## **EXHIBIT B**

# IN THE UNITED STATES DISTRICT COURT NORTHERN DISTRICT OF CALIFORNIA SAN FRANCISCO DIVISION

--000--

ORACLE CORPORATION, a
Delaware corporation, ORACLE
USA, INC., a Colorado
corporation, and ORACLE
INTERNATIONAL CORPORATION, a
California corporation,

Plaintiffs,

vs.

07-CV-1658 (PJH)

SAP AG, a German corporation, SAP AMERICA, INC., a Delaware corporation, TOMORROWNOW, INC., a Texas corporation, and DOES 1-50, inclusive,

Defendants.

VIDEOTAPED DEPOSITION OF DONALD REIFER

JUNE 18, 2010

HIGHLY CONFIDENTIAL - ATTORNEYS' EYES ONLY

REPORTED BY: SARAH LUCIA BRANN, CSR 3887 (#427125)

ge 98		·	Page 100
	11:58:32		-
	11:58:34		•
			•
•			
			)
			Q. Have you ever estimated the cost of
			development for PeopleSoft software before?
			A. No.
	12:00:01	25	Q. Have you ever estimated the cost of
je 99			Page 101
	12:00:02	1	development for JDEdwards software before?
	12:00:05	2	A. No, I have not.
	12:00:06	3	Q. Have you ever estimated the cost of
	12:00:08	4	development for Siebel software before?
	12:00:11	5	A. No, I have not.
	12:00:12	6	Q. Have you ever estimated the cost of
	12:00:15	7	development for SAP software before?
	12:00:17	8	A. No, I have not.
	12:00:34	9	Q. Have you ever worked as an employee of an
	12:00:38	10	enterprise software company like Oracle?
	12:00:40	11	A. No.
	12:00:52	12	Q. How many times have you run a COCOMO II
· ·	12:00:56	13	cost estimate?
***************************************	12:01:00	14	A. Hundreds. It's just a lot of times.
***************************************	12:01:09	15	Q. How many times have you run it with COCOMO
	12:01:10	16	11 '97?
	12:01:14	17	A. Hundreds.
1	12:01:15	18	Q. And COCOMO II.2000?
1			
	12:01:21	19	A. Oh, '97, none. Sorry. My apologies. Let
amianimanima	12:01:21 12:01:22	19 20	A. Oh, '97, none. Sorry. My apologies. Let me correct that answer.
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ome control mineral mineral management	12:01:22		
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	ge 98	11:58:32 11:58:33 11:58:34 11:58:35 11:58:50 11:58:51 11:58:55 11:58:58 11:58:59 11:59:00 11:59:04 11:59:04 11:59:11 11:59:14 11:59:17 11:59:23 11:59:25 11:59:27 11:59:23 11:59:25 11:59:27 11:59:32 11:59:33 11:59:36 11:59:56 11:59:56 11:59:58 12:00:00 12:00:01 12:00:02 12:00:05 12:00:06 12:00:08 12:00:11 12:00:12 12:00:17 12:00:34 12:00:38 12:00:40 12:00:56 12:01:00 12:01:00 12:01:00 12:01:00	11:58:32 11:58:33 11:58:34 11:58:35 11:58:50 11:58:55 11:58:58 11:58:59 11:59:00 11:59:04 11:59:04 11:59:04 11:59:11 11:59:17 11:59:23 11:59:25 11:59:27 11:59:25 11:59:27 11:59:32 11:59:33 11:59:36 11:59:56 12:00:00 12:00:01 12:00:02 12:00:03 12:00:03 12:00:04 12:00:15 7 12:00:17 8 12:00:17 8 12:00:17 8 12:00:17 8 12:00:17 8 12:00:17 8 12:00:17 8 12:00:17 8 12:00:17 8 12:00:17 8 12:00:17 8 12:00:17 8 12:00:17 12:00:17 12:00:17 12:00:17 12:00:17 12:00:19 12:00:19 12:00:19 12:00:19 12:00:19 12:00:19 12:00:19 12:00:19 12:00:19 12:00:19 12:00:19 12:00:19 12:00:19 12:00:10 14 12:00:19 15 12:01:10 16

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12:07:11	12:09:48		12ge 100
12:07:15	12:09:49		
12:07:19	12:09:49		
12:07:19			
	12:09:52		
12:07:27	12:09:54		
12:07:30	12:09:56		
12:07:32	12:09:58		
12:07:33	12:09:59		
12:07:34	12:10:02		
12:07:34	12:10:05		
12:07:35	12:10:07		
12:07:43	12:10:11		
12:07:47	12:10:14		
12:07:50	12:10:18	•	
12:07:54	12:10:20		
12:07:57	12:10:24		
12:08:02	12:10:28		
12:08:03	12:10:31		
12:08:11	12:10:36		
12:08:16	12:10:38		
12:08:18	12:10:40		
12:08:24	12:10:46		
12:08:27	12:10:52		
12:08:30	12:10:54		
12:08:32	12:10:56		
Page 107			Page 109
12:08:35	12:11:00		
12:08:39	12:11:01	2	Q. Excuse me. Let me finish.
12:08:42	12:11:03	3	You developed an estimate using
12:08:44	12:11:05	4	COCOMO II.2000 for certain software for the
12:08:47	12:11:10	5	government, and then you managed the project through
12:08:53	12:11:14	6	to deliver that software and against your
12:08:57	12:11:18	7	estimate.
12:09:00	12:11:19	8	A. That is correct.
12:09:05	12:11:19	9	Q. Okay. And tell me what you did to do
12:09:09	12:11:21	10	that.
12:09:10	12:11:22	11	A. Okay.
12:09:13	12:11:23	12	MR. BUTLER: Before you do that, I don't
12:09:16	12:11:26	13	know whether you have any confidentiality
12:09:19	12:11:28	14	obligations, but I caution you to think about that
12:09:22	12:11:31	15	before disclosing information. I don't know what
12:09:25	12:11:34	16	agreements might bind you or not, but I urge you to
12:09:26	12:11:37	17	keep that in mind.
12:09:28	12:11:37	18	THE WITNESS: Thank you, sir.
12:09:30	12:11:43	19	Let's see what's a matter of public
12:09:31	12:11:45	20	record.
12:09:34	12:11:47	21	MR. ALINDER: Q. It's fine. I don't need
12:09:34	12:11:47	22	to know the details of it.
12:09:36	12:11:46	23	
14.07.41		23	Is that the only time that you have used COCOMO II.2000 to develop an estimate and then
12.00.41			
12:09:41 12:09:44	12:11:54 12:11:58	25	managed the project to completion?

