

FEDERAL TRADE COMMISSION

I N D E X

1					
2					
3					
4	WITNESS:	DIRECT:	CROSS:	REDIRECT:	RE CROSS:
5	RHODEN	505	540/581		
6					
7	EXHIBITS*	FOR ID	ADMITTED	WITHDRAWN	
8	CX				
9	Number 303		696		
10	Number 361		518		
11					
12	RX				
13	Number 421		594		
14	Number 669		652		
15	Number 740		652		
16	Number 920		745		
17	Number 1457		667		
18	Number 1461		667		
19	Number 1535		670		
20					
21	JX				
22	Number 18		593		
23	Number 31		515		
24	Number 36		593		
25	*Many exhibits were premarked for identification				

1	EXHIBITS	FOR ID	ADMITTED	WITHDRAWN
2				
3	DX			
4	Number 3	505		
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

UNITED STATES OF AMERICA
FEDERAL TRADE COMMISSION

In the Matter of:)
Rambus, Inc.) Docket No. 9302
-----)

Friday, May 2, 2003
9:30 a.m.

TRIAL VOLUME 3
PART 1
PUBLIC RECORD

BEFORE THE HONORABLE STEPHEN J. McGUIRE
Chief Administrative Law Judge
Federal Trade Commission
600 Pennsylvania Avenue, N.W.
Washington, D.C.

Reported by: Susanne Bergling, RMR

For The Record, Inc.
Waldorf, Maryland
(301) 870-8025

1 APPEARANCES:

2

3

4 ON BEHALF OF THE FEDERAL TRADE COMMISSION:

5 M. SEAN ROYALL, Attorney

6 GEOFFREY OLIVER, Attorney

7 JOHN C. WEBER, Attorney

8 MICHAEL FRANCHAK, Attorney

9 Federal Trade Commission

10 601 New Jersey Avenue, N.W.

11 Washington, D.C. 20580-0000

12 (202) 326-3663

13

14

15 ON BEHALF OF THE RESPONDENT:

16 GREGORY P. STONE, Attorney

17 STEVEN M. PERRY, Attorney

18 PETER A. DETRE, Attorney

19 SEAN GATES, Attorney

20 Munger, Tolles & Olson LLP

21 355 South Grand Avenue, 35th Floor

22 Los Angeles, California 90071-1560

23 (213) 683-9255

24

25

For The Record, Inc.
Waldorf, Maryland
(301) 870-8025

1 APPEARANCES:

2

3 ON BEHALF OF THE RESPONDENT:

4 A. DOUGLAS MELAMED, Attorney

5 Wilmer, Cutler & Pickering

6 2445 M Street, N.W.

7 Washington, D.C. 20037-1420

8 (202) 663-6090

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

For The Record, Inc.
Waldorf, Maryland
(301) 870-8025

P R O C E E D I N G S

- - - - -

1
2
3 JUDGE McGUIRE: This hearing is now in order
4 and convened at 9:30 a.m.

5 Counsel, how is everyone today?

6 MR. PERRY: Good.

7 JUDGE McGUIRE: Are there any housekeeping
8 tasks that should come to the Court's attention at this
9 time?

10 MR. PERRY: Your Honor, could I just confirm
11 that next Tuesday morning, we are dark until 1:00 p.m.?

12 JUDGE McGUIRE: That's correct, that's correct.
13 We will not start hearing until 1:00 p.m. on Tuesday,
14 the 6th.

15 MR. PERRY: Also, some of our staff had asked
16 if the mention of a Friday off once in a while is still
17 in play or not.

18 JUDGE McGUIRE: Yes, it is, and that's
19 something I'm certainly open to, but of course, I would
20 want input from both sides, but if the parties feel
21 like we could take every other Friday or just depending
22 on trying to get those people in here that you already
23 have scheduled, yeah, I'd be happy to employ that.

24 MR. PERRY: Could I just put a suggestion in
25 play?

1 JUDGE McGUIRE: Go ahead, Mr. Perry.

2 MR. PERRY: And that is that the Friday of
3 Memorial Day weekend is I think the 23rd, and that
4 would make it a little easier for our staff if they
5 wanted to go back to the West Coast, but I don't know
6 if you have anybody planned for that day or not.

7 JUDGE McGUIRE: I think that's an excellent
8 idea, by the way, but go ahead, Mr. Oliver.

9 MR. OLIVER: Your Honor, we are trying to take
10 that into consideration and we expect we will be able
11 to work something out. Just to let you know where we
12 stand at this point, we do think that next week is
13 going to be a fairly full week.

14 JUDGE McGUIRE: Right.

15 MR. OLIVER: The week after that, we are trying
16 to figure out whether we might be able to do half a day
17 on that Friday.

18 JUDGE McGUIRE: Okay.

19 MR. OLIVER: And we are trying to figure out
20 whether we could leave the Friday before Memorial Day
21 weekend free.

22 JUDGE McGUIRE: Okay, we will try to play it by
23 ear. If we are going to try to decide to take off a
24 day, let's try to give each other four or five days
25 notice, at least, but otherwise, I think that would be

1 my inclination as well.

2 MR. OLIVER: Your Honor, if I could mention one
3 other issue with respect to scheduling. With respect
4 to the vast majority of our witnesses, they are coming
5 from other parts of the country, in many cases from
6 long distances.

7 JUDGE McGUIRE: Yes.

8 MR. OLIVER: Almost uniformly they have made
9 the request to try to start and finish in one day, and
10 we are trying to do our best to try to accommodate
11 that. We are somewhat concerned if witnesses will
12 start to spill over to a following day, first of all
13 because in some cases they may not have two consecutive
14 days, may have to travel back. Second, it is an
15 inconvenience for the witnesses. And third, it causes
16 disruption with respect to the following witnesses.

17 JUDGE McGUIRE: Yes.

18 MR. OLIVER: And as a result, we, of course,
19 have been trying to work with respondent in both
20 directions to try to anticipate how much time is
21 expected, but if there is anything we all collectively
22 can do to try to get witnesses on and off in a single
23 day, that will assist with the scheduling.

24 JUDGE McGUIRE: I understand that. Perhaps we
25 can start, you know, earlier in the morning, and I've

1 been allowing up to now an hour and a half for lunch,
2 we could cut back on that and, you know, it's
3 whatever -- but I think that's an excellent idea. I
4 mean, after all, we have got quite a few people coming
5 in from out of town, and I think we owe them every --
6 our best efforts to attempt to try to accommodate their
7 schedules as well. So, any ideas at this point or do
8 you just want to talk about it at some other point?

9 MR. PERRY: We would be happy to talk about any
10 of those suggestions. I think running later in the day
11 is more of a problem for us than starting early.

12 JUDGE McGUIRE: Well, then, maybe we should
13 start -- we shouldn't start at say 9:30. What if we
14 start at 9:00 a.m.? That will give us another half
15 hour. But again, I am not going to order it
16 inherently. I am trying to accommodate the two sides
17 as well. So, whatever, you know, agreement the two
18 sides can come up with, I have no problem, because I'm
19 here every morning at 7:00 a.m., and I'm here until
20 about 8:00 p.m. at night, so if I'm in the courtroom or
21 in my office, really it is the same, so -- but why
22 don't you all confer at a break, and then if you have
23 any understandings, we'll be happy to entertain them.

24 MR. PERRY: I would like to confer with the
25 court reporter, too, to make sure that she --

1 JUDGE McGUIRE: Well, that's true, we have to
2 confer with our court reporter.

3 Okay, if there isn't anything else at this
4 time, I think complaint counsel may proceed with its
5 witness.

6 MR. OLIVER: Thank you, Your Honor.

7 Mr. Rhoden?

8 JUDGE McGUIRE: Sir, let me just caution you
9 that you are still under oath from Thursday. Have a
10 seat.

11 Whereupon--

12 DESI RHODEN

13 a witness, called for examination, having previously
14 been duly sworn, was examined and testified further as
15 follows:

16 MR. OLIVER: Your Honor, before I proceed, I
17 did mention yesterday that I was going to seek
18 permission to -- from our technology department to
19 actually introduce this motherboard as a demonstrative
20 exhibit. They have said that I could use it for that
21 purpose, so I would like to offer it as a
22 demonstrative.

23 I would also like to mention that the one thing
24 that -- one change we have done since yesterday is I
25 have placed a memory module in the slot where Mr.

1 Rhoden indicated it would go, and it's appropriate to
2 have Mr. Rhoden confirm that that is the proper
3 placement of a memory module.

4 JUDGE McGUIRE: Mr. Perry, any opposition to it
5 being marked as -- it won't be entered, it will just be
6 marked.

7 MR. PERRY: No objection. We would like it to
8 stay around the courtroom and available for other
9 witnesses.

10 JUDGE McGUIRE: Yeah, no problem. What is
11 that, DX-3 or 4?

12 THE REPORTER: Three.

13 JUDGE McGUIRE: DX-3.

14 (DX Exhibit Number 3 was marked for
15 identification.)

16 DIRECT EXAMINATION (cont)

17 BY MR. OLIVER:

18 Q. Mr. Rhoden, how are you this morning?

19 A. I am fine, thank you.

20 Q. Mr. Rhoden, when we left off yesterday, we were
21 discussing JX-31. These were meeting minutes from
22 March 1996. Do you still have that document in front
23 of you?

24 A. Yes, I do.

25 Q. If I could ask you to turn, please, to page 9

1 of JX-31.

2 A. Okay.

3 Q. If I could direct your attention to 13.2, but
4 there appear to be two different 13.2s on this page.
5 It would be about three lines -- three headings up from
6 the bottom. It reads, "Samsung Future SDRAM Concepts."

7 Do you see that one?

8 A. Yes, I do.

9 Q. What does that item refer to?

10 A. This refers to a presentation made by Samsung
11 at the meeting, and it looks like it's in Attachment U.

12 Q. Were you present at the time that Samsung made
13 the presentation?

14 A. Yes, I was.

15 Q. Did you observe the Samsung presentation?

16 A. Yes, I did.

17 Q. Did you understand the Samsung presentation at
18 the time it was made?

19 A. Yes, I did.

20 Q. What did the Samsung presentation involve?

21 A. They were making a proposal relative to PLL and
22 DLL and its inclusion within the standard.

23 Q. Did the Samsung proposal relate to a proposed
24 change to the earlier SDRAM standard, or did it relate
25 to a future standard, or did it relate to something

1 else?

2 A. All of the information within the committee
3 necessarily is -- it could be any one of those options,
4 either a change to the existing or to a future. Since
5 we were already by this time actually past the early
6 development, it would probably have been for future
7 devices, but anything within the committee, it's up to
8 the committee how they decide to use the information.

9 Q. If I could direct your attention to page 68 of
10 JX-31, please.

11 A. Okay.

12 Q. Is this the Samsung presentation that you
13 observed at the March 1996 meeting?

14 A. Yes, it is.

15 Q. If I could direct your attention to the next
16 page on page 69.

17 A. Yes.

18 Q. Based on your understanding at the time that
19 Samsung was making this proposal, what was Samsung
20 proposing for a future clocking scheme?

21 A. Samsung was actually pointing out a limitation
22 of the PLL/DLL memory -- excuse me, of the PLL/DLL
23 circuitry within the memory for the clocking scheme
24 itself, and they were proposing a different approach,
25 if you will.

1 Q. Again, based on your understanding at the time
2 you observed the Samsung presentation, what was Samsung
3 stating about the limitations of the PLL/DLL for
4 memory?

5 A. They were proposing using a separate
6 functionality, a separate pin, if you will, to --
7 instead of using the PLL in this presentation.

8 Q. Did you have an understanding of why Samsung
9 was proposing not to use PLL/DLL?

10 A. Samsung at the time was -- had the belief --
11 well, I mean, they list in their presentation here,
12 they list their opinion, that it would take a while for
13 it to wake up, and there are always a number of
14 engineering trade-offs in particular options chosen,
15 and Samsung felt like there were other options that
16 were perhaps better.

17 Q. At the time that Samsung made this
18 presentation, did you agree with the limitations that
19 Samsung described for PLL/DLL for memory?

20 A. Excuse me, I'm not quite sure I understand.

21 Q. At the time that Samsung made this presentation
22 and at the time that Samsung explained its views
23 regarding limitations of PLL/DLL for memory, did you
24 agree with the limitations that Samsung was describing?

25 MR. PERRY: Your Honor, I would object that

1 that's compound. There's quite a few different items
2 listed here.

3 JUDGE McGUIRE: That's sustained. Could you
4 please restate the question?

5 BY MR. OLIVER:

6 Q. Mr. Rhoden, if I could direct your attention to
7 page 69, please.

8 A. Sixty-nine, okay.

9 Q. Underneath the main bullet point, "Limitation
10 of PLL/DLL for Memory," do you see the second
11 sub-bullet, "Long power down wake up time; PLL/DLL
12 Locking time"?

13 Do you see that?

14 A. Yes, I do.

15 Q. At the time that Samsung was making this
16 presentation, did you understand what Samsung meant by
17 that reference?

18 A. Certainly.

19 Q. Could you explain what Samsung meant by that
20 reference?

21 A. Their explanation -- and what they were
22 explaining at the time was that the use of a PLL/DLL on
23 the memory would necessarily require a long period of
24 time to shut the device down and wake it back up in a
25 normal system, and of course, that is true.

1 Q. So, at the time that you heard this
2 presentation, you agreed with that statement?

3 A. Oh, certainly.

4 Q. The third bullet point there reads, "Power/VBB
5 Bump may require relocking of PLL/DLL."

6 Do you see that?

7 A. Yes, I do.

8 Q. At the time, did you have an understanding of
9 what Samsung meant by that statement?

10 A. Yes, I did.

11 Q. What was your understanding of what Samsung
12 meant?

13 A. Samsung was pointing out that the power supply
14 fluctuations may cause relocking and essentially may
15 cause the circuit to have to go through a future
16 initialization process.

17 Q. And did you agree with that assessment?

18 A. Yes, I did.

19 Q. The fourth bullet point there reads, "Si area
20 and yield due to process sensitivity; Add Cost."

21 Do you see that?

22 A. Yes, I do.

23 Q. At the time that Samsung made the presentation,
24 did you understand that reference?

25 A. Yes, I did.

1 Q. Can you please explain what that reference
2 means?

3 A. Well, Si is silicon, so what they were saying
4 is that this would require additional die area, and the
5 die area -- by requiring additional die area, it would
6 have an impact on yield and add relative cost to the
7 device itself.

8 Q. At the time you observed this presentation, did
9 you agree with that assessment?

10 A. Yes, I did.

11 Q. If I could direct your attention, please, to
12 page 71.

13 A. Okay.

14 Q. Underneath Future SDRAM - Proposal, it reads,
15 "Proposed Clocking Scheme."

16 Do you see that?

17 A. Yes, I do.

18 Q. Did this page summarize the clocking scheme
19 that Samsung was proposing?

20 A. Yes, it does.

21 Q. And at the time that you observed this
22 presentation, did you have an understanding of the
23 clocking scheme that Samsung was proposing?

24 A. Yes, I did.

25 Q. Could you please summarize briefly the clocking

1 scheme that Samsung was proposing?

2 A. Well, briefly, Samsung was recommending that we
3 generate a phase shifted clock inside of the device
4 without the use of PLL/DLL and to use that type of
5 signal and that type of circuitry rather than the
6 PLL/DLL implementation to adjust the clock.

7 Q. If I could direct your attention to the fourth
8 bullet point on that page, it reads, "Data in sampled
9 at both edge of Clock into memory."

10 A. Yes.

11 Q. Do you see that?

12 A. Yes, I do.

13 Q. At the time that you observed the Samsung
14 presentation, did you have an understanding of what
15 Samsung meant by that statement?

16 A. Yes, I do.

17 Q. Could you summarize briefly your understanding
18 of what Samsung was proposing in that statement?

19 A. Yeah, this would be something we talked about
20 yesterday, a dual edge clocking or clocking with a
21 rising and falling edge. It's simply -- basically the
22 same type of approach to sampling data. So, if you had
23 rising edge and falling edge, you would be sampling
24 both edges of the clock.

25 Q. The bullet point underneath that says, "Strobe

1 clock from memory to eliminate the skew."

2 Do you see that?

3 A. Yes, I do.

4 Q. Again, at the time that Samsung made this
5 presentation, did you understand what Samsung meant
6 with that statement?

7 A. Yes, I did.

8 Q. Could you please explain briefly what Samsung
9 meant by that statement?

10 A. Yeah, they were recommending that we have a
11 separate clock, if you will, that would track and
12 follow with the read data. The term they use is a
13 strobe clock, which is essentially what we have.

14 Q. If I could also direct your attention to the
15 first bullet point on that page, "PLL in Clock
16 Generator located at memory controller side," do you
17 see that?

18 A. Yes. Yes, I do.

19 Q. And at the time that Samsung made this
20 presentation, did you have an understanding of what
21 Samsung meant by that?

22 A. Yes, I did.

23 Q. Could you summarize briefly your understanding
24 of what Samsung meant by that?

25 A. Yes, Samsung was actually proposing that

1 instead of putting a PLL in every single memory device
2 that might occur in the system, their proposal was to
3 actually put a single PLL in the memory controller
4 instead of actually putting it into multiple locations.
5 So, that was their proposal.

6 Q. Just so the record is clear, was Samsung
7 proposing to put the PLL in the memory controller in
8 addition to PLL/DLLs on each chip or instead of
9 PLL/DLLs on the chip or for some other function?

10 A. They were proposing putting it in the memory
11 controller instead of putting it in the memory
12 device -- memory devices, plural.

13 Q. By the way, based on your understanding of the
14 JEDEC disclosure policy as of March 1996, was it your
15 understanding that this proposal constituted JEDEC
16 work?

17 A. Absolutely.

18 Q. Was it your understanding at that time that
19 this proposal would have triggered any obligations
20 under the JEDEC disclosure policy?

21 A. Yes, it would have.

22 Q. By the way, with respect to the Samsung
23 proposal we've just been looking at, again, based on
24 your understanding at the time that that proposal was
25 made, did you think that that was a good proposal?

1 A. It was -- it was a reasonable proposal, one of
2 the many discussions that we were having at that time
3 about which path to take -- it was a reasonable
4 approach about which path to take for next generation
5 memory.

6 MR. OLIVER: Your Honor, at this time, I would
7 like to offer JX-31 into evidence, please.

8 JUDGE MCGUIRE: Mr. Perry?

9 MR. PERRY: No objection.

10 JUDGE MCGUIRE: So entered at this time.

11 (JX Exhibit Number 31 was admitted into
12 evidence.)

13 MR. OLIVER: Your Honor, I have one additional
14 exhibit here which I believe may not be in Mr. Rhoden's
15 pile. Do I have permission to approach?

16 JUDGE MCGUIRE: Please.

17 BY MR. OLIVER:

18 Q. Mr. Rhoden, I have handed you a document that's
19 been marked as CX-361. Do you see that document?

20 A. Yes, I do.

21 Q. Do you recognize that document?

22 A. Yes.

23 Q. What is it?

24 A. This is actually a survey ballot that I wrote
25 some -- some years ago, actually in -- it looks like

1 November 1995.

2 Q. If I could direct your attention to the Subject
3 line, it reads, "Subject: SDRAM-Lite survey ballot."

4 Do you see that?

5 A. Yes, I do.

6 Q. Now, Mr. Rhoden, I believe you testified
7 yesterday with respect to a SDRAM-Lite proposal within
8 JEDEC. Do you recall that?

9 A. Yes, I do.

10 Q. Does this document, CX-361, relate in any way
11 to the survey-lite -- excuse me, to the SDRAM-Lite that
12 you testified about yesterday?

13 A. Yes, it does.

14 Q. Could you please explain how CX-361 relates to
15 the SDRAM-Lite proposal you were discussing yesterday?

16 A. Sure. The -- this particular survey ballot, as
17 I explained yesterday about survey ballots, it would be
18 a collection of all of the topics that we had been
19 discussing for some time, usually within JEDEC, and at
20 some point we would need to make decisions, basically
21 get a sense of the committee to see what path we would
22 take moving forward.

23 So, I collected the information that we had
24 been using in the committee, put it together in a
25 survey ballot such that we could then approach it from

1 the standpoint of asking questions about what were the
2 preferences of the people that were attending the
3 committees at the time.

4 Q. If I could direct your attention to page 2,
5 please, of the survey ballot.

6 A. Yes.

7 Q. And if you look almost halfway down, there's a
8 line that reads, "Discussion."

9 A. Yes.

10 Q. Actually, I believe the line actually begins
11 just above that on the right-hand side, "Items Still
12 Under Discussion."

13 Do you see that?

14 A. I see -- oh, yes, items still under discussion,
15 correct. I'm sorry, the text is -- sometimes email is
16 a little strange.

17 Q. And then under that it reads, "CAS latency
18 equals 1, no. Unanimous (a ballot has already passed
19 to delete the functionality.)"

20 Can you explain what that refers to?

21 A. Yes, at the time we had CAS latency one, two
22 and three as part of the SDRAM standard, and we had
23 already agreed that we would remove the programmable
24 version of CAS latency of one, and so there was no
25 reason to add a discussion about CAS latency one,

1 because it had already been removed from the standard.
2 It was a ballot that was actually in the process and on
3 its way to the JEDEC Council at that time.

4 Q. So, at the time of this survey ballot, what CAS
5 latency values were still available in the standard?

6 A. Two and three.

7 Q. If I can direct your attention to the line,
8 "Does your company want to include CAS latency of 2 in
9 the reduced specification?"

10 Do you see that line?

11 A. Yes, I do.

12 Q. Could you please explain what that refers to?

13 A. Well, actually, this is a question to the
14 people that are involved, if they would like to remove
15 CAS latency two and leave the single value for CAS
16 latency three in the device.

17 MR. OLIVER: Your Honor, at this time I would
18 like to offer into evidence CX-361.

19 JUDGE MCGUIRE: Mr. Perry?

20 MR. PERRY: No problem, Your Honor, with that.

21 JUDGE MCGUIRE: It's entered.

22 (CX Exhibit Number 361 was admitted into
23 evidence.)

24 BY MR. OLIVER:

25 Q. Mr. Rhoden, I'd like to shift gears now

1 somewhat. I'd like to return to the issue of the JEDEC
2 disclosure policy, and let me ask, between late 1991
3 and mid-1996, did you ever have occasion to speak with
4 Richard Crisp at Rambus about the JEDEC disclosure
5 policy?

6 A. Yes, I did.

7 Q. How did that conversation come about?

8 A. Actually, Mr. Crisp asked me -- asked me a
9 question or two about the patent policy itself.

10 Q. Can you please describe your conversation with
11 Mr. Crisp to the best of your recollection?

12 A. Yes. Actually, the terminology that I've used,
13 he asked me about patents, patent applications, and I
14 said in the patent disclosure policy, the patent
15 applied to everything that was in the patent process,
16 and it necessarily included all of the above, patent,
17 patent applications, if you will.

18 And also at the same time, when I had that
19 conversation and at the time that I had it with him, I
20 said that if you would like to have a legal opinion,
21 you can also contact Mr. John Kelly if you like.

22 Q. Just so that the record is clear, in your
23 discussions with Mr. Crisp, did you specifically
24 mention patent applications as well as patents?

25 A. Oh, certainly, yes, because he specifically

1 asked me.

2 Q. And why did you mention to Mr. Crisp that if he
3 had questions, he should contact Mr. Kelly?

4 A. Well, it is standard policy inside JEDEC that
5 what we do as chairmen and what we do with people or
6 with anyone that's attending the committee is certainly
7 we have the patent policy, and we review that, and we
8 have it, as we explained yesterday, in a number of
9 different places to reinforce everybody's commitment
10 and knowledge of it, and we always have at -- basically
11 we have at our option the ability to contact and talk
12 with the then EIA legal counsel, which was John Kelly,
13 and now it's the JEDEC legal counsel, the same person,
14 John Kelly.

15 Q. Now, Mr. Rhoden, yesterday you testified with
16 respect to a presentation by Rambus of its technology
17 at Hewlett Packard. Do you recall that?

18 A. Excuse me, would you repeat that?

19 Q. Yes. Yesterday, you testified with respect to
20 a presentation by Rambus of its technology at Hewlett
21 Packard.

22 A. Yes.

23 Q. Do you recall that?

24 A. Yes, I do.

25 Q. At that presentation, what, if anything, did

1 Rambus say about any pending patent applications?

2 A. They did not say anything about pending patent
3 applications.

4 Q. Between late 1991 and mid-1996, what
5 understanding, if any, did you have that Rambus had
6 patent applications pending before the Patent &
7 Trademark Office?

8 A. Well, I had only my own internal assumption
9 that they probably did have patent applications
10 relevant to the presentation that they had made to me
11 at HP, since that was under NDA.

12 JUDGE MCGUIRE: I'm sorry, sir, I didn't
13 understand that answer. Could you repeat that, please?

14 THE WITNESS: Oh, sure. It was my
15 understanding or assumption I guess perhaps is the
16 better word, is that Rambus would probably have had
17 patent applications relative to the proposal that they
18 made to me when I was at Hewlett Packard, because that
19 presentation was made under a nondisclosure agreement.

20 JUDGE MCGUIRE: Thank you.

21 BY MR. OLIVER:

22 Q. Did anyone from Rambus ever suggest to you that
23 its proprietary technology extended outside of the
24 RDRAM architecture?

25 A. They did not.

1 Q. What, if any, statements did Rambus
2 representatives make to suggest to you that the SDRAM
3 that was under the process of standardization at JEDEC
4 used Rambus proprietary technology?

5 A. They did not make any statements to me relative
6 to that.

7 Q. Mr. Rhoden, if you could please look in the
8 pile of documents in front of you to see if you could
9 find a JX-36. This is a set of meeting minutes from
10 March 1997.

11 A. Okay. Okay, I have it.

12 Q. Mr. Rhoden, do you recognize this document?

13 A. Yes, I do.

14 Q. What is this document?

15 A. This is a meeting minutes for the JC-42.3
16 subcommittee on DRAM. It was in March 1997.

17 Q. Were you present at this meeting?

18 A. Yes, I was.

19 Q. Could I please direct your attention to page 7
20 of JX-36?

21 A. Okay.

22 Q. And specifically I'd like to direct your
23 attention to item 6.6. There's a caption NEC DDR SDRAM
24 for High End Systems. Do you see that?

25 A. I see that.

1 Q. If I could read that to you, please. "A first
2 showing was made by NEC (See Attachment F). It
3 included a read clock and a write clock. A discussion
4 of the clock issue took place. Some on the Committee
5 felt that Rambus had a patent on that type of clock
6 design. Others felt that the concept predated Rambus
7 by decades. Some Committee members did not feel that
8 the Rambus patent license fee fit the JEDEC requirement
9 of being reasonable. Rambus has also told JEDEC that
10 they do not intend to comply with JEDEC patent
11 policies."

12 Do you see that?

13 A. Yes, I do.

14 Q. Were you present at the meeting at the time of
15 the NEC presentation?

16 A. Yes, I was.

17 Q. Did you observe the NEC presentation?

18 A. Yes, I did.

19 Q. And were you present at the JEDEC meeting
20 during the discussion reflected in item 6.6?

21 A. Yes, I was.

22 Q. If I could ask you to turn, please, to
23 Attachment F. I'll see if I can find a page reference
24 for you in just a minute.

