

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,  
Petitioner

v.

REALTIME DATA, LLC D/B/A IXO,  
Patent Owner

Case IPR2016-01737  
Case IPR2016-01738  
Case IPR2016-01739  
Patent 8,880,862

\*\*\*\*\*

ORAL DEPOSITION OF  
CHARLES J. NEUHAUSER, Ph.D.  
JUNE 2, 2017

\*\*\*\*\*

ORAL DEPOSITION OF CHARLES J. NEUHAUSER, Ph.D.,  
produced as a witness at the instance of the Patent Owner,  
taken in the above-styled and -numbered cause on the 2nd  
day of June, 2017, A.D., beginning at 8:56 a.m. to 6:19  
p.m., before Kelly Hassell, RPR, CLR, CSR, in and for the  
State of Texas, in the offices of Winston & Strawn LLP,  
located at 2501 North Harwood, 17th Floor, Dallas, Texas,  
in accordance with the Federal Rules of Civil Procedure and  
the agreement hereinafter set forth.

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1 EXHIBITS  
 2 EXHIBIT NO. DESCRIPTION PAGE  
 3 Exhibit 2003 Patent office's trial practice guide 7  
 4 Exhibit 2004 "Declaration of Dr. Charles J.  
 5 Neuhauser," Docket No. 39521-0025IP1 60  
 6 Exhibit 2005 "Declaration of Dr. Charles J.  
 7 Neuhauser," Docket No. 39521-0025IP1 60  
 8 Exhibit 2006 "Declaration of Dr. Charles J.  
 9 Neuhauser," Docket No. 39521-0025IP3 61  
 10 Exhibit 2007 "Microsoft Computer Dictionary Fifth  
 11 Edition" 275  
 12  
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1 PROCEEDINGS  
 2 THE COURT REPORTER: Today is June 2, 2017.  
 3 The time is approximately 8:56 a.m.  
 4 This is the deposition of Charles J.  
 5 Neuhauser, Ph.D., in the matter of Realtime Data, LLC  
 6 versus Apple Inc.  
 7 Will all counsel present please state their  
 8 appearance and whom they represent.  
 9 MR. EDELL: Good morning. Joe Edell, of  
 10 Fisch Sigler, on behalf of the Patent Owner, Realtime Data,  
 11 LLC d/b/a IXO. Joining me is cocounsel Alan Fisch and Bill  
 12 Sigler, also of Fisch Sigler LLP.  
 13 MR. BITTNER: Michael Bittner, of Winston &  
 14 Strawn, on behalf of the Petitioner and Defendant Apple and  
 15 the witness. I have with me cocounsel Andrew Patrick of  
 16 Fish & Richardson.  
 17 CHARLES J. NEUHAUSER, Ph.D.,  
 18 having been first duly cautioned and sworn to testify the  
 19 truth, the whole truth and nothing but the truth, testified  
 20 on his oath as follows:  
 21 DIRECT EXAMINATION  
 22 BY MR. EDELL:

Page 5

1 Q Good morning.  
 2 A Good morning.  
 3 Q Will you please state and spell your name for the  
 4 record.  
 5 A I'm Charles J. Neuhauser. That's  
 6 N-E-U-H-A-U-S-E-R.  
 7 Q Dr. Neuhauser, how many times have you been  
 8 deposed?  
 9 A Probably 30, 40, 50 times.  
 10 Q And how many depositions for an inter partes  
 11 review?  
 12 A I think probably someplace between 10 and 12.  
 13 Q What, if any, differences are there between a  
 14 deposition involving a litigation and a deposition  
 15 involving an inter partes review?  
 16 MR. BITTNER: Objection; form.  
 17 A From my perspective, I don't think there's any.  
 18 Q (BY MR. EDELL) So are you aware of any  
 19 differences between --  
 20 A I'm not.  
 21 Q So I'm handing -- well, I've already handed the  
 22 court reporter what has been marked as Realtime

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1 Exhibit 2003. This is a -- the patent office's Trial  
 2 Practice Guide.  
 3 (Exhibit 2003 marked.)  
 4 MR. EDELL: One second a moment. I've got  
 5 to find the copies.  
 6 Q (BY MR. EDELL) Dr. Neuhauser, have you seen this  
 7 document before?  
 8 A No, I have not.  
 9 Q Well, let me direct your attention to a section  
 10 beginning on the page in the upper left corner on  
 11 Page 48772, Appendix D.  
 12 A 48 -- oh, 772.  
 13 Q Yes, sir.  
 14 A Appendix D, as in delta?  
 15 Q Correct.  
 16 A Okay.  
 17 Q Okay. There's a number of paragraphs. I'll  
 18 direct you to Paragraph 6. It's in the far right column.  
 19 A Uh-huh.  
 20 Q Paragraph 6 reads, "Once the cross-examination of  
 21 a witness has commenced, and until cross-examination of the  
 22 witness has concluded, counsel offering the witness on