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		Page 110		Page 112
12:12:01	1	A. That is correct. Most of the other	12:14:50	
12:12:02	2	estimates were used as estimating exercises to	12:14:52	
12:12:06	3	develop estimates for clients, estimates	12:14:54	
12:12:10	4	independent estimates which were used to look at the	12:14:58	
12:12:14	5	reasonableness of the client's offer, or the	12:15:06	
12:12:17	6	reasonableness of the operational organization, in	12:15:07	
12:12:21	7	some cases their ability to deliver estimates, to	12:15:13	
12:12:27	8	look at competitiveness.	12:15:16	
12:12:29	9	But in terms of "in charge of the delivery	12:15:18	
12:12:33	10	of the product," these are small R&D projects that	12:15:20	
12:12:37	11	are less than 10 people that I have managed the	12:15:25	
12:12:41	12	delivery of.	12:15:26	
12:12:41	13	Q. And you haven't used COCOMO II.1997 in	12:15:28	
12:12:46	14	order to develop an estimate and then deliver on	12:15:31	
12:12:48	15	that; correct?	12:15:34	
12:12:49	16	A. The 1992 1997 model is an antiquated	12:15:39	
12:12:55	17	model that has been basically put on the shelf, put	12:15:41	
12:12:59	18	on the shelf for history purposes that, of the 43	12:15:42	
12:13:07	19	firms that are in the USC affiliates, no one uses	12:15:44	
12:13:11	20	1997. I checked that.	12:15:46	
12:13:13	21	MR. ALINDER: Okay. I object and move to	12:15:51	
12:13:16	22	strike as non-responsive.	12:15:55	
12:13:17	23	Q. The question was whether you had used that	12:15:58	
12:13:19	24	before.	12:16:03	
12:13:20	25	A. 1997? No.	12:16:03	
		Page 111		Page 113
12:13:22			12:16:05	
12:13:25			12:16:06	
12:13:28			12:16:07	
12:13:30			12:16:07	
12:13:30			12:16:10	
12:13:30			12:16:12	
12:13:34			12:16:14	
12:13:36			12:16:16	
12:13:39			12:16:18	
12:13:41			12:16:20	
12:13:47			12:16:25	
12:13:49			12:16:29	
12:13:51			12:16:30	
12:13:57			12:16:33	
12:14:03			12:16:36	
12:14:05			12:16:43	•
12:14:03			12:16:45	
12:14:11			12:17:05	
12:14:16			12:17:12	
12:14:20			12:17:15	
12:14:27			12:17:13	
12:14:33			12:17:20	
			12:17:22	
12:14:42			12:17:24	
12:14:45			12:17:27	
12:14:48			14.11.43	

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Page 122		Page 124
		rage 124
12:28:14	12:30:36	
12:28:16	12:30:36	
12:28:19	12:30:38	
12:28:21	12:30:39	
12:28:24	12:30:42	
12:28:29	12:30:59	
12:28:30	12:31:00	
12:28:32	12:31:04	
12:28:35	.12:31:05	
12:28:38	12:31:06	
12:28:43	12:31:07	
12:28:48	12:31:09	
12:28:50	12:31:09	
12:28:53	12:31:11	
12:28:55	13:29:23	
12:29:01	13:29:24	
12:29:03	13:29:29	
12:29:08	13:29:30	
12:29:11	13:29:32	
12:29:16	13:29:35	
12:29:22	13:29:38	
12:29:23	13:29:41	
12:29:24	13:29:41	
12:29:29	13:29:47	
12:29:31	13:29:50	
Page 123		Page 125
12:29:33	13:29:51	
12:29:36	13:29:55	
12:29:40	13:30:04	
12:29:45	13:30:08	
12:29:50	13:30:13	
1	10.00.10	
12:29:53	13:30:16	
12:29:53 12:29:54		
	13:30:16	
12:29:54	13:30:16 13:30:18	
12:29:54 12:29:54	13:30:16 13:30:18 13:30:21	
12:29:54 12:29:54 12:29:55	13:30:16 13:30:18 13:30:21 13:30:25	
12:29:54 12:29:54 12:29:55 12:29:58	13:30:16 13:30:18 13:30:21 13:30:25 13:30:27	
12:29:54 12:29:54 12:29:55 12:29:58 12:30:00	13:30:16 13:30:18 13:30:21 13:30:25 13:30:27 13:30:28	
12:29:54 12:29:55 12:29:55 12:29:58 12:30:00 12:30:05	13:30:16 13:30:18 13:30:21 13:30:25 13:30:27 13:30:28 13:30:30	14 MR. ALINDER: Q. Can you turn to page 18
12:29:54 12:29:55 12:29:58 12:30:00 12:30:05 12:30:10	13:30:16 13:30:18 13:30:21 13:30:25 13:30:27 13:30:28 13:30:30 13:30:36	.  14 MR. ALINDER: Q. Can you turn to page 18 15 of your report? In your step two on page 18 you
12:29:54 12:29:55 12:29:58 12:30:00 12:30:05 12:30:10	13:30:16 13:30:18 13:30:21 13:30:25 13:30:27 13:30:28 13:30:30 13:30:36 13:30:52	
12:29:54 12:29:55 12:29:58 12:30:00 12:30:05 12:30:10 12:30:13 12:30:15	13:30:16 13:30:18 13:30:21 13:30:25 13:30:27 13:30:28 13:30:30 13:30:36 13:30:52 13:30:53	of your report? In your step two on page 18 you
12:29:54 12:29:55 12:29:58 12:30:00 12:30:05 12:30:10 12:30:13 12:30:15 12:30:18	13:30:16 13:30:18 13:30:21 13:30:25 13:30:27 13:30:28 13:30:30 13:30:36 13:30:52 13:30:53 13:31:17	of your report? In your step two on page 18 you say, "I next tried to acquire copies of the
12:29:54 12:29:54 12:29:55 12:29:58 12:30:00 12:30:05 12:30:10 12:30:13 12:30:15 12:30:18 12:30:20	13:30:16 13:30:18 13:30:21 13:30:25 13:30:27 13:30:28 13:30:30 13:30:36 13:30:52 13:30:53 13:31:17 13:31:19	of your report? In your step two on page 18 you say, "I next tried to acquire copies of the specialized counting utilities that Mr. Pinto
12:29:54 12:29:55 12:29:58 12:30:00 12:30:05 12:30:10 12:30:13 12:30:15 12:30:18 12:30:20 12:30:21	13:30:16 13:30:18 13:30:21 13:30:25 13:30:27 13:30:28 13:30:30 13:30:52 13:30:52 13:30:53 13:31:17 13:31:19 13:31:25	of your report? In your step two on page 18 you say, "I next tried to acquire copies of the specialized counting utilities that Mr. Pinto developed to tally source lines of code."
12:29:54 12:29:55 12:29:58 12:30:00 12:30:05 12:30:10 12:30:13 12:30:15 12:30:18 12:30:20 12:30:21	13:30:16 13:30:18 13:30:21 13:30:25 13:30:27 13:30:28 13:30:30 13:30:52 13:30:52 13:31:17 13:31:19 13:31:25 13:31:27	of your report? In your step two on page 18 you say, "I next tried to acquire copies of the specialized counting utilities that Mr. Pinto developed to tally source lines of code."  A. Yes.
12:29:54 12:29:55 12:29:58 12:30:00 12:30:05 12:30:10 12:30:13 12:30:15 12:30:18 12:30:20 12:30:21 12:30:22 12:30:25	13:30:16 13:30:18 13:30:21 13:30:25 13:30:27 13:30:28 13:30:30 13:30:36 13:30:52 13:30:53 13:31:17 13:31:19 13:31:25 13:31:27 13:31:28	of your report? In your step two on page 18 you say, "I next tried to acquire copies of the specialized counting utilities that Mr. Pinto developed to tally source lines of code."  A. Yes.  MR. BUTLER: Sorry. Objection to the
12:29:54 12:29:55 12:29:58 12:30:00 12:30:05 12:30:10 12:30:13 12:30:15 12:30:20 12:30:20 12:30:21 12:30:22 12:30:25 12:30:27	13:30:16 13:30:21 13:30:25 13:30:27 13:30:28 13:30:30 13:30:52 13:30:53 13:31:17 13:31:19 13:31:25 13:31:27 13:31:28 13:31:30	of your report? In your step two on page 18 you say, "I next tried to acquire copies of the specialized counting utilities that Mr. Pinto developed to tally source lines of code."  A. Yes.  MR. BUTLER: Sorry. Objection to the form. Mischaracterizes the document.
12:29:54 12:29:55 12:29:58 12:30:00 12:30:05 12:30:13 12:30:15 12:30:15 12:30:20 12:30:21 12:30:22 12:30:25 12:30:27 12:30:30	13:30:16 13:30:21 13:30:25 13:30:27 13:30:28 13:30:30 13:30:52 13:30:52 13:31:17 13:31:19 13:31:25 13:31:27 13:31:28 13:31:30 13:31:33	of your report? In your step two on page 18 you say, "I next tried to acquire copies of the specialized counting utilities that Mr. Pinto developed to tally source lines of code."  A. Yes.  MR. BUTLER: Sorry. Objection to the form. Mischaracterizes the document.  MR. ALINDER: Q. Do you see that?