25 Mr. Rhoden, if you would look at page 56 --

1 A. Fifty-six? Yes, okay.

2 Q. Do you see on page 56 the NEC presentation for
3 DDR SDRAM for High End systems?

4 A. Yes, I do.

5 Q. Was this the presentation referred to in item
6 6.6?

7 A. Yes, it would have been, Attachment F.

8 Q. If I could direct your attention, please, to
9 page 57.

10 A. Okay. Okay.

11 Q. Is there anything on page 57 that demonstrates
12 the NEC proposal to use a read clock and a write clock?

13 A. Sure, it's -- this is actually a pin-out
14 representation, and if you look about two-thirds of the
15 way down the right-hand side of the pin labels, down at
16 pin 36 -- yeah, it's pin 36, you will see the
17 terminology is read clock. It's actually highlighted
18 so they could bring attention to it for discussion.

19 Q. At the time that you observed this
20 presentation, did you have an understanding of what NEC
21 was proposing?

22 A. Yes, I did.

23 Q. Could you please summarize briefly your
24 understanding of what NEC was proposing?

25 A. Sure. I -- NEC was proposing using this read

1 clock signal as a separate clocking signal to determine
2 the flow of the data during a read, and necessarily
3 that would mean that the write data would actually use
4 the other clock pin, which is two pins above that,
5 would be the clock pin. So, you would have a separate
6 pin for reading and a separate pin for writing within
7 the clocking mechanism.

8 MR. PERRY: Your Honor, we couldn't hear that.
9 He's fading away.

10 JUDGE McGUIRE: You couldn't hear the answer or
11 the question?

12 MR. PERRY: We couldn't hear the answer.

13 JUDGE McGUIRE: Are we having trouble again
14 with the microphone or was he just not speaking
15 clearly?

16 MR. PERRY: I think it's the microphone, Your
17 Honor, perhaps it's changed where the input is, but
18 he's certainly not as audible this morning as he was
19 yesterday.

20 THE WITNESS: They worked on it this morning.

21 JUDGE McGUIRE: That sounds a little better.

22 THE WITNESS: I will get it over here and try
23 not to chew it and bite off the end of it, but I'll
24 try.

25 JUDGE McGUIRE: Okay, why don't we restate the

1 question and then we will go back.

2 MR. OLIVER: Would it be possible to have the
3 court reporter read the question and answer back?

4 JUDGE McGUIRE: I will ask the court reporter
5 to please read the question.

6 (The record was read as follows:)

7 "QUESTION: Could you please summarize briefly
8 your understanding of what NEC was proposing?

9 "ANSWER: Sure. I -- NEC was proposing using
10 this read clock signal as a separate clocking signal to
11 determine the flow of the data during a read, and
12 necessarily that would mean that the write data would
13 actually use the other clock pin, which is two pins
14 above that, would be the clock pin. So, you would have
15 a separate pin for reading and a separate pin for
16 writing within the clocking mechanism."

17 JUDGE McGUIRE: Okay, Mr. Perry?

18 MR. PERRY: Thank you, Your Honor.

19 JUDGE McGUIRE: Okay, you can proceed, Mr.
20 Oliver.

21 MR. OLIVER: Thank you, Your Honor.

22 BY MR. OLIVER:

23 Q. Mr. Rhoden, if I could direct your attention,
24 please, back to page 7, still within JX-36.

25 A. Okay. Okay.

1 Q. If I could direct your attention specifically
2 within the portion that we looked at a moment ago to
3 sentences that read, "A discussion of the clock issue
4 took place. Some on the committee felt that Rambus had
5 a patent on that type of clock design."

6 Do you see that?

7 A. Yes, I do.

8 Q. Can you please summarize briefly your
9 recollection, if any, of the discussion that took
10 place?

11 A. My recollection of the discussion, as I recall,
12 was that there were some people knowledgeable of some
13 of the Rambus architectures at the time, and they felt
14 like this would have an impact on some of the IP that
15 Rambus was claiming at the time.

16 Q. Did those individuals explain why?

17 A. I don't recall a -- it was the use of the read
18 clock and the write clock as separate items, and
19 additional depth, I -- I can't recall additional depth
20 of the discussion, no.

21 Q. What, if anything, happened with respect to the
22 NEC presentation after the March 1997 JEDEC meeting?

23 A. Well, because of the disclosure of some of the
24 people knowledgeable in the industry, there was no
25 further discussion, no further action taken on this

1 issue.

2 Q. Do you have an understanding of why JEDEC took
3 no further action with respect to this item?

4 A. It was specifically because of the patent
5 itself or it was specifically because of the disclosure
6 that had taken place by others knowledgeable in the
7 industry.

8 MR. OLIVER: Your Honor, at this time I'd like
9 to offer into evidence JX-36.

10 JUDGE McGUIRE: Any opposition?

11 MR. PERRY: No objection.

12 JUDGE McGUIRE: So entered.

13 (JX Exhibit Number 36 was admitted into
14 evidence.)

15 BY MR. OLIVER:

16 Q. Mr. Rhoden, between late 1991 and mid-1996,
17 while you were attending the JC-42.3 subcommittee
18 meetings, did anyone from Rambus ever make any
19 statements with respect to Rambus' patent position?

20 A. I don't recall any particular statements about
21 Rambus patents directly in the meeting, no.

22 Q. Mr. Rhoden, when did you first learn that
23 Rambus was contending that its patent -- its patents
24 covered products outside the RDRAM architecture?

25 A. I believe that my first discovery of that is

1 when I gained knowledge of a legal action that was
2 taking place between Rambus and I believe it was
3 Hitachi at the time.

4 Q. And when did --

5 A. Oh, excuse me, and that would have been in late
6 1999, something like that.

7 Q. Now, at that time, did you have an
8 understanding that Rambus was asserting their patents
9 covered features found in SDRAMs?

10 A. I had a vague understanding at the time -- at
11 that time, I think only what I had learned in the press
12 and from outside discussion.

13 Q. Did you have an understanding of what
14 particular features of SDRAMs Rambus alleged infringed
15 its patents?

16 A. Yes, I -- at least a couple of them. The one
17 that was most commonly discussed at that time was
18 programmable CAS latency.

19 Q. Were you also aware that Rambus alleged that
20 its patents covered certain features found in DDR
21 SDRAMs?

22 A. Yes.

23 Q. Did you have an understanding of what
24 particular features of DDR SDRAMs Rambus alleged
25 infringed its patents?

1 MR. PERRY: Your Honor, can I just ask for some
2 foundation? If he's just talking about what he read in
3 the papers, I think we might be able to move on.

4 JUDGE McGUIRE: Yes. Could you please restate
5 on that, Mr. Oliver?

6 BY MR. OLIVER:

7 Q. What was your -- what was the basis of your
8 understanding of Rambus' infringement action against
9 Hitachi?

10 A. It was my -- my understanding -- the basis of
11 my understanding came from obviously, as I said, from
12 published reports. It also came from my contacts
13 within the industry, some of which were directly from
14 inside of Hitachi. So, that's where I gained -- that's
15 where I gained my information.

16 Q. Based on that information, did you have an
17 understanding as to what features Rambus was alleging
18 in DDR SDRAMs were covered by its patents?

19 A. Yes, I did.

20 Q. And what was that understanding?

21 A. The understanding was that it would cover dual
22 edge clocking and use of on-chip PLL/DLL.

23 Q. Mr. Rhoden, if I could move back in time a bit
24 to the time of the ballot on the mode register. Do you
25 recall that we looked at that yesterday?

1 A. Yes, I do.

2 Q. Now, at the time of the mode register ballot,
3 were you at Hewlett Packard or at VLSI?

4 A. Actually, I think I probably -- I probably had
5 mode register ballots at both places. I was at Hewlett
6 Packard at the time of the discussion and ballot that
7 we discussed yesterday.

8 Q. That would be the ballot item 376.3?

9 A. That's correct. That was in about 1992.

10 Q. Did Hewlett Packard vote on that mode register
11 ballot?

12 A. I think so, yes.

13 Q. Did you cast that vote on behalf of Hewlett
14 Packard?

15 A. It is quite possible at the time that I did not
16 specifically cast the vote, but I -- I was working with
17 another person within VLSI, and -- that was working
18 from the California headquarters office, and it is
19 quite possible that she actually cast the vote herself.

20 Q. I'm sorry, you were working with another person
21 within Hewlett Packard?

22 A. Yes, I'm -- her name was Francois Lemouel
23 (phonetic), and I'm sorry I can't spell it for you.

24 Q. Well, what input, if any, did you have in the
25 position that Hewlett Packard took on that ballot?

1 A. I believe HP was in favor of the ballot, yes.

2 Q. And what input did you personally have, if any,
3 with respect to Hewlett Packard's position?

4 A. Oh, I recommended that Hewlett Packard approve
5 it.

6 Q. I'm sorry?

7 A. I recommended approval of the ballot.

8 Q. What effect, if any, would it have had on your
9 recommendation at that time if Rambus had disclosed
10 that it believed it could obtain patents covering
11 programmable CAS latency?

12 MR. PERRY: Calls for speculation, Your Honor.

13 JUDGE McGUIRE: Sustained.

14 BY MR. OLIVER:

15 Q. Mr. Rhoden, I believe that you testified that
16 you first learned that Rambus was asserting patents
17 outside of the RDRAM architecture in late 1999. Is
18 that correct?

19 A. That's correct.

20 Q. When you first learned that Rambus was
21 asserting patents that would cover features in the
22 SDRAM and DDR SDRAM products, did you consider
23 proposing that JEDEC revise the SDRAM standard to
24 replace programmable CAS latency and burst length?

25 A. Well, I did consider it, yes.

1 Q. What actions, if any, did you take following
2 that?

3 A. Well, at the recommendation of some others in
4 the committee, I did make a proposal that -- relative
5 to changing the CAS to a fixed CAS latency.

6 Q. What happened to that proposal?

7 A. It was very poorly received within the
8 committee, because there were products shipping in
9 pretty high volume by that time. It was pretty
10 difficult to change.

11 Q. At that time, did you ever consider proposing
12 that JEDEC revise the DDR SDRAM standard to replace
13 on-chip DLL?

14 A. No, I did not.

15 Q. Why not?

16 A. Based on the response that I got in the first
17 proposal and based on the wide industry use and high
18 volume production of all the devices, I considered I'd
19 just be wasting my time.

20 Q. Could you please explain how, if at all, the
21 high volume of products you referred to related to your
22 decision?

23 A. Yes, as we've discussed before, JEDEC standards
24 necessarily involve a lot of companies that are
25 involved in the development and an even much broader

1 base of companies that actually pick up and use it, and
2 this has historically been the case, and so during this
3 time period, just like all time periods before with
4 JEDEC standardization, so many people use it, people
5 inside and people outside of JEDEC, the high volume
6 comes from a -- the broad customer usage and broad
7 customer acceptance, and so by the time S -- your
8 question is about the high volume, and the high volume
9 is based on the very broad application usage, so there
10 would be many applications and necessarily a high
11 volume of devices themselves.

12 MR. PERRY: Your Honor, I am going to move to
13 strike if it went beyond what those thought processes
14 were at the time, which I think was the question.

15 JUDGE McGUIRE: Well, let me ask you, sir, if
16 that went beyond the thought processes at the time.
17 I'm -- I can't quite put that in context, but --

18 THE WITNESS: No, Your Honor.

19 JUDGE McGUIRE: Are you satisfied, Mr. Perry?

20 MR. PERRY: If that's what it's limited to,
21 that's fine, Your Honor.

22 JUDGE McGUIRE: Okay, proceed.

23 BY MR. OLIVER:

24 Q. Mr. Rhoden, in your role as chairman of the
25 JC-42 committee, have you ever had occasion to consider

1 the impact, if any, of Rambus' lawsuits on JEDEC's
2 standard-setting work?

3 A. I have.

4 Q. Have you reached any conclusions regarding the
5 impact, if any, of Rambus' lawsuits on JEDEC's
6 standard-setting work?

7 MR. PERRY: Your Honor, we are going to object
8 to that as being irrelevant and asking for an opinion
9 from this gentleman.

10 MR. OLIVER: Your Honor, this is not asking for
11 opinion with respect to any matter specific to this
12 litigation, but rather, with respect to his work, his
13 responsibilities as the JC-42 chairman, and as to
14 conclusions that he's reached in his role as JC-42
15 chairman.

16 JUDGE McGUIRE: Then overruled on that basis.
17 You may restate it, as you just have.

18 MR. OLIVER: Thank you, Your Honor.

19 BY MR. OLIVER:

20 Q. Mr. Rhoden, have you reached any conclusions
21 regarding the impact, if any, of Rambus' lawsuits on
22 JEDEC's standard-setting work?

23 A. Yes.

24 Q. What conclusions have you reached regarding the
25 impact, if any, on Rambus' standard-setting -- excuse

1 me --

2 A. My conclusions --

3 Q. If I could restate the question, please.

4 What conclusions have you reached regarding the
5 impact, if any, of Rambus' lawsuits on JEDEC's
6 standard-setting work?

7 A. Well, the fundamental premise inside JEDEC is
8 open standardization, and open standardization
9 necessarily means standards that are developed that are
10 either free of intellectual property or at least all
11 intellectual property is known at the time of creation
12 of the standard, and so based on the lawsuits, that
13 would -- that would be a fundamental change, and so I
14 would expect a fundamental change in JEDEC and a
15 fundamental shift away from open industry
16 standardization.

17 Q. And what impact, if any, would that have on the
18 JEDEC standard-setting process?

19 MR. PERRY: Pure speculation at this point.
20 It's asking him what impact it would have in the
21 future. He's just asking for pure speculation.

22 MR. OLIVER: Your Honor, again, if my question
23 is not clear, I can rephrase it, but I was intending to
24 ask him with respect to conclusions he has reached in
25 his role as chairman of the JC-42 committee.

1 MR. PERRY: Your Honor, if he's just tying it
2 to the lawsuits, I think we ought to be clear, it's
3 just the lawsuits he's talking about, or are you
4 talking about -- it's just not clear what the but for
5 world is that we're talking about.

6 JUDGE McGUIRE: Okay, Mr. Oliver, can you
7 restate in that context? Clarify exactly what context
8 you're offering this inquiry.

9 MR. OLIVER: Yes, Your Honor.

10 BY MR. OLIVER:

11 Q. Mr. Rhoden, in your previous responses, I
12 believe you stated that there may be movement away from
13 open standards, and I would like to ask you to explain
14 in a little more detail if you could, please, your
15 conclusions as chairman of the 42 committee how, if at
16 all, Rambus lawsuits might be tied into the move away
17 from open standards.

18 A. Sure. The standards are developed, and as we
19 said, they must be timely, so we operate -- the term
20 that I've used actually sometimes is on the edge of
21 technology, and the open discussions -- the conclusions
22 that I have reached is the open discussions would now
23 be essentially restricted, if not eliminated from the
24 people that are actually bringing the proposals into
25 JEDEC. They would necessarily keep them and operate in

1 some other environment rather than disclosing them in
2 an open environment like JEDEC.

3 MR. OLIVER: Thank you, Mr. Rhoden.

4 No further questions, Your Honor.

5 JUDGE McGUIRE: Okay, thank you, Mr. Oliver.

6 At this time, we will entertain the cross
7 examination of the witness.

8 MR. PERRY: Your Honor, it will take us just a
9 few minutes to set up.

10 JUDGE McGUIRE: Let's go off the record. How
11 much time do you need?

12 MR. PERRY: Oh, five to eight minutes.

13 JUDGE McGUIRE: Then let's take a break for
14 that period.

15 MR. PERRY: Thank you.

16 (A brief recess was taken.)

17 JUDGE McGUIRE: Okay, let's go back on the
18 record.

19 At this time, I'll allow the cross examination
20 of the witness. Mr. Detre, did you have a comment?

21 MR. DETRE: Yes, Your Honor. In the
22 examination I will possibly be referring to Mr.
23 Rhoden's deposition transcript from the Rambus vs.
24 Infineon case and also from his testimony at the
25 evidentiary hearing in that case, and I thought if it's

1 convenient at this time, Your Honor, I would distribute
2 copies of those transcripts.

3 JUDGE McGUIRE: Please do. Do you intend to
4 offer these portions of the transcript or the entire
5 transcript?

6 MR. DETRE: Well, at this point, Your Honor, I
7 may just be referring to them in my examination.

8 JUDGE McGUIRE: Okay, that's fine, that's fine.

9 MR. DETRE: May I approach, Your Honor?

10 JUDGE McGUIRE: If we do -- please. If we do
11 decide ultimately to offer these, I don't see it
12 inherently imperative that we offer the entire 300 or
13 400-page transcript. We might be able to offer
14 portions and counter excerpts. So, let's keep that in
15 mind.

16 MR. DETRE: Certainly.

17 MR. OLIVER: Your Honor, I was going to object
18 that when a witness appears live, the transcript would
19 be hearsay, and I don't see any occasion to offer
20 transcripts when the witness appears live.

21 JUDGE McGUIRE: The foundation, Mr. Detre?

22 MR. DETRE: Well, I'm not offering them at this
23 time, Your Honor, as I said. I may be referring to
24 them in the examination, but I'm not offering them.

25 JUDGE McGUIRE: On that point, then, overruled.

1 All right, proceed, Mr. Detre.

2 CROSS EXAMINATION

3 BY MR. DETRE:

4 Q. Good morning, Mr. Rhoden.

5 A. Good morning.

6 Q. Mr. Rhoden, yesterday you testified about
7 RDRAM. Do you recall that?

8 A. Yes, I do.

9 Q. Now, have you heard of base concurrent and
10 direct RDRAM?

11 A. I'm not sure that I've heard -- I have heard of
12 the term concurrent RDRAM. I have not heard of the
13 other terminology that you used.

14 Q. Are you aware that there are different versions
15 of RDRAM?

16 A. I have heard about them, yes.

17 Q. When you were testifying about RDRAM yesterday,
18 which version were you testifying about?

19 A. The one that I had knowledge of in the 1990 --
20 '92 time frame.

21 Q. And do you know whether the bus structure is
22 the same in the other versions of RDRAM?

23 A. I -- I have -- in -- it's my understanding that
24 it is basically the same in concurrent RDRAM, yes.

25 Q. Do you know, Mr. Rhoden, what the bus structure

1 is in direct RDRAM?

2 A. I have had no reason to find that out, no.

3 Q. So, you don't know whether it has a data bus
4 that's separate from the address and control bus?

5 A. Well, I can tell you what I've certainly read
6 in the press if you would like, and in that case, it
7 has a separate data bus in addition to its packet bus.

8 Q. And the data bus is 16 bus lines wide in direct
9 RDRAM. Have you heard that?

10 A. Yes, I have.

11 Q. In that 1990 presentation that you saw, were
12 RDRAM modules discussed?

13 A. In the modules -- yes, they were. They were
14 discussed in the direct presentation that was
15 presented -- or at least if not in the presentation,
16 they were discussed in discussions that took place at
17 the HP facility.

18 Q. And what you testified about yesterday about
19 RDRAM modules, that was based entirely on what you
20 heard during that 1990 presentation about modules?

21 A. The -- the -- I -- the modules themselves were
22 a representation, these were a pictorial
23 representation, and so I think that the testimony that
24 I provided yesterday on the RDRAM was consistent with
25 my belief of what I heard in 19 -- in the '90-'92 time

1 frame.

2 Q. Okay. Let me turn now, if I could, Mr. Rhoden,
3 to one of the exhibits that you reviewed with Mr.
4 Oliver. Could you find JX-31 in your pile there? And
5 that was the minutes of the JC-42.3 subcommittee
6 meeting number 78 in March of '96, and could we pull
7 that up, JX-31?

8 A. Okay.

9 Q. And could you go to page 64. We're muddling
10 you down with papers there, Mr. Rhoden.

11 A. Well, I have a fair number of things here.
12 Just one second. Okay, I have it.

13 Q. You have got it.

14 Could you turn to page 64. That I believe is
15 the page where your presentation appears or at least
16 one of the pages of your presentation.

17 A. Yes.

18 Q. Now, do you recall testifying about this chart
19 of SDRAM features on that page yesterday?

20 A. Yes, I do.

21 Q. Now, the first column on that chart is labeled
22 100 megahertz. Do you see that?

23 A. Yes, I do.

24 Q. And does 100 megahertz there, does that refer
25 to the speed by which data is transferred from the DRAM

1 to the controller?

2 A. Actually, this refers to the speed of the clock
3 of the device itself.

4 Q. Okay. And then as you go to the right in the
5 columns, you move up to 150 megahertz, 200 megahertz,
6 250 megahertz and 300 megahertz, correct?

7 A. That's correct.

8 Q. So, ever-increasing clock speeds then. Is that
9 right?

10 A. That's right.

11 Q. And under the -- if we look at the row marked
12 On Chip PLL/DLL, you've got a "no" under the 100
13 megahertz, correct?

14 A. That's correct.

15 Q. And then it's a "maybe" for 150 megahertz,
16 correct?

17 A. Correct.

18 Q. And "yes" for 200 megahertz and above, correct?

19 A. Yes.

20 Q. Were -- was it your belief at the time you
21 prepared this chart that on-chip PLL/DLL would be
22 required for bus speeds at 200 megahertz and above?

23 A. Actually, the presentation was in the context
24 of standardization, and so I was proposing that these
25 would be the -- a reasonable alternative at these

1 particular speeds. I -- I never would suggest that
2 they would be required, certainly.

3 Q. As the clock speed increases, the timing of the
4 data output from the DRAM has to be more and more
5 precise, is that correct, the timing of that data
6 output in order for the controller to be able to
7 capture the data accurately? Is that right?

8 A. Well, that's not necessarily -- the broad
9 statement is not necessarily correct, because certainly
10 there are DRAMs that are shipping today and certainly
11 there are even SDRAMs shipping today that operate in
12 the 300 megahertz range and even above that do not have
13 PLL/DLL.

14 Q. I don't -- I think perhaps you misunderstood my
15 question.

16 My question was that as the speeds increase,
17 the timing of the output data has to be more and more
18 precise in order to accurately capture the data.

19 A. Well, it is a -- it is a necessary requirement
20 that as speeds increase, you're dealing with a shorter
21 period in absolute time in which to control data and in
22 which to control -- control data, all of those sort of
23 things. So, the timing -- it -- your reference to
24 "precise" is a relative term.

25 In some senses you would say that the 100

1 megahertz device is perhaps more precise in a relative
2 sense than the one that is operating at 300 megahertz,
3 and so I'm having a little difficulty with your
4 terminology of "precise," okay? In an absolute sense,
5 I would -- I would agree that it takes a shorter period
6 of time to set something up, but in a relative sense,
7 certainly that would not be the case.

8 Q. In an absolute sense, the timing margins have
9 to be more precise as it moves at a higher speed. Is
10 that correct?

11 A. In an absolute sense, there is less time for
12 each clock period, yes.

13 Q. And an on-chip PLL/DLL helps with those reduced
14 timing margins. Is that right?

15 A. It is one methodology that can be used, yes.

16 Q. Now, isn't it true during the time frame when
17 you were preparing this presentation, there was never
18 any question of whether you would use on-chip PLL
19 technology; it was only a question of when?

20 A. No, I'm actually quite sure that was not the
21 discussion that took place.

22 Q. If we could turn to Volume 2 of the evidentiary
23 hearing transcript that I gave you, page 106.

24 A. Okay.

25 Q. Now, before we turn to that page, Mr. Rhoden,

1 do you recall testifying at an evidentiary hearing in
2 the Rambus vs. Infineon case?

3 A. Yes, I do.

4 Q. And you testified under oath there, correct?

5 A. I did.

6 Q. Could we turn to page 106.

7 A. 1-0-6?

8 Q. 1-0-6.

9 A. Okay.

10 Q. Of that Volume 2 of that transcript.

11 A. Okay.

12 Q. Now, if I could read your testimony there,
13 starting at line 18, where you say:

14 "ANSWER: Certainly the concept of on-chip
15 PLL/DLL is an old concept that's been around for a long
16 time. We discussed it at length inside of JEDEC, and I
17 don't think we ever had any question whether we would
18 use the technology. It was just a question of when."

19 Do you see that?

20 A. Yes, I do.

21 MR. OLIVER: Objection, Your Honor. I submit
22 that the entire answer should be read.

23 JUDGE MCGUIRE: I'm sorry, I didn't hear that.

24 MR. OLIVER: I submit that Mr. Rhoden's entire
25 answer should be read.

1 JUDGE MCGUIRE: I will give you that
2 opportunity to read counter designations. Actually,
3 while we're on this topic, because this is going to
4 come up again, have the parties talked about how they
5 want to proceed? Either I could allow the opponent to
6 come in behind and offer up his counter designations,
7 or they could do it during their examinations, but I
8 want to create a policy now to where we're all clear in
9 the future.

10 MR. PERRY: Your Honor, ordinarily I think that
11 would be a matter of redirect, and in order to prevent
12 too many interruptions during -- I think counsel would
13 be careful, if they have redirect coming up, to make
14 sure that the context is placed, if necessary.

15 JUDGE MCGUIRE: Mr. Oliver, any input on that
16 question?

17 MR. OLIVER: Your Honor, I don't think we would
18 object to that as long as the entire question and
19 answer is read in its entirety at the time it is read.

20 JUDGE MCGUIRE: And that's fine with me. I
21 just want to get it in proper context, and I don't want
22 to interrupt the flow of the inquiry at the time, but
23 certainly I'm going to give each side an opportunity to
24 go into its counter designations.

25 Is that an agreement? Do the parties

1 understand each other on this point now?

2 MR. PERRY: Well, Your Honor, often times --
3 this is being used for impeachment and for refreshment
4 purposes under the rule.

5 JUDGE McGUIRE: Right.

6 MR. PERRY: And often times the answers are
7 quite long and include many different topics, so it's
8 not proper to offer them, and I wouldn't want to see
9 that kind of thing being argued about. What you really
10 should be focusing on is whether or not there's
11 something that's contradictory or that refreshes his
12 recollection, and then if they think there's more
13 that's directly related --

14 JUDGE McGUIRE: Well, that's what he's just
15 done. That's why we're addressing it.

16 MR. PERRY: Well, he said the whole question
17 and answer is what he's talking about, and for that,
18 that's going to be a long time to read all those
19 questions and answers.

20 MR. DETRE: I mean, I have endeavored to pick
21 out parts that I thought were relevant, Your Honor, and
22 I have no particular objection to reading the rest of
23 it, except it would slow down the flow of the
24 examination and probably in many cases --

25 JUDGE McGUIRE: No, that's not your obligation.

1 It's the obligation of their side to determine what
2 other portions they want entered. I'll just allow you
3 to do that on redirect.

4 MR. OLIVER: Thank you, Your Honor.

5 JUDGE McGUIRE: Okay, are we clear on that?

6 MR. PERRY: Yes, Your Honor.

7 JUDGE McGUIRE: Okay, you can proceed, Mr.
8 Detre.

9 BY MR. DETRE:

10 Q. And isn't it true, Mr. Rhoden, that on-chip PLL
11 was a technology that you fully intended to use as
12 speeds increased?

13 A. It was the technology that we -- if I may
14 explain, in this particular question, it was the use of
15 an on-chip PLL/DLL, and we've seen presentations even
16 this morning about PLL and DLL, both on chip on the
17 memory controller, on chip on the memory device. Your
18 question was specifically about the memory device, or
19 at least that's the way I interpreted it. This
20 question was a more general question in the system, if
21 you will, okay?

22 Q. Well, in the excerpt that we just read, you're
23 talking about the concept of on-chip PLL/DLL, correct?

24 A. That's correct, on chip, and on chip -- I mean,
25 remember, there's a lot of chips inside a system, sir.

1 Q. Oh, so you meant it could be on any chip when
2 you said "on chip." Is that right?

3 A. Well, the -- the concept of PLL/DLL and the
4 concept of using it somewhere, either off board or on
5 board, there are many PLLs inside a system. So, this I
6 thought was a more general question. I am sorry that
7 there was confusion here.

