Page 1 1 2 UNITED STATES PATENT AND TRADEMARK OFFICE 3 4 BEFORE THE PATENT TRIAL AND APPEAL BOARD 5 -----X GOOGLE INC., 6 Petitioner, 7 VS. 8 VISUAL REAL ESTATE, INC., 9 Patent Owner, 10 Cases IPR2014-01338, 01339, 11 013340, 01341 12 Patent 7,929,800B2. ----X 13 14 15 16 DEPOSITION 17 OF 18 DR. JOHN R. GRINDON 19 Tuesday, September 15, 2015 20 601 Lexington Avenue 21 New York, New York 22 23 24 Reported by: AYLETTE GONZALEZ, RPR, CLR, CCR 25 JOB NO. 97654

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2	DATE: September 15, 2015	
3	TIME: 9:00 a.m.	
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5		
6	Deposition of DR. JOHN R. GRINDON, held	
7	at the offices of FISH & RICHARDSON, P.C.,	
8	601 Lexington Avenue, New York, New York,	
9	before AYLETTE GONZALEZ, a Registered	
10	Professional Reporter, Certified LiveNote	
11	Reporter, Certified Court Reporter and	
12	Notary Public of the States of New York and	
13	New Jersey.	
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     ALSO PRESENT:
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15
             JAMES F. SHERWOOD, GOOGLE
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             CAMILLE HIGHAM
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             FERNANDO DUTRA
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1 DR. JOHN R. GRINDON (9/15/15) 2 JOHN R. DR. GRINDON, 3 called as a witness, having been 4 duly sworn by a Notary Public, 5 was examined and testified as 6 follows: 7 (Grindon Exhibit 1, Responsive 8 Declaration of Dr. John R. Grindon was 9 premarked for identification, as of 10 this date.) 11 (Grindon Exhibit 2, Responsive 12 Declaration of Dr. John R. Grindon was 13 premarked for identification, as of 14 this date.) 15 (Grindon Exhibit 3, Responsive 16 Declaration of Dr. John R. Grindon was 17 premarked for identification, as of 18 this date.) 19 (Grindon Exhibit 4, Declaration of 20 Dr. John R. Grindon in Support of 21 Google's Opening Claim Construction 22 Brief was premarked for 23 identification, as of this date.) 24 25

1	
1	DR. JOHN R. GRINDON (9/15/15)
2	EXAMINATION BY
3	MR. MACEDO:
4	Q. Good morning.
5	A. Good morning.
6	Q. Could you please state your name
7	and address for the PTAB.
8	A. Yes, John Grindon. John R.
9	Grindon, G-R-I-N-D-O-N. Home address is 853
10	Coachlight Lane, Hazelwood, Missouri.
11	MR. ALMELING: Counsel, before we
12	continue much further, perhaps it's
13	useful to have appearances on the
14	record itself for all the parties
15	attending the deposition.
16	MR. MACEDO: Sure. This is
17	Charles Macedo from Amster Rothstein &
18	Ebenstein. I am lead Counsel for the
19	patent owner and the four IPRs that
20	we'll be addressing.
21	I have with me Joe Kincart who is
22	backup Counsel from Ideation Law and
23	two of his associates, Camille Higham
24	and Fernando Dutra.
25	MR. ALMELING: David Almeling of

Page 7 1 DR. JOHN R. GRINDON (9/15/15) 2 O'Melveny Myers representing Google. 3 With me from Fish & Richardson is Mike 4 Hawkins and Rick Bisenius. 5 Also with me from Google is Jim 6 Thank you, Counsel. Sherwood. 7 Jim Sherwood is MR. MACEDO: 8 in-house for Google? 9 MR. ALMELING: Correct. 10 BY MR. ALMELING: 11 0. Good morning again. 12 Α. Good morning. 13 So you understand that you're here 0. to be deposed regarding testimony that you've 14 15 offered the PTAB in each of the four different 16 IPR proceedings, correct? 17 Α. Yes. 18 Q. And you've been deposed before many 19 times, right? 20 Several times. Ά. 21 0. So you understand how depositions 22 work? 23 Not so many times in an IPR, but I Α. 24 think -- I think I have a basic understanding. 25 0. So you understand you're testifying

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1 DR. JOHN R. GRINDON (9/15/15) 2 under oath, right? 3 Α. Yes. 4 0. And that means that you're 5 promising to tell the truth, the whole truth 6 and nothing but the truth, right? 7 Α. Yes. 8 0. And you were sworn in by the court 9 reporter, right? 10 Yes, I was. Α. 11 0. And you understand if I ask you a 12 question, you need to provide the best answer 13 you can to the question I ask, right? 14 Α. Yes. 15 And you understand that if you 0. 16 don't understand a question, you should ask me 17 to clarify that question before you answer it, 18 correct? 19 Ά. Yes. 20 And since we're taking a written 0. 21 transcript, you understand that you should 22 wait for me to finish before you speak, and I 23 should wait for you to finish before I speak, 24 right? 25 Α. Yes.

		Page 9
1	DR. JOHN R. GRINDON (9/15/15)	
2	Q. And you also understand that you	
3	have to use words as your response, not merely	
4	nodding your head or other physical reactions,	
5	right?	
6	A. Yes.	
7	Q. And if you could, try to refrain	
8	from using words like "um-hum" and "uh-huh,"	
9	which are very difficult to distinguish on the	
10	transcript and stick with things like yes and	
11	no. That would be helpful, okay?	
12	A. Okay.	
13	Q. Do you think you can follow these	
14	rules for the deposition today?	
15	A. I will try.	
16	Q. If you need a break at any time,	
17	just ask me and after you answer the question,	
18	we can take a break. Okay?	
19	A. Yes.	
20	Q. Is there any medications which you	
21	are taking at this time which will impair your	
22	ability to testify truthfully or accurately	
23	today?	
24	A. No.	
25	Q. Is there any other reason why you	

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Page 10 1 DR. JOHN R. GRINDON (9/15/15) 2 cannot testify truthfully or accurately today? 3 Α. No. 4 Now, before the deposition began, 0. 5 we marked three exhibits that I'm now going to read into the record and show to you. 6 And 7 these are the declarations that were presented. 8 on behalf of Google to the PTAB from the 9 petitioner. Okay? 10 Α. Okay. 11 0. So the first one that we marked as 12 Grindon Exhibit 1 is the responsive 13 declaration of Dr. John R. Grindon. It was Google Exhibit 1010 from IPR2014-01338, and I 14 15 will represent to you that the same exhibit 16 was submitted in IPR2014-1339. 17 And I just want you to take a look 18 and tell me if you recognize this. 19 Α. Yes, I do. 20 Are you the same Dr. John R. 0. 21 Grindon that is identified in this 22 declaration? 23 Α. Yes. 24 And if you turn to the last page of 0. 25 the declaration before the exhibit, page 24 of

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1 DR. JOHN R. GRINDON (9/15/15) 2 24, is that your signature? 3 Yes, it is. Α. 4 0. And that signature is as of 5 September 1, 2015? 6 That's correct. Α. 7 0. And you declared that these 8 statements were under perjury, correct? 9 I believe I did, yes. Α. 10 Do you have any reason to believe 0. 11 that anything that you stated in what we 12 marked as Grindon Exhibit 1, Google 13 Exhibit 1010, from the 1338 and 1339 IPR, is 14 untrue? 15 No reason to believe so. Α. 16 Do you think that any information 0. 17 in it needs to be updated, including your 18 resumé? 19 Let me take a look. I believe this Ά. 20 is current as of today. 21 So now I'm going to show you 0. 22 Grindon Exhibit 2, which is the responsive 23 declaration of Dr. John R. Grindon marked 24 Google Exhibit 1012 from IPR2014-01340 and ask 25 if you recognize this document.

1 DR. JOHN R. GRINDON (9/15/15) 2 Α. Yes, I do. 3 0. Now, are you the same Dr. John R. 4 Grindon that prepared this declaration? 5 Α. Yes, I am. 6 0. And on the last page of the 7 declaration, there's a signature by John 8 Grindon dated September 1, 2015. Is that you? 9 Yes, it is. Α. 10 And you indicate in paragraph 25 0. 11 that you're making these statements under 12 oath. Is that true? 13 Α. Yes. 14 Is there anything that you think 0. 15 needs to be updated or corrected in Grindon 16 Exhibit 2 as of right now? 17 As of right now, I'm not aware of Α. 18 anything that needs updating. 19 Including the CV? 0. 20 I'm sorry; I didn't hear. Α. 21 Including the CV? 0. 22 Including the CV. If I think of Α. 23 anything later, I'll let you know. 24 0. Now, I will show you Google 25 Exhibit 3, which is the responsive declaration

Page 13 1 DR. JOHN R. GRINDON (9/15/15) 2 of Dr. John R. Grindon, Google Exhibit 1012, 3 from IPR2014-01341 and ask if you recognize 4 it. 5 MR. ALMELING: Counsel, I don't 6 mean to interject. The transcript is 7 somewhat ambiguous. It refers to a 8 Google Exhibit 3. I presume you mean 9 Grindon Exhibit 3? 10 MR. MACEDO: Yes. Let me rephrase 11 the question so that way we have it 12 correct. Thank you for your 13 clarification. You're now looking at Grindon 14 0. 15 Exhibit 3, which is the responsive declaration 16 of Dr. John R. Grindon Google Exhibit 1012 17 from IPR2014-01341, and I would like to know 18 if you recognize it. 19 Yes, I do. Α. 20 And is this your declaration from 0. 21 IPR2014-01341? 22 Α. Yes. 23 Are you the Dr. John R. Grindon who 0. 24 is declaring this declaration? 25 Α. I am.

		Page	14
1	DR. JOHN R. GRINDON (9/15/15)		
2	Q. And if you turn to the last page		
3	before the CV, is that your signature on page		
4	14 of 14 dated September 1, 2015?		
5	A. That's my signature.		
6	Q. And you declared all the statements		
7	contained in this declaration under penalty of		
8	perjury; is that correct?		
9	A. Yes.		
10	Q. And is there any corrections or		
11	updates you want to provide to this		
12	declaration or the CV that is attached to it		
13	what we marked as Grindon Exhibit 3?		
14	A. Not that I'm aware of right now.		
15	Q. So we're going to be referring to		
16	these declarations throughout the deposition.		
17	What I suggest you do is you keep all three of		
18	them next to each other in front of you so		
19	that way, you can go between them, okay,		
20	because there's a lot of the same statements.		
21	And rather than go through it five times, I		
22	want to go through it once each time. You		
23	understand?		
24	A. Yes.		
25	Q. Now, if you turn to Grindon 1 for a		

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1 DR. JOHN R. GRINDON (9/15/15) 2 second and you look at paragraph one, you're 3 referring to a declaration regarding Google's 4 "Open Claim Construction Brief for the Central 5 District of California case Vederi, LLC. v. 6 Google 2:10-cv-0774 (C.D. Cal)." 7 Do you see that? 8 Α. I see it. 9 And if you look at paragraph one of 0. 10 Grindon Exhibit 2, you'll see you're making 11 reference to the same declaration and case. 12 Please confirm that. 13 That's correct. Α. 14 0. And if you look at Grindon 15 Exhibit 3, paragraph one, again, you make the 16 same reference to the same declaration and 17 If you could please confirm that. case. 18 Α. That's correct. 19 0. I'd like to show you what we marked 20 as Grindon Exhibit 4, which is the declaration 21 of Dr. John R. Grindon from case number 22 2:10-cv-07747-AK-CW, Document 50-1, and ask if 23 you recognize this document. 24 Α. Yes, I do. 25 0. Is that the same document that

		Page 16
1	DR. JOHN R. GRINDON (9/15/15)	
2	you're referring to in paragraph one of your	
3	declarations marked as Grindon Exhibits 1	
4	through 3?	
5	A. Yes.	
6	MR. MACEDO: Counsel, I had	
7	intended to mark the version 2002 that	
8	had been submitted in the IPR, but my	
9	secretary gave me the original.	
10	Can we stipulate that this is the	
11	same document as 2002?	
12	MR. ALMELING: You can mark it and	
13	refer to it as the witness testified.	
14	I have not independently compared the	
15	two documents. I don't think there	
16	will be an issue, but I'm not prepared	
17	to stipulate right now.	
18	MR. MACEDO: Will you let he know	
19	later whether you are?	
20	MR. ALMELING: Yes.	
21	MR. MACEDO: Okay; thank you.	
22	Q. Now, in paragraph one of Grindon	
23	Exhibit 1, you say that the Vederi case, you	
24	analyzed the different patent filed, right?	
25	A. Yes.	

Page 17 1 DR. JOHN R. GRINDON (9/15/15) 2 Now, is it your understanding that 0. 3 the text of the patents that you analyzed in 4 Grindon Exhibit 4 is the same texts as the 5 prior art that Google offered as Exhibit 1004 6 in the four IPRs? And there's two 1004s. 7 MR. ALMELING: Objection to form. 8 MR. MACEDO: Let's start again. 9 You could mark this as Exhibit 5. 10 (Grindon Exhibit 5, United States 11 Patent Application Publication, dated 12 April 25, 2002 was marked for 13 identification, as of this date.) 14 BY MR. MACEDO: 15 You see we marked as Grindon 0. 16 Exhibit 5 Google Exhibit 1005 which is U.S. 17 Publication Number 2002/0047895 A1. Do you 18 recognize Google Exhibit 1005? 19 Ά. Yes. 20 0. How do you recognize it? 21 Α. Without checking every page as I 22 sit here, the publication number appears to be 23 correct. The general appearance of the 24 document appears to be correct. 25 0. And the question is: How do you

1 DR. JOHN R. GRINDON (9/15/15) 2 recognize it? What do you recognize it from? 3 Α. This is a document that I reviewed 4 during the preparation for these declarations 5 of Exhibits 1, 2 and 3. 6 Actually, Exhibits 1 and 2, 0. 7 correct, if you look at page 5 of Exhibit 1, 8 it's listed on that page, right? 9 That's correct. Α. 10 And if you look at page 5 of 0. 11 Exhibit 2, it's also listed on that page, 12 right? 13 That's correct. Α. 14 But if you look at page 5 of 0. 15 Exhibit 3, it is not listed on that page, 16 correct? 17 Α. That's correct. 18 0. So did you consider Grindon 19 Exhibit 5 when you were working on the declaration for Grindon Exhibit 3? 20 21 Α. I considered a different document 22 for declaration Exhibit 3. 23 How did that document relate to 0. 24 Grindon Exhibit 5 to the best of your 25 recollection?

1 DR. JOHN R. GRINDON (9/15/15) 2 MR. ALMELING: Objection to form. 3 You may answer. 4 Α. When you say "that document," you 5 mean one that is listed in Exhibit 3? б Yes. U.S. Patent No. 6,895,126 to 0. 7 DiBernardo? 8 MR. ALMELING: Same objection. 9 First of all, were you looking at 0. 10 U.S. Patent No. 6,895,126 to DiBernardo when 11 you were referring to the document that you 12 considered for Grindon Exhibit 3? 13 Α. I actually was, yes. 14 And do you know how U.S. Patent No. 0. 15 6,895,126 to DiBernardo compares to Grindon 16 Exhibit 5, U.S. publication number 17 2002/0047895 A1 to DiBernardo? 18 MR. ALMELING: Objection to form. 19 Α. When you say compares, can you be 20 specific on what you're looking for? And also 21 may I have a copy of the patent '126? 22 I will give that to you in a Q. 23 I'm just curious if you have a second. 24 recollection. 25 So if you're answer is I don't have

1	DR. JOHN R. GRINDON (9/15/15)
2	a recollection without seeing it, you can say,
3	"I don't have a recollection without seeing
4	it."
5	If you have a recollection as to
6	how the two documents compare, I'd like for
7	you to testify as to that recollection.
8	MR. ALMELING: Objection to form.
9	A. The previous document ending the
10	publication ending in '7895 is a publication
11	which was filed, according to the face, on
12	January 11, 2001, issued or published
13	April 25, 2002. The issue patent ending in
14	'126 is an issued patent. So that would be
15	the salient difference.
16	Q. Do you understand it's the same
17	basic specification?
18	MR. ALMELING: Objection; form.
19	A. When you say same basic
20	specification, could you clarify what you mean
21	there?
22	Q. Sure. Except for perhaps the
23	claims which may have been amended, are the
24	text of the specification and the figures
25	essentially the same?

Page 21 1 DR. JOHN R. GRINDON (9/15/15) 2 MR. ALMELING: Objection; form. 3 When you say essentially the same, Α. 4 the answer is, I believe so. But if you give 5 me the '126 document, I'll check to be sure. б MR. MACEDO: Okay. We'll mark as 7 Grindon Exhibit 6, U.S. Patent No. 8 6,895,126 B2 to DiBernardo. It was 9 previously marked as Google 10 Exhibit 1005. 11 (Grindon Exhibit 6, U.S. Patent No. 6,895,126 B2 was marked for 12 13 identification, as of this date.) 14 MR. ALMELING: Counsel, is there a 15 question pending? 16 BY MR. MACEDO: 17 I would like to know whether you 0. 18 could check and tell me if Grindon Exhibit 6 19 and Grindon Exhibit 5, except for perhaps the 20 claims and the patent number information are 21 essentially the same figures and 22 specifications. 23 MR. ALMELING: Objection to form. 24 0. Dr. Grindon, I appreciate you're 25 looking at each page, and I don't want to stop

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1	DR. JOHN R. GRINDON (9/15/15)
2	you from doing that, so please take your time
3	and do whatever you need to do to make sure
4	you can answer this question truthfully and
5	honestly.
б	MR. ALMELING: Off the record.
7	(Whereupon, an off-the-record
8	discussion was held.)
9	BY MR. MACEDO:
10	Q. Did you finish your review?
11	A. Well, I can't compare them
12	word-for-word, but for the purposes of the
13	declarations, the text, excluding the claims,
14	is substantively similar, if not exactly the
15	same.
16	Q. You don't know of any differences
17	sitting here right now between the two?
18	A. Without comparing word-for-word
19	perhaps corrections that occurred between
20	publication and the issued patent, similar
21	things, I can't say that they're identical,
22	but substantively for purposes of my
23	declarations, they're essentially the same.
24	Q. So other than some potential typos
25	that get fixed, you're not aware of any

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Page 23 1 DR. JOHN R. GRINDON (9/15/15) 2 differences between the two of them 3 substantively --4 MR. ALMELING: Objection to form. 5 Ο. -- and the claims? б MR. ALMELING: Objection to form. 7 Α. I'm sorry; you added a statement at 8 the end. Could you ask it again? 9 And the claims. The claims may be 0. 10 different. 11 Α. Yes. 12 0. Other than corrections as to typos 13 or perhaps the claims, the disclosures should 14 be essentially the same for purposes of your 15 declaration? 16 MR. ALMELING: Objection; form. 17 Α. For purposes of my declaration, I 18 believe that's the case. I haven't compared 19 them word-for-word. 20 0. Did you compare them word-for-word 21 before you did your declaration? 22 Α. Not word-for-word, no. Each is 23 substantively adequate for its purposes. 24 For purposes of the declarations, 0. 25 you treated them as if they were substantively

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1 DR. JOHN R. GRINDON (9/15/15) 2 the same; is that correct? 3 Α. That's fair. 4 0. Can you look at Grindon Exhibit 5 5 and keep those two in fronts of you, please. б Now, in Grindon Exhibit 4 are you 7 the same Dr. John R. Grindon as prepared this 8 declaration? 9 Α. Yes. 10 And if you look at the last page, 0. 11 you'll see that there's a signature with the 12 date of October 4, 2011. Is that your 13 signature? 14 Α. Yes, it is. 15 And did you sign this October 4, 0. 16 2011? 17 Α. Yes. 18 0. And at the time, did you declare, 19 under penalty of perjury and under the laws of 20 the United States, that the foregoing is true 21 and correct? 22 Α. Yes. 23 Did you ever learn that there was a 0. 24 mistake in the declaration that we've marked 25 as Grindon Exhibit 4?

DR. JOHN R. GRINDON (9/15/15) This goes back four years. I'm trying to think if anyone pointed out anything. And as I sit here right now, I'm And you didn't indicate that there were any mistakes in the context of your new declarations that we've marked as Exhibits 1

10 I didn't indicate any mistakes. I Α. 11 reviewed it with regard to the issues at hand, 12 not in toto.

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0.

through 3, correct?

not aware of any mistake.

13 0. But as of October 4, 2011 when you 14 executed the declaration that has been marked as Grindon Exhibit 4, you believed that every 15 16 statement that was contained in Grindon 17 Exhibit 4 was truthful, complete and accurate; 18 is that correct?

19 That's a fair statement. Α. 20 0. And sitting here today, have you no 21 reason to believe that any statement in 22 Grindon Exhibit 4, as of today, is not 23 truthful, correct and accurate? 24 As I sit here now, I'm not aware of Α. 25 anything.

Page 26 1 DR. JOHN R. GRINDON (9/15/15) 2 So if you turn to paragraph three, 0. 3 you'll see that there are some patents listed. 4 You see that? 5 Α. Yes, I do. б I'm going to start MR. MACEDO: 7 off by marking this as Grindon 8 Exhibit 7. 9 (Grindon Exhibit 7, U.S. Patent 10 No. 7,239,760 was marked for 11 identification, as of this date.) 12 BY MR. MACEDO: 13 U.S. Patent No. 7,239,760 B2 to 0. 14 DiBernardo. 15 Do you recognize Grindon Exhibit 7? 16 Yes. Α. 17 Is that one of the same patents 0. 18 that you identified in paragraph three of your 19 October 4, 2011 declaration marked as Grindon 20 Exhibit 4? 21 Yes. Α. 22 If you look at it, it was filed on Q. 23 May 16, 2005, correct? Look at the paragraph 24 marked 22. It says filed. 25 MR. MACEDO: Counsel, you can

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Page 27 1 DR. JOHN R. GRINDON (9/15/15) 2 point it to him if you need to. 3 You're asking the date of filing of Α. 4 the '760 patent? 5 0. Correct. б May 16, 2005. Α. 7 And it is claimed to be a division 0. 8 of Application Number 09/758717 filed on 9 January 11, 2001, correct? 10 Α. Yes. 11 0. And that's the same serial number 12 as Grindon Exhibit 5, correct? 13 The numbers appear to be the same, Α. 14 yes. 15 And it's also the same serial 0. 16 number as Grindon Exhibit 6, correct? 17 Α. Yes. 18 0. Now, in paragraph four of Grindon 19 Exhibit 4, you say, "I have reviewed the claim 20 specifications and file histories of the 21 patents in-suit." 22 And that includes Grindon 23 Exhibit 7, correct? 24 Α. Yes. 25 I understand these patents have a 0.

Page 28 1 DR. JOHN R. GRINDON (9/15/15) 2 common disclosure. That's referring to the 3 patents in-suit discussed in Grindon 4 Exhibit 4, correct? 5 Α. Yes. б 0. And do you understand that the 7 patents identified in paragraph three of 8 Grindon Exhibit 4 have a common disclosure 9 with Grindon Exhibit 5? 10 Substantially, except perhaps as Α. 11 discussed before. 12 With respect to the claims you're 0. 13 talking about? 14 As I sit here now, that's my Α. 15 understanding. 16 Would you say that the substantive 0. 17 statements you make about the disclosure of 18 Exhibit 7 in your declaration marked Exhibit 4 19 are truthful and accurate with respect to 20 Grindon Exhibit 5 also? 21 MR. ALMELING: Objection; form. 22 As I sit here now, I know of no Α. 23 reason why they would not be. 24 And is the same true with respect 0. 25 to Grindon Exhibit 6?

1	DR. JOHN R. GRINDON (9/15/15)
2	MR. ALMELING: Same objection.
3	A. The same answer.
4	Q. So for example, just picking
5	paragraph 19 of Grindon Exhibit 4, in
6	paragraph 19, you say, "the patents in-suit,"
7	and that's plural patents, "described in the
8	field of the convention as 'visual databases'
9	specifically the creation and utilization of
10	visual databases of geographic locations," and
11	then you cite to a common line number from the
12	'760 patent, right?
13	A. Let me check and make sure that
14	this is inferring to the '760 patent.
15	Q. Paragraph four, it says, "for ease
16	of reference, all citations and specification
17	are to the '760 patent, unless stated
18	otherwise."
19	A. So I don't see any stating
20	otherwise, so I'll assume this is the '760
21	patent citation.
22	Q. When you made that statement in
23	paragraph 19, you meant that to apply to all
24	the patents in-suit which had the common
25	specification, correct?

Page 30 1 DR. JOHN R. GRINDON (9/15/15) 2 That's my understanding. Α. 3 0. And that statement would apply 4 equally except for the citation of the column 5 and line number to Grindon Exhibit 5, correct? б You're talking about the first Α. 7 sentence in paragraph 19 of Exhibit 4? 8 0. Correct. 9 Α. Yes. 10 And that would also apply to 0. 11 Grindon Exhibit 6? 12 Α. Without referencing that particular 13 citation and under the previous assumptions, 14 that would be correct. 15 And you have no reason to believe 0. 16 that those assumptions are wrong sitting here 17 today? 18 Α. Not sitting here at the moment. 19 0. And when you prepared your 20 declaration that we've marked as Grindon 21 Exhibit 1 through 3, you had no reason to 22 believe that that assumption was wrong, 23 correct? 24 When I prepared those exhibits, I Α. 25 was considering the references that I listed

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1 DR. JOHN R. GRINDON (9/15/15) 2 in those exhibits which I don't believe 3 included the '760 patent. However, at the time, I was not aware of any contradiction. 4 5 Counsel didn't point out to you any ο. б contraindications between your declaration and 7 Exhibit 5? 8 MR. ALMELING: Objection. And I 9 don't want to provide instruction. 10 Perhaps you could revise your question 11 in a way that does not. 12 Nobody pointed out to you any 0. 13 errors in Grindon Exhibit 4 as it applied to Grindon Exhibit 5? 14 15 I caution you to MR. ALMELING: 16 provide an answer that is consistent 17 with the previous objection. 18 I can only say that sitting here, Α. 19 I'm not aware of any of any errors. 20 0. And you're not aware of any errors 21 with respect to your declaration marked as 22 Grindon Exhibit 4 in being applied with 23 respect to Grindon Exhibit 6; is that correct? 24 I'm not. Α. 25 Now, if you look at Grindon 0.

		Page 32			
1	DR. JOHN R. GRINDON (9/15/15)				
2	Exhibit 7, you see that it relies on the				
3	provisional that was dated October 6, 2000,				
4	correct?				
5	A. Yes.				
6	Q. And then there was a				
7	non-provisional application filed January 1,				
8	2001, correct?				
9	A. Yes.				
10	Q. Now, is it your recollection that				
11	the provisional actually had different text				
12	than the non-provisional?				
13	A. Show me both, please.				
14	Q. I don't have the provisional here,				
15	but you do testify as to different language in				
16	the provisional in you're the declaration, if				
17	you want your declaration.				
18	A. As I sit here, it's my				
19	understanding that the text is different.				
20	Q. So is it your understanding that				
21	Grindon Exhibit 7 may not have been entitled				
22	to the October 6th priority date?				
23	MR. ALMELING: Objection; form.				
24	Additionally, objection; outside the				
25	scope.				

Page 33 1 DR. JOHN R. GRINDON (9/15/15) 2 I didn't consider that question. Α. 3 You're asking for my judgment as to whether or 4 not the '760 patent is entitled to the 5 October 6, 2000 priority date? б Well, take a look at paragraph 15 0. 7 of Grindon Exhibit 4. In the first sentence, 8 you say, "I have not considered the issue 9 whether the asserted claims in the patent 10 in-suit are supported by the provisional 11 application filed on October 2000." 12 Correct? 13 Α. That's the sentence, yes. 14 0. And that was true then? 15 At the time I wrote this Α. 16 declaration, Exhibit 4, I had not considered 17 whether or not the provisional as stated here 18 applied. 19 0. And as you testified a minute ago, 20 you haven't really considered that issue since; is that correct? 21 22 I haven't for the purpose of these Α. 23 declarations. 24 Which are these declarations? 0. 25 Α. Exhibits 1 through 3.

1 DR. JOHN R. GRINDON (9/15/15) 2 Now, in the next sentence of 0. 3 paragraph 15 you say, "my definition of level 4 of skill in the art would not substantively 5 change even if it were determined that the б patents in-suit are not supported by the 7 October 2000 provisional and are only entitled 8 to a later priority date." 9 Do you see that? 10 Α. You didn't read it exactly as in 11 the declaration, but I do see the sentence 12 that you're referring to. 13 Please reread it if misread it. 0. 14 Why don't you read it into the record so make 15 sure it's correct. 16 Okay. The sentence that he's Α. 17 referring to states, "my definition of the 18 level of skill in the art would not 19 substantively change even if it is determined 20 that the patents in-suit are not supported by 21 the October 2000 provisional and are only 22 entitled to a later priority date." 23 Was that statement true when you 0. 24 signed the declaration in October 4, 2011, 25 marked Grindon Exhibit 4?

1 DR. JOHN R. GRINDON (9/15/15) 2 Α. Yes. 3 Is that statement still true today 0. 4 sitting here at this deposition? 5 MR. ALMELING: Objection; form. б Additionally, objection; outside the 7 scope. 8 I didn't consider that matter in Α. 9 preparing these three declarations. So you're 10 asking me to consider that on-the-fly with 11 regard to these three declarations. 12 No, that's not my question. My 0. 13 question is: The statement that you wrote in 14 paragraph 15 of Grindon Exhibit 4, is it true 15 with respect to the subject matter of Grindon 16 Exhibit 4 sitting here today as of right now? 17 MR. ALMELING: Objection; form. 18 Additionally, outside the scope and 19 among other things, Federal Rule of 20 Evidence 611(d). 21 At the time I signed this Α. declaration, that was the case. You're asking 22 23 now in 2015 if I would have that same 24 statement? 25 Yes, for purposes of Grindon 0.

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1 DR. JOHN R. GRINDON (9/15/15) 2 Exhibit 4. 3 If in --Α. 4 MR. ALMELING: Before you answer, 5 Counsel, we both know the scope of б cross-examination is limited to --7 MR. MACEDO: He specifically 8 offered opinions on this subject, 9 Counsel. So if you really want to go 10 down this, we can fight about that, 11 but I totally disagree it's outside 12 the scope. 13 He offered opinions as to what the 14 meaning of his testimony was, what the 15 time period of his testimony was and 16 paragraph 15 disagrees with that, with 17 his statements. It's totally within 18 the scope of his testimony, and I 19 totally disagree with you. 20 And I would appreciate if you'd 21 stop obstructing the deposition and 22 let the witness testify. 23 MR. ALMELING: Didn't mean to 24 obstruct at all. I just wanted to 25 clarify the scope of your question in

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Page 37 1 DR. JOHN R. GRINDON (9/15/15) 2 relation to my objection. My 3 objection still stands. 4 You can answer. 5 Α. At the time I prepared this б declaration in 2004, I made that statement and 7 it would have been true at that time. At this 8 time in 2015, I would have to consider any 9 possible changes in definition of skill in the 10 art if this were being written now. I would 11 have to take that under consideration. 12 0. So are you saying that your 13 testimony in paragraph 15 in the second sentence of Grindon Exhibit 4 was true when 14 15 you signed it on October 4, 2011, but is no 16 longer true today? 17 No, I did not say that. Α. 18 0. Are you saying that your statement 19 in the second sentence of paragraph 15 of 20 Grindon Exhibit 4 was true on October 4th, 21 2011? 22 All I'm saying is when I signed Α. 23 this in 2004 --24 You didn't sign it in 2004. 0. You 25 signed it in 2011.

Page 38 1 DR. JOHN R. GRINDON (9/15/15) 2 I'm sorry. That's right; 2011, Α. 3 October 4th. So at that time, that was, in 4 applying the person of ordinary the skill, 5 that was my assessment. б So the statement in the second 0. 7 sentence of paragraph 15 of Grindon Exhibit 4 8 that says, "my definition of the level of 9 skill in the art would not substantively 10 change even if it was determined that the 11 patents in-suit are not supported by the 12 October 2000 provisional and are only entitled 13 to a later priority date" was true and correct 14 on October 4, 2011; is that correct? 15 Α. Yes. 16 Is that still true and correct 0. 17 today? 18 MR. ALMELING: Objection to form. 19 Α. It should still be true today. As 20 I sit here, I'm trying to think of a reason 21 why the rule might be different now than it 22 was in 2011, but I'm not thinking of any 23 difference. 24 I'm sorry; Counsel, MR. ALMELING: 25 I don't believe the witness is

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DR. JOHN R. GRINDON (9/15/15) finished answering. Please answer. 0. Α. I was going to say that this was a district litigation proceeding. Currently we're talking about an IPR so I would have to think about the differences. But you're asking if this declaration were prepared today in a district litigation case, would that statement still be correct? 0. I'm asking if Counsel for Google asked you to again execute, under penalty of perjury, today, Grindon Exhibit 4, would you be able to execute it knowing that it includes the second sentence of paragraph 15? MR. ALMELING: Objection; form. Objection; outside the scope. Α. To be clear, that would then be in that same case CV-10-07747, except prepared today? Yes. 0. MR. ALMELING: Same objections. I don't see any reason why that Α. would change as I sit here. If you could look at Grindon 0.

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1	DR. JOHN R. GRINDON (9/15/15)		
2	Exhibit 7. Which is the patent in-suit from		
3	case 2:10-cv-07747 that we're referring to, do		
4	have you that in front of you?		
5	A. I have Exhibit 7, yes.		
6	Q. If Exhibit 7 is not entitled to		
7	October 6, 2000 priority date, what are the		
8	choice of priority dates which it might be		
9	entitled to otherwise?		
10	MR. ALMELING: Objection; form.		
11	Additionally, objection' outside the		
12	scope.		
13	A. This is not something I've		
14	considered in my declarations, so this would		
15	be just going on the face of the patent.		
16	Q. Let me withdraw that and let's		
17	think about what you did consider.		
18	You talked about it are only		
19	entitled to a later priority date. What are		
20	the later priority dates which you're		
21	referring to with respect to Grindon		
22	Exhibit 7?		
23	MR. ALMELING: Objection; form.		
24	Objection; outside the scope.		
25	A. I didn't say the later priority		

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DR. JOHN R. GRINDON (9/15/15) date. I just say a later priority date. So I didn't establish a particular later priority date.