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		Page 126			Page 128
13:31:52	1	A. Yes, we did.	13:34:24	1	A. Yeah. We kept querying about so, for
13:31:56	2	Q. And so you looked at the which versions	13:34:28	2	example, we asked about environment. We were told
13:32:05	3	of his code counters did you look at?	13:34:31	3	it was a Windows XP environment. But we didn't know
13:32:07	4	A. We looked at the in his attachments he	13:34:34	4	if SP2 was installed, SP1 was installed, if there
13:32:12	5	has parsing rules and he has the counting rules.	13:34:39	5	were any specialized drivers. To resolve the
13:32:17	6	And then we looked we believe I believe they	13:34:44	6	execution errors in those counters would have
13:32:26	7	are on his in one of the Pinto attachments there	13:34:47	7	required a great deal of dialogue, and going through
13:32:30	8	are text files with some of the counters on it.	13:34:53	8	various levels of people to get other people to
13:32:33	9	There are other files. We could never figure out in	13:34:56	9	get provide answers. We felt it would be simpler
13:32:39	10	total what the source code was for those files, nor	13:35:01	10	just to replicate Mr. Pinto's counting rules and
13:32:44	11	could we get them to execute.	13:35:04	11	parsing rules and develop our own. It just was too
13:32:46	12	Q. So you received the flat files of code and	13:35:09	12	difficult a situation.
13:32:48	13	you also received dot EXE versions of the counters;	13:35:12	13	Q. So in the end you didn't end up using
			13:35:14	14	Mr. Pinto's actual code counters?
13:32:53	14	right?			
13:32:55	15	MR. BUTLER: Objection.	13:35:17	15	A. We did not
13:32:56	16	THE WITNESS: That is correct.	13:35:18	16	MR. BUTLER: Objection.
13:32:56	17	MR. BUTLER: Sorry, Don.	13:35:18	17	Sorry, Don. Please give me a break to
13:32:59	18	Objection. Vague. Ambiguous.	13:35:21	18	chance to object.
13:33:02	19	THE WITNESS: Okay. Could you elaborate,	13:35:24	19	Objection. Vague. Ambiguous.
13:33:03	20	please?	13:35:25	20	Mischaracterizes the testimony.
13:33:05	21	MR. ALINDER: Q. You don't understand	13:35:28	21	THE WITNESS: Okay. Could you elaborate,
13:33:06	22	what I mean by flat files of code and dot EXE	13:35:30	22	please?
13:33:11	23	versions?	13:35:31	23	MR. ALINDER: Q. You don't have to ask
13:33:11	24	A. What do you mean by flat files?	13:35:32	24	for elaboration if you actually understand. If you
13:33:13	25	Q. Text files.	13:35:34	25	can answer the question despite Mr. Butler's
		Page 127			Page 129
13:33:14	1	We received text files and EXEs.	13:35:39	1	objections
13:33:19	2	Q. So do you actually run	13:35:40	2	A. Well, but there are objections. Because
13:33:21	. 3	A. We didn't	13:35:42	3	if you look at using Mr. Pinto's counters, Mr. Pinto
13:33:22	. 4	Q. Hold on. You have to wait for me to	13:35:47	4	only used counters on two of the four suites of
13:33:23	5	finish, and then you get to respond. And probably	13:35:51	5	products. Two of the suites of products he inferred
13:33:27	6	pause in between for Mr. Butler to object, if he has	13:35:54	6	size estimates.
13:33:30	7	an objection.	13:35:55	7	So there were and that's World and
13:33:31	8	MR. BUTLER: Thank you, Zac.	13:35:59	8	that's Siebel. They were never counted.
13:33:34	9	MR. ALINDER: Q. Did you actually run	13:36:03	9	So the question is, which products are you
13:33:35	10	Mr. Pinto's utilities against any code for your	13:36:06	10	saying we should have used counters for and, you
13:33:39	11	report?	13:36:11	11	know, can you elaborate?
13:33:40	12	A. No. We were unable to run those	13:36:14	12	Q. You never used the counters, Mr. Pinto's
13:33:43	13	utilities, because we kept getting execution errors.	13:36:17	13	counters, on any of the software here; right?
13:33:47	14	And our queries for clarification on the environment	13:36:19	14	MR. BUTLER: Objection to the form.
13:33:54	15	were insufficient to get the execution errors	13:36:21	15	Vague, ambiguous, and mischaracterizes the Reifer
13:33:58	16	resolved.	13:36:24	16	report.
13:34:00	17	Q. Did you ever ask anyone about why you were	13:36:25	17	THE WITNESS: We were never able to get
13:34:00	18	unable to execute the code counters that Mr. Pinto	13:36:25	18	the Pinto counters to execute in a Windows XP
13:34:04	19	provided?	13:36:27	19	environment, so we never used those counters because
		A. We			
13:34:11	20		13:36:35	20 21	of that root cause.  MR, ALINDER: Q. So instead what you did
13:34:12	21	MR. BUTLER: Objection.	13:36:38		· · · · · · · · · · · · · · · · · · ·
13:34:12	22	Sorry, Don.	13:36:39	22	is you created your own replica counters that you
13:34:14	23	Objection to the form. Vague. Ambiguous.	13:36:43	23	believe followed Mr. Pinto's rules; correct?
13:34:16	24	THE WITNESS: Who do you mean by "anyone"?	13:36:50	24	<ul> <li>A. For the Java and for some of the</li> </ul>
13:34:19	25	MR. ALINDER: Q. Anyone is anyone.	13:36:52	25	programming languages, yes, we did.

33 (Pages 126 to 129)