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1 direct examination shall not: (a) Consult or confer with  
 2 the witness regarding the substance of the witness'  
 3 testimony already given, or anticipated to be given, except  
 4 for the purpose of conferring on whether to assert a  
 5 privilege against testifying or on how to comply with a  
 6 Board order; or (b) suggest to the witness the manner in  
 7 which any questions should be answered."  
 8 A Uh-huh.  
 9 Q Do you understand those --  
 10 A I do.  
 11 Q -- information?  
 12 So in other words, you cannot discuss the  
 13 deposition testimony with your attorneys while the  
 14 deposition is ongoing; is that fair?  
 15 MR. BITTNER: Objection; form.  
 16 A Well, I understand that. Yeah.  
 17 Q (BY MR. EDELL) But you understand that?  
 18 A I mean, is that what -- you're asking me is  
 19 that -- you're not asking me whether that's fair in some --  
 20 you're asking whether your summary of this is fair?  
 21 Q Correct.  
 22 A Yeah, that's my understanding.

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1 Q So you -- you're not going to confer with your  
 2 attorneys during breaks; is that correct?  
 3 A That's correct.  
 4 Q You can set this document aside.  
 5 Are you currently employed?  
 6 A Yes, I am.  
 7 Q Where are you employed?  
 8 A I -- well, self-referential, I work for myself.  
 9 My company name is called Neuhauser Associates,  
 10 Incorporated.  
 11 Q Is that your only employment?  
 12 A Yes.  
 13 Q Okay. And where do you work?  
 14 A Where do I work?  
 15 Q Where?  
 16 A I -- well, 99 percent of the time I work out my  
 17 office.  
 18 Q And where is your office located?  
 19 A The address? 525 West Remington Drive,  
 20 Suite 126, Sunnyvale, California 94087.  
 21 Q And what do you do?  
 22 A What do I do? Well...

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1 Q What do you as -- through your job?  
 2 A Well, I tell people my job is to provide  
 3 technical advice to folks, mostly about matters related to  
 4 litigation.  
 5 Q And that's the total scope of your work there?  
 6 MR. BITTNER: Objection; form.  
 7 A Well, people come to me and ask me to do things,  
 8 and I help them out as best I can. I mean, I can describe  
 9 it in more detail, if you want, if that's what you're  
 10 looking for.  
 11 Q (BY MR. EDELL) I'm just looking to ensure that I  
 12 got the full scope of what you do at --  
 13 A Sure.  
 14 Q -- Neuhauser Associates.  
 15 And so to summarize your answer, you provide  
 16 consultation typically for litigation matters?  
 17 MR. BITTNER: Objection; form.  
 18 A I provide technical advice, and I say "typically"  
 19 for litigation matters.  
 20 Q (BY MR. EDELL) What other examples of -- what  
 21 are some of the other matters that you provide technical  
 22 advice for?

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1 A Well, I've -- I've helped people out in some kind  
 2 of business negotiations, for example. But, you know, just  
 3 a -- maybe I can help you out here.  
 4 You know, with respect to litigation, I've  
 5 done work on patents, software copyrights, trade secrets.  
 6 Okay? So those are the kind of basic things people come to  
 7 me with. And then I've done some things on business  
 8 negotiations.  
 9 Q So about what percentage of your time is spent  
 10 advising on litigation matters?  
 11 MR. BITTNER: I'll object to the form.  
 12 A Well, the clients, I would say, in the last few  
 13 years, probably 90 percent.  
 14 Q (BY MR. EDELL) To round it out, when you say "in  
 15 the last few years," what years -- what range are you  
 16 referring to?  
 17 A Well, over the last few years -- the last five  
 18 years, let's say.  
 19 Q So in the last five years your work has been  
 20 about 90 percent on advising for litigation matters?  
 21 A Yeah, giving people technical advice and  
 22 engineering things related to litigation, because usually a

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1 litigation is a patent; it's a software copyright or it's a  
 2 trade secret.  
 3 Q Okay. In this case, how would you describe your  
 4 role?  
 5 MR. BITTNER: Objection to foundation.  
 6 A How would I describe my role? Well, evaluate  
 7 prior art and determine whether or not that prior art  
 8 applies to a -- well, this particular case, that there were  
 9 three IPRs, but we're here concerned only with one set of  
 10 IPRs today, right, the three that the deposition was  
 11 noticed on.  
 12 Basically review prior art, determine  
 13 whether or not it applied and develop a declaration and  
 14 testify about it.  
 15 Q (BY MR. EDELL) And you mentioned the IPR. So  
 16 you're here today to testify regarding your opinions for  
 17 the IPRs involving U.S. Patent 8,880,862, correct?  
 18 A '862 is what I call it, yes.  
 19 Q So I was correct? That's correct?  
 20 A That's correct.  
 21 MR. EDELL: So I'm going to hand the court  
 22 reporter what has previously been marked as exhibit --