5 Let me rephrase. In paragraph 15, Ο. б you're referring to "only entitled to a later 7 priority date," correct? That's the same 8 sentence we just confirmed you still stand by. 9 Objection to form. MR. ALMELING: 10 Again, I said, as I sit here, I'm Α. 11 not thinking of any reason why that second 12 sentence would change in 2015 as compared to 13 2011. But assuming that it's the same, this 14 says "only entitled to a later priority date," 15 not analyzing just what later priority date it 16 might be.

17 And based upon your knowledge of 0. 18 patents and everything that you've studied to 19 date and bringing your expertise that you're 20 offering to the PTAB to bearing here, do you 21 have an understanding of what the potential 22 later priority date could be with respect to 23 Grindon Exhibit 7 U.S. Patent No. 7,239,760 if 24 it is not entitled to October 6, 2000, as a 25 priority date?

1 DR. JOHN R. GRINDON (9/15/15) 2 MR. ALMELING: Objection; form. 3 Objection; outside the scope. 4 Α. When you say could be, I would just 5 look at the face of the patent and very б simplistically look at the date of the 7 division of Application Number 09/758717 where 8 the division was filed on January 11, 2001. 9 So one of the a later priority 0. 10 dates that you would consider is January 11, 11 2001; is that correct? 12 Objection to form. MR. ALMELING: 13 Objection; outside the scope. 14 Again, this isn't something I Α. 15 considered in my declaration, but if you're 16 just asking me now, that is a date that I 17 would look at as a possible later date, yes. 18 0. And is it your testimony sitting 19 here today that your definition of the level 20 of skill in the art would not substantively 21 change even if it is determined that the '760 22 patent is not supported by the October 2000 23 provisional and is only entitled to a 24 January 11, 2001 priority date with respect to 25 the information that you testified to in

Page 43 1 DR. JOHN R. GRINDON (9/15/15) 2 Grindon Exhibit 4 for purposes of the 3 litigation that was submitted? 4 MR. ALMELING: Counsel, for the 5 record, clarification. I'm not б objecting. Do you mean definition of 7 the level of skill in the art in the 8 Vederi litigation or these IPRs? 9 MR. MACEDO: I'm quoting what he 10 said in the dec and it's for the 11 purposes that he offered the dec. 12 MR. ALMELING: Objection; form. 13 Objection; outside the scope. 14 So my understanding then is that Α. 15 you're referring to Exhibit 4 which is the 16 Vederi declaration? 17 Correct. 0. 18 Α. And you're asking me to conjecture, 19 which I didn't in that declaration, you're 20 asking me now to conjecture what later 21 priority date there might be and given that 22 that --23 Dr. Grindon, that's not what I'm 0. 24 I'm withdrawing the guestion. asking. That's 25 not what I'm asking.

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1 DR. JOHN R. GRINDON (9/15/15) 2 You refer specifically to the fact 3 that you would not have changed your opinion 4 if a different priority date was being 5 provided with respect to the Vederi б declaration, correct? 7 Α. I'm sorry, but I was in the middle 8 of answering your question. 9 No, you changed my question in your 0. 10 That's why I stopped you and withdrew answer. 11 it. 12 Α. I didn't think I did change it. 13 Go ahead, please. 14 That's why I'm trying to clarify Q. 15 this, okay. You testified when you prepared 16 Grindon Exhibit 4 that you did not think that 17 the level of skill in the art would be 18 substantively different if the '760 patent was 19 not entitled to the October 2000 provisional 20 date, correct? 21 Α. That's what it says, yes. 22 Q. And you still believe that to be 23 true? 24 MR. ALMELING: Objection; form. 25 Α. As written as of the date of this

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1 DR. JOHN R. GRINDON (9/15/15) 2 document, this was true. 3 And sitting here today, it's still 0. 4 true with respect to the Vederi litigation, 5 correct? б MR. ALMELING: Objection; form. 7 Objection; outside the scope. 8 Α. A moment ago you suggested another 9 later priority date of 2001 and at that date, 10 as I sit here, I see no reason why there would 11 be a substantive change in the level of the skill of the art over that year. 12 13 Now, the Vederi patent in-suit, 0. 14 Grindon-7, has a filing date of May 16, 2005, 15 correct? 16 Patent '760, which was considered Α. 17 in the Vederi matter? 18 0. Correct. 19 Has a filing date of Α. 20 September 22nd. I'm sorry; May 16, 2005. 21 Now, if the court had said that the 0. 22 claims that were presented in the '760 patent 23 were not entitled to a priority date before 24 the filing date of the '760 patent, would your 25 opinions in Grindon Exhibit 4 have been

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1 DR. JOHN R. GRINDON (9/15/15) 2 different? 3 MR. ALMELING: Objection; form. Objection; outside the scope. 4 5 Again, I didn't consider in this Α. б the declarations that we are here to talk 7 about today. But as I sit here, I am not 8 seeing a reason why there would be a 9 substantive difference in the level of skill 10 in the art even through 2005. 11 0. Thank you very much. 12 We've been going for almost an 13 Would you like to take a break at this hour. 14 time? 15 Α. Sure. 16 MR. ALMELING: Thank you. 17 (Whereupon, at this time, a short 18 break was taken.) 19 BY MR. MACEDO: 20 0. If you could take a look at Grindon 21 Exhibit 1 and turn to paragraph 14. 22 Α. I'm sorry; did you say 14. 23 14, one-four. 0. 24 Yes, I have that. Α. 25 The very first sentence says, "I am 0.

1 DR. JOHN R. GRINDON (9/15/15) 2 not and never was an employee of Google, 3 Inc.," correct? 4 Α. Yes. 5 Is there any clarification you want Ο. б to put on that sentence? 7 I can't think of any change to that Α. 8 sentence, no. 9 Do you think it accurately reflects 0. 10 the relationship you have with Google, Inc.? 11 Α. Yes, I do. 12 0. Do you think it completely reflects 13 the relationship you have with Google, Inc.? 14 Α. Well, this sentence is very 15 specific. It says, "I'm not an employee." An 16 employee is a specific thing and, no, I'm not 17 an employee. 18 MR. ALMELING: Let's go off the 19 record. 20 (Whereupon, an off-the-record 21 discussion was held.) 22 BY MR. MACEDO: 23 Is there anything else the board 0. 24 should know about your relationship with 25 Google, Inc. besides the fact that you are not

1 DR. JOHN R. GRINDON (9/15/15) 2 and never were an employee of Google, Inc.? 3 MR. ALMELING: Objection to form. 4 Α. It's hard for me to guess what the 5 board might want to know. Can you be more б specific, please? 7 0. Well, if someone wanted to 8 understand whether you had a relationship with 9 Google, Inc., how would you describe whether 10 you do have a relationship with Google, Inc.? 11 Α. When you say a relationship, please 12 be more specific. 13 Do you have any relationship at all 0. 14 with Google, Inc. besides not being an 15 employee? 16 As is self-evident, I'm engaged in Α. 17 a number of legal matters. 18 0. How many legal matters are you 19 engaged by Google, Inc.? 20 Α. Including this one, I believe four 21 as I sit here. 22 You're sure it's not five? 0. 23 Perhaps. No more than that. Α. 24 No more than that? 0. 25 Α. I'm almost sure it wouldn't be.

Page 49 1 DR. JOHN R. GRINDON (9/15/15) 2 So why don't you turn to your 0. 3 resumé, which is attached to Grindon Exhibit 1 and let's look at your litigation support 4 5 experience. And while you're turning, do you б know how much you're being paid an hour for 7 purposes of this litigation for the four IPRs 8 involving visual real estate? 9 I believe 500 an hour. Α. 10 Do you know how much your hourly 0. 11 rate was to prepare Grindon Exhibit 4 for the 12 Vederi litigation? 13 I don't recall right now. Α. 14 What's your best guess? Q. 15 This is several years ago. Α. I'm 16 going to guess no more than 400. 17 Is there someplace where you have 0. 18 records for that? 19 Α. I could find records, yes. 20 0. I'm going to request that you find 21 out that information and that you have Counsel 22 notify us as to what the rate you were paid in 23 the Vederi litigation was, okay? Do you 24 understand my request? 25 Α. Yes.

Page 50 1 DR. JOHN R. GRINDON (9/15/15) 2 Now, in your declaration, it refers 0. 3 to a litigation that involved Transcenic 4 versus Google, page 5 of 10 of your CV, page 5 29 of the exhibit that we marked as Grindon б Exhibit 1. 7 Α. I see that. 8 0. Now, were you engaged on behalf of 9 Google in that litigation? 10 Α. Yes. 11 Q. Did you prepare any expert reports? 12 Α. Yes. 13 How many? 0. 14 I don't recall. Α. 15 Was it one or more than one? 0. 16 Α. I believe more than one, but how 17 I don't know. many, 18 0. Do you know the rate you charged 19 Google for that litigation was? 20 No, I don't recall. This was Α. 21 several years ago. 22 Actually, it's through 2015. Q. 23 But the rate was established in Α. 24 2012, and I don't remember what the rate was 25 at that time.

1 DR. JOHN R. GRINDON (9/15/15) 2 Was it \$500? 0. 3 I don't think so. Α. 4 0. Do you think it was as much as 5 \$400? б I don't know right now. Α. 7 0. Is there someplace where you keep 8 your rate card as to what you're charging per 9 case? 10 I can find out what the rate was. Α. 11 On some of these cases I worked through 12 agencies and those are variable depending upon 13 the agency and the fee they charge. 14 Well, did you work through an 0. 15 agency for any of the Google cases? 16 I did. Α. 17 Which case? 0. 18 Α. I would have to check to be sure. 19 As I sit here right now, I think the 20 Transcenic case, I'm not sure, and I believe 21 the Vederi case. 22 And what agency was that through? Q. 23 When I check for the other matter Α. 24 that you asked for, that would be a time I 25 could check for these things. The Vederi case

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1	DR. JOHN R. GRINDON (9/15/15)
2	I believe was working with an agency called
3	N-E-W-N, National Expert Witness Network. But
4	to be sure of these things, I would like to
5	check and then perhaps let Counsel know.
6	Q. If you could provide us a list of
7	your rates for the various cases that you
8	worked for Google as well as whether you
9	worked through an agency and what agency, we
10	request that, okay?
11	A. Okay.
12	Q. You understand what I'm asking for?
13	A. I believe I do.
14	MR. ALMELING: Counsel, to be
15	clear to all the requests, the witness
16	can answer to his understanding of
17	them. We will consider them and if
18	they're commensurate with the rules,
19	we'll adhere to them and comply, but
20	otherwise not.
21	MR. MACEDO: Then we can go to the
22	board if necessary, okay?
23	Q. In any event, you certainly charged
24	less than \$400 for the Vederi case?
25	A. The Vederi case was initiated in

Page 53 1 DR. JOHN R. GRINDON (9/15/15) 2 2011. I believe my rates were lower at that 3 time, yes. 4 0. Would they be as low as \$300 an 5 hour? б Α. Working through an agency, they 7 could be. 8 0. They're lower when they're through 9 an agency? 10 Generally, yes. Α. 11 You testified in K-40 versus 0. 12 Escort, correct? That's on the list on page 13 29 of 30? 14 Α. Yes. 15 And would you be surprised to learn 0. that a December 2, 2010 declaration listed 16 17 your rate at \$300 an hour? 18 Α. No, I won't because I had worked 19 with that firm previously, and this was 20 basically a continuation of the same agreement 21 which was established some time earlier than 22 that. 23 So some time in 2010, you were 0. 24 charging \$300 an hour? 25 Again, I would have to check my Α.

1 DR. JOHN R. GRINDON (9/15/15) 2 records, but that seems likely that I was 3 charging that in certain cases. 4 Now when were you engaged in this 0. 5 case? б I believe July of 2015. Α. 7 0. July? 8 And that's my recollection right Α. 9 I'd have to, again, go back and check my now. 10 records. 11 0. And about how much time have you 12 spent at \$500 an hour working on these four 13 **TPRs**? 14 Α. When you say on these four IPRs, 15 are you talking about this matter that I'm 16 engaged in now? 17 The four matters, since there are 0. 18 four cases. 19 All of the cases together, how many Α. 20 hours? 21 Yes. 0. 22 Α. Going back through Vederi 23 Transcenic --24 No. You said you were engaged for 0. 25 these four IPRs in July of 2015, correct?

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1 DR. JOHN R. GRINDON (9/15/15) 2 My question is, is that what you Α. 3 want to know, how many hours --4 0. That's what I asked. 5 Α. -- I spent in this matter that I'm б engaged in? 7 With respect to the four IPRs which 0. 8 you submitted, Grindon Exhibits 1 through 3, I 9 want to know how much time have you spent at 10 \$500 an hour working for Google on those 11 matters? Because we've also talked about the 12 Α. 13 Vederi expert report and that's not included the time spent to prepare that years ago. 14 15 Dr. Grindon, each question I ask 0. 16 now is on itself, okay. So I want you to 17 focus on the question I'm asking and answer 18 the question I'm asking, okay? 19 So the question I'm asking is: You 20 testified that you were engaged for the four 21 IPRs involving visual real estate in July 2015 22 and that you're getting paid \$500 an hour; is 23 that correct? 24 With the caveats that I'm not Α. 25 certain about the July as I remember, but I

Page 56 1 DR. JOHN R. GRINDON (9/15/15) 2 think that's probably the engagement time. 3 With respect to that engagement 0. 4 relating to IPRs 2014-0133 -- 1338, '1339, 5 '1340 and '1341, how much time have you spent б working on just those four matters? 7 Α. Something on the order of 55 hours. 8 0. Fifty-five hours? 9 Α. Yes. 10 At \$500 an hour? 0. 11 Α. Yes. 12 0. That's not including the time 13 sitting here today? 14 Up to now. Α. 15 How much time did you spend working 0. 16 on the Vederi matter for Google? 17 I'm thinking, as I sit here, again, Α. 18 I'll have to check these later, and if there's 19 substantial differences I'll let you know, but 20 something on the order of 160 hours is what I 21 can recall at the moment. 22 At a rate of less than \$400 an Ο. 23 hour? 24 MR. ALMELING: Objection. 25 Α. The Vederi matter, as I mentioned a

Page 57 1 DR. JOHN R. GRINDON (9/15/15) 2 moment ago, was, I believe, through an agency 3 which charges a substantial fee. And I think 4 that would have been substantially less than 5 500, yes. б I said 400? 0. 7 Probably less than 400. Α. 8 Would it have been less than 300? 0. 9 I don't think it would be less than Α. 10 300, no. 11 Q. Do you think it would be less than 12 350? 13 Again, I'd like to check. Probably Α. 14 in the range of three to four. 15 You also list that you were engaged 0. 16 by Google for the View 360 matter, right? 17 Α. Yes. 18 0. And in the View 360 matter, you 19 prepared expert declarations and inter-party 20 review? 21 Α. Yes. 22 And did you also testify or offer Q. 23 testimony in that litigation, too? 24 I'm going to have to go back and Α. 25 see just what the testimony was at that time.

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1 DR. JOHN R. GRINDON (9/15/15) 2 I do remember IPRs. 3 How much did you charge for that 0. 4 matter? 5 Α. The View 360, again, I'll have to б go back and check my records. But I'm 7 thinking on the order of \$25,000. Something 8 like that. 9 Total? 0. 10 That is my recollection now to be Α. 11 checked. 12 0. And do you know what your rate was? 13 Again, pending checking, I think Α. 14 that was through an agency so it would have 15 been a lower rate of more than 300 or more I 16 would think, but probably less than 400. 17 0. Is that the same or different than 18 Grandeye? 19 Α. It's the same. 20 So in August 2013, you submitted a 0. 21 declaration that said you were being paid \$400 22 an hour. Does that sound right? 23 Α. That sounds like it's very 24 probable. 25 So that's not listed on your CV 0.

1 DR. JOHN R. GRINDON (9/15/15) 2 because you listed View 360 instead? 3 Α. It's basically the same thing. 4 How come you're charging a 0. 5 different rate to Google for the View 360 б matter than you're charging in this matter? 7 The View 360 matter, it's shown on Α. 8 my CV that it began in 2013. So I'm going to 9 assume that the agreement was 2013, which is a 10 couple years ago. So I charged less. 11 Who, besides Google, has paid you 0. 12 as much as \$500 an hour? 13 Α. There are others now who also pay 14 me the \$500 an hour. 15 Well, in February of 2015, you 0. 16 submitted declarations for Stryker in the 17 Stryker versus Storz case, right? The very 18 first case listed on your CV, I'm sorry it's 19 the second case listed on your CV? 20 Α. Your question regarding that again 21 is please. 22 You submitted a declaration on 0. 23 February 2015 in that case, right? 24 The date sounds right. Obviously Α. 25 have it in front of you and I don't, but

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1 DR. JOHN R. GRINDON (9/15/15) 2 assuming that's the correct date, I did submit 3 something. 4 0. Do you know what your rate was? 5 That case began 2013. Α. That would б have been less than \$500 at that time, and I 7 don't recall the exact amount. 8 0. Does 375 sound correct? 9 Α. I'm trying to think. I believe 10 that was through an agency, so it would have 11 been something like that. Perhaps I don't 12 recall which agency right now. 13 So if your declaration said you 0. 14 were being paid \$375 an hour does that mean 15 you took home less because the agency took a 16 piece of it? 17 No, that's my take home, so they Α. 18 would have charged more to the client. 19 So when you're saying your getting 0. 20 paid 375 an hour, Google was actually being 21 charged more, but you only got 375 an hour. 22 Is that your testimony? 23 MR. ALMELING: Objection. I don't 24 mean to interrupt. You say Google was 25 charged. Aren't you discussing the

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Page 61 1 DR. JOHN R. GRINDON (9/15/15) 2 Stryker matter? 3 Your client in that case was 0. 4 charged more -- let me withdraw that. 5 MR. MACEDO: Let's go ahead and б mark, as Grindon Exhibit 8, your 7 declaration from Stryker versus Karl Storz Endoscopy America Stryker 8 9 Exhibit 1009 Stryker Corp. KSEA, Inc. 10 IPR2015-00674, and ask if that is your 11 declaration. 12 (Grindon Exhibit 8, Declaration of 13 John R. Grindon was marked for 14 identification, as of this date.) 15 I believe this is. Α. 16 BY MR. MACEDO: 17 Do you see the rate you were being 0. 18 paid? 19 I'll look for it. If you can point Α. 20 me to the paragraph, that would save me from 21 looking for it. 22 Take a look at paragraph 12. Q. 23 Α. Yes, I see that. 24 Did I refresh your recollection as 0. 25 to how much you were being paid for that

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1 DR. JOHN R. GRINDON (9/15/15) 2 declaration? 3 Α. This says 375 so that would have 4 been it. 5 0. That's what you would have taken б home, not what the agency took? 7 Correct. Α. 8 And the client was being charged 0. 9 more because there was an agency between you 10 and the client? 11 Α. That's my recollection. 12 0. When you say that you're charging 13 Google \$500, that's what you're taking home an 14 hour for this case, right? 15 Α. Yes. 16 Now, did anything happen in 0. 17 response to this declaration for the Stryker 18 case? 19 MR. ALMELING: Objection; form. 20 Α. When you say, did anything 21 happen --22 Did the PTAB rule? Yes. Q. 23 I wasn't advised if they did, maybe Α. 24 you know more than I do. 25 Coincidentally on the same time you 0.

1 DR. JOHN R. GRINDON (9/15/15) 2 signed your declaration, they ruled. You 3 didn't know about that? 4 On September 1, 2015, there was a 5 decision on the institution. Did you read б that? 7 Α. I didn't, no. MR. MACEDO: Why don't we mark, as 8 9 Grindon Exhibit 9, the PTAB decision 10 on institution on Stryker versus Karl 11 Storz. It's the September 1, 2015 12 decision paper number 9 and IPR 2015-0674. 13 14 (Grindon Exhibit 9, September 1, 15 2015 PTAB decision on institution on 16 Stryker v. Karl Storz was marked for 17 identification, as of this date.) 18 BY MR. MACEDO: 19 Have you seen Grindon Exhibit 9 0. 20 before? 21 No. Α. 22 I'd like for you to turn to page 9 Q. 23 of the decision. And by the way, I will tell 24 you it did not institute on any grounds. So 25 on page 9, there's a paragraph that begins,

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1	DR. JOHN R. GRINDON (9/15/15)
2	"petitioner asserts."
3	Do you see that?
4	A. Yes.
5	Q. Could you read that paragraph into
6	the record, please?
7	A. "The petitioner asserts that claims
8	1-6 are unpatentable under 35 U.S.C. § 102 as
9	anticipated by Endsley. Pet. 8-24. To support
10	its contentions, Petitioner provides detailed
11	explanations as to how the prior art meets
12	each claim limitation. Id. at 8-25.
13	Petitioner also relies upon a Declaration of
14	Dr. John R. Grindon, who has been retained as
15	an expert witness by Petitioner for the
16	instant proceeding. Ex 1009. We are
17	unpersuaded that Petitioner's analysis and
18	supporting evidence have established a
19	reasonable likelihood of Petitioner prevailing
20	and showing unpatentability to the claims."
21	Q. So is it your understanding based
22	upon reading that sentence that despite your
23	declaration that we marked as Grindon
24	Exhibit 8, the PTAB did not find your
25	arguments persuasive?

1 DR. JOHN R. GRINDON (9/15/15) 2 MR. ALMELING: Objection to form. 3 It doesn't say that, but it says, Α. 4 "We are unpersuaded that Petitioner's analysis 5 and supporting evidence have established б reasonable likelihood." 7 And petitioner analysis included 0. 8 your declaration, right, Exhibit 1009, the 9 previous sentence? 10 MR. ALMELING: Objection to form. 11 It says, "the Petitioner relies Α. 12 upon a declaration." 13 0. So the arguments that were being 14 made relied upon your declaration were 15 unpersuasive to the PTAB; is that correct? 16 MR. ALMELING: Objection; form. 17 Α. All it's saying is that the 18 petitioner's analysis and supporting evidence 19 have established a reasonable likelihood and 20 petitioner prevailing unpersuaded event. 21 And they read your declaration at 0. 22 the time they reached that conclusion, 23 correct? 24 MR. ALMELING: Objection; form. 25 Α. The declaration was part of the

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1 DR. JOHN R. GRINDON (9/15/15) 2 petitioner's petition. 3 0. Is that a yes or a no? 4 MR. ALMELING: Objection to form. 5 Α. Can you ask it again, please? б When the board reached it's 0. 7 conclusion that it was unpersuaded by 8 petitioner's analysis and supporting evidence, 9 it considered your Exhibit 1009; is that 10 correct or incorrect? 11 MR. ALMELING: Objection; form. 12 Α. It doesn't actually state that it 13 could be, but it says the petitioner relied 14 upon the declaration and they're unpersuaded 15 by the petitioner's analysis. So that's all 16 it says. 17 No, it says "and supporting 0. 18 evidence," which is your declaration, right? 19 MR. ALMELING: Objection; form. 20 Α. I don't know what all supporting evidence was included in the petitioner's 21 22 analysis. The implication that at least part 23 of that was the declaration. 24 0. So at least part of the reason they 25 were unpersuaded was whatever they read of

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Page 67 1 DR. JOHN R. GRINDON (9/15/15) 2 your declaration; is that correct? 3 MR. ALMELING: Objection; form. 4 Α. I'm reading this for the first time 5 and all I can do is read what's said here in б this paragraph, which is out of context and I 7 haven't read the whole order. 8 Well, you testified in Fleming 0. 9 versus Escort and Beltronics, correct? 10 Yes. Α. 11 0. Do you recall how much you were 12 paid in that case? 13 I don't. That began in 2009 and I Α. 14 believe that was also through an agency, so I 15 don't know right now. 16 If you submitted a declaration on 0. 17 December 2, 2010 saying \$300 an hour, does 18 that sound approximately correct? 19 Α. That could be. 20 0. Do you know whether the court in 21 Fleming versus Escort ever rejected any of 22 your opinions? 23 The -- let's see, there was both Α. 24 invalidity and non-infringement reports. And 25 I believe initially the opposing Counsel moved

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Page 68 1 DR. JOHN R. GRINDON (9/15/15) 2 to exclude some of the -- some of the 3 testimony in the non-infringement report. 4 0. And do you remember the court 5 rejecting all of Dr. Grindon's opinions except б his opinion that the Escort products do not 7 generate an alert based upon a predetermined 8 distance because of the distance of the 9 lockout varies? 10 I don't recall those exact words Α. 11 right now, but initially the court did come 12 back agreeing with the opposing counsel's 13 motion to exclude. 14 That was despite your declaration, 0. 15 correct? 16 Objection; form. MR. ALMELING: 17 Α. That was -- my recollection is that 18 later, though, the court did allow testimony. 19 0. But not the testimony it struck? 20 MR. ALMELING: Objection; form. 21 This is back in 2012 or even before Α. 22 and I'm not remembering exactly. 23 We can mark, as Grindon Exhibit 10, 0. 24 the decision dated December 14, 2011, and I 25 was looking at page 37.

Page 69 1 DR. JOHN R. GRINDON (9/15/15) 2 (Grindon Exhibit 10, Memorandum 3 Decision and Order; Fleming v. Escort 4 was marked for identification, as of 5 this date.) б BY MR. MACEDO: 7 This is Grindon-10, and I was 0. 8 looking at page 37. On page 37 in the middle 9 of the paragraph, see "Infringement of Claims 10 3, 5, 6, 8, 26 & 27 of the '038 Patent. In 11 response, Escort points to the same opinions 12 expressed by Dr. Grindon as just discussed. 13 Once again, the Court rejects all of 14 Dr. Grindon's opinion except the opinion that 15 Escort products do not generate an alert based 16 on predetermined distance because the distance 17 from the lockout varies." 18 You see that? 19 I see that. Α. 20 MR. ALMELING: Counsel, I don't 21 mean to interrupt. For clarification 22 of the record, Exhibit 10 contains 23 various redactions. Do you know what 24 those redactions are? 25 MR. MACEDO: No, that's just the

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Page 70 1 DR. JOHN R. GRINDON (9/15/15) 2 public copy of it. 3 The redactions are MR. ALMELING: 4 not the redactions that you made to 5 Exhibit 10? б MR. MACEDO: No, this is the 7 publically available opinion. 8 As Mr. Hawkins has repeatedly 9 pointed out to me, it's our job to 10 retain publicly available documents by 11 ourselves and that is what we did. 12 Do you recall this ruling? 0. 13 Α. I don't recall seeing this document before. 14 15 By the way, if you notice at the 0. 16 top of the page, it says, "Nevertheless, the 17 discussions above demonstrate that many of 18 Dr. Grindon's opinions are irrelevant." 19 Have you heard that criticism 20 before from courts? 21 No. Α. 22 Did you hear that criticism from Q. 23 this court? 24 MR. ALMELING: Objection; form. 25 This court being the Fleming court Q.

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1 DR. JOHN R. GRINDON (9/15/15) 2 in Grindon Exhibit 10. 3 Let me take a look and see what is Α. 4 being referred to in these sections. These 5 are regarding the infringement. б MR. ALMELING: I'd like to 7 instruct the witness that based on Exhibit 10, the publicly available 8 9 document, there is parts of his 10 testimony including, for example, on 11 page 35 where there's a redaction of 12 various Dr. Grindon's testimony. It 13 continues on page 36. That in 14 providing responses to counsel, that 15 you omit from your answer any 16 information that is protected by 17 protective order or other obligation 18 to keep information confidential. Do 19 you understand? 20 THE WITNESS: Yes. 21 I'm sorry; Counsel, MR. ALMELING: 22 I wanted to make sure that's clear. 23 MR. MACEDO: I would have done the 24 same thing. That's fine with me. 25 I do not want you to violate 0.

1 DR. JOHN R. GRINDON (9/15/15) 2 anyone's protective order. 3 Okay. Α. 4 0. Dr. Grindon, if you're ready, I'm 5 ready to move on unless there's something else б you wanted to say? 7 MR. ALMELING: Is there a pending 8 question? 9 I asked whether you had heard that 0. 10 criticism from this court and you hadn't 11 answered? 12 I believe I did. Α. 13 You did answer or you did hear that 0. 14 criticism from this court? 15 May I have that question again? Α. 16 I had said, by the way, if you 0. 17 notice at the top of the page, it says, 18 "Nevertheless, the discussions above 19 demonstrate that many of Dr. Grindon's 20 opinions are irrelevant." And I said, have 21 you heard that criticism before from a court 22 and you said no. And then I said did you hear 23 that criticism from this court, referring to 24 the Fleming court. 25 Had you heard that the Fleming
1 DR. JOHN R. GRINDON (9/15/15) 2 court had said that to you is what I wanted to 3 know or about you? 4 Α. I had not seen this document 5 before. б You've also provided declaration in 0. 7 the CBS Interactive versus Helferich case, 8 right? 9 I believe so. Α. 10 And at this time, I believe Grindon 0. 11 Exhibit 11 is the correct number. 12 MR. MACEDO: If you could, please 13 mark the declaration of John R. 14 Grindon, D.SC Wireless Science 2054 15 from Case Number 2013-00033(JYC), and 16 it is dated the 7th of June 2013. 17 (Grindon Exhibit 11, declaration 18 of John R. Grindon, D.SC Wireless 19 Science 2054 from Case Number 20 2013-00033(JYC) was marked for 21 identification, as of this date.) 22 BY MR. MACEDO: 23 Are you the same John R. Grindon as 0. 24 in Grindon Exhibit 11? 25 Α. Yes.

Page 74 1 DR. JOHN R. GRINDON (9/15/15) 2 And in paragraph five, you said, "I 0. 3 am compensated for my work in this matter \$300 4 an hour with reimbursement of actual 5 expenses." 6 Correct? 7 Α. Yes. 8 So you were being paid \$300 an hour 0. 9 in June of 2013 when you were testifying on 10 behalf of the patent holder in the CBS case, 11 right? 12 Α. Yes. 13 The same time that you were 0. 14 testifying for Helferich patent licensing in 15 the CBS case at \$300 an hour, you were 16 testifying for Google, a month later, at \$400 17 an hour in the Google versus -- or Google 18 versus as Grandeye, correct? 19 MR. ALMELING: Objection; form. 20 Α. Can you show me the \$400 an hour in 21 that matter? 22 Sure. You don't recall though? 0. 23 I'm not recalling right now, no. Α. 24 I just want to say you asked me to 0. 25 show this to you.

1	DR. JOHN R. GRINDON (9/15/15)
2	MR. MACEDO: We'll mark as Grindon
3	Exhibit 12, the declaration of John R.
4	Grindon, D.SC in support of Petition
5	for Inter Partes Review Of U.S. Patent
6	7,542,035, Google Exhibit 1005 dated
7	August 30, 2013, in Google versus
8	Grandeye.
9	(Grindon Exhibit 12, declaration
10	of John R. Grindon, D.SC in support of
11	Petition for Inter Partes Review Of
12	U.S. Patent 7,542,035 was marked for
13	identification, as of this date.)
14	BY MR. MACEDO:
15	Q. If you look at paragraph one of
16	Grindon Exhibit 12, it says, "I've been
17	retained by Google, Inc. (Petitioner) an as
18	independent expert consultant in this
19	proceeding." With a footnote saying you were
20	also evoked in other IPRs for them?
21	"I am being compensated at my
22	standard rate of \$400 an hour for the time I
23	spent on this matter."
24	You see that?
25	A Yes

Page 76 1 DR. JOHN R. GRINDON (9/15/15) 2 So on August 30, 2013, you 0. 3 submitted a declaration for Google at your 4 standard rate of \$400 an hour, correct? 5 Α. I think that's the date. б That's the rate, right; is that 0. 7 correct? 8 Α. Yes. And on June 7, 2013, you submitted 9 0. 10 a declaration where you were being compensated 11 \$300 an hour; is that correct? 12 Α. No. What declaration are you 13 referring to there? 14 We're referring to the CBS versus 0. 15 Helferich declaration, Grindon 11; is that 16 correct? 17 Α. I believe that is. 18 0. How much better was your work for 19 Google than it was for Helferich? 20 MR. ALMELING: Objection; form. 21 I don't think I have to answer that Α. 22 question, but I will say that these agreements 23 and relationships were established at 24 different times and the cases were initiated 25 at different times. Some were through various

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1 DR. JOHN R. GRINDON (9/15/15) 2 So the rate varies. agencies. 3 So is it your view that the work 0. 4 that you did for Google was better, the same 5 or not as good as the work you did for б Helferich? 7 MR. ALMELING: Objection; form. 8 Α. Can I ask the basis for that 9 question? I don't understand. 10 They paid a hundred dollars more an 0. 11 hour. That is a substantial difference a 300 12 versus \$400 rate. I'm trying to understand 13 the difference, whether there was a 14 difference, in the quality of the work to 15 justify the difference in rate. 16 There's no difference in the Α. 17 quality of the work. My relationship with the 18 Helferich group went back some period of time. 19 There's no difference in the quality of work. 20 Well, you charged \$400 in 2013 to 0. 21 Google to testify in the Grandeye case, and 22 sitting here today, you're charging them \$500. 23 Your relationship to Google went back at least 24 to 2010, 2011. Why are you charging them more 25 now?

Page 78 1 DR. JOHN R. GRINDON (9/15/15) 2 MR. ALMELING: Objection to form. 3 I believe I answered this some time Α. 4 In cases where I worked through ago. 5 agencies, I actually take home less because б the agencies take a pretty big cut. 7 0. Can you name any other case where 8 you're getting paid \$500 an hour? 9 My recollection right now is there Α. 10 are at least two other cases. 11 0. And which cases are those? 12 MR. ALMELING: Objection. Let's 13 go off the record. 14 (Whereupon, an off-the-record 15 discussion was held.) 16 BY MR. MACEDO: 17 The two other cases that you're 0. 18 referring to, have you already submitted 19 expert reports? 20 Α. No. 21 Have you already been publicly 0. 22 disclosed that you're representing someone in 23 those cases? 24 Α. No. 25 Are you representing Google in 0.