		Page 130			Page 132
13:36:56	1	Q. Did you recreate Mr. Pinto's code counters	13:39:58	1	So throughout his report there is
13:36:59	2	using the source code for those counters that	13:40:00	2	confusion that in his deposition he clarified by
13:37:02	3	Mr. Pinto produced?	13:40:06	3	saying that the language that was used in World was
13:37:04	4	A. No, we did not.	13:40:10	4	Java and C++. But that was after my report was
13:37:05	5	Q. Why not?	13:40:15	5	written.
13:37:06	6	A. We couldn't get the we couldn't get the	13:40:19	6	So, to answer your question, COBOL would
13:37:09	7	code to execute or compile. I don't know if we	13:40:21	7	have been one of the languages we would have looked
13:37:13	. 8	couldn't get it to execute. I don't think we	13:40:23	8	for at that time, but at this time we wouldn't look
13:37:18	9	created a different compilation version, because we	13:40:28	9	for because of the confusion.
13:37:21	10	didn't know which version of the compiler, or which	13:40:31	10	Of course, Java, C, C++ are languages we
13:37:24	11	compiler he was using. We were using Visual Studio,	13:40:34	11	would look for. SQL and some of the other XML type
13:37:30	12	which is a standard in the university world.	13:40:39	12	languages we would look for. And if we didn't find
13:38:00	13	Q. On page 18, the second paragraph after	13:40:43	13	those languages, because there is a common framework
13:38:06	14	Mr. Pinto's step two, it starts off, "Why Mr. Pinto	13:40:46	14	for developing and others, is PeopleSoft, of
13:38:12	15	developed his own source lines of code counters	13:40:54	15	course, which is a proprietary language, which we
13:38:15	16	puzzled me." Do you see that?	13:40:57	16	couldn't have developed a count for.
13:38:18	17	A. Yes, I do.	13:41:00	17	But there is a unified framework for code
13:38:21	18	Q. Have you ever developed your own code	13:41:04	18	counting, and the ability to put your unique parser
13:38:25	19	counters from scratch before?	13:41:08	19	into the counter and take advantage of all the
13:38:27	20	A. Personally?	13:41:10	20	reusable software and tools that are provided by
13:38:28	21	Q. Personally.	13:41:12	21	that counter. And there is a provision to take that
13:38:28	22	A. I have led teams that have developed them,	13:41:15	22	software and put it copyleft open source so other
13:38:30	23	but I have not personally written the code for	13:41:21	23	people could use it.
13:38:33	24	those.	13:41:23	24	And that's how I would have developed it.
13:38:36	25	Q. What code counters did you use for your	13:41:25	25	I would have developed it using UCC, because a
	***************************************	Page 131	***************************************		Page 133
13:38:41	1	analysis in this report?	13:41:29	1	majority of the counters existed. And then for
13:38:43	2	A. We used the UCC counter. The UCC counter	13:41:32	2	specialized languages I would have built my own and
13:38:47	3	is a public domain piece of software that was	13:41:36	3	put it in the framework, because then I could have
13:38:50	4	developed by the Aerospace Corporation under	13:41:39	4	used a code comparator. I could have used the other
13:38:55	5	contract to the US government and given to USC to	13:41:42	5	tools that are provided with the UCC tool.
13:39:02	6	distribute free. It's a copyleft open source piece	13:41:49	6	Q. Okay. That was quite an answer, and I
13:39:10	7	of software.	13:41:51	7	would actually move to strike everything before you
13:39:11	8	Q. Would the UCC USC counter you used allow	13:41:55	8	said, "To answer your question."
13:39:16	9	you to count of all the languages that Mr. Pinto	13:41:58	9	MR. BUTLER: Did you believe that was a
13:39:21	10	counted?	13:41:59	10	response to Mr. Alinder's question?
13:39:23	1:1	MR. BUTLER: Objection to the form.	13:42:02	11	THE WITNESS: Yes, I believe it was a
13:39:23	12	Vague. Ambiguous.	13:42:03	12	valid response.
13:39:24	13	THE WITNESS: Could you list the	13:42:05	13	MR. BUTLER: Okay.
13:39:24	14	languages, please?	13:42:07	14	MR. ALINDER: Q. Does the USC UCC counter
13:39:26	15	MR. ALINDER: Q. You don't know all the	13:42:12	15	count lines of PeopleCode?
13:39:27	16	languages that are in the software that Mr. Pinto	13:42:14	16	MR, BUTLER: Objection to form. Vague.
13:39:29	17	provided?	13:42:15	17	Ambiguous.
13:39:29	18	A. I have an idea of the languages, but I	13:42:20	18	THE WITNESS: The UCC counter currently
	19	would like to make sure that my list is complete.	13:42:24	19	does not count PeopleCode, because it's a
13:39:31		Q. What languages do you believe exist in	13:42:27	20	proprietary language. It could very well be
13:39:31 13:39:34	2 U	· · · · · · · · · · · · · · · · · · ·			
13:39:34	20 21	PeopleSoft, JDEdwards, and Siebel?	13:42:30	21	instrumented to count it by taking and putting in a
13:39:34 13:39:37	21	PeopleSoft, JDEdwards, and Siebel?  A. Well, there is confusion in Mr. Pinto's	13:42:30 13:42:34	21 22	instrumented to count it by taking and putting in a parser and a counter in the framework. The
13:39:34 13:39:37 13:39:39	21 22	A. Well, there is confusion in Mr. Pinto's	13:42:34		parser and a counter in the framework. The
13:39:34 13:39:37	21	' '		22	

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		Page 134			Page 136
13:42:49	1	A. Same answer. It can easily be	13:45:00	1	Q. You would have to do some additional
13:42:52	2	accommodated within the framework.	13:45:02	2	development in order to make that counter count?
13:42:54	3	Q. Does the USC UCC counter count DMS code?	13:45:05	3	A. Yeah, but it would be substantially less,
13:43:01	4	MR, BUTLER: Objection. Vague.	13:45:08	4	in my opinion, than developing a custom counter.
13:43:02	5	Ambiguous.	13:45:13	5	Q. You have never developed a custom counter,
13:43:02	6	THE WITNESS: Same answer. It does not	13:45:16	6	though, yourself; correct?
13:43:04	7	currently count DMS code.	13:45:18	7	A. I have had teams develop custom counters.
13:43:06	8	MR. ALINDER: Q. Does the USC UCC counter	13:45:21	8	I have not myself.
13:43:11	9	count COBOL code?	13:45:22	9	Q. Would the USC UCC counter that you used
13:43:14	10	MR. BUTLER: Same	13:45:26	10	count SQC code?
13:43:14	11	THE WITNESS: The UCC	13:45:29	11	MR. BUTLER: Same objection.
13:43:14	12	MR. BUTLER: Wait.	13:45:29	12	THE WITNESS: Same answer. The answer is,
13:43:15	13	THE WITNESS: I turned to you.	13:45:31	13	it could.
13:43:17	14	MR. BUTLER: I wanted to see what was	13:45:32	14	MR. ALINDER: Q. It could, but it didn't.
13:43:18	15	being transcribed first.	13:45:34	15	A. Yeah,
13:43:20	16	THE WITNESS: I am sorry.	13:45:38	16	Q. In your report do you identify
13:43:21	17	MR. BUTLER: Objection. Vague.	13:45:40	17	alternatively commercially available code counters
13:43:22	18	Ambiguous, Thank you.	13:45:44	18	for each of the languages in JDEdwards and
13:43:23	19	THE WITNESS: So the answer to your	13:45:47	19	PeopleSoft code?
13:43:25	20	question is, the predecessor counter does. There is	13:45:48	20	A. No, we do not.
13:43:28	21	a counter which was the UCC counter replaced,	13:45:52	21	Q. Did you only look at Mr. Pinto's code
13:43:26	22	• •	13:45:55	22	counters for certain languages?
	23	that does count COBOL code. And we acquired that	13:45:57	23	A. Could you elaborate, please?
13:43:37	2.3	counter and were trying to use it, but we couldn't	13:45:57	24	Q. Which specific code counters of
13:43:42	25	find any COBOL code.	13:46:01	25	•
13:43:48		So we do have a counter that's open	13.40.02		Mr. Pinto's did you review and replicate?
		Page 135			Page 137
13:43:50	1	source, downloadable, available, and it's the	13:46:13	.1	A. We replicated the C++ language counter and
13:43:53	2	predecessor counter to UCC, which has been available	13:46:17	2	we replicated the Java counter, and we made an
13:43:57	3	since probably '03.	13:46:21	3	attempt to do an SQL counter and bring in a COBOL
13:44:01	4	MR. ALINDER: Q. The one that you used,	13:46:26	4	counter, but because of time we gave up on those
13:44:03	5	though, doesn't count COBOL code; correct?	13:46:29	5	efforts.
13:44:07	6	A. Well, we did download the predecessor	13:46:30	6	Q. When did you start your attempts to create
13:44:09	7	counter and load it on our machine to count COBOL	13:46:36	7	these counters?
13:44:14	8	code, but we couldn't find COBOL code. We tried.	13:46:37	8	A. Mr. Tan was my assistant, was brought on
13:44:19	9	Q. Does the USC UCC counter that you used	13:46:45	9	in mid-February. And as you saw, my report was due
. 13:44:24	10	counted RPT code?	13:46:48	10	on the 26th of March.
13:44:25	11	MR. BUTLER: Same objection. Vague.	13:46:49	11	Q. And this is Tom Tan?
13:44:26	12	Ambiguous.	13:46:52	12	A. Yes, sir.
13:44:26	13	THE WITNESS: Same answer. It could. It	13:46:53	13	Q. This is the same person we were talking
13:44:31	14	does count, not that format, but other report	13:46:56	14	about before; correct?
13:44:34	15	generators and other type codes like that.	13:46:59	15	A. Tom Tan, yes, sir.
13:44:38	16	MR. ALINDER: Q. Does the USC UCC counter	13:47:05	16	Q. Did Tom run all of the code counter
13:44:40	17	that you used count SQR code?	13:47:16	17	strike that.
13:44:44	18	MR. BUTLER: Same objection.	13:47:17	18	Did Tom Tan do all of the runs using the
13:44:45	19	THE WITNESS: Same answer.	13:47:20	19	code counters for your report?
13:44:47	20	MR. ALINDER: Q. By same answer you mean	13:47:23	20	MR. BUTLER: Objection to the form.
13:44:49	21	it could be changed or customized in order to do	13:47:24	21	Vague. Ambiguous.
	22	that?	13:47:25	22	THE WITNESS: Yes.
13:44:51			20 47 00	23	MD ALINDED. O De all the ende countries
13:44:51 13:44:52	23	<ul> <li>A. Not customized. It could the structure</li> </ul>	13:47:38	23	MR. ALINDER: Q. Do all the code counters
	23 24	A. Not customized. It could the structure     accommodates the counter, and it's relatively simple	13:47:38	24	for that you looked at relate to the JDEdwards

