Transcript of Nenad Medvidovic, Ph.D.

Date: May 29, 2024
Case: Sony Interactive Entertainment LLC -v- Quantum Imaging LLC (PTAB)

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WORLDWIDE COURT REPORTING & LITIGATION TECHNOLOGY

1 UNITED STATES PATENT AND TRADEMARK OFFICE

2 BEFORE THE PATENT TRIAL AND APPEAL BOARD

3

4

5 SONY INTERACTIVE)
ENTERTAINMENT LLC,)
6)
Petitioner,)
7)
vs.)
8)
QUANTUM IMAGING LLC,)
9)
Patent Owner.)
10)

11

12 CASE NUMBER IPR2023-00954
U.S. PATENT NUMBER 8,458,028
13 CASE NUMBER IPR2023-00995
U.S. PATENT NUMBER 10,846,941
14 CASE NUMBER IPR2023-00996
U.S. PATENT NUMBER 10,991,165
15

16 VOLUME I

17

18 VIDEOTAPED DEPOSITION OF:

19 NENAD MEDVIDOVIC, Ph.D.

20 WEDNESDAY, MAY 29, 2024

21

22

23

Reported by:
24
Kelli C. Norden
25 CSR No. 7200

1 UNITED STATES PATENT AND TRADEMARK OFFICE

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U.S. PATENT NUMBER 8,458,028
13 CASE NUMBER IPR2023-00995
U.S. PATENT NUMBER 10,846,941
14 CASE NUMBER IPR2023-00996
U.S. PATENT NUMBER 10,991,165
15

16 VOLUME I

17

18 The Videotaped Deposition of NENAD
19 MEDVIDOVIC, Ph.D., taken on behalf of the
20 Petitioner, before Kelli C. Norden, Certified
21 Shorthand Reporter 7200, for the State of
22 California, commencing at 11:49 a.m., Wednesday,
23 May 29, 2024, at SPENCER FANE, 201 Santa Monica
24 Boulevard, Suite 550, Santa Monica, California.
25

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I N D E X

WITNESS:	EXAMINED BY:	PAGE:
NENAD MEDVIDOVIC	MR. BLUMENKOPF	9, 233
	(AFTERNOON SESSION)	129
	MR. RAFATIJO	231

EXHIBITS FOR IDENTIFICATION:

PETITIONER'S:

EXHIBIT 1013	- NOTICE OF DEPOSITION OF DR. NENAD MEDVIDOVIC, PATENT NUMBER 8,458,028	21
EXHIBIT 1014	- NOTICE OF DEPOSITION OF DR. NENAD MEDVIDOVIC, PATENT NUMBER 10,846,941	21
EXHIBIT 1015	- NOTICE OF DEPOSITION OF DR. NENAD MEDVIDOVIC, PATENT NUMBER 10,991,165	22
EXHIBIT 1016	- U.S. PATENT NUMBER 8,458,028	26
EXHIBIT 1017	- "MICROSOFT COMPUTER DICTIONARY," FIFTH EDITION	38
EXHIBIT 1018	- BOOK TITLED "SOFTWARE ARCHITECTURE: FOUNDATION, THEORY, AND PRACTICE," CO-AUTHORED BY DR. MEDVIDOVIC	81

INDEX (CONTINUED):

EXHIBITS FOR IDENTIFICATION:

PETITIONER'S:

EXHIBIT 1019 - EXCERPTS FROM "SOFTWARE ARCHITECTURE, FOUNDATION, THEORY, AND PRACTICE" 87

EXHIBIT 1020 - SCREENSHOTS 148

EXHIBITS PREVIOUSLY MARKED FOR IDENTIFICATION AND ATTACHED HERETO:

1001, 1003, 1007, 2005

QUESTIONS UNANSWERED BY THE WITNESS:

(NONE)

INFORMATION REQUESTED:

(NONE)

1 SANTA MONICA, CALIFORNIA, WEDNESDAY
2 MAY 29, 2024
3 11:49 A.M.
4
5 THE VIDEOGRAPHER: Here begins media 11:48:30
6 number one in the videotaped deposition of 11:48:41
7 Dr. Nenad Medvidovic in the matter of Sony 11:48:45
8 Interactive Entertainment LLC versus Quantum 11:48:49
9 Imaging LLC in the United States Patent and 11:48:52
10 Trademark Office before the Patent Trial and Appeal 11:48:57
11 Board, case number IPR2023-dash-00954 and 11:48:58
12 dash-00959 and dash-00995 and dash-00996. 11:49:11
13 Today's date is May 29th, 2024. 11:49:18
14 The time on the video monitor is 11:49:22
15 11:49 a.m. 11:49:26
16 The videographer today is Charlie 11:49:27
17 McGrath, representing Planet Depos. 11:49:30
18 This video deposition is taking place at 11:49:32
19 Spencer Fane, 201 Santa Monica Boulevard, 11:49:35
20 Suite 550, Santa Monica, California 90401. 11:49:39
21 Would counsel please voice identify 11:49:42
22 themselves and state whom they represent. 11:49:44
23 MR. BLUMENKOPF: This is Bryan 11:49:46
24 Blumenkopf on behalf of the petitioner, Sony, from 11:49:48
25 Morrison & Foerster. 11:49:48

1 With me is my colleague, Mehran 11:49:51
2 Arjomand, also from Morrison & Foerster. 11:49:54
3 MR. RAFATIJO: This is Homayoon Rafatijo 11:49:58
4 with the firm of Spencer Fane, representing Quantum 11:50:00
5 Imaging. 11:50:00
6 With me on Zoom is Mr. Patrick Dunn, 11:50:03
7 also from Spencer Fane. 11:50:06
8 And I'd like to clarify that the IPR 11:50:08
9 matter dash-00959 was settled and no longer is in 11:50:12
10 this case. The videographer mentioned that it's 11:50:16
11 actually in the case. 11:50:19
12 THE VIDEOGRAPHER: The court reporter 11:50:23
13 today is Kelli Norden, representing Planet Depos. 11:50:24
14 The witness will now be sworn. 11:50:26
15 / / / 11:50:26
16 / / / 11:50:26
17 / / / 11:50:36
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1 NENAD MEDVIDOVIC, Ph.D.,
2 called as a witness and sworn in by
3 the court reporter, was examined
4 and testified as follows:
5
6 THE COURT REPORTER: Would you raise
7 your right hand to be sworn.
8 Do you solemnly affirm that the
9 testimony you are about to give in the following
10 proceedings will be the truth, the whole truth, and
11 nothing but the truth?
12 THE WITNESS: I do.
13 THE COURT REPORTER: Thank you.
14 THE WITNESS: Thanks.
15
16 EXAMINATION
17 BY MR. BLUMENKOPF:
18 Q. Could you please state your full name 11:50:40
19 and address for the record. 11:50:42
20 A. Sure. 11:50:43
21 Nenad Medvidovic. My address is 11:50:44
22 11019 Hortense Street in North Hollywood, 11:50:46
23 California 91602. 11:50:49
24 Q. All right. Thank you, Dr. Medvidovic. 11:50:52
25 My name is Bryan Blumenkopf. I'm an 11:50:54

1 attorney for Sony, petitioner in this proceeding. 11:50:57
2 I'll be taking your deposition today. 11:50:59
3 A. Okay. 11:51:01
4 Q. You understand the IPR proceedings in 11:51:01
5 this case or IPR number is IPR2023-dash-00954, 11:51:03
6 dash-00995, and dash-00996; right? 11:51:08
7 A. Yes. 11:51:13
8 Q. The 954 matter involves U.S. Patent 11:51:13
9 Number 8,458,028; right? Okay. 11:51:17
10 A. Yes, that sounds right. 11:51:20
11 Q. Okay. We can refer to that as the '028 11:51:21
12 Patent. 11:51:21
13 Is that okay? 11:51:26
14 A. Sure. 11:51:26
15 Q. And the 995 matter involves U.S. Patent 11:51:26
16 [unintelligible] -- 11:51:29
17 THE COURT REPORTER: I'm sorry? Can you 11:51:29
18 repeat that slower? 11:51:29
19 MR. BLUMENKOPF: Sure. Sorry. 11:51:30
20 BY MR. BLUMENKOPF: 11:51:30
21 Q. The -- the 995 matter involves U.S. 11:51:31
22 Patent Number 10,846,941. 11:51:35
23 Can we refer to that as the '941 patent? 11:51:37
24 A. Sure. 11:51:40
25 Q. And the 996 matter involves U.S. Patent 11:51:41

1 Number 10,991,165. 11:51:45
2 I may refer to that as the '165 patent. 11:51:47
3 A. Makes sense. 11:51:50
4 Q. And I'll examine you in these three 11:51:51
5 proceedings, and after that's completed, patent 11:51:53
6 owner's counsel may examine you on redirect. 11:51:56
7 A. Sounds good. 11:51:59
8 Q. My questions might relate to any of the 11:52:00
9 patents or any of the IPR proceedings, though. So 11:52:02
10 unless my question specifies otherwise, answer the 11:52:04
11 question as if it relates to any or all of the 11:52:06
12 patents or any or all of the IPR proceedings. 11:52:09
13 Does that make sense? 11:52:12
14 A. Okay. 11:52:13
15 Q. If your answer is limited to a 11:52:13
16 particular patent or a particular proceeding, just 11:52:15
17 make that clear in your answer. 11:52:17
18 A. I will try to do that. Yes. 11:52:19
19 Q. Okay. I want to reduce the amount of 11:52:20
20 times I have to ask you the same question 11:52:22
21 repeatedly. 11:52:23
22 A. Okay. 11:52:24
23 THE COURT REPORTER: And, Counsel, can 11:52:26
24 you speak a little slower? 11:52:28
25 MR. BLUMENKOPF: Sure. Sorry. I had, 11:52:29

1 like, three energy drinks this morning. I'll do my 11:52:30
2 best. 11:52:33
3 BY MR. BLUMENKOPF: 11:52:33
4 Q. Yeah. If I speak unclearly or if I ask 11:52:33
5 you a question you don't understand, just feel free 11:52:36
6 to let -- ask me to rephrase. I'm entitled to give 11:52:38
7 you questions you can -- you can understand. 11:52:41
8 A. Sounds good. 11:52:42
9 Q. Have you ever been deposed before? 11:52:44
10 A. I have. 11:52:45
11 Q. Was that for patent cases? 11:52:46
12 A. Yes. Most of them. 11:52:49
13 Q. Okay. How many of those were related to 11:52:50
14 a district court proceeding? 11:52:55
15 THE COURT REPORTER: To -- I'm sorry. 11:52:58
16 What court proceeding? 11:52:59
17 MR. BLUMENKOPF: A district court 11:52:59
18 proceeding. 11:53:00
19 THE COURT REPORTER: Ah, thank you. 11:53:02
20 THE WITNESS: My guess is a majority, 11:53:02
21 some number of IPRs. But I would say the majority 11:53:03
22 would be for district court -- 11:53:06
23 (Unreportable cross-talk.) 11:53:07
24 BY MR. BLUMENKOPF: 11:53:08
25 Q. Okay. But how many times have you been 11:53:08

1 deposed in total? 11:53:09
2 A. At this point, I would guess close to a 11:53:10
3 hundred. I stopped counting at fifty, but that was 11:53:13
4 a few years ago. 11:53:16
5 Q. Okay. How many cases would you say 11:53:17
6 you've been involved in? 11:53:19
7 A. Over fifty cases at this point. 11:53:20
8 Somewhere between fifty and sixty, if memory serves 11:53:24
9 me right. 11:53:27
10 Q. Okay. And how many of those would you 11:53:28
11 say were patent cases? 11:53:30
12 A. I think only a small number would have 11:53:31
13 been trade secret, mediation, and/or contract 11:53:36
14 dispute-type cases. So I would guess between 11:53:40
15 forty-five and fifty would be patent cases also 11:53:44
16 including IPRs. 11:53:47
17 Q. Okay. How many [unintelligible] have 11:53:48
18 you been involved in? 11:53:50
19 THE COURT REPORTER: "How many" what? 11:53:50
20 MR. BLUMENKOPF: IPRs. 11:53:52
21 THE COURT REPORTER: Thank you. 11:53:54
22 THE WITNESS: I would not be able to 11:53:55
23 give you an exact number, but if I said around 11:53:56
24 twenty, it probably wouldn't be too far off. 11:54:00
25 / / /

1 BY MR. BLUMENKOPF: 11:54:03
2 Q. Okay. So around twenty IPR cases -- 11:54:03
3 A. Right. 11:54:05
4 Q. -- more or less? 11:54:05
5 A. Right. 11:54:05
6 Q. Okay. So as a seasoned witness, I'm 11:54:07
7 gonna try to abbreviate some of the -- the ground 11:54:12
8 rules. But like I said, you know, I need to ask 11:54:15
9 you questions, and if I ask you something unclear, 11:54:19
10 let me know. 11:54:21
11 Obviously, you're -- you're under oath. 11:54:22
12 Let's try not to speak over each other 11:54:24
13 the best we can. Let's try to make things as easy 11:54:27
14 for Kelli as we possibly can. 11:54:29
15 Is there any reason you can't give your 11:54:31
16 best testimony today? 11:54:33
17 A. No reason. 11:54:34
18 Q. Okay. Have you ever been involved in a 11:54:44
19 patent matter involving Sony? 11:54:45
20 A. I believe that this is likely my first 11:54:49
21 patent -- patent matter involving Sony. 11:54:53
22 I -- I've done this for the last fifteen 11:54:55
23 years, give or take, this kind of thing, and my 11:55:01
24 memory might be failing me, but I have not -- 11:55:03
25 certainly not testified in a court proceeding 11:55:07

1 involving Sony, and I believe this is the first 11:55:10
2 time I've done anything involving Sony, going -- 11:55:15
3 just going from memory. 11:55:18
4 Q. You say anything "involving Sony." 11:55:19
5 You're speaking about court proceedings, 11:55:20
6 or are you speaking more generally? 11:55:23
7 A. As far as -- as court proceedings are 11:55:25
8 concerned, IPRs, anything of that kind. 11:55:29
9 Q. Okay. You were involved in the 11:55:34
10 Acceleration [unintelligible] -- 11:55:35
11 THE COURT REPORTER: "Acceleration" -- 11:55:37
12 MR. BLUMENKOPF: Acceleration Bay. 11:55:39
13 THE COURT REPORTER: "Bay"? 11:55:39
14 MR. BLUMENKOPF: Right. 11:55:41
15 BY MR. BLUMENKOPF: 11:55:41
16 Q. There's a litigation against 11:55:41
17 [unintelligible] -- 11:55:50
18 THE COURT REPORTER: I'm sorry. I can't 11:55:50
19 hear, and I'm not understanding. If you can just 11:55:50
20 speak up a little. 11:55:50
21 "There's a litigation against" -- 11:55:51
22 MR. BLUMENKOPF: Let me ask the question 11:55:52
23 again. 11:55:53
24 BY MR. BLUMENKOPF: 11:55:53
25 Q. You were involved in a -- a litigation 11:55:54

1 matter involving Acceleration Bay; right? 11:55:55
2 A. Yes. 11:55:58
3 Q. Against Activision? 11:55:59
4 A. The -- that's the recent one that went 11:56:01
5 to trial a couple weeks ago. 11:56:05
6 Q. Okay. What was your role in that case? 11:56:08
7 A. I was the infringement expert. 11:56:10
8 Q. Okay. Did you provide a declaration in 11:56:13
9 that case? 11:56:17
10 A. If it had been involved in an IPR, I 11:56:17
11 would have provided a declaration. I definitely 11:56:24
12 provided an expert report. 11:56:25
13 Q. Okay. Did you testify in that case? 11:56:26
14 A. I did. 11:56:28
15 Q. Did you testify in court? 11:56:29
16 A. Yes. 11:56:30
17 Q. Did you provide deposition testimony? 11:56:31
18 A. Yes. 11:56:33
19 Q. Did you study any electronic games as 11:56:34
20 part of that case? 11:56:37
21 A. I did. 11:56:38
22 Q. Which games? 11:56:41
23 A. That particular case eventually boiled 11:56:42
24 down to two games, which was "Call of Duty," their 11:56:45
25 actual -- a couple of versions of "Call of Duty" 11:56:49

1 and "World of Warcraft" -- 11:56:52
2 Q. Okay. 11:56:52
3 A. -- which is a Blizzard Entertainment 11:56:53
4 game, but Activision and Blizzard had merged at 11:56:56
5 some point before I started working on that case. 11:57:01
6 Q. [Unintelligible.] 11:57:06
7 THE COURT REPORTER: I'm sorry? 11:57:07
8 BY MR. BLUMENKOPF: 11:57:07
9 Q. Those are both online games; correct? 11:57:08
10 A. I think it's fair to say that "World of 11:57:11
11 Warcraft" is online. I think that "Call of Duty," 11:57:17
12 if memory serves me right, can be played online or 11:57:22
13 offline. 11:57:25
14 Q. Okay. So it's an online game with -- 11:57:26
15 with an offline mode. 11:57:28
16 Is that fair to say? 11:57:30
17 MR. RAFATIJO: Objection; form. 11:57:31
18 THE WITNESS: Or an offline game with an 11:57:32
19 online mode. 11:57:34
20 I -- I think it's -- it can be played 11:57:35
21 with other players in a sort of online mode, or it 11:57:46
22 can be played as a single-player mode involving 11:57:48
23 only the software that is purchased by a consumer, 11:57:50
24 a customer. 11:58:00
25 / / /

1 BY MR. BLUMENKOPF: 11:58:02
2 Q. What's a "sort of online mode"? 11:58:03
3 A. The online mode that involves other 11:58:04
4 players who may be running "Call of Duty" and may 11:58:11
5 be looking to team up. 11:58:21
6 There could potentially be settings, if 11:58:22
7 memory serves me right, where somebody can play 11:58:29
8 alone without being a member of a team or a -- some 11:58:32
9 kind of a foraging party or whatever who would 11:58:36
10 still be able to view other active players at a 11:58:42
11 given time. 11:58:45
12 But this is just -- just going from 11:58:45
13 memory. 11:58:47
14 Q. Okay. Thank you. 11:58:56
15 Did you review the source code for those 11:58:56
16 games, "Call of Duty," "World of Warcraft"? 11:58:56
17 A. I did. 11:58:56
18 Q. How much time did you spend reviewing 11:58:56
19 the source code? 11:58:57
20 A. I spent a fair bit of time. 11:58:59
21 I cannot give you an exact amount 11:59:10
22 because that all happened in the 2016-2017 11:59:10
23 timeframe, and then there was a long period during 11:59:15
24 which basically nothing was happening in the -- at 11:59:17
25 least from my end as an expert, nothing was 11:59:21

1 happening in the case before it finally -- I was 11:59:26
2 informed that it's going to trial in -- what would 11:59:30
3 that have been? I guess late April, early May of 11:59:34
4 2024. 11:59:40
5 Q. Can you give [unintelligible] -- 11:59:40
6 THE COURT REPORTER: "Of 2020-" -- I'm 11:59:41
7 sorry -- 11:59:43
8 THE WITNESS: -4. 2024. 11:59:43
9 THE COURT REPORTER: Thank you. 11:59:43
10 BY MR. BLUMENKOPF: 11:59:43
11 Q. Can you give me an estimate how many 11:59:44
12 hours you spent studying each of those games? 11:59:45
13 A. It was a lot. 11:59:48
14 I studied "Call of Duty" at Activision's 11:59:49
15 offices here in Santa Monica, and I drove down a 11:59:56
16 number of time [as spoken] to study "World of 12:00:00
17 Warcraft" at Blizzard Entertainment's offices down 12:00:05
18 in -- in -- I guess southern Irvine, it would be. 12:00:09
19 Q. Can you give me just a ballpark figure 12:00:11
20 number of hours? 12:00:14
21 A. As we sit here, unfortunately, I can't 12:00:14
22 just because it's been so long. 12:00:16
23 Q. Would you say it's over a hundred hours 12:00:18
24 for each of those? 12:00:19
25 A. I certainly worked -- I would say it's 12:00:21

1 fair to say that I worked over a hundred hours on 12:00:30
2 each of those cases. But how it broke down in 12:00:30
3 terms of studying the code or looking at the 12:00:34
4 documentation or writing my reports, at this point 12:00:36
5 I would not be able to say. 12:00:42
6 Q. Is it fair to say you're -- you're very 12:00:43
7 well versed in those games and how they operate? 12:00:47
8 A. Yes. I would say that that's fair, 12:00:50
9 given that I just had to go through the process of 12:00:51
10 getting back up to speed on -- on those two games 12:00:53
11 because of the -- the trial that took place in 12:00:56
12 Delaware a few weeks ago. 12:01:03
13 Q. Okay. Thank you. 12:01:05
14 If I return to that case, I want to be 12:01:05
15 clear I'm not asking for any non-public information 12:01:07
16 in that case. 12:01:10
17 A. Okay. 12:01:13
18 MR. BLUMENKOPF: So I want to mark three 12:01:13
19 exhibits here, Kelli. 12:01:15
20 THE COURT REPORTER: Okay. 12:01:17
21 MR. BLUMENKOPF: So if you could mark 12:01:36
22 this Exhibit 1013. 12:01:38
23 THE COURT REPORTER: 1013. 12:01:39
24 MR. BLUMENKOPF: I've got copies for 12:01:41
25 everyone. 12:01:42

1 THE COURT REPORTER: Let me just report 12:01:46
2 what you said. 12:01:43
3 (Whereupon, Petitioner's Exhibit Number 12:01:43
4 1013 was marked for identification by 12:01:43
5 the deposition officer and is attached 12:01:43
6 hereto.) 12:01:43
7 THE COURT REPORTER: Here you go, 12:01:47
8 Doctor. 12:01:47
9 THE WITNESS: Thank you. 12:01:47
10 THE COURT REPORTER: You're welcome. 12:01:49
11 MR. BLUMENKOPF: Sorry. All four copies 12:01:49
12 are there, if you could take one and then 12:01:51
13 distribute the rest. 12:01:53
14 THE WITNESS: Oh. 12:01:53
15 MR. BLUMENKOPF: Sorry. 12:01:55
16 (Whereupon, a discussion was held 12:02:11
17 off the stenographic record.) 12:02:14
18 MR. BLUMENKOPF: If you could mark this 12:02:14
19 Exhibit 1014. 12:02:15
20 THE COURT REPORTER: Thank you. 12:02:34
21 (Whereupon, Petitioner's Exhibit Number 12:02:34
22 1014 was marked for identification by 12:02:34
23 the deposition officer and is attached 12:02:34
24 hereto.) 12:02:34
25 THE COURT REPORTER: Doctor. 12:02:34

1 THE WITNESS: Thank you. 12:02:34
2 THE COURT REPORTER: You're welcome. 12:02:35
3 MR. BLUMENKOPF: And if you could mark 12:02:40
4 this one Exhibit 1015. 12:02:41
5 THE COURT REPORTER: Okay. 12:03:03
6 (Whereupon, Petitioner's Exhibit Number 12:03:03
7 1015 was marked for identification by 12:03:03
8 the deposition officer and is attached 12:03:03
9 hereto.) 12:03:05
10 THE WITNESS: Thank you. 12:03:05
11 THE COURT REPORTER: You're welcome. 12:03:06
12 BY MR. BLUMENKOPF: 12:03:06
13 Q. Okay. You've been handed what's been 12:03:08
14 marked as Exhibits 1013, 1014, and 1015. 12:03:09
15 These are notices relating to the 12:03:13
16 deposition here today; right? 12:03:14
17 A. That's what it seems to be, yes. 12:03:17
18 Q. And you've seen these before; right? 12:03:19
19 A. Yes. 12:03:21
20 Q. And you understand you're here because 12:03:22
21 of three inter partes review proceedings 12:03:24
22 [unintelligible] -- 12:03:29
23 THE COURT REPORTER: I'm sorry? Can you 12:03:29
24 repeat that slower and a little louder? 12:03:29
25 / / /

1 BY MR. BLUMENKOPF: 12:03:30
2 Q. You understand we're here because of the 12:03:30
3 three inter partes review proceedings that I 12:03:32
4 mentioned earlier, right, the 954, 995, and 996 12:03:34
5 matters? 12:03:39
6 A. Correct. 12:03:39
7 Q. And are you aware there's a lawsuit 12:03:42
8 pending in the Western District of Texas involving 12:03:44
9 these same three patents? 12:03:47
10 A. Yes. I believe I knew that. 12:03:49
11 Q. Okay. And that's case number 12:03:50
12 6:22-cv-573. I may refer to that today as "the 12:03:54
13 litigation" or "the district court litigation." 12:03:59
14 A. I will have to take your word regarding 12:04:01
15 the case number because I wouldn't have known it, 12:04:06
16 but that sounds fine to me. 12:04:08
17 Q. Okay. What did you do to prepare for 12:04:10
18 your deposition today? 12:04:16
19 A. I read my declarations, reread the 12:04:17
20 patents, looked at the alleged prior art that was 12:04:23
21 asserted by Sony. 12:04:30
22 I looked at the deposition of Sony's -- 12:04:32
23 deposition transcript of Sony's expert, a couple of 12:04:35
24 the file histories, et cetera. 12:04:40
25 So I just essentially retraced many of 12:04:42

1 the things that I did at the time at which I was 12:04:46
2 writing the declarations. 12:04:50
3 Q. Did you review any other documents other 12:04:52
4 than the ones you mentioned? 12:04:54
5 A. If any of them, I -- nothing comes to 12:04:58
6 mind, but if something would -- if something comes 12:05:03
7 up as -- as we go through this, I will make sure 12:05:06
8 to -- to point out. 12:05:08
9 I'm just kind of going from memory. 12:05:09
10 Seems pretty complete. 12:05:11
11 Q. Did you meet with anyone to prepare for 12:05:12
12 this deposition? 12:05:14
13 A. I -- 12:05:15
14 MR. RAFATIJO: I caution coun- -- I 12:05:15
15 caution the witness not to divulge in any 12:05:17
16 attorney-client information or work product 12:05:20
17 information. But otherwise, you can answer the 12:05:22
18 question. 12:05:23
19 THE WITNESS: I met briefly with Spencer 12:05:23
20 Fane's counsel. 12:05:27
21 BY MR. BLUMENKOPF: 12:05:27
22 Q. Okay. Who specifically did you meet 12:05:28
23 with? 12:05:29
24 A. I met with counsel who's present here 12:05:30
25 and -- actually, both of them because one of them 12:05:33

1 is on Zoom as well. 12:05:36
2 Q. How long did you meet with them for? 12:05:38
3 A. A total of maybe an hour and a half 12:05:39
4 would be my guess. 12:05:45
5 Q. Is the patent owner compensating you for 12:05:49
6 your work on these matters? 12:05:58
7 THE COURT REPORTER: I'm sorry.
8 "Is the" what "compensating you"?
9 BY MR. BLUMENKOPF:
10 Q. Is -- is the patent owner --
11 THE COURT REPORTER: "Patent owner."
12 BY MR. BLUMENKOPF:
13 Q. -- compensating you for your work on
14 these matters? 12:05:59
15 A. Yes. 12:05:59
16 Q. Okay. How much are they compensating 12:05:59
17 you? 12:06:01
18 A. My rate is 750 dollars an hour. 12:06:01
19 Q. And does that compensation depend in any 12:06:03
20 way on the outcome of the proceedings? 12:06:06
21 A. No. 12:06:07
22 MR. BLUMENKOPF: Okay. Let's mark this 12:06:34
23 Exhibit 1016. 12:06:35
24 THE COURT REPORTER: Thank you. 12:06:53
25 / / /

1 (Whereupon, Petitioner's Exhibit Number 12:06:53
2 1016 was marked for identification by 12:06:53
3 the deposition officer and is attached 12:06:53
4 hereto.) 12:06:58
5 THE COURT REPORTER: There you go. 12:06:58
6 THE WITNESS: Thank you. 12:06:59
7 THE COURT REPORTER: You're welcome. 12:06:59
8 MR. BLUMENKOPF: Sorry. Let me clarify 12:07:01
9 for the record. This exhibit's been premarked as 12:07:02
10 Sony Exhibit 1001. 12:07:05
11 I know I asked you to mark it as 12:07:08
12 Exhibit 1016, but it's also -- also Exhibit 1001. 12:07:10
13 Just want to clarify that for the record. 12:07:14
14 MR. RAFATIJO: Counsel, one clarifying 12:07:19
15 question. 12:07:19
16 Moving forward, are you going to refer 12:07:21
17 to this as 1016 or 1001? 12:07:22
18 MR. BLUMENKOPF: I'll refer to this as 12:07:25
19 1001. 12:07:26
20 MR. RAFATIJO: Okay. 12:07:28
21 MR. BLUMENKOPF: But let's -- let's 12:07:28
22 reserve the -- 12:07:30
23 MR. RAFATIJO: Sure. 12:07:30
24 MR. BLUMENKOPF: -- Exhibit 1016 number 12:07:30
25 so we don't reuse it. 12:07:31

1 MR. RAFATIJO: Sure. 12:07:33
2 BY MR. BLUMENKOPF: 12:07:36
3 Q. All right. This is U.S. Patent Number 12:07:36
4 8,458,028; right? 12:07:38
5 A. Correct. 12:07:41
6 Q. Okay. Do you recognize this document? 12:07:42
7 A. I do. 12:07:43
8 Q. Is it a complete and correct copy of the 12:07:44
9 '028 Patent? 12:07:50
10 A. I believe it is. I don't see anything 12:07:50
11 missing off the bat. 12:07:54
12 Q. This is one of the patents you analyzed 12:07:57
13 for this case; right? 12:07:59
14 A. This is correct. 12:08:01
15 Q. And I understand your opinion is that 12:08:03
16 claims one and three through nine of the '028 12:08:05
17 Patent are not obvious in view of the Angles 12:08:08
18 reference; right? 12:08:11
19 A. Correct. 12:08:12
20 Q. I understand your opinion is that those 12:08:16
21 same claims are not obvious in view of the Robinson 12:08:18
22 reference? 12:08:21
23 A. Correct. And in both cases, I would 12:08:21
24 just clarify not obvious and not anticipated by. 12:08:24
25 THE COURT REPORTER: "Not anticipated 12:08:31

1 by"? 12:08:33
2 THE WITNESS: Yes. 12:08:33
3 THE COURT REPORTER: Thank you. 12:08:34
4 BY MR. BLUMENKOPF: 12:08:47
5 Q. I understand your opinion is also that 12:08:47
6 claim six is not obvious in view of Angles, 12:08:48
7 Robinson, and Ginter. 12:08:51
8 Is that right? 12:08:54
9 A. I believe that is correct. I don't have 12:08:57
10 my declaration in front of me, but I -- I think 12:08:59
11 that's the claim. 12:09:01
12 Excuse me. 12:09:11
13 Q. Take a look at the first page of the 12:09:11
14 '028 Patent. 12:09:14
15 A. When you say "first page," you mean the 12:09:14
16 face page? 12:09:16
17 Q. Yes, that's right. 12:09:17
18 A. Okay. 12:09:18
19 Q. Look at the file date in the left column 12:09:19
20 of the face page. It says filed October 16th, 12:09:21
21 2002; right? 12:09:28
22 A. Correct. 12:09:28
23 Q. Is that the priority date for this 12:09:28
24 patent that you applied in your analysis? 12:09:31
25 A. I would have to look at my declaration 12:09:34

1 to confirm that, but going from memory, that sounds 12:09:36
2 right. 12:09:42
3 Q. So if I ask you about the priority date 12:09:44
4 for this patent, I'm talking about that date, 12:09:47
5 October 16th, 2002. 12:09:49
6 Okay? 12:09:52
7 A. Okay. 12:09:52
8 Q. Let's take a look at the claims. They 12:09:52
9 start on page 11 of the patent. It's the page -- 12:09:54
10 the columns headings are column seven and column 12:10:01
11 eight. 12:10:04
12 A. Okay. 12:10:08
13 Q. You understand that the scope of a 12:10:08
14 patent is defined by the claims; correct? 12:10:09
15 A. Yes. 12:10:11
16 Q. And here we have independent claim one, 12:10:13
17 and claims two through six depend from claim one; 12:10:15
18 right? 12:10:22
19 A. Technically, four depends on three and 12:10:22
20 six depends on five, which in turn both depend on 12:10:28
21 one. So yes, with that caveat, just to be precise. 12:10:31
22 Q. Okay. So claims two through six 12:10:39
23 incorporate all the limitations of claim one; 12:10:41
24 right? 12:10:44
25 A. That is true. 12:10:44

1 Q. And we also have independent claim seven 12:10:46
2 and dependent claims eight and nine, which depend 12:10:49
3 from independent claim seven; right? 12:10:54
4 A. Correct. 12:10:56
5 Q. So claims eight and nine incorporate the 12:10:56
6 limitations of claim seven; right? 12:10:59
7 A. That is correct. 12:11:00
8 Q. When you performed your analysis, did 12:11:02
9 you apply any special meanings for any of the claim 12:11:05
10 terms? 12:11:07
11 A. I believe that the PTAB did not provide 12:11:17
12 any claim construction order per se, so plain and 12:11:18
13 ordinary -- plain and ordinary meaning as it would 12:11:26
14 have been understood by a person of ordinary skill 12:11:29
15 in the art at the time of the patent's priority 12:11:31
16 date would be the appropriate meaning to apply to 12:11:36
17 the various terms. 12:11:41
18 I believe in the district court case, 12:11:43
19 there may have been a Markman order. I think I 12:11:47
20 talk about it in my declaration. 12:11:51
21 But I would have to look at it to -- to 12:11:55
22 see if it any -- in any way goes against the plain 12:11:58
23 and ordinary meaning for the various terms. 12:12:10
24 Q. When you performed your analysis, did 12:12:10
25 you apply that plain and ordinary meaning for all 12:12:10

1 of these terms? 12:12:12
2 MR. RAFATIJO: Objection. This is not a 12:12:14
3 memory test, Counsel. He needs to see his 12:12:15
4 declaration. 12:12:18
5 MR. BLUMENKOPF: Just asking about his 12:12:18
6 analysis, Counsel. 12:12:19
7 BY MR. BLUMENKOPF: 12:12:21
8 Q. You can answer. 12:12:21
9 A. I -- as -- as I already said, I talk 12:12:22
10 about it in my -- in my declaration, given that 12:12:25
11 as -- as I recall going from memory, there was no 12:12:33
12 definition or claim construction provided by the 12:12:39
13 PTAB, that would have been the correct way of 12:12:41
14 analyzing the -- the claims or an appropriate way 12:12:48
15 of analyzing the claims. 12:12:54
16 But confirming that by looking at my 12:12:56
17 declaration would be helpful. 12:13:01
18 MR. BLUMENKOPF: Counsel, just a side 12:13:06
19 note. As you know, there's no speaking objections 12:13:07
20 allowed here. We're here -- 12:13:10
21 (Unreportable cross-talk.) 12:13:11
22 MR. RAFATIJO: I object -- 12:13:11
23 MR. BLUMENKOPF: -- on a limited amount 12:13:13
24 of time. 12:13:15
25 MR. RAFATIJO: I object when I see fit. 12:13:15

1 MR. BLUMENKOPF: Right. You're aware of 12:13:16
2 the rules [unintelligible] -- 12:13:21
3 THE COURT REPORTER: I'm sorry. I can't 12:13:21
4 follow. Can you speak louder and a little slower? 12:13:22
5 MR. BLUMENKOPF: Just want to warn 12:13:22
6 counsel we're not going to permit any speaking 12:13:24
7 objections here. We're not afraid to go to the 12:13:26
8 board if needed. 12:13:30
9 MR. RAFATIJO: Sure. If you want to 12:13:30
10 drag it to the board, go ahead. 12:13:32
11 BY MR. BLUMENKOPF: 12:13:35
12 Q. Okay. Let's take a look at claim one. 12:13:36
13 Okay? 12:13:38
14 A. Okay. 12:13:39
15 Q. You see how claim one mentions a "game 12:13:39
16 application"? 12:13:41
17 A. Yes. I see the mention of a "game 12:13:44
18 application." 12:13:46
19 Q. What's an application? 12:13:48
20 A. It's a piece of software that provides 12:13:53
21 some functionality that may be of use to somebody 12:14:02
22 in a general sense. 12:14:06
23 Q. "It's a piece of software that provides 12:14:10
24 some functionality that may be of use to somebody 12:14:11
25 in a general sense." 12:14:14