8 Q. No problem.

9 So, when you use the term "on-chip PLL/DLL,"
10 you don't mean that it's necessarily on the DRAM; you
11 just mean that it's on some chip somewhere in the
12 system, correct?

13 A. The -- in the specific feature set that was
14 listed here, and if you recall the discussion that was
15 going on inside of the committee meeting at the time,
16 the proposal that was made by Samsung, the on-chip
17 PLL/DLL or whatever, both were under discussion, yes.

18 Q. And so when you're talking about SDRAM features
19 on page 64 of JX-31 and you referred to on-chip
20 PLL/DLL, you were not necessarily referring to a PLL or
21 DLL on the DRAM. Is that right?

22 A. Well, as part of the discussion that we had
23 relative to this page, yes, I was, because I prepared
24 this, sir.

25 Q. So, when you say on-chip PLL/DLL, sometimes you

1 mean on the DRAM, and sometimes you mean on any chip.
2 Is that right?

3 A. No, sir, that's not true. It has to do with
4 the context of the question and the answer, sir, I'm
5 sorry.

6 Q. Could we turn to page 109 of that same
7 evidentiary hearing, Volume Number 2.

8 A. Okay.

9 Q. And on page 109 at line 7, you have an answer
10 where you say, "This proposal is something that we
11 adopted as part of the DDR SDRAM modifications."

12 Do you see that?

13 A. That is correct. Yes, I do.

14 Q. And if you could review the context there, was
15 the proposal that you were referring to then, was that
16 a proposal relating to a DLL on the DRAM?

17 A. Yes, it was.

18 MR. OLIVER: Objection, Your Honor. I have not
19 heard any inconsistent testimony. I'm not sure how
20 this would be characterized as impeachment.

21 MR. DETRE: Well, if I could --

22 JUDGE MCGUIRE: Lay a foundation.

23 MR. DETRE: -- continue with one more reference
24 on that page, I think Mr. Oliver will understand.

25 JUDGE MCGUIRE: Go ahead.

1 BY MR. DETRE:

2 Q. At your next answer there at line 11, you
3 respond to a question from the Court, and you say, "I'm
4 not sure, Your Honor, when the first ballot actually
5 passed about the on-chip PLL, but it was one of the
6 technologies -- one of the primary technologies that we
7 fully intended to use as we increased the frequencies."

8 Do you see that?

9 A. Yes, I do.

10 Q. Now, when -- in your presentation in March '96,
11 JX-31, page 64, when you have "yes" to on-chip PLL/DLL
12 listed for speeds of 200 megahertz and above --

13 A. Yes.

14 Q. -- that was not just your personal view, that
15 on-chip PLL/DLL should be used for speeds of 200
16 megahertz and above, was it?

17 A. Well, I was the creator of this presentation,
18 and necessarily, it was my view when I created it. I
19 am certain there were others that also shared the same
20 view and probably others that did not.

21 Q. Wouldn't you say that it was a consensus of the
22 JC-42.3 committee that on-chip PLL or DLL should be
23 used at those speeds?

24 A. At -- at the speed referenced here, I'm not --
25 I'm not sure that I -- that I can answer that, because

1 I'm not sure we had a consensus at that time;
2 otherwise, we would have had a ballot.

3 Q. Can we turn to that same volume, Volume 2 of
4 your evidentiary hearing transcript, at page 116?

5 A. Um-hum. Excuse me, which page?

6 Q. Page 1-1-6.

7 A. Okay.

8 Q. And I'll just read beginning at line 4:

9 "QUESTION: Can you explain what the chart you
10 have here, which is entitled SDRAM Features, and in
11 particular a line entitled On-Chip PLL/DLL, what were
12 you intending to convey to the committee with that
13 chart?

14 "ANSWER: Well, what I was doing was actually
15 summarizing some -- as we take these votes and as we
16 list them down, this is actually recorded, what the
17 activity level was in the committee at the time, and so
18 relative to the on-chip PLL/DLL that I've listed there,
19 what you can see is that it was the consensus of the
20 people that were in the room that we would need it at
21 higher frequencies of operation or that it would be a
22 desirable feature to include at higher frequencies of
23 operation, and it probably wasn't necessary for the 100
24 megahertz operation, which was about that time frame."

25 Do you see that?

1 A. Yes, I do, sir.

2 Q. If I could turn to another topic, Mr. Rhoden,
3 isn't it true that the reason to standardize DRAMs, the
4 purpose of JEDEC in standardizing DRAMs, is in order to
5 ensure interoperability?

6 A. The purpose of standardizing DRAMs is to ensure
7 interoperability? That is one of the reasons to
8 standardize, yes.

9 Q. And what that means is that if a user purchases
10 an SDRAM and he plugs it into his computer, that it
11 should work regardless of whether the SDRAM comes from
12 Micron or Fujitsu or Samsung or some other
13 manufacturer, correct?

14 A. Could you repeat the question? I want to make
15 sure I understand it.

16 Q. Sure.

17 This idea of interoperability means that if a
18 user buys an SDRAM and plugs it into his computer, it
19 should work regardless of the manufacturer he purchased
20 it from, correct?

21 A. That's correct.

22 Q. Now, in fact, isn't that your definition of
23 compliance with the JEDEC standard for SDRAMs, that so
24 long as interoperability is maintained, the standard is
25 complied with?

1 A. It is -- it certainly is an abbreviation that I
2 have used at times, yes.

3 Q. Now, Mr. Rhoden, is it true that some
4 manufacturers included an on-chip PLL or DLL in certain
5 single data rate SDRAMs?

6 A. I believe that's correct.

7 Q. And they could choose to use that methodology
8 of an on-chip PLL/DLL in order to ensure that the SDRAM
9 met the system timing requirements. Is that right?

10 A. I assume so, yes.

11 Q. And you could take that SDRAM with a PLL or a
12 DLL on it and remove that PLL or DLL, and if the timing
13 requirements were met without it, you could still use
14 that SDRAM in your computer. Is that right?

15 MR. OLIVER: Objection, Your Honor, lack of
16 foundation, calls for speculation.

17 JUDGE MCGUIRE: Could you restate? Sustained.

18 BY MR. DETRE:

19 Q. Well, if you're given an SDRAM and you put it
20 into a computer and it works, you don't know whether
21 that SDRAM has an on-chip PLL or DLL on it or not, do
22 you?

23 A. Well, at the user interface, the user could
24 care less, frankly.

25 Q. The PLL or DLL would not be visible to the

1 user, correct?

2 A. It depends on the definition of "user." If
3 you're the person sitting in front of the keyboard,
4 then yes, I agree.

5 Q. Would it be visible to the controller?

6 MR. OLIVER: Objection, Your Honor. I don't
7 understand what capacity Mr. Rhoden is being asked to
8 answer these questions. There's been no foundation
9 laid. This is speculative.

10 MR. DETRE: Well --

11 JUDGE McGUIRE: In terms of being the chairman
12 of the organization or as what I would -- when you say
13 what capacity, in what capacity could he be other than
14 what you went into in your own examination?

15 MR. OLIVER: Well, if he is being asked about
16 memory products that he has designed or manufactured or
17 used, but we're having a bunch of speculative
18 questions.

19 JUDGE McGUIRE: Okay, and that's sustained.
20 Let's lay a better foundation here, if we could, sir.

21 BY MR. DETRE:

22 Q. Mr. Rhoden, yesterday you testified about
23 SDRAMs, correct?

24 A. That's correct.

25 Q. And you testified about memory controllers,

1 correct?

2 A. That's correct.

3 Q. And you testified about how data goes between a
4 memory controller and an SDRAM. Is that right?

5 A. That is correct.

6 Q. And that's a process that you're familiar with,
7 correct?

8 A. Yes, it is.

9 Q. And in DDR SDRAMs, you testified that an
10 on-chip DLL or PLL was added. Is that right?

11 A. In -- in the -- yes.

12 Q. And you are familiar with how those work,
13 correct?

14 A. I am.

15 Q. Now, if you had a DLL or a PLL on an SDRAM as
16 you've testified just now, that's one methodology that
17 you could use to meet system timing requirements,
18 right?

19 A. Right.

20 Q. Would that DLL or PLL be visible to the memory
21 controller?

22 MR. OLIVER: Objection, Your Honor. Yesterday
23 Mr. Rhoden was testifying with respect to the operation
24 of SDRAMs and DDR SDRAMs as they were being discussed
25 within JEDEC, and I'm not clear whether that's what Mr.

1 Detre is referring to here or not.

2 JUDGE McGUIRE: I am going to grant a certain
3 amount of latitude because of the high-tech aspect of
4 this entire inquiry. So, overruled. I'll let you
5 proceed on that.

6 MR. DETRE: Thank you, Your Honor.

7 Could we have that last question read back?

8 (The record was read as follows:)

9 "QUESTION: Would that DLL or PLL be visible to
10 the memory controller?"

11 THE WITNESS: And the answer to your question
12 is I'm not entirely sure. Typically DLL and PLL
13 takes -- there's a substantial period of time that's
14 required to initialize and set it up, and so it -- I --
15 it would depend upon the design characteristics and --
16 so, I'm not certain exactly.

17 BY MR. DETRE:

18 Q. If we --

19 A. Could you just design a system that would
20 operate that way? I suppose you could. It's also
21 possible that I don't -- that it would be impossible.
22 It would depend on the rest of the system, okay?

23 Q. So, you wouldn't say that the inclusion of the
24 on-chip PLL or DLL on the DRAM is necessarily
25 transparent to the rest of the system?

1 MR. OLIVER: Objection, hypothetical.

2 JUDGE McGUIRE: Overruled.

3 THE WITNESS: The -- as I stated, it depends
4 upon the application, again. So, I can't really answer
5 yes or no, I don't believe, based on the conditions
6 you've set up.

7 BY MR. DETRE:

8 Q. Could we turn, if you would, Mr. Rhoden, to
9 your deposition in the Rambus vs. Infineon case?

10 A. All right.

11 Q. And do you recall being deposed in that matter?

12 A. Yes, I do.

13 Q. And you testified under oath in that deposition
14 also, correct?

15 A. I did.

16 Q. And if we could turn to page 235 of that
17 transcript.

18 JUDGE McGUIRE: Counsel, I'm sorry, what was
19 that again, what volume and --

20 MR. DETRE: Oh, this is the deposition. It's
21 only a single volume. It's the big one.

22 JUDGE McGUIRE: Okay, okay.

23 MR. OLIVER: Excuse me, Counsel, which --

24 MR. DETRE: Page 235. That's correct, Mr.
25 Oliver.

1 BY MR. DETRE:

2 Q. And there you state, Mr. Rhoden, beginning at
3 line 2:

4 "ANSWER: The inclusion of a PLL, DLL, whatever
5 you want to call it, is a function that could be
6 included in any device, because it is transparent to
7 the outside world. It can be made to be so and in most
8 cases it is transparent."

9 Do you see that?

10 A. Yes. I am -- if I can respond here, in this
11 testimony, I was making a certain -- it can be made to
12 be transparent, and it certainly is transparent to the
13 end user, as we explained. You asked me a more
14 specific question as to whether or not it could be
15 transparent at the memory controller, and there's much
16 more involved with whether it's transparent to the
17 memory controller than if it's transparent to the
18 outside world.

19 Q. Now, yesterday we looked at Release 4 of
20 JEDEC's 21-C standard. Do you recall that?

21 A. Yes, I do.

22 Q. And there was nothing about PLLs or DLLs in
23 there, correct?

24 A. I -- in Release -- I don't believe so, yes.

25 Q. And then in connection with the DDR standard,

1 JEDEC added something called an extended mode register
2 to Standard 21-C, correct?

3 A. That is correct.

4 Q. And that appeared first in Release 9. Is that
5 right?

6 A. The number -- I believe you're correct.

7 Q. Now, in that extended mode register, there's a
8 bit that's used for enabling or disabling an on-chip
9 DLL. Is that right?

10 A. That is correct.

11 Q. And by "on-chip," I mean on the DRAM.

12 A. That's correct.

13 Q. And that's the only way that an on-chip DLL
14 appears in the DDR SDRAM standard published in Standard
15 21-C, is that the standard provides that capability to
16 turn the on-chip DLL on or off, correct?

17 A. Actually, I think there's another location --
18 there's another bit, but -- in that, it does appear in
19 that register, yes.

20 Q. And what's the other bit that you're referring
21 to?

22 A. There's a -- I believe there is a DLL reset bit
23 that exists also inside of -- in -- there is a DLL
24 reset bit that -- that occurs I believe in the mode
25 register, but it does occur in the extended mode

1 register, yes.

2 Q. Let's -- let me hand you a copy of CX-0234,
3 which is JEDEC standard number 21-C, Release 9.

4 A. Okay.

5 Q. And I'm sorry, I only have the one copy,
6 because I wasn't intending to use it, but we can pull
7 it up, and I've got a helpful flag there at page 176.

8 JUDGE McGUIRE: All right, let's take a second.
9 Does the other side have a copy of that?

10 MR. OLIVER: I believe we do, but it may take
11 us a moment to locate it, Your Honor.

12 JUDGE McGUIRE: Let's take a moment. Let's go
13 off the record.

14 MR. DETRE: May I -- in the break, could I
15 approach and give this to Mr. Rhoden?

16 JUDGE McGUIRE: Sure.

17 (Pause in the proceedings.)

18 JUDGE McGUIRE: Let's go on the record. I
19 understand that the proposed item of evidence is on the
20 screen. Is that -- is it on the screen at this time?

21 MR. OLIVER: One page of it is on the screen,
22 Your Honor.

23 JUDGE McGUIRE: One page, okay. Maybe we
24 should indicate again for the transcript exactly that
25 item that we're observing, Mr. Detre.

1 MR. DETRE: Yes, sir.

2 JUDGE McGUIRE: All right, hold on a second.
3 Let's go off the record again.

4 (Pause in the proceedings.)

5 JUDGE McGUIRE: On the record.

6 You may proceed, Mr. Detre.

7 BY MR. DETRE:

8 Q. Now, we've pulled up on the screen here page
9 176 of CX-0234, JEDEC standard number 21-C, Release 9,
10 and on that page, we see the DLL enable/disable bit in
11 the extended mode register that we were discussing. Is
12 that correct, Mr. Rhoden?

13 A. That's correct.

14 Q. And you mentioned that there was another bit in
15 the mode register having to do with DLL, and I was
16 wondering if you could point me to that.

17 A. Well, I'm trying to find the page that has the
18 mode register, and perhaps you could --

19 Q. Well, that's -- the page we were on has the
20 extended mode register.

21 A. That's correct.

22 Q. And -- but I will look with you for the page
23 that has the mode register. I believe it's on page
24 150. Could we pull that up?

25 A. 1-6-0?

1 Q. 1-5-0.

2 A. Okay. The DLL reset bit does not show up in
3 this version. I do believe it does show up in later --
4 remember, it's a continuum as we put things together.

5 Q. So, as far as Release 9 of JEDEC 21-C is
6 concerned, is it a correct statement that the only way
7 that on-chip DLL shows up is in connection with that
8 bit in the extended mode register to enable or disable
9 it?

10 A. It's quite possible.

11 Q. In fact, Mr. Rhoden -- let me let you get that
12 squared away.

13 A. Well, it's a big document. Okay.

14 Q. In fact, Mr. Rhoden, there may be DDR devices
15 out there that don't contain an on-chip DLL at all,
16 correct?

17 A. I -- I'm not sure that I can answer your
18 question. It's -- I -- I suppose it would be possible.
19 It -- in fact, I -- as I'm thinking about it here, I
20 believe that there are some that perhaps do not include
21 it, yes.

22 Q. So, on-chip DLL is not really a requirement for
23 JEDEC Standard 21-C, is it?

24 A. Oh, quite the contrary, sir. It is a
25 requirement.

1 Q. Could we turn to your deposition again, the
2 Rambus vs. Infineon case, at page 234.

3 A. Okay.

4 Q. And I'll just -- I'm sorry, Mr. Rhoden, I'll
5 wait for you to get there.

6 A. 2-3-4?

7 Q. 2-3-4.

8 A. Okay.

9 Q. And I'll just --

10 A. Okay.

11 Q. Are you there?

12 And I'll just begin reading at line 20.

13 "QUESTION: Are there double data rate products
14 that you're aware of that do not use extended mode
15 registers?

16 "ANSWER: I don't know. I mean, I -- you know,
17 once -- once we've defined a way to enable and disable
18 it, as I said, the inclusion of a DLL/PLL is not a
19 requirement."

20 Do you see that?

21 A. Yes.

22 MR. OLIVER: Objection, Your Honor. That's not
23 impeaching. Mr. Detre's earlier question was directed
24 specifically to what was required for the JEDEC
25 standard, and this testimony does not relate to the

1 JEDEC standard.

2 THE WITNESS: And the devices I'm aware of --

3 JUDGE McGUIRE: Hold on just a second, sir.

4 You're not supposed to talk until I rule.

5 That's overruled. I'll allow you to proceed.

6 MR. DETRE: Thank you.

7 BY MR. DETRE:

8 Q. Now, then, later, after the DDR SDRAM standard
9 was published in Standard 21-C, JEDEC came out with a
10 different standard about DDR SDRAMs which is referred
11 to as JDS-79. Is that right?

12 A. Well, the intention of JDS-79 was to extract
13 the relevant pages from 21-C and create an independent
14 document that was more useful for everyone.

15 Q. There was certainly no intention to change the
16 technical specifications for DDR SDRAM that appear in
17 21-C when you published JDS-79, correct?

18 A. There was not that intention, no.

19 Q. If I could turn now to a different topic, Mr.
20 Rhoden, yesterday you testified regarding SDRAM and the
21 RAS and CAS signals. Do you recall that?

22 A. Yes, I do.

23 Q. And you showed an animation where the RAS and
24 CAS signals would be triggered by the rising edge of
25 the clock. Do you remember that?

1 A. There being -- well, sure.

2 Q. And that meant that they were synchronous
3 signals, correct, RAS and CAS?

4 A. They are synchronous to the clock signal,
5 that's correct.

6 Q. And do you recall yesterday you also testified
7 about a presentation by Mr. Hardell of IBM? Do you
8 recall that?

9 A. I do.

10 Q. Could we pull up CX-34, and if we could go to
11 page 32, and could we blow up -- it's the second to
12 last presentation listed there. That's exactly right.

13 That's the notes of the presentation by Mr.
14 Hardell that you testified about, Mr. Rhoden?

15 A. That's correct.

16 Q. And the second bullet point there about the IBM
17 presentation reads, "A-synchronous RAS/CAS with
18 synchronous DQ," correct?

19 A. That's correct.

20 Q. So, the IBM presentation called for
21 asynchronous rather than synchronous RAS and CAS
22 signals. Is that right?

23 A. Well, the questions we heard yesterday were in
24 reference to the dual edge clock, and the dual edge
25 clock was in reference to the data, and in his

1 presentation that you see here, asynchronous is as to
2 dual edge clock, and that's the reference I was making
3 yesterday, not with respect to his terminology for
4 RAS/CAS.

5 Q. But it is a fact that in that presentation, the
6 RAS and CAS signals were asynchronous. Is that right?

7 A. The RAS and CAS signals in his presentation
8 were -- the term, as we explained yesterday, about the
9 asynchronous signals -- asynchronous nature of RAS and
10 CAS, yes, that is correct for the RAS and CAS.

11 Q. Now, yesterday you also testified I believe
12 that typically, once the -- strike that.

13 Yesterday you testified also about the CAS
14 latency in an SDRAM, correct?

15 A. I did.

16 Q. And you mentioned that the CAS latency in an
17 SDRAM was programmable through the mode register,
18 correct?

19 A. Correct.

20 Q. And that typically, once you set the CAS
21 latency by using the mode register in an SDRAM on
22 initialization, the CAS latency typically doesn't
23 change after that, correct?

24 A. That's -- that's correct.

25 Q. But it is true that in some systems, you might

1 want to set the CAS latency to one value, maybe two,
2 while in a different system, you would want to set the
3 CAS latency to another value, say three. Is that
4 right?

5 A. It is possible that in some systems you set to
6 one value and then in other systems it could be set to
7 a different value, yes, that's correct.

8 Q. And that's why you want this programmable CAS
9 latency feature in SDRAMs, right?

10 A. The use of the CAS latency feature, you'd have
11 to ask the users themselves. The wanting of it to be
12 able to set one or the other, if we never had
13 programmable, I don't know that we would have cared one
14 way or the other, but we did -- today, what you
15 describe is correct. Some systems have it; some
16 systems have -- program it one way; some systems
17 program it another way. That is correct.

18 Q. Now, yesterday you mentioned that an
19 alternative for setting the CAS latency chip would be
20 blowing a fuse. Do you remember that?

21 A. Yes, I do.

22 Q. Now, once a manufacturer blows a fuse and sets
23 the CAS latency to a certain value, he can no longer
24 change the CAS latency after that, correct?

25 A. That's correct.

1 Q. So, if you set the CAS latency to two and
2 somebody bought it and wanted to use it in a system
3 that required a CAS latency of three, they would be out
4 of luck, correct?

5 A. That would be correct.

6 Q. Now, yesterday, Mr. Rhoden, you testified also
7 about meeting number 77 of the JC-42.3 subcommittee in
8 December of 1995, and could you just find JX-28 in your
9 pile of stuff there, please, which are the minutes of
10 that meeting?

11 A. I'm -- it looks like I have 27 and 2 -- another
12 20, but not 26.

13 Q. It's 28 we're looking for. It's meeting number
14 77, December 1995, in Dallas.

15 MR. FRANCHAK: Can I help?

16 MR. DETRE: It's fine by me if somebody can
17 help Mr. Rhoden locate it.

18 JUDGE McGUIRE: Yes, sir, if you can help him
19 locate --

20 THE WITNESS: I have 27 and 29. I can't find
21 28.

22 MR. DETRE: We have another copy of our binder
23 which has --

24 MR. FRANCHAK: We've found it.

25 MR. DETRE: You've got it?

1 JUDGE MCGUIRE: You have got it, Mr. Rhoden?
2 All right, on the record, you may proceed, Mr.
3 Detre.

4 MR. DETRE: Thank you, Your Honor.

5 BY MR. DETRE:

6 Q. And if we could turn to page 6.

7 A. Turn to what page?

8 Q. Page 6, Mr. Rhoden.

9 And if we could blow up paragraph 8.8, SDRAM
10 Feature Survey Ballot Results. Thank you.

11 Do you recall yesterday we talked about that,
12 Mr. Rhoden, that -- it begins, "MOSAID made a
13 presentation on the results of the survey (See
14 Attachment G). MOSAID noted that they had a patent
15 pending on DLL."

16 Do you recall that?

17 A. Yes, I do.

18 Q. And then if we move ahead to page 35, that
19 was -- that page shows part of the conclusions of that
20 survey ballot, and you testified about that also. Do
21 you recall that?

22 A. Yes, I do.

23 Q. And could we blow up Section 4.1 there,
24 Matthew.

25 And down a little past the middle there, we

1 see, "On chip PLL/DLLs to reduce clock access time,"
2 among the issues with strong support, correct?

3 A. Yes, I do.

4 Q. Now, after this page of conclusions about the
5 survey ballot, there's an attachment which actually has
6 a tabulation of the votes received on the various
7 questions on the survey ballot, beginning -- beginning
8 at the next page, page 36, correct?

9 A. Yes, it looks like it.

10 Q. Now, if we could just jump ahead in those
11 tabulation results to page 45, and that's -- have you
12 got that, Mr. Rhoden? It's got Clock Survey Results at
13 the top.

14 A. Yes, I do.

15 Q. Can we try to blow up the -- that very small
16 print at the very top of that, Matthew? Maybe -- I
17 don't know if it is going to make it legible, but the
18 very first question there. Not so good? Well, let me
19 try to interpret it as best I can from the paper, and
20 you tell me if you agree, Mr. Rhoden.

21 Does that question seem to ask, "Does your
22 company believe that an on chip PLL or DLL is important
23 to reduce the access time from the clock for future
24 generations of SDRAM?"

25 Is that what it looks like to you?

1 A. Yes, that's what it looks like to me.

2 Q. And then -- if we could go back to the full
3 page, and could we blow up the table.

4 Then in the first column of that table, we've
5 got the responses to that first question, some
6 companies answering yes, some smaller number of
7 companies answering no, correct?

8 A. That's correct.

9 Q. And since -- I guess since the great majority
10 of the people, greater than two-thirds majority,
11 answered yes, it got included as an issue of strong
12 support, correct?

13 A. This is how we establish consensus in a
14 committee meeting. There is rarely ever everybody
15 agrees with any particular position, and so some were
16 in favor, some were not.

17 Q. And if we look at the -- perhaps we could just
18 blow up the top part of that table, up to where the
19 blank spaces begin.

20 The second line there records MOSAID's
21 response, and they voted yes. Is that right?

22 A. Yes, I do see that.

23 Q. And then there was also a Comments field where
24 comments that responders may have made on the ballot
25 can be recorded, is that right, at the far right?

1 A. Yes, the comments would normally have come from
2 the survey respondents.

3 Q. And these were surveys that were returned
4 before the meeting, right?

5 A. It would have, yes.

6 Q. And MOSAID under its comments says, "PLL or DLL
7 need only control output timing," right?

8 A. Correct.

9 Q. Didn't mention anything about any patents,
10 right?

11 A. That's correct.

12 Q. And then if we look down a few lines to
13 Hyundai, do you see that?

14 A. Yes.

15 Q. And Hyundai apparently voted no on that
16 question, right?

17 A. Yes.

18 Q. And Hyundai's comment is, "Wondering DLL may be
19 MOSAID patent," right?

20 A. Yes, I see that.

21 Q. Now, if we could put that aside, Mr. Rhoden, we
22 are going to move on to another topic. Let me actually
23 go grab one of my binders.

24 Excuse me, Your Honor, it will just take me one
25 second.

1 JUDGE McGUIRE: Go ahead.

2 (Brief pause.)

3 BY MR. DETRE:

4 Q. This morning, Mr. Rhoden, you testified about
5 some JEDEC meeting minutes from March 1997, meeting
6 number 82 of the JC-42.3 subcommittee, JX-36. Do you
7 recall that?

8 A. I -- I believe so. I'm not sure that I recall
9 all the numbers, but yes.

10 Q. Well, could you see if you could locate JX-36,
11 please?

12 A. Okay.

13 Q. And perhaps we could go right away to page 7,
14 Matthew.

15 That was the one with the NEC presentation.

16 Could you blow up number 6.6 towards the
17 bottom?

18 Have you got that, Mr. Rhoden?

19 A. Yes, I do.

20 Q. And you mentioned that NEC had made a
21 presentation which included a read clock and a separate
22 write clock, right?

23 A. That's correct.

24 Q. Now, is that separate write clock something
25 akin to the data strobe in DDR SDRAMs?

1 A. The separate write clock, no, it's not.

2 Q. What's the difference?

3 A. The -- the write clock is the same in the -- in
4 this -- in the NEC proposal, they have only a read
5 clock, and they use the on-chip clock to be the write
6 clock. So, there's not -- there's -- I think what you
7 would be saying is there would be three clocks.

8 There is a clock that goes to the device that
9 controls the control and also the data going into the
10 device in their presentation, and the data strobe
11 itself is actually a separate signal that is involved
12 with reading and writing. It's not -- it's not
13 implying that there would be a separate clock for
14 reading and a separate clock for writing. There's one
15 clock for read and write operations, which would be the
16 data strobe itself, and so it looked like that.