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		Page 138			Page 140
13:47:50	1	A. There's they relate to more than the	13:51:08	1	And if you look at the UCC counter, what
13:47:54	2	JDEdwards products, but we didn't have time to do	13:51:12	2	you will see is, for each language, that we have a
13:47:58	3	more.	13:51:17	3	counting tool. We have a counting conventions
13:48:00	4	Q. Do you believe that they relate to	13:51:21	4	document supplied with it and downloadable, free.
13:48:02	5	PeopleSoft products in some way, too?	13:51:27	5	I have examples I provided examples in
13:48:06	6	A. Well, I didn't dig into PeopleSoft. We	13:51:30	6	my report, I am pretty sure.
13:48:08	7	looked at World. We saw that World was supposed to	13:51:47	7	Yes. If you look at Pinto 8, a SAP-DJR
13:48:13	8	be in COBOL. We saw that in PeopleSoft there was	13:51:52	8	triple or quadruple, whatever the number of zeros
13:48:17	9	SQL. So, we looked. We just had a month, didn't	13:51:56	9	is how many zeros is there?
13:48:26	10	have enough time.	13:52:07	10	MR. BUTLER: Why don't you point to the
13:48:33	11	Q. What is Tom Tan's background?	13:52:09	11	page number? And I will help. Point to where the
13:48:36	12	A. He is a PhD candidate at USC. He has been	13:52:15	12	Bates number is.
13:48:40	13	in the program with a bachelor's degree in 2002 in	13:52:17	13	THE WITNESS: It was a CD. It had all the
13:48:46	14	computer science, and he has been in the PhD and	13:52:18	14	it's 08 07. I am sorry. SAP-DJR-000007.
13:48:52	15	master's program since then, with an expected	13:52:10	15	What you have is examples of those files,
13:48:54	16	graduation date of this year. He has industrial	13:52:33	16	code counting standards.
13:48:58	17			17	~
	18	experience summers and part time, working as a	13:52:39		MR. ALINDER: Okay. I object and move to
13:49:03		programmer. He is a member of the COCOMO team. He	13:52:40	18	strike that answer as non-responsive.
13:49:06	19	is one of the people who help write the code	13:52:43	19	MR. BUTLER: I think it was responsive.
13:49:10	20	counters.	13:52:46	20	We will just agree to disagree on that.
13:49:11	21	Q. By write the code counters, you mean the	13:52:49	21	MR. ALINDER: Okay.
13:49:13	22	replicas of Mr. Pinto's.	13:52:50	22	MR. BUTLER: If you don't like the answer,
13:49:17	23	A. No, I am talking about UCC. I am talking	13:52:51	23	that doesn't make it non-responsive.
13:49:19	24	about the USC code counters. He is part of the code	13:52:55	24	MR. ALINDER: I agree. When it's
13:49:23	25	counting project as well as the COCOMO project,	13:52:57	25	non-responsive, it's non-responsive.
		Page 139			Page 141
13:49:27	1	where he is defending his PhD.	13:53:00	1	Q. The bottom of page 19, the second-to-last
13:49:29	2	Q. And he was the one who built the replicas	13:53:05	2	full sentence, you state, "There was also some
13:49:34	3	of Mr. Pinto's code counters.	13:53:08	3	confusion over how Mr. Pinto counted compiler
13:49:38	4	A. Yes, he is.	13:53:12	4	directives and data declarations." Do you see that?
13:50:05	5	Q. Do you agree that a custom code counter	13:53:20	5	A. Yes, I do.
13:50:07	6	that is tailored to count lines of code written in a	13:53:21	6	Q. Can you explain what confusion you are
13:50:11	7	certain language could be more accurate than a	13:53:23	7	talking about there?
13:50:14	8	commercially available code counter that was not	13:53:25	8	A. Well, there are very specific standards
13:50:15	9	designed or tested specifically for the program	13:53:30	9	for counting data declarations in languages. There
13:50:18	10	language?	13:53:35	10	is what's called a terminal semicolon versus a
13:50:18	11	A. No.	13:53:39	11	delimiter.
13:50:18	12	Q. Why not?	13:53:40	12	If you count just a delimiter semicolon,
13:50:19	13	A. It all depends on the counting conventions	13:53:45	13	you would count everything in a list as a single
13:50:19	14	that are observed.	13:53:49	14	line of code. If you count the terminal semicolon,
	15		13:53:52	15	you may count hundreds of lines of code as a single
13:50:25		Q. Okay. And the question was, could a		16	· · ·
13:50:27	16	customized tool like the one I described be more	13:53:57		statement. So until we could resolve what the
13:50:30	17	accurate than a commercially available code counter?	13:54:00	17	delimiter was for the language and languages are
13:50:34	18	MR. BUTLER: Objection. Incomplete	13:54:04	18	different in how they delimit we had problems in
13:50:35	19	hypothetical. Vague. Ambiguous.	13:54:08	19	comparing what he did to what we did.
13:50:38	20	THE WITNESS: The answer is, there is more	13:54:11	20	The big issue we had with Mr. Pinto's
13:50:40	21	data needed. So, for example, if it's a commercial	13:54:15	21	counters were embedded constants, which are
13:50:43	22	code counter that was poorly designed and built and	13:54:18	22	explicitly excluded in languages and that's noted
13:50:50	23	that didn't observe the language standards, it could	13:54:25	23	in my report, by the way and that were counted in
13:50:57	24	produce trash, basically. You know, the real goal	13:54:31	24	Mr. Pinto's counters and which were not counted in
13:51:05	25	of a code counter is to observe language standards.	13:54:34	. 25	the UCC. And those embedded statements added size