1 Did I hear you correctly? 12:14:15
2 MR. RAFATIJO: Objection; asked and 12:14:17
3 answered. 12:14:19
4 THE WITNESS: That's what I believe I 12:14:19
5 said. I mean, an application is an application. 12:14:20
6 It's a -- it's a well-known term in the art. 12:14:24
7 So defining it beyond just saying it's 12:14:27
8 an application, it's some piece of software 12:14:30
9 generally, if we're talking about a software 12:14:35
10 application. 12:14:37
11 MR. BLUMENKOPF: Counsel, again, warning 12:14:53
12 about the objections where the Trial Practice Guide 12:14:54
13 constrains how [unintelligible] -- 12:14:59
14 MR. RAFATIJO: Objection -- 12:15:00
15 THE COURT REPORTER: I'm sorry? 12:15:00
16 MR. RAFATIJO: -- asked and answered is 12:15:00
17 a proper objection. 12:15:02
18 MR. ARJOMAND: Counsel, asked and 12:15:02
19 answered is not a proper -- 12:15:04
20 (Unreportable cross-talk.) 12:15:05
21 MR. RAFATIJO: Well -- 12:15:05
22 MR. ARJOMAND: -- objection. 12:15:05
23 MR. RAFATIJO: -- the petitioner -- 12:15:06
24 MR. ARJOMAND: Take a look -- 12:15:07
25 MR. RAFATIJO: Don't raise -- 12:15:08

1 MR. ARJOMAND: Please -- 12:15:09
2 MR. RAFATIJO: Don't raise your voice, 12:15:09
3 please. 12:15:09
4 MR. ARJOMAND: I'm not raising my voice. 12:15:10
5 MR. RAFATIJO: You are raising your 12:15:10
6 voice. 12:15:11
7 MR. ARJOMAND: I'm not raising my voice. 12:15:11
8 MR. RAFATIJO: Go ahead. 12:15:13
9 MR. ARJOMAND: You -- you interrupted 12:15:14
10 me. 12:15:15
11 MR. RAFATIJO: It's not your deposition. 12:15:17
12 It's his. You're not talking. Sorry. 12:15:19
13 MR. ARJOMAND: This is our -- 12:15:19
14 MR. RAFATIJO: He start- -- he started 12:15:21
15 the deposition. He is the one who's taking the 12:15:22
16 deposition. You're not allowed to speak. 12:15:24
17 MR. ARJOMAND: That -- 12:15:26
18 (Unreportable cross-talk.) 12:15:27
19 MR. BLUMENKOPF: -- echo -- sorry. 12:15:27
20 I wanted to echo what my colleague said. 12:15:28
21 We're here to hear about the trial practice, guys. 12:15:31
22 MR. RAFATIJO: Well, yeah. And 12:15:33
23 petitioner's former counsel started objecting based 12:15:34
24 on asked and answered, argumentative, all this 12:15:37
25 stuff, and we are doing the same thing. 12:15:39

1 You asked and -- and the witness 12:15:40
2 answered the question, and I just raised an 12:15:42
3 objection. 12:15:44
4 MR. BLUMENKOPF: I don't care what prior 12:15:44
5 counsel did. We're here to follow the rules. 12:15:46
6 (Unreportable cross-talk.) 12:15:47
7 MR. RAFATIJO: We are following the 12:15:47
8 rules. We are following the rules. If you want to 12:15:48
9 take it to the court, take it to the court. 12:15:50
10 MR. ARJOMAND: We will. 12:15:51
11 MR. RAFATIJO: Okay. 12:15:51
12 MR. ARJOMAND: If you continue with 12:15:52
13 these talking objections, we will -- 12:15:53
14 (Unreportable cross-talk.) 12:15:54
15 MR. RAFATIJO: It's not a talking 12:15:54
16 objection. Asked and answered is not a talking -- 12:15:56
17 it is not a talking objection at all. 12:15:57
18 MR. ARJOMAND: We will send you the 12:16:00
19 Trial Practice Guide so you can -- 12:16:01
20 MR. RAFATIJO: I have it. 12:16:03
21 MR. ARJOMAND: -- take a look at that. 12:16:04
22 MR. RAFATIJO: I have it. And please 12:16:06
23 send a copy to the former counsel. 12:16:07
24 BY MR. BLUMENKOPF: 12:16:14
25 Q. The definition you provided for 12:16:14

1 "application," is that what the word "application" 12:16:15
2 means in the context of these claims? 12:16:17
3 A. An application is an application. So to 12:16:22
4 the extent that I would need to broaden or narrow 12:16:25
5 that definition in the context of these claims, I'm 12:16:32
6 happy to do that, but we would have to talk about a 12:16:35
7 specific context. 12:16:37
8 There are nine different claims, and I 12:16:39
9 think your question's just a little too broad. 12:16:40
10 Q. When you said "an application is an 12:16:43
11 application," you mean there's no special meaning 12:16:45
12 of that word in these claims? 12:16:48
13 A. A plain and ordinary meaning of an 12:16:50
14 application is the plain and ordinary meaning. 12:16:53
15 It's used very widely, and a POSITA would know what 12:16:58
16 that term means. 12:17:01
17 So if you have more concrete questions, 12:17:03
18 I'm happy to answer them, but I'm not sure how else 12:17:05
19 I can answer your question. 12:17:07
20 Q. Is that word "application" defined in 12:17:08
21 the '028 Patent anywhere? 12:17:10
22 A. I would happy -- be happy to go through 12:17:14
23 the patent to see whether they defined the word 12:17:16
24 "application." 12:17:19
25 But having said that, my memory suggests 12:17:19

1 that it is not defined, nor would it be necessary 12:17:30
2 to define it because it's a well-understood term in 12:17:33
3 the art. 12:17:36
4 Q. So it would be fair to consult an 12:17:36
5 outside source like a dictionary for guidance as to 12:17:38
6 what that term means; right? 12:17:43
7 A. Fair in what sense? 12:17:44
8 Q. Well, if a person of ordinary skill was 12:17:45
9 looking to understand what that word meant, that's 12:17:48
10 a [unintelligible] -- 12:17:50
11 THE COURT REPORTER: I'm sorry. 12:17:56
12 "That's a" -- 12:17:56
13 Counsel, can you speak a little louder 12:17:56
14 and slower for me so I can follow? 12:18:03
15 MR. BLUMENKOPF: I'll do my best, Kelli. 12:18:03
16 Thank you.
17 THE COURT REPORTER: Okay. So:
18 (The record was read as follows:
19 Q. If a person of ordinary skills
20 help you understand what that word
21 meant, that's the --)
22 BY MR. BLUMENKOPF:
23 Q. The -- a dictionary is the kind of 12:18:04
24 source a person of ordinary skill might reasonably 12:18:06
25 consult to understand that word; right? 12:18:09

1 A. A person of ordinary skill -- I would be 12:18:11
2 surprised. Maybe you can give me a context where 12:18:13
3 that would be necessary. 12:18:15
4 I would be surprised if a person of 12:18:16
5 ordinary skill in the art needed a dictionary to 12:18:18
6 understand what the word "application" is. Or at 12:18:20
7 least not any more than needing a dictionary to 12:18:29
8 understand what the word "computer" is. 12:18:31
9 These are really well-understood terms 12:18:33
10 in the art. But I might be missing the context of 12:18:35
11 your question, so if you -- if you can clarify, I'm 12:18:38
12 happy to consider it further. 12:18:41
13 Q. Well, let me show you an exhibit. Maybe 12:18:45
14 that will give you a sense of what I'm asking 12:18:47
15 about. 12:18:50
16 Kelli, can you mark this Exhibit 1017. 12:19:03
17 THE COURT REPORTER: Sure. 12:19:03
18 Thank you. 12:19:19
19 MR. RAFATIJO: For the record, patent 12:19:19
20 owner objects to this evidence. This is no 12:19:21
21 evidence, has not been filed with the PTAB. 12:19:23
22 (Whereupon, Petitioner's Exhibit Number 12:19:23
23 1017 was marked for identification by 12:19:23
24 the deposition officer and is attached 12:19:23
25 hereto.) 12:19:33

1 THE COURT REPORTER: There you go. 12:19:33
2 THE WITNESS: Thank you. 12:19:35
3 THE COURT REPORTER: You're welcome. 12:19:36
4 BY MR. BLUMENKOPF: 12:19:36
5 Q. Do you recognize Exhibit 1017, 12:19:37
6 Professor? 12:19:39
7 A. I recognize the front page. It's part 12:19:39
8 of a larger document that, obviously, I wouldn't 12:19:43
9 have memorized entirely. 12:19:48
10 Q. This is the "Microsoft Computer 12:19:49
11 Dictionary, Fifth Edition"; right? 12:19:53
12 A. Correct. 12:19:54
13 Q. I'll represent to you these are excerpts 12:19:55
14 from that publication. 12:19:57
15 A. Sure. 12:19:59
16 Q. Now, that dictionary is one of the 12:20:01
17 sources you consulted in preparing your report; 12:20:03
18 right? 12:20:06
19 A. That sounds familiar; but again, I would 12:20:06
20 have to look at my declaration to confirm. 12:20:10
21 Q. You don't recall consulting this 12:20:12
22 reference in doing your analysis? 12:20:14
23 A. Well -- 12:20:17
24 (Unreportable cross-talk.) 12:20:21
25 THE WITNESS: -- this reference is at 12:20:21

1 least 562 pages long. So I consulted specific 12:20:23
2 parts of it. 12:20:26
3 This says it has over 10,000 entries. I 12:20:27
4 did not consult 10,000 entries. 12:20:29
5 THE COURT REPORTER: And excuse me. Did 12:20:34
6 you say something? 12:20:35
7 MR. RAFATIJO: Objection; form. 12:20:37
8 THE COURT REPORTER: Thank you. 12:20:38
9 BY MR. BLUMENKOPF: 12:20:38
10 Q. This excerpt belongs to that same 12:20:38
11 dictionary, though; right? The "Microsoft Computer 12:20:40
12 Dictionary, Fifth Edition"? 12:20:43
13 A. That is possible. Again, I would have 12:20:44
14 to confirm the correct edition by looking in my 12:20:46
15 declaration. But I -- since you're not showing me 12:20:51
16 my declaration, I will take your word for it. 12:20:54
17 Q. Do you recall relying on this dictionary 12:20:59
18 for the meaning of some claim terms in doing your 12:21:01
19 analysis? 12:21:03
20 A. I do recall relying on it for the 12:21:05
21 meaning of a couple of terms. As we sit here, I 12:21:08
22 would not be able to tell you what those terms are 12:21:11
23 because, again, I don't have my declaration in 12:21:13
24 front of me. 12:21:16
25 Q. But in relying on it, you must have 12:21:16

1 found it to be authoritative; correct? 12:21:18
2 MR. RAFATIJO: Objection; form. 12:21:21
3 THE WITNESS: It's Microsoft's computer 12:21:23
4 dictionary. It's a -- it's a well-known computer 12:21:26
5 dictionary. So -- 12:21:28
6 BY MR. BLUMENKOPF: 12:21:28
7 Q. Yeah. 12:21:29
8 A. -- I -- I have no -- no reason to 12:21:29
9 question its authoritativeness. 12:21:32
10 Q. You believe it to be relevant in this 12:21:35
11 proceeding? 12:21:38
12 MR. RAFATIJO: Objection; form. 12:21:38
13 THE WITNESS: To -- in the context in 12:21:39
14 which I used it, I believe it was an appropriate 12:21:43
15 way to refer to it. 12:21:46
16 Beyond that, I would not be able to 12:21:48
17 comment. 12:21:50
18 BY MR. BLUMENKOPF: 12:21:50
19 Q. Turn to page 31 in Exhibit 1017. 12:21:53
20 A. I'm there. 12:22:04
21 Q. Do you see there's a definition provided 12:22:05
22 for the word "application"? 12:22:06
23 MR. RAFATIJO: Objection; no evidence. 12:22:08
24 THE WITNESS: I see "application" there. 12:22:11
25 / / /

1 BY MR. BLUMENKOPF: 12:22:15
2 Q. The definition here says: 12:22:16
3 "A program designed to assist 12:22:17
4 in the performance of a specific 12:22:19
5 task, such as word processing, 12:22:21
6 accounting, or inventory 12:22:23
7 management." 12:22:25
8 Do you see that? 12:22:25
9 A. I see that. 12:22:26
10 Q. Do you agree with that definition of 12:22:27
11 "application"? 12:22:29
12 MR. RAFATIJO: Objection; form. 12:22:30
13 THE WITNESS: I -- I would have maybe 12:22:35
14 defined it differently, but it is what it is. I -- 12:22:42
15 I think it's -- it's illustrative and it's 12:22:44
16 consistent with how one would understand it. I 12:22:49
17 think that the definition I gave you is probably 12:22:50
18 better because I would not say that accounting is a 12:22:53
19 specific task. 12:22:58
20 Whoever wrote this may have done maybe a 12:23:02
21 better job of -- of clarifying that or providing 12:23:06
22 more meaningful examples. 12:23:12
23 Accounting is a whole category of 12:23:14
24 possibly dozens and dozens of tasks. That's just 12:23:17
25 one example, but that's what it says. 12:23:20

1 BY MR. BLUMENKOPF: 12:23:22
2 Q. Other than the example of accounting, is 12:23:22
3 this consistent with the definition of 12:23:25
4 "application" that you applied -- 12:23:27
5 (Unreportable cross-talk.) 12:23:29
6 MR. RAFATIJO: Objection; form. 12:23:29
7 THE WITNESS: It's a program. I -- 12:23:33
8 again, I would not say that an application -- of -- 12:23:39
9 maybe there is a definition of "specific task." 12:23:45
10 Can you show me that definition? 12:23:49
11 Because it really -- all of it hinges on what they 12:23:50
12 mean by "a specific task." 12:23:53
13 Word processing is not a specific task. 12:23:57
14 It's a large -- to me, a large category of tasks. 12:24:00
15 So just -- it just depends. 12:24:02
16 Maybe you can give me more context 12:24:04
17 there. 12:24:06
18 BY MR. BLUMENKOPF: 12:24:06
19 Q. Would -- would -- would you -- would you 12:24:07
20 agree, though, an application's a kind of software 12:24:08
21 designed to assist in the performance of -- of a 12:24:11
22 task? 12:24:13
23 MR. RAFATIJO: Objection; form. 12:24:14
24 THE WITNESS: It -- again, it depends on 12:24:19
25 what we mean by a "task." 12:24:25

1 BY MR. BLUMENKOPF: 12:24:30
2 Q. Well, what -- what are some examples of 12:24:32
3 tasks that -- that would meet your definition? 12:24:33
4 A. To me, what would a task be? 12:24:34
5 A task would be to print a document. 12:24:36
6 That's a task. 12:24:39
7 Q. So if we -- if we say a task is 12:24:41
8 something that the software can do, would that be 12:24:44
9 consistent with your understanding? 12:24:47
10 A. I would -- 12:24:56
11 Q. Let me -- let me ask you a different 12:24:56
12 question. 12:24:58
13 If I say a task is -- is a goal or is 12:24:59
14 something that a computer user wishes to do, would 12:25:00
15 you agree with that? 12:25:04
16 MR. RAFATIJO: Objection; form. 12:25:04
17 THE WITNESS: You would have to be more 12:25:13
18 specific than that, actually, because that -- that 12:25:15
19 is, at best, a very specific kind of task. Because 12:25:16
20 a task would also be, you know, getting water for 12:25:19
21 everybody in this room. Right? Which has nothing 12:25:27
22 to do with -- with a computer. 12:25:29
23 So to me, a -- some kind of a 12:25:31
24 software-based or computer-based or computer-aided 12:25:42
25 or software-aided task may be something along the 12:25:45

1 lines of what you described, but -- but not the way 12:25:49
2 you phrased it. 12:25:51
3 That's much -- in my view, much too 12:25:52
4 broad and -- and open-ended, and I don't think it 12:25:54
5 would -- it's accurate. 12:25:56
6 BY MR. BLUMENKOPF: 12:25:57
7 Q. Is playing a game a type of task? 12:25:57
8 A. You'd have to be more specific. I -- I 12:26:02
9 think playing a game is incredibly broad. Could be 12:26:04
10 a whole range of individual tasks. 12:26:08
11 Q. Okay. Well, is a game an example of a 12:26:14
12 task that an application can perform? 12:26:16
13 MR. RAFATIJO: Objection; form. 12:26:18
14 THE WITNESS: Not in my view, unless you 12:26:20
15 give me a definition of a "task," because a game is 12:26:22
16 a collection of capabilities, typically, that allow 12:26:32
17 players to do any range of things, only some of 12:26:40
18 which could be boiled down to -- to tasks. 12:26:44
19 But to say that a game enables a task, I 12:26:50
20 would have to disagree with that. 12:26:53
21 But again, if -- you know, it -- it 12:26:54
22 might be because we have different world views in 12:26:55
23 mind. So if you -- if you want to provide more 12:27:00
24 context, I'm happy to reconsider this -- this 12:27:03
25 answer. 12:27:06

1 BY MR. BLUMENKOPF: 12:27:06
2 Q. Is a game application an application 12:27:11
3 that plays a game? 12:27:12
4 A. A game application is not an application 12:27:22
5 that plays a game. It's an application that 12:27:24
6 implements a game, possibly. 12:27:28
7 I think generally, divorced of any of 12:27:32
8 these patents that we're talking about today, 12:27:38
9 players would be considered to play a game, not the 12:27:41
10 application itself. 12:27:47
11 Q. Is a game application an application 12:27:48
12 that executes a computer game? 12:27:54
13 A. I would not be able to agree with that. 12:27:59
14 I'm sorry. 12:28:03
15 It's -- a microchip is something that 12:28:04
16 executes code. I -- yeah. I -- I -- without 12:28:09
17 further context, again, I cannot agree with that. 12:28:18
18 Q. Let's go back to the definition on 12:28:22
19 page 31 of Exhibit 1017, which, again, you said was 12:28:25
20 consistent with your understanding of 12:28:32
21 "application," subject to the example of -- 12:28:33
22 provided for accounting. 12:28:36
23 A. Well, no. Actually, for the record, 12:28:38
24 I -- it's -- it's much broader than that in the 12:28:40
25 sense that it says it's: 12:28:42

1 "A program designed ... in the 12:28:44
2 performance of a specific task." 12:28:45
3 And I already said that in my 12:28:48
4 understanding, an application -- in my 12:28:50
5 understanding of a task, an application would 12:28:53
6 support a range of tasks. 12:28:56
7 So if we just take word processing, an 12:28:59
8 application would -- that -- such as Microsoft Word 12:29:03
9 would support spell-checking and saving documents 12:29:07
10 and printing documents and change-tracking and a 12:29:11
11 variety of other things that I would consider 12:29:19
12 tasks. 12:29:22
13 So a lot of this is hinging on what the 12:29:23
14 definition of, quote, a specific task, unquote, is. 12:29:27
15 So I think it would be critical for us to define 12:29:33
16 that before we can talk about me agreeing or 12:29:35
17 disagreeing with this definition. 12:29:38
18 Intuitively, an application to me does 12:29:41
19 more than a single specific task. 12:29:45
20 Q. Do you mean all applications do more 12:29:49
21 than a single specific task? 12:29:52
22 MR. RAFATIJO: Objection; form. 12:29:53
23 THE WITNESS: I have not studied all 12:29:55
24 applications, obviously, in preparation for today, 12:29:58
25 but a canonical application, in my understanding, 12:30:00

1 would do more than a specific task. 12:30:06
2 If you have an application in mind that 12:30:11
3 only does one specific task, I'm happy to consider 12:30:13
4 that. 12:30:16
5 BY MR. BLUMENKOPF: 12:30:17
6 Q. Well, if you have a piece of software 12:30:17
7 that only performs one task, is that an 12:30:18
8 application? 12:30:21
9 MR. RAFATIJO: Objection; form. 12:30:21
10 THE WITNESS: Can you give me an example 12:30:24
11 of what you mean by performing a single task? 12:30:25
12 BY MR. BLUMENKOPF: 12:30:29
13 Q. Well, if we have a -- an application 12:30:30
14 that will run a computer game on your computer. 12:30:31
15 Isn't that a task? 12:30:37
16 A. We have already talked about this. A 12:30:39
17 computer game involves a variety of tasks, in my 12:30:42
18 understanding. 12:30:46
19 Q. Well, understanding that a task can have 12:30:47
20 subtasks or associated tasks, are -- isn't a game 12:30:49
21 still a -- a task? 12:30:54
22 MR. RAFATIJO: Objection; form. 12:30:55
23 THE WITNESS: So now you are -- in 12:30:57
24 your -- in your question, you're basically implying 12:30:58
25 a taxonomy that involves this term, "task." 12:31:02

1 So can you give me a definition of a 12:31:05
2 "task," please? 12:31:09
3 BY MR. BLUMENKOPF: 12:31:09
4 Q. Why don't you give me your definition of 12:31:09
5 "task." 12:31:11
6 MR. RAFATIJO: Objection; form. 12:31:11
7 THE WITNESS: I understand that I'm 12:31:13
8 supposed to be answering questions here, but you're 12:31:14
9 the one who is asking me these questions. 12:31:17
10 So a "task" is -- it -- it is something 12:31:20
11 that somebody is asked to perform, and a "specific 12:31:26
12 task" is something specific being asked of somebody 12:31:32
13 to perform. 12:31:35
14 BY MR. BLUMENKOPF: 12:31:40
15 Q. When you say "someone," do you include a 12:31:41
16 computer? 12:31:43
17 A. That depends on what kind of task it is. 12:31:43
18 There are different kinds of tasks. 12:31:46
19 Q. Could it include a computer? 12:31:48
20 A. In a very general sense, yes; but again, 12:31:52
21 a computer is a very complex notion. And if you're 12:31:55
22 just thinking of the bare metal on a computer, 12:32:01
23 sure, it can perform certain tasks. 12:32:06
24 But my guess is that you're implying 12:32:08
25 other capabilities which are provided either by 12:32:09

1 maybe an operating system or middleware or 12:32:12
2 libraries and things like that. 12:32:15
3 So it just depends on what you mean by 12:32:16
4 this, and -- and I feel like we're not being very 12:32:19
5 precise here. 12:32:22
6 Q. Well, using the definition of "task" you 12:32:23
7 provided, is a game application a program designed 12:32:25
8 to assist in the performance of a task? 12:32:28
9 MR. RAFATIJO: Objection; form. 12:32:29
10 THE WITNESS: Based on my understanding 12:32:31
11 of what a task is, a game will enable the 12:32:33
12 performance of a range of tasks. 12:32:38
13 BY MR. BLUMENKOPF: 12:32:41
14 Q. So what's a game application? 12:32:41
15 A. It's an application that implements a 12:32:45
16 game. 12:32:47
17 Q. What do you mean by "implements a game"? 12:32:49
18 A. I'm sorry. I can't give you a -- a more 12:33:00
19 precise answer. That -- that answer is to somebody 12:33:00
20 of ordinary skill in the art. It's a fully 12:33:00
21 self-contained, readily understandable answer. 12:33:05
22 Q. Let's return to claim one from 12:33:07
23 Exhibit 1001, the '028 Patent. 12:33:11
24 You see how it says [unintelligible]? 12:33:16
25 THE COURT REPORTER: I'm sorry. "This" 12:33:18

1 what "game"? 12:33:19
2 BY MR. BLUMENKOPF: 12:33:22
3 Q. I'd like to return to claim one from 12:33:24
4 Exhibit 1001. 12:33:26
5 And you see how claim one recites "game 12:33:29
6 application"? 12:33:32
7 A. Yes. 12:33:34
8 Q. What's the understanding of "game 12:33:37
9 application" that you applied when you analyzed 12:33:39
10 this claim? 12:33:41
11 A. It's an application that is a game. 12:33:45
12 Q. That's your understanding of the term? 12:33:51
13 A. Yes. And if there is another 12:33:54
14 understanding that I'm supposed to have in mind, 12:33:56
15 I'm happy to consider it. 12:33:59
16 But a game application is an application 12:34:00
17 that is a game, and a person of ordinary skill in 12:34:01
18 the art would readily know that. 12:34:05
19 Q. So what's a game? 12:34:10
20 A. A game is a game. It -- it has a 12:34:13
21 well-understood meaning. It's something that 12:34:23
22 involves humans engaging, concepts, ideas, objects, 12:34:27
23 et cetera, in order to have fun. 12:34:37
24 To be frank with you, I never thought 12:34:40
25 somebody would ask me to define a game, but -- 12:34:43

1 because I'm not a psychologist or an 12:34:45
2 anthropologist, but that's kind of what a game is. 12:34:47
3 Q. Well, didn't you have to apply the 12:34:50
4 meaning of the word "game" when you performed your 12:34:52
5 analysis? 12:34:54
6 MR. RAFATIJO: Objection; form. 12:34:55
7 THE WITNESS: Being able to apply the 12:34:56
8 meaning of a word does not necessitate that one be 12:34:58
9 able to provide a -- or verbalize a definition of 12:35:02
10 that word. 12:35:08
11 There are some word that are -- words 12:35:08
12 that are absolutely undeniably and unequivocally 12:35:11
13 understood by everybody, and a game is such a word. 12:35:18
14 Children at the youngest age where they 12:35:25
15 can reason understand what a game is. 12:35:28
16 BY MR. BLUMENKOPF: 12:35:40
17 Q. So the word "game" appears in claim one; 12:35:40
18 right? Multiple times? 12:35:40
19 MR. RAFATIJO: Objection; form. 12:35:42
20 THE WITNESS: Yes. It appears more than 12:35:43
21 once in that claim. 12:35:45
22 BY MR. BLUMENKOPF: 12:35:47
23 Q. So there -- there are terms from claim 12:35:47
24 one that you were unable to verbalize when you 12:35:49
25 performed your analysis? 12:35:52

1 MR. RAFATIJO: Objection; form. 12:35:53
2 THE WITNESS: I can verbalize all of 12:36:00
3 these terms. 12:36:02
4 I think you're asking me to -- to define 12:36:03
5 a term that is so foundational to the human 12:36:09
6 experience that -- and I already did provide you a 12:36:13
7 definition, by the way. 12:36:19
8 But it seems to me that you are pushing 12:36:20
9 the kind of analysis that would take place of a 12:36:23
10 claim such as this to really an extreme [as 12:36:28
11 spoken]. 12:36:31
12 A person of ordinary skill in the art 12:36:31
13 can know what something means without sitting down 12:36:36
14 and providing a definition of every single one of 12:36:40
15 those terms. 12:36:43
16 So somebody would know what a game is 12:36:45
17 and what a game application is without necessarily 12:36:48
18 sitting down and actually writing out the 12:36:51
19 definition of that term. 12:36:53
20 BY MR. BLUMENKOPF: 12:36:54
21 Q. I'm just trying to understand how you 12:36:54
22 conducted your analysis that led to your opinion -- 12:36:56
23 opinions in this case. 12:36:58
24 A. And I've told you that. 12:37:01
25 Q. So you're unable to provide a definition 12:37:06

1 of "game" that you applied during your analysis? 12:37:07
2 MR. RAFATIJO: Objection; asked and 12:37:09
3 answered. 12:37:11
4 THE WITNESS: That is absolutely not 12:37:11
5 true. I gave you a definition of a game. 12:37:12
6 BY MR. BLUMENKOPF: 12:37:20
7 Q. Which other words in claim one were you 12:37:21
8 unable to verbalize in doing your analysis? 12:37:23
9 MR. RAFATIJO: Objection; form. 12:37:27
10 THE WITNESS: I vehemently disagree with 12:37:28
11 the premise of your question. I have been able to 12:37:34
12 verbalize every single term here. 12:37:37
13 However, if you were to ask me to define 12:37:39
14 the word "a" or to define the word "one" or to 12:37:40
15 define the word "that," I may struggle with 12:37:47
16 providing a formal definition of those words. 12:37:50
17 Some words that we use have such 12:37:52
18 ingrained and inherently well-understood meanings, 12:37:56
19 that saying what's the definition of that word is 12:37:58
20 completely superfluous. 12:38:03
21 Having said that, I did give you a 12:38:05
22 definition of what a game is to a human being, 12:38:07
23 and even though I really had not thought of it 12:38:14
24 before, I think it's a pretty good definition and I 12:38:16
25 stand by it. 12:38:19

1 BY MR. BLUMENKOPF: 12:38:23
2 Q. In the context of the '028 Patent, does 12:38:23
3 a game refer to a computer game? 12:38:26
4 MR. RAFATIJO: Objection; form. 12:38:30
5 THE WITNESS: Since it's a game 12:38:35
6 application, I think in a very broad sense, you 12:38:39
7 could say it refers to a computer game. Although, 12:38:41
8 for the record, we have not defined what we mean -- 12:38:46
9 or you have not defined what you mean by "computer 12:38:48
10 game." 12:38:51
11 BY MR. BLUMENKOPF: 12:38:56
12 Q. Take a look at Exhibit 1017 again. This 12:38:57
13 is the -- the "Microsoft Computer Dictionary." 12:38:58
14 Take a look at page 119. 12:39:00
15 MR. RAFATIJO: Objection; no evidence. 12:39:04
16 THE WITNESS: Okay. 12:39:10
17 BY MR. BLUMENKOPF: 12:39:10
18 Q. You see there's a definition provided 12:39:11
19 for a computer game? 12:39:12
20 A. I see that. 12:39:13
21 Q. It says: 12:39:14
22 "A class of computer program 12:39:15
23 in which one or more users 12:39:16
24 interacts with a computer as a form 12:39:18
25 of entertainment." 12:39:20

1 Do you agree with that definition? 12:39:22
2 A. Just that first sentence, I think, is 12:39:34
3 overly broad. 12:39:36
4 There are instances of users interacting 12:39:37
5 with a computer as a form of entertainment that I 12:39:45
6 think both you and I would agree are not games. 12:39:47
7 So either we go further in the 12:39:50
8 definition or I would have to say that this is too 12:39:52
9 broad. I -- I cannot agree with -- this definition 12:39:54
10 does capture games in some sense, but it captures 12:39:58
11 other things that, in my view, are not games. 12:40:01
12 Q. Like what? 12:40:03
13 A. Netflix, I think we would agree, is -- 12:40:06
14 is not a game. And if I go through the Netflix 12:40:09
15 selection of offerings and pick an episode of 12:40:12
16 "Seinfeld," for example, that is a form of -- I 12:40:17
17 interact with the computer as a form of 12:40:21
18 entertainment, but I'm not playing a game, in my 12:40:24
19 understanding of the word "game." 12:40:26
20 Q. How would you revise this definition to 12:40:32
21 make it correct in your mind? 12:40:33
22 MR. RAFATIJO: Objection; form. 12:40:35
23 THE WITNESS: I would -- well, first I 12:40:37
24 would make sure that we read the whole definition 12:40:39
25 and not just the first sentence. 12:40:42

1 And then if that still doesn't clarify, 12:40:43
2 I would try to be more careful with what kind of 12:40:46
3 entertainment we're talking about here. 12:40:53
4 BY MR. BLUMENKOPF: 12:41:00
5 Q. Would you agree a computer game is a 12:41:00
6 class of computer program? 12:41:02
7 MR. RAFATIJO: Objection; form. 12:41:04
8 THE WITNESS: That's what this thing 12:41:08
9 says. 12:41:10
10 I -- I don't really -- as we sit here, 12:41:11
11 divorced of -- of any context, I don't have a 12:41:12
12 reason to dispute that, but depends on where you'd 12:41:14
13 like to go with it. We can revisit. 12:41:20
14 BY MR. BLUMENKOPF: 12:41:21
15 Q. Would you agree it's a class of computer 12:41:22
16 program in which one or more users interacts with a 12:41:23
17 computer? 12:41:28
18 MR. RAFATIJO: Objection; form. 12:41:28
19 THE WITNESS: That, in and of itself, 12:41:33
20 may be the case, but that also includes tax filing 12:41:37
21 software and flight simulators and shopping 12:41:43
22 software and, you know, Spotify and Netflix and, 12:41:51
23 you know, medical imaging software, et cetera. 12:41:59
24 So there are literally thousands of 12:42:02
25 examples out there that would fall under that 12:42:09

1 portion of the definition that I would say nobody 12:42:14
2 reasonable, and certainly not a POSITA, would 12:42:17
3 consider to be a game. 12:42:19
4 BY MR. BLUMENKOPF: 12:42:20
5 Q. It does describe computer games, though, 12:42:23
6 even if it would describe other types of software; 12:42:25
7 right? 12:42:28
8 MR. RAFATIJO: Objection; form. 12:42:28
9 THE WITNESS: Not in a way where one 12:42:29
10 would be able to say, "Okay. This is a game and 12:42:31
11 this is not a game," for the reason that I already 12:42:33
12 mentioned. 12:42:36
13 If the same definition can apply to -- 12:42:38
14 since we talked about it already -- "World of 12:42:44
15 Warcraft" and Netflix, then that is not a good 12:42:48
16 definition because one is considered to be a game 12:42:51
17 and the other one is not. 12:42:53
18 BY MR. BLUMENKOPF: 12:43:01
19 Q. Do you have a test for determining if a 12:43:02
20 piece of software is a game or if it's not a game? 12:43:04
21 MR. RAFATIJO: Objection; form. 12:43:07
22 THE WITNESS: I -- if I see it, I'll be 12:43:09
23 able to tell you. And I can tell you that Netflix 12:43:14
24 is not a game, and I don't think that anybody 12:43:16
25 reasonable would say that Netflix is a game. 12:43:18

1 But they would agree that it is -- 12:43:26
2 accessing Netflix is a form of entertainment. 12:43:26
3 BY MR. BLUMENKOPF: 12:43:27
4 Q. Do you have a test for determining if 12:43:27
5 something is a game application or if it's not a 12:43:29
6 game application? 12:43:32
7 A. In the context of my analysis for this 12:43:37
8 case, that was not a relevant question that came 12:43:39
9 up. 12:43:43
10 Q. So you didn't apply any test like that 12:43:44
11 during your analysis; right? 12:43:46
12 MR. RAFATIJO: Objection; form. 12:43:47
13 THE WITNESS: There is a statement in, 12:43:52
14 for example, claim one that it deals with a game 12:43:54
15 application, and I don't think that it was 12:43:58
16 necessary to apply such a test. 12:44:00
17 However, if -- if there is a reason why 12:44:08
18 you think such a test would be necessary, other 12:44:10
19 than to rescue this poorly worded definition that 12:44:13
20 you put in front of me, I'm happy to consider it. 12:44:16
21 BY MR. BLUMENKOPF: 12:44:19
22 Q. So when you applied claim one to the 12:44:19
23 prior art in this case, you didn't have any 12:44:23
24 particular test for determining whether that game 12:44:25
25 application was met. 12:44:27

1 Is that right? 12:44:28
2 MR. RAFATIJO: Objection; form. 12:44:28
3 THE WITNESS: Look, a game is a game. I 12:44:29
4 think anybody in the art -- a person of ordinary 12:44:31
5 skill in the art would know what a game is. 12:44:36
6 The only reason we are having this 12:44:38
7 discussion is because you put in front of me a 12:44:40
8 definition that includes things other than games. 12:44:42
9 I don't think there is any question 12:44:44
10 about what is a game. 12:44:45
11 I think what we're discussing here is 12:44:50
12 what is a form of entertainment, and that is not -- 12:44:51
13 I did not analyze what, quote, a form of 12:44:55
14 entertainment, unquote, is because that is not a 12:44:58
15 term that came up in this case. 12:45:00
16 BY MR. BLUMENKOPF: 12:45:04
17 Q. Would you agree a game application is 12:45:04
18 something executed by a computer? 12:45:06
19 MR. RAFATIJO: Objection; form. 12:45:07
20 THE WITNESS: A game application may be 12:45:17
21 executed by a computer. 12:45:17
22 BY MR. BLUMENKOPF: 12:45:17
23 Q. What else could it be executed by? 12:45:18
24 A. Depends on -- again, if we're talking 12:45:20
25 about it in -- in a general sense, if we're 12:45:22

1 divorced of patent '028, a game application is also 12:45:28
2 something that could be executed by humans. 12:45:32
3 Q. What does it mean for a human to execute 12:45:38
4 a game? 12:45:40
5 A. It would be to play the game according 12:45:41
6 to its rules, just like a computer in a computer 12:45:42
7 game would execute the game according to the rules 12:45:45
8 implemented in the computer game. 12:45:51
9 Q. Is there a difference between a game 12:45:57
10 application and a game program? 12:45:59
11 MR. RAFATIJO: Objection; form. 12:46:00
12 THE WITNESS: The term "game program," I 12:46:02
13 don't believe appeared anywhere in the '028 Patent, 12:46:05
14 but if I'm wrong, please point me to it. 12:46:08
15 BY MR. BLUMENKOPF: 12:46:11
16 Q. I'm just asking about your understanding 12:46:11
17 of the term "game program." 12:46:12
18 Do you view it as something different 12:46:15
19 than a game application? 12:46:16
20 A. Again, it's a term that did not come up, 12:46:18
21 so I would need more context. 12:46:21
22 You're ask- -- you're introducing a new 12:46:22
23 term, so I'm just telling you the -- the term "game 12:46:24
24 application" figures prominently in the patent. 12:46:28
25 "Game program" I don't believe shows up. 12:46:31