1 DR. JOHN R. GRINDON (9/15/15) 2 those cases? 3 Α. No. 4 0. Have you actually been paid \$500 an 5 hour yet? б Α. Yes. 7 And how many hours have you worked 0. 8 on those cases to date? 9 I don't know. Α. 10 One hour, five hours, a hundred 0. 11 hours? 12 I don't know. Α. 13 0. How long ago were you engaged on 14 those cases? 15 Recently. Α. 16 Last month? 0. 17 Probably in this calendar year. Α. 18 I'd have to go back and check. 19 0. Before or after you were engaged by 20 Google for these IPRs? 21 I believe that would have been Α. 22 before. 23 Who engaged you for these IPRs? 0. 24 Who physically engaged you, the person? 25 MR. ALMELING: Counsel, as we

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Page 80 1 DR. JOHN R. GRINDON (9/15/15) 2 discussed off the record, these are 3 indeed governed by non-disclosure 4 obligations. 5 Ο. I'm talking about these IPRs, not б I'm talking about the four IPRs that those. 7 he's testifying today. 8 MR. ALMELING: I see. 9 0. Who engaged you? 10 I would have to look at the Α. 11 signature on the agreement, which I can do 12 later. 13 Who contacted you? 0. 14 Α. My initial contact was from Google. 15 Someone inside of Google or some 0. 16 outside lawyer? 17 Inside Google was the first Α. 18 mention. 19 Q. Do you remember who that was? 20 I believe Jim Sherwood. Α. 21 0. The same Jim Sherwood sitting here 22 today? 23 Yes. Α. 24 Are you doing any consulting work 0. 25 that doesn't involve litigation at the present

Page 81 1 DR. JOHN R. GRINDON (9/15/15) 2 time? 3 Not at the moment. Α. 4 0. Over the past two years, have you 5 done any consulting work that doesn't involve litigation? б 7 Α. Two years, very little. 8 0. When was the last time you did 9 consulting work that wasn't part of litigation 10 or IPR some legal dispute? 11 Α. Perhaps around two years ago. 12 0. So is it fair to say that since the 13 four IPRs were initiated, you have not earned 14 any income as a consultant other than in the 15 context of a litigation or legal dispute? 16 Since July, if that was the date Α. when these were instituted --17 18 0. No, that's when you were contacted. 19 These were instituted last year. 20 Α. Since the agreement with Google in 21 this matter, I don't think I've had any other 22 consulting arrangements that were not 23 litigation related or IPR related or 24 prosecution related. 25 You're working on prosecution? 0.

1 DR. JOHN R. GRINDON (9/15/15) 2 Not since July, I don't think. Α. T 3 don't think I have since July. 4 By the way, when you found that 0. 5 Google had instituted four IPRs, relying on б the same DiBernardo disclosure that you had 7 previously submitted the declaration in the 8 Vederi litigation for them, did you ask them 9 why they didn't engage you sooner? 10 No, I didn't. Α. 11 0. Didn't you know a lot about that 12 disclosure? 13 Didn't I know a lot about what Α. 14 disclosure? 15 The DiBernardo disclosure. 0. 16 Α. Yes. 17 Wasn't Google happy with the work 0. 18 you did in the Vederi litigation? 19 Α. I can't comment on Google's 20 happiness. 21 What do you know about Google's 0. 22 happiness? Did they express to you their 23 happiness with your work? 24 As far as I know. Α. 25 0. Did they ever express to you that

Page 83 1 DR. JOHN R. GRINDON (9/15/15) 2 they were unhappy with your work? 3 Α. No, never did. 4 They continued to engage you after 0. 5 you did the Vederi declaration, right? б Α. I've had engagements since, yes. 7 And they've engaged you in the 0. 8 Transcenic case, right? 9 Yes, they did. Α. 10 And they engaged you in the View 0. 11 360/Grandeye case, right? 12 Α. Yes. 13 0. Weren't you wondering how come they 14 didn't engage you sooner here? 15 I didn't ask. Α. 16 Really, you never asked why you 0. 17 didn't contact me before since I know so much 18 about this? 19 No. Α. 20 0. Do you know Dr. Fuchs? 21 Α. I don't, no. 22 Really, you've never met him? Q. 23 Α. Never met him, no. 24 Ever speak to him? 0. 25 Never did. Α.

1 DR. JOHN R. GRINDON (9/15/15) 2 Never look at any declaration or 0. 3 testimony by him? 4 Α. No, I haven't. 5 0. Including his declaration submitted б in the present IPRs, correct? 7 Correct. Α. 8 0. And you didn't look at what 9 testimony he offered in the Transcenic case, 10 did you? 11 MR. ALMELING: Objection to form. 12 Α. Now I need to recollect. No, I'm 13 not sure. 14 Q. You don't recall one way or the 15 other? 16 Yes, I'm not sure. Α. 17 By the way, do you know how much 0. 18 he's getting paid by Google? 19 Α. No idea. 20 Do you know if he's getting paid 0. 21 less or the same as you? more, 22 No idea. Α. 23 Would you think that he should be 0. 24 paid more, less or the same? 25 No idea. Α.

1	DR. JOHN R. GRINDON (9/15/15)
2	MR. ALMELING: Objection to form.
3	Q. Didn't you want to see Dr. Fuchs'
4	declaration in these IPRs so you could see
5	whether your opinions were the same or
6	different than his?
7	A. I was brought into this for a
8	limited purpose and my understanding and I was
9	aware that Dr. Fuchs had been an expert on
10	this, but my role was very limited and
11	specific.
12	Q. Well, aren't you offering opinions
13	about claim construction in 338 and 339 IPRs?
14	A. Not really claim construction.
15	Q. You're offering opinions as to what
16	server farm means?
17	MR. ALMELING: Objection to form.
18	Q. Correct or incorrect?
19	A. Not in the construing server farm,
20	only developing an understanding as far as the
21	declarations require it.
22	MR. ALMELING: Counsel, I have to
23	interrupt.
24	Q. To make it clear
25	MR. ALMELING: I'm sorry we've

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Page 86 1 DR. JOHN R. GRINDON (9/15/15) 2 been going for about an hour. 3 MR. MACEDO: I'd like to finish 4 this line, and then I will take a 5 break. б MR. ALMELING: That sounds great. 7 I just want to make it clear, the 0. 8 PTAB should not be reading your declaration as 9 offering a construction of what the term 10 server farm means in the context of the '181 11 patent in-suit for the '1338 and '1339 IPRs; 12 is that correct? 13 In my declarations, I established Α. 14 only certain aspects of the term, "server 15 farm" as it applies to the patents. But I 16 didn't attempt to develop a full construction 17 of the term, "server farm." 18 So your analysis is not a proper 0. 19 claim construction of what the term, "server 20 farm" means in claim one of the '181 patent in 21 dispute for IPRs 2014-01338 and '01340; is 22 that correct? 23 MR. ALMELING: Objection to form. 24 0. I'm sorry. So your declaration is 25 not offering a proper claim construction what

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1 DR. JOHN R. GRINDON (9/15/15) 2 the term server farm means for the '181 patent 3 in dispute for IPRs 2014 '0133 eight and 4 '01339; is that correct? 5 MR. ALMELING: Objection. б Α. I didn't say that, and I believe 7 I've answered this already. 8 No, you didn't. So are you 0. 9 offering a claim construction of what the 10 term, "server farm" means in the '181 patent, 11 claim one, that's the subject of IPRs 12 2014-01338 and 2014-01339? 13 Again, as I answered a moment ago, Α. 14 I'm not offering a formal construction. What 15 I am offering is an understanding of the term 16 as it applied at the time to show within the 17 requirements of the claim that you mentioned, 18 that there are certain aspects of the 19 understanding of that term of a person of 20 ordinary skill in the art that differ with the 21 contentions in the patent owners' response. 22 And that is not exactly the same thing as the 23 full and complete construction of the term 24 which would require substantial amount of 25 effort and research.

Page 88 1 DR. JOHN R. GRINDON (9/15/15) 2 Which you did not conduct that 0. 3 efforts and research that is required to 4 properly construe that term? 5 I carried out sufficient effort and Α. б research to establish the difference between 7 patent owner's response understanding of the 8 term, "server farm" and the understanding that 9 a person of ordinary skill would have under 10 the broadest reasonable interpretation. 11 0. But you didn't do what would be 12 necessary to do a proper claim construction 13 for purposes of the IPR; is that correct or 14 incorrect? 15 MR. ALMELING: Objection; form. 16 Α. Again, I think I've answered this 17 several times. 18 It calls for yes or no. 0. 19 MR. ALMELING: Counsel, he had not 20 finished answering your question. 21 MR. MACEDO: I'm going to withdraw 22 the question. I'm going to make it 23 very clear. 24 I want you to answer yes, no, I 0. 25 don't know I can't answer or I can't recall.

Page 89 1 DR. JOHN R. GRINDON (9/15/15) 2 Did you do the work which you think 3 is necessary to conduct a proper claim 4 construction of the term, "server farm" as 5 used in claim 1 of the '181 patent for 6 purposes of the IPRs 2014-01338 and 7 2014-01339; yes or no? 8 MR. ALMELING: Objection; form. 9 Α. I didn't offer a complete 10 construction. I did offer that portion of the 11 construction necessary to establish the 12 difference that I established. I didn't 13 explore the outer boundaries of the term, 14 "server farm." 15 And do you think server farm means 0. 16 something different today than it meant last 17 vear? 18 Α. Last year being 2014? 19 0. Yes. 20 I didn't address that exact Α. 21 The terms tends to change a little question. 22 bit in time, but I didn't explore the time 23 history of the term, "server farm" from the 24 dates that I looked at which were the dates 25 that are relevant to the current time.

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Page 90 1 DR. JOHN R. GRINDON (9/15/15) 2 What dates are relevant? 0. 3 Α. That would be the date of the 4 patent which you referenced. 5 You don't have the '181 patent in Ο. б front of you. You have your declaration so 7 your declaration presumably will tell you what 8 date you think is relevant. 9 Yes. Α. 10 MR. ALMELING: Counsel, about two 11 minutes ago you asked for a break and 12 you want to finish a line of 13 questioning. I wasn't sure if the 14 line was continuing. 15 MR. MACEDO: This is part of the 16 same line. 17 You could look at paragraph 30. 0. 18 That's where you discuss server farm. 19 MR. ALMELING: Counsel, is there a 20 question pending? 21 MR. MACEDO: Yes I asked him what 22 date he considered -- I asked him what 23 are the relevant dates. 24 That would be 2004. Α. 25 So do you think today that 0.

1 DR. JOHN R. GRINDON (9/15/15) 2 definition of server farm is different than 3 the definition in 2004? 4 MR. ALMELING: Objection to form. 5 Α. I didn't look at this question. б 0. You saw the dictionary definitions 7 that were put in by the patent owner that you 8 said are from today. Do you think those 9 definitions were correct as of today? 10 MR. ALMELING: Objection to form. 11 Α. Those were not prior art. Those 12 were, as far as I could tell, 2015 13 definitions. I thought it was more relevant 14 to find the usage of the term back in the time 15 of the patent. 16 That wasn't my question. 0. My 17 question is the dictionary definitions that 18 the patent owner put in from 2015, did you 19 think those were correct representations of what the term, "server farm" means in 2015? 20 21 MR. ALMELING: Objection; form. 22 Α. I don't take those as 23 authoritative, and I don't take those as the 24 broadest reasonable interpretation of the 25 term, "server farm."

1 DR. JOHN R. GRINDON (9/15/15) 2 I'm going to ask you again, do you 0. 3 think that the dictionary definitions that 4 were offered by the patent owner in IPRs 5 2014-1338 and 2014-1339 offer a correct 6 understanding of what the term, "server farm" 7 means in the year 2015; yes or no? 8 MR. ALMELING: Objection; form. 9 Again, I didn't look at the year Α. 10 2015 because I thought that that was not 11 relevant to the year 2004. So I looked at the 12 year 2004 so you're asking something that I 13 didn't address, but I do not think that the 14 definitions that the patent owner found, the 15 2015 definitions, fully express the full 16 definition of the term, "server farm." 17 And you think that Exhibit 1013 0. 18 referenced on page 23 of Grindon Exhibit 1 19 does properly express the broadest reasonable 20 interpretation of server farm; is that 21 correct? 22 I believe that the combination of Α. 23 at least these references that I've cited, you 24 mentioned 1013, I also cited 1012, and another 25 one somewhere here. I believe that in toto,

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1	DR. JOHN R. GRINDON (9/15/15)
2	those indicate that at the time, 2004, that
3	the server farm had a broader understanding
4	than the limitations proposed by the patent
5	owner.
6	Q. And do you think that it still has
7	a broader understanding today? Did the
8	understanding of server farm get broader or
9	narrower or is it the same today as it was in
10	2004? That's what I'm trying to understand
11	from you.
12	MR. ALMELING: Objection; form.
13	A. That is something I didn't look at,
14	but as I sit here, I think that the same
15	considerations would apply that even today,
16	the term, "server farm" would not be limited
17	so much as the references that the patent
18	owner found for 2015.
19	Q. So you think that the five
20	references that the patent owner submitted
21	from different objective third-party
22	dictionaries from 2015 do not accurately
23	reflect what someone of ordinary skill in the
24	art today would understand a server farm to
25	be? Is that your testimony?

1 DR. JOHN R. GRINDON (9/15/15) 2 MR. ALMELING: Objection; form. 3 Again, I'm looking at the broadest Α. 4 reasonable interpretation. And under that 5 interpretation, the limitation that the patent 6 owner found in its 2015 references that it be 7 a single location. I don't see that as 8 necessary. Certainly not back in 2004 and 9 still not today. 10 MR. ALMELING: Counsel, I've been 11 asking for a break 20 minutes ago, and 12 then ten minutes ago. I understand 13 you're on the same line of 14 questioning. If this continues 15 forever, can I go to the restroom or 16 do you need to keep asking this before 17 I do? 18 MR. MACEDO: You know, I am trying 19 to get an answer, and it's kind of 20 hard and I apologize. If we need to 21 take a two-minute break for you to run 22 downstairs, let's do that, but I ask 23 that the witness not move unless he 24 has to go to the bathroom, which he 25 can go to the bathroom.

1	DR. JOHN R. GRINDON (9/15/15)
2	MR. ALMELING: Let's go off the
3	record.
4	(Whereupon, at this time, a short
5	break was taken.)
6	BY MR. MACEDO:
7	Q. Welcome back, Dr. Grindon. Are you
8	feeling comfortable and competent to continue
9	testifying?
10	A. Sure.
11	Q. So we'll look at Grindon Exhibit 1.
12	All the other testimony you did for now, you
13	can put to the side. Keep the DiBernardo
14	patents and keep your three or four
15	declarations, okay?
16	A. Okay.
17	Q. So now we're looking at Grindon
18	Exhibit 1 and we're looking at paragraph 30
19	where you talk about the term, "server farm"
20	on page 22. Do you see that?
21	A. Yes, I do.
22	Q. So you start off by saying "VRE
23	argued that the claim term 'server farm' in
24	the '181 patent must be narrowly interpreted
25	to require network servers 'housed in one
1	

1	DR. JOHN R. GRINDON (9/15/15)
2	location.'"
3	You see that?
4	A. Yes.
5	Q. Now, do you know whether Google
6	offered any construction of the term, "server
7	farm" as it was used in the '181 patent as
8	part of the petition?
9	A. I don't know.
10	Q. Do you know whether Dr. Fuchs
11	offered any construction as to the term,
12	"server farm"?
13	A. I don't know.
14	Q. Now, if you were doing the
15	declaration and you had to show that the piece
16	of prior art had a server farm, would you have
17	offered a construction of that term in your
18	own declaration because you've done lots of
19	IPRs?
20	MR. ALMELING: Objection; form.
21	Q. You haven't answered yet.
22	A. Can you restate the question? It's
23	been a while.
24	Q. You've offered lots of IPR
25	declarations to date, right?

1 DR. JOHN R. GRINDON (9/15/15) 2 I wouldn't say lots, but if you --Α. 3 0. A fair number. More than three? 4 Α. Perhaps. 5 0. And you understand that as the б petitioner, it's your burden to put forth 7 claim constructions that are of terms that are 8 relevant in that analysis, right? 9 MR. ALMELING: Objection; form. 10 When you say as the petitioner --Α. 11 0. The person like Google seeking to 12 invalidate a patent and IPR proceeding. You 13 understand that the petitioner has the burden 14 to put forth claim constructions of any 15 material terms, right? 16 MR. ALMELING: Objection to form. 17 Α. I understand that often the 18 petitioner does propose claim constructions. 19 0. Do you know why? 20 In order to clarify the meaning of Α. 21 the terms. 22 And you don't think that's required Ο. 23 under the rules that they put forth those 24 constructions? 25 MR. ALMELING: Objection; form.

		Pa
1	DR. JOHN R. GRINDON (9/15/15)	
2	Additionally, objection; lacks	
3	foundation.	
4	Q. If you don't know, you can say you	
5	don't know.	
6	A. If you can show me the rule where	
7	it's stated, then I can answer affirmatively.	
8	Q. You can say you just don't know,	
9	that's fine.	
10	MR. ALMELING: Counsel, is there a	
11	question pending?	
12	Q. If you don't know, say, "I don't	
13	know."	
14	A. I haven't actually read the rule,	
15	but it's my understanding that when there's	
16	any ambiguity in a claim term, that the	
17	petitioner does propose a construction.	
18	Q. I'm going to show you what we	
19	marked as Grindon Exhibit 13 the original	
20	petition filed in IPR 2014-1338 and just let	
21	your Counsel look at it to make sure that he	
22	agrees that that's the right one. It's the	
23	original one.	
24	(Grindon Exhibit 13, Petition for	
25	Inter Partes Review of U.S. Patent No.	

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1 DR. JOHN R. GRINDON (9/15/15) 2 7,389,181 was marked for 3 identification, as of this date.) 4 MR. ALMELING: Counsel, do you 5 represent this is a true and correct б copy of the original petition in what 7 was Docket Number 19473-0323? 8 I'll believe you, but I have no 9 basis to say one way or another. 10 MR. MACEDO: Actually, I was 11 hoping if Fish & Richardson could tell 12 us if that's the right docket number 13 of attorney docket number. That's the 14 issue I had. 15 MR. ALMELING: Is there a reason 16 you believe it's not? Let's go off 17 the record. 18 (Whereupon, an off-the-record 19 discussion was held.) 20 BY MR. MACEDO: 21 So have you ever seen Grindon 13 0. 22 before? 23 Α. No. 24 So I'll represent to you that this 0. 25 is the original petition, not the corrected

Page 100 1 DR. JOHN R. GRINDON (9/15/15) 2 petition, but the petition filed by Google at 3 the very beginning of the 1338 IPR; okay? 4 Α. Okay. 5 0. So you've never read this to see б whether it's right, wrong or indifferent, 7 right? 8 Α. Correct. 9 If you take a look at it, on page 8 0. 10 you'll see various claim constructions being 11 offered. You see that? 12 Α. I see beginning on page 8 claim 13 construction proposals. 14 You see video drive-by data as one 0. 15 claim construction? 16 Yes. Α. 17 You see video storage data, the 0. 18 second? 19 Α. Yes. 20 0. Database server, the third? 21 Yes. Α. 22 Image processing server as the Q. 23 fourth? 24 Yes. Α. 25 And you see means for blah, blah, Q.

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1 DR. JOHN R. GRINDON (9/15/15) blah from claim 7 as the next one? 2 3 Α. Yes. 4 0. And than you see means for blah, 5 blah, blah from claim 8 as the next one? б Α. Yes. 7 0. And you see means for linking blah, 8 blah, blah on page 12 as the next one? 9 Α. Yes. 10 And you see on page 14 means for 0. 11 calculating as the next one? 12 Α. I do. 13 On page 15, there's no more claim 0. 14 constructions being offered, correct? 15 Not in this document. Α. 16 And at least in what we reviewed, 0. 17 you didn't see server farm as one of those 18 terms being construed, correct? 19 Α. Correct. 20 Now if you jump to the claim charts 0. 21 and I want you to look at page 32, you see a 22 claim chart of anticipation by Yoichi, right? 23 Yes. Α. 24 And you see an element 1.P "A 0. 25 system including a video and data farm

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Page 102 1 DR. JOHN R. GRINDON (9/15/15) comprising," correct? 2 3 Α. Yes. 4 0. And then you see an assertion that 5 Yoichi discloses a system including a video б and data farm, correct? 7 I see this. Α. 8 0. And then you see an explanation of 9 why Yoichi allegedly does that, right? 10 I see it. You want me to read it? Α. 11 0. No. Well, you could read it to 12 vourself. You don't need to read it aloud. 13 There is whatever explanation there is, right? 14 Α. There is something here. 15 And there's a markup of a figure on 0. 16 the next page? 17 There's a figure on the next page. Α. 18 0. With markups on it, the data server 19 and image processing server and video storage 20 servers? 21 Yes. Α. 22 Right. You see that? Q. 23 The three markups are database Α. 24 server, video storage and image processing 25 server.

1	DR. JOHN R. GRINDON (9/15/15)
2	Q. There is no statement on page 32 or
3	33 suggesting that a system, including a video
4	and data server farm comprising is not a
5	limitation of the claims, is there?
6	A. Only looking at pages 32 and 33,
7	the parts that you pointed out, in those
8	charts, at least so far I'm not seeing a
9	statement one way or the other. It doesn't
10	seem to address that issue.
11	Q. You see a statement that you see
12	the assertion that Yoichi discloses one, but
13	you don't see the assertion that it's not a
14	required limitation; is that correct?
15	A. I don't see an assertion either
16	way, but it is or is not a limitation.
17	Q. It says, "Yoichi discloses a system
18	including the video and data server farm" and
19	then it cites to Google Exhibit 1001 at
20	paragraph 29.
21	A. Sure.
22	Q. So it's asserting that Yoichi meets
23	that limitation and it doesn't say that it's
24	not a limitation that needs to be met, right?
25	MR. ALMELING: Objection. I

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Page 104 1 DR. JOHN R. GRINDON (9/15/15) 2 didn't know you were finishes. Were 3 you finished Counsel? 4 MR. MACEDO: After I said, 5 "right." б MR. ALMELING: Objection to form. 7 Additionally, outside the scope. 8 No, not right. Α. 9 Do you see that it's asserting that 0. Yoichi has a video and data server farm? 10 11 Α. Yes. 12 Do you see any assertions on pages Ο. 13 32 or 33 that a video and data server farm is 14 not a necessary element of claim one? 15 In these charts that you've pointed Α. 16 out, I see no discussion of that issue either 17 way. 18 Do you see an assertion that it is 0. 19 not a necessary element of claim one that the 20 covered system have a video and data server 21 farm; yes or no? 22 I am not seeing an assertion for Α. 23 that or the reverse. 24 So you do not see an assertion that 0. 25 a video and data server farm is not a

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Page 105 DR. JOHN R. GRINDON (9/15/15) necessary element of claim one of the '181 patent; is that correct? I don't see that matter addressed Α. here. 0. I want you to answer my question. Very straightforward question. Do you see an assertion on pages 32 and 33 of Grindon Exhibit 13 that a video and data server farm is not a necessary element of claim one of the '181 patent; yes or no? I don't see a discussion of that. Α. I don't see the assertion that you mention. I don't see an assertion that it is an element. I don't see that discussion here. But you see an assertion that Ο. Yoichi discloses a system including a video and data server farm? Α. That's another matter entirely, yes, it does talk about Yoichi. It does disclose that. That's what it asserts? Ο. That is the subject of this chart Α. at the point, yes. So I would like to understand from 0.

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1	DR. JOHN R. GRINDON (9/15/15)
2	you whether the definition of server farm is
3	the same or different in the time frame of
4	2004 compared to what it is today.
5	A. I didn't analyze that. I didn't
6	consider that to be relevant to my analysis.
7	So just sitting here thinking about it, I
8	don't see that the limitations that patent
9	owner proposed would apply either today or in
10	2004.
11	Q. I'm not asking whether the
12	limitations are correct or incorrect. I'm
13	asking whether there's a difference in meaning
14	today for server farm compared to 2004. Put
15	aside whatever that meaning is. Does it mean
16	the same thing or something different today
17	than it meant in 2004. That's all I want to
18	understand.
19	MR. ALMELING: Objection; form.
20	Additionally, objection to
21	Q. In your opinion?
22	A. The term, "server farm" is fairly
23	broad. I looked at it only with regard to
24	this limitation. So you're asking me now to
25	think about something I didn't address in

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1 DR. JOHN R. GRINDON (9/15/15) 2 preparing these declarations. 3 Before you prepared these 0. 4 declarations, did you have an understanding 5 what a server farm was? 6 Α. Yes. 7 0. What was your understanding? 8 Α. As I described in the declaration, 9 so we can read this. 10 I don't want to know what your 0. 11 declaration said. I want to know what your 12 understanding was without the declaration. 13 In other words, before Google came 14 to you in 2015, did you understand what a 15 server farm was? 16 I did, and I believe I expressed it Α. 17 in the declaration. Let's just take a look at 18 that. 19 0. I don't want to know what your 20 declaration says. I want to know what your 21 understanding, independent of this litigation, 22 of what you understood the server farm to be 23 as of July of 2015 before you received that 24 faithful call from Mr. Sherwood. 25 Α. Under the broadest Okay.

1	DR. JOHN R. GRINDON (9/15/15)
2	reasonable interpretation, the server farm
3	would consist of usually more than one
4	computer connected in some way by a network or
5	some means.
6	Q. That was what you just read from
7	the declaration, right?
8	A. Not exactly, but it's consistent
9	with my declaration.
10	Q. You're reading your declaration.
11	Whether you're reading verbatim or not, you're
12	looking at your declaration to tell me that
13	answer?
14	A. That's right.
15	Q. Before Google came to you, you
16	didn't have your declaration to look at,
17	correct?
18	A. I think I can answer that yes.
19	Q. Wasn't a hard question. Have you
20	ever looked at a dictionary definition from
21	the internet to figure out what terms of art
22	mean?
23	A. That's a pretty broad question. I
24	have.
25	Q. In fact, in IPRs you offered claim

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1	DR. JOHN R. GRINDON (9/15/15)
2	constructions based upon such definitions,
3	correct?
4	A. I believe I have.
5	Q. And so when patent owners used such
6	definitions to find out what one of ordinary
7	skill in the art thought a server farm was,
8	that wasn't improper in your view, was it?
9	A. I believe.
10	Q. Is that the proper way of doing it?
11	A. I believe I addressed that earlier.
12	It's not the matter of just using extrinsic
13	definitions. It's a matter of how those are
14	applied and whether they're relevant. And in
15	this particular case, we're talking about a
16	2004 time frame and the proposed definitions
17	in the patent owner response were 2015. And
18	so I thought it was more relevant to go back
19	to the time whether or not there's been a
20	change in the meaning and felt that it was
21	better to go back to the time of the patent.
22	Q. So if you look, let's look at
23	Exhibit 2011 from IPR 1338. We'll mark it as
24	Grindon Exhibit 14.
25	(Grindon Exhibit 14. Visual Real

1 DR. JOHN R. GRINDON (9/15/15) 2 Estate 2011 was marked for 3 identification, as of this date.) 4 BY MR. MACEDO: 5 Did you look at this definition of Ο. б server farm to see if it's an appropriate 7 definition of server farm? 8 Α. I looked at a number of 9 definitions. I don't know -- I don't 10 recognize exactly whether I looked at this 11 very one. 12 0. Well, it was one of the exhibits 13 that was offered by the patent owner to say 14 what a server farm meant. You didn't look at 15 those? 16 Then I likely did look at this. Α. 17 Do you think it's a correct 0. 18 definition in 2015? 19 Let me take a look and see. Α. 20 MR. ALMELING: I withheld the 21 verbalization of my objection to not 22 distract the witness from reading. I 23 will interpose it now. Objection to 24 form. 25 So my question is: Looking at 0.

1 DR. JOHN R. GRINDON (9/15/15) 2 Grindon Exhibit 14, which is Visual Real 3 Estate Exhibit 2011 from IPR 2014-01338, 4 WhatIs.com's definition of server farm, do you 5 believe that this is a fair and accurate 6 description of server farm as of June 3, 2015? 7 MR. ALMELING: Objection; form. 8 This could describe one kind of Α. 9 server farm, but the requirement in the 10 definition that you found here that it be in a 11 single location is not the broadest reasonable 12 interpretation, even at this late date, which 13 doesn't really apply to 2004. 14 Would you be surprised to learn 0. 15 that this is the same definition that has been 16 on WhatIs.com with respect to requiring that 17 the group of servers be kept in a single 18 location since as early as May 13, 2007? 19 Α. That wouldn't surprise me. As I 20 said, under the broadest reasonable 21 interpretations, there's no reason why they 22 have to be in a single location. 23 But of someone in ordinary skill in 0. 24 the art, if you heard the word, "server farm," 25 would you understand that the meaning set

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1 DR. JOHN R. GRINDON (9/15/15) forth in Grindon Exhibit 14 is a fair and 2 3 accurate meaning of what that term means? 4 MR. ALMELING: Objection; form. 5 Α. Again, this is one example of what б a server farm may be. And I'm not going to 7 argue that it couldn't be at a single 8 location. I'm just saying that under the 9 broadest reasonable interpretation at the 10 time, 2004, not everyone would have limited 11 the server farm to be at a single location since there's not a technical reason that the 12 13 patent depends upon that it be so. 14 And you reached that conclusion 0. 15 because you looked at Google Exhibit 1013 from 16 IPR 2014-01338, correct? 17 Tell me again. Α. 18 0. Exhibit 1013, it's one of the ones 19 listed in your declaration. 20 Α. Do you have that one? 21 0. I will in a second. I want you to 22 look at your declaration and tell me if that's 23 what you looked at. On page 23 of Grindon 24 Exhibit 1, you cite Saboori Exhibit 1013? 25 Α. All right. That was one of

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Page 113 1 DR. JOHN R. GRINDON (9/15/15) 2 several. 3 That's one of the ones which you 0. 4 say was from 2004 and it accurately reflects 5 what someone of ordinary skill in art would б understand what a server farm to mean, 7 correct? 8 I didn't actually say that. Α. What I 9 said is that these are several examples that 10 indicate that the server farm is not necessary 11 limited to a single location. 12 Do you think this is an appropriate 0. 13 reference that the PTAB should look at to 14 understand what a server farm meant in 2004; 15 yes or no? 16 In combination with the other Α. 17 references that I have here, I think that 18 these lend insight into the broadest 19 reasonable interpretation of server farm. 20 0. Well do you think the authors of 21 Exhibit 1013, that you offer in paragraph 30 22 of your declaration marked as Grindon 23 Exhibit 1, is an appropriate reference to 24 explain what a server farm meant in 2004; yes 25 or no?

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1 DR. JOHN R. GRINDON (9/15/15) 2 Again, I didn't offer that in Α. 3 isolation, but I offered it in combination 4 with other references. So my answer would be 5 taken in combination with the other 6 references. It makes clear that the broadest 7 reasonable term of server farm is not limited 8 to a single location. 9 I'm not asking you what it says. 0. 10 I'm asking you is it a correct or incorrect 11 resource for the PTAB to look at to understand 12 what server farm meant in 2004. Either you 13 think it's correct, which is why you cited it, 14 or you think it's incorrect which means you 15 probably shouldn't have cited it. 16 So what do you think it is? Is it 17 a correct or incorrect reference for the PTAB 18 to look at to understand what the word "server 19 farm" meant to someone of ordinary skill in 20 the art in 2004? What is your testimony? 21 Again, I would not recommend that Α. 22 this be in isolation. That this, by itself, 23 carry the weight of the server farm, but only 24 in combination with the other references that 25 I mentioned.

Page 115 1 DR. JOHN R. GRINDON (9/15/15) 2 So is it appropriate for the PTAB 0. 3 to look at it or not should the PTAB strike it 4 because it's inappropriate to look at it or 5 should the PTAB look at it in your opinion as б Google's expert offering a construction, 7 although be it not a proper and complete 8 construction, of what the term server farm 9 meant in 2004? 10 Again I'm not --Α. 11 MR. ALMELING: Objection. 12 Although it's not reflected in the 13 record, albeit the tone has become a 14 little belligerent. I will remind 15 Counsel of the PTAB's instructions 16 about the courtesy in these 17 proceedings. 18 MR. MACEDO: Counsel, I really do 19 not resemble that remark. The tone 20 was not belligerent. I'm not going to 21 have to speak evenhanded, but the 22 witness has been asked a very 23 straightforward question. I want to 24 know if the PTAB should or should not 25 look at the exhibit offered in his

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1 DR. JOHN R. GRINDON (9/15/15) 2 declaration. It's simple. 3 The answer is, I properly offered 4 the exhibit or I improperly offered 5 the exhibit. Whatever he wants, I б don't care. I just want to know the 7 right answer. 8 So should the PTAB look at 0. 9 Exhibit 1013 to understand what a server farm 10 meant in 2004 or not? That's what I want to 11 know. What's your testimony; is it 12 appropriate or inappropriate? 13 It is appropriate in combination Α. 14 with the other references. Taken in isolation 15 by itself, I probably would not carry -- I 16 would not have it carry the full weight of the 17 argument. 18 0. Now, did you select the excerpt 19 from Exhibit 1013 that is being quoted with an 20 ellipsis in your declaration in paragraph 30? 21 Α. That's hard to say right now. This 22 was in concert with Counsel and I don't know 23 exactly how this particular excerpt arose. 24 Did you find Exhibit 1013 to show 0. 25 what server farm meant in 2004?

