 0115, 0116, and 0117; correct?

4 A. Yes, sir, without taking time to check to
5 see where else it might also be referenced.

6 Q. Do you see that in those three paragraphs,
7 which is 0115 to 0117, describing the jog shuttle
8 model, the patent doesn't actually reference figure
9 8 in those paragraphs; correct?

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

14 Q. Okay. So my next question was going to be
15 where paragraph 0116 references figure 7, is it your
16 understanding that it's actually meant to refer to
17 figure 8 rather than figure 7?

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

19 Q. Now, Goldenberg describes the jog shuttle
20 model as having two spring effects; right?

21 A. Yes, sir.

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

1 declaration.

2 And do you see in paragraph 91 the second
3 sentence says -- of your declaration states "The
4 first spring effect ('curve 392') is 'output over
5 the entire [rotational] range of the knob' and has
6 'a medium amount of stiffness'?"

7 A. Yes, sir, I see that.

8 Q. And do you still agree with that statement
9 in your declaration?

10 A. I agree that the quotations I cite are
11 correct, yes, sir.

12 Q. But do you agree with the statement that
13 "The first spring effect ('curve 392') is 'output
14 over the entire [rotational] range of the knob' and
15 has 'a medium amount of stiffness'?"

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

17 Q. The first spring effect is centered around
18 an origin point; correct?

19 A. It states here that the force resists
20 motions away from the origin, increases in magnitude
21 as the knob is moved away. Yes, sir, on that basis.

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

1 spring effect is the entire rotational range of the
2 knob?

3 A. I believe what the patent states is that the
4 spring effect is output over the entire rotational
5 range of the knob.

6 Q. And in the answer that you just gave, when
7 you refer to the patent, you're referring to
8 Goldenberg?

9 A. Yes, sir.

10 Q. Okay. Take a look at paragraph 92 of your
11 declaration.

12 And do you see that the first sentence says
13 "The second effect ('curve 394') overlap[s] the
14 first effect but is only in effect over a small
15 range between positions -P1 and P1 around the origin
16 position"?

17 A. Yes, sir, I see that.

18 Q. So is it your understanding that the range
19 of the second spring effect is only from -P1 to P1?

20 A. What it states is that the first effect
21 is -- that it overlaps the first effect but is only
22 in effect over a small range between positions -P1

1 and P1 around the origin position. Yes, sir, on
2 that basis.

3 Q. Does that mean that the range of the second
4 spring effect is entirely within the range of the
5 first spring effect?

6 A. It states that the first effect is only in
7 effect over a small range between positions -P1 and
8 P1 around the origin position.

9 Q. Is the range of the second spring effect
10 entirely within the range of the first spring
11 effect?

12 A. It's within the -- it appears to be, based
13 on the specification, that it's within a portion of
14 the entire rotational range of the knob.

15 MR. MEYER: I'm sorry. Could the court
16 reporter please repeat back the response that
17 Mr. Ward just provided?

18 (Record read as requested.)

19 MR. MEYER: Thank you.

20 BY MR. MEYER:

21 Q. Mr. Ward, aside from the first spring effect
22 and the second spring effect, Goldenberg doesn't

1 disclose any other spring effects or other force
2 effects for the jog shuttle model, does it?

3 A. As I recollect, it states that the at the
4 transition, or at the point P1 and P2, the change
5 can be made acceptable to the user. It could be
6 construed as understood by a person of skill in the
7 art as describing a slightly different spring
8 effect. But these are the two spring effects
9 referred to here, yes, sir.

10 Q. Could you please point me to the disclosure
11 in Goldenberg that -- from which a person of
12 ordinary skill in the art could infer another spring
13 effect or another force effect beyond the first --

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

15 Q. Never mind, Mr. Ward, I withdraw that
16 question.

17 Could you please go to paragraph 154 on page
18 88 of your declaration?

19 A. Could we take a short break, please, after
20 the next -- after this question?

21 Q. We can take a short break right now if that
22 would be better.

1 A. That will be fine. Thank you.

2 Q. Okay.

3 (A short break was had.)

4 BY MR. MEYER:

5 Q. Mr. Ward, please go to paragraph 154 on page
6 88 of your declaration, and let me know when you're
7 there.

8 A. Yes, sir, I see it.

9 Q. And do you see that the first sentence says
10 "Rosenberg's system provides force feedback to the
11 user object 34 using 'force profile[s]' that are
12 stored in memory"?