1 Q. I don't see it in claims. I'm just 12:46:34
2 asking what it means to you and if it's different 12:46:37
3 from a game application. 12:46:39
4 A. It may be the same, or it may be 12:46:40
5 different. It depends on the context and what you 12:46:43
6 mean by it. 12:46:46
7 You -- I -- I don't think it's 12:46:47
8 reasonable to just kind of throw out a term 12:46:48
9 completely divorced of context and then say, "Is 12:46:50
10 this term the same as this other term or not?" 12:46:53
11 Q. Could a game program include more than 12:46:55
12 one game application? 12:46:59
13 MR. RAFATIJO: Objection; form. 12:47:01
14 THE WITNESS: That would depend on the 12:47:01
15 context. I don't know what specifically you have 12:47:03
16 in mind. 12:47:04
17 BY MR. BLUMENKOPF: 12:47:07
18 Q. Could a game application include more 12:47:08
19 than one game program? 12:47:10
20 MR. RAFATIJO: Objection; form. 12:47:17
21 THE WITNESS: Again, can you point me 12:47:17
22 somewhere in this patent where that is discussed so 12:47:17
23 that I can situate it in the context of what I 12:47:18
24 actually analyzed for this case? 12:47:21
25 / / /

1 BY MR. BLUMENKOPF: 12:47:22
2 Q. Just asking for your understanding. 12:47:22
3 A. As I already said, I don't believe that 12:47:24
4 it is appropriate for you to introduce random terms 12:47:30
5 and ask me about my understanding of those terms. 12:47:35
6 Not because in a general sense, it's not fair. 12:47:38
7 We can -- you know, as -- as part of our 12:47:41
8 discourse, we can do all kinds of things. But I 12:47:42
9 don't know what you mean by those terms, and I 12:47:47
10 haven't seen them defined or used. 12:47:49
11 So in a way, saying "game program" and 12:47:53
12 trying to equate it to something else is no 12:47:59
13 different than saying something like "frag" and 12:48:08
14 just completely making up a term. 12:48:08
15 It depends on what specifically -- what 12:48:08
16 meaning we're ascribing to that term and in what 12:48:10
17 context. 12:48:14
18 Q. How would a person of ordinary skill in 12:48:24
19 the art have understood the term "game application" 12:48:24
20 in 2002? 12:48:25
21 MR. RAFATIJO: Objection; form. 12:48:26
22 THE WITNESS: It's an application that 12:48:29
23 implements a game. 12:48:30
24 BY MR. BLUMENKOPF: 12:48:32
25 Q. Can a game have more than one game 12:48:33

1 application? 12:48:36
2 MR. RAFATIJO: Objection; form. 12:48:36
3 THE WITNESS: What do you mean by "a 12:48:48
4 game having more than one game application"? 12:48:48
5 BY MR. BLUMENKOPF: 12:48:48
6 Q. Well, would you agree "World of 12:48:48
7 Warcraft"," for example, is one example of a game? 12:48:49
8 A. Sure. "World of Warcraft" is -- I think 12:48:52
9 it's fair to say that it's a game. 12:48:54
10 Q. Okay. And my understanding is "World of 12:48:56
11 Warcraft" includes a -- a client application; 12:49:00
12 right? 12:49:09
13 A. I am not sure what you mean by "a client 12:49:09
14 application." 12:49:12
15 Q. Well, what does "client application" 12:49:12
16 mean to you? 12:49:14
17 MR. RAFATIJO: Objection; form. 12:49:14
18 THE WITNESS: Again, you introduced the 12:49:16
19 term. It's -- that's -- that's what I'm trying to 12:49:17
20 find out. 12:49:19
21 What do you mean by "client 12:49:21
22 application"? 12:49:22
23 BY MR. BLUMENKOPF: 12:49:22
24 Q. I'm trying to understand what it means 12:49:22
25 to you. 12:49:24

1 MR. RAFATIJO: Objection; form. 12:49:25
2 THE WITNESS: The -- 12:49:26
3 BY MR. BLUMENKOPF: 12:49:26
4 Q. Do -- do you have an understanding of 12:49:27
5 the term "client application"? 12:49:28
6 A. In a specific context, I would. 12:49:29
7 So in the case of "World of Warcraft"," 12:49:31
8 if you show me a document that describes what this 12:49:32
9 purported client application is and/or does, I'm 12:49:35
10 happy to consider it. 12:49:38
11 But again, asking me an open-ended 12:49:39
12 question that ties to an incredibly important term 12:49:44
13 in the patents that are in dispute here, I think at 12:49:53
14 the least it would be irresponsible for me to 12:49:53
15 answer without asking for additional detail. 12:49:56
16 Q. Okay. "World of Warcraft"'s an example 12:49:58
17 of a game with a client-server architecture; right? 12:50:01
18 MR. RAFATIJO: Objection; form. 12:50:06
19 THE WITNESS: I would not entirely agree 12:50:08
20 with that. I would actually mostly disagree with 12:50:10
21 it, although there may be renderings of "World of 12:50:17
22 Warcraft" that talk about some sort of a 12:50:22
23 client-server breakdown. 12:50:26
24 I do not recall such renderings as we 12:50:28
25 sit here, but if you have some, I'm happy to take a 12:50:31

1 look. 12:50:34
2 BY MR. BLUMENKOPF: 12:50:34
3 Q. You told me earlier you were -- you 12:50:34
4 spent many hours studying "World of Warcraft." 12:50:37
5 You -- you understand it very well, how 12:50:40
6 that game works; right? 12:50:42
7 A. On some level, yes, but I did not study 12:50:43
8 it in preparation for today. 12:50:47
9 Q. And you're here as an expert in software 12:50:49
10 architecture; right? You've published in that 12:50:51
11 field; you've spent many years in that field? 12:50:53
12 A. That is fair. 12:50:55
13 Q. And you can't tell me whether "World of 12:50:56
14 Warcraft" is a client-server architecture? 12:50:58
15 A. "World of Warcraft" is such an 12:51:03
16 incredibly complex system that just saying it's a, 12:51:04
17 quote, unquote, client-server architecture would, 12:51:09
18 at the least, be irresponsible. 12:51:11
19 Q. Would you agree there's a server 12:51:13
20 component to the game? 12:51:16
21 MR. RAFATIJO: Objection; form. 12:51:16
22 THE WITNESS: There is a set of servers 12:51:17
23 that Blizzard Entertainment uses to implement 12:51:19
24 different facets of "World of Warcraft." 12:51:25
25 Whether that meets your definition of, 12:51:30

1 quote, a server component of the game, unquote, I 12:51:33
2 can't tell because I don't know what you mean. 12:51:36
3 BY MR. BLUMENKOPF: 12:51:38
4 Q. Well, what would a person of ordinary 12:51:38
5 skill in the art have understood a "server 12:51:40
6 component" to mean in 2002? 12:51:42
7 MR. RAFATIJO: Objection; form. 12:51:43
8 THE WITNESS: That would depend on the 12:51:44
9 context. I don't remember seeing the term "server 12:51:46
10 component" in this patent. 12:51:52
11 BY MR. BLUMENKOPF: 12:51:53
12 Q. [Inaudible] -- 12:51:54
13 THE COURT REPORTER: I'm sorry. I 12:51:54
14 couldn't hear you. 12:51:55
15 THE VIDEOGRAPHER: Counsel, sorry to 12:51:57
16 interrupt. [Inaudible] -- 12:51:57
17 THE COURT REPORTER: I can't hear you, 12:52:00
18 Charlie. 12:52:02
19 THE VIDEOGRAPHER: We just lost the -- 12:52:03
20 the Zoom connection with the witness. 12:52:04
21 Would it be all right if we took off -- 12:52:06
22 or went off the record for a moment? 12:52:08
23 MR. BLUMENKOPF: Yeah. Let's take a 12:52:11
24 short break. 12:52:13
25 THE VIDEOGRAPHER: All right. We are 12:52:13

1 going off the record at 12:52. 12:52:14
2 (Whereupon, a recess was held 12:52:14
3 from 12:52 p.m. to 1:04 p.m.) 12:52:18
4 THE VIDEOGRAPHER: We are back on the 13:04:12
5 record at 1:04. 13:04:14
6 BY MR. BLUMENKOPF: 13:04:17
7 Q. All right. Great. Thank you. 13:04:17
8 Let's continue. 13:04:18
9 A. Sure. 13:04:19
10 Q. So, Professor, would a person of 13:04:20
11 ordinary skill in the art in 2002 have understood 13:04:24
12 there are at least some game app- -- some games 13:04:27
13 that have a client application and a server 13:04:29
14 application? 13:04:31
15 MR. RAFATIJO: Objection; form. 13:04:32
16 THE WITNESS: We'd have to see what you 13:04:37
17 mean by "client application" and "server 13:04:39
18 application," because we just talked about a "game 13:04:41
19 application," so now we're introducing two other 13:04:44
20 notions of applications. 13:04:50
21 So what do you mean specifically by -- 13:04:50
22 we can just pick one -- "client application"? 13:04:52
23 BY MR. BLUMENKOPF: 13:04:53
24 Q. Let me ask you a different question. 13:04:53
25 Would a person of ordinary skill in the 13:04:54

1 art in 2002 have understood at least some games can 13:04:57
2 have a client-server architecture? 13:04:59
3 MR. RAFATIJO: Objection; form. 13:05:01
4 THE WITNESS: That's possible. I 13:05:02
5 wouldn't be surprised if that were the case. 13:05:10
6 BY MR. BLUMENKOPF: 13:05:12
7 Q. You're not aware of -- aware -- are you 13:05:12
8 aware of any games that have a client-server 13:05:14
9 architecture? 13:05:17
10 MR. RAFATIJO: Objection; form. 13:05:17
11 THE WITNESS: I am, but you're asking me 13:05:17
12 about whether a person of ordinary skill in the art 13:05:20
13 would have understood it in 2002, and I am not 13:05:22
14 discounting the possibility, but I haven't 13:05:25
15 performed the analysis of what would readily have 13:05:28
16 been known to a POSITA as of 2002 in terms of 13:05:30
17 specifically client-server architectures as applied 13:05:35
18 to games. 13:05:38
19 BY MR. BLUMENKOPF: 13:05:38
20 Q. Okay. Well, a person of ordinary skill 13:05:39
21 in the art would know what a client-server 13:05:41
22 architecture is; right? 13:05:44
23 A. With reasonable likelihood, I would say 13:05:45
24 that's -- that's true. 13:05:48
25 Q. And given a piece of software, they 13:05:49

1 would be able to identify whether that piece of 13:05:51
2 software utilizes a client-server architecture; 13:05:55
3 right? 13:05:58
4 MR. RAFATIJO: Objection; form. 13:05:58
5 THE WITNESS: That is a much harder 13:05:59
6 question to answer. So that would depend on a 13:06:00
7 whole bunch of different factors, so I cannot off 13:06:02
8 the bat agree with that. 13:06:05
9 BY MR. BLUMENKOPF: 13:06:06
10 Q. In at least some cases, a person of 13:06:06
11 ordinary skill would be able to analyze a game and 13:06:09
12 determine this game has a client-server 13:06:12
13 architecture; right? 13:06:15
14 MR. RAFATIJO: Objection; form. 13:06:16
15 THE WITNESS: I don't know that 13:06:24
16 that's -- or I don't agree that that's readily 13:06:25
17 true. It would have to depend on a bunch of 13:06:28
18 different factors, which we have not established at 13:06:30
19 this point. 13:06:38
20 So would -- I don't know what you mean, 13:06:38
21 for example, to look at a game. 13:06:39
22 BY MR. BLUMENKOPF: 13:06:41
23 Q. I mean to analyze it, understand how it 13:06:42
24 works. 13:06:44
25 A. Analyze the source code? Analyze the 13:06:51

1 documentation? What -- what are they analyzing? 13:06:53
2 Q. What materials would they need to 13:06:57
3 analyze to understand how the game works? 13:06:59
4 MR. RAFATIJO: Objection; form. 13:07:02
5 THE WITNESS: As of 2002, a person of 13:07:03
6 ordinary skill in the art would probably benefit 13:07:10
7 from all of the above, meaning if there is 13:07:15
8 appropriate documentation, if there is access to 13:07:21
9 the code, if there is access to the game's 13:07:24
10 architects, any -- any of those or all of those 13:07:28
11 things would probably be helpful. 13:07:33
12 BY MR. BLUMENKOPF: 13:07:35
13 Q. You're -- of at least some games that 13:07:36
14 have a client component and a server component; 13:07:39
15 right? 13:07:42
16 MR. RAFATIJO: Objection; form. 13:07:42
17 THE WITNESS: I have constructed myself 13:07:43
18 games that have had a client component and -- at 13:07:45
19 least one client component and at least one server 13:07:50
20 component, and that, I think, would probably be 13:07:58
21 sufficient to answer your question with a yes. 13:07:59
22 BY MR. BLUMENKOPF: 13:08:01
23 Q. Did you identify "Call of Duty" as 13:08:01
24 having a client component and a server component? 13:08:03
25 MR. RAFATIJO: Objection; form. 13:08:08

1 THE WITNESS: "Call of Duty" is much 13:08:09
2 more complex than that. There are -- for example, 13:08:11
3 the opinion that I provided a couple of weeks ago 13:08:12
4 had to do with peer-to-peer voice-over-IP 13:08:15
5 connections. 13:08:21
6 So there were no clients or servers 13:08:21
7 there. There was a -- specifically, an m-regular 13:08:24
8 network involving a set of peers. 13:08:28
9 BY MR. BLUMENKOPF: 13:08:35
10 Q. I understand that game is complex, but 13:08:36
11 it does include at least a client component and a 13:08:38
12 server component; correct? 13:08:42
13 MR. RAFATIJO: Objection; form. 13:08:43
14 THE WITNESS: If you show me what you 13:08:43
15 mean by "it," I'm happy to consider it. But as I 13:08:45
16 already mentioned, the thing that I opined on was 13:08:47
17 expressly a peer-to-peer architecture, not a 13:08:50
18 client-server architecture. 13:08:54
19 BY MR. BLUMENKOPF: 13:08:56
20 Q. You identified a client-server 13:08:56
21 architecture, "World of Warcraft"," didn't you? 13:08:58
22 MR. RAFATIJO: Objection; form. 13:08:59
23 THE WITNESS: That is not accurate. 13:09:00
24 All I said was that there are notions of 13:09:01
25 servers that Blizzard Entertainment's engineers 13:09:05

1 introduce into their architecture. 13:09:12
2 But the entire substance of my 13:09:17
3 infringement opinion was that what they call their 13:09:19
4 servers are -- 13:09:22
5 BY MR. BLUMENKOPF: 13:09:23
6 Q. I -- I'll just -- I don't mean to 13:09:23
7 interrupt. 13:09:25
8 I don't want to know any non-public 13:09:26
9 information from that case. 13:09:27
10 A. It's public in the sense that anybody 13:09:28
11 could have been in the courtroom to listen to my 13:09:30
12 testimony. 13:09:32
13 It is an m-regular network of servers, 13:09:33
14 what they call servers, but they're really nodes. 13:09:39
15 Q. Okay. And are there -- is there at 13:09:44
16 least one application that runs on those server 13:09:45
17 nodes? 13:09:48
18 MR. RAFATIJO: Objection; form. 13:09:48
19 THE WITNESS: Those server nodes run a 13:09:50
20 range of complex functionality. I don't recall 13:09:55
21 that I ever saw somebody refer to any of that 13:09:57
22 functionality as an application. 13:10:01
23 BY MR. BLUMENKOPF: 13:10:04
24 Q. In implementing "World of Warcraft"," 13:10:05
25 it's running at least one application; right? 13:10:07

1 THE COURT REPORTER: "Running one 13:10:11
2 application"? 13:10:13
3 MR. BLUMENKOPF: Running at least one 13:10:13
4 application. 13:10:15
5 THE WITNESS: It is possible that 13:10:15
6 somebody could look at "World of Warcraft" and say, 13:10:18
7 "This is a complex computer-based or software-based 13:10:21
8 system," and somebody else might look at the same 13:10:26
9 thing and say, "Well, to me, that's an 13:10:30
10 n-application." 13:10:33
11 I have not seen such a characterization 13:10:35
12 of -- of -- of the game itself because it's very 13:10:38
13 complex. But if somebody were to characterize it 13:10:41
14 that way, I don't think there would be a 13:10:45
15 revolution. 13:10:47
16 BY MR. BLUMENKOPF: 13:10:48
17 Q. And they're individuals players or 13:10:49
18 clients who connect to those server nodes, right, 13:10:51
19 in playing the game? 13:10:54
20 MR. RAFATIJO: Objection; form. 13:10:55
21 THE WITNESS: I would have to look at 13:10:57
22 the documentation of "World of Warcraft" to see 13:11:01
23 whether anybody ever refers to any of the players 13:11:05
24 who play the game as clients. 13:11:10
25 As we sit here, I don't recall that term 13:11:13

1 being used. 13:11:15
2 BY MR. BLUMENKOPF: 13:11:16
3 Q. You don't recall the term "client" being 13:11:16
4 used in your study of "World of Warcraft"? 13:11:18
5 MR. RAFATIJO: Objection; form. 13:11:20
6 THE WITNESS: It's -- it's been a while. 13:11:21
7 For the record, since I testified in 13:11:23
8 that case, I have testified in another case on a 13:11:26
9 completely unrelated technology. 13:11:29
10 And to boot, I was deposed on yet 13:11:33
11 another case in a completely unrelated technology 13:11:36
12 last week, which means that that was, like -- 13:11:41
13 considering that I studied for this one, that was, 13:11:44
14 like, three technology categories ago for me. 13:11:48
15 So I -- as we sit here, I don't recall 13:11:50
16 "client" figuring in any of my analysis -- the term 13:11:53
17 "client" figuring in any of my analysis of "World 13:11:56
18 of Warcraft." 13:11:59
19 BY MR. BLUMENKOPF: 13:11:59
20 Q. Okay. If I'm to play that game on my 13:12:00
21 computer, I'm running an executable program; right? 13:12:02
22 MR. RAFATIJO: Objection; form. 13:12:05
23 THE WITNESS: I don't think you're 13:12:06
24 running an executable program. 13:12:09
25 I think you're opening up a browser and 13:12:11

1 connecting to some "World of Warcraft" server 13:12:14
2 somewhere. 13:12:18
3 BY MR. BLUMENKOPF: 13:12:19
4 Q. Is a browser an executable program? 13:12:19
5 MR. RAFATIJO: Objection; form. 13:12:22
6 THE WITNESS: Sure. If you mean by -- 13:12:23
7 by "executable program," if you mean something like 13:12:25
8 a browser, then sure. You're running an executable 13:12:29
9 program, just like you're running, very likely, you 13:12:33
10 know, Microsoft Word or PowerPoint or whatever. 13:12:38
11 But that's not -- that executable 13:12:40
12 program is -- has nothing to do with the game, 13:12:42
13 per se. 13:12:45
14 So I just mis- -- misunderstood your 13:12:46
15 question. 13:12:48
16 Sure. You're running something 13:12:48
17 executable on your computer to run anything on your 13:12:49
18 computer. 13:12:53
19 BY MR. BLUMENKOPF: 13:12:53
20 Q. Is a browser an application? 13:12:54
21 A. A browser, again, if somebody were to 13:13:03
22 term it an "application," I'm happy to consider 13:13:06
23 that notion. 13:13:08
24 I have not seen a browser readily being 13:13:09
25 referred to as an application. I've seen it 13:13:15

1 referred to as an environment. 13:13:18
2 And then, of course, it's just referred 13:13:21
3 to as a browser, which is a term in the art. 13:13:22
4 So recasting a term that's well-known in 13:13:26
5 the art into another term is not really something 13:13:29
6 that happens readily. 13:13:32
7 Q. Well, we -- we talked earlier about a 13:13:33
8 definition of "application." It's a piece of 13:13:35
9 software that assists in performing a task; right? 13:13:38
10 A. That is a definition that I disagreed 13:13:41
11 with. 13:13:44
12 Q. So a browser application is a piece of 13:13:45
13 software that assists in browsing the web. 13:13:48
14 Would you agree with that? 13:13:52
15 MR. RAFATIJO: Objection; form. 13:13:52
16 THE WITNESS: It is a piece of software, 13:13:53
17 and it, among many other things, helps to browse 13:13:55
18 the web. I have no objection to characterizing it 13:14:01
19 that way. 13:14:04
20 BY MR. BLUMENKOPF: 13:14:07
21 Q. Browsing the web is a kind of task; 13:14:09
22 right? 13:14:11
23 A. Browsing the web is a -- possibly a 13:14:11
24 whole plethora of tasks. 13:14:15
25 Again, I think you're trying to tie this 13:14:19

1 to a flawed definition, and I'm just gonna have to 13:14:22
2 keep disagreeing with that. 13:14:25
3 Q. Would a person of skill in the art in 13:14:35
4 2002 have considered at least some web browsers to 13:14:35
5 be game applications? 13:14:38
6 MR. RAFATIJO: Objection; form. 13:14:38
7 THE WITNESS: I would be surprised if 13:14:39
8 anybody considered a web browser a game 13:14:41
9 application. 13:14:47
10 If there is an opinion of that sort, I'm 13:14:47
11 happy to look at it. But I -- as we sit here, that 13:14:49
12 would sound flawed to me. 13:14:52
13 BY MR. BLUMENKOPF: 13:14:53
14 Q. Were there web browsers in 2002 that 13:14:53
15 executed games? 13:14:57
16 MR. RAFATIJO: Objection; form. 13:14:58
17 THE WITNESS: What do you mean by 13:15:02
18 "executed games"? 13:15:03
19 BY MR. BLUMENKOPF: 13:15:03
20 Q. Well, were there web browsers that a -- 13:15:04
21 a person could use to perform a game? 13:15:06
22 MR. RAFATIJO: Same objection. 13:15:08
23 THE WITNESS: What do you mean by "to 13:15:09
24 perform a game"? 13:15:19
25 / / /

1 BY MR. BLUMENKOPF: 13:15:19
2 Q. Well, to -- to run a game. Were there 13:15:19
3 web browsers that were able to do that? 13:15:19
4 MR. RAFATIJO: Same objection. 13:15:21
5 THE WITNESS: I don't believe that a web 13:15:23
6 brow- -- that -- that a web browser in 2002 or in 13:15:27
7 2024 is capable of, quote, running a game, unquote, 13:15:31
8 in the plain and ordinary sense of -- of what it 13:15:37
9 means to run something. 13:15:42
10 But you may have something else in mind. 13:15:43
11 BY MR. BLUMENKOPF: 13:15:46
12 Q. It's true that in 2002 there were web 13:15:46
13 browsers that were able to execute computer code; 13:15:49
14 right? 13:15:51
15 MR. RAFATIJO: Objection; form. 13:15:51
16 THE WITNESS: What do you mean by 13:15:52
17 "execute computer code"? 13:15:56
18 BY MR. BLUMENKOPF: 13:15:58
19 Q. What would you mean by "execute computer 13:15:59
20 code"? 13:16:01
21 MR. RAFATIJO: Objection; form. 13:16:01
22 THE WITNESS: To me, a computer executes 13:16:02
23 computer code. A processor executes computer code. 13:16:05
24 So that's why I'm asking what you mean by a web 13:16:09
25 browser executing computer code. 13:16:13

1 BY MR. BLUMENKOPF: 13:16:15
2 Q. Well, weren't there web browsers that 13:16:15
3 would have, for example, an interpreter to execute 13:16:17
4 lines of code? 13:16:20
5 MR. RAFATIJO: Objection; form. 13:16:22
6 THE WITNESS: An interpreter interprets 13:16:24
7 code. He doesn't execute code, per se. 13:16:25
8 BY MR. BLUMENKOPF: 13:16:32
9 Q. What do you view is the difference? 13:16:32
10 A. Well, I guess my question would be what 13:16:35
11 do you view it as a difference? 13:16:38
12 Because it sound- -- it seems to me like 13:16:39
13 by interpreting, you -- by being able to interpret 13:16:42
14 something, you consider that the same as being able 13:16:46
15 to execute something. 13:16:48
16 So to me, a processor executes code. An 13:16:50
17 interpreter interprets things, just like a compiler 13:16:53
18 compiles things. 13:16:56
19 So an interpreter would interpret things 13:16:56
20 into a form that a processor could execute. 13:17:00
21 Q. You're telling me an interpreter doesn't 13:17:03
22 execute code? 13:17:05
23 MR. RAFATIJO: Objection; form. 13:17:06
24 THE WITNESS: That depends on what you 13:17:08
25 mean -- what your definition of "execute code" is. 13:17:09

1 An interpreter interprets code. 13:17:12
2 BY MR. BLUMENKOPF: 13:17:22
3 Q. Okay. I'm going to introduce a new 13:17:22
4 exhibit for you. 13:17:23
5 Kelli, can you mark this 1018, 13:17:32
6 Exhibit 1018. 13:17:34
7 THE COURT REPORTER: Absolutely. 13:17:42
8 MR. RAFATIJO: For the record, I object 13:17:42
9 to the evidence. It's not part of the exhibits 13:17:44
10 filed with the PTAB. 13:17:46
11 MR. BLUMENKOPF: I have the book and I 13:17:46
12 have excerpts from the book, the portions I'm going 13:17:47
13 to ask you about, and I have copies of the experts 13:17:49
14 for everybody. 13:17:51
15 MR. RAFATIJO: Still same objection. 13:17:52
16 (Whereupon, a discussion was held 13:18:21
17 off the stenographic record.) 13:18:21
18 (Whereupon, Petitioner's Exhibit Number 13:18:23
19 1018 was marked for identification by 13:18:23
20 the deposition officer and is attached 13:18:23
21 hereto.) 13:18:24
22 THE COURT REPORTER: Doctor. 13:18:24
23 THE WITNESS: Thank you. 13:18:24
24 THE COURT REPORTER: You're welcome. 13:18:25
25 / / /

1 BY MR. BLUMENKOPF: 13:18:26
2 Q. Do you recognize Exhibit 1018? 13:18:26
3 A. Not from the cover because I haven't 13:18:28
4 seen this before, but it seems like it's a -- on 13:18:29
5 the inside, it's a reprint of my textbook. Maybe 13:18:34
6 not complete, but somewhere in the neighborhood. 13:18:42
7 Q. You're an author of that book; right? 13:18:46
8 A. Of the "Software Architecture: 13:18:52
9 Foundations, Theory, and Practice" book, yet -- 13:18:54
10 yes. I don't know -- this says that it's for sale 13:18:56
11 only in India, Bangladesh, Nepal, Pakistan, Sri 13:18:58
12 Lanka -- 13:19:02
13 THE COURT REPORTER: I'm sorry. 13:19:02
14 Can you repeat those? I'm sorry. 13:19:02
15 THE WITNESS: Absolutely. 13:19:03
16 THE COURT REPORTER: Thank you. 13:19:03
17 THE WITNESS: It's restricted for sale 13:19:04
18 only in India, Bangladesh, Nepal, Pakistan, Sri 13:19:05
19 Lanka, and Bhutan. And I have not seen this 13:19:13
20 version of the book before. 13:19:16
21 BY MR. BLUMENKOPF: 13:19:20
22 Q. Do you have any reason to believe the 13:19:20
23 book is not a complete and correct copy of your 13:19:22
24 book "Software Architecture" -- 13:19:26
25 A. I -- 13:19:28

1 Q. -- "Foundations, Theory, and Practice"? 13:19:28
2 A. I have no knowledge of what this 13:19:29
3 particular edition is, so I can't comment on it one 13:19:32
4 way or the other. 13:19:37
5 Q. Will you take a look through the book 13:19:39
6 and confirm whether it looks like your textbook. 13:19:41
7 A. As I said, just by flipping through it, 13:19:46
8 the things that I see look like reproductions of 13:19:50
9 what is in the textbook. But it's a 13:20:01
10 730-some-odd-page book, although in this edition 13:20:03
11 it's 712. 13:20:05
12 So it -- it appears to be the book, but 13:20:07
13 I cannot confirm it without spending way more time 13:20:15
14 than would be appropriate today. 13:20:19
15 Q. Do you have any reason to think it's not 13:20:20
16 the book? 13:20:23
17 A. I've already told you I have never seen 13:20:25
18 this. I don't know what this edition is. And it 13:20:27
19 is not for sale in this country, so I cannot 13:20:31
20 comment on that. 13:20:34
21 Q. Well, you're familiar with the book 13:20:34
22 "Software Architecture: Foundations, Theory, and 13:20:36
23 Practice"; right? As the -- 13:20:38
24 (Unreportable cross-talk.) 13:20:39
25 MR. RAFATIJO: Objection; form. 13:20:40

1 THE WITNESS: I am a co-author of the 13:20:42
2 book "Software Architecture: Foundations, Theory 13:20:44
3 and Practice." 13:20:47
4 BY MR. BLUMENKOPF: 13:20:47
5 Q. So you're very familiar with it; right? 13:20:48
6 A. I'm reasonably familiar with it, given 13:20:49
7 that it was written fifteen, sixteen years ago and, 13:20:51
8 as you might imagine, I don't go through it on a 13:20:55
9 regular basis. 13:20:58
10 But I would say I'm -- you know, I 13:20:59
11 remember, by and large, what's in it. 13:21:01
12 Q. And are you aware of any specific reason 13:21:04
13 why this book wouldn't be a true, complete, and 13:21:06
14 correct copy of that book? 13:21:11
15 MR. RAFATIJO: Objection; form. 13:21:11
16 THE WITNESS: Well, I can only tell you 13:21:22
17 that I have never seen this edition before and I, 13:21:22
18 quite frankly, don't understand why you didn't 13:21:22
19 obtain an edition that's readily available in this 13:21:24
20 country. 13:21:26
21 But beyond that, I cannot answer your 13:21:27
22 question one way or the other. 13:21:28
23 BY MR. BLUMENKOPF: 13:21:29
24 Q. Well, you're aware the book is sold in 13:21:30
25 multiple countries in multiple territories; right? 13:21:32

1 MR. RAFATIJO: Objection; form. 13:21:34
2 THE WITNESS: I am now. 13:21:35
3 BY MR. BLUMENKOPF: 13:21:36
4 Q. Are you aware of any differences in the 13:21:36
5 content of the book -- that -- the version of the 13:21:38
6 book that's sold in different countries? 13:21:40
7 A. I know nothing about this version of the 13:21:42
8 book, other than the fact that it appears to be 13:21:45
9 shorter, page-count-wise, than the U.S. edition of 13:21:47
10 my book. But I can't comment on it beyond that 13:21:53
11 because this is the first time I've seen it. 13:21:56
12 Q. Who's the audience for the book? 13:22:03
13 MR. RAFATIJO: Objection; form. 13:22:05
14 THE WITNESS: Advanced undergraduate and 13:22:06
15 graduate students, as well as practitioners who may 13:22:10
16 be looking to expand their palette of skills in 13:22:17
17 software engineering. 13:22:21
18 BY MR. BLUMENKOPF: 13:22:24
19 Q. That group would include people of 13:22:24
20 ordinary skill in the art; right? 13:22:27
21 A. Ordinary skill in the art as of 2002 as 13:22:28
22 I defined it in my declaration. Such a person may 13:22:32
23 find this book useful. 13:22:47
24 Q. When was your book published? 13:22:47
25 A. It came out in early 2009. 13:22:48

1 Q. When did you start writing the book? 13:22:51
2 A. Sometime in late 2005. 13:22:57
3 Q. Okay. Take a look at the inside cover 13:22:59
4 of that book. 13:23:06
5 MR. RAFATIJO: Are you planning to give 13:23:07
6 me a copy? 13:23:08
7 MR. BLUMENKOPF: Yes. Thank you, 13:23:09
8 Counsel. 13:23:10
9 MR. RAFATIJO: Thank you. 13:23:10
10 MR. BLUMENKOPF: Let me provide excerpts 13:23:11
11 from the -- the text. One second. 13:23:13
12 MR. RAFATIJO: I'm sorry. 13:23:42
13 MR. BLUMENKOPF: Kelli, can you mark 13:23:42
14 this as Exhibit 1019, please. 13:23:44
15 THE COURT REPORTER: Yes. 13:23:46
16 MR. RAFATIJO: I raise my objections. 13:23:46
17 No evidence. 13:23:47
18 THE COURT REPORTER: Thank you. 13:23:50
19 MR. BLUMENKOPF: Counsel, you've been 13:23:58
20 cautioned about the objections. 13:23:59
21 MR. RAFATIJO: Counsel, the trial guide 13:24:01
22 practice says -- I'm going to read it for you: 13:24:02
23 "An objection at the time of 13:24:05
24 examination -- whether to 13:24:07
25 evidence," which is an objection to 13:24:08

1 evidence, "must be noted on the 13:24:09
2 record." 13:24:12
3 And I'm objecting to the evidence. 13:24:12
4 (Whereupon, Petitioner's Exhibit Number 13:24:24
5 1019 was marked for identification by 13:24:24
6 the deposition officer and is attached 13:24:24
7 hereto.) 13:24:24
8 THE COURT REPORTER: Here you are, 13:24:24
9 Doctor. 13:24:26
10 THE WITNESS: Just for the record, is it 13:24:26
11 supposed to be 1019 or 2019? 13:24:41
12 THE COURT REPORTER: How could I have 13:24:41
13 done that? 13:24:43
14 MR. BLUMENKOPF: To be clear, this is 13:24:43
15 Exhibit 1019. 13:24:45
16 THE COURT REPORTER: Yes, that was a 13:24:46
17 bizarre number one. 13:24:47
18 THE WITNESS: Thank you. 13:24:47
19 THE COURT REPORTER: Thank you. 13:24:48
20 BY MR. BLUMENKOPF: 13:24:48
21 Q. Okay. I will -- scratch that. 13:24:49
22 So you have in front of you 13:24:50
23 Exhibit 1019. 13:24:53
24 I'll represent to you this is an excerpt 13:24:53
25 from Exhibit 1018, a photocopy of the pages from 13:24:54

1 Exhibit 1018. 13:24:57
2 A. Okay. 13:24:59
3 Q. Feel free to compare Exhibit 1019 with 13:24:59
4 Exhibit 1018 and confirm that the content of 1019 13:25:02
5 is found in Exhibit 1018. 13:25:07
6 A. To the extent that it makes a difference 13:25:12
7 based on your questions, we can do that. I don't 13:25:14
8 want to waste your time right now. I'll take your 13:25:16
9 word for it. 13:25:19
10 Q. Okay. So the questions I'm asking you 13:25:20
11 about are rel- -- directed to 1019 as the excerpt, 13:25:20
12 but they're also directed to 1018 as the -- the 13:25:24
13 textbook that you authored. 13:25:26
14 A. Okay. 13:25:27
15 Q. Okay. Let's take a look at page 116 13:25:30
16 from Exhibit 1019. 13:25:42
17 A. Okay. 13:25:54
18 Q. Okay. So see in the top margin, it says 13:25:54
19 "Chapter four, Designing Architectures"? 13:25:57
20 A. Yes. 13:25:59
21 Q. Right? 13:25:59
22 Is that a chapter in your book? 13:26:00
23 A. That is -- there is a chapter four in my 13:26:02
24 book. Certainly. 13:26:04
25 Q. Is it fair to say this chapter relates 13:26:06

1 to designing architectures for software? 13:26:07
2 A. Specifically, it relates to 13:26:11
3 architectural styles and patterns. 13:26:13
4 Q. What's an architectural style in this 13:26:16
5 context? 13:26:19
6 A. Well, since I presumably have my book in 13:26:21
7 here, I will go to the book to read the exact 13:26:23
8 definition so I don't paraphrase it. 13:26:32
9 "An architectural style is a 13:27:44
10 named collection of architectural 13:27:46
11 design decisions that are 13:27:48
12 applicable in a given development 13:27:52
13 context, constrain architectural 13:27:53
14 design decisions that are specific 13:27:56
15 to a particular system within that 13:27:57
16 context, and elicit beneficial 13:27:59
17 qualities in each resulting 13:28:03
18 system." 13:28:06
19 Q. That's the definition a person of 13:28:06
20 ordinary skill would apply; correct? 13:28:08
21 A. Well, that's the definition of an -- of 13:28:12
22 a style. So if they were talking about an 13:28:14
23 architectural style, this is the definition they 13:28:21
24 should use. 13:28:23
25 Q. Let's turn to page 115, Exhibit 1019. 13:28:23

1 MR. RAFATIJO: You said 119? 13:28:37
2 MR. BLUMENKOPF: Page 115. 13:28:37
3 MR. RAFATIJO: 115. 13:28:37
4 MR. BLUMENKOPF: Exhibit 1019. 13:28:37
5 BY MR. BLUMENKOPF: 13:28:39
6 Q. You see there's a section called 13:28:39
7 "Interpreter"? 13:28:41
8 A. Yes. 13:28:41
9 Q. And you see in that paragraph, it says: 13:28:42
10 "Interpretation proceeds by 13:28:45
11 starting with an initial execution 13:28:46
12 state, obtaining the first command 13:28:48
13 to execute, possibly by reading 13:28:50
14 some user input, executing the 13:28:52
15 command over the current execution 13:28:54
16 state, thereby modifying that 13:28:55
17 state, then proceeding to execute 13:28:57
18 the next command." 13:28:59
19 Do you see that? 13:29:01
20 A. I do. 13:29:01
21 Q. Do you agree now that an interpreter 13:29:02
22 executes commands? 13:29:05
23 MR. RAFATIJO: Objection; form. 13:29:07
24 THE WITNESS: Again, it really depends 13:29:08
25 on the context of what you're talking about. 13:29:10