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1	DR. JOHN R. GRINDON (9/15/15)
2	A. I didn't initially find that
3	document.
4	Q. Did you read it?
5	A. I read it.
6	Q. Did you make sure that the quote
7	was an appropriate quote and an accurate quote
8	before you swore under perjury the facts that
9	are set forth in paragraph 30 of Grindon
10	Exhibit 1?
11	A. I did read it. Notice there's an
12	ellipsis here which, in my view, includes
13	other material and that this is just an
14	example from the exhibit. It's not meant to
15	be the only reference to that exhibit.
16	Q. In fact, the exhibit gives a very
17	clear definition of what a web server farm is,
18	correct?
19	A. We're talking about an exhibit that
20	you haven't shown me yet.
21	Q. No, one that you relied on and
22	cited and quoted in your declaration to offer
23	your opinion as to what it means. If you
24	don't recall, you can say you don't recall.
25	That's fine.

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Page 118 1 DR. JOHN R. GRINDON (9/15/15) 2 You're asking me to remember a Α. 3 certain part of that exhibit so I think it 4 would be fair to show it to me. 5 You're saying you don't remember 0. б whether there was a definition that you didn't 7 quote that is set forth in Google Exhibit 1013 8 as submitted in IPR 2014-01338? 9 I do have a memory of that. Α. T 10 would much prefer to have the document in 11 front of me. If you're asking me to go on 12 memory as I sit here, this appeared to be an 13 exception showing that in the broadest 14 reasonable interpretation that the servers do 15 not have to be co-located. 16 0. But not servers in a server farm, 17 but servers in general, correct? 18 Again, we're getting into the weeds Α. 19 on a document that you're not showing me. 20 Apparently you're finding something to argue 21 with and we're not having the document in 22 front of us. 23 Let's go ahead and mark it as 0. 24 Grindon Exhibit 15. 25 (Grindon Exhibit 15, document

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1 DR. JOHN R. GRINDON (9/15/15) 2 entitled, "A new scheduling algorithm 3 for server farm load balancing" was 4 marked for identification, as of this 5 date.) 6 BY MR. MACEDO: 7 Do you recognize Grindon 0. 8 Exhibit 15? 9 MR. ALMELING: Counsel, before we 10 get to questions on this, you asked a 11 series of questions that may implicate 12 the privilege and the forwarded 13 termination of the instruction on 14 those guestions. I would like to 15 confer with my colleagues, so can we 16 go off the record for a second? 17 (Whereupon, an off-the-record 18 discussion was held.) 19 MR. ALMELING: I have no objection 20 to the pending question. 21 BY MR. MACEDO: 22 So we're looking at Grindon 0. 23 Exhibit 15, correct? 24 Correct. Α. 25 While we had this little break you 0.

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1 DR. JOHN R. GRINDON (9/15/15) 2 spent sometime reading it? 3 I looked to find the excerpt, which Α. I found. 4 5 0. What I want you to do is look at б the top of the second column, you see it has 7 Roman II, web server farms. You see that? 8 Α. Yes. 9 Can you read the first sentence 0. 10 into the record? 11 Α. Yes. "A Web server farm refers to 12 a website that uses two or more servers housed 13 together in a single location to handle user 14 requests." 15 Do you think that is a fair and 0. 16 accurate statement of what someone of ordinary 17 skill in the art, as of 2004, understood a web 18 server farm to mean? 19 I think that often the servers are Α. 20 at a single location, just in the broadest 21 reasonable interpretation, they don't have to 22 There's a suggestion in the preceding be. 23 column that's cited here so that's all this 24 reference really does and I would not --25 Let's go back to the sentence you 0.

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1 DR. JOHN R. GRINDON (9/15/15) 2 just read. 3 MR. ALMELING: I'm sorry, Counsel, 4 I don't believe the witness had 5 finished answering the guestion. 6 Dr. Grindon, did you finish answer 7 the question? 8 Α. I would not look upon this 9 reference alone, but rather in concert with 10 the others that I've cited. 11 0. I want to go back, and I want you 12 to look at the first sentence of column two in 13 Grindon Exhibit 15 and it states, "A web 14 server farm refers to a website that uses two 15 or more servers housed together in a single 16 location to handle user requests and I want to 17 know if that is a fair and accurate 18 understanding of what a web server meant to 19 those skilled in the art as of 2004; yes or 20 no? 21 Α. Again, we discussed this many 22 This is one example. Often they would times. 23 be housed in a single location, just not in 24 the broadest reasonable interpretation. 25 But in this paper, it specifically 0.

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1 DR. JOHN R. GRINDON (9/15/15) 2 says that they're being housed in a single 3 location and it doesn't say often. It's 4 defining it pretty definitively, isn't it? 5 This paper is describing a certain Α. б thing in that section II. In section I, it 7 gives a suggestion that servers can be 8 distributed over geographic locations. 9 Absolutely. Let's go back to 0. 10 section I. So what section I says is that one 11 way to figure out this problem is using server 12 farms, correct? You see where I'm starting 13 after 5? 14 Α. Yes. 15 0. And it says, "server farm is 16 consisting of a collection of many computers 17 also called host, server or node and front-end 18 high speed dispatcher, correct? 19 Α. Yes. 20 0. Is that a fair and correct 21 statement of what a server farm is? 22 It's a fair and correct reading of Α. 23 this and --24 MR. ALMELING: Objection; Counsel. 25 You continue to do this.

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1 DR. JOHN R. GRINDON (9/15/15) 2 MR. MACEDO: He's not answering my 3 question. 4 MR. ALMELING: He was. Please 5 allow the witness to finish the б answer. 7 I'll withdraw and ask it again. 0. Τ 8 want you to answer yes, no, I don't know, I 9 can't answer that guestion, I don't recall. Ι 10 don't want a narrative. I'm entitled to a 11 simple answer to my question. If you can't 12 give a simple answer, just say, I can't answer 13 that guestion and then we'll talk. Okay. Do 14 you understand me? 15 Α. Sure. 16 So in Grindon Exhibit 15, it says 0. 17 one way to figure out this problem is using 18 server farms. You see that? 19 Α. Correct. 20 0. That's a yes, you see it? 21 I see it. Α. 22 Then it says, "A server farm is Q. 23 consisting of a collection of many computers 24 also called host, server or node and front-end 25 high speed dispatcher."

1 DR. JOHN R. GRINDON (9/15/15) 2 Do you see that? 3 Α. I see it. 4 0. Do you think that is a correct 5 understanding of what a server farm was in б 2004? 7 This is an article which is Α. 8 addressing a particular example and particular 9 problem with these. It is -- it seems 10 generally fair at this point that that 11 sentence you just read does apply to server 12 farms. 13 It says, "A server farm is 0. 14 consisting of." It's talking about server 15 farm, right? 16 That's why I say it seems fair. Α. 17 Okay. And do you disagree with it 0. 18 at all? 19 Α. This is what they are positing for 20 the purpose of this paper. 21 I'm sorry; I didn't mean to cut you 0. 22 off. Please continue. 23 It says a collection. It doesn't Α. 24 say a collection in one place or on what basis 25 the collection is made, but this is certainly

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1	DR. JOHN R. GRINDON (9/15/15)
2	if you look at a server farm under this view,
3	then it sets up their analysis for load
4	balancing the discussions following in this
5	paper.
6	Q. Right. And the whole point of this
7	paper is that in contrast to server farms,
8	they have a new approach for load balancing,
9	right?
10	A. Well, it's not in contrast to
11	server farms, but it's scheduling algorithms
12	to help distribute the jobs in server farms.
13	Q. Right. And when it says what a
14	server farm is on the top of column two, it
15	says it's in a single location?
16	A. That's for the purpose of this
17	analysis and it often is, perhaps usually is,
18	but not in the broadest reasonable
19	interpretation.
20	Q. At the bottom of the paragraph that
21	you quoted with the ellipsis, it says, "for
22	loaded balancing web traffic there are several
23	approaches," right?
24	A. I see that.
25	Q. It goes, "for web serving, one

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		Page	126
1	DR. JOHN R. GRINDON (9/15/15)		
2	approach is to wrap each request in turn to a		
3	different server," right?		
4	A. Yes.		
5	Q. "In some approaches, the servers		
6	are distributed over different geographic		
7	locations. That's the sentence you're		
8	reading," right?		
9	A. Yes.		
10	Q. Does it say server farm is		
11	distributed over different geographic		
12	locations in that sentence?		
13	A. It says "these servers." The title		
14	of the paper regards server farms, so the		
15	suggestion is here. And, again, I'm not		
16	weighting it solely on the Saboori reference,		
17	but the suggestion is here that the servers do		
18	not have to be in the same geographic		
19	location.		
20	Q. Doesn't the title say "A new		
21	scheduling algorithm for servers farms",		
22	plural, "load balancing" suggesting it applies		
23	to more than one server farm?		
24	A. Certainly the algorithm would apply		
25	to despaired server farms.		

DR. JOHN R. GRINDON (9/15/15) When it says that the servers are 0. distributed over different geographic locations, it doesn't say the servers of a single server farm are distributed over different geographic locations, does it? Α. That sentence doesn't say the words that you said, but in toto, the paper has that suggestion. Actually, in toto, the paper says a 0. web server farm refers to a website that uses two or more servers housed together in a single location to handle user request, correct? That sentence is on the second Α. page, but in some approaches, the servers are distributed over different geographic locations. This is a suggestion then that the simple model that they're using for their analysis is not the broadest model. Well, isn't the suggestion that you 0. could use more than one server farm to help balance the load, not that there are multiple servers in different locations within the same

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server farm?

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1	DR. JOHN R. GRINDON (9/15/15)
2	A. The sentence would not be necessary
3	if there was, say, a person in this country
4	who had a server farm and a totally separate
5	server farm somewhere else. This sentence
6	really would be extremely awkward to read it
7	the way that you said. Of course, we could
8	have a server farm here and someone else could
9	have a server farm there and that's not the
10	way I read this sentence.
11	Q. No, but this is talking about
12	distributing to the extent it says that
13	there's one approach distributed in different
14	locations. It doesn't say that a server farm
15	comprises computers in different locations,
16	does it?
17	MR. ALMELING: Objection; form.
18	A. We have to read the whole thing and
19	the suggestion the person of ordinary skill in
20	the art is that, hey, I don't have to have
21	everything in some approaches, we can have
22	different geographic locations.
23	Now, for the purpose of this
24	analysis, let's take one where they're in the
25	same location and make it simple, but just let

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DR. JOHN R. GRINDON (9/15/15) the reader know it doesn't always have to be that way.

Q. Is there any example where it says
a server farm has computers in different
locations in Exhibit Grindon Exhibit 15,
Google Exhibit 1013, from the '1338 IPR?

8 Α. Well, we'd have to read this whole 9 paragraph, one. It says several lines down, 10 "server farm is consisting of a collection of 11 many computers," and you read this one 12 earlier, and so forth. And then within that 13 same paragraph is the cited text, "in some 14 approaches the servers are distributed over 15 different geographic locations."

¹⁶ So the suggestion is here to a ¹⁷ person of ordinary skill in the art, I don't ¹⁸ have to put them all at one location. Most of ¹⁹ the time I will, but I don't always have to.

Q. But it doesn't say that the servers that it's referring to are the servers that are for web serving throughout each request to a different server; that is, the servers, not the servers necessarily within a single server farm.

1 DR. JOHN R. GRINDON (9/15/15) 2 MR. ALMELING: Counsel, is there a 3 question? 4 0. Is that correct? 5 Α. Again, this is within the same б This is in the introduction, same paragraph. 7 paragraph as the sentences that we just read a 8 moment ago about server farms. And it says 9 for web server, one approach is to root each 10 request to a different server. In some 11 approaches, the servers are distributed over 12 different geographic locations. We are 13 talking about server farms. That's the title 14 of the paper. The term, "server farm" is used 15 in this paragraph. 16 So you're asking if your language 17 appears in the paragraph. Your language 18 doesn't, but other language does that's 19 adequate suggestion to a person of ordinary 20 skill in the art. 21 Did you look at the Wikipedia 0. 22 definition that was submitted by the patent 23 owners to what server farm is? 24 I think I did. If you can show me Α. 25 again.

Page 131 1 DR. JOHN R. GRINDON (9/15/15) 2 Q. I apologize for how hard it is to 3 read. I'll show you what was previously 4 marked as Visual Real Estate Exhibit 2009, and 5 we will mark it as Grindon 16. б (Grindon Exhibit 16, Visual Real 7 Estate Exhibit 2009 was marked for 8 identification, as of this date.) 9 BY MR. MACEDO: 10 To make it easier for you, I will 0. 11 give you the 2004 version from the archive.org 12 of this page, which is a little easier to 13 read? 14 MR. MACEDO: Can we mark this as 15 Grindon 17, please. 16 (Grindon Exhibit 17, document from 17 archive.org was marked for 18 identification, as of this date.) 19 MR. ALMELING: I note for the 20 record that Exhibit 16, which was 21 filed with PTAB is not legible either 22 in the copy that was used for 23 Exhibit 16 that was provided to PTAB. 24 Exhibit 17 is legible. I do not know 25 if the content is the same between

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1	DR. JOHN R. GRINDON (9/15/15)
2	Exhibit 16 and 17 and am not able to
3	make that determination based on the
4	materials that were provided by
5	questioning Counsel.
6	MR. MACEDO: Counsel, if you're
7	objecting to the quality of Grindon
8	Exhibit 16, we will gladly put in a
9	new, better quality at the PTAB, since
10	this is the first time that you raised
11	that objection. We will be submitting
12	with our observations Grindon
13	Exhibit 17, in any event, and I would
14	like for Dr. Grindon to look at
15	Grindon Exhibit 17.
16	Q. You see at the bottom of Grindon
17	Exhibit 17 where it says, "web.archive.org" at
18	the very bottom of the page, Dr. Grindon, very
19	bottom of the page?
20	A. Yes, I do.
21	Q. And you see where it says 20040603
22	with a bunch of other numbers?
23	A. Yes, I do.
24	Q. That we'll represent to you
25	reflects that this was the archive.org page

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1 DR. JOHN R. GRINDON (9/15/15) 2 for the Wikipedia definition of server farm 3 from June 3, 2004. 4 So now that you have this definition in front of you, can you please 5 б take a look and see whether it fairly and 7 accurately reflects what a server farm is. 8 MR. ALMELING: I object to form. 9 Α. Okay, I've looked at it. 10 So you see where it says that this 0. 11 is a definition of server farm, correct? 12 Α. I don't see those words, this is 13 the definition of server farm. 14 0. Withdrawn. 15 Well, it's on the page, 16 "Terms/Server farm" and says "server farm" at 17 Do you see that? the top. 18 Α. At the very bottom, the printout of 19 the path to the web page is "term/S/server 20 The article itself is merely titled, farm." 21 "server farm." 22 And it says, "e-mail this Q. 23 definition to a colleague." 24 Α. Where are you looking? 25 (Indicating.) 0.

1 DR. JOHN R. GRINDON (9/15/15) 2 I see it now at the end of the --Α. 3 MR. ALMELING: Let's go off the 4 record real quick. 5 (Whereupon, an off-the-record б discussion was held.) 7 BY MR. MACEDO: You see this is Webopedia, the 8 0. 9 number one online encyclopedia dedicated to 10 computer technology, correct? 11 Α. I see that. 12 0. Server farm appears to be the word 13 that they're defining, doesn't it? 14 It appears to be. The authority of Α. 15 this I can't vouch for. 16 And you see it is also referred to 0. 17 as server cluster, computer farm or ranch; is 18 that correct? 19 Α. Yes. 20 MR. ALMELING: Just so the record 21 is clear, I want to provide an 22 objection in general to the 23 authenticity of this document. I'11 24 also provide an objection to various 25 questions regarding it. But all

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Page 135 1 DR. JOHN R. GRINDON (9/15/15) 2 questions regarding this document are 3 subject to, among others, 902 and 901 4 objections. 5 Counsel, you may continue. б 0. And you see it says, "last 7 modified, Thursday, January 8, 2004." 8 Α. Show me where it says that. 9 In red underneath, server farm. 0. 10 Yes. Α. 11 0. And it says, "a server farm is a 12 group of network servers that are housed in 13 one location." 14 You see that? 15 I see where it says that. Α. 16 0. Now, is that a fair explanation of 17 one aspect of what a server farm is as of 18 2004? 19 Α. Again, we've discussed this many 20 times over the last hour or so, but servers 21 can often be in one location, but this is not 22 the broadest reasonable interpretation. 23 There's no technical reason why they have to 24 be at one location. 25 When you're talking about servers 0.

1	DR. JOHN R. GRINDON (9/15/15)
2	that are in different locations, are they
3	stationary in different locations or are they
4	moving?
5	A. They could be stationary or moving.
6	Normally, they would be stationary, but moving
7	is another option.
8	Q. Now, the idea of distributing load
9	to an assigned computer is so that way you can
10	access that computer, right?
11	A. I don't know that your statement is
12	precise, but basically load balancing is used
13	among computers in a server farm.
14	Q. And can you tell me of any server
15	farms that you have seen referred to as server
16	farms which are comprised of a plurality of
17	computers that are temporarily inside the
18	network and temporarily outside the network
19	via connectivity and comprise computers
20	located in moving cars?
21	MR. ALMELING: Objection; form.
22	Additionally, objection; lacks
23	foundation.
24	A. I didn't analyze this as part of my
25	declarations, so that's

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1 DR. JOHN R. GRINDON (9/15/15) 2 So you're not offering an opinion 0. 3 that if you had a plurality of computers 4 located in automobiles, that those computers 5 in those automobiles go in different 6 directions at different times that may have 7 different levels of connectivity can 8 constitute a server farm, correct? 9 MR. ALMELING: Objection to form. 10 Additionally, objection; lacks 11 foundation. Also objection to scope. 12 So, again, that's something I Α. 13 didn't consider in my declaration, that 14 particular situation that you're just 15 describing. 16 As I sit here, I'm not seeing why 17 that could not be done. I don't see why 18 computers -- moving computers could not be 19 networked and into a server farm, but, again, 20 that's just based sitting here. I didn't 21 consider it in my declaration. 22 Is there any reference you're aware Q. 23 of in 2004 that says a server farm comprises a 24 plurality of computers that are located in 25 cars going in different directions at

1 DR. JOHN R. GRINDON (9/15/15) 2 different times with different levels of 3 connectivity? 4 MR. ALMELING: Same objections. 5 Α. I, right at the moment, am not б recalling. 7 In your declaration, do you refer 0. 8 to anything that would meet that definition? 9 I think paragraph 30 is where you talk about 10 server farms. 11 Α. Yes. If you could show me the 12 other references, that would be helpful right 13 now. 14 You don't cite anything in those 0. 15 references to support that, do you? 16 I don't think I cited that Α. 17 particular configuration of moving computers. 18 MR. MACEDO: Can we go off the 19 record. 20 (Whereupon, an off-the-record 21 discussion was held.) 22 MR. MACEDO: So we'll mark, as 23 Grindon Exhibit 18, what was marked as 24 Google-1011 in the IPR2014-1338 which 25 is U.S. Publication No. 2004/0158474

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1 DR. JOHN R. GRINDON (9/15/15) 2 A1. 3 (Grindon Exhibit 18, U.S. 4 Publication No. 2004/0158474 Al was 5 marked for identification, as of this б date.) 7 MR. MACEDO: We'll mark, as 8 Grindon Exhibit 19, what was marked as 9 Google Exhibit 1012 in IPR 2014-01338 10 entitled, "Monitoring and State 11 Transparency of Distributed Systems" Martin J. Logan. 12 13 (Grindon Exhibit 19, document 14 entitled, "Monitoring and State 15 Transparency of Distributed Systems" 16 was marked for identification, as of 17 this date.) 18 BY MR. MACEDO: 19 0. Those were the other two exhibits 20 that you identify in your declaration? 21 MR. ALMELING: Thank you, Counsel, 22 for marking these. May we take a 23 break for lunch or are you not 24 finished with whatever line of 25 questioning you have going on right

1 DR. JOHN R. GRINDON (9/15/15) 2 now? 3 MR. MACEDO: I think he's looking 4 to see whether or not it will support 5 that construction. б MR. ALMELING: I don't see a 7 pending question. What is the pending 8 question? 9 MR. MACEDO: The question I asked 10 "In your declaration, do you him was: 11 refer to anything that would meet that 12 definition? I think paragraph 30 is 13 where you talk about the server farms. 14 Yes, if you could show me the 15 other references, that would be 16 helpful right now. 17 You don't site anything in those 18 references to support that. 19 I don't think I site a particular 20 configuration of moving computers." 21 And I gave him references to see 22 if there's anything else in those 23 references that support the

24 construction we were talking about.

25 MR. ALMELING: Could you just ask

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Page 141 1 DR. JOHN R. GRINDON (9/15/15) 2 a question that the witness can 3 answer? 4 MR. MACEDO: Yes. 5 BY MR. MACEDO: б 0. Is there anything else in Grindon 7 Exhibit 18 or 19 that would support a 8 construction which says that a server farm 9 comprises computers located in different 10 locations which are in cars moving in 11 different directions with different levels of 12 connectivity at different times? 13 MR. ALMELING: I note for the 14 record that that is a request that 15 asked the witness to read and provide 16 his analysis on 14 pages, 15 pages of 17 combined text after a pending request 18 for lunch has been outstanding for a 19 while and after the original request 20 for a break was denied because we're 21 on the same line of questioning of 22 server farm. 23 This does not seem to be so time 24 sensitive that we need to address this 25 Can we please take a long due now.

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1 DR. JOHN R. GRINDON (9/15/15) 2 break for lunch and then address 3 whatever question you have about that 4 and the follow-up questions after 5 that, or are you refusing the witness б to go have lunch like you refused him 7 to take the original break? MR. MACEDO: I didn't refuse him 8 9 to take the original break. I refused 10 you, if anyone. The witness didn't 11 ask me for the break. You did. And I 12 gave you the break when you said you 13 needed to go to the bathroom, and I'm 14 happy to do that. 15 I have a pending question right 16 now I'd like the witness to answer. 17 If the witness tells me he's not 18 competent to testify right now because 19 he needs break, that's fine, we'll 20 take a break. 21 Dr. Grindon, you asked for those 0. 22 I've given you those documents in documents. 23 You didn't cite anything in response. 24 paragraph 30 to support the other definition. 25 Is there anything, sitting here

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Page 143 1 DR. JOHN R. GRINDON (9/15/15) 2 right now, that you have identified in either 3 Grindon Exhibit 18 or 19 that would support 4 that expanded definition of server farm? 5 MR. ALMELING: Let's go off the б record. 7 (Whereupon, an off-the-record 8 discussion was held.) 9 BY MR. MACEDO: 10 Dr. Grindon, I understand that you 0. 11 may want to go back and read this further. As 12 we sit here right now, is there anything that 13 vou're aware of from Grindon Exhibit 18 or 19 14 that would support the broader definition we 15 just discussed? 16 I don't see anything in my Α. 17 declaration that would not apply to the moving 18 vehicle network that you just described. I'11 19 take a look at these and see if there's 20 anything to add to that after our lunch break. 21 Right now the only thing that you 0. 22 referred to in your declaration is the quoted 23 sections, correct? 24 MR. ALMELING: Counsel, you said 25 we could take a break after that

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1 DR. JOHN R. GRINDON (9/15/15) 2 question. You continue to refuse to 3 permit the parties to take a break. 4 Α. These are examples, the three 5 exhibits, 1011, 1012, 1013 there are some cites. These cites are very brief. б The 7 intent is to look at the exhibit in its 8 entirety and these are just some highlights, 9 not necessarily to be limited. 10 MR. ALMELING: Let's go off the 11 record. 12 0. Those are the only ones you gave 13 the board; is that correct? 14 The board has this declaration as Α. 15 you see it. 16 MR. ALMELING: Objection. 17 Counsel, are you seriously refusing to 18 permit the parties to take a break 19 because you just continue to ask 20 questions over and over again. 21 MR. MACEDO: Counsel, he's not 22 answering my question. 23 MR. ALMELING: He did. 24 MR. MACEDO: He isn't. He's not 25 answering my question.
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DR. JOHN R. GRINDON (9/15/15)
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           MR. ALMELING: Let's go off the
 3
     record.
 4
           (Whereupon, an off-the-record
     discussion was held.)
 5
 б
           (Whereupon, at this time, a lunch
 7
     break was taken.)
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Page 146 1 DR. JOHN R. GRINDON (9/15/15) 2 AFTERNOON SESSION 3 4 (Time noted: 1:26 p.m.) 5 б JOHN DR. R. GRINDON, resumed 7 and testified as follows: 8 EXAMINATION BY (Cont'd.) 9 MR. MACEDO: 10 Welcome back, Dr. Grindon. 0. 11 Α. Thank you. 12 0. Do you feel competent to continue 13 to testify? 14 Α. Sure. 15 I'd like for you to look in Grindon 0. 16 Exhibit 1, and I would like for you to start 17 off with paragraph 12. Tell me when you're 18 there. 19 Α. I have it. 20 0. In paragraph 12 you describe who 21 you think a person of ordinary skill in the art in this field relevant to the time frame 22 23 is, correct? 24 Α. Yes. 25 And I believe that you use the same Q.

1	DR. JOHN R. GRINDON (9/15/15)
2	definition of what someone of ordinary skill
3	in the art would be, although the time period
4	changes, for all three of your declarations,
5	Grindon 1, 2 and 3; is that correct?
6	A. I believe that's correct.
7	Q. How did you arrive at the
8	definition of what someone that's a person
9	of ordinary skill in the art would be?
10	A. Thinking back over my own
11	experience and the people I've worked with,
12	this fairly describes the skill level and the
13	background of people who work effectively in
14	this area. It's a fairly typical kind of
15	background to look at this through the eyes
16	of.
17	Q. You have what we marked as Grindon
18	Exhibit 8 in front of you, the Stryker
19	declaration. Looks like this.
20	A. I'm sure it's here. Okay; I have
21	that.
22	Q. Why don't you turn to paragraph 38?
23	A. I have that.
24	Q. In there, in paragraph 38, this is
25	what we previously marked as Grindon 8. You

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1	DR. JOHN R. GRINDON (9/15/15)
2	say, "I understand that a hypothetical person
3	of ordinary skilled in the art is considered
4	to have normal skill and knowledge of a person
5	in a certain technical field as of the time of
6	the invention at issue. I understand that the
7	factors that may be considered in determining
8	the level of ordinary skill in the art
9	include: (1) the education of the inventor;
10	(2) the types of problems encountered in the
11	art; (3) the prior art solutions to those
12	problems; (4) the rapidity with which
13	innovations are made; (5) the sophistication
14	of the technology; and (6) the education level
15	of active workers in the field."
16	Do you see that?
17	A. Yes, I do.
18	Q. Which, if any, of those factors did
19	you consider when you came up with the
20	definition of a person of ordinary skill in
21	the art for purposes of paragraph 12 of your
22	declaration that we've marked as Grindon
23	Exhibit 1?
24	A. General assessment of all of those
25	areas.

Page 149 1 DR. JOHN R. GRINDON (9/15/15) 2 So what's the level of education of 0. the inventor of the '181 patent? 3 4 Α. The -- I don't know for sure. I'm 5 thinking not meeting this, but I don't know б his background. 7 You didn't consider? 0. 8 MR. ALMELING: I'm sorry, Counsel. 9 Did you finish? 0. 10 I considered it to the extent that Α. 11 looking at the '181 patent, I saw the general 12 level of the patent, the technology involved, 13 but as far as formal education of the 14 inventor, I didn't know that. 15 0. Do you know the name of the 16 inventor? 17 This is Meadow. Α. 18 Do you know the name of the other 0. 19 inventor? 20 Α. I'd have to refresh any memory on 21 that. 22 Did you try to look up what their 0. 23 level of education was? 24 No. I was looking at their Α. 25 education as it was reflected in the patents

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Page 150 1 DR. JOHN R. GRINDON (9/15/15) 2 itself. That was the defining document. 3 You were in an extensive litigation 0. 4 which involved Mr. DiBernardo, right? 5 Α. I don't know if you'd call it б extensive, but I was involved in a matter with 7 that, yes. 8 Do you know what his level of 0. 9 education was? 10 I don't think I looked at his Α. 11 formal level of education, but, again, the 12 patent itself conveys a level that is 13 displayed and that's what was important at the 14 time. 15 What about Mr. Goncalves, 0. 16 G-O-N-C-A-L-V-E-S; did you look at his level 17 of education? 18 Α. I think it's the same answer for 19 that. 20 And Mr. Yoichi? 0. 21 I think the same there. Α. 22 Do you know who Mr. Yoichi is? Q. 23 Α. Right now help my memory in that. 24 Well, if you look in your 0. 25 declaration on page 5, you cite to U.S. patent

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1 DR. JOHN R. GRINDON (9/15/15) 2 publication number 2003/0210806. 3 Α. You're talking about Yoichi. Okav; 4 I misunderstood when you say Yoichi. Perhaps 5 I'm mispronouncing it wrong and you're б pronouncing it right. 7 0. As long as we understand the same 8 thing. Do you know who Mr. Yoichi is? 9 He is the one of the inventors Α. 10 listed on this patent publication that you 11 just mentioned. 12 Do you know who Mr. Tomohisa; 0. 13 T-O-M-O-H-I-S-A is? 14 If he is another inventor. Α. Ι 15 didn't look at that carefully. 16 You certainly didn't look up what 0. 17 his education was? 18 No. Again, what I looked at is the Α. 19 patent result, which the patents itself and 20 what's displayed there. 21 And is it fair to say you didn't 0. 22 look up the education of any of the people of 23 any of the art or patents in any of the four 24 IPRs? 25 Α. You're referring to the Stryker

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1 DR. JOHN R. GRINDON (9/15/15) 2 declaration, which was not a matter that I 3 considered. 4 0. I'm not referring to the Stryker 5 declaration. I'm asking whether you looked at б the level of education of any of the inventors 7 of the patents in-suit in the four IPRs that 8 you're offering declaration here today on? 9 Α. Okay. You began your questioning 10 with reference to the Stryker declaration, 11 however. 12 0. I began it with that just to go 13 through the factors that you had identified as 14 being relevant in the past. 15 With that declaration? Α. 16 0. Absolutely. 17 And now this question is divorced Α. 18 from that. 19 0. This question is with respect to 20 the current IPRs, the '1338, '1339, 1340, 21 1341. I want to know if you looked up the 22 level of education of any of the inventors or 23 authors on any of the patents at issue or 24 prior arts cited in those four IPRs. 25 Again, I looked at the Α. No.

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Page 153 1 DR. JOHN R. GRINDON (9/15/15) 2 documents themselves and that was reflecting 3 whatever level of expertise they had. 4 0. Now, what was the type of problem 5 encountered in the '181 patent? б This had to do with collecting Α. 7 imagery for later display. 8 Anything else? 0. 9 Without going through the whole Α. 10 patent, that's top level summary. 11 0. What did you consider about the 12 type of problem encountered in the '181 patent 13 to help you understand what the appropriate 14 level of ordinary skill in the art should be? 15 MR. ALMELING: Counsel, I don't 16 mean to interrupt. I'm looking for my 17 copy of the '181. Did you mark that 18 yet? 19 MR. MACEDO: No. 20 Α. And, again, you're taking language 21 from the Stryker declaration, not from the 22 declaration in this matter. I didn't repeat 23 those statements in this matter. 24 So is it fair to say that you 0. 25 didn't use any of the five factors listed in

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Page 154 1 DR. JOHN R. GRINDON (9/15/15) 2 the Stryker declaration paragraph 38, which 3 has been marked as Grindon Exhibit 8, to help 4 you determine what the level of ordinary skill 5 in the art should be for purposes of your 6 declarations in IPRs '1338, '1339, '1340 and 7 '1341? 8 MR. ALMELING: Objection to form. 9 That's not a correct representation Α. 10 of what I said. 11 0. So now, again, I'm asking you, did 12 you consider any type of problems encountered 13 in the context of the '181 patent to help you 14 understand what the level of ordinary skill in 15 the art should be with respect to the '181 16 patent? 17 That would be one way to look at Α. 18 it. Certainly looking through the '181 19 patent, what it's trying to do, the technology 20 it provides is guidance in a decision on what 21 a person of ordinary skill in the art should 22 be. 23 Did you do that? 0. 24 Well, yes. Α. 25 Before you determined what the Q.

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1 DR. JOHN R. GRINDON (9/15/15) 2 level of ordinary skill in the art should be? 3 Is that a question? Α. 4 0. Yes. 5 Α. I'm sorry; I didn't hear the whole б thing then. 7 Did you identify what the problems 0. 8 that the '181 patent faced were in order to 9 determine the level of ordinary skill in the 10 art for purposes of paragraph 12 of your 11 declaration marked as Grindon Exhibit 1? 12 Α. When you say problems, the patents 13 disclosure has certainly things that it's 14 trying to accomplish, and that is part of the 15 -- part of the assessment that I made in my 16 determination. 17 Are you finished? 0. 18 Α. Yes. 19 0. What problems that you saw present 20 in the '181 patent did you consider in order 21 to determine what the appropriate person of 22 ordinary skill in the art would be for 23 purposes of paragraph 12 of Grindon Exhibit 1? 24 Then let me go back to earlier Α. 25 parts of the declaration. Let's see. Again,

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DR. JOHN R. GRINDON (9/15/15) 2 the declaration itself is addressing primarily 3 the VRE response contentions regarding my earlier Vederi declaration and there are a 4 5 number of technical matters in association with that that are identified throughout my 6 7 declaration. 8 (Grindon Exhibit 20, U.S. Patent 9 No. 7,389,181, marked for 10 identification, as of this date.) 11 BY MR. MACEDO: 12 0. Now, I'm going to ask you the same 13 question, can the court reporter please read 14 it back; and if it will help you, I've marked 15 as Grindon Exhibit 20, the Meadows patent, 16 U.S. Patent 7,389,181, which you offer your 17 opinion about. 18 (Whereupon, the referred to 19 question was read back by the 20 Reporter.) 21 Α. Again, as I just mentioned, my 22 declaration is addressing primarily the VRE. 23 It's limited scope. It's addressing the VRE 24 response. And in particular contentions 25 regarding my earlier Vederi proposal

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1	DR. JOHN R. GRINDON (9/15/15)
2	declaration. So throughout here, there are a
3	number of things that are raised and these
4	matters, for example, reconstruction of 3D
5	scene geometry, compositing images, collecting
6	images, processing images, so forth, this
7	informs the technology that needs to be
8	addressed and would inform the decision of
9	what the person of ordinary skill should be.
10	Q. But those things are in the
11	DiBernardo patent, not in the '181 patent,
12	right?
13	A. The person of ordinary skill is not
14	limited to the DiBernardo to the DiBernardo
15	patent, but also is a person who would look at
16	the issues that I've expressed in my
17	declaration and address those issues in
18	concert with the various references and
19	documentation that are at issue.
20	Q. You understand that paragraph 12 is
21	talking about a person of ordinary skill in
22	the art in the relevant time frame with
23	respect to the '181 patent, correct?
24	A. With respect to that time frame,
25	yes.