17 Q. Am I understanding correctly that you're
18 saying, Mr. Rhoden, that the difference is that in DDR
19 SDRAMs, the data strobe is bi-directional, while in the
20 NEC presentation, the write clock was uni-directional?

21 A. Recall I said it's not -- it's not just the
22 write clock. It is also the command and address clock.
23 So, it is the clock that takes care of all the write
24 data. It is a uni-directional signal and also free
25 running.

1 Q. Now -- and that's another difference that that
2 write clock was free running, whereas the data strobe
3 in DDR SDRAMs is not?

4 A. That is correct.

5 MR. OLIVER: I'm sorry, Your Honor, if we could
6 just have a point of clarification in terms of whether
7 he's asking about the witness' understanding at the
8 time of the NEC presentation or otherwise.

9 JUDGE MCGUIRE: All right, sustained. Can we
10 do that, Mr. Detre?

11 BY MR. DETRE:

12 Q. I was asking about your understanding at the
13 time, Mr. Rhoden. Is that the way you were responding?

14 JUDGE MCGUIRE: I don't think it was clear that
15 you were asking about his understanding, but it is now,
16 so go ahead.

17 THE WITNESS: Okay, the -- my understanding at
18 the time was not a -- we were talking about individual
19 proposals. I don't know that we were talking about
20 differences or modifications or what you were asking
21 with respect to those.

22 BY MR. DETRE:

23 Q. So, you were just speculating in your answer?
24 We better go back, then.

25 You have an understanding of DDR and testified

1 extensively about it yesterday and testified how it
2 compared to earlier presentations, right?

3 A. Yes.

4 Q. And you have an understanding of this NEC
5 presentation, because you were there, right?

6 A. Yes, I do.

7 Q. And so you're able to compare the two. Is that
8 right?

9 A. I believe so, yes.

10 Q. And it was based on your understanding of the
11 DDR SDRAM presentations that you were present for and
12 the NEC presentations that you were present for that
13 you performed a comparison that you've done for me here
14 today. Is that right?

15 A. I -- that was -- that was -- it was based on my
16 knowledge there that I performed this speculation for
17 you, yes.

18 Q. Thank you.

19 And that's sort of similar to the speculation
20 you did yesterday for Mr. Oliver. Is that right?

21 MR. OLIVER: Objection, Your Honor. He
22 testified yesterday with respect to his observations of
23 the presentations at the meeting.

24 JUDGE McGUIRE: Sustained.

25 BY MR. DETRE:

1 Q. Now, in this -- in the minutes here about that
2 NEC DDR SDRAM presentation, as you testified earlier
3 today, it says that some on the committee felt that
4 Rambus had a patent on that type of clock design.

5 Do you see that?

6 A. Yes, I do.

7 Q. Now, from your recollection of this NEC
8 presentation, was that NEC presentation about the use
9 of separate read and write clocks in connection with
10 some sort of special narrow bus architecture?

11 A. No, it was not.

12 Q. It was just in connection with that same wide
13 bus SDRAM architecture that you testified about
14 yesterday in connection with SDRAM. Is that right?

15 A. I believe so, yes.

16 MR. DETRE: I have no further questions for you
17 myself, right now, and I'll pass off to my colleague,
18 Mr. Perry, if that's okay.

19 JUDGE MCGUIRE: Okay, Mr. Perry.

20 MR. PERRY: Yes, Your Honor. We do have one
21 more transcript we would like to come around and bring
22 up.

23 JUDGE MCGUIRE: Go ahead.

24 MR. PERRY: If I could hand it to the witness,
25 this is the transcript of his deposition in this

1 matter.

2 THE WITNESS: Excuse me?

3 MR. PERRY: This is the transcript of your
4 deposition in this matter.

5 THE WITNESS: Okay.

6 MR. PERRY: Could I hand this up to Your Honor?

7 JUDGE McGUIRE: Yes.

8 MR. PERRY: Thank you.

9 JUDGE McGUIRE: Mr. Oliver?

10 MR. OLIVER: Do you have another copy, Mr.
11 Perry?

12 MR. PERRY: I can give you the original, and I
13 can work off the Minuscript.

14 MR. OLIVER: Thank you.

15 JUDGE McGUIRE: I just want to clarify again
16 that -- what we talked about prior to starting the
17 hearing, that at the end of the day, I am going to ask
18 that the hard copies that I have received are returned
19 to the parties, because you can imagine where this is
20 going to go otherwise, okay?

21 MR. PERRY: Correct.

22 MR. OLIVER: Yes, Your Honor.

23 JUDGE McGUIRE: All right, Mr. Oliver -- I'm
24 sorry, Mr. Perry.

25 MR. PERRY: Thank you, Your Honor.

1 CROSS EXAMINATION

2 BY MR. PERRY:

3 Q. Good morning, Mr. Rhoden.

4 A. Good morning.

5 Q. Yesterday and this morning you were shown a
6 particular ballot by Mr. Oliver, a JEDEC ballot dated
7 June 1992, and I don't know if that's available to you.
8 It was JX-59. I have an extra copy if that would
9 expedite things.

10 A. I have it right here.

11 Q. All right, good.

12 Could we bring that up on the screen?

13 Actually, if you don't mind, Your Honor, I am
14 going to move this screen so it's visible to me.

15 And you testified previously that you recognize
16 this ballot from June 1992, correct?

17 A. Yes, I did.

18 Q. And on page 2, I believe you talked about some
19 language that appears in the ballot.

20 A. Yes.

21 Q. There is a phrase about halfway down that says,
22 "If anyone receiving this ballot is aware of patents
23 involving this ballot, please alert the Committee
24 accordingly during your voting response."

25 Do you see that?

1 A. Yes, I do.

2 Q. And you testified yesterday about your
3 understanding of the word "patents." My question is,
4 was it your understanding in this time period, 1992,
5 that the phrase "please alert the Committee" meant the
6 same as you must alert the committee?

7 A. Yes.

8 Q. And if you'll look up just above that, do you
9 see the reference to a "no" vote in the third line?

10 A. We are back on page 1?

11 Q. No, page 2.

12 A. Oh, okay.

13 Q. Do you see next to the box -- the third box
14 down that says, "I do not approve the content"?

15 A. Yes.

16 Q. That would be a "no" vote, correct?

17 A. That is correct.

18 Q. Do you see that it says, "Attached are my
19 detailed reasons for this disapproval. (We need your
20 reasons in order to understand your view of this
21 matter.)" And then it says "MANDATORY" in all capital
22 letters.

23 Do you see that?

24 A. Yes, I do.

25 Q. Did you between 1991 and 1996 ever have any

1 discussion of adding the phrase "MANDATORY" to the
2 ballot portion of this ballot -- I'm sorry, to the
3 patent portion of this ballot?

4 A. I don't recall.

5 Q. Do you have an understanding as to why the word
6 "MANDATORY" appears in all capital letters in the box
7 relating to "no" votes?

8 A. I mean, the form itself would appear to be
9 self-explanatory, but the term "MANDATORY" is intended
10 to imply that when you vote no, it is required that you
11 provide -- that you provide a comment. A comment is
12 not required for -- the comment itself is mandatory,
13 that you provide the comment. The comment is not
14 required for any of the other actions.

15 Q. Now, you were going to JC-42 meetings back in
16 1989, weren't you?

17 A. Yes, I was -- yes.

18 Q. As a representative of Hewlett Packard at that
19 time?

20 A. Yes, I was working at Hewlett Packard at the
21 time.

22 Q. Let me show you CX-3. That's complaint counsel
23 Exhibit 3.

24 If I could approach?

25 JUDGE MCGUIRE: Please.

1 BY MR. PERRY:

2 Q. Do you recognize that to be the minutes of a
3 meeting of JC-42.1 that took place here in Washington
4 on September 13, 1989?

5 A. Yes, I do.

6 Q. And do you see that about eight names down that
7 your name appears?

8 A. Yes, I do.

9 Q. Do you have any reason to believe you weren't
10 at this meeting of JC-42.1?

11 A. No, I would imagine that I at least was there
12 for part of it. This is -- the 42.1 in this time frame
13 referred to the committee on bipolar, and it would have
14 been bipolar memory devices as opposed to DRAM, and
15 yes, I did attend occasionally these meetings.

16 Q. Well, if you'll look on page 6, there's a
17 discussion of that phrase that we've been talking about
18 on the ballot form.

19 A. Okay.

20 Q. And I'll let you read paragraph 11 to yourself.

21 A. (Document review.)

22 Q. Have you had a chance to read it?

23 A. I have.

24 Q. Do you see that it begins by stating that the
25 JEDEC council had discussed the patent issue at the

1 June 1989 meeting?

2 A. Yes, I do.

3 Q. And that was at the request of JC-42.3, at
4 least that's what the minutes say. Do you see that?

5 A. Yes, I do.

6 Q. Putting this document aside, do you have any
7 recollection of JC-42.3 in the summer of 1989
8 requesting that the council discuss patents?

9 A. I -- this was along about the time that there
10 was WANG litigation going on, so I am not -- I don't
11 have a direct recollection of the actual conversation,
12 but -- so, I have no direct recollection at this time.

13 Q. All right, thank you.

14 Do you see that the minutes go on to say, "The
15 result was not to change EIA legal requirements as
16 outlined in document EP-7, but to add some wording on
17 JEDEC ballot voting sheets about informing the
18 Committee if any patent covers the balloted material"?

19 Do you see that?

20 A. Yes, I do.

21 Q. You weren't on the council at the time,
22 correct?

23 A. I was not.

24 Q. And the minutes go on, "TI was concerned that
25 Committee members could be held liable if they didn't

1 inform Committee members correctly on patent matters."

2 Do you see that?

3 A. I do.

4 Q. And then it says, "Committee responded that the
5 question was added on ballot voting sheets for
6 information only and was not going to be checked to see
7 who said what."

8 Do you see that?

9 A. I do.

10 Q. Now, do you have any recollection of sitting in
11 that meeting and hearing someone respond to TI's
12 concerns by saying that no one was going to check to
13 see what was marked on the ballot?

14 MR. OLIVER: Objection, Your Honor. Which
15 meeting?

16 MR. PERRY: The September 13, 1989 meeting of
17 JC-42.1.

18 THE WITNESS: Yeah, I have no recollection of
19 such discussion.

20 BY MR. PERRY:

21 Q. Now, you also testified yesterday -- I'm going
22 to have to paraphrase -- that you thought that every
23 JEDEC ballot you had ever seen had the patent
24 language -- the patent alert language on it. Do you
25 remember that testimony?

1 A. Yes, I do.

2 Q. Let me just show you a ballot from May of 1993.
3 This will be RX-392.

4 I have got a copy for you.

5 MR. OLIVER: Thank you.

6 MR. PERRY: May I approach the witness?

7 BY MR. PERRY:

8 Q. This is entitled Committee Survey Ballot. Do
9 you see that?

10 A. Yes, I do.

11 Q. And go to page 2 and pull up the middle of the
12 page where it says 1, 2, 3.

13 Do you see that there's no space on this survey
14 ballot for anything relating to a patent disclosure?
15 Do you see that?

16 A. That is correct, that was relevant to ballots.
17 This is a survey ballot, which is essentially just to
18 gauge interest level.

19 Q. So, it was your experience in the '91 to '96
20 time period that survey ballots did not have the patent
21 disclosure box to check. Is that right?

22 A. I -- I'm not sure -- survey ballots are
23 always -- they are almost always handled by somebody
24 within a task group, because we're putting together --
25 and remember, we're just trying to gauge interest

1 level, and so I'm -- I don't think I can comment about
2 whether they did or did not have -- some may, some may
3 not have.

4 Q. All right, but you meant to exclude from your
5 answer yesterday survey ballots?

6 A. Yes.

7 Q. All right. And how about council ballots, when
8 the standard goes up to the JEDEC council for approval
9 in that time period, at least when you were on the
10 council in that time period, about '95 to '96, did
11 council ballots have a patent box to check?

12 A. I'm not sure if I remember.

13 Q. All right, thank you.

14 Now, we've also been looking at some of these
15 more lengthy JC-42.3 minutes, and I'd like to look at
16 another one, JX-18.

17 May I approach?

18 JUDGE MCGUIRE: Go ahead.

19 BY MR. PERRY:

20 Q. And if you'll find -- we'll find your name on
21 the very first page. I thought you were still at HP at
22 this point. It looks like you had moved to VLSI. Is
23 that your recollection as well? The very last -- it's
24 December 1993.

25 A. Yeah, by December 1993, I was at VLSI, yes.

1 Q. So, your name appears at the very bottom of
2 this list. Is that right?

3 A. Yes.

4 Q. And do you remember being present at the
5 December 1993 JC-42.3 meeting in San Diego?

6 A. Yes, I do. It was an insanely long meeting.

7 Q. I'm sorry?

8 A. It was an insanely long meeting. It went past
9 11:00 at night.

10 Q. And if you'll look on page 8 of the minutes,
11 and if we can go to page 8, and I'll let you
12 familiarize yourself with that page just briefly so
13 that you'll understand the context of what I'm going to
14 point you to.

15 A. I'm sorry, but this is almost unreadable.

16 Q. Can you --

17 A. Perhaps we could --

18 Q. Let me blow it up on the screen for you. If
19 you'll blow up the third paragraph from the bottom,
20 please.

21 A. Let me look at it.

22 Q. It states, "As a side issue, IBM noted that in
23 the future they will not come to the Committee with a
24 list of applicable patents on standards proposals. It
25 is up to the user of the standard to discover which

1 patents apply."

2 A. Yes.

3 Q. Did you hear an IBM representative make that
4 statement in the December 1993 meeting?

5 A. I heard an IBM make the statement about -- that
6 they could not -- the company was so large, they could
7 not guarantee that they would bring all patents to the
8 attention of the committee. I do remember that, yes.

9 Q. Let me ask the question again.

10 Did you hear an IBM representative state that
11 in the future, they will not come to the committee with
12 a list of applicable patents on standards proposals?

13 A. The conversation, yes, I did hear that. I'm
14 not certain I heard exactly these words, sir.

15 Q. Do you think that the secretary of the meeting
16 got this portion wrong?

17 A. I'm not sure, sir. It does happen.

18 Q. Now, this was intended --

19 A. Frequently.

20 Q. -- to be -- these minutes were intended to be a
21 chronological statement of the events and occurrences
22 that happened in the meeting, right?

23 A. That is correct.

24 Q. And you so testified yesterday, didn't you?

25 A. Yes, sir.

1 Q. And the purpose of -- one purpose of writing it
2 down, as you recall it during that time period, was to
3 make sure there was a record of the statements made at
4 the committee?

5 A. That there was a record of key activities that
6 took place in the committee. Certainly the meeting
7 takes place for a long time, and the whole record is
8 not here, and this -- it's not really a transcript.
9 It's not the exact words. It would be what the
10 secretary actually wrote down in the meeting
11 themselves, okay?

12 Q. And you understand there's a review process
13 that goes on before these minutes are made official?

14 A. Sure.

15 Q. And you understood that in that time period,
16 correct?

17 A. Of course.

18 Q. And if you will look on page 13, do you see
19 that -- do you see there's signature blanks?

20 A. Sure.

21 Q. Do you see Mr. McGhee -- do you recognize Mr.
22 McGhee's initials?

23 A. Yes, I do.

24 Q. And do you see that it appears that he's filled
25 in Mr. Townsend's name, but I guess we can ask him

1 that, can't we?

2 A. Okay, yes.

3 Q. Now, when you were referring to a statement by
4 an IBM representative, were you remembering something
5 about ball grid array patents?

6 A. I'm not sure exactly what it was in reference
7 to, sir. There -- certainly in this time frame, there
8 were discussions about ball grid array, and IBM had
9 been active in that area for quite a number of years.

10 Q. All right. Well, let me show you RX-421 and
11 see if that refreshes your recollection in that area.

12 You see this is on what appears to be IBM
13 letterhead dated August 31, 1993.

14 A. Yes, I do see that.

15 Q. And that was about, what, three months before
16 the December 1993 meeting that we were just looking at
17 the minutes, right?

18 A. Yes, I do.

19 Q. And this came from the JEDEC office, and it
20 says, "Jim," and do you understand that to be Jim
21 Townsend?

22 A. Jim is Jim Townsend, yes.

23 Q. "Jim: IBM Intellectual Property Law attorney's
24 have informed me that we will not use JEDEC as a forum
25 for discussing this subject." (Sic).

1 Do you see that?

2 A. Yes, I do.

3 Q. "It is the responsibility of the producer to
4 evaluate the subject and to workout the proper use of
5 rights." (Sic).

6 Do you see that?

7 A. Yes, I do.

8 Q. Did you ever hear an IBM representative say
9 those words in your presence?

10 A. I cannot recall.

11 Q. Thank you.

12 Your Honor, I don't believe that JX-18, those
13 meeting minutes, have been moved into evidence, and I
14 would do that now.

15 MR. OLIVER: No objection, Your Honor.

16 JUDGE McGUIRE: So entered.

17 (JX Exhibit Number 18 was admitted into
18 evidence.)

19 MR. PERRY: And I would also move into evidence
20 RX-421.

21 JUDGE McGUIRE: What document was the other
22 one, JX-what again?

23 MR. PERRY: JX-18.

24 JUDGE McGUIRE: JX-18. And I'm sorry, what was
25 the second one?

1 MR. PERRY: RX-421.

2 JUDGE McGUIRE: Mr. Oliver, any objection to
3 RX-421.

4 MR. OLIVER: Your Honor, I don't believe we
5 have a proper foundation for RX-421.

6 JUDGE McGUIRE: How so?

7 MR. OLIVER: Could you pause just one moment,
8 Your Honor?

9 JUDGE McGUIRE: Okay, off the record.

10 (Counsel conferring.)

11 (Discussion off the record.)

12 JUDGE McGUIRE: Let's go back on the record.
13 Mr. Perry, you may proceed.

14 I'm sorry, on that prior -- Mr. Oliver, you
15 have withdrawn the prior objection. Is that correct?

16 MR. OLIVER: Yes, after brief consultation with
17 the other side, I withdraw my objection.

18 JUDGE McGUIRE: Okay, and that was RX-421, was
19 it?

20 MR. PERRY: That's correct.

21 JUDGE McGUIRE: And that's entered at this
22 time.

23 (RX Exhibit Number 421 was admitted into
24 evidence.)

25 BY MR. PERRY:

1 Q. Mr. Rhoden, yesterday you discussed what was
2 referred to as the EIA Legal Guides, and do you happen
3 to have that available to you or should I --

4 A. If you give me the number, I can find it by
5 number, I believe.

6 MR. PERRY: Your Honor, may I hand one of these
7 up to you?

8 BY MR. PERRY:

9 Q. If you're having trouble, I can give you
10 another one.

11 A. Yes, I am, but --

12 Q. I'll give you another one, if I could.

13 JUDGE McGUIRE: And you know, again, let me
14 just add that when something's on the overhead here, on
15 the ELMO, I don't need a hard copy inherently. It's
16 only when it's not going to be on the ELMO and you are
17 going to talk about it that I will need a hard copy,
18 and that's to be returned at the end of the day, just
19 so we're clear.

20 MR. PERRY: On this one some of the type is
21 really small.

22 JUDGE McGUIRE: Okay.

23 BY MR. PERRY:

24 Q. Do you have that Legal Guides in front of you?

25 A. Yes, I do.

1 Q. And you understood in the 1991 to 1996 time
2 period that JEDEC's standardization activities were
3 operating under the EIA Legal Guides that are in front
4 of you?

5 A. Yes, I do.

6 Q. Would you look on page 3. Do you see that the
7 heading is General Guides -- on the right side, General
8 Guides Applicable to All EIA Activities? Do you see
9 that?

10 A. Yes, I do.

11 Q. And then on page 5 -- it's page 5 of the
12 guides, actually page 4 of the exhibit -- we have too
13 many pages in these documents.

14 A. I've got it.

15 Q. And I am going to draw your attention to the
16 heading at the top on the right column where it says,
17 Part II, Special Guides Applicable to Engineering
18 Standardization Programs.

19 Do you see that?

20 A. Yes, I do.

21 Q. And that first sentence is what I'd like you to
22 focus on, and it says, "This Part II contains legal
23 policies applying specifically to the operations and
24 conduct of all EIA engineering standardization and
25 related programs."

1 Do you see that?

2 A. Yes, I do.

3 Q. And in fact, yesterday you talked about some of
4 the language from this Part II, and I wanted to talk to
5 you about some of the additional language that wasn't
6 discussed yesterday.

7 A. Okay.

8 Q. The phrase that I just read to you, "EIA
9 engineering standardization," that's what JEDEC was
10 doing?

11 A. JEDEC was in the engineering department at that
12 time, yes.

13 Q. Of EIA?

14 A. Of EIA, that's correct.

15 Q. Well, if you look at Section B a little bit
16 further down on that page where it says Statement of
17 Policy.

18 A. I see it.

19 Q. The preamble says, "The following statement of
20 policy, reflecting the basic objectives of all
21 standardization programs, shall be included in all EIA
22 standards."

23 Do you see that?

24 A. Yes.

25 Q. And was that language that was required to be

1 placed actually in the standard itself? Is that your
2 understanding?

3 A. I'm not certain, but -- I'm not certain if it
4 was included. I can't answer the question.

5 Q. That -- that's fine.

6 If you look at the second paragraph under these
7 basic objectives --

8 A. Yes.

9 Q. -- the one that starts, "Standards --" if you
10 could bring that up.

11 "Standards are proposed or adopted by EIA
12 without regard to whether their proposal or adoption
13 may in any way involve patents on articles, materials,
14 or processes."

15 Do you see that?

16 A. I do.

17 Q. And that was your understanding in 1991 to 1996
18 of one of the basic objectives of EIA standardization
19 programs. Is that right?

20 A. As written here, yes. I can't say that we ever
21 focused on this particular passage.

22 Q. Well, would you look on the next page, which is
23 page 5 of the exhibit. I want to talk about some of
24 the special rules for conducting standardization
25 programs in Section F.

1 A. Yes.

2 Q. Would you look at item 2 and just read that to
3 yourself? If we could pull up item 2.

4 A. (Document review.)

5 Q. And it says, "All standardization activity
6 shall be confined to the technical and engineering
7 considerations in the establishment of a standard."

8 Do you see that?

9 A. Yes, I do.

10 Q. And was that one of the basic principles that
11 JEDEC followed, as you understood it, between 1991 and
12 1996?

13 A. Yes.

14 Q. And did that mean, as you understood it, that
15 discussion of how much a standard might cost was not to
16 be one of the considerations in coming up with a JEDEC
17 standard?

18 A. In terms of a cost of product or --

19 Q. Cost of manufacture, other costs that might be
20 included before it goes out the door to the consumer.

21 A. Absolute costs were a forbidden topic, still
22 are.

23 Q. What do you mean by "absolute costs"?

24 A. Well, there are times within the
25 standardization that you will discuss the relative cost

1 of particular options, and relative cost is something
2 that is discussed. Absolute cost is not.

3 Q. Well, did you understand between 1991 and 1996
4 that it was a goal authorized under the EIA rules to
5 come up with the lowest manufacturing cost possible in
6 a standard?

7 A. The -- I -- I don't believe that that was a --
8 was an outside stated goal. That particular concept
9 may be what were driving the participants. Remember,
10 JEDEC is made up of member companies, so I can't --
11 there is not a stated objective that that's what we
12 were doing, no.

13 Q. And if it had been a stated objective, do you
14 think it would have been consistent, as you understood
15 these policies, with the Legal Guides?

16 A. To derive the absolute lowest possible cost?
17 The -- the objective is to derive relevant standards,
18 and it would seem reasonable to me, if I were to -- it
19 would seem reasonable to speculate that an applicable,
20 relevant standard may, in fact, be the lowest possible
21 cost.

22 Q. Well, going back to the language of paragraph
23 F, sub 2, did you understand that all standardization
24 activity conducted in accordance with the EIA Legal
25 Guides shall be confined to the technical and

1 engineering considerations in the establishment of a
2 standard?

3 A. The discussions in the committee meetings, yes.

4 Q. In fact, if you'll go back to page 3 of the
5 exhibit, do you see under Section A, Improper
6 Activities and Programs, that in item 4, there's --
7 I'll let you come to it -- there's a particular
8 discussion --

9 A. Are you talking about -- well, I guess page 3
10 is the same on both of these. Okay.

11 Q. It is. Under Section A, Improper Activities
12 and Programs, do you see that there's a particular
13 discussion of costs in item 4? Do you see that?

14 A. Yes, I do.

15 Q. And the last sentence of that says,
16 "Discussions at EIA meetings of industry costs are
17 normally not permitted."

18 Do you see that?

19 A. Yes, I do.

20 Q. And that's how you understood JEDEC operated
21 between 1991 and 1996?

22 A. Yes, and I -- as I said, normally not
23 discussed. Relative costs are something that we allow
24 the discussion of.

25 Q. Did you at any point understand that the EIA

1 guidelines that I just read where it talks about
2 industry costs meant industry absolute costs? Is that
3 right?

4 A. I -- that has been the guideline that we have
5 used, yes.

6 Q. Well, what's your definition of "absolute cost"
7 as you just used it?

8 A. As outlined here, any discussion about the cost
9 of manufacture, die cost, that absolute cost is
10 something that JEDEC does not discuss when considering
11 particular options. Relative cost is something that
12 has been a topic of discussion and still is.

13 Q. Well, look at item 5, Future Planning, see if
14 you can read that. Let's see if we can bring that up.
15 This, again, is under the heading Improper Activities.

16 "Programs involving the exchange of company
17 information relating to future plans affecting the
18 design, research and development, production, and
19 distribution or marketing of products are also
20 improper. Any discussions at EIA meetings relating to
21 such programs are not permitted."

22 Do you see that?

23 A. Yes, I do.

24 Q. And you understood that between 1991 and 1996,
25 JEDEC operated under that EIA legal guideline?

1 A. Yes, I did.

2 Q. And when you joined the SyncLink consortium,
3 had it borrowed the same principles and guidelines from
4 these EIA guidelines?

5 A. I have no idea where they got it from.

6 Q. How about AMI2? You testified yesterday you're
7 the head of that industry consortium.

8 A. Yes.

9 Q. Does it follow these same guidelines and
10 principles?

11 A. It follows the contract that was originally
12 drawn up by SLDRAM, and there is a series of bylaws,
13 and those bylaws were inherited as modified from the
14 SLDRAM consortium, which was the out -- it was the end
15 result of the SyncLink consortium, and then there was a
16 corporation set up for the work that was taking place
17 in the SyncLink consortium, and the name became the
18 SL -- it became SLDRAM, Incorporated. AMI2 got their
19 guidelines, their rules, from that particular path. I
20 have no idea if any of this was involved in that
21 discussion or not.

22 Q. Let me just back up to make sure that the
23 record's straight on the corporate part.

24 A. Okay.

25 Q. There was the SyncLink consortium, right, and

1 you attended some of those meetings.

2 A. I did.

3 Q. And that became SLDRAM, Inc., a corporation?

4 A. That is correct.

5 Q. And then the name was changed to AMI2?

6 A. That is correct, sir.

7 Q. So, that's the same corporation?

8 A. That is -- from a -- as far as corporate
9 structure, yes, that's correct.

10 Q. And AMI2 is what you now are the chairman?

11 A. The president and CEO of that, yes.

12 Q. Well, did you have an understanding between
13 1991 and 1996 as to why EIA considered discussions of
14 industry costs and future plans of different companies
15 to be inappropriate for the EIA meeting?

16 A. Not precisely. The -- the -- the only way that
17 I could answer that is that it was the intent to
18 make -- to take steps to avoid any impropriety with
19 respect to the antitrust laws that were in effect at
20 that time.