1 So when we talked about this before, as 13:29:13
2 I already mentioned, the thing that executes things 13:29:14
3 is a -- the thing that executes code is a 13:29:17
4 processer. 13:29:21
5 Here, we're talking about commands and a 13:29:21
6 higher level abstraction of -- of what we mean by 13:29:25
7 "execution." So the notion of execution is 13:29:28
8 different. 13:29:30
9 So if you want to talk about how an 13:29:31
10 interpret- -- interpreter architectural style 13:29:34
11 functions, then this is absolutely accurate. 13:29:37
12 But before, we were talking about 13:29:42
13 executing code, in my understanding. 13:29:43
14 BY MR. BLUMENKOPF: 13:29:44
15 Q. When you used the word "command" in your 13:29:45
16 textbook, did you mean computer code? 13:29:47
17 MR. RAFATIJO: Objection; form. 13:29:51
18 THE WITNESS: That really depends on a 13:29:54
19 bunch of different factors. There are all kinds of 13:30:06
20 interpreters. I have built interpreters that you 13:29:58
21 may look at and would not recognize the inputs to 13:30:01
22 them as computer code. 13:30:04
23 It really depends on context. So we 13:30:06
24 cannot talk about it in a general sense and provide 13:30:09
25 a definitive answer across the board. 13:30:13

1 BY MR. BLUMENKOPF: 13:30:15
2 Q. So when you said in your book an 13:30:15
3 interpreter executes a command, you weren't talking 13:30:17
4 about interpreter executing computer code? 13:30:19
5 MR. RAFATIJO: Objection; form. 13:30:21
6 THE WITNESS: Again, this is an 13:30:22
7 architectural style. This is not a specific 13:30:24
8 interpreter tool, if you will, or implementation. 13:30:27
9 This is talking about a way of 13:30:31
10 organizing your system's architecture. 13:30:36
11 So this is not necessarily code. That's 13:30:39
12 why it says "Commands." 13:30:41
13 It says: 13:30:43
14 "Commands are explicit 13:30:43
15 statements." 13:30:45
16 And it says: 13:30:47
17 "Possibly encoded in human 13:30:48
18 readable and editable text." 13:30:49
19 BY MR. BLUMENKOPF: 13:30:53
20 Q. Let's look back at page 116 from that 13:30:53
21 same exhibit. 13:30:56
22 And do you see there's a paragraph 13:31:02
23 titled "Mobile Code"? 13:31:03
24 A. Yes. 13:31:05
25 Q. It says: 13:31:06

1 "As the name suggests, mobile 13:31:07
2 code enables" -- 13:31:09
3 I'm sorry. Strike that. 13:31:10
4 "As the name suggests, mobile 13:31:11
5 code styles enable code to be 13:31:13
6 transmitted to the remote 13:31:16
7 [unintelligible]" -- 13:31:19
8 THE COURT REPORTER: "Transmitted to 13:31:19
9 remote" -- 13:31:20
10 BY MR. BLUMENKOPF: 13:31:20
11 Q. (Reading): 13:31:20
12 -- "to a remote host for 13:31:20
13 interpretation. This may be due to 13:31:22
14 a lack of local computing power, 13:31:23
15 lack of resources, or due to large 13:31:25
16 data sets remotely located. Mobile 13:31:27
17 code may be classified as code on 13:31:30
18 demand, remote evaluation, or 13:31:33
19 mobile agent, depending on where 13:31:35
20 the code is being transmitted, who 13:31:37
21 requested the transmission, and 13:31:38
22 where the program state resides." 13:31:40
23 Do you agree with that statement? 13:31:44
24 A. That's what it says. 13:31:55
25 Q. Well, it's your book; right? 13:31:55

1 A. This is -- I -- I think that this part 13:31:55
2 of the book is unadulterated. 13:31:55
3 Q. Okay. You agree with your statement 13:31:57
4 here? 13:31:58
5 A. That's what it says. Yeah. I don't -- 13:31:58
6 I mean, in terms of architectural styles, and 13:32:01
7 specifically the mobile code style, this is 13:32:06
8 appropriate -- an appropriate characterization. 13:32:08
9 Q. It continues: 13:32:13
10 "Code on demand is when the 13:32:14
11 initiator has resources 13:32:15
12 [unintelligible]" -- 13:32:18
13 THE COURT REPORTER: "Has" -- I'm sorry. 13:32:18
14 You've got to read slower -- 13:32:19
15 MR. BLUMENKOPF: All right. 13:32:19
16 THE COURT REPORTER: -- for me. 13:32:20
17 MR. BLUMENKOPF: Let me restart that 13:32:21
18 sentence. 13:32:23
19 BY MR. BLUMENKOPF: 13:32:23
20 Q. (Reading): 13:32:23
21 "Code on demand is when the 13:32:23
22 initiator has resources and state, 13:32:24
23 but downloads code from another 13:32:25
24 site to be executed locally." 13:32:27
25 A. Yes. That's what it says. 13:32:33

1 Q. Yes. And you agree with that? 13:32:34
2 MR. RAFATIJO: Objection; form. 13:32:36
3 THE WITNESS: I don't have any reason to 13:32:46
4 disagree with that sentence in isolation. It just 13:32:46
5 depends on what -- what specifically you want me to 13:32:46
6 opine on there. 13:32:51
7 If you just want to read my book and ask 13:32:52
8 me if I agree with it, divorced of this case, I 13:32:54
9 agree with what the book says. I co-wrote the 13:32:58
10 book. 13:33:01
11 BY MR. BLUMENKOPF: 13:33:01
12 Q. Is there anything in the book you 13:33:01
13 disagree with? 13:33:02
14 MR. RAFATIJO: Objection; form. 13:33:04
15 THE WITNESS: There may well be things 13:33:06
16 that I would disagree with today that -- the book 13:33:08
17 came out over fifteen years ago. Things have 13:33:11
18 changed. 13:33:14
19 We do things differently in software 13:33:14
20 engineering today than we did in -- whenever the -- 13:33:16
21 the final touches were put on the book in late 13:33:21
22 2008. 13:33:23
23 BY MR. BLUMENKOPF: 13:33:24
24 Q. Back when you wrote the book, is there 13:33:24
25 anything in the book you disagreed with? 13:33:25

1 A. It would be highly unlikely. 13:33:28
2 Q. Take a look at page 102 from this 13:33:31
3 exhibit. 13:33:36
4 A. 102? 13:33:36
5 Q. Yes. 13:33:37
6 And I see a heading here. It says 13:33:44
7 "4-dot-3-dot-4, Simple Styles." 13:33:47
8 Do you see that? 13:33:50
9 A. Yes. 13:33:50
10 Q. And that description of mobile code that 13:33:50
11 we just looked at, that's part of that same section 13:33:52
12 called "Simple Styles"; right? 13:33:55
13 A. I would be seriously surprised if that 13:33:59
14 were the case, but let me double-check by -- 13:34:02
15 Okay. I see what it is. 13:34:22
16 Yes, that would be under the "Simple 13:34:24
17 Styles" heading, but only as a way of 13:34:26
18 distinguishing it. 13:34:30
19 This is why context is incredibly 13:34:31
20 important, only as a way of distinguishing it from 13:34:33
21 more complex styles, such as Representational State 13:34:35
22 Transfer, which is the style of the web for 13:34:38
23 distributed objects, which is a style that was 13:34:42
24 popular in the late 1990s, early 2000s. 13:34:44
25 There is nothing simple about mobile 13:34:52

1 code. I can tell you that much. 13:34:54
2 Q. So by putting mobile code under the 13:34:55
3 "Simple Style" section, though, you're trying to 13:34:57
4 convey it's at least relatively simple compared to 13:35:00
5 other styles; right? 13:35:03
6 A. Only that it is not a -- an 13:35:04
7 agglomeration or combination of other known styles. 13:35:11
8 In that sense, it's simple. But it is not -- 13:35:14
9 certainly, it would not be in the same category as 13:35:24
10 main program subroutines, or example. 13:35:24
11 Q. Would the person of ordinary skill in 13:35:25
12 the art have found mobile code relatively 13:35:27
13 straightforward to implement -- 13:35:30
14 (Unreportable cross-talk.) 13:35:32
15 MR. RAFATIJO: Objection -- 13:35:32
16 BY MR. BLUMENKOPF: 13:35:32
17 Q. -- other styles? 13:35:33
18 MR. RAFATIJO: Objection; form. 13:35:34
19 THE WITNESS: Relatively -- well, first, 13:35:35
20 mobile code is really three different styles. You 13:35:37
21 read about it in a -- in that section a minute ago, 13:35:39
22 so let me find it again. 13:35:45
23 It is code on demand, re- -- remote 13:35:46
24 evaluation, or mobile agents. So those are three 13:35:55
25 different ways of implementing mobile code. 13:35:57

1 Some of them may be easier than others. 13:36:00
2 Mobile agents proved, in fact, in retrospect to be 13:36:09
3 incredibly complicated, and in some ways flawed, to 13:36:12
4 the point where, soon after this book came out, 13:36:17
5 people slowly kind of started walking away from it. 13:36:22
6 So it just depends on which of these, 13:36:25
7 and I think a POSITA would need some training to be 13:36:27
8 able to implement this, but I would not be 13:36:33
9 surprised if they were able to make it happen. 13:36:36
10 There were certainly libraries out there 13:36:38
11 that -- that helped with this kind of thing. 13:36:43
12 BY MR. BLUMENKOPF: 13:36:49
13 Q. So the -- the section that followed the 13:36:49
14 "Simple Styles" section, I don't know if this is in 13:36:51
15 the -- the excerpt. I apologize. But it is in the 13:36:53
16 original book. 13:36:56
17 If you take a look at page -- let's find 13:36:57
18 it quickly. 13:37:00
19 Take a look at page 124 from Exhibit 13:37:12
20 1018. 13:37:19
21 A. Okay. 13:37:20
22 MR. RAFATIJO: Do you have a copy of 13:37:20
23 that? 13:37:21
24 MR. BLUMENKOPF: I don't. I'm sorry. 13:37:22
25 It's in the original book, Exhibit 1018. It's not 13:37:22

1 included in the excerpt. 13:37:25
2 MR. RAFATIJO: Then I need to review it. 13:37:26
3 MR. BLUMENKOPF: You're welcome to 13:37:28
4 take -- 13:37:30
5 MR. RAFATIJO: Sure. 13:37:31
6 MR. BLUMENKOPF: -- a look at Exhibit 13:37:31
7 1018. 13:37:33
8 (Whereupon, the witness handed counsel 13:37:36
9 Exhibit 1018.) 13:37:38
10 MR. RAFATIJO: Your question is limited 13:37:50
11 to 124? 13:37:52
12 MR. BLUMENKOPF: I'm about to ask the 13:37:53
13 question. 13:37:55
14 You can -- 13:37:55
15 (Unreportable cross-talk.) 13:37:55
16 MR. RAFATIJO: No -- 13:37:55
17 MR. BLUMENKOPF: -- the exhibit back, 13:37:56
18 please. 13:37:57
19 MR. RAFATIJO: -- I don't want to 13:37:57
20 interrupt. If you ask -- if you go to some other 13:37:58
21 page, I need to get on that. 13:38:00
22 MR. BLUMENKOPF: I'm about to ask a 13:38:01
23 question about page 124 -- 13:38:03
24 MR. RAFATIJO: Sure. 13:38:03
25 Give it back. 13:38:04

1 BY MR. BLUMENKOPF: 13:38:05
2 Q. Professor, there's a heading on page 13:38:06
3 124. It says "4-dot-3-dot-5, More Complex Styles"? 13:38:07
4 A. I see that. 13:38:11
5 Q. All right. 13:38:12
6 MR. RAFATIJO: Objection; evidence. 13:38:12
7 BY MR. BLUMENKOPF: 13:38:14
8 Q. And this section -- this section follows 13:38:14
9 the section "4-dot-3-dot-4, Simple Styles"; right? 13:38:16
10 A. Yes. 13:38:20
11 Q. So you chose not to include the mobile 13:38:21
12 code under "More Complex Styles"; right? 13:38:24
13 A. Well, because of the notion of simple 13:38:34
14 versus complex that was used in organizing this 13:38:38
15 chapter. 13:38:42
16 Q. So that there are more complex styles 13:38:43
17 than the mobile code style; right? 13:38:45
18 MR. RAFATIJO: Objection; form. 13:38:49
19 THE WITNESS: Complex in the sense that 13:38:49
20 there are rules that are borrowed or reused from 13:38:53
21 other styles that I termed -- or whoever wrote this 13:38:58
22 chapter, because I -- at this point, I don't 13:39:03
23 remember. But it's my book, so let's say it was 13:39:06
24 me. 13:39:08
25 If I termed it as "simple style," it's 13:39:08

1 only because it doesn't rest on other styles. More 13:39:11
2 complex styles rest on concepts and rules of what I 13:39:14
3 called "simple styles." 13:39:20
4 So just because something is in the 13:39:24
5 category here listed as "simple styles," it doesn't 13:39:25
6 mean that they're simple. 13:39:29
7 They -- they require some smarts, some 13:39:30
8 of these more than others. But they require some 13:39:32
9 smarts to -- to implement and use properly. 13:39:35
10 BY MR. BLUMENKOPF: 13:39:42
11 Q. Take a look at page 117. 13:39:42
12 This -- this is in Exhibit 1019, the 13:39:44
13 excerpt. 13:39:47
14 MR. RAFATIJO: Same objection. 13:39:54
15 BY MR. BLUMENKOPF: 13:39:54
16 Q. And there is a box at the bottom. And 13:39:54
17 on the right, it says "Style, Mobile Code," and 13:39:54
18 there's a few lines here in that gray box. 13:39:56
19 Do you see that? 13:39:59
20 A. Yes, I do. 13:40:00
21 Q. These are describing the mobile code 13:40:01
22 style; right? 13:40:04
23 A. This is a summary of the mobile code 13:40:05
24 style, using the -- the rubrics that we decided to 13:40:09
25 highlight for each one of the styles in the 13:40:14

1 chapter. 13:40:16
2 Q. You see where it says "Qualities 13:40:18
3 Yielded"? 13:40:20
4 A. I do. 13:40:23
5 Q. This is describing some advantages of 13:40:23
6 the mobile code style; right? 13:40:25
7 MR. RAFATIJO: Objection; form. 13:40:29
8 THE WITNESS: It could be advantages or 13:40:30
9 disadvantages, just depending on -- on the style. 13:40:32
10 BY MR. BLUMENKOPF: 13:40:34
11 Q. It says, under "Qualities Yielded," 13:40:36
12 "Dynamic Adoptability." 13:40:39
13 See that? 13:40:41
14 A. Yes, I do. 13:40:42
15 Q. Is that an advantage of the mobile code 13:40:42
16 style? 13:40:44
17 MR. RAFATIJO: Well, objection; form. 13:40:44
18 THE WITNESS: It -- it is a quality. 13:40:46
19 Whether it's an advantage is really, in many ways, 13:40:49
20 in the eye of the beholder. 13:40:51
21 I already mentioned that for mobile 13:40:54
22 agents, architectures, dynamic adaptability came at 13:40:57
23 significant cost, which eventually led to their 13:41:02
24 disuse. 13:41:05
25 / / /

1 BY MR. BLUMENKOPF: 13:41:05
2 Q. Well, you said right here: 13:41:06
3 "Takes advantage of the 13:41:07
4 aggregate computing power of 13:41:08
5 available hosts, 13:41:08
6 [unintelligible]" -- 13:41:16
7 THE COURT REPORTER: I'm sorry. Can you 13:41:16
8 back up? 13:41:17
9 (The record was read as follows: 13:41:17
10 Q -- advantage of the aggregate 13:41:17
11 computing power of" --) 13:41:17
12 BY MR. BLUMENKOPF: 13:41:17
13 Q. (Reading): 13:41:17
14 "Takes advantage of the 13:41:18
15 aggregate computing power of 13:41:19
16 available hosts, increased 13:41:22
17 dependability through provision of 13:41:24
18 migration to new hosts"? 13:41:25
19 A. I see that. 13:41:29
20 Q. Those are advantages; right? 13:41:30
21 MR. RAFATIJO: Objection; form. 13:41:33
22 THE WITNESS: Sure. They could be 13:41:33
23 looked at as -- as advantages, but first it's 13:41:34
24 obviously an incomplete list. 13:41:38
25 And also, that has nothing to do with -- 13:41:39

1 with dynamic adaptability, which came right before 13:41:42
2 it, which can be looked at as an advantage from one 13:41:45
3 perspective, but turns out to be a disadvantage 13:41:48
4 from another perspective. 13:41:50
5 And the same thing with increased 13:41:52
6 dependability. That increased dependability in 13:41:55
7 practice came at the price -- at least of 13:41:58
8 significant security issues with mobile code 13:42:01
9 systems. 13:42:10
10 So again, it's very much in the in 13:42:10
11 the eye of the beholder. 13:42:13
12 BY MR. BLUMENKOPF: 13:42:14
13 Q. Well, is it fair to say increased 13:42:14
14 dependability is an advantage, even if there are 13:42:16
15 also some disadvantages associated with it? 13:42:19
16 MR. RAFATIJO: Objection; form. 13:42:21
17 THE WITNESS: If you're asking me 13:42:22
18 whether making a system more dependable is an 13:42:29
19 advantage in and of itself in a vacuum, making a 13:42:29
20 system more dependable would be an advantage. 13:42:32
21 Nobody wants an undependable system. 13:42:34
22 BY MR. BLUMENKOPF: 13:42:38
23 Q. And that's a characteristic of the 13:42:39
24 mobile code style; right? 13:42:41
25 MR. RAFATIJO: Objection; form. 13:42:42

1 THE WITNESS: That is a characteristic 13:42:43
2 of the mobile code style when looked through a 13:42:48
3 particular lens that ignores a clear disadvantage 13:42:51
4 directly associated with increased dependability. 13:42:56
5 So it's increased dependability, 13:43:04
6 accompanied by significant security, privacy, and 13:43:08
7 data confidentiality disadvantages. 13:43:12
8 MR. BLUMENKOPF: By the way, do you want 13:43:22
9 to take a break for lunch soon? 13:43:23
10 THE WITNESS: That's up to you. I'm not 13:43:25
11 going to be doing lunch -- 13:43:27
12 (Unreportable cross-talk.) 13:43:27
13 MR. BLUMENKOPF: Counsel, do you want to 13:43:27
14 take a break for lunch? 13:43:28
15 MR. RAFATIJO: Can we go until 2:00 p.m. 13:43:29
16 and then take a break then? 13:43:32
17 MR. BLUMENKOPF: I think that's okay. 13:43:34
18 MR. RAFATIJO: Thank you. 13:43:38
19 BY MR. BLUMENKOPF: 13:43:38
20 Q. Okay. Take a look at Exhibit 1018. 13:43:39
21 A. Okay. 13:43:45
22 Q. That's the actual book; right? 13:43:46
23 And I want you to take a look at page 13:43:48
24 118. 13:43:50
25 A. Okay. 13:43:53

1 Q. And I'm sorry. It looks like this 13:43:53
2 might -- may not be in the excerpt, Exhibit 1019. 13:43:56
3 MR. RAFATIJO: May I review it first? 13:43:59
4 MR. BLUMENKOPF: Yes. 13:44:01
5 MR. RAFATIJO: Thank you. 13:44:02
6 (Whereupon, the witness handed counsel 13:44:05
7 Exhibit 1018.) 13:44:07
8 (Document reviewed by counsel.) 13:44:10
9 MR. BLUMENKOPF: And, counsel, I'm going 13:44:24
10 to ask about page 118, and also page 119, i you'd 13:44:25
11 like -- 13:44:28
12 MR. RAFATIJO: Sure. 13:44:28
13 MR. BLUMENKOPF: -- to look at that as 13:44:29
14 well. 13:44:31
15 MR. RAFATIJO: Sure. Sure. I'm -- give 13:44:31
16 me a minute. 13:44:34
17 Okay. Great. Thank you. 13:44:48
18 BY MR. BLUMENKOPF: 13:44:50
19 Q. Okay. So let's take a look at page 118 13:44:50
20 from Exhibit 1018. 13:44:55
21 A. Okay. 13:44:57
22 Q. And you see the first paragraph there. 13:44:58
23 It's describing Figure 4-dash-19; right? 13:44:58
24 MR. RAFATIJO: Objection; evidence. 13:45:01
25 THE WITNESS: Yes, I see the first full 13:45:02

1 paragraph referring to Figure 4-19. 13:45:04
2 BY MR. BLUMENKOPF: 13:45:07
3 Q. And this paragraph is describing the 13:45:07
4 mobile code style; right? 13:45:10
5 MR. RAFATIJO: Objection; form. 13:45:12
6 THE WITNESS: This is describing a 13:45:16
7 code-on-demand design that one might arrive at 13:45:20
8 specifically for the "Lunar Lander" game applet 13:45:29
9 that is distributed via HTTP. 13:45:37
10 BY MR. BLUMENKOPF: 13:45:41
11 Q. Code on demand is an example of the 13:45:41
12 mobile code style; right? 13:45:43
13 A. Sure. It's one of the -- one of the 13:45:46
14 incarnations of the mobile code style. 13:45:48
15 Q. So Figure 4-dash-19, which is on page 13:45:52
16 119 of Exhibit 1018, that's also describing the 13:45:55
17 mobile code style; right? 13:46:00
18 MR. RAFATIJO: Objection; form. 13:46:01
19 THE WITNESS: It is some static capture 13:46:07
20 of three web browser-based architecture for the 13:46:13
21 "Lunar Lander" game that was used as a simple 13:46:26
22 running example in the textbook. 13:46:31
23 BY MR. BLUMENKOPF: 13:46:34
24 Q. So in that paragraph on top of 118, the 13:46:35
25 first sentence says: 13:46:40

1 "In Figure 4-19, one client 13:46:41
2 web browser downloads code on 13:46:43
3 demand in the form of a 'Lunar 13:46:47
4 Lander' game app-" -- "applet via 13:46:48
5 HTTP." 13:46:48
6 Right? 13:46:50
7 MR. RAFATIJO: Objection; form. 13:46:51
8 THE WITNESS: Yes. That's what -- what 13:46:53
9 it says. 13:46:54
10 BY MR. BLUMENKOPF: 13:47:01
11 Q. And if you turn back to that Figure 4-19 13:47:01
12 on page 119. 13:47:01
13 A. Okay. 13:47:05
14 Q. So Figure 4-19, I see three web 13:47:07
15 browsers; right? 13:47:24
16 A. That is correct. 13:47:24
17 Q. I see a box on the left labeled "Web 13:47:25
18 Browser" and a box on the right labeled "Web 13:47:29
19 Browser," and then there's a third box beneath 13:47:32
20 those labeled "Web Browser"; right? 13:47:35
21 A. Yes. 13:47:37
22 Q. So these are three examples of web 13:47:37
23 browsers? 13:47:41
24 MR. RAFATIJO: Objection; form. 13:47:41
25 THE WITNESS: These are incredibly 13:47:42

1 high-level renderings of -- of the notion of a web 13:47:45
2 browser. I wouldn't call them examples of web 13:47:48
3 browsers. 13:47:51
4 BY MR. BLUMENKOPF: 13:47:51
5 Q. Well, they're each labeled "Web 13:47:51
6 Browser"; right? 13:47:53
7 A. Yes. They're web browser components 13:47:54
8 within this architectural rendering. 13:47:55
9 Q. And in that sentence we just read where 13:48:00
10 it says: 13:48:02
11 "One client web browser 13:48:03
12 downloads code on command in the 13:48:05
13 form of a 'Lunar Lander' game 13:48:06
14 applet." 13:48:08
15 That's referring to the web browser in 13:48:08
16 the upper right in Figure 4-dash-19; right? 13:48:11
17 A. That would seem to be correct. 13:48:13
18 Q. And I see in Figure 4-dash-19, that web 13:48:16
19 browser includes a Java virtual machine; right? 13:48:21
20 A. It does. 13:48:27
21 Q. And within that Java virtual machine, 13:48:28
22 there is the "Lunar Lander" game applet; right? 13:48:32
23 A. That's what's represented or drawn in 13:48:34
24 that box. 13:48:36
25 Q. And you said in the book that that web 13:48:38

1 browser downloads code on demand from that game 13:48:42
2 server we see on the bottom of 4-dash-19; right? 13:48:45
3 A. It doesn't say where it's downloaded 13:49:03
4 from, but one possibility is that it may come from 13:49:05
5 the game server. 13:49:09
6 I have to say that all of the ports 13:49:11
7 point in the other direction, which is why I -- you 13:49:15
8 know, I -- I can't necessarily agree with -- with 13:49:21
9 what you said. 13:49:30
10 But there's just not enough information 13:49:30
11 here. 13:49:30
12 Q. Well, in that paragraph on 118, you said 13:49:30
13 the web browser downloads code on demand via HTTP; 13:49:32
14 right? 13:49:40
15 A. Yes. That -- that's what it says. It: 13:49:40
16 "Downloads code on demand in 13:49:41
17 the form of a 'Lunar Lander' game 13:49:43
18 applet via HTTP." 13:49:45
19 Q. And back to Figure 4-19, we see that web 13:49:48
20 browser. It's connected to a box labeled 13:49:51
21 [unintelligible] -- 13:49:53
22 THE COURT REPORTER: Labeled what? 13:49:53
23 MR. BLUMENKOPF: "Remote Procedure 13:49:54
24 Call." 13:49:56
25 / / /

1 BY MR. BLUMENKOPF: 13:49:57
2 Q. And then in that box labeled "Remote 13:49:57
3 Procedure Call," it says "HTTP as Mechanism"; 13:49:59
4 right? 13:50:03
5 A. That's what it says. 13:50:03
6 Q. And then we see that connected to a box 13:50:04
7 labeled "Game Server"; right? 13:50:06
8 A. Yes, with the caveat that all of the 13:50:08
9 arrows are pointing in the direction that is 13:50:10
10 opposite o what you are suggesting. 13:50:12
11 So that's why I'm saying, based on just 13:50:14
12 this diagram alone, I cannot agree with what you're 13:50:17
13 suggesting. 13:50:21
14 Q. But in the paragraph on the previous 13:50:21
15 page, it says it: 13:50:24
16 "Downloads code on demand in 13:50:25
17 the form of a "Lunar Lander" game 13:50:27
18 applet via HTTP." 13:50:30
19 Right? 13:50:32
20 A. That -- it says that, but HTTP is used 13:50:32
21 for any interaction of any web browser with 13:50:39
22 anything on the web. 13:50:39
23 So whether the intent here was to have 13:50:39
24 this game server be the -- the right game server 13:50:46
25 for this, I can't tell you. 13:50:49

1 Also, there are three different versions 13:50:52
2 of the code-on-demand instantiation, each one for 13:50:54
3 the different web browsers. 13:51:02
4 And this excerpt here simply doesn't 13:51:04
5 have enough information for me to tell you one way 13:51:07
6 or the other what actually was the intent here. 13:51:09
7 As I said, it's been sixteen years since 13:51:11
8 this happened and I -- this is not -- definitely 13:51:13
9 not one of the styles that I personally worked on, 13:51:15
10 so I cannot comment on exactly what the intent here 13:51:17
11 was. 13:51:21
12 There is a -- an implementation of each 13:51:22
13 one of these architectures that is available in the 13:51:26
14 book's website somewhere that I, again, haven't 13:51:28
15 looked at in over ten years. 13:51:31
16 But that might provide some additional 13:51:33
17 insight into what's happening here. 13:51:37
18 Based on what this short paragraph here 13:51:39
19 says, especially the first sentence, we cannot 13:51:41
20 establish that what you are saying is actually the 13:51:44
21 case. 13:51:46
22 Q. Well, it's true, at least in some cases, 13:51:46
23 a web browser could download code via HTTP; right? 13:51:49
24 MR. RAFATIJO: Objection; form. 13:51:53
25 THE WITNESS: For this style, it's 13:51:54

1 possible that code can be downloaded via HTTP. 13:51:55
2 BY MR. BLUMENKOPF: 13:51:59
3 Q. And the "Lunar Lander" game applet is an 13:52:00
4 example of code that would be downloaded; right? 13:52:02
5 MR. RAFATIJO: Objection; form. 13:52:05
6 THE WITNESS: In -- again, in this 13:52:06
7 example, that's the suggested mechanism, if you 13:52:07
8 will, for getting "Lunar Lander" on to the -- 13:52:14
9 "Lunar Lander" applet, rather, onto the right-hand 13:52:17
10 web browser there. 13:52:21
11 BY MR. BLUMENKOPF: 13:52:22
12 Q. Okay. And that web browser runs on a -- 13:52:22
13 a computer of some kind; right? 13:52:23
14 A. Presumably. 13:52:25
15 Q. Well, is there anything else a web 13:52:30
16 browser would run on? 13:52:32
17 MR. RAFATIJO: Objection; form. 13:52:33
18 THE WITNESS: I mean, here, this is an 13:52:33
19 example of a notional architecture used to 13:52:35
20 illustrate a style that, admittedly, nobody would 13:52:37
21 implement a game as simple as "Lunar Lander" in, 13:52:40
22 just to demonstrate how you can use a style 13:52:43
23 incorrectly, in a sense, by implementing a much 13:52:47
24 simpler set of notions in that more involved or 13:52:52
25 complex style. 13:52:56

1 Presumably, a web browser would run on a 13:52:58
2 computer somewhere, but this is just an 13:53:01
3 architectural drawing. It's a high-level 13:53:02
4 architectural drawing. That's all it is. 13:53:06
5 BY MR. BLUMENKOPF: 13:53:07
6 Q. And we see in that Figure 4-dash-19 the 13:53:07
7 web browser includes the Java virtual machine; 13:53:12
8 right? 13:53:15
9 A. Yes. There is a browser engine and it 13:53:15
10 involves a Java virtual machine and there is a set 13:53:18
11 of procedure calls with carefully drawn 13:53:21
12 bi-directional interactions between the browser 13:53:25
13 engine and the JVM. 13:53:29
14 Q. By "JVM," you mean the Java virtual 13:53:30
15 machine? 13:53:34
16 A. Correct. 13:53:35
17 Q. And the Java virtual machine of the web 13:53:35
18 browser executes the code in the "Lunar Lander" 13:53:38
19 game applet; right? 13:53:40
20 MR. RAFATIJO: Objection; form. 13:53:41
21 THE WITNESS: The virtual machine -- 13:53:42
22 again, it depends on what you mean by "execute." 13:53:46
23 The processer would execute the code. 13:53:48
24 The virtual machine would take the code 13:53:50
25 that is described in Java and convert it into a set 13:54:02

1 of byte codes, which would in turn be somehow 13:54:02
2 compiled down to the machine code, which is then 13:54:04
3 executed by the processer. 13:54:06
4 BY MR. BLUMENKOPF: 13:54:22
5 Q. And in 2002, it was common for web 13:54:22
6 browsers to have a Java -- Java virtual machine 13:54:22
7 built in; right? 13:54:24
8 MR. RAFATIJO: Objection; form. 13:54:25
9 THE WITNESS: At least some of the web 13:54:25
10 browsers that I'm amiliar with had a Java virtual 13:54:27
11 machine. 13:54:37
12 BY MR. BLUMENKOPF: 13:54:37
13 Q. Like [unintelligible] -- 13:54:37
14 THE COURT REPORTER: I'm sorry. 13:54:37
15 The honking is distracting me. Can you 13:54:38
16 repeat that again? 13:54:38
17 BY MR. BLUMENKOPF: 13:54:38
18 Q. In 2002, was Microsoft Internet Explorer 13:54:38
19 an example of a web browser that included a Java 13:54:42
20 virtual machine? 13:54:44
21 MR. RAFATIJO: Objection; form. 13:54:45
22 THE WITNESS: It -- the Internet 13:54:46
23 Explorer browser may have had Microsoft's own 13:54:52
24 implementation of a JVM in 2002. 13:54:54
25 But as we sit here, I have -- I -- 13:55:00

1 I'm -- cannot be entirely sure because it's been 13:55:04
2 over twenty years. And I haven't checked the dates 13:55:07
3 of when Microsoft's virtual -- version of the 13:55:09
4 virtual machine existed within their browser. 13:55:11
5 BY MR. BLUMENKOPF: 13:55:14
6 Q. Wasn't Netscape Navigator an example of 13:55:14
7 a [unintelligible] -- 13:55:19
8 THE COURT REPORTER: I'm sorry. Can you 13:55:19
9 say that slower? 13:55:20
10 BY MR. BLUMENKOPF: 13:55:20
11 Q. Wasn't Netscape Navigator an example of 13:55:20
12 a web browser that included a Java virtual machine? 13:55:23
13 MR. RAFATIJO: Objection; form. 13:55:26
14 THE WITNESS: As my recollection goes, 13:55:27
15 at some point the Navigator had a version of the 13:55:32
16 Java virtual machine. 13:55:39
17 But as we sit here, I do not recall the 13:55:41
18 timeframe when -- when that became available and 13:55:45
19 when it was either discontinued or the Navigator 13:55:49
20 just ceased to be relevant anymore. 13:55:52
21 BY MR. BLUMENKOPF: 13:55:57
22 Q. So the sticker 4-dash-19 is showing an 13:55:57
23 example of a web browser that runs a game 13:56:00
24 application; right? 13:56:02
25 MR. RAFATIJO: Objection; form. 13:56:03

1 THE WITNESS: No, I don't think that we 13:56:11
2 can conclude that based on anything that we have 13:56:12
3 seen or read so far. 13:56:14
4 BY MR. BLUMENKOPF: 13:56:29
5 Q. Turn back to page 116 in Exhibit 1018. 13:56:29
6 Do you see, back in that paragraph, 13:56:40
7 beginning "Mobile Code"? 13:56:43
8 A. I see that. 13:56:45
9 Q. And there's a sentence in that 13:56:46
10 paragraph. It says: 13:56:48
11 "Code on demand is when the 13:56:49
12 initiator has resources and state, 13:56:51
13 but downloads code from another 13:56:52
14 site to be executed locally." 13:56:54
15 Do you see that? 13:56:57
16 A. I do. 13:56:58
17 Q. So this is describing the code-on-demand 13:56:58
18 style where the code is downloaded and then 13:57:02
19 executed locally; right? 13:57:04
20 MR. RAFATIJO: Objection; form. 13:57:08
21 THE WITNESS: I mean, you kind of 13:57:09
22 skipped a few words there. 13:57:10
23 It is the style where the initiator that 13:57:12
24 requests the code has the resources and state. 13:57:17
25 So it has the data. It has the ability 13:57:19

1 to execute the code. It may have the -- it may 13:57:22
2 have a powerful processer, for example. And 13:57:27
3 downloads the code or requests or demands the code 13:57:33
4 from another site, which may not have the state and 13:57:35
5 may not have adequate resources to be able to 13:57:39
6 execute it. 13:57:43
7 BY MR. BLUMENKOPF: 13:57:56
8 Q. Isn't the purpose of this code on demand 13:57:56
9 to have a -- a -- at least in some cases, an 13:57:57
10 application like a web browser execute code because 13:58:00
11 the machine the web browser runs on would have more 13:58:03
12 reasons to execute -- more -- 13:58:07
13 MR. RAFATIJO: Objection -- 13:58:07
14 BY MR. BLUMENKOPF: 13:58:07
15 Q. Sorry. 13:58:07
16 -- more resources to execute that 13:58:07
17 program? 13:58:09
18 MR. RAFATIJO: Objection; form. 13:58:10
19 THE WITNESS: Well, I don't think I can 13:58:13
20 agree with that because I don't think we've 13:58:16
21 established that a web browser can be readily 13:58:23
22 thought of as an application. 13:58:25
23 Why you may want to use code on demand, 13:58:26
24 it's a -- it's a range of reasons. 13:58:29
25 One of the reasons may be, as I already 13:58:38

1 mentioned, because you have the state locally, so 13:58:40
2 you have the data that needs to be processed and 13:58:43
3 you have the resources. You're just missing the 13:58:47
4 algorithm, in a sense, or the code. 13:58:51
5 So that's -- that's a canonical example 13:58:53
6 of why you would use code on demand. 13:58:57
7 BY MR. BLUMENKOPF: 13:58:59
8 Q. So at least in some examples, the web 13:58:59
9 browser has the game state and then it downloads 13:59:02
10 the game code; right? 13:59:04
11 MR. RAFATIJO: Objection; form. 13:59:05
12 THE WITNESS: Absolutely not. I think 13:59:06
13 that is a completely wrong characterization of 13:59:07
14 what's happening here. 13:59:11
15 I don't -- I have not seen a single 13:59:12
16 example of a web browser having, quote, unquote, 13:59:15
17 game state. I don't even know what that would 13:59:19
18 mean. 13:59:21
19 BY MR. BLUMENKOPF: 13:59:22
20 Q. I -- I thought you just testified that 13:59:22
21 a -- the web browser in this code-on-demand module 13:59:24
22 would -- would have state; right? 13:59:27
23 MR. RAFATIJO: Objection; form. 13:59:30
24 THE WITNESS: Sure. It may have. 13:59:30
25 It's not necessarily the web browser. 13:59:31