1 DR. JOHN R. GRINDON (9/15/15) 2 But with respect to the '181 0. 3 patent, right? 4 MR. ALMELING: Objection; form. 5 Α. This is with respect to the '181 б patent, but not just the patent, also the 7 field of art at the time. 8 But the reason why you're defining 0. 9 a person of ordinary skill in the art in the 10 field is that we can interpret and understand 11 the '181 patent, right? 12 Α. That is the --13 MR. ALMELING: Objection to form. 14 Α. Primary ---15 I'm sorry; that's the primary what? 0. 16 The primary application of the Α. 17 person of ordinary skill in the art would be 18 with regard to the '181 patent. Also the 19 surrounding field. 20 0. Now, when you look at the '181 21 patent, you see discussions with respect to 22 various open source software, correct? 23 There has been mention of several Α. 24 open source software. 25 Where did you see it mentioned? 0.

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Page 159 1 DR. JOHN R. GRINDON (9/15/15) 2 Well, in column nine, for example. Α. 3 Okay. You see the discussion of 0. 4 MEncoder in column nine? 5 Α. Yes. б What is MEncoder? 0. 7 Α. This is -- the patent itself states 8 convert the compressed MPEG2 data into 9 lossless TIFF images. 10 Is that something someone of 0. 11 ordinary skill in the art would understand in 12 2004? 13 Α. When you say that, are you 14 referring to the conversion of images? 15 Using MEncoder software. 0. 16 Α. This is something a person of 17 ordinary skill would have known to do in 2004 18 in my estimation. 19 And you don't have any reason to Ο. 20 believe that that's an inaccurate description 21 of the MEncoder software and what it does, do 22 you? 23 Α. No. 24 0. Up above, it talks about the GDAL, 25 you see that, as a programming tool?

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1	DR. JOHN R. GRINDON (9/15/15)
2	A. Yes.
3	Q. What does it describe the GDAL is
4	doing?
5	A. It says here that it "completes a
6	range calculation from latitude and longitude
7	positions encoded in the video segments."
8	Q. Is that a fair description of what
9	GDAL did in 2004?
10	A. I think it's a fair description of
11	one of the functions that it can perform that
12	was of interest to the patentees.
13	Q. Now, what type of experience would
14	someone using MEncoder to convert and compress
15	M2 MPEG2 data into lossless TIFF image files?
16	A. To do just that conversion?
17	Q. Yes. What type of background in
18	education or experience do you need in order
19	to do that?
20	A. If a person were tasked to use this
21	software tool and convert data as in these two
22	examples, it would require someone with enough
23	understanding to know what the what the
24	source and what the result needs to be and how
25	to use a computer and how to use these

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1	DR. JOHN R. GRINDON (9/15/15)
2	packages.
3	Q. So that would be someone with like
4	a computer science degree for example; is that
5	correct?
6	A. A person I'll put it a different
7	way; a person with a computer science degree,
8	as you pose, should be able to do this
9	provided they also have some understanding of
10	images and location and things of the sort.
11	Q. So the important concepts that you
12	draw out of that is that they should
13	understand computer science image and
14	location; is that correct?
15	A. That's not what I said. You asked
16	if a person with a computer science background
17	would be able to do this. Certainly they
18	would if they also had an understanding of
19	some of these engineering concepts that are
20	involved.
21	Q. What engineering concepts are you
22	talking about?
23	A. The ones I just mentioned; what's
24	longitude, what's latitude, what are image
25	files. Things of that sort.

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1	DR. JOHN R. GRINDON (9/15/15)
2	Q. What type of engineering is that?
3	A. That would be electrical
4	engineering.
5	Q. Electrical engineering teaches you
б	about latitude and longitude; is that your
7	testimony?
8	A. That is the type of background that
9	would be most useful in understanding not just
10	the mechanics of the process of using the
11	software packages, but also the meaning of the
12	results and what needs to be done.
13	Q. So, to you, it's important that in
14	order to competently understand how to do the
15	things described in the '181 patent like the
16	GDAL software I'm sorry; the MEncoder
17	software and the GDAL software, you should
18	have an electrical engineering background. Is
19	that what you're saying?
20	MR. ALMELING: Objection; form.
21	A. What I'm saying is my assessment
22	is, in paragraph 12 of my declaration, a
23	person of ordinary skill is someone with a
24	background that I mentioned here, such a
25	person would be a person of ordinary skill in

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1	DR. JOHN R. GRINDON (9/15/15)
2	the art and that's not to say that some other
3	people may also have adequate skill in the
4	art, but this is my assessment of the person
5	who would have the appropriate skills.
6	Q. So what quality of electrical
7	engineering are necessary, in your mind, to
8	understand the '181 patent as disclosed?
9	A. That's not at all what I just said.
10	Let me read this, for example. "In my
11	opinion, a person of ordinary skill in the art
12	in this field with the relevant time frame
13	(POSITA) would have had a combination of
14	experience and education in electrical
15	engineering, computer science, computer
16	graphics and/or imaging technology."
17	So this is a general grab bag of
18	scientific and engineering and technical
19	fields that would be suitable for
20	understanding this patent.
21	Q. What I want to focus on is you
22	included electrical engineering in that group,
23	correct?
24	A. Sure.
25	Q. So I want to understand what are

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DR. JOHN R. GRINDON (9/15/15) the combination of experience and education associated with the electrical engineering aspects that you think you need to understand in order to be a person of ordinary skill in the art to read and understand the '181 patent?

8 Α. All right. That doesn't fairly say 9 A person would not have to have what I said. 10 electrical engineering. A person could have 11 some of these other things and still develop 12 the expertise necessary. So I'm not saying 13 that electrical engineering is necessary or 14 computer science is necessary or computer 15 graphics is necessary. Only that these are 16 representative of technical disciplines that 17 would have the correct skills.

18 Let me ask you a question: Without 0. 19 some training in computer science, how would 20 you understand how MEncoder works? 21 MR. ALMELING: Objection; form. 22 Α. Earlier you asked a different 23 question. You asked about using these things. 24 Actually, if we're limiting to this part, 25 column nine of the '181 patent, these

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DR. JOHN R. GRINDON (9/15/15) activities of simply using these open source software packages could be given to someone with considerably lesser skill than what I think is necessary for the purpose of my declaration.

Q. So in order to understand the software discussed on column nine, you think someone could have a lower level of skill in the art than you set forth in paragraph 12? Is that what your testimony is?

A. No. What I said, in order to use effectively, for example, converting from one type of data to another type of data, using the software that could be done without understanding the inner workings of the various software packages.

Q. By the way, in DiBernardo, does it disclose any software that's being used?

20

A. DiBernardo?

21 Q. Yes.

A. When you say any software, that
 is --

Q. Like the MEncoder software, the
 GDAL software.

1 DR. JOHN R. GRINDON (9/15/15) 2 Okay. So your question is in which Α. 3 DiBernardo are you talking about? 4 0. Pick one. They're all the same, 5 right, for these purposes. б Let's look at the '7895 Α. 7 publication. 8 0. That's marked as what exhibit? 9 Α. Exhibit 5. In light of your 10 previous question, are you asking about 11 pre-packaged software packages such as GDAL 12 and MEncoder? Is that what you mean by 13 software? 14 I just want to know where in 0. 15 DiBernardo it teaches any specific software, 16 whether it's the same or different as GDAL or 17 MEncoder, I don't care. I just want to know 18 how do you know what software to use with the 19 DiBernardo patents in order to make it work? 20 Α. The DiBernardo patent -- give me a 21 moment and I'll find the references, but the 22 DiBernardo patent goes deeper than the '181 23 patent in that it provides the flow charts and 24 description of exactly what is done and then 25 the software would be written to accomplish

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1 DR. JOHN R. GRINDON (9/15/15) 2 that. 3 So, for example, the '181 patent, 0. 4 column nine, describes using the open source 5 programming tool MEncoder that converts the б compressed MPEG2 data into lossless TIFF 7 images. You see that? 8 Α. I see that. 9 Does DiBernardo disclose any 0. 10 comparable software that operates in the same 11 way as the MEncoder software to convert MPEG 12 data into lossless TIFF images? 13 Objection; form. MR. ALMELING: 14 Α. The DiBernardo describes how to 15 create the composite images sufficient for 16 someone with the skills that I've listed in 17 paragraph 12 of my declaration to be able to 18 right software. The '181 does it by simply 19 using existing packages to convert data. 20 0. So in other words, someone reading 21 the '181 patent can just apply an 22 off-the-shelf package and figure out how it 23 works while someone reading DiBernardo would 24 have to have a higher level of skill in the 25 art in computer software because they'd have

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1 DR. JOHN R. GRINDON (9/15/15) 2 to write the software? Is that what you're 3 saying? 4 MR. ALMELING: Objection; form. 5 Α. That's not a fair statement. We're looking, first of all, in the '181 at column б 7 nine, some fairly limited applications of 8 existing software packages. 9 Well, for purposes of figuring out 0. 10 how to convert the MPEG data into lossless 11 TIFF images, you said that you don't need to 12 know how to program the computer to do what 13 the '181 patent tells you, correct? 14 MR. ALMELING: Objection to form. 15 Additionally, I object to this line of 16 questioning as improper under 611 (d) 17 as outside the scope. 18 You may continue. 0. 19 Again, you're asking about using Α. 20 the MEncoder program as a means to convert 21 data. A person could use that MEncoder 22 program without fully understanding what's 23 going on inside. Simply knowing I put in this 24 data, I get out that data. 25 So you don't need to know how to be 0.

DR. JOHN R. GRINDON (9/15/15) trained in computer software in order to do that?

A. In order to use the MEncoder program. That's not the same as saying that you could accomplish the full scope of the '181 patent with no knowledge of computer algorithms or developing software.

9 Q. But to convert from the one file 10 format to the other file format ascribed in 11 column nine of the '181 patent, they teach you 12 to go in the software, right? You don't need 13 it to do any programming to run that software; 14 is that correct?

A. To do the conversion at lines, what is it, 24 something through 26, column nine of the '181, a person would merely need to learn how to use that software, the MEncoder software and then apply it to the data.

20 Q. And if you wanted to implement the 21 flow charts that you referred to in Grindon 22 Exhibit 5, the DiBernardo publication, you'd 23 need to have computer training on how to 24 program the computer to accomplish that, 25 right?

1	DR. JOHN R. GRINDON (9/15/15)
2	MR. ALMELING: I'm not currently
3	showing a current question, Counsel.
4	Will you repeat your question? I
5	apologize.
6	Q. If you wanted to implement the flow
7	charts that you referred to in Grindon
8	Exhibit 5, the DiBernardo publication, you'd
9	need to have computer training on how to
10	program the computer to accomplish that task;
11	is that correct?
12	MR. ALMELING: Objection; form.
13	A. The flow charts contain the logic
14	and the conversion of these to code to run on
15	a computer would be well-known in the art.
16	Q. Which art?
17	A. The art known by the POSITA as I
18	describe it in paragraph 12.
19	Q. If I had an electrical engineering
20	degree with no computer science background,
21	would I be able to implement those flow charts
22	into software as you just described?
23	MR. ALMELING: Objection; form.
24	And I will repeat, at the sake of not
25	distracting testimony, I will not

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Page 171 1 DR. JOHN R. GRINDON (9/15/15) 2 repeat it again, but it should be 3 clear that my guestions to these are 4 all outside the scope. 5 MR. MACEDO: Take a look at б paragraph 12, Counsel. 7 MR. ALMELING: I have. 8 MR. MACEDO: Okay. 9 0. You may continue. 10 An engineer would be in a Α. 11 particularly good position to implement 12 DiBernardo because it's basically an 13 engineering technology that is describing; 14 understanding images, the collection of 15 images, the location, position determination, 16 These all are engineering discipline so on. 17 functions. Conversion of those into code 18 would require code conversion which electrical 19 engineers, probably almost everyone now could 20 do. 21 0. When you got your electrical 22 engineering degree, how many software 23 programming classes did you take? 24 Undergraduate, probably none. Α. 25 Graduate, now of course it's part and parcel.

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Page 172 DR. JOHN R. GRINDON (9/15/15) Wasn't my question. My question is 0. you, when you got your degree, how many software programs -- how many software classes did you take? Okay. Undergraduate, 1961 I Α. believe so there was none at that time. So if you have to understand from 0. your education how to do computer programming, would a person of ordinary skill in the art who has an electrical engineering degree comparable to your electrical engineering degree be able to implement DiBernardo? MR. ALMELING: Objection to form. Additionally, objection to lack of foundation. I think there's a disconnect here Α. because the POSITA that I'm postulating in paragraph 12 is as of 2004, not 1961. 0. But you talk about the fact that you knew people that were POSITAs in 2004? Α. Sure. And you consider yourself a POSITA 0.

²⁴ in 2004, correct?

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MR. ALMELING: Objection to form.

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1 DR. JOHN R. GRINDON (9/15/15) 2 Α. Yes. 3 And your education is an electrical 0. 4 engineering degree with no computer science 5 classes is what you testified to, correct? б Not at all. What I said was at the Α. 7 time of my first engineering degree three, 8 1961, at that time, there were no computer 9 software classes, but the underground or 10 underpinnings of all of this technology, of 11 course, were taught, but the conversion from 12 these flow diagrams to code wasn't taught at 13 that time. 14 But this POSITA is defined as of 15 2004 and as of 2004, there was guite a few 16 advances in that ensuing time. My statement 17 here that this combination of experience in 18 these things applies as of 2004. 19 Now, if you take a look in your 0. 20 declaration to the paragraph that begins on 21 page 4, paragraph ten, you talk about your 22 personal experience that carries over on page 23 5. The experience you point to is the areas 24 of computer graphics, graphics hardware, 25 computer architecture and other subjects.

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Page 174 1 DR. JOHN R. GRINDON (9/15/15) 2 Why did you leave electrical 3 engineering out there? 4 Α. Well, I did say other subjects, but 5 if I were rewriting this, now I should put б electrical engineering in there. 7 So in other words, the way it's 0. 8 written, you don't think is the best way of 9 stating what you meant; is that correct? 10 MR. ALMELING: Objection; form. 11 The "and other subjects" covers it. Α. 12 0. Well, "and other subjects" could be 13 It could be music. It could be glazing art. 14 at windows, correct? Those are other 15 subjects. 16 Certainly other relevant subjects. Α. 17 Well, you point out engineering in 0. 18 all the other paragraphs, but you leave it out 19 there. Is there a reason why you left it out 20 there? 21 No, that's an oversight. Α. 22 Well, did you think that your Q. 23 electrical engineering degree that had no 24 training in computer science was relevant for 25 you to be able to offer your opinions in this

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1 DR. JOHN R. GRINDON (9/15/15) 2 matter? 3 When you say engineering degrees, I Α. 4 have three degrees. You're talking before 5 about my first degree where they did not teach 6 software yet. I have more degrees, more 7 experience, more training, more studies 8 personally. But regarding electrical 9 engineering, that's probably the key 10 background to understanding these patents. 11 0. So would you think that someone 12 that doesn't have training in electrical 13 engineering would not have a key background to 14 understanding the patents in-suit? 15 Objection; form. MR. ALMELING: 16 We went over this several times. Α. 17 There is a great overlap between these 18 technologies. That's why I listed more than 19 These are examples of technologies. one. SO 20 other subjects would include other things that 21 would overlap in this. In looking at this, 22 since you point it out, if I were editing 23 this, I would add electrical engineering to 24 the top of page 5 along with this list. But I 25 did cover it by saying and other subjects.

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Page 176 1 DR. JOHN R. GRINDON (9/15/15) 2 And a person reading this would understand 3 that the other subjects would be other related 4 subjects. 5 MR. ALMELING: I would interpose 6 not an objection here, but a statement 7 before you begin, just to make it 8 clear, I agree with the witness that 9 he has answered this numerous times 10 and to the extent this deposition is 11 proceeding slowly, I think it's 12 because of the repetitive questioning. 13 So I encourage you in order to 14 expedite this, to move onto some new 15 lines that are not just reiterating 16 the current questions. 17 I'm sorry, but until MR. MACEDO: 18 the witness answers the question I 19 ask, it's kind of hard to move on. 20 Now I'm entitled to an answer to the 21 question I asked. I'll keep asking 22 until I get the answer. I don't think 23 I am improperly asking him questions 24 and they're all within the scope of 25 his testimony he offered.

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Page 177 DR. JOHN R. GRINDON (9/15/15) Now, in your previous answer you 0. said, "and that's probably the key background to understanding these patents," referring to electrical engineering. I want to understand whether without that key background in electrical engineering, is someone able to understand appropriately these patents being the patents in-suit in the four IPRs. Can you answer that yes or no? MR. ALMELING: Objection; form. I think the declaration itself Α. answers that because I mentioned in several areas of expertise so those areas would be sufficient background and, of course, a person would have to also study the technology of these patents if they were not part of his formal training. 0. So if you had a computer science background, you wouldn't need the electrical engineering background? Is that your testimony? MR. ALMELING: Objection to form. Α. Again, with a computer science

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Page 178 1 DR. JOHN R. GRINDON (9/15/15) 2 background, plus appropriate experience in the 3 technology of these patents. 4 0. Which is what? 5 MR. ALMELING: Counsel, the б witness has not finished. Unless you 7 withdraw your question, please permit 8 him to finish. 9 0. Finish your answer, please. 10 I'm sorry; I forget where I left Α. 11 off. 12 0. You said, again, a computer science 13 background was the appropriate experience in 14 the technologies of these patents, and I asked 15 you which is what, to understand what you're 16 referring to. 17 All right. So I'm picking up in Α. 18 mid sentence here. 19 MR. ALMELING: Objection. The 20 record is not clear, and I don't 21 want --22 I will ask the question again and Ο. 23 maybe you'll answer it this time. 24 If you have a computer science 25 degree, you wouldn't need an electrical

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1 DR. JOHN R. GRINDON (9/15/15) 2 engineering background to understand these 3 patents; is that correct? 4 Α. It is correct in that a person with 5 computer science degree and no electrical б engineering degree would be able to unmask the 7 additional expertise necessary to understand 8 these patents. 9 We were looking at column nine, 0. 10 lines 28 through 36. You see where it starts 11 off with "for a target parcel"? 12 Α. Yes. 13 So it says, "for a target parcel a 0. 14 calculation using GDAL is made in a camera 15 centroid program position 0630 to determine 16 the exact latitude and longitude of a centroid 17 of the parcel which generally approximates the 18 location of the structure. Given the centroid 19 of the parcel, another simple geometry 20 calculation is made as to the orientation and 21 location of the camera view that is pointed 22 towards the centroid of the parcel. The 23 location of the centroid of the parcel and the 24 distance to the parcel is then calculated for 25 the frame."

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1	DR. JOHN R. GRINDON (9/15/15)
2	You see that?
3	A. Yes.
4	Q. Do you understand that as to be
5	describing a means for linking latitude and
6	longitude data with the video drive-by data?
7	MR. ALMELING: Counsel, I do not
8	want to provide an objection, perhaps
9	a brief confer between you and I can
10	do it. I'm happy to do it on the
11	record or off. I don't want to infect
12	the witness with my question.
13	MR. MACEDO: He offered testimony
14	that there were mistakes in the brief
15	on his declaration. He didn't make it
16	close ended.
17	MR. ALMELING: Let's go off the
18	record.
19	(Whereupon, an off-the-record
20	discussion was held.)
21	(Grindon Exhibit 21, Patent
22	Owner's Response to Petition
23	IPR2014-01338 was marked for
24	identification, as of this date.)
25	(Grindon Exhibit 22, Patent

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Page 181 1 DR. JOHN R. GRINDON (9/15/15) 2 Owner's Response to Petition 3 IPR2014-0139 was marked for 4 identification, as of this date.) 5 BY MR. MACEDO: б 0. While we were on break, we marked 7 as Exhibit 21, Patent Owner's Response to Petition in IPR2014-01338, and as Exhibit 22, 8 9 Patents Owner's Response to Petition in 10 IPR2014-0139? 11 And let's start with 21 and ask: 12 Have you ever seen Exhibit 21 before? 13 Α. Yes. 14 0. You reviewed Exhibit 21 to 15 determine if there were any inaccurate 16 statements made in it, correct? 17 MR. ALMELING: Objection; form. 18 Α. That isn't exactly, but I'd rather 19 express it the way I did in my declaration. 20 So on paragraph two of the 21 declaration in this matter, that would be 22 Exhibit 1, I said, "I have been informed that 23 the Patent Owner in these current IPR 24 proceedings, VRE cited to portions of my 25 previous declarations from the unrelated

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Page 182 1 DR. JOHN R. GRINDON (9/15/15) 2 Vederi litigation. Google, Inc., the 3 Petitioner in these proceedings, reached out 4 to me to address VRE's characterizations of my 5 earlier declaration, which I've done below." б You go beyond the declaration you 0. 7 also say, "I have noticed inaccuracies in 8 VRE's statements with regard to the patent at 9 issue in these proceedings, particular prior 10 art references mentioned in VRE's Response 11 documents and the state of the prior art in 12 2004." 13 You didn't limit it just your 14 comments on DiBernardo? 15 Are you waiting for me? 16 Α. Is there a question pending? 17 There was a question mark at the 0. 18 end of that? 19 Α. I didn't see the question mark. 20 0. Take a look at paragraph 25. You 21 see it says, "In reviewing VRE's Patent Owner 22 Responses in both the '1338 and '1339 IPR 23 proceedings," and you're talking about 24 Exhibits 21 and 22, right? 25 Α. Yes.

1 DR. JOHN R. GRINDON (9/15/15) 2 "I've noticed several other 0. 3 inaccuracies or erroneous assumptions made by VRE that, while not directly related to my 4 5 previous declaration, are clearly incorrect б and thus addressed here," right? 7 You didn't limit yourself to the DiBernardo declaration? 8 9 In light of as explained by Α. 10 paragraph 25, there's some additional items. 11 0. Right, and to the extent that you 12 noticed something was inaccurate or erroneous, 13 did you identify it in your declaration? 14 MR. ALMELING: Objection; form. 15 Α. As I went through the Patent Owner 16 Responses, I saw many places where I felt there were inaccuracies. I didn't address 17 18 each and every paragraph and line, but what I 19 did do is address the substantive integration 20 of all of those inaccuracies and treated them 21 generally not necessarily line-by-line. 22 So if you turn to page 43 of 0. 23 Exhibit 21, did you review this section of the 24 brief? 25

Α. This is page 43?

1	DR. JOHN R. GRINDON (9/15/15)
2	Q. Yes.
3	A. My role in this, I understood to be
4	fairly limited primarily to address the patent
5	owner's comments regarding my earlier Vederi
6	declaration and then I noticed a couple of
7	extra things which you've pointed out in
8	paragraph 25. So I didn't address everything
9	that there is in the patent owner's response.
10	Q. That wasn't my question. My
11	question is: Did you read the section
12	starting on page 43 and going through page 51?
13	And we're looking at Grindon Exhibit 21.
14	I'm not asking you to read it now.
15	I'm asking did you read it before?
16	A. I'm not reading it now, but I'm
17	scanning it to see if there were parts of this
18	that I did read before. At most I had scanned
19	it. I didn't analyze it. I don't really have
20	opinions about those pages that you just
21	mentioned.
22	Q. You didn't reach any conclusions
23	that any statements in it were inaccurate?
24	MR. ALMELING: Objection; form.
25	A. In order to answer that precisely,

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1 DR. JOHN R. GRINDON (9/15/15) 2 I would have to take time to actually read 3 everything in here. Not having studied it 4 before, there may be some points in these 5 pages that are expressed elsewhere that I did 6 review and I can't comment on those, but 7 generally limiting to these pages, I am not 8 seeing anything that I commented on or had 9 opinions about regarding accuracy. 10 What I'm asking is when you 0. Right. 11 previously did whatever you did to prepare the 12 declaration, you did not reach any conclusions 13 that there were statements that you saw that 14 were inaccurate in Grindon Exhibit 21 on 15 pages 43 through 51? 16 MR. ALMELING: Objection. 17 The question is: 0. Is that true or 18 not true? 19 MR. ALMELING: Objection; form. 20 You're beginning to prolong this with 21 duplicative questions. 22 Again, if there are statements Α. 23 embedded in those pages that I looked at 24 elsewhere, I treated them elsewhere. Without 25 reading every word now, I can't say that there

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1 DR. JOHN R. GRINDON (9/15/15) 2 is, in some statement in these pages that I 3 didn't address. But if I addressed them, it 4 wasn't through reading these pages, it was 5 through reading a statement on another page. 6 0. So other than statements that you 7 otherwise addressed from other parts of the 8 brief, there were no portions of this section 9 of the brief from pages 43 through 51 that you 10 identified as having uniquely problematic or 11 inconsistent statements? 12 Objection; form. MR. ALMELING: 13 Just to clarify, unless the point Α. 14 was raised elsewhere outside of these pages, I 15 don't recall addressing it in my declaration, 16 and I don't have an opinion on the accuracy. 17 And if you look at Exhibit 22, and 0. 18 you look at the section starting on page 43 19 going through page 51, is your testimony the 20 same starting on page 44? 21 Α. 44. Are these corresponding pages 22 to the Exhibit 21 pages that you mentioned? 23 I wouldn't swear to you that 0. 24 they're verbatim identical, but they are the 25 corresponding sections.

Page 187 1 DR. JOHN R. GRINDON (9/15/15) 2 Then my answer would be the same. Α. 3 So let's jump to paragraph 27 in 0. 4 Exhibit 1. You probably need Exhibit 20, 5 which is the '181 patent next to you. 6 Now in 2004, how big was a hard 7 drive? 8 Α. Somewhere on the order of 50 to a 9 hundred gigabytes would be typical for a 10 general purpose home or office computer. 11 0. What about a computer that you 12 would put in a car like the one that is 13 described in the '181 patent? 14 Could be of the same order. These Α. 15 would be IDE type drives. They could be used 16 in the car. 17 If you look at figure 4 of the '181 0. 18 patent -- you see figure 4? 19 Yes, I do. Α. 20 0. So you see according to this flow 21 chart, you start with a blank hard disk drive 22 one and you return a full hard disk drive one. 23 You see that? 24 There are a number of paths Α. 25 indicating full and blank. Can you point to a

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1	DR. JOHN R. GRINDON (9/15/15)
2	call out number?
3	Q. I was actually going to say that
4	you do this four times in this example. In
5	other words, what you understand the '181
6	patent teaching you is that they would send a
7	hard disk drive, people would drive around and
8	gather the neighborhood information, fill it
9	up, send it back and then start another hard
10	disk drive. Is that correct?
11	MR. ALMELING: Objection; form.
12	A. That is a summary of it's fair,
13	I think.
14	Q. You said that you would expect 50
15	to hundred gigabytes to be the size of these
16	hard disk drives at the time of the invention?
17	A. That's just as I sit here there's
18	nothing in my declaration that gives those
19	numbers.
20	Q. But as a person of ordinary skill
21	in the art who knows what the state-of-the-art
22	was in 2004, that's your understanding, right?
23	A. Yes, subject to POSITA, that's what
24	my memory serves at the moment.
25	Q. So when you're looking at these

Page 189 1 DR. JOHN R. GRINDON (9/15/15) 2 four hard disk drive images, you're looking at 3 something that is between 200 and 400 4 gigabytes of data images, right? 5 MR. ALMELING: Objection; form. б Four hard disk drives at a hundred. 0. 7 4 times 50 is 200. 4 times 100 is 400. So 8 since they are full, you're looking at 9 somewhere between 200 and 400 gigabytes of 10 data during weeks one through five according 11 to the '181 patent; is that correct? 12 Α. When you say according to the '181 13 patent --14 The '181 patent is telling you, in 0. 15 figure four, that they contemplate driving 16 around in weeks one through five and filling 17 up four hard disk drives, correct? 18 Α. Figure four, they do. Before you 19 said the '181 patent, which is different than 20 just figure four, but we're looking at figure 21 four only. 22 Certainly. If you look at figure Ο. 23 four, you understand that it is teaching 24 filling up four hard disk drives over four 25 weeks that you estimate would be somewhere

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Page 190 1 DR. JOHN R. GRINDON (9/15/15) 2 between 200 and 400 gigabytes of data, 3 correct? 4 Α. The '181 patent I can't recall giving the number of gigabytes. 5 б 0. Right now you just estimated that 7 for me. 8 But I don't see that in the '181 Α. 9 that was just as I sit here asking --10 responding to your question about how big a 11 hard drive could be. I don't know that the 12 hard drives in contemplated in the '181 patent 13 were the size that I might guess would be 14 available at that time. 15 0. How long do you think the cars will 16 drive around? How many hours before they fill 17 up one of those hard disk drives? 18 MR. ALMELING: Objection; form. 19 There are many variables there; the Α. 20 size of the image, image rate, size of the 21 hard drive which we have not established, 22 despite what you said. So that is something 23 that doesn't have a ready answer. 24 So you don't have an opinion as to 0. 25 whether or not it would take one hour or 20

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1	DR. JOHN R. GRINDON (9/15/15)
2	hours or 40 hours to fill up a hard disk drive
3	as reflected in figure four of the '181
4	patent?
5	MR. ALMELING: Objection; form.
6	A. I could make some estimates. These
7	are outside the scope of what I reported in my
8	declaration. Unnecessary for the conclusions
9	in my declaration. If you'd like, I can make
10	some estimates.
11	Q. Well, you take issue in paragraph
12	27 saying that nowhere does the '181 patent
13	state or suggest that large amounts of data
14	are required to perform the described
15	processes. So I'm trying to figure out what
16	amount of data is necessary to perform the
17	processes set forth in figure four.
18	MR. ALMELING: Counsel, is there a
19	question?
20	MR. MACEDO: Yes.
21	Q. So do you have an understanding of
22	what amount of data was necessary to perform
23	the processes described in figure four which
24	involved driving around for a week filling up
25	a hard disk drive and then sending it back and

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1 DR. JOHN R. GRINDON (9/15/15) 2 doing the next one and doing that for five 3 weeks? 4 Α. And you're looking only at the 5 example of figure four, not claims, not the б '181 patent in toto; is that correct? 7 0. That's what we're talking about is 8 figure four. 9 So just to be clear, you're asking Α. 10 the maximum amount really that could be 11 collected, not the minimum amount required by 12 the claims. Do I understand? 13 You didn't say required by the 0. 14 claims. You said nowhere does the '181 patent 15 state or suggest that large amount of data 16 required to perform the described processes. 17 Figure four is a described process. It is 18 talking about an amount of data. 19 I want to know what your 20 understanding of the amount of data that is 21 required to perform the processes described in 22 figure four which involves driving around over 23 four weeks and filling up at least four hard 24 disk drives full of image and location data. 25 So I want to know what you understand that to

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1 DR. JOHN R. GRINDON (9/15/15) 2 mean as of 2004. 3 MR. ALMELING: Objection; form. 4 Α. Again, all I said here, required to 5 perform. So that doesn't say that you can't б collect a large amount of data. Figure four 7 shows that you can. All I'm saying in 8 paragraph 27 is that it's not required in 9 order to perform the described processes. 10 So is it your testimony that figure 0. 11 four describes a process which does collect 12 large amounts of data? 13 MR. ALMELING: Objection to form. 14 Α. That's your statement of course, 15 I don't know that I would call that not mine. 16 large amounts, but certainly there would be 17 the capability in 2004 of collecting far more 18 data than necessary to support the claims. 19 0. Your statement 27 doesn't say 20 claims in the first sentence, does it? 21 Α. It says, required. 22 Yes, for the described processes. Ο. 23 The processes there described include figure 24 four, correct? 25 I don't see that figure four says Α.

Page 194 1 DR. JOHN R. GRINDON (9/15/15) 2 that we have to collect a certain amount of 3 data. So let's turn to the text surrounding 4 figure four and see what it says. 5 To assist you, why don't you look Ο. б at the bottom of column eight starting at line 7 59 and read that sentence into the record? 8 Well, actually, I'm starting at Α. 9 column seven, line 57 which begins discussion 10 of figure four. 11 0. I understand, but I want you to 12 look at column eight, line 57 and just read 13 that sentence into the record and see if it 14 answers your question. 15 MR. ALMELING: Counsel, do you 16 withdraw the previous guestion that 17 required him to look at figure four? 18 Are you asking a new guestion and 19 withdrawing the previous one? 20 MR. MACEDO: Well, he didn't 21 answer my previous question. 22 MR. ALMELING: Well, he was trying 23 You told him to stop doing what to. 24 he was doing. 25 MR. MACEDO: Let's withdraw the

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1 DR. JOHN R. GRINDON (9/15/15) 2 last question since I'm not going to 3 get an answer to it anyhow and move 4 onto this question. 5 Can you please look at column Ο. eight, line 57 through 60 and read that into б 7 the record out loud. 8 The line that you points to Α. Okay. 9 is approximately one column past the beginning 10 of the discussion of figure four so it is out 11 of context. Would those be the words, "the 12 above-described"? Is that where you want me 13 to start? 14 Yes. 0. 15 "The above-described process Α. 16 provides a simple yet efficient method of 17 moving large amounts of data from the field 18 drive back to the video and data server form." 19 Again, all I asked you to do was Ο. 20 read it. That's what I asked you to do and 21 I appreciate that. Now I'm going to you did. 22 ask you a question about what that says. 23 What do you understand large 24 amounts of data to be referring to other than 25 large amounts of data as you quote on

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1 DR. JOHN R. GRINDON (9/15/15) 2 paragraph 27? 3 Again, as I mentioned several times Α. 4 now on paragraph 27, I say nowhere does it 5 suggest that large amounts of data are 6 required in order to perform the described 7 The text beginning at the bottom processes. 8 of column seven, which you asked me to stop 9 reading says, "FIG 4 is a process flow diagram 10 illustrating a preferred efficient process," 11 so that's one process by which data can be 12 If you went to collect large collected. 13 amounts of data, here's how you can do it. 14 But the point of paragraph 27 is 15 that it's not necessary to collect large 16 amounts of data in order to perform the 17 described processes. 18 Is it fair to say that when the 0. 19 response cites to the '181 patent as requiring 20 -- as enabling, restoring and processing of 21 large amounts of video drive-by data that at 22 column eight, lines 57 through 60, it's

23 discussing a method of enabling the storing

²⁴ and processing of large amounts of video

25 drive-by data?