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1 Apple Exhibit 1001. And this is Exhibit 1001.  
 2 In each of the IPR -- the 2016 IPR 01737,  
 3 01738 and 01739, Exhibit 1001 is U.S. Patent 8,880,862  
 4 entitled "Systems and Methods for Accelerated Loading of  
 5 Operating Systems and Application Programs."  
 6 MR. BITTNER: Objection; form.  
 7 Q (BY MR. EDELL) Dr. Neuhauser, do you recognize  
 8 this document?  
 9 A Yes, I do.  
 10 Q And if I refer to this as the '862 patent you'll  
 11 understand I'm referring to Exhibit 1001?  
 12 A I will.  
 13 Q And this is the patent with which you provided  
 14 opinions for the IPRs I mentioned before?  
 15 A That's right.  
 16 MR. BITTNER: Objection; foundation.  
 17 Q (BY MR. EDELL) How many times have you read the  
 18 '862 patent?  
 19 MR. BITTNER: Objection; form.  
 20 A Well, I've probably -- I'll have to qualify this  
 21 little part here (indicating), the front page and the  
 22 actual -- this -- the figures and the text and the back, I

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1 probably read that -- I mean, you know, putting aside just  
 2 referring to it -- probably five or six times cover --  
 3 cover to cover. The references here, I haven't really  
 4 studied those. I mean, there's thousands of them. Well,  
 5 maybe not thousands, but hundreds.

6 Q (BY MR. EDELL) So you're referring to Pages 2  
 7 through --

8 A Probably 22 or something, 27, 29.

9 Q So setting aside the references cited on Pages 2  
 10 through 29 of the '862 patent, you've read the remaining  
 11 pages approximately five or six times, correct?

12 A That -- that's -- that --

13 MR. BITTNER: Objection; form.

14 A -- seems right to me.

15 Q (BY MR. EDELL) I want to direct you to Claim 1  
 16 of '862, so we'll skip over those --

17 A Okay.

18 Q -- (inaudible) pages.

19 And this is in Column 26 of the '862 patent,  
 20 correct, sir?

21 A That's correct.

22 Q So Claim 1 of the '862 patent begins, "A method

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1 for providing accelerated loading of an operating system in  
 2 a computer system, the method comprising..."

3 That's correct?

4 A That's correct.

5 Q And then that's followed by the first step, which  
 6 reads, "Loading a portion of boot data in a compressed form  
 7 that is associated with a portion of a boot data list for  
 8 booting the computer system into a memory."

9 Correct?

10 A That's correct.

11 Q So Step 1 describes loading boot data; is that a  
 12 fair description?

13 MR. BITTNER: Objection; form.

14 A Well, I don't think that describes the step. I  
 15 mean, that just -- I mean, you can refer to it that way, if  
 16 you want, but that -- it has more words than that. Words  
 17 are important, they're there for a purpose.

18 Q (BY MR. EDELL) For purposes of -- of Claim 1, if  
 19 I refer to the loading step, you'll at least understand  
 20 what I'm referring to? That's the first step that I just  
 21 recited.

22 A You can call it that if you wish.

Page 15

1 Q Okay. So in Claim 1 -- in the loading step of  
 2 Claim 1 it states explicitly "boot data in a compressed  
 3 form"; is that correct?

4 A It -- it states that, yes.

5 Q And this means the boot data being loaded into  
 6 memory has already been compressed?

7 MR. BITTNER: I'll object to the form.

8 A I just have to get my mind warmed up here. It's  
 9 early in the morning, so let me review this for a minute.

10 Do you have my declaration for this?

11 Q (BY MR. EDELL) I do.

12 A May I have it?

13 Q We'll get to that.

14 But I'm asking you what -- you know, what  
 15 the words on the page of '862 are describing.

16 A Well, I mean, it's in my declaration, so if you  
 17 would just present it to me that would probably shorten  
 18 things.

19 Q Well, let me ask you a question that maybe you  
 20 can answer without having to defer to your declaration.

21 A Without deferring to my declaration? I'd just  
 22 like to refer to it.

Page 16

1 Q Okay. Well, we're going to talk about Claim 1  
 2 for now.

3 So Claim 1, Step 1, a person of skill in the  
 4 art when they read the step understands that the data --  
 5 the boot data is compressed when it's loading it, correct?

6 MR. BITTNER: I'll object to the form.

7 A I'm not -- I'm not sure I quite understand your  
 8 question. Do you think compression is part of the step; is  
 9 that what you're trying to say? You said it is compressed?

10 Q (BY MR. EDELL) What I'm asking is, when a person  
 11 of skill in the art reads -- so when I --

12 A Okay. Yeah.

13 Q -- have just read that phrase, the common phrase  
 14 I'm sure you're familiar with, if I refer to that as  
 15 POSITA, will you understand that refers to a person of  
 16 ordinary skill in the art?

17 A Yeah. It's a dreadful term, but, yeah, I  
 18 understand it.

19 Q Do you prefer that or POSITA or which one  
 20 do you --

21 A The same, a person of ordinary skill in the art.

22 Q Yeah. And --

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