1 It's the local device that may have access to the 13:59:33
2 state. 13:59:36
3 It might have a database with all of 13:59:36
4 your receipts from 2023. And if you're looking to 13:59:41
5 file your taxes, you have the ability to run Intuit 13:59:45
6 Software, TurboTax, for example, and you have all 13:59:54
7 of your receipts; you just don't have TurboTax. 13:59:57
8 So you might go to Intuit and say, "Hey, 14:00:01
9 can you please send me TurboTax so I can run it 14:00:04
10 locally." That's what code -- code on demand is. 14:00:07
11 BY MR. BLUMENKOPF: 14:00:08
12 Q. So you gave me an example with TurboTax, 14:00:08
13 but you could have used an example from games; 14:00:11
14 right? 14:00:13
15 MR. RAFATIJO: Objection; form. 14:00:13
16 THE WITNESS: Give me an example that 14:00:14
17 involves a game and I'm happy to consider it. 14:00:15
18 BY MR. BLUMENKOPF: 14:00:18
19 Q. Well, I -- I see one right here. We 14:00:19
20 have the -- the "Lunar Lander" is an example of a 14:00:20
21 game; right? Shown on Figure 4-19? 14:00:22
22 A. "Lunar Lander" is an example of a game, 14:00:27
23 but there's no state here that is described 14:00:29
24 anywhere. 14:00:30
25 So what would -- what would the state be 14:00:31

1 in this case? What is the local state that you are 14:00:33
2 suggesting is being processed on when you're 14:00:35
3 demanding the code? 14:00:40
4 Q. Well, in this Figure 4-19, is there 14:00:41
5 state associated with the "Lunar Lander" game? 14:00:45
6 MR. RAFATIJO: Objection; form. 14:00:48
7 THE WITNESS: That's the whole point of 14:00:48
8 my whole discussion here, is that "Lunar Lander" 14:00:49
9 was used as a running example for each one of these 14:00:52
10 styles. 14:00:55
11 And for many of them, it was used, in a 14:00:55
12 sense, as a -- an anti-pattern, because "Lunar 14:00:57
13 Lander" itself is so simplistic that applying one 14:01:02
14 or more of these styles on it was 14:01:04
15 counter-productive. 14:01:07
16 So there is really -- the game state 14:01:07
17 itself has to do with what's happening while you're 14:01:10
18 running the game, and that is created from the 14:01:14
19 point at which you start executing the game, and it 14:01:17
20 disappears at the point at which you either land or 14:01:21
21 crash. 14:01:24
22 BY MR. BLUMENKOPF: 14:01:24
23 Q. So -- well -- okay. So it -- in this -- 14:01:25
24 so there is some game state associated with the 14:01:32
25 "Lunar Lander" game in this example; right? 14:01:34

1 MR. RAFATIJO: Objection; form. 14:01:36
2 THE WITNESS: The game state, I think 14:01:36
3 it's described elsewhere in -- in this and other 14:01:38
4 chapters. 14:01:46
5 The game state may have things like fuel 14:01:48
6 level, altitude, what's currently displayed on your 14:01:52
7 cockpit. 14:02:05
8 BY MR. BLUMENKOPF: 14:02:05
9 Q. I'm sorry, Professor. Which page are 14:02:05
10 you looking at? 14:02:06
11 A. I'm just -- I'm looking at page 98, but 14:02:07
12 it doesn't -- ultimately, doesn't matter. I'm just 14:02:09
13 kind of going from -- from memory since "Lunar 14:02:12
14 Lander" is a relatively well-known, very simplistic 14:02:14
15 game. 14:02:18
16 But that game state does not exist 14:02:18
17 outside of a single execution of "Lunar Lander." 14:02:21
18 It's -- "Lunar Lander" starts with 14:02:25
19 preset values for how high you are and how much 14:02:28
20 fuel you have and a value for the gravity of the 14:02:33
21 celestial body on which you're trying to land. 14:02:40
22 Essentially, that's where it starts and 14:02:43
23 all those are hard-coded into the game. 14:02:44
24 So there is no such thing as having a 14:02:49
25 host that has the state and thereby would need the 14:02:53

1 code in order to operate on that state. That -- 14:02:58
2 in -- in the context of "Lunar Lander," code on 14:03:01
3 demand does not make sense. 14:03:04
4 Q. Yeah. 14:03:05
5 A. And that's kind of the whole point here. 14:03:06
6 Q. You're talking in the context of "Lunar 14:03:07
7 Lander," code on demand doesn't make sense? 14:03:10
8 Did I understand you? 14:03:12
9 MR. RAFATIJO: Objection; form. 14:03:13
10 THE WITNESS: As described in the 14:03:14
11 textbook, that is correct. It's not an 14:03:16
12 architectural style that you would use for "Lunar 14:03:18
13 Lander." 14:03:18
14 In fact, what is shown here is three 14:03:20
15 different instances of "Lunar Lander," each one of 14:03:21
16 which is deployed on a different node. And that's 14:03:30
17 what this paragraph talks about here. 14:03:30
18 THE COURT REPORTER: Excuse me. 14:03:34
19 Did you say "note" or "node"? 14:03:35
20 THE WITNESS: "Node." "Node." Thank 14:03:36
21 you. 14:03:36
22 THE COURT REPORTER: Thank you. 14:03:37
23 BY MR. BLUMENKOPF: 14:03:37
24 Q. Going back to that first paragraph on 14:03:37
25 page 118, it says: 14:03:40

1 "One client web browser 14:03:41
2 downloads code on demand in the 14:03:43
3 form of a 'Lunar Lander' game 14:03:44
4 applet." 14:03:47
5 So this is an example of code on demand, 14:03:47
6 right, involving "Lunar Lander"? 14:03:49
7 A. Yes, that's what this says. It's code 14:03:53
8 on demand in the form of a game applet and it's 14:03:55
9 downloads by the web -- client web browser. 14:03:59
10 Q. Do you see later in that paragraph, it 14:04:05
11 says: 14:04:07
12 "Thus, all the game logic 14:04:07
13 moves to the client machines, 14:04:09
14 freeing the server's competing 14:04:11
15 resources"? 14:04:12
16 A. Yes, I see that. 14:04:12
17 Q. What did you mean by: 14:04:14
18 "All the game logic moves to 14:04:16
19 the client machines"? 14:04:18
20 MR. RAFATIJO: Objection; form. 14:04:18
21 BY MR. BLUMENKOPF: 14:04:20
22 Q. Let me ask you a different question. 14:04:21
23 You meant executable game code moves to 14:04:21
24 the client machines; right? 14:04:26
25 MR. RAFATIJO: Objection; form. 14:04:27

1 THE WITNESS: No, not necessarily. 14:04:27
2 BY MR. BLUMENKOPF: 14:04:30
3 Q. Doesn't game logic include executable 14:04:30
4 game code? 14:04:33
5 A. What do you mean by "executable game 14:04:37
6 code"? Do you think that Java code is executable 14:04:40
7 game code, based on your definition? 14:04:44
8 Q. I'm asking you what you -- you're -- 14:04:46
9 you're the one who wrote the book. I'm trying to 14:04:47
10 understand what you meant by the sentence. 14:04:49
11 A. Well, I never said "executable game 14:04:51
12 code." You said that. So I'm trying to understand 14:04:53
13 what you mean. 14:04:54
14 Q. What did you mean by: 14:04:55
15 "All the game logic moves to 14:04:56
16 the client machines"? 14:04:58
17 A. That's the description of code on 14:05:01
18 demand. It means that you take the code that 14:05:04
19 exists somewhere remotely and bring it closer so 14:05:06
20 that you can run that code locally. 14:05:12
21 Q. And we saw on -- on page 116, this is 14:05:14
22 code downloaded from another site to be executed 14:05:19
23 locally; right? 14:05:24
24 A. It says: 14:05:37
25 "Code on demand is when the 14:05:37

1 initiator has resources and state, 14:05:37
2 but downloads code from another 14:05:38
3 site to be executed locally." 14:05:40
4 So it defines precisely what needs to be 14:05:42
5 available on the requestor and the requestee. 14:05:45
6 And in this case, there is something 14:05:50
7 that is absolutely missing from the requestor, 14:05:54
8 which is state. There is no state in any one of 14:05:59
9 the three web browsers. 14:06:08
10 So this is why again, this is not 14:06:08
11 this is not how you would build "Lunar Lander." 14:06:11
12 And, in fact, it's also suggested by the 14:06:15
13 fact that this doesn't describe "Lunar Lander" -- 14:06:17
14 it describes three different deployments -- pro- -- 14:06:20
15 deployment profiles for three different instances 14:06:23
16 of "Lunar Lander," because it would make no sense 14:06:25
17 to go one level below and show how you actually 14:06:28
18 designed "Lunar Lander" using this style. 14:06:31
19 You -- you couldn't do it. 14:06:33
20 Q. Well, it says right in that paragraph 14:06:35
21 this is code that's executed. Right? I mean, the 14:06:36
22 paragraph labeled "Mobile Code" on page 116. 14:06:41
23 A. Well, it says that it's code to be 14:06:46
24 executed. 14:06:49
25 It doesn't say that it's code that is 14:06:49

1 executed because there are many different steps you 14:06:51
2 may need to take in order to actually execute that 14:06:53
3 code. And that's the whole point of code on 14:06:55
4 demand. 14:06:58
5 Q. The code can be executed, though; right? 14:06:58
6 MR. RAFATIJO: Objection; form. 14:07:01
7 THE WITNESS: Under specific conditions 14:07:02
8 that are captured by the code-on-demand substyle of 14:07:05
9 mobile code, the code can be executed. But those 14:07:10
10 conditions have to be met. 14:07:12
11 BY MR. BLUMENKOPF: 14:07:13
12 Q. And executed locally; right? It says 14:07:14
13 "executed locally." 14:07:16
14 MR. RAFATIJO: Objection; form. 14:07:17
15 THE WITNESS: Again, if you have the 14:07:18
16 resources to execute the code and you have the 14:07:19
17 state that that code needs to run on, so in a 14:07:22
18 sense, you have the oven and you have the recipe -- 14:07:25
19 sorry -- you have the ingredients, all this is 14:07:30
20 doing is it's bringing over the recipe to help you, 14:07:33
21 you know, bake your bread or whatever. 14:07:39
22 MR. BLUMENKOPF: Why don't we break for 14:07:41
23 lunch. 14:07:43
24 MR. RAFATIJO: Sure. 14:07:43
25 MR. BLUMENKOPF: Is this a good -- 14:07:44

1 MR. RAFATIJO: Absolutely. 14:07:45
2 THE VIDEOGRAPHER: We are going off the 14:07:46
3 record at 2:07. 14:07:48
4 (Whereupon, a luncheon recess was
5 held from 2:07 p.m. to 2:42 p.m.)
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1 LOS ANGELES, CALIFORNIA, WEDNESDAY
2 MAY 29, 2023
3 2:42 P.M. 14:42:53
4 14:42:55
5 THE VIDEOGRAPHER: We are back on the 14:42:55
6 record at 2:42. 14:42:58
7 14:42:59
8 EXAMINATION (RESUMED) 14:43:00
9 BY MR. BLUMENKOPF: 14:43:00
10 Q. Okay. Great. 14:43:00
11 I want to return to Exhibit 1018 again. 14:43:01
12 A. Okay. 14:43:03
13 Q. That was the textbook. 14:43:04
14 And just turn back to that page 119 we 14:43:05
15 were looking at earlier. It's the one with Figure 14:43:08
16 4-dash-19. 14:43:12
17 A. Okay. 14:43:12
18 Q. So the web browser example we talked 14:43:13
19 about -- so the -- this -- this is executing the 14:43:15
20 "Lunar Lander" game; right? 14:43:22
21 MR. RAFATIJO: Objection; evidence. 14:43:24
22 THE WITNESS: It just says -- this thing 14:43:39
23 only says that it's downloaded -- the code on 14:43:40
24 demand is downloaded by the web browser in the form 14:43:48
25 of a game applet HTTP. 14:43:51

1 Doesn't talk anything about execution. 14:43:54
2 BY MR. BLUMENKOPF: 14:44:02
3 Q. Well, it could be executed, though; 14:44:02
4 right? 14:44:05
5 MR. RAFATIJO: Objection; form. 14:44:05
6 THE WITNESS: What happens from that 14:44:06
7 point on is not something that this talks about 14:44:08
8 because it's beyond what the -- the objective of 14:44:13
9 this discussion is. 14:44:15
10 BY MR. BLUMENKOPF: 14:44:19
11 Q. So that -- that web browser from Figure 14:44:19
12 4-19, that -- that's running on a computer; right? 14:44:21
13 A. Again, that's not what this is talking 14:44:23
14 about, but a web browser may be running on a 14:44:25
15 computer, indeed. 14:44:28
16 Q. Okay. So if the web browser is -- is 14:44:29
17 executing the "Lunar Lander" game, you would say 14:44:31
18 the "Lunar Lander" game is accessible at the 14:44:33
19 computer; right? 14:44:37
20 MR. RAFATIJO: Objection; form. 14:44:37
21 THE WITNESS: The web browser would not 14:44:38
22 be executing the "Lunar Lander" game. There is no 14:44:39
23 indication of that anywhere. 14:44:42
24 BY MR. BLUMENKOPF: 14:44:45
25 Q. Well, the "Lunar Lander" game app was 14:44:46

1 executable code; right? 14:44:48
2 A. No. It's an applet. It's not 14:44:49
3 executable code. 14:44:51
4 As we already talked about, it would 14:44:52
5 have to be interpreted into Java byte codes and 14:44:54
6 then the Java byte codes themselves would have to 14:44:57
7 be compiled into executable code or machine code 14:45:01
8 for a given architecture or given processer that 14:45:05
9 would be running, in a sense, underneath this. 14:45:10
10 So this is one layer. There is a 14:45:13
11 actually, there are multiple layers below this. 14:45:16
12 And one of those layers would be the actual 14:45:19
13 processer that requires executable code in order to 14:45:21
14 be able to, in fact, execute it. 14:45:29
15 Q. Okay. Well, you -- you would say the 14:45:30
16 "Lunar Lander" game applet is accessible on the 14:45:32
17 computer on the web browser -- 14:45:36
18 (Unreportable cross-talk.) 14:45:38
19 MR. RAFATIJO: Objection; form. 14:45:38
20 THE WITNESS: Why would I say that? 14:45:38
21 I'm sorry. What does -- what do you 14:45:40
22 mean by I would say that it's accessible on the web 14:45:41
23 browser? 14:45:45
24 It's -- the "Lunar Lander" game has been 14:45:45
25 obtained via code on demand that -- sorry. 14:45:46

1 The "Lunar Lander" game applet is 14:45:48
2 obtained via code on demand from a remote site via 14:45:51
3 HTTP. That's all that this is talking about. 14:45:59
4 BY MR. BLUMENKOPF: 14:46:01
5 Q. Okay. Well, it's got to be accessible, 14:46:01
6 though; right? 14:46:03
7 MR. RAFATIJO: Objection; form. 14:46:03
8 THE WITNESS: What do you mean by 14:46:04
9 "accessible"? 14:46:05
10 BY MR. BLUMENKOPF: 14:46:07
11 Q. Well, it says "accessible on the 14:46:07
12 claims." 14:46:09
13 You apply that -- that term in your 14:46:10
14 analysis; right? 14:46:11
15 A. Sorry. Are we talking about my textbook 14:46:12
16 now or are we talking about the patent? 14:46:14
17 Q. The '028 Patent, claim one, that -- that 14:46:17
18 mentions "accessible"; right? 14:46:19
19 A. So this game has nothing to do with the 14:46:21
20 patent, just for the record. 14:46:24
21 So we can talk about the patent, but 14:46:25
22 this game absolutely has nothing to do with the 14:46:29
23 patent, nor does this game operate in anything that 14:46:32
24 approximates what's taught in the patent. 14:46:37
25 So we can talk about one or the other, 14:46:39

1 but not both. 14:46:41
2 Q. Let's take a look at -- go back to page 14:46:43
3 118. This is from Exhibit 1019. 14:46:45
4 A. Okay. 14:46:50
5 Q. And let's look at the sent- -- second 14:46:50
6 sentence of that first paragraph. 14:46:52
7 It says a -- a second 14:46:53
8 [unintelligible] -- 14:46:55
9 THE COURT REPORTER: I'm sorry. What 14:46:55
10 was that? 14:46:56
11 BY MR. BLUMENKOPF: 14:46:57
12 Q. It says: 14:46:57
13 "A second browser loads a 14:46:57
14 JavaScript 'Lunar Lander.'" 14:46:59
15 You see that, Professor? 14:47:02
16 A. Yes. 14:47:04
17 Q. And this is referring to Figure 4-19; 14:47:04
18 right? 14:47:09
19 A. Yes. 14:47:09
20 Q. And that's describing the web browser in 14:47:10
21 the upper left of Figure 4-19; right? 14:47:13
22 A. Yes. 14:47:30
23 Q. And we see from the figure that includes 14:47:30
24 the JavaScript "Lunar Lander" program; right? 14:47:30
25 A. I see that. That's the topmost box. 14:47:34

1 Q. And we see it also includes a JavaScript 14:47:37
2 interpreter? 14:47:41
3 A. I see that as well. 14:47:41
4 Q. And you see this -- this web browser 14:47:42
5 also includes interpreter state? 14:47:44
6 A. Yes. That's the bottommost box. 14:47:46
7 Q. And we see that the JavaScript 14:47:51
8 interpreter, the web browser, is able to access the 14:47:53
9 data of the interpreter state; correct? 14:47:56
10 A. If you mean it uses the data access 14:48:02
11 connecter to interact with the interpreter state, 14:48:05
12 that I would agree with. 14:48:07
13 But I don't know what you mean by 14:48:09
14 "access the data of the interpreter state." 14:48:10
15 Q. Go back to page 118 again. 14:48:19
16 A. Okay. 14:48:19
17 Q. And then the second part of that 14:48:19
18 sentence we just looked at, it says: 14:48:20
19 "A third uses some other form 14:48:22
20 that is not detailed." 14:48:24
21 See that? 14:48:27
22 A. I see that. Yes. 14:48:27
23 Q. When it says "a third," that's referring 14:48:28
24 to a third browser; right? A third -- 14:48:29
25 A. Yes. 14:48:33

1 Q. -- web browser? 14:48:33
2 A. Yes. 14:48:33
3 Q. Okay. And looking back at Figure 4-19, 14:48:33
4 this is referring to that web browser, kind of a -- 14:48:36
5 in the middle of the figure, it says "web browser" 14:48:39
6 and then it says "'Lunar Lander' game code." 14:48:41
7 See that? 14:48:44
8 A. Yes. 14:48:47
9 Q. That's what that portion of the 14:48:47
10 paragraph on page 118 is re erring to? 14:48:48
11 A. Yes. I believe that's correct. 14:48:50
12 Q. Okay. So we have three examples of web 14:48:59
13 browsers in Figure 4-19; right? 14:48:59
14 A. I don't know what you mean by "examples 14:49:00
15 of web browsers." 14:49:01
16 There are three web browser instances 14:49:03
17 depicted in -- in the figure. They're components 14:49:07
18 in the architecture that is rendered in Figure 14:49:14
19 4-19. 14:49:24
20 Q. Okay. Let's -- okay. Let's look at the 14:49:24
21 '028 Patent. And this was Exhibit 1001. 14:49:42
22 A. Okay. 14:49:45
23 Q. And can you turn to Figure 1 of Exhibit 14:49:54
24 1001. 14:49:57
25 A. Okay. 14:50:07

1 Q. And we see here, there's a -- there's a 14:50:07
2 user 12; right? 14:50:10
3 A. Yes. I see user 12. 14:50:11
4 Q. And we have user 12. There's a line 14:50:13
5 connecting user 12 to electronic device 14; right? 14:50:16
6 A. Yes. There is a line, yes. 14:50:21
7 Q. That indicates the user is -- is using 14:50:22
8 electronic device 14; right? 14:50:24
9 A. Yeah. I think that's accurate. 14:50:26
10 Q. And we see that electric -- electronic 14:50:28
11 device 14 has a web browser 16; right? 14:50:30
12 A. There is a web browser 16 box inside of 14:50:33
13 electronics device 14 box. 14:50:36
14 Q. And we just looked at some examples of 14:50:39
15 web browsers from your textbook. 14:50:41
16 That web browser 16 could be one of 14:50:43
17 those -- could be a web browser like the ones we 14:50:45
18 looked at; right? 14:50:47
19 MR. RAFATIJO: Objection; form. 14:50:49
20 THE WITNESS: I have no opinion on that. 14:50:49
21 I -- this is, basically -- at this point 14:50:56
22 we're crossing to the realm of connecting apples 14:50:58
23 and oranges, and I don't think there is any reason 14:51:01
24 nor any evidence to do that. 14:51:03
25 A web browser is a web browser, but the 14:51:05

1 web browsers in my textbook are a specific 14:51:08
2 anti-pattern, all three examples of something that 14:51:16
3 you would not do in practice for a video game such 14:51:19
4 as "Lunar Lander." 14:51:25
5 So to the extent that you want to build 14:51:26
6 an example of Figure 1 as something that you should 14:51:28
7 not do in -- in practice, then maybe we could 14:51:31
8 consider that. But otherwise, I don't think that's 14:51:34
9 appropriate. 14:51:37
10 BY MR. BLUMENKOPF: 14:51:39
11 Q. You see there's a network ten connected 14:51:39
12 to electronic device 14; right? 14:51:41
13 A. I do see that. 14:51:44
14 Q. And then we see there's a primary 14:51:45
15 electronic device two connected to network ten? 14:51:47
16 A. I see that. 14:51:50
17 Q. So couldn't the web browser 16 exchange 14:51:53
18 data with a primary electronic device two over 14:51:57
19 network ten? 14:52:01
20 MR. RAFATIJO: Objection; form. 14:52:02
21 THE WITNESS: Are you asking me about -- 14:52:03
22 BY MR. BLUMENKOPF: 14:52:03
23 Q. Yeah. 14:52:03
24 A. -- about -- 14:52:03
25 Q. Yeah. 14:52:03

1 A. Sorry. Go ahead. 14:52:06
2 Q. That -- that -- that's my question. 14:52:06
3 A. Are you asking me about what the patent 14:52:08
4 teaches or are you asking me in a general sense, 14:52:10
5 divorced from this patent, whether a browser could 14:52:13
6 exchange data -- a browser running on one device 14:52:17
7 could exchange data with another device? 14:52:21
8 Q. Would the person of ordinary skill in 14:52:24
9 the art in 2002 understand the '028 reference to 14:52:26
10 teach that? 14:52:31
11 MR. RAFATIJO: Objection; form. 14:52:32
12 THE WITNESS: Well, a person of ordinary 14:52:33
13 skill in the art would understand '028 to teach 14:52:38
14 what '028 teaches. And they would not just look at 14:52:40
15 a figure. 14:52:44
16 They would read through the spec to 14:52:44
17 understand what the figure actually says. So -- 14:52:46
18 and I'm happy to do that if you would like me to, 14:52:47
19 by the way. 14:52:47
20 BY MR. BLUMENKOPF: 14:52:51
21 Q. So in the Figure 4-19 we looked at from 14:52:51
22 your textbook, we saw web browser exchanging 14:52:53
23 executable code over HTTP. 14:52:57
24 (Unreportable cross-talk.) 14:52:59
25 MR. RAFATIJO: Counsel, what exhibit are 14:52:59

1 we? 14:53:00
2 MR. BLUMENKOPF: Excuse me? 14:53:01
3 MR. RAFATIJO: Which exhibit? 14:53:01
4 MR. BLUMENKOPF: That was Figure 4-19 14:53:02
5 from Exhibit 1018. 14:53:04
6 MR. RAFATIJO: Oh, okay. 14:53:06
7 Objection; evidence. 14:53:07
8 THE WITNESS: Also, absolutely not. 14:53:09
9 There is no evidence that any executable code -- 14:53:10
10 code was exchanged. We talked about this multiple 14:53:12
11 times. There is no executable code being 14:53:15
12 exchanged. 14:53:17
13 BY MR. BLUMENKOPF: 14:53:19
14 Q. You see in Figure 1, primary electronic 14:53:19
15 device two is a game application four? 14:53:22
16 A. I do see that. 14:53:26
17 Q. Couldn't there be other game 14:53:27
18 applications in these components to figure one 14:53:34
19 besides game application four? 14:53:37
20 MR. RAFATIJO: Objection; form. 14:53:38
21 THE WITNESS: Are you asking me is there 14:53:38
22 another box called "Game Application," something 14:53:40
23 else in addition to game application four? 14:53:42
24 The answer is no. 14:53:44
25 / / /

1 BY MR. BLUMENKOPF: 14:53:45
2 Q. Let me ask you a different question. 14:53:45
3 Is this -- these -- these elements we 14:53:46
4 see here [unintelligible] -- 14:53:49
5 THE COURT REPORTER: I'm sorry. Can you 14:53:49
6 slow down? 14:53:49
7 MR. BLUMENKOPF: Sorry. 14:53:50
8 BY MR. BLUMENKOPF: 14:53:51
9 Q. Let me ask a different question. 14:53:51
10 So in Figure 1, we see a number o 14:53:53
11 components. We talked about a few of them; right? 14:53:55
12 A. I mean, yes. We have identified a set 14:53:58
13 of boxes that comprise parts of Figure 1. 14:54:03
14 Q. Do you believe this to be an exhaustive 14:54:06
15 list of components that could be part of Figure 1? 14:54:08
16 MR. RAFATIJO: Objection; form. 14:54:11
17 BY MR. BLUMENKOPF: 14:54:12
18 Q. I'm sorry. That could be part of the 14:54:12
19 system described by Figure 1? 14:54:16
20 MR. RAFATIJO: Same objection. 14:54:17
21 THE WITNESS: When you say "an 14:54:23
22 exhaustive list," what do you mean? 14:54:24
23 BY MR. BLUMENKOPF: 14:54:25
24 Q. Well, are there other -- other -- there 14:54:26
25 could be other components not shown that would be 14:54:27

1 within the scope of the '028 Patent; right? 14:54:29
2 A. Can you give me an example and -- and 14:54:35
3 then let's look at the spec and the claims to see. 14:54:37
4 I mean, there is a claim in '028, claim 14:54:40
5 seven, that talks about a plurality of locally 14:54:45
6 executed applications. 14:54:52
7 But I'm not sure what you specifically 14:54:54
8 mean and whether Figure 1 is an appropriate place 14:54:56
9 to consider an instantiation of Figure 1 that would 14:54:58
10 be different than what Figure 1 shows. 14:55:05
11 So maybe you can help me there. 14:55:07
12 Q. Let me just ask you a different 14:55:08
13 question. 14:55:10
14 So we have game application four from 14:55:10
15 Figure 1. That could include game content; right? 14:55:14
16 A. What do you mean by "game content"? 14:55:17
17 Q. What do you mean by "game content"? 14:55:19
18 What's your understanding of "game 14:55:23
19 content"? 14:55:26
20 A. Counsel, I think that it would be very 14:55:26
21 helpful to me if you did not throw a term at me and 14:55:28
22 then ask me what I mean by it. 14:55:31
23 I don't mean anything by it in the sense 14:55:33
24 that I haven't used the term. So that's why I'm 14:55:34
25 asking you. 14:55:37

1 Is it -- is it a term that's used in the 14:55:37
2 patent? 14:55:39
3 I don't recall it, to be honest with 14:55:39
4 you, but maybe you can help me. 14:55:41
5 Q. Let's take a look at column five -- 14:55:44
6 A. Okay. Thank you. 14:55:47
7 Q. -- from Exhibit 1001. And take a look 14:55:48
8 at line 36 from column five. 14:56:00
9 A. I see line 36. 14:56:13
10 Q. Actually, let me ask you to to let 14:56:18
11 me direct your attention to a different portion of 14:56:21
12 this column. 14:56:22
13 Take a look at column five, line 65 14:56:23
14 instead. 14:56:25
15 Do you see that? 14:56:26
16 A. I see line 65. 14:56:28
17 Q. Okay. It says: 14:56:31
18 "The game application four 14:56:32
19 allows the player to access more 14:56:34
20 than task-oriented games." 14:56:35
21 Right? 14:56:37
22 A. I see that. 14:56:38
23 Q. And it continues: 14:56:39
24 "The application can access 14:56:40
25 music sites, chat areas, reading 14:56:42

1 area, educational areas," 14:56:46
2 et cetera. 14:56:49
3 Right? 14:56:50
4 A. I see that. 14:56:50
5 Q. All right. Would you agree from that 14:56:50
6 there are many different kinds of content that can 14:56:52
7 be represented by game application four? 14:56:56
8 MR. RAFATIJO: Objection; form. 14:56:58
9 THE WITNESS: Is there a particular 14:57:09
10 reason why we moved away from what we -- you 14:57:10
11 pointed out before, which had to do with 14:57:14
12 business-related content, and now we're talking 14:57:16
13 about something that does not have the term 14:57:18
14 "content" associated with it but you are ascribing 14:57:21
15 content to it? 14:57:24
16 This is -- nowhere does this say that 14:57:25
17 this is game content. 14:57:27
18 BY MR. BLUMENKOPF: 14:57:31
19 Q. I -- let me clarify. 14:57:31
20 I wasn't trying to connect it to line 14:57:33
21 36. I had the wrong line in my notes. 14:57:35
22 I'm asking about column five, line 65, 14:57:37
23 and the -- the sentence that -- the passage that 14:57:40
24 follows that line 65. 14:57:43
25 A. Well, line 65 seems to tie this back to 14:57:45

1 business-related content. There is, again, no 14:57:49
2 mention of game content in this patent that I can 14:57:51
3 recall off the top of my head. 14:57:55
4 So this is all business-related content 14:57:56
5 and it says as much by tying this back to things 14:57:58
6 that are exchanged with business sponsors, which is 14:58:08
7 line six, and also ties it back to non-game 14:58:10
8 selections, which is on line seven. 14:58:16
9 So I -- I believe that this is going all 14:58:18
10 the way back to line 24 o column ive, which is 14:58:20
11 business-related content. 14:58:25
12 So that doesn't help me with answering 14:58:26
13 your question about game content. 14:58:28
14 Q. Well, line 65 says "the game application 14:58:30
15 four"; right? 14:58:32
16 A. Sure. And it says: 14:58:40
17 "It allows a player to access 14:58:41
18 more than task-oriented games." 14:58:42
19 So the content it's talking about here 14:58:44
20 is described as more than this game-related stuff. 14:58:46
21 Q. Okay. So the content would include 14:58:49
22 task-oriented games and it would include these 14:58:51
23 other types of content as well; right? 14:58:53
24 MR. RAFATIJO: Objection; form. 14:58:56
25 THE WITNESS: No. I think that that's a 14:58:57

1 completely incorrect read of what the patent 14:58:59
2 teaches. 14:59:02
3 I -- again, I would ask you to show me 14:59:02
4 where in the patent it refers to specifically game 14:59:04
5 content. 14:59:08
6 It talks about other kinds of content. 14:59:08
7 BY MR. BLUMENKOPF: 14:59:10
8 Q. Okay. Well, if you look at line 65 14:59:11
9 again, it says: 14:59:13
10 "The game application four 14:59:13
11 allows the player to access more 14:59:15
12 than task-oriented games." 14:59:17
13 Wouldn't you infer from that that the 14:59:20
14 game application four allows the player to access 14:59:22
15 task-oriented games? 14:59:24
16 MR. RAFATIJO: Objection; form. 14:59:26
17 THE WITNESS: But that has nothing to do 14:59:30
18 with game content, quote, unquote. 14:59:31
19 BY MR. BLUMENKOPF: 14:59:34
20 Q. My question wasn't about game content. 14:59:34
21 A. If it says it allows the player to 14:59:37
22 access more than task-oriented games, then it would 14:59:39
23 subsume task-oriented games within what the player 14:59:45
24 can access. 14:59:48
25 Q. So the player can access task-oriented 14:59:49

1 games, and also this additional type of information 14:59:52
2 described in this paragraph; right? For example, 14:59:54
3 music sites, chat areas, et cetera. 14:59:58
4 A. That would be one way of reading this. 15:00:09
5 It's not -- it's not complete and we would have to 15:00:11
6 go all the way through this. 15:00:13
7 But again, this is what I was talking 15:00:14
8 about tying -- all this is tied with information 15:00:16
9 exchanged with business sponsors, which ties all 15:00:19
10 the way back to column five. And that's the 15:00:21
11 business-related content that I was talking about. 15:00:24
12 Q. Let's turn back to Figure 1 from Exhibit 15:00:27
13 1001. 15:00:30
14 Is web browser 16 locally executed with 15:00:44
15 respect to electronic device 14? 15:00:46
16 MR. RAFATIJO: Objection; form. 15:00:48
17 THE WITNESS: The patent spec says that 15:01:15
18 electronic device 14 holds the web browser 16. It 15:01:19
19 doesn't say anything about local execution. It 15:01:24
20 talks about the electronic device holding the web 15:01:27
21 browser. 15:01:27
22 BY MR. BLUMENKOPF: 15:01:33
23 Q. Doesn't electronic device 14 execute at 15:01:33
24 web browser 16? 15:01:37
25 MR. RAFATIJO: Objection; form. 15:01:38

1 THE WITNESS: I am not sure that that's 15:01:54
2 an appropriate way of using the -- the verb "to 15:01:54
3 execute" in this context. 15:01:55
4 The web browser may be running on that 15:01:58
5 electronic device, but the patent is very careful 15:02:02
6 about saying that the electronic device holds the 15:02:05
7 web browser. 15:02:07
8 BY MR. BLUMENKOPF: 15:02:09
9 Q. Is there a difference between running 15:02:10
10 and executing? 15:02:11
11 A. There is a difference between a device 15:02:14
12 executing something and something executing on a 15:02:17
13 device. I think that -- that using it as a 15:02:18
14 transitive verb may not be accurate. 15:02:24
15 But again, you might be using the -- the 15:02:27
16 verbs differently than I do. So you can -- you can 15:02:29
17 certainly help me by clarifying further what you 15:02:32
18 mean. 15:02:38
19 Q. Let me show you a different exhibit. 15:02:38
20 Okay. Can you mark this Exhibit 1020, 15:03:12
21 please. 15:03:15
22 THE COURT REPORTER: Absolutely. 15:03:16
23 Thank you. 15:03:31
24 MR. RAFATIJO: For the record -- 15:03:31
25 THE COURT REPORTER: I'm sorry. Just 15:03:32

1 one second. I was marking it. 15:03:33
2 (Whereupon, Petitioner's Exhibit number 15:03:33
3 1020 was marked for identification by 15:03:33
4 the deposition officer and is attached 15:03:33
5 hereto.) 15:03:33
6 THE COURT REPORTER: Okay. Go ahead. 15:03:34
7 MR. RAFATIJO: Sure. 15:03:34
8 For the record, I object to evidence as 15:03:35
9 not being filed as exhibits. 15:03:39
10 THE COURT REPORTER: There you go. 15:03:46
11 THE WITNESS: Thank you. 15:03:47
12 THE COURT REPORTER: You're welcome. 15:03:48
13 BY MR. BLUMENKOPF: 15:03:50
14 Q. Okay. This exhibit is marked Exhibit 15:03:50
15 1020. There's a Bates stamp in the lower right. 15:03:52
16 It begins with BT 00014843. 15:03:56
17 And the last page ends in Bates number 15:04:03
18 BT 00014877; right? 15:04:05
19 A. Mine ends on 878. 15:04:16
20 Q. Oh, yeah. Yeah. That's -- that's -- 15:04:21
21 that's correct. There's a -- the last page is BT 15:04:23
22 00014878. 15:04:26
23 And I'll represent this is a document 15:04:31
24 that was produced by Quantum in the district court 15:04:34
25 litigation. 15:04:36

1 Do you recognize this document, 15:04:45
2 Professor? 15:04:48
3 MR. RAFATIJO: Objection; evidence. 15:04:48
4 THE WITNESS: I'm not sure I've seen 15:04:49
5 this document before. Off the top of my head, I 15:04:50
6 cannot recall seeing it before. 15:04:52
7 BY MR. BLUMENKOPF: 15:04:53
8 Q. What does this look like to you? 15:04:53
9 A. It looks like some screenshots from 15:05:04
10 something. 15:05:06
11 Q. Okay. I'm going to refer to each page 15:05:12
12 by the last two digits of the Bates number. 15:05:13
13 Is that okay? 15:05:17
14 So the first page will be page 43. 15:05:17
15 A. Sure. 15:05:20
16 Q. The last page will be page 78. 15:05:20
17 A. Okay. 15:05:22
18 Q. Okay. So take a look at page 43 of the 15:05:23
19 exhibit, the first page. 15:05:24
20 A. Okay. 15:05:26
21 Q. This is a screenshot of Microsoft 15:05:27
22 Internet Explorer; right? 15:05:30
23 MR. RAFATIJO: Objection; form. 15:05:31
24 THE WITNESS: It's very tiny, but it 15:05:37
25 looks like it -- that's what it says in the ribbon 15:05:39