1 DR. JOHN R. GRINDON (9/15/15) 2 MR. ALMELING: Objection to form. 3 So, again, the line at the bottom Α. 4 of column eight that you asked me to read, in 5 the preceding column, it shows that if you 6 want to convey large amounts of data, that's 7 possible to do. 8 All I'm saying in paragraph 27 is 9 that the described processes; that is the 10 collection of images and a selection of images 11 for display and so forth, itself does not 12 require large amounts of data. If you want to 13 collect large amounts of data, you can. A11 14 I'm saying is that you don't have to. It's 15 not a requirement. 16 Does the '181 patent teach a system 0. 17 that enables the storing and processing of 18 large amounts of video drive-by data? 19 Α. I'm not sure how that question is 20 different. It does tell you if you want to 21 collect large amounts of data, you can do it. 22 It tells you how to? Q. 23 Α. Well, it shows some suggestions on 24 how to do that. Not in great detail. 25 What's an application in the sense 0.

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1 DR. JOHN R. GRINDON (9/15/15) 2 of the '181 patent? 3 MR. ALMELING: I don't want to 4 object outside the scope, but perhaps 5 you can provide a little context. б MR. MACEDO: It's going to come up 7 in paragraph 28. Give me a second. 8 Α. Can you point to a particular place 9 in my declaration that we're talking about? 10 I'm talking about the '181 patent 0. 11 right now. You read the '181 patent, correct? 12 Α. Yes. And you understand the '181 patent, 13 0. 14 right? 15 I believe I did. Α. 16 And in understanding the '181 0. 17 patent, you read through it to figure out what 18 it says and what it means, right? 19 Α. Basically. 20 0. And did you see any discussion 21 about a particular application in the context 22 of the '181 patent with respect to the 23 materials that you read? 24 MR. MACEDO: Objection. 25 If you don't recall, you can say Q.

1	DR. JOHN R. GRINDON (9/15/15)
2	you don't recall. That's fine.
3	A. Again, can you point to the word,
4	"application" either in the '181 or in my
5	declaration?
6	Q. Well, take a look at our brief
7	which you commented on, which is marked as
8	Exhibit 22. And on page 9, you see at the
9	bottom of the page where it says a particular
10	application quoting the '181 patent. Do you
11	see where I'm referring to?
12	A. Yes.
13	Q. So I'm trying to understand at
14	column six, lines 50 through 53 through 56
15	when it says, "The image processing servers
16	0115 convert the original video drive-by data
17	to one of many potential new image formats
18	(depending on the particular application)
19	which constitute Post-Processed Video Data
20	(PPVD)."
21	I want to understand what your
22	understanding of an application is in that
23	sentence.
24	A. First, I didn't construe terms, but
25	you're asking for the understanding.

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1	DR. JOHN R. GRINDON (9/15/15)
2	Q. Well, you analyzed page 9 of
3	Grindon Exhibit 22 and said that it was wrong,
4	so I want to figure out how we made a mistake.
5	So we quoted there the sentence that I just
б	read to you and it uses the word,
7	"application."
8	I want to understand whether you
9	know what beer referring to in the '181 patent
10	when see say on the particular application?
11	A. This would be in reference, as I
12	understood it, to how you're going to use the
13	teaching of the patent. You might use it in
14	different ways and those different ways would
15	be different applications. So that's the
16	context that I would understand the word,
17	"application" to be used.
18	Q. You don't understand that to be the
19	particular software that's running it like the
20	difference between Word and PowerPoint as
21	being two different applications running on a
22	computer?
23	A. That's one, perhaps narrower,
24	interpretation of the word, "application."
25	There could be different software.

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1 DR. JOHN R. GRINDON (9/15/15) 2 What are they talking about in the 0. 3 '181 patent? 4 MR. ALMELING: Counsel, would you 5 like to rephrase your pending б question? 7 What do you understand the word, 0. 8 "application" to be referring to in the '181 9 patent in the excerpt quoted on page 9 of 10 Exhibit 22? 11 MR. ALMELING: Again, I don't want 12 to interrupt you, but that seems to be 13 exactly the same question you just 14 asked. 15 Are you asking a different 16 question or the same one? 17 I'm trying to ask the MR. MACEDO: 18 same question, but you didn't seem to 19 understand it so I restated it. 20 MR. ALMELING: Well, objection; 21 form. 22 Going back to column one of the Α. 23 '181 patent, line 59 continuing, I'll just 24 read that. "The ability of the system to 25 provide data associated with the neighborhood,

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L		
	1	DR. JOHN R. GRINDON (9/15/15)
	2	as well as a particular property in question,
	3	would be extremely desirable in a number of
	4	government and commercial applications."
	5	So there is the use of the word,
	6	"applications." Your use was much narrower,
	7	the PowerPoint versus Word. I think the
	8	application in this patent, the word,
	9	"application" has a fairly vague and broad
	10	meaning.
	11	Q. Do you think that the use of the
	12	word, "application" in terms of describing the
	13	prior art systems that are available in column
	14	one is the same use of application as set
	15	forth in column six on lines 53 to 56 in terms
	16	of converting image formats?
	17	MR. ALMELING: Objection; form.
	18	A. It certainly appears to be.
	19	There's a reason that column one was written
	20	into the patent and they're talking about a
	21	number of government and commercial
	22	applications. So these different
	23	applications, whatever they might be might,
	24	have somewhat different requirements.
	25	Q. Well, if you turn to column nine,
1		

1 DR. JOHN R. GRINDON (9/15/15) 2 which is cited on page 10 of the brief and 3 look at lines 44 through 47. 4 Α. I'm sorry. 5 0. Column nine, lines 44 through 47. б Of the '181? Α. 7 0. Yes. 8 Α. I'm looking at that. 9 0. Isn't the '181 talking about 10 converting TIFF images into MPEG2 formats? 11 Α. In these lines it says, in this 12 example implemented using an open source 13 programming tool to convert the -- so here, 14 they're giving an example. 15 And the example is to convert TIFF 0. 16 images into MPEG2 formats; is that correct? 17 For the particular -- for the Α. 18 particular example, that would be a 19 conversion. 20 0. And if you go further up in column 21 nine at approximately line 25, would the 22 MEncoder software that we talked about earlier 23 that was converting compressed MPEG2 format 24 and files, right? 25 Α. So there's another example.

1 DR. JOHN R. GRINDON (9/15/15) 2 So at a minimum, you would agree 0. 3 the '181 patent discloses examples of 4 converting from one image file format, TIFF, 5 to another image file format, MPEG2; is that б correct? 7 Α. It's not saying -- it's saying convert MPEG data. It's not saying convert 8 9 files, but some of the examples that they're 10 giving here do show converting MPEG and TIFF files. 11 12 Do you agree that MPEG2 is a kind Ο. 13 of image file format? 14 The MPEG2 is an image compression Α. 15 It would describe the data comprising format. 16 image. 17 So you would consider that an image 0. 18 format? 19 Α. That would be one example of an 20 image format. 21 TIFF would be another example of an 0. 22 image format? 23 Another example. Α. 24 Are there any other examples of 0. 25 image formats described in the context of the

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1 DR. JOHN R. GRINDON (9/15/15) 2 '181 patent? 3 Regarding the claims, let me take a Α. 4 look what the claim says. 5 Let's look at claim 1, line 16. It б says, "The image processing server converts 7 the video drive-by data to post-process" -post-processed video data." 8 9 So this isn't talking about MPEG or 10 TIFF format so that the claim. 11 0. I'm sorry; did you finish reading 12 that? It looks like you left off the rest of 13 the sentence. 14 This was just an excerpt from the Α. 15 claim. The claim itself was much longer than 16 what I just read. 17 But you left out corresponding to 0. 18 the desired image format, which is the 19 language we're talking about. 20 Α. The video data corresponding to a 21 desired image format. 22 Right. So what we're talking about Q. 23 is what does image format mean. And I was 24 asking you whether there were any examples of 25 image format that you saw on the patent other

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1	DR. JOHN R. GRINDON (9/15/15)
2	than MPEG2 or TIFF?
3	A. Well
4	MR. ALMELING: Objection to form.
5	You can answer.
6	A. I don't want to read MPEG and TIFF
7	under the claim. I think the claim, if it
8	intended to be limited to that, would have
9	said MPEG and TIFF. I think those were merely
10	examples.
11	Q. And I want to know if there's any
12	other examples disclosed in the spec of the
13	image format other than MPEG2 and TIFF?
14	MR. ALMELING: Objection; form.
15	A. And I don't know that the examples
16	have to be exhaustive. Those are two
17	examples, and I don't think they were meant to
18	be exhaustive.
19	Q. I didn't say they were. I asked
20	you if there are any other examples in the
21	patent that you are aware of image format
22	other than MPEG2 and TIFF.
23	MR. ALMELING: Objection to form.
24	Q. If the answer is there aren't any,
25	you can say that. If the answer is I don't

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Page 207 DR. JOHN R. GRINDON (9/15/15) know, you can say I don't know, but I'd like for you to answer the question that I am asking. Α. Okay. I'm not aware of any at the moment. 0. Do the patents describe, as a possible image format, adding a watermark to the image file? A person of ordinary still would Α. know, especially in the broadest reasonable interpretation, that there is more to an image format than just the two examples that were listed in the body of the patent, for example. I understand that you're asking 0. what someone of ordinary skill would understand, but I want you to listen to what my question was. You're not answering it. I'll let you continue your answer, but I want you to understand that what I'm asking you about is does the patent describe as a possible image format adding watermark to the image file. I'm not asking you what a person of ordinary skill in the art would

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²⁵ understand an image file to mean. I just want

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Page 208 1 DR. JOHN R. GRINDON (9/15/15) 2 to know what's disclosed in the patent. 3 So please answer the question. You 4 can finish whatever you're saying, but try and 5 answer my question. 6 MR. ALMELING: So I will note out 7 of courtesy to the court reporter, I 8 did not try to speak louder to you, a 9 courtesy that you do not afford. Now 10 that you finished speaking, I will 11 speak. 12 I would like to repeat the 13 question that you have asked because 14 the witness did not finish answering 15 that question. So the question that 16 was pending that the witness was 17 answering, unless you'd like to 18 withdraw that question, the question 19 remains outstanding. 20 MR. MACEDO: I will withdraw that 21 question and restate it. 22 MR. ALMELING: I'll afford you the 23 courtesy of not speaking when you 24 speak and I would appreciate the 25 courtesy. Let me ask a clear guestion

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1	DR. JOHN R. GRINDON (9/15/15)
2	and then stop. Have you withdrawn the
3	previous question?
4	MR. MACEDO: I am withdrawing the
5	previous question.
6	MR. ALMELING: Please continue.
7	Q. I want you to listen carefully to
8	my question and answer the question that I'm
9	asking.
10	I'm not asking about what one of
11	ordinary skill in the art would understand an
12	image format is. You already offered that.
13	And if Mr. Almeling wants you to answer that
14	question, he'll ask that.
15	The question I'm asking you is
16	whether there's an example of adding a
17	watermark to a file disclosed in the '181
18	patent.
19	A. I don't see in the '181 patent an
20	exclusive example of the watermark.
21	Q. Is there any way to know, as of
22	2004, where a watermark could be added without
23	converting the file format into a desired
24	image format?
25	MR. ALMELING: Objection; form.

1 DR. JOHN R. GRINDON (9/15/15) 2 You're talking about file formats. Α. 3 In other words, if I have a TIFF 0. 4 image, is there a way for me to add some sort 5 of watermark to the TIFF image without 6 converting the image format? 7 MR. ALMELING: Objection; form. 8 Α. A TIFF image can have a watermark 9 added to it and have it remain a TIFF image, 10 but now it is formatted with a watermark, 11 still a TIFF image but formatting the 12 watermark. 13 Can you have a TIFF image that has 0. 14 space for a watermark in its format that 15 doesn't include one? 16 MR. ALMELING: Objection; form. 17 0. In 2004? 18 MR. ALMELING: Objection. 19 Α. Your question I'm not parsing very 20 well. It seems too simple. You can take an 21 image that has space for a watermark to be 22 added and add a watermark to it and it's still 23 a TIFF image. Now it is reformatted with a 24 watermark. 25 Well, is it reformatted or did they 0.

Page 211 1 DR. JOHN R. GRINDON (9/15/15) 2 just add some data? 3 It now is of a watermarked format Α. instead of an unwatermarked format. 4 5 The format is the same. It just Ο. б has extra data in it, right? 7 MR. ALMELING: Objection; form. 8 Α. That is changing the format. 9 Is it changing the image format or 0. 10 is it changing other aspects of the format 11 beyond the image? 12 Α. It's changing the image. 13 The image looks different? 0. 14 Α. It looks different with the 15 watermark. 16 And that's inherent and necessary 0. 17 as of 2004, in your view? 18 MR. ALMELING: Objection to form. 19 Α. That being what exactly now? 20 That by definition if you add a 0. 21 watermark to an image file that it necessarily 22 changes the image format rather than just adds 23 extra data? 24 MR. ALMELING: Objection; form. 25 Α. An image with a watermark is a

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1	DR. JOHN R. GRINDON (9/15/15)
2	different image that now is of a format with
3	the watermark instead of a format without a
4	watermark.
5	Q. So when you convert the video
6	drive-by data into video data corresponding a
7	desired image format, one example is
8	converting MPEG to GIF or to TIFF, right; MPEG
9	data to TIFF data, that's an example of doing
10	that, right?
11	A. That's one example.
12	Q. Now, when you're converting it to
13	the desired image format, what you're doing in
14	that example is that you're taking something
15	that was previously in the MPEG2 format and
16	now putting it into the TIFF format, correct?
17	A. That is, when you say the TIFF
18	format, there would be different TIFF formats.
19	Q. A particular TIFF?
20	A. A particular TIFF format.
21	Q. Sorry; a particular TIFF. So if I
22	have a Word document and I save it in .doc,
23	something you do all the time, right?
24	A. Right.
25	Q. And I add in a sentence to that

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1 DR. JOHN R. GRINDON (9/15/15) 2 document and save it again, have I converted 3 the format of that document? 4 MR. ALMELING: Objection; form. 5 Α. That's a different question. There б you changed the amount of data in the Word 7 document, which is different than adding a 8 watermark on top of the data of an image. 9 We're talking about images in this context, 10 not word docs. 11 0. I asked you a very specific Let's go back to it. If I have a 12 question. 13 file in Word, my brief for the PTAB, and it's 14 saved in a .doc format and I add a sentence to 15 it and save it again in the same .doc format, 16 did I convert the format of that document? 17 That's all I'm asking. I'm not asking about 18 anything else. Just that one simple question. 19 MR. ALMELING: Objection; form. 20 You may have, if adding the data --Α. 21 if the format, for example, is considered to 22 be a single page format, and this is not in my 23 declaration, you're going far afield and just 24 winging it off of the moment here. If you, 25 let's say, had required a single page format

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1	DR. JOHN R. GRINDON (9/15/15)
2	in a Word document and you used that page, now
3	you're adding text that brings it into a
4	second page, now that's a two-page format.
5	So you, in that case, have changed
6	the format. Another way to look at it suppose
7	you change the layout. Let's say you want it
8	formatted in a certain way with numbers at the
9	bottom and change that with numbers at the
10	top. Now you have a different format for that
11	document.
12	Q. Is it possible to save a TIFF image
13	in a TIFF format by changing the data but not
14	converting the image format?
15	MR. ALMELING: Objection; form.
16	Q. In other words, TIFF1 to TIFF1.
17	I'm not trying to switch it to TIFF styles.
18	A. I understand.
19	MR. ALMELING: Objection.
20	A. The term, "format" is not so narrow
21	that when you say "the TIFF format," that it
22	has to apply only to the extension of that
23	image. The term, "format" in the broadest
24	reasonable interpretation goes beyond just
25	changing files, file representations. For

1	DR. JOHN R. GRINDON (9/15/15)
2	example, you could have a wide image that's
3	not very tall, that would be a wide format,
4	but it could be a TIFF. You could have a
5	narrow image that's taller, that could be
6	another image format, still a TIFF.
7	Q. So let's assume for a second the
8	board were to conclude that converting
9	drive-by data to post video data corresponding
10	to a desired image format is talking about
11	changing the way the file format like MPEG2 to
12	TIFF or TIFF to GIF and not about the data
13	within the file. Do you understand my
14	question so far?
15	A. Continue.
16	Q. So can you add a watermark to a
17	TIFF image without changing the file format?
18	MR. ALMELING: Objection to form.
19	A. When you add the watermark, it's
20	going to change the format. If we use if
21	we don't narrow format to be just different
22	file extensions and I don't think here we want
23	to narrow it to different file extensions. So
24	if you take a broader interpretation as I was
25	trying to do in some of my previous answers,

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1	DR. JOHN R. GRINDON (9/15/15)
2	then adding a watermark, that's a different
3	situation than not having a watermark and that
4	could be a watermarked format, still TIFF,
5	still TIFF1, but now it's formatted with a
6	watermark versus the other one is not. So
7	have you changed the format without changing
8	the file extension.
9	Q. But you haven't changed the file
10	format, right?
11	A. It depends. This depends how
12	you're defining your term. If you're defining
13	your term, "file format" to be the extension,
14	the compatible extension, then the watermark
15	would not be that type of reformatting. It
16	wouldn't be reformatting the file in that way.
17	It would be reformatting the image contained
18	in the file.
19	Q. So if I have the file format or if
20	I have the desired image format to be talking
21	about a format that a particular application
22	like Windows Media Player can play; you
23	understand my question so far?
24	A. If you finish it, then I will let
25	you know if it makes sense to me.

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Page 217 1 DR. JOHN R. GRINDON (9/15/15) 2 So you understand what Windows 0. 3 Media Player is, right? 4 Α. Yes. 5 And there's certain file formats 0. б which a Windows Media Player can play and 7 other file formats that it can't play, 8 correct? 9 Again, my previous answer if by Α. 10 file format, you mean the particular extension 11 of TIFF, JPEG, MPEG, then I'm following you. 12 0. You agree there are some extensions 13 that a Windows Media Player can play and other 14 extensions that Windows Media Player can't 15 play, correct? 16 MR. ALMELING: Objection; form. 17 Α. That seems fair. Windows Media Player is a typical 18 0. 19 example of an image application that was 20 available in 2004, correct? 21 That seems fair. Α. 22 I believe Apple had a player, Ο. 23 probably Quick Time. Is that what it was 24 called back then? 25 Α. Ouick Time.

Page 218 DR. JOHN R. GRINDON (9/15/15) And Quick Time had a different type of file format that it could play that sometimes overlapped with Windows Media Player and sometimes didn't, correct? Again, file format being extension, the arrangement of the data in the file, that would be correct. So, for example, when you refer to MPEG2 that's capable of being played on some video players but not others at the time, I would have to go back and look at the players then to see if MPEG was not playable on some, but perhaps. If desired image format meant a format that was capable of being played on a desired player or application, would it be fair to assume that it's talking about the extension as you call it rather than the

20 21 content of the data? 22 MR. ALMELING: Objection; form. 23 Again, I don't want to narrow it to Α. 24 just the extension because the content of the 25 data is what is eventually displayed to the

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correct?

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1 DR. JOHN R. GRINDON (9/15/15) 2 user and that is important. Not only does the 3 player have to play it, but it has to be the useful content for the application. 4 5 But isn't the whole point in claim Ο. б one of converting the video drive-by data to 7 post-process video data correspond to a desired image format to make it work in the 8 9 player that the user is going to see it, not 10 to add a security watermark feature? 11 MR. ALMELING: Objection; form. 12 Α. I'm not prepared to narrow the 13 claim to that extent. 14 Is it fair that that is the example 0. 15 that the '181 patent gives? 16 Α. I think that that is one example. 17 Are there any other examples that 0. 18 is set forth explicitly in the '181 patent? 19 MR. ALMELING: Objection; form. 20 Α. I'm not importing the examples into 21 the claim. I'm looking at the claim and in 22 its broadest reasonable interpretation, I 23 don't think we can narrow it that much. 24 0. I'm not asking you to interpret the 25 claim. I'm asking you what are the examples

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1	DR. JOHN R. GRINDON (9/15/15)
2	disclosed in the spec that are performed in
3	the claim. In the examples we have done so
4	far are changing the doc extension.
5	Is there any other examples
6	concerning converting video drive-by data to
7	post-processed video data corresponding to a
8	desired image format disclosed in the '181
9	patent besides changing the doc extension?
10	MR. ALMELING: Objection; form.
11	A. I don't see that, and I also don't
12	see the limitation in claim one as narrowing
13	to the file format of the doc extension.
14	Q. You see it would read on the doc
15	format, correct?
16	A. That would be one change of file
17	format it would be changing the doc extension.
18	Q. That would be changing an image
19	format, right?
20	A. Generally, yes, JPEG or MPEG to
21	TIFF would generally change that.
22	Q. By the way, in Yoichi you read
23	Yoichi?
24	A. Yes.
25	Q. You read the passage regarding the

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1	DR. JOHN R. GRINDON (9/15/15)
2	watermark features?
3	A. Yes.
4	Q. Does it describe how the
5	watermarking feature is done?
6	A. Let's look at Yoichi and see what
7	it says. Can you give that to me?
8	Q. Did you offer testimony about it?
9	MR. ALMELING: Counsel, again, in
10	the interest of expediting things, do
11	you want to point the witness to what
12	you're asking about or do you want
13	this to be where he searches through?
14	MR. MACEDO: I'm not aware of him
15	offering testimony on it. That's why
16	I'm asking if he offered testimony.
17	He offered testimony on Yoichi, but he
18	didn't describe any particular
19	watermarking software that was used or
20	the way the watermarking was done. If
21	you know otherwise, let me know. I'm
22	not aware of any?
23	MR. ALMELING: That's what I'm
24	looking at. Well, I'm looking at
25	something if you want to point it to

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1 DR. JOHN R. GRINDON (9/15/15) 2 him, great. I don't want to get in 3 the way of your questioning. You're 4 just making the witness --5 MR. MACEDO: You can point to б whatever you want. 7 MR. ALMELING: I presume Counsel 8 is asking about paragraph 28, the 9 final sentence. 10 MR. MACEDO: He certainly talks 11 about Yoichi there, but I don't think 12 he describes the software absolutely. 13 MR. ALMELING: So what is the 14 pending question? 15 MR. MACEDO: I said does it 16 describe how the watermarking feature 17 is done. He said he wanted to see 18 Yoichi. And I asked him did he offer 19 testimony about how the watermarking 20 feature was done. That's the 21 question. 22 Is there a pending question? Α. 23 Did you offer any testimony 0. Yes. 24 about how the watermarking feature in Yoichi 25 was performed?

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1	DR. JOHN R. GRINDON (9/15/15)
2	A. Well, I referenced Yoichi. That's
3	why I'm asking to see it to see if Yoichi to,
4	I guess, show you what Yoichi says about
5	watermarking.
б	Q. You're referring to the bottom of
7	page 20, top of 21 where you said, "For
8	example, DiBernardo's disclosure of generating
9	composite images from video image data and
10	Yoichi's disclosure of generating watermarked
11	images from unsecured images both satisfy the
12	claim recitation of 'convert[ing] the video
13	drive-by data to post processed video data
14	corresponding to a desired image format."
15	That's what you're referring to,
16	right?
17	A. Yes.
18	Q. You don't describe there how Yoichi
19	does the watermarking, just say that it does
20	it?
21	A. That's right.
22	MR. MACEDO: Do you want us to
23	break now or do you want to continue?
24	I don't want to interrupt this line of
25	questioning.

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Page 224 1 DR. JOHN R. GRINDON (9/15/15) 2 MR. ALMELING: Let's take a break. 3 MR. MACEDO: We'll mark Yoichi in 4 the break. 5 (Whereupon, at this time, a short б break was taken.) 7 (Grindon Exhibit 23, U.S. Patent 8 No. 2003/0210806 A1 was marked for 9 identification, as of this date.) BY MR. MACEDO: 10 11 0. Dr. Grindon, who typed your 12 declaration, Grindon Exhibit 1? 13 This would be a collaborative Α. 14 The first draft would have been effort. 15 prepared by someone associated with Counsel. 16 How complete was that draft 0. 17 compared to the final draft? 18 Α. I didn't keep a record of that so 19 it's hard to say. 20 0. Do you recall typing anything 21 yourself that is included in Grindon 22 Exhibit 1? 23 Yes. Α. 24 How much do you recall typing? 0. 25 Α. It's hard to say because it's a

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Page 225 1 DR. JOHN R. GRINDON (9/15/15) 2 collaborative effort and who actually did the 3 typing, I don't know that I paid that much 4 attention. 5 0. Well, where were you when the б typing was done? 7 I was in St. Louis. Α. 8 0. And where was Counsel? 9 Α. Counsel was in their respective 10 offices. 11 0. It's kind of easy to tell who did 12 the typing because you were in different 13 cities. 14 MR. ALMELING: Counsel, is there a 15 question pending? As you sort of 16 formulate questions, I remind you of 17 both Federal Rule of Civil Procedure 18 26(b)(3)(a) as well as the PTO 19 practice in this field including 20 Perrin against Flan, which encouraged 21 Counsel not to delve into how direct 22 testimony of declarations can be 23 prepared because it's not relevant. 24 So we've given you a bit of a 25 leash here and he's answered your

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1 DR. JOHN R. GRINDON (9/15/15) 2 questions. So I just encourage you to 3 ask any future questions recognizing 4 those rules. 5 MR. MACEDO: I'm just trying to б understand whether it's something that 7 he, himself drafted or just simply 8 reviewed and authorized. 9 And to the extent that he recalls 10 and can testify to that, that's all 11 I'm asking, and I'm not trying to 12 delve into attorney-client privilege. 13 MR. ALMELING: I think he's 14 answered your questions. Do you have 15 any additional ones. 16 MR. MACEDO: Yes, I do. 17 BY MR. MACEDO: 18 Now, why don't you turn to page 14 0. of Grindon Exhibit 1. And you're talking 19 20 about the personal computers that you had that 21 were available in 2004, correct? 22 Α. Correct. 23 And you're talking about a 0. 24 microprocessor that was a 2 gigahertz 25 processer, correct?

Page 227 DR. JOHN R. GRINDON (9/15/15) Α. Yes. That would be the equivalent of 200 0. megahertz, correct? 2 gigahertz is 2,000 --Α. 0. 2,000 megahertz, right? Α. Correct. Now, your view is that even though 0. you haven't run any of the programs that are taught about in DiBernardo, a 2 gigahertz processer would be enough to perform the computations required in DiBernardo; is that correct? Α. When you say, computations required. 0. Well, you say it's "Well capable of performing the functions described in DiBernardo at satisfactorily levels of image quality resolution and precision for practical applications." Can you explain what you mean? I think it's pretty Α. self-explanatory. Is there a part of this that you want me to elucidate? Yes. I don't understand what you 0.

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1 DR. JOHN R. GRINDON (9/15/15) 2 So why don't you try to explain to me mean. 3 using different words? 4 Α. The process laid out in DiBernardo 5 is expressed in the text and figures in the б patent and I'm talking about the application 7 here that was referenced or the publication in 8 order to generate the composite images he 9 describes the computer that I've described 10 here available in 2004 would be capable of. 11 0. And in 2000, the computers weren't 12 capable of it? 13 Objection; form. MR. ALMELING: 14 Q. That's what your testimony is? 15 I'm sorry in 2000. Α. 16 0. 2000, yes. Is that your testimony? 17 Well, certainly in 2004 by the time Α. 18 of the '181, a computer like this would be 19 capable of doing what DiBernardo lays out. 20 But it would still be 0. 21 computationally intensive as you described in 22 your declaration Exhibit 4, correct? 23 Not so computationally intensive in Α. 24 The Exhibit 4 was in the year 2000 and 2004. 25 in the year 2000, this particular computer was

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1 DR. JOHN R. GRINDON (9/15/15) 2 not available. 3 But what's the difference is that 0. 4 this is a 2 gigahertz processer and there were 5 not as powerful processors available in 2000? б Α. The processors available in 2000 at 7 this level, this is an ordinary desktop 8 computer, not a high end type computer. That 9 comparable level in 2000, the computers were 10 less capable. 11 0. And what was your understanding of 12 the capability of those computers in 2000 that 13 would be less capable than the 2 gigahertz 14 computer that cited available in 2004? 15 First, if we're comparing apples Α. 16 and apples in, say, ordinary desktop computer 17 rather than a very expensive computer, the 18 computer that is available in 2000 can do 19 these things, but at the time, the cost of the 20 computer, the speed, the amount of memory and so forth was more expensive and it was more 22 advantageous to have ways that didn't 23 necessarily require as much computation. 24 We discussed earlier -- we 0. 25 discussed the fact that your opinion also

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Page 230 1 DR. JOHN R. GRINDON (9/15/15) 2 applied in 2001 since the patent in-suit in 3 the Vederi litigation may not be entitled to 4 the provisional priority date, right? 5 MR. ALMELING: Objection to form. б We discussed earlier -- can you Α. 7 reread the testimony that we talked about 8 earlier when we were talking about that? That 9 was some hours ago. 10 Well, you understand that the 0. 11 Vederi patents in-suit claim priority to a 12 provisional in 2000 and non-provisional in 13 2001, correct? You have it in front of you if 14 you want to look at it? 15 Α. Right. 16 You said your testimony would apply 0. 17 both to the 2000 time period as well as the 18 2001 time period, correct? 19 MR. ALMELING: Objection to form. 20 Α. I don't think that's what my 21 testimony was. 22 MR. ALMELING: Counsel, I'm 23 talking here so I don't object to your 24 questioning. That was over an hour, 25 and there was a lot of things said.

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1 DR. JOHN R. GRINDON (9/15/15) 2 If you want it reiterate it, we can do 3 that, but that seems like a waste of 4 time. If you'd just like to move on 5 with whatever questions you have about б paragraph 21, that would probably be 7 advisable. 8 I'm trying to get to MR. MACEDO: 9 there. 10 You understand that your level of 0. 11 ordinary skill in the art didn't turn on 12 whether it was a 2000 priority date because it 13 could apply to the 2001 priority date that was 14 set forth with a non-provisional, right? 15 MR. ALMELING: Objection to form. 16 0. With respect to the Vederi 17 litigation. 18 MR. ALMELING: Objection to form. 19 Α. So that's a different question. My 20 recollection is what we were talking about at 21 this time was not the entirety of the 22 testimony, but the definition of a person of 23 ordinary skill in the art. That's why I asked 24 it to be reread. 25 You understand that the person of 0.

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1 DR. JOHN R. GRINDON (9/15/15) 2 ordinary skill in the art wouldn't change in 3 terms of what their skillset -- the skill they 4 had in 2000 or 2001 for purposes of the Vederi 5 litigation; is that correct? б MR. ALMELING: Objection; form. 7 Α. A person of ordinary skill in the 8 art, as I expressed it in my declaration, 9 would apply to the later dates as well. 10 Is it your understanding that the 0. 11 computationally intensive processes which 12 Vederi was trying to get around was based on a 13 processer that was available as late as 2001? 14 Let me say, first of all, I was Α. 15 assuming the 2000 October 6 time frame for the 16 processer since that is the priority date that 17 In that time frame, there was a was assumed. 18 tremendous advance in computing, as most 19 people are aware. So I'm not saying that it 20 could not be done in 2000 and I expressed in 21 my declaration words to that affect. 22 Well, you understand that Intel had Ο. 23 a 1 gigahertz pentium 3 chip available in 24 2000, right? 25 Α. The chips -- the 1 gigahertz chips

1	DR. JOHN R. GRINDON (9/15/15)
2	were being sampled in 2000. They were
3	expensive so it still applies that it makes a
4	lot of sense to try to avoid computation
5	complexity.
6	Q. At what gigahertz do you transform
7	from trying to avoid computational intensity
8	to not caring?
9	MR. ALMELING: Objection; form.
10	A. It's a progressive thing. Even
11	when there is more computational complexity
12	available, it still makes sense to save a few
13	steps. It depends on the application. So it
14	could still make sense even later.
15	Q. Even in 2004 with the 2 gigahertz
16	chips available that you point to?
17	A. Depending on the application, it
18	could still make sense so I'm not saying that
19	DiBernardo has no applicability past 2000.
20	Q. You're offering opinions about
21	combining DiBernardo's processes with Yoichi's
22	processes, right? You're saying 2004 you
23	wouldn't be worried about computational
24	intensity?
25	MR. ALMELING: Objection to form.