21 Q. Was one of Ken McGhee's jobs, as you understood
22 it in that time period, at JEDEC meetings to see that
23 these guidelines were adhered to?

24 A. Not Ken McGhee's as much as the committee
25 chair. Ken McGhee is actually the secretary. It's

1 a -- anyone within the room perhaps could make -- make
2 points, and I suppose at times Ken McGhee may have made
3 issues -- may have made points, but the chairman is the
4 person who's actually running the meeting.

5 Q. All right. And the chairman of JC-42.3 between
6 '91 and '96 was Gordon Kelley, as you recall it. Is
7 that right?

8 A. I'm not entirely sure if it was Mr. Gordon
9 Kelley through all of that period of time, no.

10 Q. If we could move forward just a bit in time to
11 January of 1996, and I'll show you RX-669.

12 I have copies for you, Counsel.

13 May I?

14 JUDGE McGUIRE: Please.

15 MR. PERRY: And I have got a copy of this one
16 for you, too, but it will be I think the last one I
17 will hand up to you.

18 JUDGE McGUIRE: Thank you.

19 BY MR. PERRY:

20 Q. Now, I think you saw this at your deposition.

21 A. I did.

22 Q. And it's dated January 22, 1996, correct?

23 A. Correct.

24 Q. It appears to be a letter from the EIA and the
25 TIA to the Federal Trade Commission. Do you see that?

1 A. Yes, I do.

2 Q. If you can pull up the first preamble right
3 after, "Dear Mr. Clark."

4 Now, you were on the JEDEC Council at the time,
5 weren't you?

6 A. I believe so.

7 Q. And this says that "The Electronic Industries
8 Association (EIA) and the Telecommunications Industry
9 Association (TIA) hereby respond to the Federal Trade
10 Commission's (FTC) Notice appearing in the Federal
11 Register which seeks comment on the proposed Consent
12 Decree between Dell Computer Corporation and the FTC."

13 Do you see that?

14 A. I do.

15 Q. And while you were on the JEDEC Council, there
16 was some discussion of the Dell case. Do you remember
17 that?

18 A. Briefly, yes.

19 Q. Well, let me show you something, if I could
20 approach.

21 JUDGE MCGUIRE: Go ahead.

22 BY MR. PERRY:

23 Q. This will be RX-742, if we could just go to 742
24 just for a second before we will come back to the
25 letter to the FTC. Could we go up to the date?

1 Do you see that this is a memo to JEDEC Council
2 Members and Alternates dated July '96?

3 A. Yes, I do.

4 Q. Do you remember getting this particular memo?

5 A. I do not.

6 Q. And it appears to be from Ken McGhee. Do you
7 see that?

8 A. Yes, I do.

9 Q. And if you will pull up the "Mr. Bart"
10 paragraph, the very first sentence or two, right there.

11 It says, "Mr. Bart, vice president of
12 engineering department of EIA, asked that you be
13 informed of the attached information about the Dell
14 case."

15 Do you see that?

16 A. I do.

17 Q. Now, at the time, did you understand Mr. Bart
18 to be one of Ken McGhee's bosses?

19 A. I believe at this time, that's correct.

20 Q. Well, do you remember any discussion at the
21 JEDEC Council about the Dell case?

22 A. I don't have exact recollection at this time,
23 no.

24 Q. You were aware that EIA had submitted a letter
25 to the FTC about the Dell case, weren't you?

1 A. I was not aware of that, no.

2 Q. Well, didn't you get this memo, this Exhibit
3 742?

4 A. Well, as I -- as I testified a moment earlier,
5 I do not recall receiving this memo.

6 Q. Well --

7 A. It's quite possible that I did.

8 Q. Well, do you see that in the third paragraph
9 that starts, "ANSI," A-N-S-I, and it points out that
10 EIA had filed a comment with the FTC in January?

11 A. Excuse me, point me to the area again.

12 Q. I'm pointing to RX-742.

13 A. Okay, 742.

14 Q. Do you see that JEDEC Council members were told
15 in July '96 that EIA had filed comments with the FTC
16 back in January?

17 A. I see what it says here, yes.

18 Q. All right. Well, let's look back now at 669,
19 the January 1996 letter to the FTC. Now, it's your
20 understanding as of January of 1996, JEDEC was still an
21 activity within the engineering department of EIA,
22 correct?

23 A. Yes.

24 Q. And in fact, there's a reference to JEDEC
25 standards in the first full paragraph about -- under

1 the phrase Statement of Interest. Do you see down at
2 the bottom of that paragraph a reference to JEDEC
3 standards?

4 A. Yes, I do.

5 Q. So, would you agree with me that this letter
6 was written at least in part on behalf of JEDEC?

7 A. The -- well, I don't know if it was written
8 on -- in part on behalf of JEDEC. I know that this was
9 written in part on behalf of EIA and TIA. That's all
10 that I can respond to.

11 Q. And it was your understanding at the time that
12 JEDEC was an activity within an engineering department
13 of EIA?

14 A. That's correct, yes.

15 Q. Well, if I could take you, please, to the
16 discussion on page 2. If you look at the heading --
17 please bring up just the heading -- it says, "Allowing
18 patented technology in standards is procompetitive."

19 Do you see that?

20 A. Yes, I do.

21 Q. Was it your understanding in 1996 that EIA's
22 policy was that allowing patented technology in
23 standards was pro-competitive?

24 A. I don't recall having -- ever having a
25 discussion about this statement, pro-competitive. I

1 have no comment about that.

2 Q. Putting the statement aside, was it your
3 understanding in 1996 that EIA's policy was that
4 allowing patented technology in standards was
5 pro-competitive?

6 A. As I said, I have no recollection of
7 considering whether patented technology was or was not
8 pro-competitive.

9 Q. Would you look, please, on page 3, and I'll
10 point you to the first full paragraph of this letter
11 from the EIA and TIA to the Federal Trade Commission.
12 Do you see the first sentence?

13 A. Yes, I do.

14 Q. "Both EIA and TIA encourage the early,
15 voluntary disclosure of patents that relate to the
16 standards in work."

17 Do you see that?

18 A. Yes, I do.

19 Q. And was it your understanding, as of January of
20 1996, that the EIA policy encouraged the voluntary
21 disclosure of patents related to the standards?

22 A. Well, sir, all of -- if I can explain, the
23 JEDEC and EIA -- within EIA and within TIA,
24 participation is voluntary, and a person is -- a
25 person, company, whatever, disclosing, they are

1 voluntary. There is nothing within JEDEC, nothing
2 within EIA that actually -- there is no enforcement.
3 There is no -- there's no sergeant or whatever. And so
4 from that perspective, yes.

5 From the perspective of whether or not the
6 requirement to disclose, that is different in terms of
7 voluntary. If you're asking me do I believe it was
8 voluntary to -- in terms of the interpretation of the
9 policy, you were required to disclose your -- but your
10 actions, by definition, have to be voluntary, because
11 there is no way that EIA or any of the organizations
12 could, in fact, force you to do it.

13 Q. Was it your understanding as of January 1996,
14 and I'll point you to that first line again --

15 A. Okay.

16 Q. -- that instead of the words that appear there,
17 your understanding that EIA required the early,
18 mandatory disclosure of patents that related to the
19 standards in work?

20 A. The -- it's -- it was my understanding at the
21 time that the -- if you wished to protect the IP that
22 you had, you were obligated to disclose, and as I would
23 understand it, any company that did not disclose
24 necessarily gave up their right to that IP as it
25 related to the standard. That is what I understood.

1 Q. Was that your understanding of legal
2 principles?

3 A. No, sir.

4 Q. Was that your understanding of some contract
5 that the parties had made?

6 A. No, sir.

7 Q. Was it your understanding that the EIA patent
8 policy was that if you didn't disclose a patent that
9 related to the standards in work, you could not enforce
10 it against anyone trying to use the standard?

11 A. There is no punitive language in any of the
12 policies. Remember, all of these are voluntary
13 organizations. The part that I'm referring to are the
14 cases that had taken place at the time when people
15 failed to disclose. There was the WANG case, the Dell
16 case and others like that, and I think everybody in the
17 industry was aware of that at that time, that failure
18 to disclose had certain consequences.

19 Q. You under --

20 A. It was my own personal understanding that --
21 that if you did not disclose, then the consequence of
22 that action would be that you necessarily would forego
23 your rights.

24 Q. And was it your understanding that you would
25 forego your rights regardless of the patent policy of

1 that particular standard-setting organization?

2 A. I'm not sure I understand your question, sir.

3 Q. You understood that in the Dell case, a Dell
4 engineer had signed a certification that he knew of no
5 applicable patents, signed that in writing. Do you
6 remember that?

7 A. I do not.

8 Q. Do you understand that in the WANG case, there
9 was a ruling that was based upon implied license
10 because of negotiations between a manufacturer and the
11 patent holder?

12 A. I do not.

13 Q. You're not a lawyer?

14 A. That's correct.

15 Q. All right. Well, let me go back to the
16 statement that was made to the Federal Trade Commission
17 back in January of 1996, and it says, "Both EIA and TIA
18 encourage the early, voluntary disclosure of patents
19 that relate to the standards in work."

20 Now, you saw when you looked at this that John
21 Kelly was one of the names at the end of it under the
22 signature block. Do you see that?

23 A. Yes, I do.

24 Q. And he's the EIA general counsel today, and he
25 was in that position back then in January '96, right?

1 A. That is correct.

2 Q. And you've said throughout your testimony that
3 Mr. Kelly is someone you would defer to and you would
4 send other JEDEC representatives to for answers to
5 questions about the patent policy, correct?

6 A. That is correct.

7 Q. That's because of his role as the general
8 counsel?

9 A. Correct.

10 Q. Well, let's look at the memo that was
11 distributed to JEDEC Council members. I've given you
12 that already.

13 A. Yes.

14 Q. RX-742, July 10, 1996. It says, "Mr. Bart, VP
15 engineering department of EIA, asked that you be
16 informed of the attached information about the Dell
17 case."

18 Do you see that?

19 A. Yes, I do.

20 Q. Would you look down at the next to last
21 paragraph, the last sentence, if we could pull that up,
22 it starts with, "ANSI," A-N-S-I, the last sentence --
23 the last sentence of the next to last paragraph. It
24 starts with a parentheses, "(ANSI)."

25 Do you see that?

1 A. Yes, I do.

2 Q. And it says, "(ANSI and EIA do however,
3 encourage early, voluntary disclosure of any known
4 essential patents.)"

5 Do you see that?

6 A. Yes, I do.

7 Q. And was it your understanding in July 1996 when
8 you as a JEDEC Council member received this memorandum
9 from JEDEC EIA secretary Ken McGhee that it was EIA's
10 policy to encourage the voluntary disclosure of known
11 essential patents?

12 A. As I have said, I do not recall receiving this
13 memo, and from my perspective, in that time frame, it
14 has always been my understanding that disclosure of
15 relevant information related to a patent is -- is --
16 you are obligated to disclose. Participation in the
17 committees is always voluntary.

18 Q. So, do you think this statement to be accurate
19 and to avoid any future misunderstanding should have
20 said that EIA requires the early, mandatory
21 disclosure --

22 MR. OLIVER: Objection, Your Honor, calls
23 for --

24 JUDGE McGUIRE: I'm sorry, let him finish, and
25 then you can object. Go ahead.

1 BY MR. PERRY:

2 Q. -- of patents, patent applications, intentions
3 to file amended patent applications and the belief that
4 your company owned certain features?

5 MR. OLIVER: Objection, Your Honor, calls for
6 speculation.

7 MR. PERRY: I don't think it calls for
8 speculation. It calls for his belief at the time.

9 JUDGE MCGUIRE: Overruled. I'll entertain the
10 question and the answer on that.

11 THE WITNESS: This wording that is written, I'm
12 not sure where the wording of the memo came from. I
13 assume that Mr. Bart is the one who wrote the other
14 one, and so in response to your question -- as you
15 said, I'm not an attorney, sir. What I'm telling you
16 is my opinion -- excuse me, what I'm telling you is my
17 understanding of the policy and how it applied to the
18 work that was going on inside JEDEC.

19 I'm not sure I can give you an exact language
20 that would satisfy you. The language that we have is
21 the one that we used in the committee to satisfy the
22 engineers that were involved in the standard-setting
23 process.

24 BY MR. PERRY:

25 Q. Now, the memo, RX-742, is addressed to Jim

1 Townsend. Do you see that?

2 A. Yes, I do.

3 Q. And you described him yesterday as having a
4 passion for the patent policy. Do you recall that?

5 A. Yes, sir, I do.

6 Q. Now, do you remember back in July '96, August
7 '96 or anytime in '96 there being some big ruckus
8 because Mr. Townsend had gotten a memo saying that
9 disclosure was voluntary and encouraged?

10 A. Well, no, sir, not about the particular
11 language, I do not.

12 Q. All right. Well, let's look, if we could, at
13 the Federal Trade Commission Secretary's response to
14 the letter from the EIA and TIA. That's RX-740.

15 MR. OLIVER: Thank you.

16 MR. PERRY: May I?

17 JUDGE McGUIRE: Go ahead.

18 MR. PERRY: I am going to forget, and I'm sorry
19 if I forget.

20 BY MR. PERRY:

21 Q. Now, this is dated July 10, '96. Do you see
22 that's the same as the date on the memo to the JEDEC
23 Council?

24 A. (Document review.)

25 Q. Have you had a chance to read the letter?

1 A. Yes.

2 Q. My question to you was, do you see that this
3 letter from the Federal Trade Commission to Mr. Bart is
4 dated the same day as the memo we were just looking at
5 from Mr. McGhee to the JEDEC Council, July 10, 1996?

6 A. Yes, I do.

7 Q. And do you see that the letter is cc'd or
8 copied to Mr. Kelly, the EIA general counsel?

9 A. Yes, I do.

10 Q. You read to yourself the third paragraph of
11 this letter from the Federal Trade Commission?

12 A. I did.

13 Q. And it says, "EIA and TIA, following ANSI
14 procedures, encourage the early, voluntary disclosure
15 of patents, but do not require a certification by
16 participating companies regarding potentially
17 conflicting patent interests."

18 Do you see that?

19 A. I do.

20 Q. Now, was it your understanding as of July 1996
21 that the EIA policy encouraged the voluntary disclosure
22 of patents but did not require participating companies
23 to certify about whether or not they had any
24 potentially conflicting patent interests?

25 A. I believe you're asking to make a judgment in

1 terms of the legal aspects, and I'm not sure I'm either
2 qualified or prepared to do that. What I can give you
3 as an answer is that in the functioning of the JEDEC
4 committees, inside of EIA, with the patent policies
5 that were in place at the time, that were reiterated at
6 every single meeting, that you were obligated to
7 disclose if you had IP that you felt was relevant and
8 should do so.

9 Q. Now, between 1991 and 1996, did you think it
10 was important that JEDEC 42 committee members clearly
11 understood that policy? Did you personally feel that
12 that was important?

13 A. I did, yes.

14 Q. Now, the -- this -- let me focus on one of the
15 statements that's in that first sentence, and that's
16 the statement about a certification by participating
17 companies regarding the potentially conflicting patent
18 interests.

19 Was there ever a discussion that you were a
20 part of, that you were present for, between '91 and '96
21 about adding some kind of written certification to be
22 signed by member representatives at JEDEC meetings that
23 say, with respect to a ballot or a presentation, my
24 company does not have any potentially conflicting
25 patent interests?

1 A. I'm not sure if I was ever involved in such a
2 discussion. I -- I know the topic has certainly come
3 up in the industry, and I can't recall where -- where
4 it would have come up that I would have been aware of
5 it.

6 Q. Now, have you ever seen an application form to
7 join JEDEC?

8 A. I'm not sure I have, sir.

9 Q. So, you don't know whether there's any
10 statement on that application form about the rules of
11 JEDEC or patents or anything like that, right? You
12 just don't know.

13 A. I'm sorry, I have no knowledge. I can't say.

14 Q. Well, let's talk a little bit about the state
15 of mind of the engineer that we discussed yesterday
16 that in your understanding triggered an obligation to
17 make a disclosure of some sort to JEDEC.

18 A. Yes.

19 Q. Do you have that general subject matter in
20 mind?

21 A. Yes, I do.

22 Q. I just want to follow up and see if I can
23 understand the parameters of what you were talking
24 about yesterday.

25 What if the engineer hoped that his company

1 would file a patent application in the future with
2 respect to a particular feature or application that was
3 related in a general way to a subject being discussed
4 at JEDEC? Was it your understanding, during the '91 to
5 '96 time period, that the hope of the engineer
6 triggered an obligation on the part of the engineer who
7 was the representative that was sitting in the meeting,
8 that engineer, to raise his hand and say he had a hope?

9 A. I'm not sure that -- you're asking me to
10 speculate here, and I don't know that I can answer.

11 Q. I'm not. I'm really focused on your
12 understanding.

13 You talked yesterday about the state of mind of
14 the engineer, and --

15 A. The --

16 Q. -- and I'm focused on what that engineer's
17 state of mind was that in your view triggered. So, let
18 me try to ask the question a different way.

19 A. Okay.

20 Q. Because I'm not asking you to speculate.

21 A. Okay.

22 Q. Most of the 42.3 representatives were
23 engineers, right?

24 A. I would think so, yes.

25 Q. In fact, there's -- I think there's something

1 in one of the manuals that says they're supposed to
2 have a technical background, right?

3 A. Probably.

4 Q. All right. So, most of these representatives
5 sitting in the room are engineers. Were there any --
6 as far as you know, between '91 and '96, were there any
7 JEDEC representatives who were patent lawyers?

8 A. None to my knowledge, no, sir.

9 Q. Was there a lawyer that regularly went to
10 meetings --

11 A. None that I'm aware of.

12 Q. -- of 42.3?

13 A. None that I'm aware of.

14 Q. All right. Now, let's talk about what -- in
15 your understanding of the operation of the patent
16 policy between '91 and '96, what your understanding was
17 about what triggered an obligation to disclose
18 something, and my question was, if the representative
19 had a hope or desire that his company file a patent
20 application in the future that related in some general
21 way to a particular feature being discussed in the
22 JEDEC meeting, did that trigger a duty of disclosure in
23 your understanding?

24 JUDGE MCGUIRE: Now, when you say a hope, Mr.
25 Perry, I mean, I'm not sure I understand the context.

1 I mean, a hope could be a thought, but it doesn't mean
2 you're in the process of having an application filed.
3 So, maybe you should change the word "hope" to
4 something a little more tangible in that regard.

5 MR. PERRY: Well, it's based on the fact that
6 this is the first witness and we haven't seen all the
7 evidence come in, and I am trying to -- these questions
8 are --

9 JUDGE McGUIRE: I don't know what you mean
10 either when you said a "hope" that he may -- that his
11 company may file an application for a patent. I don't
12 understand in what context that could cause him to have
13 an understanding.

14 MR. PERRY: I'll try to get around it.

15 BY MR. PERRY:

16 Q. As you understood the JEDEC patent policy in
17 operation between '91 and '96, was there an obligation
18 on the part of the representative to do any kind of
19 investigation or inquiry or research back at his
20 company about the company's patent or patent
21 application portfolio?

22 A. There -- in the policy itself, it was not ever
23 stated that there should be any kind of research.
24 That -- I don't recall having that understanding, no.

25 Q. Okay, let me ask that a different way.

1 As you understood the operation of the patent
2 policy in that time period, was a representative
3 required to go talk to lawyers for the company to
4 understand what was in the patent process that might
5 relate to JEDEC?

6 A. This would be sort of left up to the individual
7 companies. There was no stated policy like that.

8 Q. All right. Was it your understanding that the
9 disclosure obligation during that time period was
10 triggered by the actual knowledge of the representative
11 at the meeting?

12 A. It was triggered by the actual knowledge of the
13 people that were involved, and that would be not just
14 the representative at the meeting, but all of the
15 people that would have been involved in -- I mean, some
16 companies -- for some companies, I'm sure that may be
17 one person. For other companies, that may be 30 or 40
18 or 50 people. So, it's triggered by the -- the
19 knowledge of the people that are involved in the
20 process.

21 Q. Now, you understood during that time period
22 that many of the members of 42.3 were Asian companies
23 or had headquarters in Asia?

24 A. Sure.

25 Q. And did those companies often send over as

1 guests various scientists or engineers from Japan?

2 A. Yes.

3 Q. Was it your understanding of the application of
4 the patent disclosure policy that those guests from
5 those companies in Japan were obligated to disclose
6 patents, patent applications that were related in some
7 general way to a subject being discussed at JEDEC, even
8 though they weren't representatives?

9 A. Yes, absolutely.

10 Q. If an engineer representative sitting in a
11 meeting had a question in his head when he saw
12 something being presented, gee, I wonder if we might
13 have intellectual property interests with respect to
14 that feature, was he obligated, as you understood the
15 policy in that time period, to disclose the fact that
16 he had a question?

17 A. As I responded, it would have to be people that
18 would have knowledge. If they had questions, I would
19 assume they would go back and have their questions
20 answered, or to contact whoever inside or outside the
21 company to get their question answered. I -- I have
22 no -- I can't tell you how the obligation to disclose
23 is relative to a question that might come up.

24 Q. Well, if the engineer representative had
25 actually done a review of the company's patent

1 applications and had concluded that his company had not
2 filed any applications that covered the feature that
3 was being discussed, was he obligated to disclose that
4 he had looked at the applications and had come to that
5 conclusion?

6 A. Sir, you're obligated to disclose if you have
7 knowledge of something that's relevant.

8 Q. Well, let's talk about your understanding in
9 that time period about what had to be disclosed, how
10 much information, what type of information, that's the
11 general subject matter here of these questions.

12 A. Okay.

13 Q. And you talked some about this yesterday. And
14 assume we're talking about a patent application now.

15 If an engineer representative was going to
16 disclose to the committee a patent application because
17 he believed or had knowledge -- let me strike that.
18 Let me start over.

19 If an engineer representative was going to
20 disclose a patent application because he had knowledge
21 that it related in a general way to a feature being
22 discussed at the meeting, was it your understanding in
23 that time period that he would need to give a
24 description of the claims contained in the patent
25 application?

1 A. It has been my understanding that the
2 requirement to disclose is that you disclose and you
3 disclose sufficient technical information as it would
4 be relevant to the -- so the formulating committee can
5 understand what is being claimed.

6 Q. Now --

7 A. So, I'm not sure that that would include all of
8 the detail that you're talking about. It would have to
9 be some sufficient technical information would be
10 required to be disclosed, such that the formulating
11 committee can understand what has been claimed.

12 Q. And that was your understanding with respect to
13 disclosure of patent applications as well, right?

14 A. In terms of intellectual property, I'll leave
15 it in a general term, sir.

16 Q. So, what you're saying is what the company
17 needed to know is -- what the committee needed to know,
18 sorry, is how the company described its invention?

19 A. I'm not sure it would be how the company would
20 describe its invention. It was how it would -- the --
21 the terminology is sufficient technical information,
22 and I would expect that that might involve an exchange.
23 Perhaps something could be offered. If not sufficient,
24 more could be offered. I can't tell you exactly the
25 language that would be used in that case.

1 Since this is up to the committee, the
2 committee has the responsibility -- excuse me, the
3 committee has the option to certainly request
4 additional information if they would so desire.

5 Q. In practice, in your experience from '91 to
6 '96, what you personally saw, when a company disclosed
7 that it had a patent application that might relate to
8 something under discussion and then said, and if it
9 issues and if it covers the standard, we agree to
10 reasonable and nondiscriminatory licensing, was that as
11 far as the discussion went of that application?

12 A. In some cases, yes.

13 Q. Do you remember any cases where there was a
14 discussion under the circumstances I just laid out of
15 designing around whatever was claimed in that patent
16 application, choosing an alternative?

17 A. Do I remember discussions about designing
18 around particular patent claims or patent applications?
19 Is that the question you're asking me?

20 Q. Well, let me make sure the question's clear.

21 A. All right.

22 Q. We're talking about in your experience, when
23 you saw between '91 and '96 a company representative to
24 say my company has filed a patent application that
25 relates in some way to the subject matter of this

1 presentation, and my company says if the patent issues
2 and it covers the standard, we agree to reasonable and
3 nondiscriminatory licenses to all comers.

4 A. Okay.

5 Q. In that circumstance, did you ever see the
6 committee try to figure out an alternative patent that
7 would not use whatever it was the patent application
8 related to?

9 A. There -- I'm trying to remember if there is a
10 specific example. I'm not sure I can recall one for
11 you.

12 Q. Well, in order for a group of engineers to
13 figure out an alternative path with respect to a patent
14 application over some feature, wouldn't the engineers
15 need to know what the claims were that were in the
16 patent application?

17 A. Well, as a practical implementation matter,
18 when a company would disclose that they had
19 intellectual property in the form of a patent
20 application, I think what would normally happen in that
21 case is companies then would negotiate outside of
22 JEDEC, and they would come to some independent
23 agreement outside as to whether or not they would be
24 involved in future license, current license or
25 otherwise, and that the discussion about the relevance

1 of the feature and the applicability of the feature
2 took place inside of JEDEC, but the actual real
3 decision about it took place -- I mean in terms of the
4 real decision about the intellectual property itself,
5 it took place outside of.

6 The requirement was to disclose, and in order
7 to be able to continue to consider it, the assurance
8 letter was required. That process having taken place,
9 the rest of the process takes place outside of JEDEC.
10 So, I can't tell you exactly how or if something else
11 would have taken place in that time period.

12 Q. Were you personally involved in the licensing
13 negotiations with respect to the technologies covered
14 by patent applications disclosed at JEDEC --

15 A. I was --

16 Q. -- in the '91 to '96 time period?

17 A. In the '91 to '96 time frame, I worked for user
18 companies. I was not involved in the discussions,
19 because I was not a manufacturer of DRAM, nor did I
20 work with a manufacturer of DRAM. I worked as a
21 customer. So, I have no knowledge.

22 MR. PERRY: All right, Your Honor I would move
23 to strike his testimony about licensing negotiations on
24 the grounds that there was no foundation for it.

25 MR. OLIVER: Objection, Your Honor. He's made

1 no effort to determine whether he has a foundation or
2 not.

3 JUDGE McGUIRE: I'm sorry, Mr. Oliver, what was
4 that again?

5 MR. OLIVER: Mr. Perry has not made any effort
6 to determine what Mr. Rhoden's foundation was.

7 MR. PERRY: He just said he had no knowledge of
8 it, Your Honor. I'm happy to go further. He said he
9 had no knowledge.

10 JUDGE McGUIRE: Sustained. That portion will
11 be stricken from the record.

12 MR. PERRY: Your Honor, this would be a
13 convenient time for the lunch break, but I can keep
14 going.

15 JUDGE McGUIRE: All right, let's go off the
16 record for a moment.

17 (Discussion off the record.)

18 (Whereupon, at 1:45 p.m., a lunch recess was
19 taken.)

20

21

22

23

24

25

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

AFTERNOON SESSION

(1:45 p.m.)

JUDGE MCGUIRE: This hearing is now in order.
Mr. Perry, you may proceed, unless we have a couple of housekeeping items.

MR. OLIVER: Just very quickly, Your Honor, I wondered if I might be able to offer the witness a bottle of water?

JUDGE MCGUIRE: Oh, by all means, sure.

THE WITNESS: Thank you. It's pretty dry in the courtroom.

JUDGE MCGUIRE: It is probably good if in the future, whomever is in charge of putting the courtroom facilities together, if they would just put another -- what I have up here, another pitcher, so whoever is on the stand will have access. Just an idea.