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			Page 142			Page 144
13:54:	39	1	to the code that made his counts higher than our	13:56:48	1	A. By the time we the answer is no.
13:54:	46	2	counts.	13:56:58	2	We asked them for to get
13:54:	46	. 3	Q. Are embedded constants related to compiler	13:57:01	3	clarification
13:54:	52	4	directives or data declarations?	13:57:02	4	MR. BUTLER: Excuse me.
13:54:	55	5	A. No, they are not.	13:57:03	5	THE WITNESS: Sorry.
13:54:	56	6	Q. Okay. Then I move to strike the end of	13:57:04	6	MR. BUTLER: Do not disclose the contents
13:54:	58	7	your response as non-responsive.	13:57:05	7	of discussions we had. If you have a question about
13:55:	00	8	The question is, what was the confusion	13:57:07	8	whether it's subject to some
13:55:	02	9	over compiler directives and data declarations?	13:57:09	9	THE WITNESS: I understand.
13:55:	06	10	A. We needed to understand the rules in the	13:57:10	10	MR. BUTLER: it needs to be withheld
13:55:	07	11	specific languages. And we were able to figure	13:57:12	11	from discovery, mention it to Mr. Alinder, and we
13:55:	09	12	those out after a while, but it took us some time.	13:57:15	12	can have a discussion of it.
13:55:	12	13	Q. And you attended Mr. Pinto's deposition;	13:57:16	13	But do you think you answered his
13:55:	16	14	correct?	13:57:18	14	question?
13:55:		15	A. Yes, I did.	13:57:19	15	THE WITNESS: My answer is complete.
13:55:		16	Q. Mr. Pinto wasn't asked about compiler	13:57:32		
13:55:	19	17	directives, that you recall or were aware of.	13:57:33		
13:55:		18	A. We were that is correct.	13:57:38		
13:55:		19	Q. He wasn't asked about data declarations	13:57:48		
13:55:		20	that you are aware of; right?	13:57:50		
13:55:		21	A. That is correct.	13:57:54		
13:55:		22	Q. You assert in your report that you tested	13:57:55		
13:55:		23	Mr. Pinto's source lines of code counters and	13:57:58		
13:55:		24	parsing rules; right?	13:57:59		
13:55:		25	MR. BUTLER: Objection to form. Vague and	13:58:00		
			Page 143			Page 145
12-55-	20	1	_	13:58:05		
13:55: 13:55:		1 2	ambiguous.	13:58:03		
		3	THE WITNESS: What do you mean by that, please?	13:58:14		
13:55: 13:55:		4	MR, ALINDER: I will withdraw that	13:58:16		
13:55:		5	question.	13:58:21		
13:55:		6	Q. Did anyone else besides Mr. Tan assist	13:58:25		
13:55:		7	with creating these code counters?	13:58:34		
13:55:		8	A. No.	13:58:38		
13:55:		9		13:58:44		
13:55:		10	Q. Did anyone else but Mr. Tan assist with running the code counters?	13:58:45		
				13:58:46		
13:56: 13:56:		11 12	A. No.     Q. What does Mr. Tan do to develop those code	13:58:40		
13:56:		13	counters?	13:58:55		
13:56:		13	A. Well, he actually wrote counters. He	13:58:58		
13:56:		15	wrote them, and we supplied them. You have them.	13:50:50		
13:56:		16	O. Did you ever test them against Mr. Pinto's	13:59:01		
13:56:		17	code counters?	13:59:10		
13:56:		18	A. We didn't have Mr. Pinto's code counters.	13:59:15		
13:56:		19	We couldn't get them to run.	13:59:18		
13:56:		20	Q. You had them, but you just couldn't get	13:59:19		
13:56:		21	them to run; correct?	13:59:23		
13:56:		22	A. They would not execute for us.	13:59:28		
13:56:		23	Q. Did you ever ask Jones Day to provide	13:59:33		
13:56:		23	technical assistance with regard to those code	13:59:35		
		25	counters?	13:59:38		
13:56:	44	∠3	Counters:	10.09.00		

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		Page 150		Page	152
14:04:43	1	Q. Why did you perform a test on the	14:07:48		
14:04:46	ż	FlightGear code?	14:07:50		
14:04:48	3	A We looked at FlightGear just to see if we	14:07:51		
14:04:52	4	should go any further. We were having difficulties	14:07:52		
14:04:56	5	finding the code in EnterpriseOne. And we didn't	14:07:54		
14:05:03	6	know whether or not it would be a fruitful exercise	14:07:59		
14:05:07	7	to continue that effort, so what we did is we took	14:08:01		
14:05:16	8	the two counters and counted a public domain open	14:08:03		
14:05:20	9	source package to see if there were major	14:08:07		
14:05:23	10	differences in the counts. And based on that, then	14:08:10		
14:05:27	11	what we did is we, you know, continued with our	14:08:10		
14:05:33	12	counting experiments.	14:08:11		
14:05:44	13	Q. Isn't it true that open source code like	14:08:12		
14:05:47	14	FlightGear can be structurally different than	14:08:15		
14:05:50	15	proprietary code?	14:08:18		
14:05:52	16	MR. BUTLER: Objection. Vague.	14:08:26		
14:05:52	17	Ambiguous.	14:08:29		
14:05:53	18	THE WITNESS: I think that has no it's	14:08:37		
14:05:56	19	not relevant. We were just running an experiment to	14:08:44		
14:06:00	20	see the difference. And then what we said, based on	14:08:48		
14:06:03	21	the difference, let's look at the actual code. So	14:09:03		
14:06:06	22	the experiment was not germane to anything in my	14:09:07		
14:06:10	23	report. It just was we were running an	14:09:09		
14:06:14	24	experiment to see if we should go any further.	14:09:12		
14:06:18		-	14:09:18		
		Page 151		Page	153
14:06:22			14:09:21		
14:06:24			14:09:25		
14:06:26			14:09:28		
14:06:27			14:09:31		
14:06:29			14:09:37		
14:06:31		·	14:09:39		
14:06:38			14:09:53		
14:06:43			14:09:53		
14:06:46			14:09:57		
14:06:50			14:10:00		
14:06:54			14:10:00		
14:06:55			14:10:05		
14:06:59			14:10:09		
14:07:04			14:10:13		
14:07:07			14:10:15		
14:07:10			14:10:17		
14:07:13			14:10:18		
14:07:17			14:10:21		
14:07:21			14:10:24		
I			14:10:28		
14:07:36			14:10:33		
14:07:36 14:07:37			11.10.33		
1		·	14:10:39		
14:07:37					
14:07:37 14:07:41			14:10:39		