1 DR. JOHN R. GRINDON (9/15/15) 2 It's a progressive thing. Α. There 3 was more impetus in the year 2000 to avoid 4 computational complexity. It's not that there 5 isn't any even now, but there's less. So б people would look less to saving computation 7 and more toward performance of the product and accuracy and so forth. 8 9 Would 500 gigahertz -- I'm sorry; 0. 10 would 1 gigahertz be enough to not worry about 11 computational intensive processes? 12 Α. Again, the predominant chips 13 available back in 2000, as I recall, were more 14 like 500 megahertz, but the 1 gigahertz now is 15 very expensive, very limited quantities. So 16 you would still worry about computational 17 complexity with those chips because they were 18 not so readily available and were very 19 expensive. 20 0. So 500 megahertz would probably 21 inspire you to avoid computationally intensive 22 applications. Is that a fair statement? 23 Objection; form. MR. ALMELING: 24 Α. I've answered twice. It's a 25 progressive thing. It's not a single answer

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1 DR. JOHN R. GRINDON (9/15/15) 2 all the time that there's a threshold. 3 Well, the Yoichi system isn't 0. 4 talking about using a server like the one 5 you're referring to in your declaration in б regard. He's talking about using like a car 7 system like you have with your NAV system, 8 right? 9 Ou need to have a computer in your 10 car for Yoichi to work, right? 11 Α. It's my understanding. 12 0. And the computer in the car, you 13 don't want this big, bulky IBM clone sitting 14 on your dashboard while you're driving to be 15 able to capture the video images and transmit 16 them, right? 17 Objection; form. MR. ALMELING: 18 0. You want a built-in computer system 19 that was available in 2004, right? 20 Α. I don't think that the way you're 21 expressing it, I don't think it's in the 22 patents. I think that's own your own idea, 23 sir. 24 What do you think the patents are 0. 25 describing? What's the computer system? Are

1 DR. JOHN R. GRINDON (9/15/15) 2 we talking about having a big, bulky computer 3 available in 2004 sitting on your dashboard or 4 are they talking about a computer embedded 5 into your system that was typically done by б computer -- by car makers back then? 7 Α. Can you tell me about this big, 8 bulky computer you're referring to? 9 How big the is skill graphics 0. 10 computer that you had with 2 gigahertz 11 processing? 12 I think you're confusing a couple Α. 13 of things here. 14 I'm talking about the workstation 0. 15 you referred to. 16 That's another one. There were a Α. 17 couple of things here. The first computer 18 that you referred to, and the only one that 19 you referred to until now, was the 2 gigahertz 20 one and that's not the workstation. 21 What is that? 0. 22 Α. That's just an ordinary desktop 23 Fairly small, relatively computer. 24 inexpensive. 25 Is it bigger than the court 0.

1 DR. JOHN R. GRINDON (9/15/15) 2 reporter's laptop? 3 The computer that I had is -- I Α. 4 have it in a case along with other 5 It's a lot of empty space peripherals. б inside. 7 0. What would you say is the 8 dimensions of it? 9 The case is maybe 8 inches by 18 by Α. 10 18, something like that, 16. But that's --11 it's just in a large case. It doesn't have to 12 be packaged for portability. 13 And in 2004, what was the monitor 0. 14 used with that computer? 15 The monitor was a CRT monitor. Α. 16 That's generally pretty big because 0. 17 you have a cathode ray tube in it, right? 18 Α. They don't have to be big. It can 19 be. On a desktop, there's no impetus for 20 making it smaller. 21 But in a car, you really wouldn't 0. 22 want to be using a monitor that you were using 23 in 2004 in your laptop. Is that a fair 24 statement? 25 You say my lab? Α.

1	DR. JOHN R. GRINDON (9/15/15)
2	Q. That's where your computer was, in
3	your lab?
4	A. Yes.
5	Q. Whatever big CRT monitor that you
6	had in your big computer sitting in your lab
7	is not the same computer you would probably
8	use to implement Yoichi in a car in 2004. Is
9	that a fair statement?
10	A. The components would be repackaged
11	and I don't know that you'd use a CRT in a car
12	at that time. You might also use some other
13	form of monitor. Although could you use a
14	CRT. I think they may have been used in cars.
15	Q. Have you ever heard of a company
16	called QNX?
17	A. QNX, as I sit here right now, I'm
18	not recalling a company like that.
19	Q. It was a company that in 2004 made
20	state-of-the-art in car infotainment systems.
21	Does that refresh your recollection?
22	A. No it doesn't, but go ahead.
23	Q. Do you know what an infotainment
24	system would be for an in car infotainment
25	system?

Page 239 1 DR. JOHN R. GRINDON (9/15/15) 2 MR. ALMELING: Objection to form. 3 Additionally, objection to the scope. 4 Α. I'm not familiar with that 5 particular system, but I can look at it if you б want to show me the specs on it. 7 I unfortunately don't have other 0. 8 copies. It's only one page. Counsel can copy 9 it after we mark it. 10 Let's mark, as Grindon Exhibit 24, 11 a printout of QNX news release that is talking 12 about "QNX Turbocharges In-Car Infotainment 13 Systems With Support From Renesas SH-4A 14 Processors." 15 (Grindon Exhibit 24, QNX News 16 Release was marked for identification, 17 as of this date.) 18 MR. MACEDO: And this is from the 19 2004 period October 18, 2004, roughly 20 what you considered to be the time of 21 the invention of the '181 patent. 22 MR. ALMELING: Counsel, before you 23 ask a question just so it's clear, I'm 24 not objecting yet, and I don't want to 25 object as to scope if I don't have to,

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Page 240 1 DR. JOHN R. GRINDON (9/15/15) 2 can you explain the relevance of this 3 to his direct testimony. 4 MR. MACEDO: Goes to the paragraph 5 that we're discussing. б MR. ALMELING: How? 7 MR. MACEDO: He says that 8 computers like his workstation were 9 available in 2004 making it less 10 necessary to have computationally 11 intensive -- to avoid computationally 12 intensive processes as disclosed in 13 the DiBernardo and in Yoichi so it 14 would be okay to add complexity to the 15 Yoichi system. I'm trying to show 16 what Yoichi system would have been in 17 2004. 18 Counsel, maybe you want to get 19 someone to quickly copy that. 20 Let's go off the record for a 21 second. 22 (Whereupon, an off-the-record 23 discussion was held.) 24 BY MR. MACEDO: 25 So in 2004, if your desktop could 0.

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Page 241 1 DR. JOHN R. GRINDON (9/15/15) 2 have accomplished the goals of DiBernardo, you 3 used the server farm in 2000, could you have 4 achieved the same benefits? 5 MR. ALMELING: Objection; form. б Again, in 2000, I did not say that Α. 7 you could not do what DiBernardo discloses. 8 0. But in 2000, your view was that 9 DiBernardo taught a way to avoid 10 computationally complex processes involving 11 image formation, right? 12 Α. Regarding image formation 13 DiBernardo had a disclosure which he purports 14 has less computational requirements than an 15 earlier method that he talks about. 16 And the whole point of DiBernardo 0. 17 was to teach a computationally less intensive 18 way because it thought that the computations 19 in the intensive ways were the wrong way to go 20 at the time, right? 21 MR. ALMELING: Objection; form. 22 DiBernardo has an alternative Α. 23 approach for the applications that he 24 addresses which have -- for which his results 25 would be acceptably accurate that avoids the

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1 DR. JOHN R. GRINDON (9/15/15) 2 dense image sampling and 3D reconstruction. 3 He points out prior art to DiBernardo that 4 does use those things which are more 5 computationally intensive. So one of the б advantages of his approach was, as he puts it, 7 was to reduce computational complexity of the 8 image, trading image quality. 9 But it does more than that. He 0. 10 also talks about the complex databases that 11 existed in the prior art and he was trying to 12 avoid that computational complexity too, 13 right? 14 Α. That is a part of it. The 15 disclosure that he makes would have less 16 requirement for data storage than the 3D 17 intense sampling. 18 Well, if you look at paragraph 24 0. 19 of your declaration, you're talking about 20 prior art which was time consuming, 21 inefficient for creating large and 22 comprehensive databases covering geographic 23 areas such as an entire city or state, right? 24 Let me turn to paragraph 24. Α. 25 Looking at Grindon Exhibit 4. 0.

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Page 243 1 DR. JOHN R. GRINDON (9/15/15) 2 Where in paragraph 24? Α. 3 Well, in paragraph 24, you talk 0. 4 about "The patents in-suit state that 'the 5 prior art for creating visual images of б geographic locations' includes methods wherein 7 'individual photographs' and images derived 8 from video recordings are 'electronically 9 past[ed]... on a polygonal mesh that 10 provide[s] the frame for a three-dimensional 11 (3D) rendering of the location," right? You 12 signed column 1 through 30? 13 So this is Grindon Exhibit 1. Α. 14 paragraph 24 and somehow I didn't sync up with 15 your reading. 16 We're talking about Exhibit 4. 0. 17 Α. Exhibit 4. 18 0. Talking about the Vederi 19 declaration. 20 Α. All right. 21 Maybe that's why you didn't sync 0. 22 up. 23 You have the right exhibit in front 24 of you now? 25 Α. I believe I do.

		Page	244
1	DR. JOHN R. GRINDON (9/15/15)		
2	Q. We're talking about Grindon		
3	Exhibit 4, which is your Vederi declaration,		
4	right?		
5	A. Right.		
6	Q. And we're looking at paragraph 24,		
7	right?		
8	A. Correct.		
9	Q. And we are talking about the		
10	composite images that could be made by pasting		
11	images onto a 3D model geographic location,		
12	right?		
13	A. Well, let me read it and see.		
14	Okay.		
15	Q. And in describing that technology,		
16	you quote the patent as saying, "such methods,		
17	according to the patents-in-suit are 'time		
18	consuming and inefficient for creating large,		
19	comprehensive databases covering a substantial		
20	geographic area such as an entire city, state,		
21	or country," right?		
22	A. I believe you read that correctly.		
23	Q. And the point of that sentence was		
24	so that way a reader would understand, don't		
25	do that, right? That's not what we're		

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		Page	245
1	DR. JOHN R. GRINDON (9/15/15)		
2	teaching you to do. We're teaching you not to		
3	do what is described in the first sentence of		
4	24.		
5	MR. ALMELING: Objection; form.		
6	A. Is there a question?		
7	Q. I'm asking is that your		
8	understanding of what that sentence is saying?		
9	A. Well, it's saying according to the		
10	patent in-suit for large comprehensive		
11	databases covering substantial geographic		
12	areas such as an entire city or state, the		
13	computation gets a bit complex and that's what		
14	the patent is trying to address.		
15	Q. And it's saying that that's a bad		
16	thing. We want to do something that isn't		
17	time consuming and inefficient for creating		
18	large comprehensive data bases covering a		
19	suggested geographic area such as an entire		
20	city, state, or country, correct?		
21	MR. ALMELING: Objection to form.		
22	A. No, it isn't necessarily saying		
23	that. It's saying that you can't use		
24	Q. If you look at Grindon Exhibit 5,		
25	the published version, why don't you turn to		

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Page 246 1 DR. JOHN R. GRINDON (9/15/15) 2 page 20 which is the first page of the dec. 3 You see under the background, the 4 invention, paragraph three? 5 I see paragraph three. Α. It says, "There exist methods in б 0. 7 the prior art for creating visual databases of 8 geographic locations," right? 9 Yes. Α. 10 "However, such databases are of 0. 11 limited use due to the method of acquiring 12 imagery as well as the kind of imagery 13 required," right? 14 That's what it says. Α. 15 And one particular method involves 0. 16 taking of individual photographs of the 17 location and electronically pasting the photos 18 on a polygonal mesh that provides a framework 19 for three-dimensional rendering of the 20 location, correct? 21 Correct. Α. 22 Then it says, "This method," Q. 23 referring to what we just discussed, "however 24 is time consuming and inefficient for creating 25 large comprehensive databases covering a

Page 247 1 DR. JOHN R. GRINDON (9/15/15) 2 substantial geographic area such as an entire, 3 city, state, or country," right? 4 Α. Yes. 5 0. And the reason it says that is it's б saying we're doing something different, right? 7 MR. ALMELING: Objection to form. 8 0. Is that your understanding of 9 someone of ordinary skill in the art reading 10 this patents? 11 Α. The patent is offering another 12 approach other than the three-dimensional 13 rendering. 14 Right. It considers the time 0. 15 consuming and inefficient method of creating 16 the large comprehensive database as disclosed 17 there as a deficiency associated with the 18 prior art, if you look at paragraph nine, 19 correct? 20 MR. ALMELING: Objection; form. 21 Α. It says what it says, and you just 22 read it. 23 And what I read is what it says, 0. 24 right? 25 Α. Right.

Page 248 1 DR. JOHN R. GRINDON (9/15/15) 2 0. Now, in paragraph seven, it also 3 talks about "dense sampling of images of an 4 object seems to provide different views of the 5 object seen." And it says, "the sampling is б generally done in two dimensions either with 7 the plane or on the surface of the image 8 sphere surrounding the object seen. Such 9 sampling, however, is computationally 10 intensive and is cumbersome and is inefficient 11 in terms of time and cost," right? That's 12 what it says? 13 I believe you read it correctly. Α. 14 And the reason why it's saying that 0. 15 such sampling, however, is computationally 16 intensive and is cumbersome and inefficient in 17 terms of time and cost is because it considers 18 that method another deficiency in the prior 19 art, right? 20 MR. ALMELING: Object to form. 21 Α. Again, it doesn't say deficiency. 22 It just says this is computationally intensive 23 and cumbersome. 24 In paragraph nine, it says 0. 25 deficiency and that's what it's referring to

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1 DR. JOHN R. GRINDON (9/15/15) 2 is the computationally intensive and, hence, 3 cumbersome and inefficient in terms of time and cost, right? That's the deficiency it's 4 5 referring to, correct? б MR. ALMELING: Objection; form. 7 Α. Well, it says the above-mentioned 8 deficiencies, so ... 9 That's one of them? 0. 10 This is setting up the disclosed Α. 11 method, which is less computational intensive. 12 0. In fact, isn't it fair to say that 13 the whole point of DiBernardo was to have a 14 computationally less intensive way of 15 generating images than existed in prior art? 16 MR. ALMELING: Objection; form. 17 Α. DiBernardo is offering an 18 alternative which has some other deficiencies. 19 So he's offering a trade off which he says is 20 less complex, but nevertheless has other 21 deficiencies. So it may not be the total solution all the time. 22 23 Right. And, in fact, you talk 0. 24 about, in paragraph 28 of Grindon Exhibit 4, 25 that the -- you call it Vederi but that's the

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1	DR. JOHN R. GRINDON (9/15/15)
2	DiBernardo claims invention sacrifices image
3	quality in order to reduce computational
4	complexity. That's the point, right?
5	Paragraph 28 on page 27 of Exhibit 4.
6	A. Okay. You read that right.
7	Q. In other words, your understanding,
8	reading this in 2011, was that if you read
9	what Vederi says or DiBernardo says, it's
10	saying, I will accept a poor quality image in
11	exchange for avoiding computational intensity.
12	Is that a correct summary of your opinion?
13	MR. ALMELING: Objection; form.
14	You can answer.
15	A. As long as we're talking about
16	image quality, that seems fair.
17	Q. And when you read the next sentence
18	in paragraph 28, you're actually quoting the
19	provisional patent application there, correct?
20	That's what it says.
21	A. That probably is. Let me see. It
22	states it's a provisional, so, yes?
23	Q. And in that provisional
24	application, the present method is a
25	compromise between quality synthetic image and

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Page 251 1 DR. JOHN R. GRINDON (9/15/15) 2 algorithmic complexity, right? 3 Α. Yes, that's what it says. 4 0. And what it's trying to reduce is a 5 rhythmic complexity, correct? б MR. ALMELING: Objection; form. 7 Α. That's what the statement says as a trade off. 8 9 And your understanding is that the 0. 10 teaching in the pointing of the DiBernardo 11 disclosure in Exhibits 4 and 5 is to sacrifice 12 image quality in favor of reducing algorithmic 13 complexity and computational intensity; is 14 this correct? 15 MR. ALMELING: Objection; form. 16 Α. So the DiBernardo is making that 17 trade off. 18 0. And you understood that in 2011, 19 and you understand that today, right? 20 I'm not sure what you're saying, Α. 21 but this, of course, is referring to the 22 DiBernardo dates of 2000. 23 Whether you read it in 2011 or 0. 24 whether you read it today, what DiBernardo is 25 teaching is that its making a trade off of

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1 DR. JOHN R. GRINDON (9/15/15) 2 image quality for computational intensity. 3 Whether you need to do that in 2011 is another 4 story. What DiBernardo is teaching is to make 5 that trade off, right? б Α. It seems right. 7 0. That teaching is true today as it was in 2000, as it was in 2011, as it was in 8 9 2004, correct? 10 The teaching referenced to 2000 in Α. 11 DiBernardo. 12 0. The teaching in DiBernardo which 13 was written in 2000 is the DiBernardo is 14 teaching you how to do a trade off between 15 image quality and algorithmic complexity. 16 At that time. Α. 17 Well at any time. But whether you 0. 18 need to do that later on is another story, but 19 it's teaching this is how I trade off on image 20 quality to save on algorithmic complexity, 21 right? 22 Α. If I'm understanding you, that's 23 right. 24 And in paragraph 25, another thing 0. 25 that it teaches against, according to you, is

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Page 253 1 DR. JOHN R. GRINDON (9/15/15) 2 to provide a 360 degree view; is that correct? 3 MR. ALMELING: Objection; form. 4 Α. I wouldn't state it the way. You 5 did. б Well, it's teaching the prior art 0. 7 provide a 360 degree view using imagery spheres surrounding the object seen and then 8 9 it says that it's computationally intensive 10 and, hence, cumbersome and inefficient in 11 terms of cost, right? 12 Α. It says that. 13 And the point of you including 0. 14 paragraph 25 in the declaration was to say 15 that it would go against teaching of 16 DiBernardo to use that type of 360 degree 17 technology to create images, right? 18 Α. You can't draw that conclusion. 19 DiBernardo's objection is not to the 360 20 degree view, but to the computational 21 complexity of the imagery. 22 So your understanding is that Ο. 23 DiBernardo should be interpreted as reading on 24 the 360 degree view? Is that what you're 25 saying?

1 DR. JOHN R. GRINDON (9/15/15) 2 MR. ALMELING: Objection; form and 3 additionally, objection; outside the 4 scope. 5 No, I didn't say that. Α. б 0. Why not? 7 MR. ALMELING: Objection. 8 0. What about DiBernardo makes you 9 think that it wouldn't read on the 360 degree 10 view? 11 MR. ALMELING: Objection; form. 12 Also outside the scope and Counsel 13 seems way outside the scope. 14 MR. MACEDO: One of the pending 15 claims that's being challenged. As 16 opposed to the obviousness, it goes to 17 the obviousness of combining 18 DiBernardo processes with the other 19 processes in the Yoichi. 20 Α. I didn't opine on that in my 21 declaration. 22 You did in DiBernardo and Vederi, Q. 23 right? 24 I didn't opine on the 360 degree Α. 25 aspect that you're asking about now.

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1	DR. JOHN R. GRINDON (9/15/15)
2	Q. And Vederi, did you opine on the
3	360 degree aspect?
4	A. I'm not sure what you're asking,
5	but in paragraph 25, there is discussion of
6	what was just described about the difference
7	of projecting image on the imaginary sphere
8	for 360 degrees whereas DiBernardo regards
9	that as computationally intensive.
10	In the current declaration,
11	Exhibit 1, I didn't address the 360 degree
12	aspect of DiBernardo.
13	MR. ALMELING: Let's go off,
14	Counsel. Before we go continue on
15	this line, I'd like to go off the
16	record real quick to meet and confer.
17	MR. MACEDO: Let me do one more
18	question and go off the record.
19	MR. ALMELING: Okay.
20	Q. You talk about the computational
21	intensive and hence cumbersome inefficient
22	aspects of DiBernardo in paragraph 25, right?
23	A. I talk about it in the way that we
24	just read earlier.
25	Q. You criticize our responsive brief

Page 256 1 DR. JOHN R. GRINDON (9/15/15) 2 for misstating what you said was 3 computationally intensive and, hence, 4 cumbersome and inefficient, correct? 5 Α. Can you show me the part of the б declaration that you're talking about. 7 MR. ALMELING: Again, I think it 8 was one more question. Now it's 9 turning into three. Can we go off the 10 record to have a quick meet and 11 confer? 12 MR. MACEDO: Sure. 13 (Whereupon, at this time, a short 14 break was taken.) 15 BY MR. MACEDO: 16 Do you understand the concept of 0. 17 teaches away? 18 Α. I believe I do. 19 In fact, you offered opinions about Ο. 20 teaches away, correct? 21 Α. I have. 22 You did that in the Helferich case, Q. 23 right, right? 24 As I recall. Α. 25 What was your opinion in the 0.

Helferich case regarding teaches away? MR. ALMELING: We just had an off-the-record discussion about the impropriety of continuing this deposition with outside the scope questioning. Now you're asking for his opinion in another case ostensibly to the idea that he has opined on teaching away before. You are wasting time and you are wasting the witness' time. What's wasting my MR. MACEDO: time is all these off-the-record interpossessions. If you want to say objection to scope, say, "objection to scope." I don't think it's beyond the He offers an opinion there was scope. no teaching away here. I want to understand what he think teaching away If he has contradicting testimony is. in another case where he said that teaches away under the same facts and

DR. JOHN R. GRINDON (9/15/15)

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circumstances as he said doesn't teach

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1 DR. JOHN R. GRINDON (9/15/15) 2 away here, that is perfectly relevant. 3 It is appropriate. It's within the 4 scope of any deposition, whether it's 5 PTAB or litigation. б And if you don't like it, you can 7 object. But I don't think it's 8 inappropriate. 9 So now I'm go back to my question 10 11 MR. ALMELING: So the CBS -- let's 12 be clear, the CBS interactive case is 13 the same facts and circumstances as 14 this case? 15 I'm not going to get MR. MACEDO: 16 into a legal debate with you. If you 17 have an objection, give an objection. 18 If you have an instruction, give an 19 instruction. If you want to make a 20 call, make a call. I'm trying to ask 21 my questions. You're wasting my time. 22 BY MR. MACEDO: 23 Do you understand what is legally 0. 24 required to teach away from a piece of prior 25 art?

Page 259 1 DR. JOHN R. GRINDON (9/15/15) 2 MR. ALMELING: Objection to form. 3 I have an understanding of that. Α. 4 0. In the Helferich case, you actually 5 applied that understanding? б MR. ALMELING: Objection to form. 7 Objection outside the scope. 8 0. Is that correct? 9 Α. Can you she show me the Helferich 10 case. 11 0. You have it in front of you. 12 Α. Can you show me? 13 Grindon 11. 0. 14 Can you show me in there where Α. 15 you're referring? 16 Page 60, paragraph 120. 0. 17 MR. ALMELING: Off the record. 18 (Whereupon, an off-the-record 19 discussion was held.) 20 BY MR. MACEDO: 21 Look at Grindon Exhibit 4 and turn 0. 22 to paragraph 38. It's on page 11. 23 Α. Okay. 24 This is where you're talking about 0. 25 the two alternative embodiments for forming

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1	DR. JOHN R. GRINDON (9/15/15)
2	composite images.
3	A. Okay; go ahead.
4	Q. You're describing the fact that
5	there's two alternative embodiments to
б	composite the embodiment image in paragraph
7	38, right?
8	A. Let me read it. Okay.
9	Q. The first embodiment that you're
10	describing in paragraph 37, you talk about the
11	post processing system which includes a
12	computer with a video acquisition card and a
13	processer programmed with instructions to take
14	the image and positional data and create one
15	more composite images for storing into an
16	image database, correct?
17	A. Essentially, right.
18	Q. And in the alternative, you talk
19	about the on-the-fly technique where it can go
20	directly from the camera into the image card
21	and done without any additional processing
22	after it's been formed, right?
23	A. Yes.
24	Q. And while in your new declaration
25	you say that you could have a hybrid system

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1 DR. JOHN R. GRINDON (9/15/15) 2 which does both the on-the-fly, in some 3 instances, and the post processing in other 4 instances, you're not suggesting that 5 DiBernardo would teach that you should do both on the same image, are you? б 7 That wasn't the intent. Let's look Α. 8 at the declaration. Can you point me to the 9 paragraph? 10 I'm looking at paragraph 24 on page 0. 11 17. 12 Α. The intent was different images, 13 not the same image. 14 So what you're trying to say is for 0. 15 one image you could do the post processing 16 technique described in paragraph 37, but for a 17 different image you could do the on-the-fly 18 technique described in 38; is that correct? 19 MR. ALMELING: Objection to form. 20 Α. Multiple images are collected. 21 Some could be processed one way, some the 22 other. 23 But you never process the same 0. 24 image both ways? 25 MR. ALMELING: Objection; form.

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1	DR. JOHN R. GRINDON (9/15/15)
2	A. I didn't address that in the
3	declaration.
4	Q. But when the brief referred to the
5	two different ways as incompatible or mutually
6	exclusive, it was referring to that you won't
7	do it on the same image, right? That's what
8	you're commenting on?
9	A. Can you show me where it says that
10	it's the same image?
11	Q. Is it correct that for the same
12	image it is incompatible to use the post
13	processing system described in paragraph 37 of
14	Grindon Exhibit 4 and the on-the-fly system
15	described in paragraph 38 of Grindon
16	Exhibit 4?
17	MR. ALMELING: Objection to form.
18	A. I don't think that I commented on
19	that and in my declaration about the same
20	image. If I did that now, it would be outside
21	of the declaration and just as I sit here now.
22	Q. But when you did comment about the
23	use of both of these systems, it's on
24	different images, not the same image, correct?
25	A. That was the comment that I had

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1	DR. JOHN R. GRINDON (9/15/15)
2	made in the declaration. And I'm not and I
3	don't think the declaration addressed the
4	matter of the same image.
5	Q. So if the board were to read
б	paragraph 24 of your declaration marked as
7	Grindon Exhibit 1, they shouldn't understand
8	that those two alternative embodiments could
9	be performed on the same image?
10	A. That's not what I said. I just
11	said that I didn't address that situation in
12	the declaration, not that it couldn't be done.
13	Q. Well, are you suggesting it could
14	be done?
15	MR. ALMELING: Objection to form.
16	A. Again, that's not addressed in the
17	declaration, so I wouldn't comment on that
18	right now.
19	Q. So you didn't offer an opinion that
20	it could be done on the same image?
21	A. Didn't offer it could or could not.
22	Q. But you did offer that it could be
23	done on different images?
24	A. Yes, and I didn't say that it
25	couldn't be done on the same image.

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		Page
1	DR. JOHN R. GRINDON (9/15/15)	
2	Q. So the composite image that's	
3	created in DiBernardo, it includes more than	
4	just image information, it includes positional	
5	information?	
6	A. The composite image, that's my	
7	understanding, it includes	
8	Q. And what positional information	
9	does it include?	
10	A. Well, let's look and see.	
11	Q. Take a look at paragraph 35 of your	
12	dec. It may help you.	
13	A. So I'm looking at	
14	Q. I mean Exhibit 4.	
15	A. The Vederi declaration?	
16	Q. Yes.	
17	Did you find paragraph 35?	
18	A. I'm reading it. All right I read	
19	paragraph 35.	
20	Q. What is the positional information	
21	that's being recorded with the composite	
22	information composite image; I'm sorry?	
23	A. This paragraph doesn't actually	
24	say. It says the information restored and	
25	used by a post processing system to create the	

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1	DR. JOHN R. GRINDON (9/15/15)
2	composite images. It doesn't say that that
3	information is stored with the composite
4	image.
5	Q. Doesn't it say, "In the disclosed
б	system the location data is saved as images
7	are being required, the location data being
8	provided by GPS receiver and/or inertial
9	navigation system"?
10	A. Yes.
11	Q. Don't you understand that to be the
12	GPS coordinates?
13	A. That would be the data provided by
14	the GPS location, yes.
15	Q. That's being saved as the composite
16	image?
17	A. That's being saved with the images
18	as they're being acquired. This does not say
19	it's being saved with the composite image.
20	MR. ALMELING: Counsel, to avoid
21	another dispute regarding scope, could
22	you identify how this is relevant to
23	the direct testimony?
24	MR. MACEDO: He testified about
25	the four patents, not just '338. It's

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Page 266 1 DR. JOHN R. GRINDON (9/15/15) 2 not just the '181. 3 The composite image which is the 0. 4 location information that's being stored is 5 the location of the camera, right? б You're talking now about the Α. 7 acquired image, not the composite images. 8 MR. ALMELING: Right, the acquired 9 image. 10 That would be the location of the Α. 11 camera. 12 MR. ALMELING: I'm still -- I may 13 still dispute whether this is outside 14 the scope. What IPR proceeding is 15 this responsive to the direct 16 testimony of? 17 Object if you want to MR. MACEDO: 18 object. If you want to cut me off, 19 cut me off. Let me take my questions. 20 You're wasting our time. 21 MR. ALMELING: To be clear, you're 22 refusing to meet and confer on the 23 objection? 24 MR. MACEDO: If you have an 25 objection -- I'm trying to get the

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1	DR. JOHN R. GRINDON (9/15/15)
2	deposition done. If you keep
3	interrupting, I'm not going to be able
4	to get the deposition done, okay. You
5	wasted hours of my deposition by
6	asking for these meet and confers
7	without letting me actually ask the
8	questions of the witness. He
9	testifies about positional data so you
10	go look and you find it and if you
11	have an objection, you state it.
12	Q. So you understand that the acquired
13	image is giving you information of where the
14	camera is located, correct?
15	A. In paragraph 35, as we talked, the
16	information location information would be
17	the location of the camera.
18	Q. And when the composite image is
19	formed, whether it's through the on-the-fly
20	method or the alternative post processing
21	method, it's saved in the image data server,
22	right?
23	A. The composite image?
24	Q. Yes.
25	A. It's saved in

Page 268 1 DR. JOHN R. GRINDON (9/15/15) 2 The image database storage. 0. 3 Α. Yes. 4 0. And then it's never converted or 5 changed or modified thereafter before delivery б to the person who receives it; is that 7 correct? 8 When you say thereafter, it's been Α. 9 modified in order to create the composite 10 image. 11 0. But not after it has been created. 12 Once it's been saved in the image database 13 storage, there's no further modification of 14 the composite image? 15 MR. ALMELING: Objection; scope. 16 Objection; form. 17 I can't say right now if there's no Α. 18 further change to the image once it's 19 composited. 20 Sitting here right now, you're not 0. 21 aware of any further changes to the image? 22 MR. ALMELING: Objection; form. 23 Objection; scope. 24 The change to the image occurs in Α. 25 the compositing process taking the acquired

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Page 269 1 DR. JOHN R. GRINDON (9/15/15) 2 images and creating the composite image and 3 it's in the format of a composite image. As I sit here right now, I'm not recalling 4 5 additional changes to the image format after б that. 7 0. So you remember reading the '800 8 patent, right? 9 Yes. Α. 10 And you remember the ribbons that 0. 11 were created from the street view images, 12 right? 13 Objection to form. MR. ALMELING: 14 Ribbon views? 0. 15 Yes. I don't see the '800 patent. Α. 16 I don't think you marked it yet. 17 No, I haven't marked it yet. 0. 18 Do you have an understanding of how 19 that technology compares to the technology 20 disclosed in DiBernardo as being 21 computationally intensive and not desirable? 22 Α. Can you parse that question for me, 23 please? 24 There's a whole discussion about 0. 25 creating 3D images by spreading the photos

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Page 270 1 DR. JOHN R. GRINDON (9/15/15) 2 onto like a point cloud, for example, right? 3 Α. Okay. 4 0. That's described in the spec of the 5 other two patents, right, using that type of б technology? 7 Α. When you say other two, which two? 8 0. The '396 and the '800, the other 9 two IPRs. 10 When you say described --Α. 11 0. The specification for those patents 12 are the same specification and they're 13 describing the technology where they can 14 display the images onto a point cloud, right? 15 Show me exactly where you're Α. 16 talking right now. 17 You don't recall without me showing 0. 18 you, which is fine, if that's the case? 19 Α. I'd like you to show me. 20 0. We'll move on and come back, okay? 21 MR. ALMELING: Counsel, to be 22 clear, you're refusing the witness' 23 request for a document? 24 MR. MACEDO: No, I'm just saying 25 that I don't have it readily available

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1 DR. JOHN R. GRINDON (9/15/15) 2 so we'll come back to that. 3 MR. ALMELING: You don't have a 4 copy of the '800 patent. 5 MR. MACEDO: In my hand this б second, yes. 7 MR. ALMELING: Maybe one of your 8 three colleagues with you can hand it 9 to you. 10 MR. MACEDO: When I come back to 11 it, I will pull it out. 12 In paragraph 41, you discuss the 0. 13 method described in the Vederi patent as 14 suffering from "attempting to combine images 15 from different positions, which produce 16 different prospective views. This is not 17 possible to do with three-dimensional settings 18 containing multiple, unaligned objects at 19 different distances without distortion." 20 It's at the bottom of page 12? 21 Α. I see that. 22 Are you trying to say that the Q. 23 DiBernardo method is a bad way of generating 24 3D scenes? 25 MR. ALMELING: Objection; form.