1 on the top. 15:05:43
2 BY MR. BLUMENKOPF: 15:05:50
3 Q. And you understand the ribbon at the top 15:05:50
4 to describe the name of the application; right? 15:05:52
5 MR. RAFATIJO: Objection; form. 15:05:55
6 THE WITNESS: Well, it describes a bunch 15:05:56
7 of different things. And most of them, I can't 15:05:57
8 actually read. 15:05:59
9 And if you had not mentioned that it was 15:05:59
10 Internet Explorer, I would not have caught on to 15:06:02
11 the fact that that's what those three words 15:06:05
12 actually say. 15:06:07
13 The rest of it, I can't read. It says 15:06:07
14 something -- Compaq, maybe? But I -- I cannot read 15:06:09
15 this. This is -- for some reason, this is 15:06:13
16 compressed left to right, so I can't -- it's too 15:06:15
17 small. 15:06:18
18 BY MR. BLUMENKOPF: 15:06:21
19 Q. Does this look like Microsoft Internet 15:06:21
20 Explorer to you? 15:06:24
21 MR. RAFATIJO: Objection; form. 15:06:25
22 THE WITNESS: It -- it may be. But 15:06:25
23 again, it's -- I don't know why it's compressed 15:06:28
24 horizontally like that. 15:06:32
25 It's consistent with Microsoft Explorer. 15:06:33

1 But beyond that, I can't comment on it. I -- as I 15:06:36
2 said, I don't think I've seen this before. 15:06:38
3 BY MR. BLUMENKOPF: 15:06:40
4 Q. And this is a screenshot of that program 15:06:40
5 running on Microsoft Windows; right? 15:06:42
6 MR. RAFATIJO: Objection; form. 15:06:44
7 THE WITNESS: I can't say anything about 15:06:45
8 this because I don't know what this is. 15:06:47
9 BY MR. BLUMENKOPF: 15:06:48
10 Q. Well, you recognize this as Microso t 15:06:49
11 Windows; right? 15:06:51
12 MR. RAFATIJO: Objection; form. 15:06:52
13 THE WITNESS: Yes, I do see something 15:06:56
14 that looks like Windows in the lower right-hand 15:06:57
15 corner. I see the Microsoft start button, but I 15:06:59
16 have no -- yeah. I -- I have literally zero 15:07:05
17 additional information about this. 15:07:14
18 BY MR. BLUMENKOPF: 15:07:16
19 Q. Microsoft Internet Explorer was a web 15:07:16
20 browser; right? 15:07:19
21 A. Sure. Yes. 15:07:19
22 Q. See at the bottom, it says: 15:07:20
23 "Website, visitor access to 15:07:23
24 the site"? 15:07:25
25 MR. RAFATIJO: Objection; form. 15:07:25

1 THE WITNESS: Yes, I see that that's 15:07:26
2 what's written on the bottom. 15:07:28
3 BY MR. BLUMENKOPF: 15:07:29
4 Q. You understand this to be a depiction of 15:07:29
5 a visitor accessing a website with a web browser; 15:07:31
6 right? 15:07:34
7 A. For the record, I have no understanding 15:07:34
8 of what this is. This is -- I -- I can read what 15:07:36
9 it says on the bottom. And that, actually, is one 15:07:38
10 o the things that is written legibly on on this 15:07:40
11 screenshot. 15:07:44
12 But I cannot represent one way or the 15:07:44
13 other what this is or is not. I have not seen this 15:07:47
14 before. 15:07:50
15 Q. Is that because the -- the size of the 15:07:59
16 image on the page is too small or is it because you 15:08:02
17 don't understand the content or some other reason? 15:08:04
18 A. It's because you're showing me a 15:08:06
19 screenshot that I haven't seen before and then -- 15:08:08
20 actually, a collection of screenshots. 15:08:10
21 This is some twenty-five or thirty-five 15:08:11
22 pages of screenshots I haven't seen before, and 15:08:13
23 you're asking me to agree or disagree with what 15:08:15
24 this actually represents. 15:08:20
25 I don't know what this is. So in order 15:08:22

1 for me to be able to answer your questions, I would 15:08:24
2 need the context and additional information about 15:08:27
3 what is actually shown here. 15:08:30
4 I have not cite -- cited this in my 15:08:38
5 declarations, to the best of my recollection. 15:08:40
6 Q. You didn't take this into account in 15:08:43
7 preparing your analysis? 15:08:46
8 MR. RAFATIJO: Objection; form. 15:08:48
9 THE WITNESS: I already mentioned that I 15:08:49
10 don't know what this actually is. 15:08:51
11 So I guess the answer is it would -- the 15:08:52
12 answer would be I did not take this into account 15:08:55
13 because this is not something that has come up. 15:08:57
14 If it was part of the -- of Sony's 15:09:02
15 complaint or of Sony's expert's declaration, I'm 15:09:05
16 happy to look at it, but I don't recall seeing this 15:09:08
17 before. 15:09:10
18 BY MR. BLUMENKOPF: 15:09:12
19 Q. Okay. Let me give you another exhibit. 15:09:12
20 Okay. Kelli, if you could mark this 15:09:37
21 Exhibit -- actually, I'm sorry. This is premarked 15:09:39
22 Sony Exhibit 1003. 15:09:41
23 THE COURT REPORTER: Would you like 15:09:41
24 previously marked exhibits attached to this 15:09:41
25 transcript? 15:09:41

1 MR. BLUMENKOPF: Yes, please. 15:09:41
2 THE COURT REPORTER: Okay. 15:10:12
3 (Previously marked Exhibit 1003 attached 15:10:12
4 hereto.) 15:10:19
5 BY MR. BLUMENKOPF: 15:10:19
6 Q. Okay. The exhibit in front of you is 15:10:20
7 marked Exhibit 1003. 15:10:21
8 A. Okay. 15:10:23
9 Q. This is the prosecution history from the 15:10:23
10 '028 Patent. 15:10:26
11 A. Okay. 15:10:26
12 Q. You told me you reviewed the prosecution 15:10:28
13 history in preparing your opinion; right? 15:10:30
14 A. I did. 15:10:32
15 Q. So I added some colored flags here to 15:10:38
16 help us find the right pages. 15:10:41
17 Other than those flags, is there any 15:10:42
18 reason to think this isn't a complete and correct 15:10:44
19 copy of the prosecution history? 15:10:47
20 A. I would think even with those flags, 15:10:48
21 it's a complete and correct copy. 15:10:51
22 But if you're suggesting that the flags 15:10:52
23 themselves somehow resulted in a modification of 15:10:55
24 this, then it would be probably good for me to know 15:10:57
25 that. 15:11:00

1 Q. I'll represent to you I didn't make any 15:11:00
2 modifications, other than attaching the flags to 15:11:02
3 the document. 15:11:04
4 A. Okay. Great. Thank you. 15:11:05
5 Q. Turn to page 122, which is the page with 15:11:07
6 the yellow flag attached to it. 15:11:09
7 A. Okay. The pages I see have 41 and 42 on 15:11:25
8 the bottom. Am I in the right place? 15:11:25
9 Q. I should clarify. 15:11:27
10 Yes, the page says 41 at the bottom, but 15:11:29
11 this is page 122 of the -- the exhibit. 15:11:31
12 A. Great. So as long as we're in the right 15:11:34
13 place, that's good. 15:11:36
14 Q. You see it says "Evidence Appendix"? 15:11:37
15 A. I do see that. 15:11:39
16 Q. Did you review this evidence appendix in 15:11:40
17 preparing your opinion? 15:11:43
18 A. I am sure I've seen this before. 15:11:47
19 Obviously, it's a very large document, so I'd have 15:11:50
20 to go through specific bits and pieces for -- to -- 15:11:52
21 to confirm specific things that you may want me to 15:11:55
22 opine on. 15:11:57
23 Q. You can see it says: 15:12:00
24 "Storyboard provided to the 15:12:01
25 examiner during the personal 15:12:02

1 interview of October 8th, 2008." 15:12:03
2 Right? 15:12:06
3 A. I see that. 15:12:06
4 Q. Okay. So look at pages 122 through 131. 15:12:09
5 Those are the pages between the yellow flag and the 15:12:12
6 blue flag. 15:12:15
7 A. Okay. The rendering is really spotty or 15:12:31
8 incomplete. But yes, I see the -- see those pages. 15:12:37
9 Q. The -- these pages are copies of pages 15:12:44
10 from Exhibit 1020, which we just looked at; right? 15:12:47
11 Feel free to compare it to Exhibit 1020. 15:12:50
12 MR. RAFATIJO: Objection; no evidence. 15:12:57
13 THE WITNESS: Sorry. 15:13:04
14 Given the renderings being completely 15:13:30
15 different from one another, I would never have 15:13:33
16 guessed that. 15:13:35
17 But now that you're pointing out that 15:13:35
18 some of the pages from the file history match some 15:13:38
19 of the -- of these horizontally compressed 15:13:42
20 screenshots, I can see that, except that they're 15:13:46
21 not exactly the same. 15:13:57
22 So that would be another reason why I 15:13:58
23 would not have guessed that, because the green text 15:14:00
24 on Exhibit 1020 does not match the text underneath 15:14:02
25 the figures in whatever this is. 1003? 15:14:07

1 So I'll take your word for it, but never 15:14:13
2 in a million years would I have guessed to be 15:14:17
3 matching -- to have even tried to match what's in 15:14:21
4 1003 versus 1020. 15:14:25
5 It just never would have occurred to me 15:14:30
6 if you had not pointed me to it. 15:14:32
7 BY MR. BLUMENKOPF: 15:14:33
8 Q. Take a look at page 45 from Exhibit 15:14:33
9 1020. 15:14:36
10 A. Okay. 15:14:36
11 Q. Does this look like the same image as 15:14:38
12 the page labeled 42 from Exhibit 1021 [sic]? 15:14:43
13 MR. RAFATIJO: Objection; form. 15:14:49
14 BY MR. BLUMENKOPF: 15:14:52
15 Q. The page labeled 42 is actually page 123 15:14:52
16 of the file history. 15:14:55
17 A. Yes. That's the -- that's -- that was 15:15:09
18 my tip-off. When you mentioned that, that's the 15:15:09
19 first thing I looked at. It's -- visually, it 15:15:09
20 doesn't match. 15:15:09
21 But in terms of content, it seems to be 15:15:10
22 close. Completely different fonts. Obviously, the 15:15:13
23 rendering is not anywhere near the same. But I 15:15:18
24 can -- I can see the resemblance. 15:15:23
25 But then there are other screenshots 15:15:31

1 here that -- for which the labels are off. 15:15:39
2 They're -- they do not match. 15:15:36
3 So if you had not pointed me to this, as 15:15:40
4 I said already, I would have zero reason to go 15:15:42
5 through this and go, "Oh, yeah. This is part of 15:15:44
6 the same document that you showed me in 1020." 15:15:47
7 Q. So those pages we just looked at from 15:15:50
8 Exhibit 1021, those are pages 122 to 131. 15:15:53
9 You didn't take those into account in 15:15:58
10 preparing your opinions; correct? 15:16:00
11 MR. RAFATIJO: Objection; form. 15:16:01
12 THE WITNESS: Sorry. 122 and 131? 15:16:03
13 BY MR. BLUMENKOPF: 15:16:06
14 Q. I apologize. 15:16:06
15 The page -- those page numbers don't 15:16:07
16 appear on the document. They're the pages, I'll 15:16:09
17 represent to you, between the yellow flag and the 15:16:11
18 blue flag. The -- 15:16:13
19 A. So this is the file history. I looked 15:16:15
20 at the file history and I took it into account in 15:16:17
21 forming my opinion. 15:16:20
22 If that's your question, then the answer 15:16:21
23 to your question is no, that's not correct. 15:16:23
24 Q. Did -- did you take these specific pages 15:16:26
25 into account in preparing your opinion? 15:16:27

1 A. As much as I took all the other pages in 15:16:29
2 preparing my opinion, I -- this did not directly -- 15:16:31
3 these pages did not directly figure in either the 15:16:35
4 complaint, as far as I remember, or Sony's expert's 15:16:39
5 opinion, and I was rebutting your expert's opinion. 15:16:44
6 So if this didn't figure prominently 15:16:49
7 there, I am not surprised that it wouldn't have 15:16:52
8 figured prominently in my declaration. 15:16:56
9 But if there are specific questions you 15:16:59
10 want to ask with regard to my opinion as it 15:17:00
11 connects to and pertains to these pages, I'm happy 15:17:02
12 to -- to try to answer whatever those questions may 15:17:05
13 be. 15:17:07
14 Q. Take a look at the page labeled 42 on 15:17:07
15 the bottom. 15:17:10
16 A. Okay. 15:17:11
17 Q. I'll -- I'll represent to you this is 15:17:11
18 page 123 from Exhibit 1003. 15:17:13
19 By the way, for the record, I may have 15:17:21
20 referred to Exhibit 1003 as 1021. Just for 15:17:23
21 clarity, those were intended to refer to the same 15:17:27
22 exhibit. 15:17:29
23 MR. RAFATIJO: Counsel, sorry. 15:17:31
24 1003 and 1021 are the same thing? 15:17:33
25 MR. BLUMENKOPF: That's right. 15:17:37

1 MR. RAFATIJO: Okay. 15:17:38
2 MR. BLUMENKOPF: I apologize for any -- 15:17:43
3 MR. RAFATIJO: No. 15:17:44
4 MR. BLUMENKOPF: -- for any confusion. 15:17:45
5 BY MR. BLUMENKOPF: 15:17:46
6 Q. Are you looking at page 123, Professor? 15:17:46
7 A. Yes. I -- I think that's -- this is the 15:17:50
8 page; right (indicating)? 15:17:51
9 Q. Yes. 15:17:52
10 A. The one with 42 on the bottom. 15:17:53
11 Q. It says 42 at the bottom. That's right. 15:17:55
12 And you see at the top, it says 15:17:56
13 "Microsoft Internet Explorer"; correct? 15:17:58
14 A. Yes. I can see that. 15:18:00
15 It says: 15:18:07
16 "Provided by Compaq, working 15:18:24
17 offline." 15:18:24
18 Q. So this is a screenshot of the Microsoft 15:18:24
19 Internet Explorer web browser; correct? 15:18:24
20 A. Based on what's shown here, I will just 15:18:24
21 have to take your word for it, because this looks 15:18:24
22 like -- like it could be a hand-drawn image of 15:18:24
23 something that is intended to show Microsoft 15:18:24
24 Explorer, but it could be literally hand drawn. 15:18:28
25 Q. And do you see this is a -- this is the 15:18:33

1 Microsoft Internet Explorer web browser running on 15:18:36
2 Windows; right? 15:18:38
3 MR. RAFATIJO: Objection; form. 15:18:40
4 THE WITNESS: No, I don't see that. I 15:18:41
5 can't -- as I said, this could be hand drawn for 15:18:43
6 all I know. 15:18:45
7 I mean, honestly, this is such a poor 15:18:46
8 reproduction that I can't tell what this actually 15:18:50
9 is. 15:18:54
10 BY MR. BLUMENKOPF: 15:18:54
11 Q. See at the bottom, it says: 15:18:55
12 "Website, visitor chooses 15:18:56
13 game-slash-genre"? 15:18:59
14 A. Yes, I see that. 15:19:00
15 Q. You understand this to be depicting a -- 15:19:01
16 a website viewed -- 15:19:04
17 A. Well -- 15:19:04
18 Q. -- through the web browser; right? 15:19:05
19 A. This is a storyboard. This storyboard 15:19:06
20 could have been rendered -- 15:19:12
21 Q. Okay. 15:19:12
22 A. -- by hand. Could have been rendered 15:19:14
23 using Microsoft Paint, for all we know. 15:19:15
24 So what this actually is depicting, just 15:19:18
25 based on what's shown here, I don't think that we 15:19:23

1 can conclude one way or the other. 15:19:25
2 It shows something that looks like 15:19:27
3 Windows. But whether this is actual Windows or 15:19:28
4 whether it's -- this is somebody storyboarding what 15:19:32
5 something running on Windows might look like, we 15:19:35
6 can't conclude that from this. 15:19:38
7 Q. So let's refer to those same pages. And 15:19:54
8 again, this is pages 122 through 131, Exhibit 1003. 15:19:54
9 This is the pages between the yellow flag and the 15:19:55
10 blue lag in the exhibit. 15:19:58
11 Let's refer to those as the storyboard. 15:20:01
12 Okay? 15:20:03
13 A. That's fine, because that's what -- what 15:20:03
14 the paragraph on page 41 says. 15:20:04
15 Q. Okay. 15:20:04
16 A. Or, rather, the sentence. 15:20:15
17 Q. In your view, does this storyboard 15:20:16
18 embody any of the claims of the '028 Patent? 15:20:21
19 MR. RAFATIJO: Objection; form. 15:20:27
20 THE WITNESS: Sorry. 15:20:28
21 Was the question does the storyboard 15:20:29
22 embody any of the claims? 15:20:31
23 BY MR. BLUMENKOPF: 15:20:32
24 Q. Yes. 15:20:32
25 A. Well, considering that this was done 15:20:36

1 during a personal interview and that, as I already 15:20:38
2 mentioned, it is impossible to see what's happening 15:20:41
3 here because the rendering is so poor, I think, at 15:20:44
4 the least, it would be irresponsible for me to -- 15:20:48
5 to try to speculate on that because I -- this is -- 15:20:50
6 again, this is not accompanied by a written 15:20:56
7 description. 15:20:57
8 This was done as -- as -- in support of 15:20:57
9 a verbal discussion with the patent examiner, 15:20:59
10 clearly. 15:21:02
11 So if there is more information that 15:21:03
12 describes this, I'm happy to consider that. 15:21:05
13 But it relates to the patent and it's 15:21:07
14 part of the discussion, but the context in which it 15:21:13
15 was discussed and how it relates to the claims, I 15:21:16
16 would need more information than to just look at 15:21:23
17 one of the random -- one of these slides and 15:21:25
18 somehow speculate about how it may relate to the 15:21:27
19 claims. 15:21:30
20 MR. BLUMENKOPF: Is it okay if we take a 15:21:44
21 quick break? 15:21:46
22 MR. RAFATIJO: Sure. Five minutes? 15:21:47
23 MR. BLUMENKOPF: Five minutes. 15:21:48
24 THE VIDEOGRAPHER: We are going off the 15:21:50
25 record at 3:21. 15:21:51

1 (Whereupon, a recess was held 15:21:51
2 from 3:21 p.m. to 3:32 p.m.) 15:21:54
3 THE VIDEOGRAPHER: We are back on the 15:32:59
4 record at 3:32. 15:33:00
5 BY MR. BLUMENKOPF: 15:33:03
6 Q. Okay. Professor, you can put that large 15:33:03
7 prosecution history away. We're done with it for 15:33:05
8 now. 15:33:08
9 A. Okay. 15:33:08
10 Q. Okay. So this next exhibit is 15:33:27
11 premarked. It's Exhibit 1007. 15:33:29
12 (Previously marked Exhibit 1007 attached 15:33:29
13 hereto.) 15:33:49
14 THE COURT REPORTER: Here you go. 15:33:49
15 THE WITNESS: Thank you. 15:33:51
16 THE COURT REPORTER: You're welcome. 15:33:52
17 BY MR. BLUMENKOPF: 15:33:53
18 Q. Okay. Professor, do you recognize 15:33:53
19 Exhibit 1007 as the Angles reference? 15:33:55
20 A. Yes, I do. 15:33:58
21 Q. And this is one of the references you 15:33:59
22 considered in preparing your opinion; right? 15:34:00
23 A. That is correct. 15:34:02
24 Q. Is it a true, complete, and correct copy 15:34:04
25 of Angles? 15:34:07

1 THE COURT REPORTER: Is that "Engles" or 15:34:10
2 "Angles"? 15:34:15
3 MR. BLUMENKOPF: Angles, A-N-G-L-E-S. 15:34:16
4 MR. RAFATIJO: (Indicating.) 15:34:18
5 THE COURT REPORTER: Thank you, 15:34:19
6 everybody. 15:34:20
7 THE WITNESS: It seems to be. I don't 15:34:20
8 have any reason to believe that stuff is missing 15:34:22
9 from it. 15:34:23
10 BY MR. BLUMENKOPF: 15:34:59
11 Q. I have one more document. Give me a 15:34:59
12 moment. 15:35:02
13 Okay. This next exhibit is premarked 15:35:25
14 Exhibit 2005. 15:35:25
15 THE COURT REPORTER: Thank you. 15:35:25
16 (Previously marked Exhibit 2005 attached 15:35:25
17 hereto.) 15:35:25
18 (Document handed to the witness.) 15:35:40
19 THE WITNESS: Thank you. 15:35:40
20 THE COURT REPORTER: You're welcome. 15:35:42
21 MR. RAFATIJO: Counsel, for 15:35:43
22 clarification, other proceedings also have Exhibit 15:35:43
23 2005. So you going to name them differently after 15:35:47
24 you introduce them? 15:35:50
25 MR. BLUMENKOPF: To clarify, this is 15:35:51

1 Exhibit 2005 that was provided in the -- the '028 15:35:52
2 matter. 15:35:56
3 MR. RAFATIJO: Okay. 15:35:56
4 MR. BLUMENKOPF: IPR 2023-954. 15:35:57
5 BY MR. BLUMENKOPF: 15:36:07
6 Q. Professor, do you recognize Exhibit 2005 15:36:07
7 as your report for the '028 Patent? 15:36:10
8 A. My declaration, to be more specific. 15:36:13
9 Q. Yes. Your declaration. 15:36:16
10 Do you recognize it as a -- as a true, 15:36:17
11 complete, and correct copy of that declaration? 15:36:19
12 A. Seems to be. 15:36:21
13 Q. And I realize you prepared multiple 15:36:23
14 declarations. This is the one from the -- the 954 15:36:25
15 matter; correct? 15:36:28
16 A. That is correct. 15:36:28
17 Q. Okay. Turn to page 104, the very last 15:36:38
18 page of Exhibit 2005. 15:36:41
19 A. Okay. 15:36:44
20 Q. That's your signature; right? 15:36:44
21 A. Yes. 15:36:45
22 Q. Do you stand by your statements in this 15:36:46
23 declaration? 15:36:48
24 A. I do. 15:36:49
25 Q. Are there any statements you wish to 15:36:59

1 reconsider based on your testimony today? 15:37:01
2 A. Based on my testimony today, no. 15:37:03
3 I do believe that there are a couple of 15:37:06
4 typos, but we'll -- we may get to them. If we do, 15:37:08
5 I'll -- I'll identify them. 15:37:12
6 Q. Okay. Will you turn to paragraph 93 in 15:37:17
7 your declaration. 15:37:21
8 A. Okay. 15:37:32
9 Q. This is under a section called "Claim 15:37:32
10 Interpretation"; right? 15:37:32
11 A. Yes. 15:37:32
12 Q. And in paragraph 93, you said: 15:37:33
13 "I understand that the terms 15:37:36
14 set form" -- 15:37:38
15 I think that's supposed to be "set 15:37:40
16 forth"; right? 15:37:42
17 A. That's one of the typos. Yes. 15:37:42
18 Q. (Reading): 15:37:42
19 "I understand that the terms 15:37:43
20 set forth in the 15:37:44
21 [unintelligible]" -- 15:37:47
22 THE COURT REPORTER: In the what claims? 15:37:47
23 BY MR. BLUMENKOPF: 15:37:48
24 Q. (Reading): 15:37:48
25 "I understand that the terms 15:37:48

1 set forth in the patent claims in 15:37:49
2 an IPR are given their broadest 15:37:52
3 reasonable interpretation in light 15:37:53
4 of the specification as it would be 15:37:55
5 interpreted by a person of ordinary 15:37:57
6 skill in the art." 15:37:57
7 Right, Professor? 15:38:04
8 A. That's the first part of the first half 15:38:06
9 of that sentence, yes. 15:38:08
10 Q. And is that your understanding? 15:38:10
11 A. That is my understanding. 15:38:13
12 Q. And is that the interpretation you gave 15:38:15
13 to the terms in the patent claims in the '028 15:38:16
14 matter? 15:38:19
15 MR. RAFATIJO: Objection; form. 15:38:19
16 THE WITNESS: I applied the standard as 15:38:20
17 specified in the entire paragraph 93 and as 15:38:27
18 informed by what's written in paragraphs 94 and 95 15:38:32
19 in my analysis of the '028 Patent. 15:38:37
20 BY MR. BLUMENKOPF: 15:38:41
21 Q. So you applied this broadest reasonable 15:38:41
22 interpretation standard? 15:38:42
23 MR. RAFATIJO: Objection; form. 15:38:43
24 THE WITNESS: In light of the 15:38:46
25 specification as it would be understood and 15:38:47

1 interpreted by one of ordinary skill in the art, 15:38:50
2 and also in light of the prosecution history, and 15:38:53
3 as informed by the fact that the board -- the PTAB 15:39:00
4 in this case -- determined that no express claim 15:39:02
5 construction was necessary for any of the claim 15:39:04
6 terms. 15:39:06
7 BY MR. BLUMENKOPF: 15:39:07
8 Q. Do you agree with the board that no 15:39:15
9 express claim construction was necessary? 15:39:15
10 MR. RAFATIJO: Objection; form. 15:39:15
11 THE WITNESS: In my understanding, it's 15:39:16
12 not for me to agree or disagree. I am to abide by 15:39:18
13 what was provided, or in this case, not provided. 15:39:22
14 And I abided by it. 15:39:25
15 If the PTAB had chosen to construe a 15:39:30
16 term, I would have used the construction -- or one 15:39:34
17 or more terms, I would have used those 15:39:36
18 constructions in my analysis. 15:39:38
19 I -- again, in my understanding of what 15:39:40
20 I'm asked to and supposed to do in a case like 15:39:43
21 this, it's not arbitrary. I am expected to respect 15:39:46
22 the -- the parameters of the case. 15:39:58
23 And in this case, specifically the -- 15:39:59
24 any constructions of the claims, I would -- I would 15:40:05
25 have had to apply those. 15:40:07

1 BY MR. BLUMENKOPF: 15:40:18
2 Q. Okay. Let's take a look at paragraph 18 15:40:19
3 in your declaration. 15:40:24
4 A. Okay. 15:40:28
5 Q. Here, it says: 15:40:29
6 "I co-authored 'Software 15:40:30
7 Architecture: Foundations, Theory, 15:40:32
8 and Practice,' a widely used 15:40:33
9 textbook in the field of software 15:40:37
10 systems architecture." 15:40:40
11 A. Correct. 15:40:41
12 Q. That's Exhibit 1018 that we discussed 15:40:41
13 earlier; right? 15:40:43
14 MR. RAFATIJO: Objection; form. 15:40:44
15 THE WITNESS: That is a reprint of that 15:40:45
16 exhibit for another region in the world that I was 15:40:50
17 unfamiliar with, but the excerpts that we discussed 15:40:54
18 seem to match what is in the original edition 15:41:00
19 that -- the one that I am familiar with. 15:41:02
20 BY MR. BLUMENKOPF: 15:41:06
21 Q. And you have this included in your 15:41:06
22 declaration under a section called 15:41:08
23 "Qualifications"; right? 15:41:10
24 I see that on page three. 15:41:11
25 A. Yes. 15:41:16

1 Q. Okay. So you believed your authorship 15:41:16
2 of that textbook to be one of your qualifications 15:41:19
3 for opining on the validity of the '028 Patent? 15:41:21
4 A. Well, it's -- it is part of my 15:41:33
5 background, things that I have accomplished and 15:41:34
6 things that demonstrate my knowledge and expertise. 15:41:36
7 So it is -- given that, right, in this 15:41:38
8 particular case I'm opining on that specific 15:41:42
9 patent, it would be relevant to that patent. 15:41:45
10 Excuse me. 15:41:55
11 Q. I'd like you to turn to paragraph 61 in 15:42:04
12 your declaration. 15:42:08
13 A. Okay. 15:42:21
14 Q. And paragraph 61 is referring to claim 15:42:22
15 three; right? From the '028 Patent? 15:42:24
16 A. That is correct. 15:42:28
17 Q. And specifically, it's referring to the 15:42:30
18 claim language: 15:42:33
19 "The game application displays 15:42:35
20 branded business-related content"? 15:42:36
21 A. Yes. That's what list -- what's listed 15:42:53
22 up in the section subheading. 15:42:53
23 Q. And in paragraph 61, it says: 15:42:53
24 "A person of ordinary skill in 15:42:54
25 the art would appreciate that, 15:42:56

1 quote, a game application 15:42:58
2 displaying branded business-related 15:42:59
3 content, end quote, must 15:43:01
4 necessarily mean differently than, 15:43:03
5 quote, integrating business-related 15:43:06
6 content into the game application," 15:43:08
7 end quote. 15:43:08
8 Right? 15:43:12
9 A. That's what it says. 15:43:12
10 Q. Then when you said those two terms must 15:43:15
11 necessarily mean differently, did you mean that 15:43:18
12 they're -- if you imagine a Venn diagram, how would 15:43:21
13 you describe a Venn diagram of those two terms? 15:43:24
14 MR. RAFATIJO: Objection; form. 15:43:27
15 THE WITNESS: I would not. Those are 15:43:28
16 not terms. Those are limitations of a claim. And 15:43:30
17 I would not draw a Venn diagram with claim 15:43:37
18 limitations. 15:43:42
19 But displaying branded business-related 15:43:42
20 content by a game application is different than 15:43:49
21 integrating it into the game application because, 15:43:55
22 as I already said, in this paragraph, claim three 15:43:58
23 would essentially mean the same thing as claim one, 15:44:02
24 in which case it would be redundant and it would 15:44:07
25 not be a separate part of the invention. 15:44:10

1 BY MR. BLUMENKOPF: 15:44:17
2 Q. So is it your position that if something 15:44:17
3 meets the limitation integrating business-related 15:44:19
4 content into the game application, 15:44:22
5 [unintelligible] -- 15:44:26
6 THE COURT REPORTER: I'm sorry. It 15:44:26
7 what? 15:44:27
8 I can read it. 15:44:39
9 (The record was read as follows: 15:44:39
10 Q. So is it your position that if 15:44:17
11 something meets the limitation 15:44:18
12 integrating business-related 15:44:20
13 content into the --) 15:44:22
14 THE COURT REPORTER: That's where I lost 15:44:22
15 it. 15:44:40
16 BY MR. BLUMENKOPF: 15:44:40
17 Q. Lets -- let me ask a different question. 15:44:42
18 So can -- can the same -- the same 15:44:44
19 element meet both of these limitations? 15:44:47
20 MR. RAFATIJO: Objection; form. 15:44:52
21 THE WITNESS: The same element of what? 15:44:52
22 I'm sorry. 15:44:53
23 BY MR. BLUMENKOPF: 15:44:54
24 Q. Of an accused product or a reference or 15:44:54
25 if we're -- if we're considering whether something 15:44:56

1 meets claim one or claim three? 15:44:59
2 MR. RAFATIJO: Objection; form. 15:45:02
3 THE WITNESS: I mean, a product could be 15:45:11
4 very, very broad and have lots of different parts 15:45:11
5 to it. So sure. A product -- just generally 15:45:11
6 speaking, a given product may meet more than one 15:45:13
7 limitation of a claim. 15:45:16
8 So since we talked about it before 15:45:20
9 lunch, "World of Warcraft" is a product sold by 15:45:23
10 Activision Blizzard, and it meets multiple 15:45:27
11 different elements of the asserted claims in the 15:45:31
12 case that I testified in that we mentioned before. 15:45:35
13 I don't think that that's necessarily a 15:45:42
14 surprising finding. So -- yeah. I'll just leave 15:45:43
15 it at that. 15:45:51
16 I mean, these things are different. 15:45:51
17 Claim three would've been struck if it taught the 15:45:53
18 same thing that's already taught in claim one. 15:45:56
19 But can one product meet both claims one 15:45:58
20 and three? That's possible. 15:46:00
21 BY MR. BLUMENKOPF: 15:46:09
22 Q. So as part of your analysis, you 15:46:09
23 considered whether the Angles reference meets the 15:46:09
24 claims of the '028 matter; right? 15:46:09
25 A. I did. 15:46:12

1 Q. And as part of your analysis, did you 15:46:15
2 consider whether the same element in Angles could 15:46:17
3 meet both of these limitations? 15:46:21
4 MR. RAFATIJO: Objection; form. 15:46:22
5 THE WITNESS: What element in Angles 15:46:24
6 would that be, though? 15:46:27
7 My -- the whole point of my analysis is 15:46:29
8 that Angles does not meet the -- what is taught in 15:46:31
9 the claims of '028. 15:46:35
10 So can we talk about a specific element 15:46:38
11 of Angles, and I'm happy to consider it. 15:46:41
12 BY MR. BLUMENKOPF: 15:46:42
13 Q. I'm talking about your process in 15:46:43
14 reaching that conclusion. 15:46:44
15 You considered whether Angles met these 15:46:45
16 two claim limitations; right? 15:46:47
17 A. Specifically, when you say "two claim 15:46:58
18 limitations," it's the -- the one from claim one 15:46:58
19 and then the limitation cited here from claim 15:46:58
20 three. 15:47:02
21 Q. That's right. 15:47:02
22 A. I did. 15:47:03
23 Q. And you also considered the Robinson 15:47:07
24 reference; right? 15:47:13
25 THE COURT REPORTER: "Also considered 15:47:13

1 the Robinson" -- 15:47:14
2 BY MR. BLUMENKOPF: 15:47:16
3 Q. Also considered the Robinson reference? 15:47:16
4 A. Yes. I believe that was ground two in 15:47:19
5 my -- referred to as ground two in my report. 15:47:20
6 Let me just double check to -- yes. 15:47:22
7 Ground two on page two. 15:47:25
8 Q. Let's turn to paragraph 67. 15:47:35
9 A. Okay. 15:47:44
10 Q. And this is re erring to the language 15:47:45
11 from claim four: 15:47:46
12 "Said branded business-related 15:47:48
13 content is dynamically updated." 15:47:50
14 Right? 15:47:52
15 A. Yes. 15:47:53
16 Q. Okay. And it says the illustration 15:48:02
17 below was created by you from images you found in 15:48:02
18 the public domain; right? 15:48:02
19 A. Correct. 15:48:03
20 Q. And here we see two images of what looks 15:48:07
21 like a Honda Civic. 15:48:09
22 Is that right? 15:48:12
23 A. That is correct. 15:48:12
24 Q. And you say: 15:48:13
25 "This illustrates an example 15:48:14

1 where the branded business-related 15:48:15
2 content is dynamically updated 15:48:18
3 within the meaning of the '028 15:48:20
4 Patent." 15:48:20
5 Right? 15:48:23
6 A. Yes. 15:48:23
7 Q. Now, when you -- when you said that, did 15:48:23
8 you mean that the -- that the change from the image 15:48:25
9 on the left, which looks like a front view of the 15:48:28
10 Civic, to the image on the right, which looks like 15:48:31
11 a rear view of the Civic, do you mean that the -- 15:48:33
12 the transition between those two static images is 15:48:35
13 an example of the branded business-related content 15:48:38
14 being dynamically updated? 15:48:42
15 A. That would be one way and that would 15:48:46
16 suffice. There could be other ways. There could 15:48:48
17 be a series of intermediate steps in an actual 15:48:51
18 execution. But I couldn't show that, obviously, in 15:48:54
19 a declaration. 15:49:04
20 So these would be either two bookends of 15:49:04
21 multiple intermediate steps of this content being 15:49:06
22 dynamically updated or it could just be a switch 15:49:09
23 from one to the other. 15:49:12
24 In both cases, it would satisfy the -- 15:49:13
25 the requirement of the limitation, the language of 15:49:16

1 the limitation. 15:49:20
2 Q. Okay. So when you -- when you reached 15:49:20
3 that conclusion that this would meet that 15:49:22
4 limitation, what test are you applying? 15:49:24
5 Let -- let me rephrase. 15:49:27
6 What test did you apply in your analysis 15:49:28
7 to reach that conclusion? 15:49:30
8 MR. RAFATIJO: Objection; form. 15:49:32
9 THE WITNESS: When you say what -- what 15:49:33
10 test did I -- 15:49:36
11 BY MR. BLUMENKOPF: 15:49:37
12 Q. Let -- let -- let me ask you a different 15:49:37
13 question. 15:49:39
14 If I gave you two images, how would you 15:49:39
15 determine whether those two images represent 15:49:42
16 dynamically updated claim four? 15:49:46
17 A. Well, they would have to be done within 15:49:48
18 the context of the -- the game. So given that 15:49:50
19 claim four goes back to claim three, which goes 15:49:57
20 back to claim one, all of the different elements 15:50:02
21 would have to be present. 15:50:05
22 So you can't just give me two images. I 15:50:06
23 would need -- I would need to know the context. 15:50:08
24 Here, I'm just using this as an 15:50:10
25 illustration because I'm trying to demonstrate the 15:50:12