All right, Mr. Perry.

MR. PERRY: Thank you, Your Honor.

BY MR. PERRY:

Q. Mr. Rhoden, let's go back and talk for a minute about your understanding of what information had to be disclosed based on your understanding of the patent policy in effect between 1991 and 1996 with respect to intellectual property.

Now, you're a named inventor on a patent,

1 right?

2 A. Excuse me?

3 Q. Are you a named inventor on a patent?

4 A. A named inventor on patents? Yes, I am.

5 Q. How many?

6 A. Fifteen to 20, something like that.

7 Q. So, you came up with something or you helped
8 come up with something that was novel, that had advance
9 over the prior art and was useful and a patent issued,
10 right?

11 A. Correct.

12 Q. And you understand that the patent expires
13 under the law after a certain amount of time?

14 A. Yes, I do.

15 Q. And at that point in time, after the patent
16 expires, whatever is claimed in it is donated to the
17 public. Is that your understanding?

18 A. I don't know that I heard exactly that
19 terminology. I'm sure that's probably written
20 somewhere.

21 Q. Do you also understand that sometimes companies
22 want to keep their inventions secret and maintain them
23 as a trade secret so that they are never donated to the
24 public, as it were?

25 A. Yes, I do.

1 Q. For example, the formula for Coca-Cola, you
2 understand that to be a trade secret, nobody really
3 knows exactly what's in it?

4 A. Yes, I do.

5 Q. And if it's successfully kept secret, it can
6 belong to the company forever. Is that your
7 understanding?

8 A. I suppose, yes.

9 Q. Now, as you understood the JEDEC patent policy,
10 as it was being applied at JEDEC meetings in January
11 '91 or December '91, whatever we're using as the start
12 date, just say 1991 up to 1996, did you understand that
13 if a JEDEC representative had knowledge of an invention
14 his company had come up with that related in some
15 general way to a topic under discussion but that the
16 company had decided to keep it a trade secret and not
17 apply for a patent, that the company was obligated --
18 the representative was obligated to disclose the
19 invention at the JEDEC meeting?

20 A. You're asking me to talk about a trade secret,
21 sir, and I'm not sure that that -- that is applicable
22 here. I -- the JEDEC patent policy would apply to
23 things that would be in the patent process. It would
24 seem to me, if I were to speculate, that trade secrets
25 would be not intended to ever go into the patent

1 process and thereby not ever come under the realm of
2 the patent disclosure policy that exists inside JEDEC.

3 Q. Well, yesterday you said something like the
4 best way to put it is whatever the company thinks it
5 has ownership of. Now, did you mean to exclude from
6 that answer ideas, inventions that the company thought
7 it had but that it was not at that time intending to
8 seek to put into the patent process?

9 A. Let me see if I can offer a clarification.
10 What I said -- I probably used terminology much to the
11 effect that said if you believe that you have ownership
12 for it and you wish to protect your right to assert
13 this at some later date, then you are obligated to
14 disclose it, and I don't think that would apply in my
15 understanding of what -- your description of trade
16 secret would apply, because trade secret seems like
17 it's only relevant so long as it's your secret.

18 If somebody else displays it and you haven't
19 pursued protection of it, then you've lost it. Is that
20 true or not true?

21 Q. Well, assume that you've disclosed your
22 information under a nondisclosure agreement to a
23 manufacturer who builds the product, and assume that
24 whatever your invention is is not obvious from the
25 finished project. Now, assume that for me, and assume

1 that that company's at the standard-setting meeting, at
2 the JEDEC meeting.

3 Is it your understanding that the
4 representative's obligated to say, we've got an
5 invention that's related to that feature under
6 discussion, even where the company hasn't decided yet
7 whether to put it into the patent process or not?

8 A. As I explained, I've tried to be very clear, if
9 it is in the patent process, your understanding of it,
10 if you intend to seek protection of your intellectual
11 property as it relates to the standard, then you're
12 obligated to disclose. And so I can't speculate for
13 you on the other assumptions that you're making. I'm
14 sorry.

15 Q. Okay. Where does that obligation come from, to
16 your understanding? What is your understanding of
17 where that obligation came from back in '91 to '96?

18 A. The JEDEC patent policy is where that
19 obligation comes from, and if you'd like, I can be more
20 specific.

21 Q. Is it written down somewhere that you know of
22 that says that patents, when used in the policy, means
23 something that hasn't -- where an application hasn't
24 even been filed yet?

25 A. As written in -- it specifically applies to

1 patents, and I testified that the patent was
2 understood, and as we explained it and as I have
3 explained it myself and as I've heard others explain
4 it, that patents applied to anything in the patent
5 process, and that certainly would encompass things that
6 would be patent applications and would be patents also,
7 and certainly issued patents, patent applications,
8 and -- and the process itself, as the companies that
9 are in JEDEC and working toward a standard, and the
10 intent is to create standards that are free of
11 intellectual property or at least of all intellectual
12 property that's known at the time of the creation of
13 the standard that would relate to that standard, then
14 that -- if a company is operating in this realm,
15 operating under the good faith -- all of the
16 competitors and everyone else in the room are working
17 together, then that would include if you were going
18 to -- if you had not yet filed.

19 To me, the patent process itself -- there is a
20 process, as you're aware and as I'm aware, and the
21 patent process is an engineer or group of engineers
22 formulates the information and puts it into the patent
23 process. Now, I'm sure from a legal perspective there
24 is also a filing date and there's an issue date and
25 there's other things that come along with that, but for

1 me and my understanding of the policy, the term
2 "patent" applies to the patent process, anything in
3 that patent process. Is that clear?

4 Q. Are you done with your answer?

5 A. If it's clear to you, then yes, I'm done.

6 MR. PERRY: Your Honor, I would like to move to
7 strike the answer, because my simple question was
8 whether a concept was written down somewhere, and that
9 was in my view nonresponsive. I would like to get an
10 answer to the question.

11 JUDGE McGUIRE: Overruled.

12 BY MR. PERRY:

13 Q. Let me go back to my question, Mr. Rhoden.

14 You've described that to you, there was an
15 obligation -- as you understood it, there was an
16 obligation to disclose by a representative if he had
17 knowledge that a company intended to file a patent
18 application. Is that right?

19 A. I --

20 Q. If the application related in some general way
21 to a feature being discussed at JEDEC.

22 A. If --

23 Q. Is that part of it?

24 A. -- if that -- if that claim was within the
25 patent process, whatever step you want to call it, then

1 the answer is yes.

2 Q. Does -- whatever you're referring to as the
3 patent process, is that definition of the patent
4 process that you're using, is that written down
5 anywhere for us to look at?

6 A. The process itself of filing and claiming a
7 patent? Not within JEDEC.

8 Q. Let me ask it a different way.

9 A. Okay.

10 Q. In any EIA or JEDEC publication, have you ever
11 seen the phrase "patent process" defined?

12 A. I don't recall ever seeing exactly that
13 terminology used.

14 Q. Have you ever seen anything in writing in a
15 JEDEC or EIA manual that expressly stated that
16 disclosure had to be made of intention to file a patent
17 application?

18 A. Well, perhaps the best way for me to answer
19 this question is to offer by example what I have
20 observed --

21 MR. PERRY: Your Honor, may I interrupt?

22 JUDGE McGUIRE: Yes, you can. Go ahead, Mr.
23 Perry.

24 MR. PERRY: I would like to move to strike and
25 ask him -- maybe I'll ask the reporter to read the

1 question back.

2 JUDGE McGUIRE: Yes, please do, court reporter.

3 (The record was read as follows:)

4 "QUESTION: Have you ever seen anything in
5 writing in a JEDEC or EIA manual that expressly stated
6 that disclosure had to be made of intention to file a
7 patent application?"

8 JUDGE McGUIRE: Okay, then Mr. Rhoden, can you
9 answer that question?

10 THE WITNESS: Well, I think so. I have seen in
11 those manuals the wording that would say that it is a
12 requirement for patents, and then it would be my
13 interpretation of that that -- operating in the
14 committee and in the guise of standardization that that
15 would be covered and would be included.

16 BY MR. PERRY:

17 Q. And we looked at some of those manuals
18 yesterday, correct?

19 A. Yes, we did.

20 Q. And I'm going to ask you to see if you can find
21 one.

22 A. Give me a number and I'll try.

23 Q. Manual 21-I was marked as Exhibit 208, and I
24 believe it's been entered into evidence.

25 JUDGE McGUIRE: Is that an RX-208 or CX-208?

1 MR. PERRY: CX-208, thank you, Your Honor.

2 JUDGE McGUIRE: All right.

3 MR. PERRY: But I have another one here if
4 you -- Counsel?

5 THE WITNESS: 21-I? I have it. Okay.

6 BY MR. PERRY:

7 Q. Now, you identified this yesterday as a JEDEC
8 manual that was approved as of October 1993, the date
9 it bears on the front cover, correct?

10 A. Correct. That would have been the published
11 date.

12 Q. Published date, thank you. It was --

13 A. We would have to research the record to find
14 when it was actually approved.

15 Q. Now, if you'll look on the -- it's page 5 of
16 the exhibit, but it's page 1 of the manual, make sure
17 we're on the same page. It starts up at the top just
18 with the heading JEDEC Manual of Organization and
19 Procedure.

20 Do you see that?

21 A. Yes, I do.

22 Q. Under 1.2, Functions, the last sentence of the
23 second paragraph says, "Such organization and
24 procedures must be consistent with those defined in
25 this manual."

1 Do you see that?

2 A. Yes, I do.

3 Q. And then there's these double asterisks after
4 "must."

5 Do you see that?

6 A. Yes, I do.

7 Q. And that means down at the bottom -- that means
8 you're supposed to go down to the bottom, I guess,
9 right?

10 A. That's correct.

11 Q. Where you see another set of double asterisks,
12 and it says, "Special word usage. The word 'must' is
13 cautionary in the sense that the stated action is
14 essential to successful achievement of a purpose."

15 Do you see that?

16 A. I do.

17 Q. And then there's a citation to EP-7-A, right?

18 A. Yes.

19 Q. And we saw that yesterday, I believe. That's
20 JX-54. Yeah, that was entered into evidence. And
21 that's a Style Manual. Feel free to find it, but it's
22 the EIA Engineering Publication Style Manual.

23 Do you see that?

24 A. Okay.

25 Q. Have you ever had occasion to read this?

1 A. I have read it. I'm not sure I have ever read
2 all of it. I have read parts of it upon occasion.

3 Q. Well, let's look at the first page of Exhibit
4 54.

5 Do you need one, Counsel?

6 MR. OLIVER: Thank you.

7 BY MR. PERRY:

8 Q. And do you see the first page is a notice. Do
9 you see it says, "Notice"?

10 A. Yes, I do.

11 Q. And if you look in the second paragraph,
12 there's that language that we were talking about
13 earlier that says, "Recommended Standards and
14 Publications are adopted by EIA without regard to
15 whether their adoption may involve patents on articles,
16 materials, or processes."

17 Do you see that?

18 A. I do.

19 Q. And then the next page, it says, "Style
20 Manual."

21 A. Yes.

22 Q. And did you understand -- did you have an
23 understanding between '91 and '96 of what the purpose
24 of this EIA Style Manual was?

25 A. The Style Manual, it is my understanding, is

1 primarily for use in creation of the look and feel of
2 the standards as they were published.

3 Q. Well, does it also tell you what words mean
4 when they're used in --

5 A. I'm not sure.

6 Q. Let's talk about it.

7 Going back to 21-I, we saw this citation to
8 7-A --

9 A. Okay.

10 Q. -- in that asterisk on the first page.

11 Remember that?

12 A. I do.

13 Q. And it said, "See EP-7-A at 7.2.1," so if you
14 will jump over to the Style Manual, Exhibit 54, you
15 will find 7.2.1 on page 25, I think.

16 A. Okay.

17 Q. And that's under the general heading 7 -- let's
18 look up at the general heading, if we could, heading 7.
19 Show that whole paragraph, 7.1.

20 A. Okay.

21 Q. And that says, "Special EIA Publication
22 Policies," and again, from '91 to '96, JEDEC was an
23 engineering activity within the EIA engineering
24 department, right?

25 A. That's correct.

1 Q. And the style of its publications was, as you
2 understood it, governed by this Style Manual, right?

3 A. Well, this was the recommended approach and
4 recommended that management people use. I can't say
5 that everybody did, including myself.

6 Q. Well, when 21-I cites to this Style Manual and
7 explains what the word "must" means, does that in your
8 mind, as you understood it at the time, mean you should
9 go to the Style Manual and find out what that word is
10 intended to mean?

11 A. In the footnote, I would think so.

12 Q. All right. Well, let's look at 7.2.1, and its
13 heading, Shall, Should, May and Must. Do you see that?

14 A. I do.

15 Q. It says, "The word 'shall' expresses
16 requirement, 'should' expresses recommendation, 'may'
17 expresses permission, and 'can' expresses possibility."

18 Then on the next page there's a table. Do you
19 see Table 3, Verbal Forms?

20 A. I do.

21 Q. And it gives you some equivalent expressions
22 for the words shall, should, may and can. Do you see
23 that?

24 A. Yes, I do.

25 Q. And then below the table, we find out about

1 "must." Do you see "must"? It says, "Do not use
2 'must' except to describe unavoidable situations.
3 'Must' is cautionary in the sense that the stated
4 action is essential to the successful achievement of a
5 purpose."

6 Do you see that?

7 A. I do.

8 Q. And if you look back at 21-I, you will see in
9 the footnote on the first page of 21-I that that
10 language about "must" is picked up there.

11 A. Yes, I do.

12 Q. All right. Now, this is going somewhere.
13 Let's see if we can look at the description of patented
14 products in 21-I, paragraph 9.3. That appears on page
15 19 of Exhibit 208, and I'll let you find it.

16 A. Yes. Okay.

17 Q. All right, under 9.3, the first sentence -- and
18 I think you were shown this yesterday -- it says, "EIA
19 and JEDEC Standards and --" I'll wait for the text to
20 come up, sorry.

21 "EIA and JEDEC standards and nonproduct
22 registrations (e.g., package outline drawings) that
23 require the use of patented items should be considered
24 with great care."

25 Do you see that?

1 A. Yes.

2 Q. As you understand how 21-I comports with 7-A,
3 the reader should understand "should" to mean whatever
4 "should" is defined as in the Style Manual, 7-A.

5 A. Well, I would not, because the word "should" is
6 not actually referenced and pointed back. The only
7 reference to 7-A that I'm aware of is in reference to
8 the word "must." Perhaps it exists, but I'm unaware of
9 it.

10 Q. Well, down at the bottom of this page that
11 we're on, it says, "The word 'should' is to be
12 understood as advisory."

13 Do you see that?

14 A. Yes, I do, okay.

15 Q. Do you understand that the word "should" as it
16 appears in 21-I is intended to be advisory?

17 A. Yes.

18 Q. Now, if you look to the next sentence in 9.3,
19 it says, "While there is no restriction against
20 drafting a proposed standard in terms that include the
21 use of a patented item, if technical reasons justify
22 the inclusion, committees should ensure that no program
23 of standardization shall refer to a product in which
24 there is a known patent unless all the relevant
25 technical information covered by the patent is known to

1 be -- is known to the formulating committee,
2 subcommittee or working group."

3 Do you see that?

4 A. I do.

5 Q. It's your understanding that the word "should,"
6 as used in that sentence in 21-I means whatever
7 "should" is defined to mean in the Style Manual, 7-A.

8 A. I never made that particular connection, but it
9 seems reasonable.

10 Q. Now, let's look at the next sentence in 9.3,
11 the first paragraph. It says, "If the committee
12 determines that the standard requires the use of
13 patented items, then the committee chairperson must
14 receive a written assurance from the organization
15 holding rights to such patents that a license will be
16 made available without compensation to applicants
17 desiring to implement the standard, or written
18 assurance that a license will be made available to all
19 applicants under reasonable terms and conditions that
20 are demonstrably free of any unfair discrimination."

21 Do you see that?

22 A. Yes, I do.

23 Q. Now, you talked a little earlier today in
24 response to Mr. Oliver's questions about the impact on
25 JEDEC of lawsuits that had occurred when Rambus

1 asserted claims on their patents.

2 A. Yes.

3 Q. I want to know if -- as far as you know, has a
4 JEDEC committee ever determined that any JEDEC standard
5 requires the use of any patented items where the patent
6 is held by Rambus?

7 A. The JEDEC committee has made no such
8 determination.

9 Q. And has any JEDEC committee ever asked Rambus
10 for a written assurance that a license will be made
11 available under Rambus' patents to all applicants under
12 reasonable terms and conditions that are demonstrably
13 free of any unfair discrimination?

14 A. I believe there was a request made recently
15 over a proposal that was made in the JEDEC committee,
16 so there was a letter that was sent to Rambus. I don't
17 believe in this time frame, but that was a recent
18 occurrence, yes.

19 Q. Which patent did that refer to?

20 A. I do not remember.

21 Q. It didn't refer to any of the patents in the
22 Infineon suit, did it?

23 A. I have no idea, sir.

24 Q. Did you write the letter?

25 A. I did not.

1 Q. Do you know who did?

2 A. The letter would have come from the JEDEC
3 offices. I'm not exactly sure who wrote it.

4 Q. Did it refer to any patents that apply to
5 SDRAM?

6 A. I have no idea.

7 Q. Did it refer to any patents that apply to
8 JEDEC-compliant DDR SDRAM?

9 A. I have no idea.

10 Q. All right. So, as far as you know, no request
11 has been made by any JEDEC committee to Rambus asking
12 it if it will license to all comers under reasonable
13 terms and conditions patents that Rambus holds that
14 cover JEDEC-compliant SDRAM and DDR SDRAM devices.
15 Isn't that true?

16 A. That's correct.

17 Q. Have you thought about making that request at
18 JEDEC, as far as you know?

19 A. I have no knowledge.

20 Q. Now, let's talk about what "fair and
21 reasonable" means as you understand it in the JEDEC
22 policy. Is it your understanding -- strike that.

23 Between '91 and '96, was it your understanding
24 that JEDEC became involved at all in determining what a
25 fair and reasonable royalty was for patented

1 technology?

2 A. It has always been my understanding that fair
3 and reasonable was determined by the courts and between
4 the negotiating parties. JEDEC was not involved.

5 Q. So, you mean -- is it fair to say that the
6 first step would be the negotiation and then the
7 courts, as you understand it?

8 A. I have no idea.

9 Q. All right. Do you -- has JEDEC taken any
10 position with respect to the royalties proposed to
11 anyone with respect to any Rambus patent, as to whether
12 or not the license rate, the royalty rate that's
13 proposed, is fair or reasonable?

14 A. JEDEC has not taken such a position to my
15 knowledge.

16 Q. Well, let's look back at the letters from 1996
17 that we were looking at this morning on this particular
18 issue, we didn't address this this morning, now that
19 we're talking about the fair and reasonable part. Let
20 me let you have the chance to put in front of you 669
21 and 740 that we looked at this morning. 669 is the
22 letter from EIA and TIA to the Federal Trade
23 Commission.

24 A. Okay.

25 Q. And 740 is the response dated July 10.

1 And by the way, Your Honor, I would like to
2 move these two exhibits, 669 and 740, into evidence.

3 JUDGE McGUIRE: Mr. Oliver, any objection?

4 MR. OLIVER: No objection, Your Honor.

5 JUDGE McGUIRE: So entered.

6 (RX Exhibit Number 669 was admitted into
7 evidence.)

8 (RX Exhibit Number 740 was admitted into
9 evidence.)

10 BY MR. PERRY:

11 Q. Now, if you will look first to the letter
12 that's to the Federal Trade Commission, that's Exhibit
13 669, I'll point you to page 4 -- the page numbers are
14 up at the top -- and I'll ask you to focus on the only
15 full paragraph on that page, and I'll just let you read
16 it to yourself so you understand my question in
17 context.

18 A. You would like me to read the paragraph?

19 Q. Just to yourself, just so that when I ask my
20 question, you have the context.

21 A. (Document review.) Okay.

22 Q. Now, I'd like to point your direction in
23 particular and ask to be brought up on the screen the
24 last two lines -- the last two sentences in that only
25 full paragraph on this page 4. It starts with, "The

1 early," the last two sentences.

2 It says, "The early disclosure policies of EIA
3 and TIA have worked well to highlight possible patents
4 and ensure that they will be available for licensing by
5 the time the standard is published. Even if knowledge
6 of a patent comes later in time due to the pending
7 status of the patent while the standard was being
8 created, the important issue is the license
9 availability to all parties on reasonable,
10 non-discriminatory terms."

11 Do you see that?

12 A. I do.

13 Q. And was it your understanding in 1996, at the
14 time this letter was written by the EIA to the Federal
15 Trade Commission, that the important issue in
16 connection with the EIA patent policy was that licenses
17 be available to all parties on reasonable,
18 nondiscriminatory terms if patented technologies are
19 included in EIA standards?

20 A. That would not be my understanding.

21 Q. And should we ask John Kelly if that was his
22 understanding when he signed -- strike that. I'll
23 withdraw that question, Your Honor.

24 What was your understanding in 1996 about the
25 importance of the availability to all comers on

1 reasonable terms as a goal of JEDEC? Was that a goal
2 of JEDEC?

3 A. The policy in JEDEC was to -- the policy in
4 JEDEC obligated the participants to disclose, as is
5 stated here, as early as possible. I think that's
6 probably referenced here as well. That is the part of
7 it that we spent all of the time working on in the
8 standards. The rest would be wording associated with
9 the required policy, letter, that would come from the
10 IP holder as far as inclusion of their IP into the
11 policy -- into the standard itself.

12 Q. Well, yesterday you testified that when you
13 used the phrase "uphold the principles of antitrust" in
14 your Power Point presentation about are standards worth
15 the effort, that really meant nondiscriminatory,
16 available to everybody.

17 A. That's correct.

18 Q. So, that's an important principle to uphold,
19 right, available to everybody if it's in a standard?

20 A. Yeah, upholding -- I mean, a standard cannot
21 really be an open standard unless everybody has access.
22 I agree with that.

23 Q. Right. And JEDEC doesn't get involved with how
24 much they have to pay, right?

25 A. We do not.

1 Q. So, if Rambus' patents are available to all
2 comers on fair and reasonable terms to manufacture or
3 use JEDEC-compliant standard devices, is there the same
4 impact on JEDEC that you spoke about this morning when
5 Mr. Oliver was asking you those questions about the
6 impact on JEDEC from Rambus' lawsuits?

7 A. The -- the impact that -- in my understanding,
8 the impact of the lawsuits have more to do with the
9 failure to disclose, and the impact that I described
10 this morning in my understanding is a lot more relevant
11 about the failure to disclose, the failure of timely
12 disclosure, than it is about the actual terms of
13 whatever would wind up.

14 Q. So, this sentence in the January letter to the
15 Federal Trade Commission from the EIA, the important
16 issue is the license availability to all parties on
17 reasonable, non-discriminatory items, but you think
18 that's not the important issue when it comes to JEDEC?

19 A. That's not what I said, sir. I said the one
20 that I used the most was the disclosure was more
21 important to what -- the work that I did. I did not
22 make a statement about what I thought was more or less
23 important.

24 Q. And is disclosure more important to
25 manufacturers that have to pay the royalties directly

1 and worry about passing them on to their end users than
2 they would be to the end users, as you understood it
3 within JEDEC?

4 A. Disclosure is more -- disclosure is important
5 to the JEDEC process, regardless of who's involved.

6 Q. Well, let's look at the response back from the
7 Secretary of the Federal Trade Commission, which is in
8 front of you, Exhibit 740, and I'll ask you to look at
9 the third paragraph on the first page, and we talked
10 about the first sentence, "EIA and TIA, following ANSI
11 procedures, encourage the early, voluntary disclosure
12 of patents, but do not require a certification by
13 participating companies regarding potentially
14 conflicting patent interests. "

15 Now, I want to talk about the second sentence
16 in that paragraph, which says, "Later discovered
17 patents essential to the standard can remain as part of
18 a standard if licenses for the underlying patents are
19 available either on a royalty-free basis or on
20 reasonable terms and conditions that are demonstrably
21 free of unfair discrimination."

22 Do you see that?

23 A. I do.

24 Q. Now, when the Federal Trade Commission wrote
25 that language on July 10, '96, was it your

1 understanding that the EIA patent policy provided that
2 later discovered patents essential to the standard can
3 remain as part of a standard if the patent holder makes
4 the technology available on reasonable terms and
5 conditions that are demonstrably free of unfair
6 discrimination?

7 A. It was not.

8 Q. Thank you.

9 Now, let me talk about some memos you wrote
10 about the fair or unreasonable part, and I'll ask you
11 to take a look at Exhibit 1461, and I'll give a copy to
12 counsel.

13 MR. OLIVER: Thank you.

14 MR. PERRY: May I?

15 JUDGE McGUIRE: Yes.

16 BY MR. PERRY:

17 Q. Now, this is an email chain or tree or train or
18 whatever you want to call it, right? You recognize it
19 as a collection of emails?

20 A. Yes, I do.

21 Q. And so the earliest one is usually at the last
22 part of the pages, but I just want you to look through
23 it so you're familiar with it. I don't want to spend a
24 lot of time on this, but I don't want to have you
25 answer questions until you understand it.

1 A. Okay.

2 Q. Is the top half of the first page -- and let's
3 bring that up. This is a -- this top half is an email
4 you wrote and sent to Jim Townsend and Dick Foss and
5 someone else whose name I can't pronounce on June 2nd,
6 1999, right?

7 A. Yes, I probably just replied to whoever sent it
8 to me.

9 Q. Okay. It looks like you hit "reply to all,"
10 but --

11 A. Probably.

12 Q. And you say, "The bottom line on 'Fair and
13 Reasonable' is and always has been as 'Determined by
14 the Courts,'" right?

15 A. Correct.

16 Q. And that's been your position the entire time
17 you've been on the JEDEC Council, right?

18 A. I believe so.

19 Q. Have you ever heard the JEDEC Council come to a
20 different position, that it wanted to have involvement
21 in what's fair and reasonable?

22 A. I have not.

23 Q. Are you a regular attendee at JEDEC Council
24 meetings?

25 A. I am.

1 Q. And then you say, "At one time the Bylaws of
2 JEDEC required a review of the licensing terms, but
3 such requirement was removed some years ago and
4 interpretation is left solely up to the courts," right?

5 A. That is correct.

6 Q. And do you remember this discussion with some
7 folks from a company called MOSAID?

8 A. MOSAID.

9 Q. MOSAID, M-O-S-A-I-D, about patents on DLL?

10 A. I have some vague recollection, yes.

11 Q. Now, we've talked some today about the DLL and
12 PLL, correct?

13 A. Yeah.

14 Q. Have you ever looked at the MOSAID DLL patents?

15 A. I have not.

16 Q. And are you aware that MOSAID is collecting
17 royalties on DDR SDRAM devices for the use of DLL?

18 A. I am not.

19 Q. Are you aware of any litigation involving those
20 patents?

21 A. I believe I've heard that there was some
22 litigation. I don't recall between which parties and
23 what the outcome or the verdict was, so I think all I
24 have is probably hearsay.

25 Q. Well, let me pass on that, then, and go to

1 the -- if you look to the bottom of the first page --

2 A. The first page?

3 Q. Yeah, the bottom of the first page, it looks
4 like there's a little piece of an email that says,
5 "From: Dick Foss."

6 Do you see that?

7 A. Yes, I do.

8 Q. And you are familiar with Dick Foss?

9 A. Yes, I am.

10 Q. He was then an executive of MOSAID, correct?

11 A. Yes, he was the founder of MOSAID.

12 Q. The what?

13 A. The founder.

14 Q. Founder. And it appears that he addresses his
15 email to Jim, and did you understand at the time that
16 to be Jim Townsend?