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		Page 154			Page 156
14:11:07	1	Q. Right below the "Notes" you say, "The main	14:14:07	1	counters, because they are different languages with
14:11:10	2	difference in Logical Source Lines of Code ('SLOC')	14:14:10	2	different syntax and different semantics.
14:11:15	. 3	calculation occurred due to how embedded comments	14:14:13	3	Q. But Mr. Pinto's code counters, you
14:11:18	4	were counted by Mr. Pinto's utility software." Do	14:14:15	4	understand, were for C and not C++.
14:11:22	5	you see that?	14:14:18	5	A. I understand that. But the FlightGear is
14:11:22	6	A. Yes, I do.	14:14:24	6	written in C and C++.
14:11:37	7	Q. Is that based on this experiment using the	14:14:26	7	Q. Right. So for the UCC you used C and C++
14:11:42	8	FlightGear code?	14:14:31	8	counters.
14:11:46	9	A. Yes, it is, I would imagine.	14:14:32	9	A. That's correct.
14:11:53	10	Let me read it again, because	14:14:35	10	Q. And there was no C++ counter for Pinto;
14:12:16	11	Yes, it is. It's on the C code.	14:14:38	11	correct?
14:12:22	12	Q. The C++ code?	14:14:39	12	A. Not to my knowledge, if that's what you
14:12:26	13	A. C and C++ code, yes. There is both in	14:14:41	13	are driving at.
14:12:28	1.4	there.	14:14:44		3
14:12:29	15	Q. You agree that FlightGear is not at issue	14:14:47		
14:12:31	16	in this case?	14:14:49		
14:12:32	17	MR. BUTLER: Objection to the form. Vague	14:14:54		
14:12:35	18	and ambiguous.	14:14:56		
14:12:36	19	THE WITNESS: What do you mean by "at	14:14:58		
14:12:37	20	issue"?	14:15:00		
14:12:38	21	MR. ALINDER: Q. It's not part of the	14:15:00		
14:12:39	22	case at all, other than in your report here;	14:15:05		
14:12:41	23	correct?	14:15:05		
14:12:41	24				
	25	MR. BUTLER: Same objection.	14:15:05 14:15:26		
14:12:45		THE WITNESS: It's the only reason that	14,13,20		
		Page 155			Page 157
14:12:48	1	it's in here is that it was an experiment on	14:15:28		
14:12:52	2	leading to further experiments.	14:15:30		
14:12:54	3	MR, ALINDER: Q. You just said that	14:15:41		
14:12:55	4	FlightGear contains C++ code; correct?	14:15:42		
14:12:59	5	A. Both C and C++ code.	14:15:45		
14:13:02	6	Q. Are you aware of whether there was any C++	14:15:46		
14:13:05	.7	code in JDEdwards, PeopleSoft, or Siebel?	14:15:47		
14:13:09	8	A. I'm not aware. In this code I know	14:15:50		•
14:13:12	9	this code very well. That's why we selected it.	14:15:54		
14:13:16	10	Q. Did you differentiate between C and C++	14:15:55		
14:13:20	11	code when you tested the replicas of Mr. Pinto's C	14:15:56		
14:13:25	12	code counter?	14:15:59		
14:13:26	13	A. The C and C++ are separate counters in	14:16:01		
14:13:28	14	USC, because they observe different counting rules	14:16:02		
14:13:34	15	and parsing rules. So by definition we have	14:16:06		
14:13:38	16	differentiated.	14:16:10		
14:13:39	17	Q. And my question refers to Mr. Pinto's	14:16:16		
14:13:43	18	replicas of the or the replicas that you made of	14:16:19		
14:13:49	19	Mr. Pinto's C code counter, not the UCC one.	14:16:19		
14:13:53	20	A. I would have to go look at the counters	14:16:26		
14:13:54	21	themselves to answer that definitively.	14:16:29		
14:13:56	22	Q. You are aware that Mr. Pinto's counter was	14:16:29		
14:13:58	23	designed for C code, and not C++?	14:16:32		
14:14:01	24	A. Yes, I understand that. We have two	14:16:35		
	25	separate counters. Again, C and C++ are separate	14:16:37		

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		Page 170			Page 172
14:34:14			14:53:39	1	package. Is that right?
14:34:16			14:53:40	2	A. The programs that we found, that is
14:34:18			14:53:42	3	correct.
14:34:19			14:53:45	4	Q. And then you ran both the replica Pinto
14:34:22			14:53:50	5	counters and the USC counters on each of those sets
14:34:25			14:53:55	6	of code; correct?
14:34:27			14:53:56	7	A. That is correct.
14:34:30			14:53:58	8	Q. And then you compared those two sets of
14:34:31			14:54:06	9	results and determined that for the five routines
14:34:31			14:54:14	10	there was nine and a half percent difference between
14:34:34			14:54:19	11	the Pinto replica counter and the USC code counter;
14:34:35			14:54:19	12	•
14:34:35		•		13	right?
			14:54:24		A. That is correct.
14:34:38			14:54:25	14	Q. And the difference between the replica
14:34:40			14:54:29	15	counter and the USC counter for the all of the
14:34:42			14:54:34	16	code that you found in JDEdwards EnterpriseOne was
14:34:43			14:54:37	17	14 and a half percent; right?
14:34:44			14:54:39	18	A. That is correct.
14:34:46			14:54:47	19	Q. Which set of code in your report do you
14:34:49			14:54:50	20	apply the nine and a half percent difference to?
14:34:52			14:54:58	21	A. I believe that's the Java code, but I need
14:34:55			14:55:03	22	to confirm that.
14:34:59			14:55:23	23	That is correct, on page 62, in the
14:35:06			14:55:30	24	final in this table on the second paragraph down.
14:35:09			14:55:35	25	Q. Okay. So thank you. On page 62 you
		Page 171			Page 173
14:35:13			14:55:42	1	state that you used the 14 and a half percent to
14:35:18			14:55:46	2	reduce the C programming language size estimates by
14:35:21			14:55:50	3	14 and a half percent, and you applied the nine and
14:35:22			14:55:53	4	a half percent to reduce the Java size estimate;
14:35:26			14:56:01	5	correct?
14:35:29			14:56:01	6	A. That is correct.
14:35:30			14:56:04	7	Q. So you applied those percentages to
14:35:33			14:56:06	8	Mr. Pinto's total size estimate to come up with a
14:35:34			14:56:10	9	revised size estimate for each of those types of
14:52:54			14:56:13	10	code?
14:52:55			14:56:13	11	A. To come up with a corrected estimate.
14:52:59			14:56:18	12	Q. Based on a perceived error between the
14:53:02			14:56:20	13	replica counter and the USC code counter; correct?
14:53:05			14:56:24	14	MR. BUTLER: Objection. Vague and
14:53:07			14:56:25	15	ambiguous.
14:53:12			14:56:29	16	THE WITNESS: We used those percentages
14:53:14			14:56:29	17	because of perceived errors in counting, based on
	18	O Okay And in table 4 and table 5 year have	14:56:30	18	the fact that the embedded constants were not
		Q. Okay. And in table 4 and table 5 you have			
	19	results of two code counting experiments that you	14:56:41	19	stripped in Pinto's counters
	20	did; correct?	14:56:47	20	MR. ALINDER: Q. In the replica counters
	21	A. That is correct.	14:56:48	21	that you used?
	22	Q. In the first one you use five routines	14:56:49	22	A which followed the yes, that's
	23	from the JDEdwards EnterpriseOne software package,	14:56:51	23	соттест.
	24	and in the second one you took all of the programs	14:56:53		
14:53:34	25	that you found in the JDEdwards EnterpriseOne	14:56:58		