1 difference between what the pat- -- patent actually 15:50:14
2 requires and what Mr. Crane uses as his read of 15:50:22
3 what that means in his declaration. 15:50:29
4 So this is just done specifically in the 15:50:32
5 context of that discussion. 15:50:34
6 If you and I were just to meet randomly 15:50:38
7 and you show me two images or I show you two 15:50:40
8 images, I don't think we could draw very many 15:50:43
9 conclusions from that. 15:50:46
10 There would need to be more context 15:50:47
11 provided there. 15:50:49
12 Q. So for these two images shown here in 15:50:49
13 paragraph 67, they both have -- have the same 15:50:53
14 brand; right? 15:50:56
15 A. That is correct. That's the same brand. 15:50:56
16 It's Honda. 15:50:58
17 Q. And they're both the same product too; 15:50:59
18 right? 15:51:03
19 A. Yes. They're -- presumably, it's the 15:51:03
20 same car. 15:51:06
21 Q. So what if -- what if one 15:51:07
22 [unintelligible] -- 15:51:11
23 THE COURT REPORTER: I'm sorry. 15:51:11
24 "What if one" -- 15:51:12
25 / / /

1 BY MR. BLUMENKOPF: 15:51:13
2 Q. What if one of these two images was a 15:51:13
3 Honda Civic and what if the other image was a Honda 15:51:15
4 Accord, for example? Would that still meet the 15:51:19
5 limitation of claim four? 15:51:21
6 A. That would depend on context. It may, 15:51:34
7 because all that limitation of claim three, which 15:51:36
8 four depends on, says is that the game application 15:51:39
9 displays branded business-related content to said 15:51:42
10 user. 15:51:46
11 And Honda may be displaying to the user 15:51:46
12 their lineup of -- of different sedans, for 15:51:51
13 example. So that would still potentially meet. 15:51:55
14 We would just need to know more about -- 15:51:58
15 more details of the scenario, but it is -- it is a 15:52:00
16 qualified yes in this case. 15:52:06
17 Q. I'm asking specifically about this one 15:52:07
18 limitation from claim four. 15:52:09
19 This is the -- the said branded 15:52:10
20 business-related content is dynamically updated 15:52:13
21 limitation. 15:52:17
22 I just want to focus on that limitation 15:52:17
23 for now. And if we had the situation I described 15:52:19
24 where instead of a Civic and a Civic, it's now a 15:52:23
25 Honda Civic and a Honda Accord, would that meet 15:52:24

1 that limitation from claim four? 15:52:27
2 MR. RAFATIJO: Objection; form. 15:52:29
3 THE WITNESS: Well, we can't read four 15:52:30
4 in isolation. 15:52:33
5 I understand that you're asking about 15:52:34
6 dynamic updating, and I am answering with respect 15:52:36
7 to dynamic updating. But branded business-related 15:52:38
8 content is something that's introduced in claim 15:52:41
9 three, which is why I was including it there. 15:52:44
10 And then business related content is 15:52:49
11 something that's introduced in claim one. So one 15:52:51
12 would have to keep the broader context in mind. 15:52:53
13 Having said all that, if we had a 15:52:57
14 scenario where -- 15:53:00
15 THE COURT REPORTER: Would you slow 15:53:01
16 down? 15:53:02
17 THE WITNESS: Yes. Thank you. 15:53:03
18 If we had a scenario where Honda chose 15:53:04
19 to display its selection of, let's say, four-door 15:53:08
20 sedans to a user, the content is business-related 15:53:15
21 content and it's branded by Honda, who is the 15:53:20
22 provider of that content. 15:53:26
23 So there is a scenario where I can 15:53:27
24 definitely see that satisfying the limitation 15:53:35
25 expressed in claim four. 15:53:37

1 The reason why I am saying I can see a 15:53:44
2 scenario where that is satisfied is because it is 15:53:46
3 an incomplete scenario. 15:53:51
4 Both your question and then the scenario 15:53:54
5 I gave you in response is incomplete because we 15:53:57
6 would have to nail down a bunch of different things 15:54:00
7 to really make a full determination. 15:54:03
8 But is it possible? The answer is yes. 15:54:05
9 BY MR. BLUMENKOPF: 15:54:08
10 Q. Again, I'm only asking about that one 15:54:08
11 limitation from claim four. I realize there are 15:54:11
12 other limitations. I'm not asking about those. 15:54:13
13 A. It's the same answer because we cannot 15:54:16
14 read the limitation from claim four without 15:54:18
15 understanding where it comes from, because it 15:54:21
16 said -- it states: 15:54:25
17 "Said branded business-related 15:54:26
18 content is dynamically updated." 15:54:28
19 So clearly, the notion of the branded 15:54:31
20 business-related content is introduced elsewhere; 15:54:33
21 in this case, in claim three. And then in claim 15:54:39
22 three, it talks about said game application. 15:54:41
23 So one has to consider the context of 15:54:46
24 claim one. 15:54:48
25 So it would be -- in my view, it would 15:54:48

1 be inappropriate to just look at claim four without 15:54:51
2 considering the bigger picture, because claim four 15:54:55
3 by itself cannot be infringed unless three and one 15:54:58
4 are infringed. 15:55:01
5 Q. Well, suppose they had that bigger 15:55:02
6 picture you're talking about. How would you 15:55:04
7 conclude whether this limitation from claim four is 15:55:05
8 met by two images? 15:55:08
9 MR. RAFATIJO: Objection; form. 15:55:17
10 THE WITNESS: I you just showed me two 15:55:17
11 images and you asked me: Is this claim limitation 15:55:18
12 met? 15:55:22
13 BY MR. BLUMENKOPF: 15:55:22
14 Q. How would you determine that? 15:55:22
15 A. You would have to provide more 15:55:23
16 information: Where the two images are coming from, 15:55:25
17 how they're used in the game, et cetera. 15:55:26
18 So for me, thankfully, I had Mr. Crane's 15:55:29
19 declaration and his assessment of what he considers 15:55:33
20 dynamically updated, so I could build on that and 15:55:37
21 demonstrate why he's wrong. 15:55:41
22 But if I just included two screenshots 15:55:43
23 of a -- of a Honda Civic in my declaration, I think 15:55:48
24 you would be right to come to me and say I can't 15:55:54
25 conclude anything from this without further 15:55:59

1 information. 15:56:00
2 Well, that further information is 15:56:00
3 present in the three claims of '028 that are 15:56:03
4 relevant here in my declaration, as well as 15:56:12
5 Mr. Crane's declaration. 15:56:16
6 So in -- in their totality, they explain 15:56:16
7 what is actually going on here. 15:56:18
8 Q. So you said in your report you found 15:56:19
9 these images from the public domain; right? 15:56:22
10 A. I did. 15:56:24
11 Q. Where specifically did you find them? 15:56:24
12 A. Just Google Image Search. 15:56:29
13 Q. So they had no context; right? 15:56:31
14 A. These images -- by definition, I wanted 15:56:37
15 images that have no context because I wanted to tie 15:56:39
16 them specifically to Mr. Crane's declaration and 15:56:42
17 why I'm convinced that he's wrong, because I also 15:56:45
18 included two other images that provide additional 15:56:49
19 context and additional illustration of why he's 15:56:53
20 wrong. 15:56:55
21 So yes, an image by itself pulled from 15:56:55
22 Google Images may not have context. But the way 15:57:00
23 it's used in my declar- -- declaration, it 15:57:03
24 absolutely has the proper context and it's fully -- 15:57:05
25 the explanation is fully self-contained. 15:57:10

1 Q. Self-contained in paragraph 67? 15:57:12
2 A. No. In my declaration. Paragraph 67 is 15:57:14
3 one of the paragraphs. I already, just a second 15:57:17
4 ago, referred to paragraph 68. 15:57:21
5 And, like, five seconds before that, I 15:57:23
6 referred to paragraph 69, where I explained why I 15:57:29
7 disagree with Mr. Crane's characterization. 15:57:31
8 And then there is, you know, a bunch of 15:57:35
9 other stuff that goes before and after the 15:57:37
10 paragraphs in question. 15:57:43
11 Q. Okay. Let's look at the next paragraph, 15:57:51
12 68. 15:57:53
13 And here, I see, again, you have two 15:57:57
14 images, again found in the public domain; right? 15:57:59
15 A. Correct. 15:58:02
16 Q. I see an image of a Honda Civic, and 15:58:02
17 that matches the -- the first image of the Honda 15:58:05
18 Civic from paragraph 67; right? 15:58:08
19 A. Correct. 15:58:09
20 Q. Then to the right, I see an image of a 15:58:10
21 Tesla; right? 15:58:12
22 A. Yes. 15:58:14
23 Q. And your conclusion is that the sequence 15:58:14
24 of static images is not dynamically updated? 15:58:17
25 MR. RAFATIJO: Objection; form. 15:58:27

1 THE WITNESS: Specifically, it is not -- 15:58:33
2 the branded business-related content is not 15:58:35
3 dynamically updated, because that is the 15:58:39
4 requirement in claim four. 15:58:41
5 BY MR. BLUMENKOPF: 15:58:45
6 Q. So the -- do both images represent 15:58:45
7 branded business-related content? 15:58:47
8 A. Based on what we see here, we can't 15:58:53
9 conclude that because they might also be car 15:58:56
10 aficionado's images. 15:59:03
11 So somebody who's a fan of -- of family 15:59:05
12 cars, for example, or I think the Tesla is -- this 15:59:12
13 looks like a two-door, perhaps. I can't tell. 15:59:15
14 But they might be -- they might be a fan 15:59:18
15 of four-door sedans. They might be looking to 15:59:21
16 demonstrate the difference between a blue car and a 15:59:24
17 white car. 15:59:29
18 There is no branded business-related 15:59:30
19 content at work here. 15:59:37
20 Q. So in both images, I see a -- I see a 15:59:39
21 logo. I see the Honda logo on the left image and I 15:59:42
22 see the Tesla logo on the right image. 15:59:45
23 Do you agree? 15:59:48
24 A. Yes. That's fair. 15:59:49
25 Q. So it's your position that even if a 15:59:50

1 company logo is displayed, that's not necessarily 15:59:55
2 branded business-related content? 15:59:57
3 MR. RAFATIJO: Objection; form. 15:59:59
4 THE WITNESS: Well, these are two very 15:59:59
5 different companies. One of them is Japanese and 16:00:01
6 the other one is owned by Elon Musk. 16:00:03
7 So it would not be -- I -- unless there 16:00:09
8 is a scenario that you're suggesting here that I am 16:00:11
9 not getting, this is not branded business-related 16:00:16
10 content. This is two cars from two different car 16:00:20
11 makers. 16:00:25
12 BY MR. BLUMENKOPF: 16:00:25
13 Q. Let's focus on just the image on the 16:00:26
14 left, the Honda Civic, and ignore the Tesla image 16:00:27
15 for the time being. 16:00:31
16 A. Okay. 16:00:32
17 Q. Does that image represent branded 16:00:32
18 business-related content? 16:00:36
19 A. It would depend on context. It would 16:00:37
20 have to match things that are taught in claims one, 16:00:41
21 three and four. But, in fact, it may. 16:00:44
22 The question here is does -- is not does 16:00:50
23 it represent branded business-related content, but 16:00:52
24 is that business-related content -- sorry -- is 16:00:55
25 that branded business-related content dynamically 16:00:58

1 updated. 16:01:01
2 That's what we're talking about here. 16:01:02
3 Q. What -- what I'm asking you about, 16:01:04
4 though, is the branded business-related content 16:01:05
5 part. 16:01:08
6 So sounds like if you have that Honda 16:01:08
7 Civic image, even though you can see the Honda 16:01:11
8 manufacturer's logo, that might be branded 16:01:14
9 business-related content or it might not, depending 16:01:16
10 on context. 16:01:19
11 Do I understand you there? 16:01:20
12 MR. RAFATIJO: Objection; form. 16:01:21
13 THE WITNESS: Well, in -- in order for 16:01:22
14 it to satisfy what's taught in the claims one, 16:01:24
15 three and four, it would have to be part of the 16:01:26
16 game application and it would have to -- give me 16:01:29
17 just a second. 16:01:35
18 It would have to involve automatically 16:01:49
19 integrated business-related content from at least 16:01:52
20 one of said web pages of -- 16:01:57
21 THE COURT REPORTER: I'm sorry. Can you 16:01:57
22 repeat that one more time? 16:01:58
23 THE WITNESS: Absolutely. 16:01:59
24 It would have to automatically integrate 16:02:00
25 business-related content from at least one of said 16:02:06

1 web pages of said secondary electronic device into 16:02:10
2 said locally executed game application, et cetera, 16:02:16
3 et cetera. 16:02:21
4 It would have to be actually 16:02:22
5 business-related content, which is what claim three 16:02:28
6 teaches. And then claim four talks about 16:02:30
7 dynamically updated. 16:02:34
8 But if we're just asking is this branded 16:02:35
9 business-related content, claims one and three 16:02:41
10 would have to be satisfied. 16:02:43
11 So we can't just show an image and say 16:02:44
12 does this meet the limitations of those two claims. 16:02:47
13 We would have to figure out where it's represented, 16:02:54
14 how it's shown, et cetera. 16:02:57
15 If -- if it meets the elements of one 16:02:58
16 and three, then it is branded business-related 16:03:01
17 content. 16:03:04
18 BY MR. BLUMENKOPF: 16:03:04
19 Q. I'm only asking about one specific 16:03:05
20 element, and that's the business-related content 16:03:07
21 element. 16:03:09
22 I understand there are additional claim 16:03:09
23 limitations, but I want you to ocus on just that 16:03:11
24 one element. 16:03:14
25 A. I -- I think the question you're asking 16:03:16

1 is not an appropriate question here because this 16:03:19
2 is -- branded business-related content is displayed 16:03:26
3 by said game application. 16:03:27
4 So in order for us to understand whether 16:03:30
5 it's actually branded business-related content, we 16:03:31
6 have to understand what actually happens in said 16:03:35
7 application and how, to begin with, 16:03:43
8 business-related content is dealt with by that 16:03:46
9 application. 16:03:55
10 So first it has to be business-related 16:03:55
11 content. It has to meet the elements of claim one. 16:03:55
12 And then it has to be actually branded 16:03:56
13 business-related content, which makes it meet the 16:04:01
14 elements -- or, rather, the claim, dependent claim 16:04:03
15 three. 16:04:08
16 So we can't just pick one term and 16:04:08
17 completely divorce it from its context in this -- 16:04:12
18 in the invention. I don't think that's 16:04:16
19 appropriate. 16:04:18
20 Q. It's -- it's a yes or no question, 16:04:18
21 Professor. That [unintelligible] -- 16:04:20
22 THE COURT REPORTER: What was that? 16:04:22
23 BY MR. BLUMENKOPF: 16:04:23
24 Q. It's a yes or no question. 16:04:23
25 Is that image on the left branded 16:04:24

1 business-related content or is it not? 16:04:26
2 A. Well, I guess you and I are going to 16:04:30
3 have to disagree because I -- in fact, I vehemently 16:04:32
4 disagree that it's a yes or no question. 16:04:35
5 If somebody were to answer that question 16:04:37
6 with a yes or no without considering the language 16:04:39
7 of claims one and three, that person would be 16:04:44
8 foolhardy. 16:04:48
9 And I will not answer it without 16:04:49
10 considering the language of those claims because 16:04:51
11 that language exists in the context of both those 16:04:53
12 claims. 16:04:56
13 Q. So just to be clear, so given that 16:05:03
14 image, you have no way of answering whether or not 16:05:05
15 it is branded business-related content? 16:05:07
16 A. Given that image in the context in which 16:05:09
17 I'm using it in my declaration, it is branded 16:05:11
18 business-related content. 16:05:15
19 That image just shown up on a random 16:05:15
20 Google Image Search page, we can't tell one way or 16:05:19
21 the other. It probably would not be, in fact, 16:05:22
22 because there would be no game application. It's 16:05:25
23 Google Image Search. 16:05:28
24 So in the context of my declaration, 16:05:29
25 yes, it is branded business-related content. And 16:05:32

1 the whole point there is that in the context of 16:05:35
2 paragraph 68, we do not have dynamically updated 16:05:39
3 branded business-related content because the other 16:05:45
4 image is a Tesla, not a Honda. 16:05:48
5 Q. Just to make sure I understand, so just 16:05:50
6 given a -- an image in the abstract, there's not 16:05:52
7 enough information for you to conclude whether 16:05:56
8 that's branded business-related content. 16:05:57
9 You would need more information than 16:05:59
10 that; right? 16:06:00
11 A. If you just showed me a photo of a car, 16:06:02
12 for example, I don't think that we could conclude 16:06:07
13 one way or the other because we would not know the 16:06:11
14 context within which that photo may or may not 16:06:14
15 exist. 16:06:18
16 And as I already said, the proper 16:06:20
17 analysis of claim three must also include an 16:06:22
18 analysis of the limitations of claim one, because 16:06:28
19 claim three depends on claim one. 16:06:33
20 Q. Okay. Last question on this. Then I 16:06:34
21 want to move on. 16:06:34
22 Just to be clear -- 16:06:37
23 THE COURT REPORTER: I'm sorry. Can you 16:06:37
24 slow down for me? 16:06:38
25 MR. BLUMENKOPF: Yes. 16:06:38

1 BY MR. BLUMENKOPF: 16:06:39
2 Q. One last question on this and then I 16:06:39
3 want to move on. 16:06:41
4 Just to be clear, none of this is 16:06:42
5 specific to cars; right? You picked cars as a 16:06:43
6 representative example, but it's -- your analysis 16:06:45
7 is not limited to -- 16:06:47
8 (Unreportable cross-talk.) 16:06:48
9 THE WITNESS: Any kind of branded 16:06:48
10 business-related content that satisfies the 16:06:52
11 language of claims four, three and one would 16:07:03
12 qualify in my analysis and my reasons behind the 16:07:03
13 argument why Mr. Crane is wrong would remain the 16:07:11
14 same, as long as it satisfies the requirements and 16:07:15
15 the limitations of the '028 Patent. 16:07:19
16 Q. Okay. Let me ask you about the next 16:07:23
17 paragraph, 69. 16:07:25
18 So you indicate here you -- you disagree 16:07:26
19 that dynamically updated in the claim is as simple 16:07:29
20 as it changes over time; right? 16:07:32
21 A. That's the -- the first sentence there, 16:07:37
22 and it's specifically in the context of claim four. 16:07:39
23 Q. And you indicate later in that paragraph 16:07:42
24 changes over time would inappropriately broaden the 16:07:50
25 definition of dynamically updated. 16:07:53

1 Is that right? 16:07:55
2 A. In the context in which Mr. Crane is 16:08:16
3 trying to use it and apply it to claim four, yes, 16:08:16
4 he is incorrect and this would be inappropriate. 16:08:17
5 Or it is inappropriate. 16:08:19
6 Q. And you -- you cite some language from 16:08:21
7 the '028 Patent here, where you say that: 16:08:24
8 "Dynamic content is constantly 16:08:26
9 being updated through the use of 16:08:28
10 scripts, Java applets, ActiveX 16:08:30
11 objects" -- 16:08:33
12 THE COURT REPORTER: What was that one? 16:08:33
13 MR. BLUMENKOPF: (Reading): 16:08:35
14 "Scripts, Java applets, 16:08:36
15 ActiveX objects or other similar 16:08:39
16 mechanisms." 16:08:41
17 BY MR. BLUMENKOPF: 16:08:43
18 Q. You quoted those examples from the '028 16:08:43
19 specification; right? 16:08:46
20 A. I see that. 16:08:47
21 Q. And you -- you say later in the 16:08:48
22 paragraph: 16:08:50
23 "The person of ordinary skill 16:08:50
24 in the art would recognize that the 16:08:53
25 '028 Patent teaches dynamically 16:08:54

1 updating as doing so in a manner 16:08:56
2 similar to the methods enumerated 16:08:59
3 in the specification." 16:09:00
4 Right? 16:09:01
5 A. Yes. 16:09:05
6 Q. And when you said "the methods 16:09:06
7 enumerated in the specification," you were talking 16:09:08
8 about those scripts, Java applets, ActiveX objects, 16:09:10
9 and similar mechanisms; right? 16:09:13
10 MR. RAFATIJO: Objection; form. 16:09:15
11 THE WITNESS: Those are some examples. 16:09:16
12 Yes, those are some examples. There -- there are 16:09:22
13 other methods discussed in the specification. 16:09:24
14 BY MR. BLUMENKOPF: 16:09:27
15 Q. So you'd agree that dynamically updated 16:09:27
16 in the claims is not limited to those specific 16:09:30
17 examples; right? 16:09:32
18 MR. RAFATIJO: Objection; form. 16:09:37
19 THE WITNESS: Well, it says "other 16:09:37
20 similar mechanisms" in the very language that I 16:09:37
21 cited there. 16:09:41
22 So those are examples. But then others 16:09:42
23 are inherently included by using that -- by -- by 16:09:46
24 including that "or other similar mechanisms" 16:09:51
25 clause. 16:09:54

1 BY MR. BLUMENKOPF: 16:09:54
2 Q. So has to be a script, a Java applet, an 16:09:54
3 ActiveX object, or a similar mechanism? 16:09:57
4 Is that your position? 16:09:59
5 MR. RAFATIJO: Objection; form. 16:10:05
6 THE WITNESS: My position is that it has 16:10:05
7 to be done in the manner that is taught by the '028 16:10:08
8 Patent. And these are some examples that '028 16:10:12
9 discusses. And they are -- or rather, Mr. Crane's 16:10:15
10 declaration is at odds with what '028 teaches. 16:10:20
11 That's -- that is my position. 16:10:24
12 BY MR. BLUMENKOPF: 16:10:36
13 Q. Let me ask you again. 16:10:36
14 Is the '028 Patent limited to generating 16:10:36
15 dynamic content through the use of scripts, Java 16:10:38
16 applets, ActiveX objects, or other similar 16:10:42
17 mechanisms? 16:10:45
18 MR. RAFATIJO: Objection; form. 16:10:46
19 BY MR. BLUMENKOPF: 16:10:46
20 Q. Or does it encompass other ways of 16:10:47
21 generating dynamic content? 16:10:49
22 MR. RAFATIJO: Same objection. 16:10:51
23 THE WITNESS: There -- there is a bunch 16:11:22
24 of different stuff discussed in that section of the 16:11:23
25 patent alone. 16:11:28

1 It talks about that: 16:11:31
2 "The content may be in the 16:11:33
3 form of static web pages. 16:11:34
4 Alternatively, the content may be 16:11:37
5 in the form of web pages, including 16:11:38
6 dynamic content, which is 16:11:41
7 constantly being updated through 16:11:43
8 the use of scripts, Java applets, 16:11:45
9 ActiveX objects, or other similar 16:11:49
10 mechanisms. 16:11:52
11 "An example of this is the 16:11:54
12 display of a news crawl from a 16:11:55
13 sponsoring" -- 16:12:00
14 THE COURT REPORTER: Excuse me. 16:12:00
15 "A news" -- 16:12:02
16 THE WITNESS: Crawl, C-R-A-W-L. 16:12:03
17 -- "from a sponsoring news 16:12:04
18 channel. Alternatively, the 16:12:07
19 dynamic content may include 16:12:08
20 real-life weather data for the 16:12:10
21 geographic area the player is 16:12:11
22 virtually experiencing in the game. 16:12:15
23 "Network-accessible databases 16:12:19
24 of current weather reports, 16:12:20
25 currency valuations, current 16:12:24

1 events, airline schedules, and 16:12:27
2 similar subjects may be used to 16:12:29
3 provide this information. The 16:12:31
4 content to which the game player is 16:12:33
5 exposed may include video and audio 16:12:35
6 data." 16:12:39
7 And then it clarifies: 16:12:39
8 "The exposure of the player to 16:12:40
9 this data occurs in the context of 16:12:42
10 the game." 16:12:46
11 Which is what I was referring to, back 16:12:46
12 to claim one. So there are a bunch of things 16:12:54
13 disclosed just in that one part of the -- of the 16:12:57
14 patent specification that go beyond the short blurb 16:13:06
15 that I cited in my declaration. 16:13:06
16 Again, the point here is the dynamic 16:13:07
17 content may take a range of different forms, but 16:13:11
18 that Mr. Crane misreads and mischaracterizes what 16:13:16
19 the patent actually teaches. 16:13:19
20 BY MR. BLUMENKOPF: 16:13:26
21 Q. Okay. Let me ask you about paragraph 74 16:13:26
22 from your declaration. 16:13:29
23 And paragraph 74 is re erring to claim 16:13:39
24 five; right? 16:13:41
25 A. Correct. 16:13:42

1 Q. And in particular, it's referring to the 16:13:42
2 limitation: 16:13:44
3 "Executing game-related user 16:13:45
4 reactions in said game application 16:13:47
5 as a result of user choices." 16:13:49
6 Right? 16:13:52
7 A. Yes. 16:13:52
8 Q. Okay. And now, in paragraph 74, you 16:13:54
9 said: 16:13:56
10 "A person of ordinary skill in 16:13:57
11 the art would understand that this 16:14:01
12 limitation is distinct from and 16:14:02
13 covers a different scope than 16:14:03
14 limitation 1-E." 16:14:05
15 THE COURT REPORTER: 1 -- limitation 16:14:07
16 1-E? 16:14:09
17 MR. BLUMENKOPF: 1-E. That's right. 16:14:09
18 THE WITNESS: Okay. 16:15:08
19 BY MR. BLUMENKOPF: 16:15:08
20 Q. But -- 16:15:08
21 A. I -- 16:15:08
22 Q. -- is that right? 16:15:08
23 A. I'm sorry. I wasn't sure 16:15:08
24 (Unreportable cross-talk.) 16:15:08
25 / / /

1 BY MR. BLUMENKOPF: 16:15:11
2 Q. Okay -- 16:15:11
3 A. -- wasn't sure whether there was a -- a 16:15:12
4 pending question. 16:15:12
5 Q. No. 16:15:12
6 And just to be clear, so limitation 1-E 16:14:05
7 is executing a user action on said business-related 16:15:16
8 content from said secondary electronic device; 16:15:20
9 right? 16:15:40
10 A. Correct. 16:15:40
11 Q. Okay. And you said in paragraph 74: 16:15:40
12 "Limitation 1-E covers any 16:15:45
13 user action, game-related or not, 16:15:48
14 executed on business-related 16:15:50
15 content." 16:15:52
16 Right? 16:15:52
17 A. That is what 1-E states. 16:16:05
18 Q. Well, it's what you said in paragraph 16:16:07
19 74, though; right? 16:16:09
20 A. Correct. But that's also exactly what 16:16:10
21 you just read from the -- from claim one, element 16:16:12
22 E, in '028. That's literally what it says. 16:16:15
23 It says: 16:16:19
24 "Executing the user action on 16:16:21
25 said business-related content." 16:16:22

1 Q. I'm just clarifying you -- you agree 16:16:24
2 with that. 16:16:26
3 A. That's what -- what my statement here 16:16:36
4 says. I don't -- 16:16:36
5 Q. All right. 16:16:36
6 A. -- see any reason to disagree with it. 16:16:36
7 Q. And then the paragraph then says: 16:16:36
8 "And thus, this limitation" -- 16:16:37
9 Referring to the limitation from claim 16:16:38
10 five, the executing game-related user actions 16:16:39
11 limitation: 16:16:43
12 -- "only addresses 16:16:43
13 game-related user actions that are 16:16:45
14 not" -- 16:16:47
15 THE COURT REPORTER: What? Can you slow 16:16:47
16 down? 16:16:48
17 (The record was read as follows: 16:16:48
18 Q. Claim five, the executing 16:16:39
19 game-related user actions had 16:16:41
20 limitation only addresses 16:16:43
21 game-related user --) 16:16:45
22 BY MR. BLUMENKOPF: 16:17:02
23 Q. Let -- let me ask a different question. 16:17:02
24 Okay? 16:17:05
25 So -- so this is discussing claim five; 16:17:05

1 right? 16:17:07
2 A. Yes. 16:17:07
3 Q. And it's discussing the limitation of 16:17:07
4 claim five, executing game-related user actions and 16:17:08
5 said game application as a result of user choices; 16:17:13
6 right? 16:17:15
7 A. Yes. 16:17:15
8 Q. I'm going to call that "the claim five 16:17:16
9 limitation" for the purpose of this -- this 16:17:18
10 paragraph, just so we can communicate about it. 16:17:20
11 A. Sure. 16:17:26
12 Q. So your view is that user action 16:17:26
13 executed on business-related content is covered by 16:17:29
14 limitation 1-E, but game-related user actions that 16:17:33
15 are not executed on the business-related content 16:17:38
16 are covered by the claim five limitation; right? 16:17:41
17 MR. RAFATIJO: Objection; form. 16:17:46
18 THE WITNESS: Well, any user action, 16:17:56
19 game-related or not, executed on business-related 16:17:58
20 content is covered by 1-E. 16:18:00
21 So five, or what I'm calling 5(A), 16:18:03
22 addresses game-related user actions that are not 16:18:07
23 executed on business-related content of claim one. 16:18:09
24 So claim one covers -- sorry. 16:18:15
25 Claim 1-E, element E, covers user 16:18:17

1 actions executed on business-related content 16:18:21
2 whether they're game-related or not. 16:18:24
3 So to draw a distinction here, I am -- 16:18:26
4 I'm -- what I'm saying here is that user actions 16:18:29
5 not executed on the business-related content are 16:18:33
6 what is taught by 5-A. 16:18:37
7 BY MR. BLUMENKOPF: 16:18:42
8 Q. So to be clear, your view is that user 16:18:42
9 actions that are not executed could meet limitation 16:18:45
10 1-E, or it could also meet the claim five 16:18:49
11 limitation; right? 16:18:50
12 MR. RAFATIJO: Objection; form. 16:18:53
13 THE WITNESS: Sorry. What do you mean 16:18:53
14 by "user actions that are not executed"? 16:18:55
15 BY MR. BLUMENKOPF: 16:18:57
16 Q. I'm sorry. Let -- let -- let 16:18:57
17 me -- let me clarify it. Let me ask a different 16:18:59
18 question. 16:19:01
19 (Brief pause in the proceedings.) 16:19:01
20 BY MR. BLUMENKOPF: 16:19:01
21 Q. Okay. Sorry. I just want to make sure 16:19:33
22 I understand your paragraph here. 16:19:35
23 So any user actions executed on a 16:19:36
24 business-related content meets limitation 1-E; 16:19:40
25 right? 16:19:47

1 A. That's minus the parenthetical remark. 16:19:47
2 Q. Right. 16:19:50
3 A. That's what the first -- 16:19:50
4 Q. Right. 16:19:51
5 A. -- part of that sentence says. 16:19:51
6 Q. All right. And this limitation's only 16:19:53
7 for game-related user actions, the claim five 16:19:54
8 limitation? 16:19:57
9 A. Well, these are -- this is for 16:20:04
10 game-related actions that are not executed on the 16:20:06
11 business-related content of claim one. 16:20:08
12 If it's executed on the business-related 16:20:12
13 content, then that would be covered by claim one. 16:20:15
14 That's what this says. 16:20:17
15 Q. Can the same thing meet limitation 1-E 16:20:25
16 and also meet the claim five limitation? 16:20:28
17 MR. RAFATIJO: Objection; form. 16:20:30
18 THE WITNESS: What do you mean by "the 16:20:39
19 same thing"? 16:20:39
20 BY MR. BLUMENKOPF: 16:20:39
21 Q. The same user action? 16:20:39
22 MR. RAFATIJO: Same objection. 16:20:40
23 THE WITNESS: If the user action is 16:20:50
24 executed on business-related content, then it meets 16:20:52
25 claim one. 16:20:56

1 If you tried to patent claim five by 16:20:57
2 also having the same user action executed on 16:21:03
3 something that you're arguing now is not 16:21:08
4 business-related content, with high probability 16:21:11
5 that would be rejected by the patent examiner. 16:21:14
6 BY MR. BLUMENKOPF: 16:21:17
7 Q. I'm not asking about applying for a 16:21:18
8 patent. I'm not asking about getting a patent. 16:21:19
9 I'm asking about what would meet these 16:21:21
10 limitations. 16:21:25
11 A. Can you give me a specific example of 16:21:25
12 what you mean? Just kind of draw a picture for me 16:21:27
13 and I'll -- I'm happy to try to answer. 16:21:29
14 Q. Well, for example, you considered the 16:21:32
15 Angles reference in your analysis; right? 16:21:32
16 A. I did. 16:21:34
17 Q. Did you consider whether the same user 16:21:34
18 action in Angles could meet limitation 1-E and also 16:21:38
19 meet this limitation from claim five? 16:21:42
20 A. Again, to make it absolutely clear, 16:21:44
21 Angles doesn't meet any of this stuff. 16:21:47
22 So if you want me to look at either 16:21:50
23 figure nine or Figure 1 of Angles and walk through 16:21:51
24 how you think this could be met in Angles, I'm 16:21:55
25 happy to consider it. 16:21:57

1 But in my opinion, Angles, the way it 16:21:58
2 was presented in the complaint and the way that 16:22:01
3 Sony's expert, Mr. Crane, analyzed it in his 16:22:13
4 declaration, it does not meet either one of these 16:22:17
5 two claims. 16:22:19
6 So I think that the premise of your 16:22:20
7 question is flawed. 16:22:22
8 So if -- if you have a specific scenario 16:22:24
9 that you wanted me to consider, I'm happy to do 16:22:28
10 that. But saying that Angles somehow can meet 16:22:29
11 either one of these two is -- is simply not true. 16:22:32
12 Q. It sounds like you didn't specifically 16:22:34
13 consider that, then; right? 16:22:36
14 A. Of course -- 16:22:40
15 MR. RAFATIJO: Objection -- 16:22:40
16 THE WITNESS: -- I did. My -- my entire 16:22:41
17 declaration -- well, not the entire declaration. 16:22:43
18 But my declaration all the way through 16:22:45
19 wherever Robinson is -- so the first seventy-three 16:22:47
20 pages of my declaration are basically about why 16:22:55
21 Angles and arguing that Angles has anything to do 16:22:55
22 with the '028 Patent is wrong. 16:22:57
23 I have seventy-three pages worth of 16:22:59
24 arguments regarding that. 16:23:02
25 / / /

1 BY MR. BLUMENKOPF: 16:23:03
2 Q. I -- I didn't get an answer to my 16:23:03
3 question earlier as to whether the same thing can 16:23:04
4 meet limitation 1-E and also meet this limitation 16:23:07
5 of claim five. 16:23:10
6 MR. RAFATIJO: Objection; form. 16:23:11
7 BY MR. BLUMENKOPF: 16:23:12
8 Q. I'm not asking about a specific. 16:23:12
9 I think I'm asking whether it's 16:23:13
10 possible. 16:23:15
11 MR. RAFATIJO: Same objection. 16:23:15
12 THE WITNESS: Well, I am -- my answer 16:23:17
13 has to be the same. 16:23:19
14 You have to give me a scenario that you 16:23:20
15 think could pass the -- the smell test, so to 16:23:22
16 speak, by the patent examiner where you are 16:23:31
17 essentially exe- -- sorry -- you are inventing the 16:23:33
18 same thing and getting two claims from it. 16:23:36
19 I -- in my understanding of how that 16:23:38
20 works, that is not allowed. In other words, if 16:23:40
21 you -- 16:23:43
22 BY MR. BLUMENKOPF: 16:23:43
23 Q. I'm -- I'm -- I'm not talking about 16:23:44
24 obtaining claims. I'm not talking about patent 16:23:45
25 prosecution. 16:23:48

1 I'm asking if a user action can meet 16:23:49
2 both of these limitations. 16:23:51
3 MR. RAFATIJO: Counsel, may I ask, 16:23:52
4 please let him finish his answer. 16:23:54
5 Thank you. 16:23:56
6 THE WITNESS: So you're -- actually, 16:23:57
7 you're asking me very much about whether it would 16:23:58
8 pass the -- what I call the smell test with the 16:24:00
9 patent examiner, because what you're saying is can 16:24:02
10 the same thing satis y claim limitation 1 E and 16:24:05
11 satisfy a dependent claim that draws from claim 16:24:10
12 where limitation 1-E is described. 16:24:16
13 So in my understanding, that would be 16:24:21
14 enough to reject the dependent claim because that's 16:24:23
15 already invented by the independent claim, but I'm 16:24:27
16 happy to indulge you and answer the question if you 16:24:30
17 have a specific example that you'd like me to 16:24:33
18 consider. 16:24:35
19 I don't think this is possible, so the 16:24:35
20 answer is no unequivocally. But if there is an 16:24:37
21 example that you'd like me to consider, I -- I'm 16:24:42
22 happy -- because we might be talking past each 16:24:44
23 other because you've asked me the same question, 16:24:47
24 like, four times. 16:24:49
25 I'm happy to consider it if there is 16:24:50