17 A. I would have, yes.

18 Q. And Mr. Foss says that, "There was a statement
19 and presentation made by me. From memory, it was about
20 a year ago when our first DLL patent issued. The
21 minutes should have it in somewhere."

22 Do you see that?

23 A. Jim -- okay, there was indeed a statement --
24 yes, I see it.

25 Q. Now, I want to see if I can help you find the

1 question that he's answered, and if you'll look down to
2 the bottom email on page 2, and read everything after
3 the work "Dick" in reviewing it. Let's put that up.

4 This appears to be from Mr. Townsend to someone
5 at MOSAID, and it says, "Dick, in reviewing this
6 material in preparation for the June meeting, I noticed
7 that there was no statement regarding MOSAID's position
8 on complying with the JEDEC patent bylaws."

9 Do you see that?

10 A. I do.

11 Q. And does it appear to you -- well, strike that.

12 Did it appear to you when you were reading this
13 and responding back in June of '99 that Mr. Foss said,
14 "It was about a year ago when our first DLL patent
15 issued, we made a statement and a presentation at
16 JEDEC"?

17 Do you see that?

18 A. Yes, I do.

19 Q. And then he says, "We declared the existence at
20 the first opportunity, noting that it might be
21 interpreted as an implementation, although as I recall,
22 the claims were pretty broad, as the work was done
23 early on in the SDRAM era before DDR had been thought
24 of."

25 Do you see that?

1 A. I do.

2 Q. Now, did you -- do you remember reading that
3 portion of this email back in 1999?

4 A. I'm sure I probably did, because I did respond
5 to it. I'm not sure if I read all or just the last
6 piece, but it's probable that I did read it.

7 Q. Have you ever discussed with Mr. Foss or
8 anybody else at MOSAID about whether or not they had an
9 obligation to disclose their intentions to patent some
10 DLL features before they disclosed them?

11 A. Well, MOSAID did disclose at the meeting or the
12 discussion, and Mr. Foss even points it out here, that
13 the disclosure did take place and they did volunteer to
14 conform to the JEDEC policy, okay?

15 Q. And it's your recollection that upon that
16 statement by MOSAID, the committee moved forward with
17 incorporating the DLL into the DDR SDRAM standard?

18 A. Upon -- the statement that was made and the
19 assurance by the IP holder allowed discussion to
20 continue, yes.

21 Q. So, the 42.3 committee standardized DLL in the
22 DDR standard knowing full well there might be royalties
23 payable to MOSAID for the use of the DLL, right?

24 A. They knew about the existence of the IP, and I
25 would have to assume that negotiations had taken place

1 outside of JEDEC. I don't know about the royalty, sir.

2 Q. Well, it appears to you that in '99, Mr. Foss
3 is asking you about what's fair and reasonable. Would
4 you agree with that?

5 A. Yes.

6 Q. Does that --

7 A. And as I've told you, that's determined by the
8 courts. I have no knowledge if royalties are being
9 paid now or were then.

10 Q. So, you don't have any reason to believe that
11 there had been licensing negotiations three or four
12 years earlier when the first mention was made of the IP
13 at JEDEC, do you?

14 A. I have no reason not to believe it either.

15 Q. But it's true that you have no reason to
16 believe it, correct?

17 A. Believe or disbelieve, I have no knowledge of
18 it.

19 Q. Thank you.

20 Well, let me show you what appears to be a
21 separate branch on this email tree, and I showed you
22 this at your deposition as well. This is RX-1457.

23 May I?

24 JUDGE MCGUIRE: Approach.

25 BY MR. PERRY:

1 Q. I'll let you have a chance to familiarize
2 yourself with this.

3 A. (Document review.) Okay. It looks like the
4 same email with different replies at the top.

5 Q. Right. At least the two bottom messages appear
6 to be the same, right?

7 A. They do.

8 Q. And then it looks like on the -- the two
9 bottom -- by that I meant the two bottom ones on the
10 first page, right, they appear to be the same --

11 A. Correct.

12 Q. -- as the two bottom ones on -- now I'm getting
13 confused -- yes, as the earliest two on the last
14 exhibit we looked at, but what's different is the email
15 up at the top.

16 Do you see that?

17 A. Yes.

18 Q. And that appears to be from Mr. Foss -- let's
19 focus on that first email -- to a whole group of
20 people, including you. Do you see that?

21 A. Yes, I do.

22 Q. And he said, in part, "My query really related
23 to the 'non-discriminatory' bit. There will be
24 differences in terms if company "a" is a general
25 licensee (and is automatically licensed anyway) and

1 company "b" is not and will be expected to take a
2 'reasonable' license if wanting to use our IP on the
3 item."

4 Do you see that?

5 A. I do.

6 Q. Did you as a -- strike that.

7 As of May '99, did you hold a position within
8 JEDEC?

9 A. Yes, I'm sure I did. I'm not sure which ones,
10 but yes, I'm sure I did.

11 Q. Were you chairman of the board by that time?

12 A. I -- I would be chairman of the board by that
13 time, yes.

14 Q. All right. Did you respond to that question by
15 Mr. Foss in any capacity, a JEDEC capacity, a long-time
16 member of 42.3, in any capacity?

17 A. I don't recall that I ever did.

18 Q. To your knowledge, has JEDEC ever given an
19 opinion about whether or not "nondiscriminatory" means
20 that a company that's in a patent pool has to get to
21 the same license as a company that's not in a patent
22 pool?

23 A. As I stated, JEDEC does not take any position
24 in something like that.

25 Q. Okay. Then the last line says, "Although our

1 work pre-dates DDR and we could be miserable, we
2 obviously are anxious for DDR to fly and have a good
3 incentive to be nice guys."

4 Do you see that?

5 A. Yes.

6 Q. Did you ever at any time disagree with Mr.
7 Foss' statements that the DLL work predated the
8 discussion at JEDEC?

9 A. I never had any comment about it one way or the
10 other.

11 MR. PERRY: Your Honor, if I could move into
12 evidence 1457 that we were just looking at, as well as
13 1461.

14 JUDGE McGUIRE: Now, let's be clear, Mr. Perry,
15 that -- is this CX again?

16 MR. PERRY: Oh, shoot.

17 JUDGE McGUIRE: Because last time, you didn't
18 indicate, and I don't want you engaging in bad habits
19 in the courtroom.

20 MR. PERRY: Well, Your Honor, it will happen
21 again, but it's RX. Both of them are RX.

22 JUDGE McGUIRE: RX. All right, Mr. Oliver?

23 MR. OLIVER: With that clarification, Your
24 Honor, no objection. Thank you.

25 JUDGE McGUIRE: Thank you, Mr. Oliver. So

1 entered.

2 (RX Exhibit Number 1457 was admitted into
3 evidence.)

4 (RX Exhibit Number 1461 was admitted into
5 evidence.)

6 BY MR. PERRY:

7 Q. If we could talk a little bit about the JEDEC
8 bylaws, which are RX-1535. This will just take a
9 second.

10 May I?

11 Now, this on the front cover says JEDEC
12 Articles of Incorporation and Bylaws, and I don't want
13 to spend a lot of time on this, but I'd like you to
14 confirm that the next page is the articles of
15 incorporation with John Kelly's signature on them for
16 JEDEC.

17 A. They are.

18 Q. And is it approximately November of '99 when
19 JEDEC became its own company?

20 A. Yes, it would have been at that time.
21 Actually, I think they were filed and perhaps it didn't
22 occur until December 8th, but the same time frame.

23 Q. And it was your understanding that prior to
24 that time, November or December '99, JEDEC didn't enter
25 into its own contracts. Is that right?

1 A. JEDEC was not an independent corporation prior
2 to that.

3 Q. And so it didn't enter into its own contracts?
4 Is that your understanding?

5 A. That's correct. I mean -- well, I -- I'm not
6 sure I can answer that. I don't know the answer.

7 Q. All right, that's fine.

8 A. Okay.

9 Q. Let's look at the bylaws, which appear to start
10 on page 4 of this document, and bylaw number -- are you
11 on that page, Mr. Rhoden?

12 A. I am on that page.

13 Q. Bylaw number IV --

14 A. Number --

15 Q. -- is -- yeah, they have got Roman numerals.

16 A. I am on page 4. What --

17 Q. Right, bylaw number IV says, "Board of
18 directors."

19 A. Okay, board of directors.

20 Q. And you're the chairman of the board of
21 directors, right?

22 A. Yes, I am.

23 Q. And this says, "The Board of Directors is the
24 governing body of the Association."

25 Do you see that?

1 A. Yes, I do.

2 Q. And the association refers to JEDEC, correct?

3 A. That is correct.

4 Q. And is that your understanding today of who
5 governs JEDEC, it's the board of directors?

6 A. That's correct.

7 Q. And if the board of directors has made some
8 decision, it's an official decision ratified by the
9 vote of the board, could the president overrule it? Do
10 you have an understanding?

11 A. The president has certainly day-to-day
12 responsibility for the organization. I've never known
13 of any antagonistic relationship to exist between the
14 board and the president, so I'm not sure that situation
15 has ever come up.

16 Q. All right, well, I'm just asking for your
17 understanding of the relationship. If the board of
18 directors makes a decision, puts it into the minutes,
19 the minutes are approved, can the president of the
20 organization say that that doesn't mean anything?

21 A. I -- as I said, I don't -- I can't give -- I
22 can't recite you a case when -- it would depend. It
23 would depend on its impact. For the day-to-day
24 responsibilities, that's the responsibility of the
25 president. Sorry.

1 Q. That's fair. That's fair.

2 Let me ask you about Exhibit CX-302, but first
3 I am going to move into evidence RX-1535, the JEDEC
4 Bylaws.

5 MR. OLIVER: No objection, Your Honor.

6 JUDGE McGUIRE: So entered.

7 (RX Exhibit Number 1535 was admitted into
8 evidence.)

9 MR. PERRY: And Your Honor, if I miss some, I
10 hope to --

11 JUDGE McGUIRE: That's why at the end of the
12 day, I'm going to ask you all to go back, because this
13 is Friday, and we should establish that protocol, as we
14 discussed, where you can confer with the court reporter
15 and then assert exactly what's been entered so we'll be
16 clear on that.

17 MR. PERRY: And then should we do that as just
18 a housekeeping matter when we start up again on Monday
19 or --

20 JUDGE McGUIRE: Yes, if there's any problems,
21 then yes, we will take that up early on Monday.

22 MR. PERRY: All right. That's fine with you?

23 MR. OLIVER: Yes, that's fine, Your Honor.

24 BY MR. PERRY:

25 Q. All right, looking at 302, did you manage to

1 find it? It's the standards -- Are Standards Worth the
2 Effort? We talked about it yesterday, Mr. Rhoden.

3 A. Yes.

4 Q. Do you have it?

5 A. Yes, I do.

6 Q. Well, I want to take you through more of the
7 document than you looked at yesterday, but I want you
8 to remind us again what it was prepared for. I think
9 you said it was prepared in December of last year,
10 December of 2002?

11 A. In -- late last year. I don't know if it was
12 December or when, but these foils that are made up here
13 I have used on numerous occasions, so some of these
14 things are many years old and some of them are perhaps
15 only a few years old, some of them maybe only a few
16 months old, but I did collect them all at a time that
17 was toward the last of last year sometime.

18 Q. Is this collection something you presented at
19 IBM when you were invited to speak there?

20 A. Yes.

21 Q. All right. And that was -- it's always
22 December in Vermont, but that was in December --

23 A. I think it was December, yes.

24 Q. -- of 2002?

25 A. I believe so.

1 Q. And under Agenda, was that the agenda for the
2 discussion? Is that why it says "Agenda," for the
3 discussion with IBM? And I'm referring to page 2.

4 A. I think agenda would be more like a table of
5 contents, if you would, for the presentation. That's
6 normally how I put things together. It's not an agenda
7 for discussion.

8 Q. That's where I was going. Is this a template
9 for a discussion you were having with some IBM people,
10 or is it a presentation you were making and you were
11 showing these Power Points to them?

12 A. Well, the kind of presentations that I
13 typically make, I certainly always am open for
14 discussion, and so discussions could have taken place
15 or may not have. I prepared this as a presentation.
16 If people had questions, then I certainly would stop
17 and answer the questions.

18 Q. On page 5 of the exhibit, there's a chart that
19 Mr. Oliver talked to you about. It's called What
20 Standards Mean.

21 A. Yes.

22 Q. And the first bullet point is, "To the End
23 Users."

24 What did you mean by the end users when you
25 were using -- making this chart?

1 A. End users are the end users of the technology,
2 and as I explained yesterday, that could be the -- the
3 Fortune 500 companies buying it for their own product
4 or in this case it could also be the end users buying
5 it from the local store.

6 Q. What did you mean by "To the Supplier"?

7 A. "To the Supplier," I would normally mean the
8 manufacturers of the product. This could apply in a
9 general sense or the discussion we had yesterday was
10 specifically about DRAM.

11 Q. Now, at the time you presented this, were you
12 still chairman of AMI2?

13 A. Still am, was then, yes.

14 Q. And at the time that the dues-paying members of
15 AMI2 were memory manufacturers, right?

16 A. Yes -- well, not all of them, but yes, some of
17 them are.

18 Q. The only dues-paying members of AMI2 as of
19 December 2002 were memory manufacturers.

20 A. That is not right.

21 Q. Oh, who else?

22 A. As I said, memory manufacturers and
23 infrastructure providers.

24 Q. Well, who else as of December 2002 was still a
25 dues-paying member other than memory manufacturers?

1 A. Okay, the chipset manufacturers, VIA and ALi
2 from Taiwan; other manufacturers, like TI. I can't
3 remember others, but those are three that I can
4 remember right now.

5 Q. Now, there's two levels of dues-paying
6 manufacturers of AMI -- I'm sorry, there's two levels
7 of dues-paying members of AMI, the company that you
8 head, right?

9 A. That is correct.

10 Q. And the higher level pays more?

11 A. More money, yes.

12 Q. And those are called executive members?

13 A. Yes.

14 Q. And they have some kind of extra access to
15 AMI's patents, right?

16 A. Well, they are the ones who actually sit on --
17 it's basically whether or not you have a board seat or
18 not, and they sit on the board.

19 Q. So, the executive members of AMI2, as of
20 December of 2002, were all memory manufacturers,
21 correct?

22 A. That is correct.

23 Q. Now, let's look at the next page, I believe
24 it's the next page -- yes, page 6 of your presentation,
25 Introduction to JEDEC, and then it -- and then the next

1 page says, on page 7, What is JEDEC? And you say,
2 "It's the world leading technology standards
3 association where 250 companies get together to share
4 their secrets and standardize their industry."

5 What did you mean by "share their secrets"?

6 A. Well, by nature of the standardization process,
7 people are actually getting together and working
8 toward -- this is a -- I did not invent this phrase.
9 It's been around for a very long time. The intent is
10 for people to get together and share the things that
11 they're working on to the betterment of -- for the
12 standardization of their industry.

13 JUDGE MCGUIRE: Could I interject? You just
14 said something, I don't think this question has been
15 asked, but I was going to ask it myself. How old is
16 this organization, JEDEC?

17 THE WITNESS: Actually, JEDEC dates back for a
18 very long time, Your Honor, back to the Radio
19 Manufacturers Association, 1924. The name JEDEC and
20 the formulation of that part of it that is still called
21 JEDEC occurred in 1958.

22 JUDGE MCGUIRE: I'm sorry, Mr. Perry, I just
23 wanted to clarify that.

24 BY MR. PERRY:

25 Q. Page 10 of that document --

1 A. Page 10 --

2 Q. It starts with Marconian, but I was going to
3 skip that part.

4 JUDGE McGUIRE: Well, that makes sense, then.

5 BY MR. PERRY:

6 Q. All right, so, when you wrote "share their
7 secrets," you didn't mean their trade secrets, did you?

8 A. Excuse me?

9 Q. You didn't mean share their trade secrets, did
10 you?

11 A. No, not directly. It's -- the intent was --
12 it's a catchy phrase, and it's intended to get the
13 attention of the people that you're presenting it to.

14 Q. All right. We're moving past the history,
15 which actually takes two pages. If you could look at
16 page 13 --

17 A. Page what?

18 Q. Thirteen --

19 A. Okay.

20 Q. -- of the exhibit.

21 A. Okay.

22 Q. And it says, "Why JEDEC? Who's Who of
23 Semiconductors," and then it says, "Managed and run by
24 industry leaders, defining and developing their
25 industry. The process forces continual forward

1 progress and guards against antitrust."

2 What did you mean by "the process guards
3 against antitrust"?

4 A. Well, JEDEC operates with bylaws, and with the
5 bylaws it's specifically spelled out what can and
6 cannot be discussed -- well, with the Manual of
7 Operations and Procedures and bylaws. There are
8 policies and procedures set up inside of JEDEC that --
9 that restrict and govern the types of discussions, and
10 the intent is to guard against antitrust such that we
11 have the policies and procedures in place such that
12 people do not step outside of the law that's governed
13 by the Sherman Antitrust Act.

14 Q. Talk about what? You said talk about certain
15 things. What do you mean?

16 A. Well, price, for instance. Price is never a
17 discussion in JEDEC, and we don't talk about absolute
18 cost. Cost is never a discussion. I thought earlier
19 today that we said -- I said relative cost perhaps, but
20 in general, anything that would have to do with --
21 certainly no quotas, anything like that that would be
22 seen as any kind of restraint of trade, there would be
23 no discussion of that.

24 Q. How about discussion of whether or not RDRAM
25 should be a de facto standard or DDR SDRAM, is that

1 something that's appropriate in your mind to discuss
2 within JEDEC?

3 A. It would only be appropriate if someone had
4 made a presentation about it, and to my knowledge,
5 RDRAM was never discussed at JEDEC.

6 Q. You talked about the JEDEC bylaws, which we
7 have now introduced into evidence as 1535, and is there
8 anything in those bylaws about what to talk about or
9 what not to talk about?

10 A. Well, as I said, there's policies and
11 procedures, and I would refer to the legal guidelines
12 as outlined in 21 -- the -- the 21-I and future
13 revisions, whatever, I think it's 21-L is what we're
14 using today. We just modified it through the
15 electronic processes.

16 Q. Well, we had looked at the EIA Legal Guides
17 when we were talking about this general issue before.

18 A. Correct.

19 Q. Now that JEDEC is its own separate company, is
20 there some legal guides for JEDEC?

21 A. Yes, it should be -- we basically just
22 inherited -- I think we have translated exactly the
23 same -- well, I won't say exactly, that's a poor choice
24 of words. We have translated from what is there in EIA
25 and replaced the name with JEDEC. I think that was the

1 intent.

2 Q. All right. Well, looking back at your
3 presentation to IBM that's Exhibit 302, the next bullet
4 point says, "Everyone marching to the same drum, at the
5 same time."

6 A. Yes.

7 Q. What does that mean?

8 A. Actually, when you have all of the people in
9 the room working together on the same product, then you
10 have a tremendous leverage of resource. You wind up
11 getting -- you eliminate the duplication of effort
12 across multiple companies, and the decisions that are
13 being made are broadcast to the entire industry through
14 that same forum, and so by definition, everybody is
15 essentially moving together. That's what I meant.

16 Q. Well, in the EIA Legal Guides --

17 A. Yes.

18 Q. -- one of the items, and I'll just read it to
19 you, it says, "Adherence to standards shall be entirely
20 voluntary and within the discretion of individual
21 manufacturers." This is in Exhibit 204, page 9.

22 A. Sure, and --

23 Q. And then it says, "Any agreement, expressed or
24 implied, or any coercion, direct or indirect, to adhere
25 or to require or to compel adherence to a standard is

1 not permitted."

2 Now, as you understand that phrase that --

3 MR. OLIVER: Excuse me, Counsel, could you
4 direct --

5 MR. PERRY: Yes, page 9, right there.

6 BY MR. PERRY:

7 Q. -- as you understand the phrase I just read to
8 you, is that consistent with your statement that in
9 JEDEC, everyone marches to the same drum at the same
10 time?

11 A. Absolutely.

12 Q. Could you explain that?

13 A. Okay, well, it -- everything in JEDEC is
14 voluntary. It's voluntary participation, the standards
15 that are created, the adherence to those standards is
16 voluntary. They're published free on the web. They're
17 available to all people. The -- the marching to the
18 same drum does not imply any kind of ordering. It
19 implies that you have people that are working together
20 for a common interest.

21 If people want to participate, they can. If
22 they don't, they do not participate. So, I'm not sure
23 whether it would be in conflict with the statement that
24 you read and the statement that I've made.

25 Q. Now, let me -- let me go back for a minute to

1 the testimony that you gave us this morning about a
2 conversation you had with Richard Crisp.

3 A. Okay.

4 Q. You described that a little bit. Was there any
5 discussion with Mr. Crisp in that conversation about
6 this fair and reasonable concept that we've been
7 talking about?

8 A. I recall the discussion, it was a question from
9 Mr. Crisp about the JEDEC patent policy, and we
10 discussed the term "patent" in the policy as applying
11 to anything within the patent process. That's what I
12 recall.

13 Q. Did you also talk about the fair and reasonable
14 part of the patent policy?

15 A. Well, I -- I'm not sure what you're getting at.
16 The patent policy is the patent policy. The fair and
17 reasonable is a statement for an assurance letter,
18 okay, and that would be -- the disclosure part is the
19 patent policy, and then for inclusion of that disclosed
20 IP, an assurance letter. So, the fair and reasonable
21 is part of the assurance letter.

22 Is it part of the policy? Then yes, and from
23 that perspective, I am certain that we had a
24 conversation about the two terms. You offer your
25 intellectual property free or -- or -- free of any

1 unfair -- on reasonable, nondiscriminatory terms, free
2 or reasonably nondiscriminatory.

3 Q. And had Mr. Crisp approached you, is that how
4 this conversation came up?

5 A. That's correct.

6 Q. Did you have lunch together?

7 A. We've had many lunches perhaps together over
8 the years. He came to JEDEC a lot of times. When
9 you're all stuck in the same city for a long time,
10 everybody eats together.

11 Q. Have you seen any email from Mr. Crisp
12 describing the lunch with you or a meeting with you, a
13 discussion with you about the patent policy?

14 A. I don't recall.

15 Q. Did you prepare any notes or emails or letters
16 or memos about this conversation with Mr. Crisp?

17 A. I did not.

18 Q. Now, did you provide any assistance or
19 encouragement to Mr. Crisp at any time to have Rambus
20 try to standardize anything relating to RDRAM at JEDEC?

21 A. Yes, it would have been at a later time. Mr.
22 Crisp contacted me and asked about the creation of a
23 letter. I believe it was his desire at the time to
24 bring the RDRAM technology into JEDEC for
25 standardization, and so we were in process -- I was

1 helping him draft the letter, and basically a letter
2 that would provide one of those two terminologies,
3 either free or reasonable and nondiscriminatory in the
4 terms, and that -- that discussion ceased in probably
5 late '96 or something like that.

6 Q. Thank you -- well --

7 A. I'm not sure exactly when. '95-'96, in that
8 time frame.

9 Q. I can tell you that Mr. Crisp didn't attend any
10 meetings after the December '95 meeting. That's been
11 stipulated to.

12 A. Then it --

13 Q. And the withdrawal letter came in June of '96,
14 if that helps you.

15 A. He -- well, but what I can -- the discussions
16 that I had with Mr. Crisp about this did not take place
17 at JEDEC meetings. They took place over the telephone.

18 Q. Oh, okay. And do you remember if he was
19 talking about standardizing the RDRAM module, the
20 R-module as opposed to different parts of the RDRAM
21 technology?

22 A. I don't recall a particular element that he was
23 focusing on.

24 Q. Now, let's go back to Exhibit 302, if we could.
25 Now, on page 16, if you could go to page 16, there's a

1 statement on page 16 that says, "All JEDEC Standards
2 are accessible for free on the web."

3 A. Yes.

4 Q. And that reminded me that yesterday you said
5 something about JEDEC standards being available for
6 free on the web.

7 Did you mean to imply that JEDEC standard were
8 royalty-free when you said that?

9 A. Certainly not. I was trying to -- to -- they
10 are available for free, and people around the world use
11 JEDEC standards because they can access them 24 hours a
12 day on the web.

13 Q. If an engineer has a question, they can look at
14 it on the website?

15 A. Yes, understood.

16 Q. Got it.

17 All right, let's look at the next page, then,
18 which is page 17 of Exhibit 302, and this is entitled
19 Revenue Based on Influence.

20 A. Yes.

21 Q. Now, when it says, "Revenue Based on
22 Influence," is that JEDEC's revenue or the JEDEC
23 members' revenue? What does that mean?

24 A. I'm sorry, I must be on the wrong page.

25 Q. Page 17.

1 A. Seventeen, okay, yes.

2 Q. It says, "Revenue Based on Influence."

3 A. Yes.

4 Q. Then the second bullet point says, "Those that
5 participate influence the outcome. Member companies
6 decide what paths to take in standardization. If you
7 are not there, your competition may be deciding your
8 future."

9 Do you see that?

10 A. Yes, I do.

11 Q. Was this Power Point, this particular slide,
12 prepared as a sales pitch to get people to join JEDEC?

13 A. To a certain extent, yes.

14 Q. And what message were you giving as part of
15 your sales pitch?

16 A. Well, JEDEC is a nonprofit organization. It's
17 a standards-based organization, and the revenue that
18 supports the JEDEC operation are the dues that's paid
19 by the members, okay? And in the wording that you see
20 here, the standards themselves are published after
21 they're complete.

22 During the time that they're being worked on,
23 they're available to all people who participate and all
24 people that are involved in the committee. So, if you
25 want to have early access and if you want to be

1 involved in the actual standardization process itself
2 and help make the decisions, then you should pay JEDEC
3 dues and become a JEDEC member. That's exactly what I
4 was trying to say on this foil.

5 Q. And you say back on page 7 that there's 250
6 members.

7 A. It goes up and down depending upon acquisitions
8 and mergers.

9 Q. Right. How many do you have now in JEDEC?

10 A. About 250.

11 Q. And how many were there in 1996 when Rambus
12 left, approximately?

13 A. Probably about 250, because it's gone up to
14 about 300. It depends on the entry and exit of
15 companies. It's a -- we get a lot of new members on a
16 year-to-year basis, but we also have an awful lot of
17 acquisitions, and when companies are acquired, then we
18 take two or three or four sometimes and make one.

19 Q. And how do they pick which member gets to keep
20 coming to the meetings in San Diego and -- you don't
21 have to answer that.

22 A. I don't know about that.

23 Q. Let me talk about another Power Point
24 presentation. This one is CX-303. That's complaint
25 counsel's Exhibit 303.

1 I have a copy for you.

2 If I could approach the witness, Your Honor?

3 JUDGE McGUIRE: Please.

4 THE WITNESS: I'm trying to keep this in some
5 semblance of order so I can get --

6 MR. PERRY: Your Honor, this might be a good
7 time for a break.

8 JUDGE McGUIRE: Okay, let's take a quick
9 ten-minute break.

10 MR. PERRY: Thank you.

11 (A brief recess was taken.)