13 A. Yes, sir, I see that.

14 Q. And in that sentence, Rosenberg refers to
15 Exhibit 1017, which is the Rosenberg declaration --
16 or the Rosenberg reference; correct?

17 A. I believe so, yes, sir.

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

21 A. Paragraph 89, sir?

22 Q. I'm sorry. Paragraph 154. Let me repeat

1 the question.

2 Rosenberg doesn't state that the force
3 profiles you referenced in paragraph 154 are defined
4 during use, does it?

5 A. Again, as a matter of logic, the values have
6 to be defined before they can be used. So in that
7 sense, they are defined during use.

8 Q. I think you just said that they have to be
9 defined before use.

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

11 Q. At the time of use?

12 A. Yes, sir.

13 Q. So it's your --

14 A. (Inaudible.)

15 (Unreportable crosstalk.)

16 Q. Go ahead.

17 A. Go on, sir.

18 Q. Is it your contention that there's something
19 in Rosenberg that discloses that during actual use
20 of the device, as opposed to design or manufacture,
21 that the force profiles are defined during that
22 actual use?

1 A. May I bring up the Rosenberg reference?

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

3 A. Excuse me. I just want to make sure I have
4 the right reference open. In one of the prior
5 depositions, the attorney giving me questions, I
6 believe, got confused about which reference.

7 I don't believe this is a complete review of
8 what may relate to your question; but before I
9 respond, could I have the question read back to me,
10 please?

11 MR. MEYER: Could the court reporter please
12 recite or quote back the previous question?

13 (Record read as requested.)

14 A. If I can draw your attention to paragraph
15 066, in the middle it says "The calibration
16 parameters can be determined and stored by the
17 manufacturer before the interface device is sold, or
18 optionally, the parameters can be determined by a
19 user of the interface device."

20 A person of skill in the art would
21 understand that they may be determined during use.

22 Q. And just to be clear --

1 A. Excuse me, sir. I'm not finished.

2 Q. Go ahead.

3 A. It says the calibration parameters are used
4 by the processor to modify the input sensor signals
5 and/or the output force values to actuators to
6 provide approximately the same range of forces on an
7 object.

8 In paragraph 69, it also says that relative
9 sensors only provide relative angle information, and
10 thus this usually requires some form of calibration
11 step.

12 A person of skill in the art reading this
13 would understand that this would be quite reasonably
14 or even most likely done by involving the user, so
15 this would be during use.

16 Q. And are you finished with your --

17 A. No, sir.

18 Q. -- answer?

19 A. It also states in paragraph 210 that a host
20 processor may request -- issue a request information
21 command -- I'm paraphrasing here -- to obtain
22 information about the device. It says that this

1 information may be necessary so that the commands it
2 outputs to the local processor can be adjusted and
3 customized to the particular type of interface
4 device.

5 A person of skill in the art would
6 understand that that would be considered by the
7 device as being used, because if it's not being
8 used, why request the commands.

9 Q. Now, for each -- so you've given three
10 quotations or paraphrases from the -- from
11 Rosenberg. And --

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

15 Q. Well, my question is with each one, you've
16 then said what a person of ordinary skill in the art
17 would understand.

18 And just to be clear, that's your contention
19 about what a person of ordinary skill in the art
20 would understand as opposed to something that's
21 explicitly stated in Rosenberg; correct?

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

1 explicit where it says "... optionally, the
2 parameters can be determined by a user of the
3 interface device."

4 I believe I've quoted that correctly, sir.
5 So -- and I believe that's an explicit statement.
6 If it is done by a user device, that's while the
7 device is being used, because if the device is not
8 being used, there is not a current user of the
9 device.

10 Q. Could you please go back to your
11 declaration, Exhibit 1003, and go to paragraph 251
12 on page 131?

13 A. Paragraph 253?

14 Q. 251.

15 A. 251, I apologize.

16 Q. Do you see that the first sentence of 251
17 states "Levin's method used 'detent force profiles,'
18 which are pre-defined force effects stored in
19 memory"?

20 A. Yes, sir. I'm not sure how to pronounce
21 "detent" either.

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

1 But my first question is where you're
2 referring to Levin here, is it correct that you're
3 referring to the Levin reference, which is
4 Exhibit 1006?