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		Page 194			Page 190
15:24:53		·	15:28:44	1	could.
15:24:54			15:28:52	2	The important point here is there is the
15:24:56		**************************************	15:28:55	3	potential for double counting.
15:25:01			15:29:01	4	MR. ALINDER: Q. So you are saying, if
15:25:05		***************************************	15:29:02	5	Mr. Pinto included additional documentation costs on
15:25:14		***************************************	15:29:05	6	top of the COCOMO estimate, that would be double
15:25:16			15:29:09	7	counting.
15:25:20		9999	15:29:11	8	A. In his total estimate, that would be, yes.
15:25:31	9	Q. Can you turn to page 23, please, of your	15:29:13	9	Q. But you are not aware that Mr. Pinto
15:25:34	10	report? On table page 23 of your report, you	15:29:15	10	actually did that.
15:25:53	11	analyze Mr. Pinto's step four regarding the number	15:29:16	11	MR. BUTLER: Objection. Objection.
15:25:58	12	of pages of documentation. Is that right?	15:29:16	12	Vague. Ambiguous. Mischaracterizes the prior
15:26:03	1.3	A. Under the second bullet, that is correct.	15:29:20	13	testimony.
15:26:10	14	Q. Did the number of pages of documentation	15:29:20	14	THE WITNESS: I am not aware that he did
15:26:13	15	from Mr. Pinto's report result in a number that is	15:29:22	15	or didn't do that.
15:26:17	16	an input into the COCOMO model?	15:29:23	16	I also note that, you know, if you look at
15:26:21	17	A. No, it does not.	15:29:26	17	the volume of documentation in the last, next to the
15:26:27	18	Q. So, do your statements here about number	15:29:32	18	last sentence, you are talking 5,000 volumes of user
15:26:29	19	of pages of documentation directly influence your	15:29:36	19	documentation of 400 pages. That seems a little
15:26:33	20	COCOMO model at all?	15:29:39	20	excessive to me.
15:26:36	21	MR. BUTLER: Objection. Vague, ambiguous,	15:29:41	21	MR. ALINDER: Q. Did you talk to
15:26:38	22	and mischaracterizes the expert report.	15:29:41	22	Mr. Garmus about the 7,000 volumes that he had for
15:26:42	23	THE WITNESS: I can refresh you on page	15:29:45	23	his analysis?
15:26:47	24	17. It's my comments on the 10-step method proposed	15:29:47	24	A. No, I did not.
15:26:54	25	by Mr. Pinto. And what I was doing as I was going	15:29:49	25	Q. He didn't tell you about that?
13.20.34	2.3				
		Page 195			Page 19
15:26:58	1	through the steps was noting differences between	15:29:51	1	A. No. I didn't talk to him at all about
15:27:03	2	COCOMO and what Mr. Pinto was proposing.	15:29:54	2	this analysis, nor did I read his report.
15:27:07	3	If one looks at the table that's cited	15:29:57	, 3	Q. Would that have been helpful in you
15:27:10	4	here from Capers Jones, which was not cited by	15:30:00	4	determining whether 5,000 volumes was too many?
15':27:16	5	Mr. Pinto in his report and should have been, one	15:30:08	5	A. Mr. Garmus has a stellar reputation in the
15:27:21	6	sees that, you know, the thing items in his table	15:30:13	6	function point community. If he has said that 7,000
15:27:25	7	for documentation in terms of manuals, et cetera,	15:30:18	7	volumes of documentation were needed, which I doubt,
15:27:29	8	that he said were extra are normally produced as a	15:30:22	8	I would have confidence in his ability to come up
15:27:36	9	normal part of the software development process, and	15:30:26	9	with that number.
15:27:39	10	normally encompassed within the scope of COCOMO. So	15:30:28	10	Q. I didn't say that he said 7,000 were
15:27:43	11	there is some double counting there.	15:30:31	11	needed. I said over that many were in his
15:27:53	12	MR. ALINDER: Q. So they don't directly	15:30:35	12	possession for use in his analysis.
15:27:55	13	influence the COCOMO model; correct?	15:30:39	13	A. Oh, I would be surprised.
15:27:58	14	MR, BUTLER: Objection. Mischaracterizes	15:30:43	14	MR. BUTLER: Also mischaracterizes the
15:27:59	15	the testimony. Vague. Ambiguous.	15:30:45	15	prior testimony.
15:28:03	16	THE WITNESS: It impacts the estimate, in	15:30:52	16	MR. ALINDER: Q. Did you look on any of
15:28:05	17	the sense that if Mr. Pinto and I don't know how	15:30:53	17	the software CDs to see how much documentation was
15:28:10	18	he arrived at his numbers on his extreme end of his	15:30:57	18	provided with any of the PeopleSoft or JDEdwards
15:28:15	19	estimate. That was never explained in his report,	15:31:03	19	software?
15:28:22	20	when we get to that,	15:31:04	20	A. There were instructions on one of the
15:28:24	21	I quoted it before, you know, this extreme	15:31:06	21	JDEdwards software, the second CD, I believe. There
15:28;27	22	range, where he goes doubles his cost as the most	15:31:12	22	was documentation. But this is pretty standard, you
15:28:35	23	pessimistic cost. I don't know if that includes	15:31:15	23	know. I did not look at the PeopleSoft.
15:28:38	24	COCOMO estimate plus documentation as a separate	15:31:20	24	Again, we focused our energy on
		•			

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		Page 198		Page 200
15:31:27	1	would basically limit our ability to do a detailed	15:34:06	
15:31:31	2	analysis of the size counts.	15:34:09	
15:31:34	3	Q. Did you ask anyone for the PeopleSoft or	15:34:09	
15:31:37	4	PeopleBook libraries that related to the software	15:34:12	
15:31:41	5	that you had?	15:34:14	
15:31:41	6	A. No.	15:34:17	
15:31:52	7	Again, let me state that we did a COCOMO	15:34:17	
15:31:56	8	analysis to verify Mr. Pinto's estimates. And	15:34:19	
15:32:00	9	within the scope of the COCOMO estimate there is	15:34:30	
15:32:03	10	documentation. And it was apparent that, within the	15:34:34	
15:32:09	11	documentation step four that Mr. Pinto had in his	15:34:35	
15:32:15	12	table, that there was the potential for double	15:34:36	
15:32:18	13	counting some of that documentation that the COCOMO	15:34:41	
15:32:21	14	estimate already estimated.	15:34:45	
	15			
15:32:23		Q. So other than this potential for double	15:34:49	
15:32:25	16	counting if Mr. Pinto had counted additional	15:34:53	
15:32:29	17	documentation and added it to the COCOMO model which	15:34:59	
15:32:34	18	you have described, is there any other double	15:34:59	
15:32:37	19	counting that you are referring to in your report	15:35:02	
15:32:39	20	here?	15:35:02	
15:32:39	21	A. You mean in terms of documentation or	15:35:04	
15:32:43	22	Q. Yes. Correct,	15:35:07	
15:32:45	23	MR. BUTLER: Objection to the form.	15:35:08	
15:32:46	24	Vague, ambiguous, and mischaracterizes the	15:35:09	
15:32:49	25	testimony.	15:35:10	
		Page 199		Page 201
15:32:50	1	THE WITNESS: Well, I would have to study	15:35:13	
15:32:51	2	the report and look. There may be. There may not	15:35:17	
15:32:56	3	be. I don't remember.	15:35:18	
15:32:58			15:35:19	
15:32:59			15:35:23	
15:33:03			15:35:26	
15:33:05			15:35:27	
15:33:05			15:35:30	
15:33:08			15:35:33	
15:33:10			15:35:37	
15:33:13			15:36:04	
15:33:16			15:36:11	•
15:33:19			15:36:14	
15:33:22			15:36:24	
15:33:27			15:36:28	
15:33:31			15:36:29	
15:33:31			15:36:30	
15:33:34		ere de la companya de	15:36:32	
15:33:35		·	15:36:36	
15:33:38		The second secon	15:36:39	
15:33:36		and the second s	15:36:43	
15:33:41			15:36:47	
		een	15:36:47	
15:33:52			15:36:57	
15:33:56			15:30:57	
15:34:00			10.07:00	

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#### CERTIFICATE OF REPORTER

I, SARAH LUCIA BRANN, a Certified

Shorthand Reporter, hereby certify that the witness in the foregoing deposition was by me duly sworn to tell the truth, the whole truth, and nothing but the truth in the within-entitled cause;

That said deposition was taken in shorthand by me, a disinterested person, at the time and place therein stated, and that the testimony of the said witness was thereafter reduced to typewriting, by computer, under my direction and supervision;

That before completion of the deposition, review of the transcript [X] was [] was not requested. If requested, any changes made by the deponent (and provided to the reporter) during the period allowed are appended hereto.

I further certify that I am not of counsel or attorney for either or any of the parties to the said deposition, nor in any way interested in the event of this cause, and that I am not related to any of the parties thereto.

DATED: June 25, 2010

Sarah huas Brann

SARAH LUCIA BRANN, CSR No. 3887