Page 272 1 DR. JOHN R. GRINDON (9/15/15) 2 What I'm saying only is that Α. 3 there's a trade off in distortion and 4 complexity and this is a source of the 5 distortion. б And you said it has limited use in 0. 7 practice, if you turn the page. 8 Α. I am saying it has practice for 9 flat or nearly flat displays. 10 And you said it has limited use in 0. 11 practice. Those are your words, correct? 12 Α. Let me read the surrounding. 13 All right. I wanted to read some 14 of that surrounding. This is --15 MR. ALMELING: Counsel, I had a 16 copy of '800 printed out because you 17 didn't have one in your hand. Would 18 you mind if I hand that to the witness 19 or do you not want me to do that? 20 MR. MACEDO: You can give him 21 whatever your heart desires. 22 You can mark it as Grindon 25. 23 Would you make a copy for everyone? 24 (Grindon Exhibit 25, U.S. Patent 25 No. 7,929,800 B2 was marked for

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Page 273 1 DR. JOHN R. GRINDON (9/15/15) 2 identification, as of this date.) 3 BY MR. MACEDO: 4 Now, can you answer my question? 0. 5 What I'm saying here, it's limited Α. б in practice because there is some distortion 7 so you wouldn't use it for every application. 8 It does work without a problem for flat and 9 nearly flat surfaces such as document 10 scanning. 11 0. But it doesn't work for, like, 12 Google Maps, right? 13 MR. ALMELING: Objection; form. 14 Objection; scope. 15 Α. I didn't say it wouldn't work. T 16 said it has limited application because of 17 distortion. So I didn't say that you couldn't 18 use it for Google Maps, but it introduces 19 trade offs so Google Maps may choose not to use it. In fact, it's not. 20 21 MR. ALMELING: I'm sorry, Counsel. 22 Dr. Grindon, are you finished? 23 I'm finished. THE WITNESS: 24 In 2011, when you wrote this 0. 25 declaration, you understood that it would not

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Page 274 1 DR. JOHN R. GRINDON (9/15/15) 2 be a wise choice to follow the DiBernardo 3 teaching of general composite images for 4 systems such as taught in '181 patent; isn't 5 that correct? б MR. ALMELING: Objection; form. 7 Could the court reporter read the 8 question. 9 (Whereupon, the referred to 10 question was read back by the 11 Reporter.) 12 Α. I would not say that. 13 You certainly wouldn't use the 0. 14 DiBernardo system if you were building a 15 system like the '181 patent? 16 I wouldn't? Α. 17 Take a look at Grindon Exhibit 24. 0. 18 Α. That was a question mark. 19 0. Didn't come across as that. 20 MR. ALMELING: To be very clear on 21 the record, the response, "I wouldn't" 22 was, "I wouldn't?" 23 He was asking you to clarify your 24 question, not that he was testifying 25 in response to it. So perhaps you can

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Page 275 1 DR. JOHN R. GRINDON (9/15/15) 2 repeat your question so we can have a 3 clean record. 4 Did your testimony include a 0. 5 question mark that didn't get transcribed? б Α. Yes. 7 0. Could you look at Grindon Exhibit 24, please? Did you get to read it 8 9 before? 10 I have not read this, no. Α. 11 0. Why don't you spend a minute 12 reading it? 13 I'm sorry; I didn't hear you. Α. 14 Why don't you spend a minute 0. 15 reading it, please. Let me know whenever 16 you're done reading it, please. 17 You'll let me know when you're 18 ready, right, Dr. Grindon? 19 Α. Yes, I'll let you know. 20 Okay; I read it. 21 0. Is it your understanding that the system described in Grindon Exhibit 24 would 22 23 be the type of computer system that would have 24 had to have been used to make Yoichi work in 25 cars in 2004, not the exclusive system, but an

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1 DR. JOHN R. GRINDON (9/15/15) 2 example system? 3 MR. ALMELING: Objection; form, 4 Additionally, objection; lacks scope. 5 authentication. And lacks 6 authentication referring to Exhibit 24 7 and all questions regarding 8 Exhibit 21. 9 MR. MACEDO: I will represent it 10 was printed out from the internet at 11 the address indicated at the bottom 12 and that this is a complete copy, as 13 far as I am aware, of this press 14 release and that it has a date of 15 October 18, 2004 on it. 16 In any event, having read Grindon Ο. 17 Exhibit 24, is that consistent with your 18 understanding of the state-of-the-art of 19 in-car infotainment systems that were 20 available in 2004? 21 Α. It looks like this is an example of 22 a system available then. 23 And the system at least considered 0. 24 itself the state-of-the-art from that 25 manufacturer's perspective?

1 DR. JOHN R. GRINDON (9/15/15) 2 MR. ALMELING: Objection to form. 3 Objection to scope. 4 Α. I don't see the word, 5 state-of-the-art used. Perhaps they were used б and you can point me to it. It's merely 7 saying it's a new high performance 8 microprocessor and it's offering an RTOS that 9 would support it. 10 Don't they say that it runs 0. 11 traditionally faster than CPUs traditionally 12 used in telematic systems? Second paragraph. 13 Α. Yes, it says that. 14 It's referring to a 400 megahertz 0. 15 chip, right? 16 Yes. Α. 17 Which has substantially less 0. 18 processing power than the 2 gigahertz chip you 19 were referring to in your declaration, right? 20 400 is less than 2,000, so you're Α. 21 offering a particular chip here -- information 22 on a particular chip in a particular RTOS. 23 That's not to say that someone else wouldn't 24 take another processer, another operating 25 system, and create another system for use in

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1	DR. JOHN R. GRINDON (9/15/15)
2	an automobile.
3	Q. Except that they're suggesting that
4	this is significantly faster than what's
5	otherwise being used in cars, right?
6	A. They're saying traditionally used.
7	They're not saying that you couldn't use a
8	faster processer in cars, they are just
9	comparing it with traditional CPUs used in
10	telematic systems.
11	Q. And you haven't identified any
12	other telematic system that uses a more
13	powerful processer at the time of the 2004
14	invention, have you?
15	MR. ALMELING: Objection; scope.
16	A. I've identified a number of other
17	processors which are traditional computer
18	processors which are faster and certainly
19	could be designed into vehicular systems.
20	Q. But you haven't identified any
21	vehicle systems which did, in fact, use those
22	processors as of 2004, correct?
23	MR. ALMELING: Same objection.
24	A. One would take the available
25	processors and design it into a system such as

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1 DR. JOHN R. GRINDON (9/15/15) 2 The difference that I see here is Yoichi. 3 that this ONX news release we would be for 4 mass distribution in this vehicle whereas the 5 Yoichi is not really so constrained to be б something offered at the corner auto dealer, 7 but rather could utilize more powerful 8 devices. 9 Well, Yoichi doesn't work unless a 0. 10 lot of cars have it. Is that a fair 11 statement? 12 MR. ALMELING: Objection to form; 13 scope. 14 Multiple vehicles would be equipped Α. 15 with it. 16 Unless the car is driving on a path 0. 17 that you care about, you're not going to get 18 an image; is that correct? 19 MR. ALMELING: Objection; form, 20 scope. 21 If there's no image being collected Α. 22 on a certain path, then no image would be 23 available from that path, if that's what your 24 question was. 25 Not only does the image have to be 0.

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1	DR. JOHN R. GRINDON (9/15/15)		
2	collected, it has to then be shared with the		
3	system, right?		
4	MR. ALMELING: Objection; form,		
5	scope.		
6	A. So the image could be shared, yes.		
7	Q. So if you don't have some sort of		
8	wireless connection or a travel spot to unload		
9	through the wireless connection, the image is		
10	as if it was never taken in the Yoichi system,		
11	right?		
12	A. If the image were never shared,		
13	then it wouldn't be available.		
14	Q. What type of wireless networks were		
15	available in 2004?		
16	MR. ALMELING: Objection; form,		
17	scope.		
18	Q. Did you answer?		
19	A. Yoichi is suggesting, on figure		
20	one, internet connection.		
21	Q. How many internet connections were		
22	available in 2004 driving along Route 66, for		
23	example?		
24	MR. ALMELING: Objection; form,		
25	scope.		

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1 DR. JOHN R. GRINDON (9/15/15) 2 Right now I can't say. Α. 3 (Grindon Exhibit 26, Cingular and 4 AT&T Coverage Map was marked for 5 identification, as of this date.) б BY MR. MACEDO: 7 Let me show you Grindon 26, which 0. 8 we took from AT&T submissions to the FCC in 9 2004 to show what would be the coverage for 10 the combination of Singular and AT&T. We took 11 this from the FCC website? 12 MR. ALMELING: Counsel, I don't 13 want to seek a protective order to 14 prevent questions that are outside the 15 scope if I don't have to. 16 Can you explain how Exhibit 26 17 relates to his direct testimony? 18 MR. MACEDO: It relates to whether 19 or not it would be obvious to make the 20 combination of DiBernardo and Yoichi, 21 which requires that Yoichi actually 22 work. 23 So anyhow, looking at Exhibit 26 0. 24 you see that even if you had the combination 25 of Singulair and AT&T, which we're in the

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1 DR. JOHN R. GRINDON (9/15/15) 2 process of combining in 2004, there wasn't a 3 lot of coverage over large parts of the 4 Is that a fair statement? country. 5 MR. ALMELING: Objection to all б questions regarding Exhibit 26. Lacks 7 authentication. Additionally, it 8 lacks foundation. 9 I see very dense coverage in high Α. 10 population areas. For example, the northeast 11 corridor appears to be very densely covered. 12 0. Yet there's still white spots even 13 in that dense coverage, right? 14 MR. ALMELING: Objection; scope. 15 From the figure that you gave me as Α. 16 Exhibit 26, the northeast corridor over a 17 range of, at least looks like north of 18 New York to at least D.C. appears to be pretty 19 solid. I don't see any white areas. 20 You don't see --0. 21 -- in that corridor. Α. 22 You don't see large white areas in Q. 23 New York? 24 Upstate New York, but not the Α. 25 densely populated part.

Page 283 1 DR. JOHN R. GRINDON (9/15/15) 2 And do you see a lot of white areas 0. 3 in Florida despite the large orange areas? 4 Α. Florida appears to be almost 5 entirely covered. б What's that blue stuff? 0. 7 Α. You tell me. This is not 8 intelligible. I can't read what it says. 9 If you were in New Mexico, though, 0. 10 you'd get no coverage or virtually no 11 coverage, right? 12 MR. ALMELING: Objection; scope. 13 I'm trying to read this. It's not Α. 14 really readable. It's too blurry, too small. 15 By the way, the example given in 0. 16 the Yoichi was California, right? 17 California has also very dense Α. 18 coverage over large areas. 19 0. It also has a lot of white space, 20 right? 21 So you're suggesting that there may Α. 22 be some places of very sparse population where 23 Yoichi may have limited or no operability. 24 Sparse population or would it be 0. that there is limited cell coverage? 25

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1 DR. JOHN R. GRINDON (9/15/15) 2 MR. ALMELING: Objection; scope. 3 The two go together. The cell Α. 4 coverage generally covers the high density 5 population areas and California looks like б it's well covered in the high population 7 density areas. 8 We certainly can let the board make 0. 9 their own decision looking at the map. 10 With respect to Exhibit 24, is that 11 the type of infotainment system that would be 12 used to implement Yoichi in 2004? 13 Α. We, just a moment ago, discussed 14 the processer and RTOS disclosed in 15 Exhibit 24. Just sitting here not having 16 opined on this in my declaration, I would 17 think that Yoichi could be designed for a 18 higher end processer than this. Nevertheless, 19 this processer may well function to support 20 Yoichi. 21 But you don't know sitting here 0. 22 today? 23 Objection; scope. MR. ALMELING: 24 Α. Looking at the document that you 25 gave me, again, I have not opined on it in my

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1	DR. JOHN R. GRINDON (9/15/15)
2	declaration, it appears to be a pretty decent
3	processer, and I believe could support
4	again, this is without any analysis which I
5	would want to do under normal situations.
6	Looks like it could support Yoichi. At least
7	cannot say that it couldn't.
8	Q. But you don't know, one way or the
9	other, because you haven't done the analysis
10	necessary; is that correct?
11	A. I'm saying that it looks promising
12	to support Yoichi.
13	Q. And you understand that one of the
14	concerns of the manufacturers of the
15	infotainment system in Grindon Exhibit 24 was
16	for low cost delivery of high end mapping?
17	MR. ALMELING: Objection; scope,
18	foundation.
19	A. Is there a question associated with
20	that statement?
21	Q. Yes. And do you understand that
22	one of the concerns of the manufacturers of
23	the infotainment system in Grindon Exhibit 24
24	was for low cost delivery of high end mapping?
25	And I direct you to the second paragraph of

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1 DR. JOHN R. GRINDON (9/15/15) 2 the press release. 3 Α. Yes. 4 MR. ALMELING: Same objection. 5 Α. Yes, it does. б MR. MACEDO: Let's take a break. 7 MR. ALMELING: Yes. 8 (Whereupon, at this time, a short 9 break was taken.) 10 BY MR. MACEDO: 11 0. If you can, look at Grindon 12 Exhibit 1, please. 13 All right. Α. 14 In paragraph 29, you are responding 0. 15 to the description that Grindon may not be 16 accurate, for instance, if there's an unusual 17 wide structure. Do you see that? In paragraph 29 of Grindon 18 19 Exhibit 1, you are responding to the statement 20 that DiBernardo, paragraph 76, explains 21 identification of a particular street address 22 in a composite image may not be accurate if, 23 for instance, there is an unusually wide 24 structure. Do you see that? 25 Α. Yes, I do.

Page 287 1 DR. JOHN R. GRINDON (9/15/15) 2 Do you recognize that statement is 0. 3 true, even if it's in an unusual circumstance? 4 Α. Even if it's an unusual 5 circumstance, an unusually wide structure may б trigger this situation. 7 0. As well as an unusually narrow 8 structure? 9 It does not actually say that, just Α. 10 sitting here that would be probable. 11 0. So to the extent that DiBernardo 12 could give you the wrong result, it doesn't 13 necessarily identify the correct address in 14 those situations, right? 15 Α. Wrong. 16 So DiBernardo teaches how to 0. 17 address those unusual situations? 18 Α. Yes. 19 0. Does DiBernardo capture the 20 direction of the camera that is capturing the 21 image? 22 MR. ALMELING: Objection; form. 23 I believe I've -- if I didn't state Α. 24 that in my declaration, it still does. 25 I'm sorry. I don't understand your 0.

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1	DR. JOHN R. GRINDON (9/15/15)
2	answer.
3	A. Captures the direction of the
4	camera, yes.
5	Q. Can you show me where because in
6	your declaration, you talk about capturing
7	from the GPS. You don't say anything about
8	the direction of the camera.
9	A. Refer to figure two of DiBernardo.
10	Q. You're looking at Grindon 5?
11	A. That's right.
12	Q. Okay.
13	A. The direction of the camera needs
14	to be known relative to the path in order to
15	do the processing that DiBernardo discloses so
16	the camera can't be pointing in just any
17	direction. It needs to be in this example,
18	appears to be perpendicular to the direction.
19	Q. Well, isn't this example assuming
20	that you're going in a straight line and it
21	just takes the same images from the same
22	camera? It doesn't note whether it's pointing
23	north, south, east or west, does it?
24	A. No, but it knows where the
25	direction is relative to the path which is

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1 DR. JOHN R. GRINDON (9/15/15) 2 what's important here. 3 Can you show me where it says that 0. 4 in the description figure two? It starts on 5 paragraph 45? б Did you find anything yet? 7 Α. Yes. 8 What did you find? 0. 9 Α. For example, paragraph 40. 10 What in paragraph 40? 0. 11 Α. Three lines down it says, "two side 12 cameras face each side of the path." 13 So that says that the cameras are 14 oriented relative to the vehicle and the path. 15 Then in the subsequent paragraphs, 42 is the 16 camera ten moves along the path and records 17 The GPS receiver computes the the objects. 18 latitude and longitude at the selected time 19 intervals. 20 Latitude and longitude isn't 0. 21 telling you which direction the camera is 22 pointing. 23 I'm not finished yet. Α. Then 24 paragraph -- toward the end of paragraph 42, 25 the GPS receiver is preferably located on the

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DR. JOHN R. GRINDON (9/15/15) vehicle transporting the camera. On the camera, the GPS data with the position sequences and the time information is then transferred to the computers. So the path is known from the position sequences in paragraph 42.

8 Then paragraph 43, in addition to 9 the position information provided by the GPS 10 43 in addition to the position and information 11 provided by the GPS system -- the inertial 12 navigation so it also has an inertial 13 navigation system. Also provides acceleration 14 information to the computer for independently 15 deriving the position sequence of the camera. 16 So there's considerably more 17 processing going on to determine the path and 18 the alignment of the camera is said to be side 19 looking relative to the vehicle. So all of 20 this and more that I am not taking time to 21 read.

Q. But none of that is recording the directional information as to whether it's going north, south, east or west. All it's telling you is that a sideways camera is at

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I		-
	1	DR. JOHN R. GRINDON (9/15/15)
	2	this GPS location?
	3	A. No. Again, what I just read,
	4	there's a GPS sequence of data. The sequence
	5	of positions tells you the path. Then also it
	6	has inertial navigation and acceleration data.
	7	Q. That path is just telling you where
	8	the car is, not whether the car is pointing
	9	north, south, east or west?
	10	A. Again, in paragraph 40 which we
	11	read, the camera is facing to the side. The
	12	other information in the other paragraphs I
	13	read tell where the car is going so that all
	14	tells you where the camera is facing; north,
	15	south, east or west.
	16	You don't see it.
	17	Q. No I don't, but that's your
	18	testimony.
	19	A. The information that's divulged
	20	here allows you to compute the information
	21	that you're asking for.
	22	Q. But it isn't teaching you to
	23	compute the information?
	24	MR. ALMELING: Objection; form.
	25	A. Is that a statement or question.
I		

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1	DR. JOHN R. GRINDON (9/15/15)
2	Q. Question.
3	A. It's telling a person of ordinary
4	skill in the art how to do it. That's what
5	these paragraphs will convey to a person of
6	ordinary skill in the art.
7	Q. It's saying that the computer
8	preferably combines the position derived from
9	the acceleration information with the GPS
10	position data to produce a more accurate
11	evaluation of the position of the camera at
12	the particular instance in time. It's talking
13	about the longitude and latitude, not the
14	direction of the camera, right?
15	A. The position of the camera is
16	evaluated. The information in the paragraphs
17	that I read, 40 through 43, also enable you to
18	determine the direction pointing of the
19	camera.
20	Q. But it's not telling you to
21	determine that. It's telling you to determine
22	the position of the camera, not the direction
23	of the camera, correct?
24	MR. ALMELING: Objection to form.
25	A. First, it's not telling you not to

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1 DR. JOHN R. GRINDON (9/15/15) 2 compute the direction. Secondly, position is 3 often taken to mean both coordinates and 4 direction. 5 Where does it use the word, 0. б "direction information" anywhere in DiBernardo 7 with respect to the camera? 8 Have you found it yet, Dr. Grindon? 9 Α. Well, I did find one thing here and 10 to a person of ordinary skill in the art, the 11 information that I already gave you is 12 sufficient. But I'm looking for additional 13 material. 14 Paragraph 52 in the right-hand 15 column toward the top says, in step 84, "the 16 computer 28 measures the distance traveled 17 between the two points on the path that 18 correspond to the time instance and the image 19 sequence where the landmark is seen from the 20 two sides of the path." 21 So this is an indication that the 22 direction is taken into account. 23 0. Isn't that the direction of the 24 light ray, not the direction of the camera? 25 In fact, at the beginning of the paragraph,

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1	DR. JOHN R. GRINDON (9/15/15)
2	
Par Post L	they say "a flow diagram of an alternative
3	embodiment for synchronizing image sequences
4	with GPS position information trying to locate
5	the longitude and latitude."
6	That's what the point of this
7	process is, isn't it?
8	A. So in order to know which side to
9	look, the direction, as well as position,
10	needs to be tracked. And, again, there's
11	sufficient information here I think in
12	paragraphs 40 through 43 to inform a person of
13	ordinary skill in the art that not only the
14	position, but the actual track direction is
15	determined.
16	Q. But you didn't see anyplace where
17	it actually calls out that it's saving the
18	directional data on anywhere, right?
19	MR. ALMELING: Objection; form.
20	Q. To clarify the question, you don't
21	see anyplace in DiBernardo where DiBernardo
22	actually calls out that information regarding
23	the directional data is being saved with
24	either the original image or the composite
25	image?

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1 DR. JOHN R. GRINDON (9/15/15) 2 MR. ALMELING: Objection to form. 3 And directional data of the 0. 4 direction of the camera. 5 MR. ALMELING: Objection to form. б 0. Did you find any yet, Dr. Grindon? 7 I am finding discussion of street Α. 8 segments, trajectories, camera trajectories 9 and so forth. And so all of this requires 10 determining the trajectory. And I'm just 11 looking for a clean statement that would 12 satisfy you that says direction is stored. 13 But all of this processing requires that 14 knowledge of the trajectory of the vehicle, 15 the fact that the camera is looking at a 16 certain angle relative to the trajectory of 17 the vehicle. 18 And without reading the whole 19 patent, I'm not sure if I can quickly find 20 that clean statement that you're asking me 21 for. 22 How would you like to MR. MACEDO: 23 proceed, Counsel? 24 MR. ALMELING: Have you finished 25 cross-examination?

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1 DR. JOHN R. GRINDON (9/15/15) 2 MR. MACEDO: Except for the answer 3 to this question. 4 MR. ALMELING: Let's go off the 5 record. б (Whereupon, an off-the-record 7 discussion was held.) 8 BY MR. MACEDO: 9 Dr. Grindon, have you found any 0. 10 disclosure that uses either the word, 11 directional data or the equivalent type of 12 data showing that the system saves with the 13 composite image or the acquired image the 14 direction of the camera that is recorded? 15 As I sit here, I am not finding Α. 16 that specific reference. I am finding the 17 disclosure though that would require that. 18 Thank you very much, Dr. Grindon. 0. 19 I appreciate your time and effort and thank 20 you for taking the time to travel to New York. 21 I hope you get to enjoy your evening here. 22 Α. Thank you. 23 Subject to any MR. MACEDO: 24 redirect, I'm finished. 25 MR. ALMELING: Let's go off the

1	DR. JOHN R. GRINDON (9/15/15)
2	record.
3	(Whereupon, an off-the-record
4	discussion was held.)
5	EXAMINATION BY
6	MR. ALMELING:
7	Q. Can you please approximate the
8	total number of times that you have been
9	retained as an expert by any party throughout
10	your entire career for any legal disputes?
11	MR. MACEDO: Objection; beyond the
12	scope.
13	A. I don't have a number calculated
14	and memorized. The CV has a record going
15	back, I believe, to 2008 of matters in which I
16	am on public record so we could count those,
17	take us back to that time.
18	Q. To be clear, I wasn't limiting my
19	question to matters of public record or going
20	back to 2008. My question was during your
21	entire career, approximately how many times
22	have you been engaged as an expert on behalf
23	of any party in any legal dispute?
24	MR. MACEDO: Objection; calls for
25	confidential information. May invade

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Page 298 1 DR. JOHN R. GRINDON (9/15/15) 2 other people's privilege and is beyond 3 the scope and is irrelevant. 4 Α. I would say probably no more than 5 two dozen. б Would it be more than 20, less than 0. 7 Does that sound like a fair two dozen? 8 statement? 9 That's a fair estimate without Α. 10 actually going and checking. 11 MR. MACEDO: Objection; calls for 12 speculation. 13 I'd like to direct your attention 0. 14 to Grindon Exhibit 4. And in particular, 15 paragraphs 15 and 16. Please read those and 16 let me know when you're finished. 17 All right. I'm finished. Α. 18 0. Earlier today, Counsel for VRE 19 asked you a series of questions about the 20 definition of the level of skill in the art in 21 both your Vederi declaration, Exhibit 4, as 22 well as your VRE declarations, Exhibit 1 23 through 3. Do you recall those questions? 24 MR. MACEDO: Objection to form. 25 Α. Yes, I do.

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Page 299 1 DR. JOHN R. GRINDON (9/15/15) 2 The second sentence of paragraph 15 0. 3 of Grindon Exhibit 4 refers to "my definition 4 of the level of 'skill in the art.'" 5 Do you see that? б Α. Yes, I do. 7 0. Paragraph 16 reads, "In my 8 definition, a person of ordinary" --9 Objection to form. MR. MACEDO: 10 Doesn't say, "in my definition." 11 0. Paragraph 16 reads, in part, "in my 12 opinion, a person of 'ordinary skill in the 13 art, " and it continues. Do you see that? 14 I do. Α. 15 In paragraph 15, when you referred 0. 16 to my definition of the level of skill in the 17 art, were you referring to the definition that 18 you provided in paragraph 16 or to something 19 else? 20 MR. MACEDO: Objection to form. 21 Α. This would be paragraph 16. 22 I direct your attention to Ο. 23 DiBernardo reference which is Grindon 24 Exhibit 5. I direct your attention in 25 particular to paragraph 88 and claim 44 of

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1	DR. JOHN R. GRINDON (9/15/15)
2	that reference. Please read those and let me
3	know when you're done.
4	MR. MACEDO: Paragraph 88 in claim
5	44; objection to scope.
6	A. All right. I've read those.
7	Q. Counsel for VRE asked a question
8	before you were finished reviewing the Vederi
9	reference which is Grindon Exhibit 5. "Have
10	you found any disclosure that uses either the
11	word directional data or the equivalent type
12	of data showing that the system saves the
13	composite image or the acquired image the
14	direction of the camera that is recorded?"
15	Your response was, "As I sit here,
16	I am not finding that specific reference. I
17	am finding disclosure though that would
18	require that."
19	My question to you, sir, is: Do
20	the disclosures provided in Exhibit 88 and/or
21	claim 44 of the DiBernardo reference assist
22	you in answering the question that opposing
23	Counsel asked before you had the chance to
24	review the entire reference?
25	A. Yes, they do.

Page 301 1 DR. JOHN R. GRINDON (9/15/15) 2 MR. MACEDO: Objection to form. 3 Can you please describe how? 0. 4 Α. Yes, these -- this paragraph 88 and 5 the dependant claim 44 that you reference are 6 specific in disclosing viewing direction. Ι 7 guess that probably suffices, unless you want 8 me to read these into the record. 9 I do not. 0. 10 MR. ALMELING: And I have no 11 further questions. 12 EXAMINATION BY 13 MR. MACEDO: 14 Let's go back to paragraph 15 of 0. 15 Grindon Exhibit 4. It says, "My definition of 16 the level of 'skill in the art' would not 17 substantively change even if it were 18 determined that the patents in-suit are not 19 supported by the October 2000 provisional and 20 are only supported or only entitled to a later 21 priority date." 22 Correct? 23 You didn't read it exactly right, Α. 24 but I think the differences are insubstantial, 25 so, go ahead.

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Page 302 1 DR. JOHN R. GRINDON (9/15/15) 2 And in paragraph 17 you say, "I 0. 3 understand that a claim term has meaning that would have to a person of ordinary skill in 4 5 the art as of the effective filing date of the 6 patent application," right? 7 A. I see that, yes. 8 Would your testimony for paragraph 0. 9 17 change if DiBernardo were not entitled to 10 the October 2000 priority date? 11 MR. ALMELING: Objection; form. 12 Α. No. 13 And, in fact, none of your 0. 14 testimony in the declaration would change even 15 if DiBernardo were entitled to the later 16 effective priority dates; is that correct? 17 MR. ALMELING: Objection; form and 18 scope. 19 Α. What later priority dates are you 20 referring to? 21 0. Same ones we discussed earlier, the 22 2001 priority date, for example. 23 Same objections. MR. ALMELING: 24 The 2001 priority date, I don't Α. 25 think there would be any reason to change the

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DR. JOHN R. GRINDON (9/15/15) What about the 2005 priority date that you testified earlier you wouldn't

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change? б MR. ALMELING: Same objections. 7 Α. The person of ordinary skill in the 8 art I said I wouldn't change. 9 No, you said more than that. Would 0. 10 any of your testimony set forth in the 11 declaration marked as Grindon Exhibit 4 change 12 if the '760 patent were only entitled to its 13 2005 filing date? 14 MR. ALMELING: Objection; form, 15 scope. Additionally, foundation. 16 First, I'm not aware that I said Α. 17 more than that. Could you point to where I 18 did? 19 Not at this point in time. So if Ο. 20 you don't recall, that's fine. 21 But my question is: Would any of 22 the testimony contained in Grindon Exhibit 4 23 change if DiBernardo's '760 patent were only 24 entitled to its 2005 filing date?

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declaration.

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MR. ALMELING: Objection; form,

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1	DR. JOHN R. GRINDON (9/15/15)
2	scope, foundation.
3	A. I didn't consider that question
4	directly in the disclosure of Exhibit 1. If
5	you're asking me right now just as I sit here
б	to give you my thoughts on that, I would
7	really have to review this again to see if I
8	would make any changes if the date moved to
9	2005.
10	Q. You're not saying that any of the
11	testimony you provided earlier today was
12	wrong; is that correct? You stand by whatever
13	you testified to earlier today?
14	A. I am not aware as I sit here of any
15	mistakes.
16	Q. So whatever you testified earlier
17	today is still true tonight as it was whenever
18	you made the testimony?
19	A. I, again, am not aware of anything
20	that I would change. Just recalling the
21	testimony up to this point.
22	MR. MACEDO: That's all.
23	MR. ALMELING: I also have no
24	further questions. I note for the
25	record we began approximately 9. It

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		Pa
1	DR. JOHN R. GRINDON (9/15/15)	
2	is now 6:40 p.m.	
3	MR. MACEDO: I also note for the	
4	record that we took a lot of breaks	
5	and a lot of off the records from	
6	Counsel at Google's request.	
7	MR. ALMELING: I have nothing	
8	further.	
9	(Time noted: 6:41 p.m.)	
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	Page	306
DR. JOHN R. GRINDON (9/15/15)		
JURAT		
I, DR. JOHN R. GRINDON, do hereby		
certify under penalty of perjury that		
I have read the foregoing transcript		
of my deposition taken on		
September 15, 2015; that I have made		
such corrections as appear noted		
herein in ink, initialed by me; that		
my testimony as contained herein, as		
corrected, is true and correct.		
DR. JOHN R. GRINDON		
Subscribed and sworn to before me		
This day of, 2015.		
NOTARY PUBLIC		

1 DR. JOHN R. GRINDON (9/15/15) 2 -----I N D E X------3 WITNESS: DR. JOHN R. GRINDON 4 EXAMINATION BY PAGE 5 6, 301 MR. MACEDO б MR. ALMELING 297 7 8 9 ----ЕХНІВІТ S-----ЕХНІВІТ 10 GRINDON EXHIBIT FOR I.D. 11 5 Grindon Exhibit 1, 12 Responsive Declaration of 13 Dr. John R. Grindon 14 Grindon Exhibit 2, 5 15 Responsive Declaration of 16 Dr. John R. Grindon 17 Grindon Exhibit 3, 5 18 Responsive Declaration of 19 Dr. John R. Grindon 20 5 Grindon Exhibit 4, 21 Declaration of Dr. John R. 22 Grindon in Support of Google's 23 Opening Claim Construction Brief 24 25

1	DR. JOHN R. GRINDON (9/15/15)	
2	Grindon Exhibit 5, 17	
3	United States Patent	
4	Application Publication,	
5	dated April 25, 2002	
б	Grindon Exhibit 6, 21	
7	U.S. Patent No. 6,895,126 B2	
8	Grindon Exhibit 7, 26	
9	U.S. Patent No. 7,239,760	
10	Grindon Exhibit 8, 61	
11	Declaration of John R. Grindon	
12	Grindon Exhibit 9, 63	
13	September 1, 2015 PTAB decision	
14	on institution on Stryker v.	
15	Karl Storz	
16	Grindon Exhibit 10, 69	
17	Memorandum Decision and Order;	
18	Fleming v. Escort	
19	Grindon Exhibit 11, 73	
20	Declaration of John R. Grindon,	
21	D.SC Wireless Science 2054 from	
22	Case Number 2013-00033(JYC)	
23		
24		
25		

1	DR. JOHN R. GRINDON (9/15/15))
2	Grindon Exhibit 12,	75
3	Declaration of John R. Grindon,	
4	D.SC in support of Petition for	
5	Inter Partes Review Of U.S.	
6	Patent 7,542,035	
7	Grindon Exhibit 13,	98
8	Petition for Inter Partes Review	
9	of U.S. Patent No. 7,389,181	
10	Grindon Exhibit 14,	109
11	Visual Real Estate 2011	
12	Grindon Exhibit 15,	118
13	Document entitled, "A new	
14	scheduling algorithm for server	
15	farm load balancing"	
16	Grindon Exhibit 16,	131
17	Visual Real Estate Exhibit 2009	
18	Grindon Exhibit 17,	131
19	Document from archive.org	
20	Grindon Exhibit 18,	139
21	U.S. Publication No.	
22	2004/0158474 A1	
23		
24		
25		

1	DR. JOHN R. GRINDON (9/15/15)
2	Grindon Exhibit 19, 139
3	Document entitled, "Monitoring
4	and State Transparency of
5	Distributed Systems"
6	Grindon Exhibit 20, 156
7	U.S. Patent No. 7,389,181
8	Grindon Exhibit 21, 180
9	Patent Owner's Response to
10	Petition IPR2014-01338
11	Grindon Exhibit 22, 180
12	Patent Owner's Response to
13	Petition IPR2014-0139
14	Grindon Exhibit 23, 224
15	U.S. Patent No. 2003/0210806 A1
16	Grindon Exhibit 24, 239
17	QNX News Release
18	Grindon Exhibit 25, 272
19	U.S. Patent No. 7,929,800 B2
20	Grindon Exhibit 26, 281
21	Cingular and AT&T Coverage Map
22	
23	
24	(Original exhibits attached.)
25	

1	DR. JOHN R. GRINDON (9/15/15)
2	CERTIFICATE
3	
4	STATE OF NEW YORK)
	: SS.:
5	COUNTY OF RICHMOND)
6	
7	I, AYLETTE GONZALEZ, a Notary Public
8	for and within the State of New York, do
9	hereby certify:
10	That the witness, DR. JOHN R.
11	GRINDON, whose examination is hereinbefore
12	set forth was duly sworn and that such
13	examination is a true record of the testimony
14	given by that witness.
15	I further certify that I am not
16	related to any of the parties to this action
17	by blood or by marriage and that I am in no
18	way interested in the outcome of this matter.
19	IN WITNESS WHEREOF, I have hereunto
20	set my hand this 17th day of September, 2015.
21	
22	
	AYLETTE GONZALEZ
23	
24	
25	

ERRATA SHEET FOR THE TRANSCRIPT OF:
Case Name: Google v. Visual Real Estate
Dep. Date: September 15, 2015
Deponent: Dr. John R. Grindon
Pg. Ln. Now Reads Should Read Reason
DR. JOHN R. GRINDON
AUDOCRATERS AND AUCON SERVER
SUBSCRIBED AND SWORN BEFORE ME,
mbi- 1
This day of, 2015.