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

6 Q. And do you -- do you still maintain -- do
7 you still agree with the first sentence of paragraph
8 251?

9 A. Yes, sir.

10 Q. Now, let's take a look at Exhibit 1001. Let
11 me know when you have that open.

12 A. Yes, sir.

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

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

15 Q. Okay. Which is the patent at issue in this
16 IPR?

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

18 Q. Okay. Please go to Claim 1, which starts
19 near the bottom of column 13.

20 A. Excuse me a moment.

21 Yes, sir.

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

1 that starts at column 13 line 65 and ends at line
2 67, stating "rendering a haptic effect in response
3 to an entry of the user input element to one or more
4 positions within the boundary range of positions"?

5 Do you see that limitation?

6 A. Yes, sir, I believe you've read that
7 correctly.

8 Q. Okay. Now my question is in -- as used in
9 that limitation in this patent, do you understand
10 the phrase "in response to" to connote a cause and
11 effect relationship?

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

13 Q. So it's your understanding that "in response
14 to," as it is used in this limitation, would require
15 some form of causal relationship between rendering a
16 haptic effect and entry of the user input element to
17 one or more positions within the boundary range of
18 positions?

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

20 Q. Would you agree that mere coincidence or one
21 event happening after another would not be enough to
22 qualify -- to meet that limitation unless there is

1 some causal relationship?

2 MR. SPEED: Objection.

3 A. Could you rephrase the question, sir?

4 Q. Sure.

5 So I think that you've stated -- and correct
6 me if I'm wrong -- "in response to," as it is used
7 in the limitation at the bottom of column 13,
8 connotes some sort of causal relationship; is that
9 correct?

10 A. I'm not sure that's phrased exactly the same
11 way, but that sounds like a fair statement, yes,
12 sir.

13 Q. And is it your understanding that causal
14 relationship requires something more than mere
15 coincidence or one event happening after another?

16 MR. SPEED: Objection.

17 A. Could you rephrase the question, sir? I
18 think the -- I'm not sure. The question may be
19 compound. I don't know.

20 Q. Okay. The question is, does "in response
21 to" require more than mere coincidence or one event
22 happening after another?

1 MR. SPEED: Same objection.

2 A. Could you perhaps break that question up,
3 sir, when you rephrase it?

4 Q. Sure.

5 Does a causal relationship, as connoted by
6 "in response to," require more than mere
7 coincidence?

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

10 Q. And would it be your -- let me rephrase
11 that.

12 Is it your position that --

13 A. Excuse me. Excuse me.

14 Q. Go ahead.

15 A. Just to complete, it depends upon how you
16 mean mere coincidence.

17 Q. Is it your understanding that "in response
18 to" would require more than merely one event
19 happening 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,

1 for your time. I have no further questions.

2 MR. SPEED: We have no questions.

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

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1 CERTIFICATE OF COURT REPORTER - NOTARY PUBLIC

2
3 I, TIFFANY M. PIETRZYK, Certified Shorthand
4 Reporter No. 084-004371, CSR, RPR, CRR, and a Notary
5 Public within and for the State of Illinois, do
6 hereby certify:

7
8 That JEAN RENARD WARD, the witness whose
9 deposition is hereinbefore set forth, was duly
10 affirmed by me before the commencement of such
11 deposition and that such deposition was taken before
12 me and is a true record of the testimony given by
13 such witness.

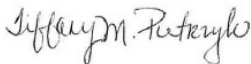
14
15 I further certify that the adverse party,
16 VALVE CORPORATION, was represented by counsel at the
17 deposition.

18
19 I further certify that the deposition of
20 JEAN RENARD WARD occurred virtually, via Zoom
21 videoconference, on Friday January 10, 2025,
22 commencing at 9:05 a.m. CST to 10:21 a.m. CST.

1 I further certify that I am not related to
2 any of the parties to this action by blood or
3 marriage, I am not employed by or an attorney to any
4 of the parties to this action, and that I am in no
5 way interested, financially or otherwise, in the
6 outcome of this matter.

7
8 IN WITNESS WHEREOF, I have hereunto set my
9 hand and affixed my notarial seal this 20th day of
10 January, 2025.

11
12
13 My commission expires: February 28th, 2028
14
15

16 
17 _____

18 NOTARY PUBLIC IN AND FOR THE
19 STATE OF ILLINOIS
20
21
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