1 something you have specifically in mind. 16:24:51
2 Otherwise, my answer is still no. 16:24:53
3 BY MR. BLUMENKOPF: 16:25:00
4 Q. Okay. We can move on. 16:25:00
5 A. Okay. 16:25:00
6 Q. So I'd like to ask you about paragraph 16:25:00
7 76. 16:25:03
8 A. Okay. 16:25:04
9 Q. And this is talking about claim five 16:25:04
10 again. And it's talking about the limitation that 16:25:07
11 says: 16:25:09
12 "Generating a player profile 16:25:10
13 based on said user choices made 16:25:11
14 during said game application." 16:25:14
15 Right? 16:25:18
16 A. Yes. 16:25:18
17 Q. And so your opinion here is that a 16:25:26
18 player profile is generated for the user, as 16:25:28
19 opposed to a user profile; right? 16:25:31
20 A. Yes. That's what I state in the latter 16:25:35
21 part of the first sentence of paragraph 76. 16:25:40
22 Q. What's the relationship between a player 16:25:43
23 profile and a user profile? 16:25:45
24 MR. RAFATIJO: Objection; form. 16:25:48
25 THE WITNESS: A user profile is the 16:25:55

1 profile of a user. 16:26:00
2 A player profile is the profile of 16:26:00
3 whatever the character the player assumes in a 16:26:01
4 given game. 16:26:05
5 BY MR. BLUMENKOPF: 16:26:08
6 Q. Okay. You also mentioned character 16:26:08
7 profiles in this paragraph; right? 16:26:10
8 (No audible response by the witness.) 16:26:10
9 BY MR. BLUMENKOPF: 16:26:10
10 Q. In fact, you cite language from the '028 16:26:23
11 Patent that specifically mentions character 16:26:49
12 profiles. 16:26:49
13 A. Yes. It says exactly what I just said a 16:26:49
14 second ago, just stated slightly differently. 16:26:49
15 "A player profile is tied to a 16:26:49
16 character representing the player, 16:26:49
17 not the actual individual playing 16:26:49
18 the game." 16:26:49
19 So a character representing me in a game 16:26:49
20 could be a dragon. 16:26:49
21 So the player profile would have to do 16:26:49
22 with that dragon, not to me as a human who is 16:26:50
23 actually playing the game. 16:26:50
24 Q. Is the player profile the same thing as 16:26:56
25 a character profile? 16:26:56

1 MR. RAFATIJO: Objection; form. 16:26:56
2 THE WITNESS: I don't believe that the 16:27:00
3 term "character profile" is used in the patent, but 16:27:01
4 if I'm wrong, maybe you could point me to where it 16:27:05
5 is actually used. 16:27:09
6 BY MR. BLUMENKOPF: 16:27:09
7 Q. Well, you use "character profiles" right 16:27:10
8 here in this paragraph; right? 16:27:12
9 A. I did not. Where did I use it? 16:27:20
10 Q. Well, I see it right here in 76. And 16:27:21
11 there's a parenthetical about Exhibit 1001, which 16:27:23
12 is the '028 Patent. 16:27:27
13 A. Okay. 16:27:28
14 Q. You see that? It says "character 16:27:28
15 profiles"? 16:27:31
16 A. Yes. And that's the profile tied to a 16:27:31
17 character representing the player. 16:27:34
18 Q. Okay. So is that a synonym for a player 16:27:38
19 profile? 16:27:42
20 The -- let me clarify. 16:27:45
21 Is -- is "character profile," as you use 16:27:46
22 it here, a synonym for "player profile"? 16:27:48
23 MR. RAFATIJO: Objection; form. 16:27:51
24 THE WITNESS: Given the language in 16:28:40
25 claim 5-B and what this language from the spec 16:28:41

1 states here, character profiles are at least 16:28:47
2 related to player profiles. 16:28:50
3 So a player profile is tied to a 16:28:52
4 character representing the player. And here it 16:28:54
5 says: 16:28:56
6 "Character profile tracks the 16:29:01
7 player's decisions during the 16:29:03
8 course of the game." 16:29:04
9 So the player profile of the claim 16:29:11
10 language is at least related to, if not the same 16:29:13
11 thing as character profile of this portion of the 16:29:16
12 spec. 16:29:18
13 BY MR. BLUMENKOPF: 16:29:21
14 Q. So the player profile or the character 16:29:21
15 profile are at least related is what you said; 16:29:22
16 right? 16:29:26
17 A. Yes. And I say so in my declaration. I 16:29:26
18 say a player profile is tied to a character 16:29:28
19 representing the player. 16:29:30
20 Q. So is "player profile" a synonym for 16:29:31
21 "character profile"? 16:29:34
22 MR. RAFATIJO: Objection; form. 16:29:35
23 THE WITNESS: I already answered that 16:29:37
24 question. 16:29:38
25 They're at least related based on what's 16:29:38

1 provided in claim 5-B, claim element 5-B, and in 16:29:40
2 this portion of the spec. 16:29:44
3 BY MR. BLUMENKOPF: 16:29:46
4 Q. Being at least related is different from 16:29:46
5 being a synonym. 16:29:48
6 I'm asking you whether they're synonyms. 16:29:49
7 MR. RAFATIJO: Objection; form. 16:29:52
8 THE WITNESS: There may be elements of a 16:29:53
9 character profile or a player profile that goes 16:29:55
10 beyond just these -- whatever it is -- seven, eight 16:29:57
11 lines of -- of the spec here. 16:30:01
12 Just by looking at that, saying that 16:30:02
13 they're at least related and that a character 16:30:05
14 profile -- sorry -- a player profile is tied to a 16:30:11
15 character representing the player, I would have to 16:30:14
16 read the entire spec, which I'm guessing you don't 16:30:19
17 want me to do right now, to unequivocally answer 16:30:22
18 that question. 16:30:26
19 BY MR. BLUMENKOPF: 16:30:26
20 Q. So that's no? 16:30:26
21 MR. RAFATIJO: Objection; form. 16:30:28
22 THE WITNESS: That is not a no. 16:30:28
23 That is they're at least related. A 16:30:30
24 player profile is tied to a character representing 16:30:32
25 the player, not the individual playing the game. 16:30:34

1 Whether they're exactly one and the 16:30:38
2 same, I would have to read the spec to definitively 16:30:40
3 and confidently answer that question. 16:30:45
4 BY MR. BLUMENKOPF: 16:30:47
5 Q. So you can't conclude that they're 16:30:47
6 synonyms? Is that your -- 16:30:49
7 MR. RAFATIJO: Objection; form. 16:30:50
8 THE WITNESS: To the -- to my analysis, 16:30:51
9 it made no difference whether they're synonyms or 16:30:53
10 what I'm calling at least related in the way that I 16:30:56
11 describe in paragraph 76. 16:30:59
12 Whether it's important to you whether 16:31:01
13 they're synonyms or at least related, I can't speak 16:31:03
14 to that. But if you want me to answer that 16:31:07
15 question, I would have to read the spec. 16:31:09
16 BY MR. BLUMENKOPF: 16:31:11
17 Q. You said here in this paragraph -- you 16:31:11
18 cited the '028 Patent for providing that character 16:31:12
19 profile as, quote: 16:31:16
20 "May include non-identifying 16:31:17
21 demographic data, end quote, that 16:31:19
22 can be exchanged with business 16:31:21
23 sponsors." 16:31:26
24 Right? 16:31:27
25 THE COURT REPORTER: "With business 16:31:27

1 sponsors"? 16:31:28
2 MR. BLUMENKOPF: "Business sponsors." 16:31:28
3 THE WITNESS: I see that. 16:31:29
4 BY MR. BLUMENKOPF: 16:31:30
5 Q. Does that describe a player profile? 16:31:31
6 MR. RAFATIJO: Objection; form. 16:31:34
7 THE WITNESS: That is a citation from 16:31:41
8 the patent spec that refers to character profiles. 16:31:43
9 BY MR. BLUMENKOPF: 16:31:46
10 Q. So you dont know i it describes a 16:31:46
11 player profile? 16:31:48
12 A. Well, a player -- player -- player 16:31:48
13 profile is tied to a character representing the 16:31:51
14 player. So there is definitely a tie-in there. 16:31:52
15 So depending on what you mean by the 16:31:57
16 word "describe," it may describe a player profile. 16:32:04
17 I just would like to know the -- what you mean by 16:32:04
18 definition, "describe." 16:32:05
19 BY MR. BLUMENKOPF: 16:32:06
20 Q. Well, "character profile" doesn't appear 16:32:07
21 in the claim language; right? 16:32:08
22 A. Not in the language that we just looked 16:32:12
23 at. 16:32:14
24 Q. But "player profile" does appear in the 16:32:14
25 claim language; right? 16:32:17

1 A. It does. 16:32:17
2 Q. So when you applied this claim language 16:32:18
3 to the prior art, Angles and Robinson, you made 16:32:20
4 some conclusion about what the player profile is; 16:32:25
5 right? 16:32:30
6 MR. RAFATIJO: Objection; form. 16:32:30
7 THE WITNESS: Yes. For example, that 16:32:40
8 the player profile is generated based on said user 16:32:40
9 choices made during said game application. That's 16:32:43
10 all expressly stated in the patent. 16:32:47
11 BY MR. BLUMENKOPF: 16:32:50
12 Q. And you concluded that player profile 16:32:51
13 does not identify the user to third parties and 16:32:52
14 does not reveal any identifying demographic data 16:32:55
15 about the user to third parties. 16:32:58
16 And your support for that is the 16:33:00
17 language about character profiles from the '028 16:33:02
18 Patent; right? 16:33:05
19 A. That, and the fact that there is no 16:33:08
20 other indication whatsoever of anything 16:33:10
21 approximating a player profile exposing any of that 16:33:12
22 information to third parties. 16:33:16
23 Q. But you couldn't articulate the 16:33:19
24 relationship between player profile and character 16:33:21
25 profiles sitting here; right? 16:33:23

1 MR. RAFATIJO: Objection; form. 16:33:25
2 THE WITNESS: That is absolutely 16:33:26
3 incorrect. You're mischaracterizing my testimony. 16:33:28
4 BY MR. BLUMENKOPF: 16:33:30
5 Q. I believe you testified they're at least 16:33:30
6 related; right? 16:33:32
7 A. Yes. And I -- I specified how they're 16:33:33
8 related. 16:33:35
9 So a player profile is tied to a 16:33:36
10 character representing the player, not the actual 16:33:37
11 individual playing the game. I say so in the -- in 16:33:40
12 my declaration. 16:33:51
13 Q. But you can't conclude whether or not 16:33:54
14 those two are synonyms; right? 16:33:56
15 MR. RAFATIJO: Objection; form. 16:33:58
16 THE WITNESS: For the purpose of my 16:33:59
17 analysis, it made no difference whether they are 16:34:01
18 synonyms or not. 16:34:04
19 What would matter is what I included in 16:34:05
20 my declaration. 16:34:07
21 And I already said it sounds like to you 16:34:07
22 it matters whether they're synonyms. And I'm happy 16:34:09
23 to answer that question, but it's going to take us 16:34:12
24 a while. 16:34:16
25 / / /

1 BY MR. BLUMENKOPF: 16:34:19
2 Q. And in paragraph 67, you didn't cite to 16:34:19
3 any language from the '028 Patent that mentions the 16:34:22
4 player profile specifically; right? 16:34:26
5 A. Well, when it says "the profiles are 16:34:57
6 tied to the character representing the player," 16:35:00
7 that to a person of ordinary skill in the art would 16:35:02
8 mean a player profile. 16:35:08
9 I don't think there is any doubt, 16:35:10
10 especially when it's ollowed with "not the actual 16:35:14
11 individual playing the game," which would be user 16:35:18
12 profile, again, to a person of ordinary skill in 16:35:21
13 the art. 16:35:24
14 So, in fact, I disagree with you. I do 16:35:24
15 cite the language from the patent. 16:35:26
16 Q. The language from the patent you cited, 16:35:28
17 though, doesn't say "player profile," does it? 16:35:30
18 A. Well, it says: 16:35:33
19 "Profiles are tied to 16:35:36
20 characters representing the 16:35:37
21 player." 16:35:38
22 So a person of ordinary skill in the art 16:35:38
23 would understand that profile tied to character 16:35:41
24 representing the player would be player profile. 16:35:44
25 Q. Okay. 16:35:47

1 A. I don't think there is any doubt. 16:35:47
2 Q. It doesn't use the phrase "player 16:35:49
3 profile," though; right? 16:35:51
4 MR. RAFATIJO: Objection; form. 16:35:53
5 THE WITNESS: It does not use the words 16:35:53
6 "player" and "profile" next to one another, but it 16:35:56
7 uses them as part of the same phrase. 16:35:59
8 And somebody with sufficient 16:36:03
9 understanding of the English language and having 16:36:05
10 ordinary skill in the art would absolutely 16:36:09
11 understand that's what that means. 16:36:10
12 BY MR. BLUMENKOPF: 16:36:21
13 Q. Okay. Let's look at paragraph 77 from 16:36:21
14 your declaration. 16:36:23
15 So do you see in the middle of the 16:36:35
16 paragraph where you cite to the '028 Patent and you 16:36:37
17 say: 16:36:39
18 "Character profile six are 16:36:40
19 records which track the game 16:36:42
20 choices a player makes while 16:36:43
21 playing the game application four." 16:36:46
22 A. That is correct. And specifically, it 16:37:15
23 is describing what is rendered in -- part of what 16:37:17
24 is rendered in Figure 1. 16:37:23
25 Q. This is providing a definition of 16:37:25

1 character profile six; right? 16:37:27
2 MR. RAFATIJO: Objection; form. 16:37:31
3 THE WITNESS: It characterizes what 16:37:38
4 character profile six contains or what it is. But 16:37:41
5 whether that was intended as a definition, I would 16:37:52
6 have to think about it. 16:37:52
7 I'm not -- I'm not sure that the author 16:37:57
8 of the patent would necessarily agree with you 16:37:55
9 because there are other characters -- 16:37:59
10 characterizations of character profiles that we 16:38:05
11 just read which read slightly differently. 16:38:07
12 They're consistent with this, but 16:38:10
13 they're not identical. 16:38:12
14 BY MR. BLUMENKOPF: 16:38:18
15 Q. And is that the definition of a player 16:38:18
16 profile? 16:38:20
17 MR. RAFATIJO: Objection; form. 16:38:20
18 THE WITNESS: This is talking about -- 16:38:27
19 this is a characterization of character files with 16:38:28
20 respect to what is rendered in Figure 1. 16:38:34
21 It is connected to a player profile, but 16:38:36
22 I would need more information from you as to why 16:38:41
23 you would think this is a definition of a player 16:38:47
24 profile. 16:38:50
25 We talked about player profiles in 16:38:50

1 context of -- I think it was column five and claim 16:38:51
2 element 5-B for a while just prior to this. 16:38:58
3 BY MR. BLUMENKOPF: 16:39:02
4 Q. You said it's connected to the player 16:39:02
5 profile? 16:39:05
6 MR. RAFATIJO: Objection; form. 16:39:05
7 THE WITNESS: Well, given that the -- we 16:39:08
8 just discussed that player profiles are tied to 16:39:10
9 characters or to a character representing the 16:39:16
10 player, not the individual player playing the game, 16:39:17
11 any time we're talking about a character profile, 16:39:20
12 we have to keep that in mind. 16:39:25
13 It's related to a player profile. 16:39:26
14 BY MR. BLUMENKOPF: 16:39:44
15 Q. And you can't articulate that 16:39:44
16 relationship further than that? 16:39:44
17 MR. RAFATIJO: Objection; form. 16:39:44
18 THE WITNESS: Sounds to me like you're 16:39:44
19 asking me to take the patent specification and, in 16:39:46
20 a sense, freestyle off of it. And I don't think 16:39:48
21 that would be appropriate. 16:39:50
22 The patent speaks for itself. 16:39:52
23 BY MR. BLUMENKOPF: 16:39:53
24 Q. I'm just asking how you interpreted the 16:39:53
25 '028 Patent in the process of your analysis. 16:39:59

1 A. And I'm answering your questions, but 16:40:00
2 you're asking me repeatedly, in my mind, in my 16:40:02
3 view, to go beyond what '028 actually teaches. 16:40:05
4 And there, that's where I'm -- I have to 16:40:09
5 push back and ask you either for clarification or 16:40:12
6 examples, because the patent speaks for itself. 16:40:15
7 And my analysis is based on what is included in the 16:40:17
8 patent and in the intrinsic evidence. 16:40:20
9 MR. BLUMENKOPF: Okay. I'm ready to 16:40:28
10 move on from that paragraph. 16:40:29
11 Maybe this is a good time for another 16:40:31
12 break? 16:40:33
13 MR. RAFATIJO: Can we take a break in 16:40:34
14 five minutes? 16:40:35
15 MR. BLUMENKOPF: Yeah. That's okay. 16:40:36
16 Right? 16:40:36
17 I'm ready to move on to a different part 16:40:39
18 of the -- 16:40:39
19 MR. RAFATIJO: Sure. 16:40:39
20 MR. BLUMENKOPF: -- declaration now. 16:40:40
21 BY MR. BLUMENKOPF: 16:40:47
22 Q. Okay. Look at paragraph 81 from your 16:40:47
23 declaration. 16:40:50
24 A. Okay. 16:40:52
25 Q. And this paragraph is describing claim 16:40:52

1 six; right? 16:40:56
2 A. Yes. 16:40:59
3 Q. And in particular, it's describing the 16:41:01
4 limitation and said player profile is disseminated 16:41:04
5 to providers of business-related content used in 16:41:09
6 said game application; right? 16:41:11
7 A. Correct. 16:41:14
8 Q. So you say in paragraph 81: 16:41:15
9 "The person of ordinary skill 16:41:20
10 in the art would recognize that 16:41:22
11 since the player profile is 16:41:23
12 disseminated to the profile" -- "to 16:41:25
13 the providers of the 16:41:27
14 business-related content, it cannot 16:41:28
15 be located in a device belonging to 16:41:31
16 those providers." 16:41:34
17 Right? 16:41:35
18 A. I say that, yes. 16:41:36
19 Q. So do I understand your view to be 16:41:37
20 disseminating in claim six requires moving the 16:41:42
21 player profile from a location off of a device to a 16:41:45
22 location at the device? 16:41:49
23 MR. RAFATIJO: Objection; form. 16:41:57
24 THE WITNESS: Well, I say in paragraph 16:42:10
25 82: 16:42:11

1 "A POSITA reading the '028 16:42:11
2 Patent would understand that by 16:42:13
3 reciting the term 'disseminated 16:42:14
4 to,' the claim requires the player 16:42:17
5 profile to be sent out from the 16:42:19
6 device holding them, player 16:42:20
7 profiles, to providers of 16:42:24
8 business-related content." 16:42:26
9 BY MR. BLUMENKOPF: 16:42:28
10 Q. And when you say "sent out rom the 16:42:28
11 device," you mean it's going to a location that's 16:42:30
12 not part of the device; right? 16:42:32
13 A. I think the best way of characterizing 16:43:09
14 that is shown in the top figure on page 32. 16:43:10
15 Q. I'm going to get to that. 16:43:16
16 I want to know what you meant by "sent 16:43:17
17 out" in paragraph 82. 16:43:19
18 A. Well, the -- the label to the figure 16:43:21
19 says exactly what I mean by it. 16:43:25
20 It says: 16:43:26
21 "The device holding the player 16:43:28
22 profile receives requests from 16:43:30
23 providers of business-related 16:43:33
24 content" -- 16:43:33
25 And those are the blocks A, B, C, and D. 16:43:35

1 -- "and in response" -- "in 16:43:38
2 response, sends out the player 16:43:41
3 profile to each of them." 16:43:45
4 And then it explains: 16:43:47
5 "The user of the device has 16:43:48
6 the discretion whether to approve a 16:43:57
7 request or not." 16:43:59
8 Q. Okay. So I'm looking at that top figure 16:43:59
9 on page 32. That's the one you're describing; 16:44:02
10 right? 16:44:04
11 A. Correct. 16:44:04
12 Q. And I see in the center, we have: 16:44:05
13 "Device holding the player 16:44:06
14 profile." 16:44:06
15 And it looks like some kind of a storage 16:44:08
16 device; right? 16:44:11
17 A. Yes. She has it drawn -- drawn just for 16:44:12
18 illustration. 16:44:15
19 Q. And -- and then I see these elements A, 16:44:16
20 B, C, and D; right? 16:44:19
21 A. Those are -- yes. There are four 16:44:22
22 providers of business-related content rendered 16:44:25
23 there and labeled A through D. 16:44:27
24 Q. And you're saying this figure represents 16:44:31
25 that storage device in the center sending out the 16:44:33

1 player profile to each of A, B, C, and D; right? 16:44:36
2 A. If the request is appropriately 16:44:41
3 approved, once the request is received, then the 16:44:49
4 profile is being sent to the devices. 16:44:51
5 Q. So let -- let's take A, for example; 16:44:55
6 right? 16:44:55
7 A. Okay. 16:44:55
8 Q. If -- if A and that storage device in 16:45:00
9 the center are part of the same device, can it 16:45:02
10 still send out the player pro ile rom that storage 16:45:05
11 device to A? 16:45:08
12 MR. RAFATIJO: Objection; form. 16:45:10
13 THE WITNESS: Sorry. What do you mean, 16:45:14
14 they're part of the same storage device? 16:45:15
15 A and the box in the center, the device 16:45:17
16 holding the player profile -- we can call it the 16:45:19
17 main device. The main device and A are clearly 16:45:24
18 separate devices. 16:45:27
19 So if I understood your question 16:45:28
20 correctly, you're asking what happens if the main 16:45:30
21 device and A are one and the same. 16:45:35
22 BY MR. BLUMENKOPF: 16:45:39
23 Q. What -- to be clear, if -- if -- if 16:45:39
24 they're not separate devices, is it still possible 16:45:41
25 for that storage device to send out the player 16:45:44

1 profile? 16:45:47
2 MR. RAFATIJO: Objection; form. 16:45:47
3 THE WITNESS: My guess is your question 16:46:04
4 is about something different. But maybe you will 16:46:04
5 tell me. So I will just answer it this way. 16:46:05
6 But they are separate devices. 16:46:09
7 So what do you mean by if they're not 16:46:10
8 separate devices? What is the scenario there? 16:46:13
9 BY MR. BLUMENKOPF: 16:46:20
10 Q. Well, i you imagine suppose there 16:46:21
11 well, you can imagine two storage units that are 16:46:21
12 part of a cent- -- like, a -- a larger storage 16:46:25
13 unit, for example, if you can imagine some very 16:46:26
14 large, like, cloud storage device. 16:46:29
15 And if you imagine data being sent from, 16:46:31
16 say, one element of that cloud storage device to 16:46:34
17 another element of that same cloud storage device. 16:46:36
18 MR. RAFATIJO: Objection; form. 16:46:40
19 BY MR. BLUMENKOPF: 16:46:40
20 Q. Would that constitute disseminating? 16:46:41
21 MR. RAFATIJO: Same objection. 16:46:45
22 THE WITNESS: I -- I have to apologize. 16:46:55
23 I don't understand your scenario. Your scenario 16:46:55
24 does not make sense to me. 16:46:55
25 I -- I cannot reconcile your scenario 16:46:55

1 with what's being taught in the '028 Patent. 16:46:58
2 BY MR. BLUMENKOPF: 16:47:04
3 Q. You'd agree that you can send data from 16:47:04
4 one element of a device to another element of the 16:47:06
5 same device; right? 16:47:09
6 MR. RAFATIJO: Objection; form. 16:47:12
7 THE WITNESS: In a computer, completely 16:47:13
8 divorced of anything that we're talking about here 16:47:15
9 today, data can be sent from, let's say, one part 16:47:17
10 o the memory to, like, volatile memory to a hard 16:47:22
11 disk. 16:47:28
12 That is possible in a computer, but that 16:47:28
13 has nothing to do with what's being taught in the 16:47:30
14 '028 Patent. 16:47:33
15 BY MR. BLUMENKOPF: 16:47:33
16 Q. Well, in that situation, if you imagine 16:47:34
17 the player profile as storing the vault, the memory 16:47:37
18 that you mentioned, and it's being provided to 16:47:40
19 long-term storage on the same device, is that 16:47:50
20 volatile memory disseminating the player profile? 16:47:45
21 MR. RAFATIJO: Objection; form. 16:47:48
22 THE WITNESS: That right there is 16:47:50
23 ignoring every single thing, basically, that is 16:47:51
24 being taught by claims one, five and six. 16:47:55
25 So it's ignoring, basically, three 16:47:59

1 different claims of this patent to ask a question 16:48:01
2 about whether this could be possible. 16:48:03
3 Not with the notion of player profile 16:48:07
4 that is taught in the '028 Patent. 16:48:10
5 Is it possible to move some random data 16:48:14
6 in some random computer from volatile memory to 16:48:17
7 persistent storage? Of course. That's how 16:48:21
8 computers very often work. 16:48:23
9 But that has nothing to do with what's 16:48:25
10 being taught in the '028 Patent. 16:48:27
11 MR. BLUMENKOPF: Okay. Why don't we 16:48:32
12 take a break here? 16:48:33
13 MR. RAFATIJO: Sure. Absolutely. 16:48:33
14 MR. BLUMENKOPF: Okay. 16:48:34
15 THE VIDEOGRAPHER: We are going off the 16:48:36
16 record at 4:48. 16:48:38
17 (Whereupon, a recess was held 16:48:38
18 from 4:48 p.m. to 5:04 p.m.) 16:48:40
19 THE VIDEOGRAPHER: We are back on the 17:04:12
20 record at 5:04. 17:04:14
21 MR. BLUMENKOPF: All right. Well, we 17:04:16
22 have no further questions for Dr. Medvidovic. 17:04:17
23 We pass the witness and we reserve the 17:04:19
24 right to recross after your redirect. 17:04:21
25 MR. RAFATIJO: Okay. So do you want -- 17:04:27

1 can we go off the record for at least ten, fifteen 17:04:28
2 minutes, if possible, so I -- 17:04:32
3 MR. BLUMENKOPF: Sure. 17:04:33
4 MR. RAFATIJO: -- can speak? 17:04:34
5 And if we do so, you no longer need 17:04:34
6 Dr. Medvidovic for tomorrow? Is it my 17:04:37
7 understanding that that would conclude your 17:04:38
8 cross-examination? Correct? 17:04:40
9 MR. BLUMENKOPF: Right. Subject to 17:04:42
10 our right to recross -- 17:04:44
11 MR. RAFATIJO: No. Of course. I 17:04:44
12 understand that. 17:04:44
13 All right. So let's go off the record 17:04:45
14 for ten, fifteen minutes. 17:04:46
15 THE VIDEOGRAPHER: We are going off the 17:04:50
16 record at 5:04. 17:04:51
17 (Whereupon, a recess was held 17:04:51
18 from 5:04 p.m. to 5:16 p.m.) 17:04:55
19 THE VIDEOGRAPHER: We are back on the 17:24:49
20 record at 5:16. 17:24:49
21 / / / 17:24:49
22 / / / 17:24:49
23 / / / 17:24:49
24 17:24:49
25

1 EXAMINATION 17:24:49
2 BY MR. RAFATIJO: 17:24:49
3 Q. Okay. So I would like to pull out -- 17:24:49
4 pull up Exhibit 1001. That's '028 Patent. And I 17:24:49
5 would like direct your attention, Dr. Medvidovic, 17:24:49
6 to column one, line 4- -- 40, and the sentence that 17:24:49
7 start with the term "branded." 17:24:49
8 Would you please read for the record. 17:24:49
9 A. Give me just a second. Yes. 17:24:50
10 "The term 'branded' re ers to 17:24:50
11 business-related content which 17:24:50
12 uniquely identifies the goods and 17:24:50
13 services of a particular company." 17:24:50
14 Q. Great. Thank you. 17:24:50
15 And I would like to pull up Exhibit 17:24:50
16 2005, which is your declaration for the '028 17:24:50
17 matter, and paragraph 67, page 28 of the exhibit. 17:24:50
18 THE COURT REPORTER: And I'm so sorry, 17:24:50
19 but can we take a second? I am having some sort of 17:24:50
20 a computer glitch. 17:24:50
21 MR. RAFATIJO: Sure. Sure. Sure. 17:24:50
22 THE VIDEOGRAPHER: We are going off the 17:24:50
23 record at 5:17 p.m. 17:24:50
24 (Whereupon, a recess was held 17:24:50
25 from 5:17 p.m. to 5:25 p.m.) 17:25:01

1 THE VIDEOGRAPHER: We are back on the 17:25:04
2 record at 5:25. 17:25:14
3 BY MR. RAFATIJO: 17:25:17
4 Q. Sure. So I would like to direct your 17:25:17
5 attention to paragraph 67. 17:25:19
6 A. Okay. 17:25:23
7 Q. Given the defin- -- and you see the two 17:25:24
8 images on -- on that page; correct? 17:25:27
9 A. Correct. 17:25:29
10 Q. Given the definition that you just 17:25:30
11 recited from Exhibit 1001, that would be '028 17:25:33
12 Patent, would you say that each image represents or 17:25:40
13 illustrate a branded business-related content? 17:25:43
14 MR. BLUMENKOPF: Objection to form; 17:25:47
15 leading. 17:25:49
16 THE WITNESS: Well, the definition or 17:25:50
17 the -- the characterization provided in column one 17:25:51
18 is: 17:25:55
19 "Business-related content 17:25:58
20 which uniquely identifies the goods 17:25:58
21 and services of a particular 17:26:00
22 company." 17:26:03
23 So it would -- the -- in the context 17:26:04
24 of -- of this paragraph and what we discussed 17:26:10
25 before, the images of the Honda Civic would be 17:26:12

1 business-related content which uniquely identifies 17:26:18
2 the goods and services of a particular company; in 17:26:23
3 this case, Honda. 17:26:26
4 MR. RAFATIJO: Okay. I have no further 17:26:26
5 questions. 17:26:28
6 THE VIDEOGRAPHER: This marks the end of 17:26:28
7 the deposition of Dr. Nenad -- oh, my apologies. 17:26:30
8 MR. BLUMENKOPF: Just have a couple of 17:26:45
9 brief questions, Professor. 17:26:46
10 THE WITNESS: Sure. 17:26:48
11 17:26:48
12 EXAMINATION 17:26:49
13 BY MR. BLUMENKOPF: 17:26:49
14 Q. So before the -- the redirect 17:26:49
15 examination right now, did you speak to anybody in 17:26:51
16 the -- in the break between the cross-examination 17:26:55
17 and your redirect? 17:26:56
18 A. Yes. I spoke briefly to the -- to the 17:26:57
19 counsel. 17:27:00
20 Q. Did you speak about the substance of the 17:27:00
21 deposition? 17:27:02
22 A. No, other than the fact that he seems 17:27:02
23 pretty pleased with how it went. 17:27:05
24 Q. So you did speak about the deposition? 17:27:09
25 A. Not the -- 17:27:13

1 (Unreportable cross-talk.) 17:27:13
2 MR. RAFATIJO: Objection -- 17:27:13
3 THE WITNESS: -- substance of the 17:27:15
4 deposition. It's his impression of how the 17:27:16
5 deposition went. 17:27:19
6 I think the substance of the deposition 17:27:20
7 would be -- at least as I understand the term, 17:27:21
8 would be the actual things we discussed during the 17:27:23
9 deposition. 17:27:25
10 BY MR. BLUMENKOPF: 17:27:25
11 Q. Well, he commented on your testimony; 17:27:25
12 right? 17:27:29
13 A. I suppose you could say that, that, you 17:27:29
14 know, it -- well, it is what it is. 17:27:32
15 It was supposed to go for two days and I 17:27:35
16 was stressing about making my flight tomorrow, and 17:27:38
17 now I don't have to worry about it. So that's -- 17:27:40
18 to me, that's pretty good news. 17:27:42
19 Q. Did you speak about branded related 17:27:44
20 content with counsel? 17:27:49
21 A. No. 17:27:49
22 Q. Did counsel suggest anything about your 17:27:50
23 testimony or your questions -- or your answers in 17:27:51
24 any way? 17:27:53
25 A. Well, I think -- well, the -- the short 17:27:55

1 answer is no. 17:27:57
2 The slightly longer answer is he just 17:27:58
3 pointed me to language which I reread three times 17:28:00
4 and commented in the context of what you and I 17:28:02
5 discussed extensively, and there is nothing that I 17:28:07
6 said that I have not already said maybe five 17:28:10
7 different times during the deposition. 17:28:12
8 So the answer is -- you know, I'll -- 17:28:13
9 I'll tie it back to the short answer, which is no. 17:28:16
10 Q. And that conversation happened outside 17:28:18
11 of the deposition room in the break before the 17:28:19
12 redirect? 17:28:21
13 A. Sorry. Which -- which conversation? 17:28:23
14 MR. RAFATIJO: Objection; privileged. 17:28:24
15 BY MR. BLUMENKOPF: 17:28:27
16 Q. So just to clarify, you did speak with 17:28:27
17 counsel prior to your redirect examination just 17:28:29
18 now? 17:28:31
19 A. Not about the -- the things that we 17:28:31
20 talked about in this room. None of that was 17:28:33
21 discussed. 17:28:36
22 As I said, he pointed me just a second 17:28:38
23 ago in front of you to specific language of the -- 17:28:41
24 of the patent. 17:28:43
25 I reread that language two or three 17:28:44

1 times in my answers, and I only commented on the 17:28:46
2 things that you and I already -- already had 17:28:49
3 discussed. 17:28:51
4 So strategically, I can't even tell you 17:28:51
5 why counsel asked me to repeat what I feel like I 17:28:55
6 already answered pretty well. But that's -- you 17:28:58
7 know, might be for you two to discuss. 17:29:01
8 Q. To be clear, the conversation you're 17:29:03
9 referring to was during your redirect examination 17:29:04
10 right now? 17:29:07
11 A. There was no conversation. 17:29:07
12 There was the questions that I got from 17:29:09
13 him and the fact that he pointed me to read from 17:29:10
14 the patent. 17:29:13
15 There was -- that was not a 17:29:13
16 conversation. Those were two questions that he 17:29:15
17 asked, including also telling me where to look. 17:29:17
18 The only other thing that I mentioned 17:29:19
19 before is the fact that -- well, quite frankly, I'm 17:29:21
20 going to make my flight tomorrow, so I don't have 17:29:26
21 to stress about it, which is good news to me. 17:29:28
22 Q. Okay. There's nothing further discussed 17:29:30
23 with counsel during the break? 17:29:32
24 A. No. 17:29:33
25 Q. Okay. Nothing further, Professor. 17:29:35

1 Thank you. 17:29:38
2 A. Thank you. 17:29:41
3 THE COURT REPORTER: And, Counsel, would 17:29:43
4 you like a copy of the transcript? 17:29:44
5 MR. RAFATIJO: Sure. No rush. 17:29:45
6 Thank you. 17:29:48
7 THE COURT REPORTER: Thank you. 17:29:48
8 THE VIDEOGRAPHER: All right. This 17:29:48
9 marks the end of the deposition of Dr. Rubio Nenad 17:29:49
10 Medvidovic. 17:29:49
11 We are going off the record at 5:29. 17:29:52
12
13 (Whereupon, at the hour of
14 5:29 p.m., the proceedings
15 were concluded.)
16 -o0o-
17
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24
25

1 PENALTY OF PERJURY
2
3
4 I, , do hereby declare
5 under penalty of perjury that I have read the
6 foregoing transcript; that I have made any
7 corrections as appear noted, in ink, initialed by
8 me, or attached hereto; that my testimony as
9 contained herein, as corrected, is true and
10 correct.
11 EXECUTED this day of , 20 ,
12 at , .
(City) (State)
13
14
15
16
NENAD MEDVIDOVIC
17
18
19
20
21
22
23
24
25

1 CERTIFICATE
2 OF
3 CERTIFIED SHORTHAND REPORTER
4 * * * *
5
6 I, KELLI C. NORDEN, Certified Reporter and
7 Notary Public within and for the State of California
8 do hereby certify:
9 That NENAD MEDVIDOVIC, Ph.D., the witness whose
10 deposition is hereinbefore set forth, was duly sworn by
11 me before the commencement of such deposition and that
12 such deposition was taken before me and is a true record
13 of the testimony given by such witness.
14 I further certify that the adverse party, PATENT
15 OWNER, was represented by counsel at the deposition.
16 I further certify that the deposition of NENAD
17 MEDVIDOVIC, Ph.D., occurred at the offices of SPENCER
18 FANE, 201 Santa Monica Boulevard, Suite 550, Santa Monica,
19 California on Wednesday, MAY 29, 2024, commencing at
20 11:49 a.m. to 5:29 p.m..
21 I further certify that I am not related to any of
22 the parties to this action by blood or marriage, I am not
23 employed by or an attorney to any o the parties to this
24 action, and that I am in no way interested, financially
25 or otherwise, in the outcome of this matter.

In witness whereof, I have subscribed my name, this date: May 30, 2024

Kelli C. Norden

KELLI C. NORDEN, CSR NO. 7200

1 ERRATA CORRECTION SHEET FOR THE DEPOSITION OF:
2 NENAD MEDVIDOVIC, conducted on MAY 29, 2024
3 Case Name: SONY INTERACTIVE ENTERTAINMENT LLC v.
QUANTUM IMAGING LLC
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