12 JUDGE McGUIRE: We're back on the record.

13 Mr. Perry, you may continue with your
14 questioning.

15 MR. PERRY: Thank you.

16 BY MR. PERRY:

17 Q. Do you have CX-303 in front of you, Mr. Rhoden?

18 A. Yes, I do.

19 Q. And this is entitled Advanced Memory
20 International, An Industry Partnership, by Desi Rhoden.

21 Do you see that?

22 A. Yes, I do.

23 Q. Is this something you prepared?

24 A. It is.

25 Q. It was produced to us in discovery by Elpida.

1 Were they at some point in time a member of AMI?

2 A. They were and still are.

3 Q. And still are. Are they on the board of
4 directors?

5 A. They are.

6 Q. Well, let's look, if we could, at this
7 document, and I'll ask you first if you recognize when
8 you may have given this -- the presentation that it
9 represents and to what audience.

10 A. I actually gave this particular presentation to
11 a number of different places shortly after we created
12 Advanced Memory International. This was a description
13 foil set to indicate to people what -- what we were
14 trying to do, who was involved, that sort of thing.
15 And the time frame would have been probably 19 --
16 probably 1999.

17 Q. I'm sorry?

18 A. This would have been about 1999.

19 Q. All right, thank you.

20 Well, if you will look on the third page of the
21 document, it says, "Mission." Was that intended to
22 represent -- do you have it? It's page --

23 A. Yes, I have it.

24 Q. -- ELP-136.

25 A. Yeah, I have it.

1 Q. Was that intended to be a statement by you at
2 the time of what you understood AMI's mission to be?

3 A. Yes.

4 Q. And it says, "To be the unified coordinating
5 body for the alignment and promotion of the mainstream
6 memory industry."

7 Do you see that?

8 A. That's correct.

9 Q. "AMI2 is the memory industry working together
10 to bring complete solutions to end users of new memory
11 technologies."

12 Do you see that?

13 A. Yes, I do.

14 Q. Why couldn't the work that AMI is doing be done
15 at JEDEC?

16 A. Well, JEDEC is involved in standardization, and
17 almost all the work inside of JEDEC has been involved
18 directly in the creation of industry standards. We
19 have actually requested -- I say we, myself and others
20 within the industry -- have suggested that JEDEC
21 perform some kind of coordination, but remember, JEDEC
22 is focused just on standardization, and so the
23 coordination of other activities has been outside the
24 scope of many of the companies that are involved in
25 JEDEC, of what they felt like they wanted to take on.

1 And in addition, it would also be about cost to
2 those companies, because in doing this, it costs more
3 money to do this, so it would impact on what the
4 members of JEDEC would have to pay.

5 Q. In doing what?

6 A. Oh, the coordination of the -- both the
7 promotion of and the coordination of infrastructure.

8 Q. What does AMI do -- strike that.

9 In the year 2000, what did AMI do?

10 A. They coordinated the development and roll-out
11 of the infrastructure.

12 Q. What does that mean, "infrastructure"?

13 A. Okay, infrastructure, as we discussed
14 yesterday, infrastructure -- in standard memory, in
15 fact, the memory that we were developing inside -- the
16 standard that we were creating inside JEDEC, the
17 creation of that standard is only part of what is
18 required before you can have a full system, a computer,
19 if you will, like you see here that actually utilizes
20 that standard, and so there's other chips -- many other
21 chips, motherboards, memory modules, clock devices,
22 memory controllers, many, many aspects of the full
23 computer system or full infrastructure. That's that
24 infrastructure, everything that touches the memory or
25 has to do with the memory would be memory

1 infrastructure.

2 Q. Isn't it true that the primary goal of AMI in
3 the year 2000 was the successful introduction of DDR
4 SDRAM?

5 A. Actually, I -- the -- our focus has been JEDEC
6 standard memory, and in 2000, I think one of the key
7 memories at the time was PC-133. DDR was one of the
8 technologies certainly, but industry standard memory as
9 defined by the standard we were -- that came out of
10 JEDEC.

11 Q. And when you said PC-133, just for everybody's
12 understanding, that's an SDRAM?

13 A. Oh, yes, it is.

14 Q. And in the year 2000, was it AMI's primary goal
15 to further the introduction and use of PC-133?

16 A. To further the introduction and use of JEDEC
17 standard memory, that is correct.

18 Q. What's the -- why the focus on JEDEC standard
19 memory?

20 A. Well, the -- the stated objective is to -- AMI
21 is a nonprofit, JEDEC is a nonprofit. The focus was to
22 make certain that the infrastructure was developed in
23 parallel with the development of the standard as much
24 as possible.

25 Q. Were there any -- in the year 2000, were there

1 any memory devices in production that weren't JEDEC
2 standard other than RDRAM?

3 A. I'm sure that there probably were others. I
4 only focused on the things that came from JEDEC.

5 Q. Well, you knew that RDRAM was competing with
6 PC-133 and DDR in the memory marketplace in the year
7 2000, didn't you?

8 A. I did not consider that fact.

9 Q. You didn't know that?

10 A. I -- I was aware that RDRAM existed in the
11 market. I was focusing on JEDEC standard memory
12 products and nothing else.

13 Q. So, you didn't look at all of the competition
14 for those JEDEC standard products. Is that your
15 testimony?

16 A. That is my testimony. I did not -- I wasn't
17 involved in looking at the -- it was not about -- it's
18 not about competition from the -- from an AMI or JEDEC
19 standpoint. We were trying to put together the
20 infrastructure. What happens in a competitive
21 marketplace is -- is up to the companies that are
22 involved in that, I suppose.

23 Q. It's --

24 A. Our goal was to provide infrastructure for
25 JEDEC standard memory.

1 Q. When you say the companies that are involved,
2 that includes, at least, the companies that make up the
3 board of directors of AMI, right, the memory
4 manufacturers?

5 A. Sure.

6 Q. Now, let's look at page 140. There we go.

7 Is this a chart that you or someone at your
8 request put together?

9 A. Yes, I believe I put this together.

10 Q. And it says, "Bringing The Industry Together,
11 Providing Complete System Solutions."

12 Do you see that?

13 A. Yes, I do.

14 Q. And there is like a circle that goes from AMI
15 to JEDEC and back to AMI and back to JEDEC?

16 A. Yes, I see that.

17 Q. What does that graphic mean?

18 A. It's intended to represent the symbiotic
19 relationship that existed between AMI and JEDEC. The
20 JEDEC is where we produce the standard and AMI is where
21 we coordinate the infrastructure development for those
22 standards.

23 Q. And the companies listed here on this chart you
24 put together were at the time in 1999 on the board of
25 directors of AMI?

1 A. This was the board of directors of AMI at the
2 time.

3 Q. And at the time, they were all memory
4 manufacturers, correct?

5 A. That is correct.

6 Q. And were there board meetings of
7 representatives of these memory manufacturers?

8 A. Yes, there were.

9 Q. Was there ever any discussion that you're aware
10 of of RDRAM in a board meeting of AMI?

11 A. No, there was not.

12 Q. Was there ever any discussion at a board
13 meeting of AMI of anyone's view that JEDEC had become
14 too slow in developing standards?

15 A. I don't believe at any board meeting. I have
16 heard conversations of people who have had discussions
17 in the industry. I have heard that description in the
18 past, that JEDEC was too slow or whatever. I mean,
19 I -- I'm under the impression that happens to almost
20 all people who are involved in any kind of trade
21 organization. Some people in the industry feel like
22 what takes place is too slow.

23 Q. And have you heard that JEDEC is too slow
24 because of the need to develop a consensus of a large
25 body to get something done?

1 A. Well, I don't think I've ever heard it from a
2 JEDEC member. I've heard it from people who have never
3 been to a meeting.

4 Q. Was it one of the reasons why AMI was formed,
5 was to speed up the development of future DRAM
6 generations?

7 A. No. The creation of AMI was for the
8 development of the infrastructure.

9 Q. Was --

10 A. The --

11 Q. Well, we will spend some time on that, I
12 promise you, but --

13 A. Okay.

14 Q. -- let's go back to SyncLink, and this is one
15 of the things you talked about yesterday.

16 A. Okay.

17 Q. Do you understand SyncLink to be the
18 predecessor of what is AMI?

19 A. Sure.

20 Q. Was it one of the goals of SyncLink to move
21 faster than JEDEC could move to develop future DRAM
22 devices?

23 A. I believe that that was a goal of at least some
24 of the participants. I believe I've heard that, yes.

25 Q. Was that a reason why you went to SyncLink

1 meetings?

2 A. No, it was not.

3 Q. Well, let me show you one more document about
4 SyncLink or SLDRAM or AMI before we move on to a
5 different topic for today, and that is CX-305, but
6 first let me offer into evidence 303, CX-303.

7 MR. OLIVER: No objection, Your Honor.

8 JUDGE McGUIRE: So entered.

9 (CX Exhibit Number 303 was admitted into
10 evidence.)

11 BY MR. PERRY:

12 Q. This is from complaint counsel's exhibit list,
13 and it's entitled A Vision for SLDRAM Inc., Lead -
14 Co-Ordinate - Teach, by Desi Rhoden.

15 Could you take a look at this Power Point
16 presentation and see if you recognize it?

17 A. Yes, I recognize it.

18 Q. Now, on the first page it talks about the first
19 order of business should be to change the name. Is
20 that to change the name of SLDRAM, Inc.?

21 A. Yes, actually, it took a long time to create
22 the contract between all of the companies that was
23 involved that essentially is the bylaws of AMI, and --
24 bylaws of SLDRAM, and the belief was that it would
25 take -- it would be far too painful to go through that

1 process again. So, rather than create a new
2 corporation, we decided to just inherit the corporate
3 identity of an older one that already had that
4 infrastructure in place.

5 Q. Well, SLDRAM, Inc. had been focused on
6 developing a particular kind of DRAM called SLDRAM. Is
7 that right?

8 A. That -- that's primarily true. I think that
9 certainly some of the members that were involved had
10 visions that it would do not only that but other
11 things, but I believe that your statement is correct as
12 far as actual work that took place.

13 Q. And then when it became AMI2, it had a broader
14 vision. Is that right?

15 A. That is correct.

16 Q. And so can you put this presentation in time,
17 when there was this name change discussion going on?

18 A. The -- this was probably in late 1998 or so
19 of -- and during the time that there was some
20 formulating discussions going on about what became
21 known as AMI, because it doesn't have AMI here, it says
22 Advanced Memory-something, and we had to find a
23 corporate identity name that the State of California
24 was happy with.

25 Q. Because you wanted to register the trademark?

1 A. Well, it's not registered as a trademark, you
2 just register the name of the company. It's a black
3 arch as far as the State of California is concerned.

4 Q. I won't take that personally, but on page 2, is
5 this a piece of a Power Point presentation that you
6 prepared, page 2?

7 A. Yes.

8 Q. It says, "New Name - New Focus," and then it
9 says, "Lead standards development through JEDEC."

10 What were you intending at the time to do with
11 respect to leading the standards development at JEDEC
12 through this industry consortium?

13 A. Okay, one of my roles at the time was chairman
14 of the memory committee inside of JEDEC, and so one of
15 the objectives of me coming to AMI, because I think
16 this presentation was put together prior to my actually
17 going to AMI, was that in my role when I would come to
18 join, that I would continue in that leadership role
19 inside of JEDEC and attend the board of directors and
20 the rest of that.

21 Q. And so how would that lead to standard
22 development through JEDEC?

23 A. Me as the leader of the discussions inside
24 JEDEC, the chairman of committees, chairman of the
25 board of directors, that sort of stuff, that would

1 allow me to continue the process. By making that a
2 stated objective for the corporation, then it gave the
3 assurance that my role within JEDEC would continue.

4 Q. So, did you prepare this exhibit sort of as a
5 way to propose a role for you within this new entity?

6 A. Well, AMI is extremely small, and a role for me
7 and a role for AMI are almost inextricably tied
8 together. So, in a sense, yes, it was a role for me.
9 It was also in a sense -- because of the size of AMI,
10 we tried to do the coordination from essentially
11 myself, and so the -- to say one or the other is -- I
12 think the answer is the same either way.

13 Q. Well, we heard yesterday that you weren't
14 getting paid as chairman of the board of JEDEC. Mr.
15 Oliver asked you that question.

16 A. That's correct.

17 Q. Were you getting paid by AMI?

18 A. At this time, I was not getting paid by AMI
19 either. This was a proposal before I actually went to
20 work for AMI.

21 Q. But after you went --

22 A. I did get paid by AMI for a period of time, and
23 I am not being paid now.

24 Q. You are not being paid now by AMI?

25 A. No, I am not being paid by anyone.

1 Q. Do you still hold a position with AMI?

2 A. Yes, I actually have continued in a voluntary
3 position until I find something else to do.

4 Q. And AMI still holds patents?

5 A. I believe that's correct, yes.

6 Q. Do they still hold meetings?

7 A. Not really, no. They haven't had a meeting in
8 months, many months.

9 Q. Well, going back to the Power Point
10 presentation, on page 2, we're still talking about
11 CX-305, the -- it says up at the top, "Lead standards
12 development through JEDEC," and then it says,
13 "Co-ordinate instead of developing new technology," and
14 then further down it, it says, "Co-ordinate industry
15 proliferation and widespread adoption of new memory
16 technology."

17 Is that a reference to -- when it talks about
18 new memory technology, is that a reference to JEDEC
19 standard technology?

20 A. Yes, it was.

21 Q. And then it says, "Indemnify member companies
22 from anti-trust while still providing a close working
23 environment for all."

24 What did you mean when you said that to the AMI
25 people?

1 A. Well, perhaps -- remember, I'm not an attorney,
2 and I -- what I was trying to provide was that inside
3 of AMI, there were -- that there were -- the bylaws of
4 AMI were drafted in parallel by a number of different
5 companies, I'm not sure, 15 or 16 at the initial time,
6 and they drafted that document such that it would
7 provide a framework under which companies could
8 actually participate and do development work together
9 and make certain that we did not in any way restrain or
10 infringe trade.

11 Q. Is that what you meant by that?

12 A. That's what I was trying to say, yes.

13 Q. Now, look at the last page of this document
14 under Organization Logistics. Is this a page that you
15 prepared for this presentation?

16 A. I believe so.

17 Q. It says, "Most meetings should be in Japan or
18 Korea for access to design teams."

19 Did that end up being the case for AMI?

20 A. No, it did not. Most meetings were held in San
21 Jose.

22 Q. Then there is something about halfway down that
23 says, "M12 should be folded under the corporation for
24 antitrust protection."

25 Do you see that?

1 A. Yes, I do.

2 Q. Now, what was M12?

3 A. M12 was an informal ad hoc marketing
4 organization, not -- organization is not even a fair
5 term. It was -- M12 was a -- was a collection of
6 companies that were trying to collectively market a
7 common message, and all related to the memory industry.

8 Q. Does M stand for manufacturers?

9 A. I have no idea. I did not coin the term.

10 Q. Did you ever --

11 A. There were a number of manufacturers in there.
12 I think there were also a number of module suppliers
13 perhaps as well. I -- since I'm -- since this was an
14 ad hoc group, I'm not sure that I know all of the
15 people that were involved or were not involved.

16 Q. Did you ever go to a meeting of M12, or it also
17 I think was referred to as M14, M11, M9?

18 A. No, I never heard the term M11 or M14. I think
19 I heard one M7 maybe one time and I heard one that said
20 M11, but I don't doubt that the others probably existed
21 at some time.

22 Q. Did you ever go to a meeting of that ad hoc --

23 A. I don't recall ever attending a meeting of
24 something like that.

25 Q. What did you understand its purpose to be?

1 A. Of what?

2 Q. The purpose of M12 or M11 or --

3 A. Well, since I was not necessarily involved, I
4 would have to speculate for you, and --

5 Q. Okay, don't speculate.

6 A. Okay.

7 Q. Why did you say in this document that M12
8 should be folded under the AMI corporation for
9 antitrust protection?

10 A. I understand. The ad hoc mixture of companies
11 that were working together, there is -- in my view and
12 in my understanding of the way law works relative to
13 the association of companies is you need to have very
14 strict guidelines if you're going to work together with
15 people in your industry, particularly if you're going
16 to work together with your competitors towards
17 standardization or marketing or whatever, and just to
18 avoid any perceptions of anything that would be
19 misconstrued, and so that's what I was recommending
20 here, is this ad hoc group was moved together.

21 Q. Was M12 folded into AMI?

22 A. Well, I -- I don't know. I assume so. If the
23 members that were initially in M12, whatever they were,
24 were folded into AMI -- since it wasn't ever really a
25 formal organization, I'm not sure. I can't tell you.

1 Q. Was it one of the goals of M12 while it was an
2 organization to further the development and
3 introduction of JEDEC-compliant memory devices?

4 A. You would have to ask --

5 MR. OLIVER: Objection, Your Honor, lack of
6 foundation.

7 JUDGE McGUIRE: Sustained.

8 BY MR. PERRY:

9 Q. Did you ever have an understanding of what
10 M12's goals were?

11 A. I -- I don't think so.

12 Q. So, you recommended that it be folded into AMI
13 without having any understanding of what its goals
14 were. Is that correct?

15 A. Well, the -- I had a loose understanding that
16 it was intended to be a marketing organization, but --
17 and so, AMI was intended to be assisting in the
18 marketing of new memory technologies, and so from that
19 perspective, based on that level of understanding, yes,
20 that's -- that's what my recommendation was, and it's
21 based on other conversations that I had. I'm trying to
22 make sure that I provide you with as much information
23 as I know about this term M12.

24 Q. Isn't it true that you understood M12 to be
25 working to defeat the successful introduction of the

1 RDRAM device into the memory industry?

2 A. Excuse me?

3 Q. Isn't it true that you understood in 1998 and
4 1999 that M12 was working to prevent the successful
5 introduction of RDRAM as a mainstream memory device?

6 A. No, sir, I --

7 MR. OLIVER: Objection, Your Honor, lack of
8 relevance, lack of foundation.

9 JUDGE McGUIRE: Overruled.

10 I'm sorry, what was your answer, Mr. Rhoden?

11 THE WITNESS: No, it was not.

12 BY MR. PERRY:

13 Q. I want to switch now to a different topic and
14 go back in time to a subject that you talked about
15 yesterday and this morning, and that was some JEDEC
16 meetings in the early nineties.

17 You testified this morning -- and I'm sorry, I
18 don't have a transcript, I'm paraphrasing -- but my
19 recollection is that you testified that you never heard
20 from Rambus anything that led you to believe that
21 Rambus had intellectual property that might cover
22 features being standardized at JEDEC.

23 A. That's correct.

24 Q. All right. If you had developed a belief in
25 the '91 to '96 time period that Rambus might have

1 intellectual property claims over features included
2 within the SDRAM standard, as you understood your
3 obligations as a JEDEC representative, would you have
4 had an obligation to make a disclosure to JEDEC of your
5 belief?

6 A. If I had direct knowledge that Rambus had IP
7 related, then yes, my obligation would have been to
8 disclose it.

9 Q. So, is that the same obligation that would be
10 placed on the Rambus representative, the way you just
11 described it?

12 A. That is correct.

13 Q. And your testimony is you never had that direct
14 knowledge.

15 A. I never had any knowledge.

16 Q. Does the chairman of a JEDEC committee, in this
17 case 42.3, does the chairman, as you understood it from
18 '91 to '96, have any special or heightened
19 responsibility to let the committee know about
20 potential intellectual property problems involving
21 standards?

22 A. The chairman's responsibility is for
23 facilitating the meeting and for making sure that
24 things like the patent policies are shown and discussed
25 and presented clearly. I -- the chairman is just

1 like -- it's a pretty thankless job since they are all
2 unpaid anyway, and you're standing up in front of a
3 room full of people. So, I don't think I would agree
4 with your statement.

5 Q. Okay. Does the chairman have any heightened
6 responsibility to understand the policies of JEDEC --
7 let's start very broadly -- than just an ordinary
8 member? When you take on the job of chairman between
9 '91 and '96 of a subcommittee of JEDEC, do you take on
10 some kind of obligation to study and learn the rules
11 and policies of JEDEC?

12 A. It is a responsibility of all members of JEDEC
13 to study and understand the rules. I wouldn't say that
14 the chairman necessarily would be expected to know more
15 or less.

16 Q. Did you have an expectation when you were a
17 JEDEC representative between '91 and '96 that the
18 chairman of a subcommittee would have a full and
19 complete understanding of the policies and rules of
20 JEDEC?

21 A. I knew by reference that if I had any
22 questions, I could go to people within JEDEC, senior
23 members or people who had been attending that may or
24 may not have been chairmen and some that may have been
25 chairmen, and I also had access to the EIA counsel for

1 any explanation.

2 Q. So, if you had questions -- let's get real
3 fact-specific. If you had questions about the patent
4 policy between '91 and '96, did you ever ask Gordon
5 Kelley for his advice?

6 A. I may have asked Jim Townsend. I perhaps have
7 had discussions like this with Gordon Kelley, perhaps
8 even with others. I mean, the responsibility and the
9 duty to know and understand them extends to all
10 participants.

11 Q. Did Gordon Kelley in 1992 or thereafter ever
12 disclose to you that he believed there were patent
13 problems with the SDRAM standard that involved Rambus?

14 A. I do not recall.

15 Q. Did he ever disclose to you that he thought
16 there might be potential patent problems involving
17 Rambus and the SDRAM standard?

18 A. I do not recall.

19 Q. Did he ever disclose to you that he thought
20 there might be patent problems with respect in
21 particular to the two-bank design of an SDRAM device?

22 A. I do not recall.

23 Q. Did Willie Meier, the Infineon representative,
24 ever state in your presence that he thought there might
25 be patent or intellectual property problems involving

1 Rambus and the SDRAM standard?

2 A. I'm not sure that I ever heard it in Willie's
3 presence. It is possible that I have heard a statement
4 like that, and I'm not certain of the time frame. It
5 could have been recently. I'm not sure.

6 Q. Was it before 1996?

7 A. I do not know.

8 Q. Did you ever hear Howard Sussman say that he
9 had examined all 150 claims in Rambus' European or WIPO
10 patent application?

11 A. I don't recall hearing that.

12 Q. Did you ever hear Howard Sussman express his
13 opinion at a JEDEC meeting that Motorola's Synchronous
14 DRAM related patent portfolio predated Rambus' patent
15 application in the area?

16 A. I can't say that I have direct knowledge. It
17 is -- I've heard perhaps statements made like that
18 from -- and perhaps from others, I'm not sure.

19 Q. Well, my question was real specific to Howard
20 Sussman, so --

21 A. Yes, I understand, and my answer specific to
22 Howard Sussman is I don't know.

23 Q. Thank you.

24 Prior to 199 -- prior to July 1996, did you
25 ever hear anyone suggest that there would be prior art

1 to any claims that Rambus might make for patent
2 protection?

3 A. I have heard discussions about prior art and
4 almost any claim by any company, and that's -- and
5 frankly, I have never placed any basis in it. So, if
6 there was a disclosure, then perhaps there could have
7 been evaluation, but that's -- some of these things,
8 like side discussions, like what you're referring to
9 here, is -- in a role of trying to lead a discussion,
10 it's best to just ignore.

11 MR. PERRY: Your Honor, may I move to strike as
12 nonresponsive? I was asking about a specific
13 disclosure or a specific statement.

14 JUDGE MCGUIRE: Mr. Oliver, any response?

15 MR. OLIVER: Your Honor, I believe the answer
16 is responsive.

17 JUDGE MCGUIRE: He said he's heard
18 conversations about prior art on almost any claim by
19 any company, and at what point was he nonresponsive?

20 MR. PERRY: I was asking specifically about
21 Rambus and he talked about any company and didn't tell
22 me if he ever heard that information about Rambus, and
23 that is what my question was about, so what I --

24 JUDGE MCGUIRE: Can you clarify your answer to
25 comport exactly with that question?

1 MR. PERRY: Can I ask it again, Your Honor?
2 I'll withdraw my motion to strike if I'm allowed to ask
3 a follow-up.

4 JUDGE McGUIRE: All right, you withdraw and
5 restate.

6 MR. PERRY: Thank you.

7 BY MR. PERRY:

8 Q. Did you prior to July 1996 ever hear anyone in
9 your presence state an opinion that any Rambus
10 intellectual property claim would be in that person's
11 opinion barred by prior art?

12 A. I cannot recall such a discussion.

13 Q. Did you ever at any time state your own opinion
14 that any Rambus intellectual property claim was barred
15 by prior art?

16 A. I have had discussions about some patents that
17 HP had at the time and perhaps used terminology as you
18 say, and this would have been relative to clocking, as
19 I recall.

20 Q. And you were familiar with those patents while
21 you were at HP, correct?

22 A. The HP patents? Vaguely familiar with them. I
23 had not specifically read them. I only had side
24 knowledge of -- not direct knowledge. I didn't
25 actually read the patent itself. And to a certain

1 extent, I was paraphrasing other things that I had
2 heard from people that I worked with that perhaps did
3 have greater knowledge.

4 Q. Did you ever make a statement to a gentleman
5 named Warmke, W A R M K E, that there was significant
6 prior art on Rambus patents?

7 A. The name is familiar to me. Can you perhaps
8 tell me something more about Mr. Warmke? I'm afraid
9 I'm not that good with names.

10 Q. We discussed it at your deposition, I believe.
11 I believe he might be an S3 employee.

12 A. S3, okay.

13 Q. Did you ever make a statement to him that you
14 believed that there was significant prior art on the
15 Rambus patents?

16 A. It is possible that I did have a discussion
17 with S3 about that.

18 Q. And in the 1997 time period, were you hearing
19 similar statements at dinner parties you had gone to?

20 A. Probably, yes.

21 Q. Why were people discussing at dinner parties in
22 1997, long before Rambus asserted claims for patent
23 infringement against SDRAM or DDR SDRAM, whether or not
24 there was prior art in Rambus' patents?

25 A. Sir, you're asking me to speculate, and I

1 can't. I don't have an answer for you.

2 JUDGE McGUIRE: Mr. Perry, while we're on this
3 point, and I apologize for interjecting, but I think it
4 would be of aid to the Court to have him answer exactly
5 what he means by the term "prior art." I have had some
6 involvement in patent law, but I would like -- and I
7 think I understand the term "prior art," but just to be
8 clear, I would like to hear him tell me his
9 understanding of the term.

10 THE WITNESS: Yes, Your Honor, while I was at
11 HP, one of the things that I did at HP, when a claim
12 would come to HP from an outside party about their
13 intellectual property patent rights, I would -- one of
14 the tasks that I performed occasionally was to read
15 those claims, compare the timing and filing of that
16 particular IP and compare and contrast that perhaps
17 with things that were going on inside of HP or perhaps
18 other places.

19 And so, my understanding of prior art is art in
20 the technology that existed prior to -- by I think it's
21 at least a year prior to the application of the
22 intellectual property in question.

23 JUDGE McGUIRE: Now, does that mean it's a
24 claim that has been issued -- that has been put forth
25 by some other company, or is that an issued patent? I

1 mean, when you talk about prior art, the same design
2 we're talking about that is in the process of being
3 patented or has been patented?

4 THE WITNESS: It would be -- in my discussion
5 about prior art, it's in reference to particular -- and
6 prior art, I think the particular definition refers to
7 specific claims for issued patents.

8 JUDGE McGUIRE: Right, okay.

9 MR. PERRY: And Your Honor, both sides have
10 patent law experts, and --

11 JUDGE McGUIRE: I just thought that was a term
12 that should be clarified before we go much further.

13 MR. PERRY: I appreciate that.

14 BY MR. PERRY:

15 Q. To get back to the question I was asking, you
16 thought you may have made such a statement in that time
17 period, and I'm wondering why you would be making
18 statements about prior art on Rambus patents. HP
19 wasn't or VLSI, they weren't making -- let me ask it
20 this way.

21 Why did you care about whether or not there was
22 prior art on Rambus patents before those patents began
23 to be asserted against JEDEC-compliant standards?

24 A. I'm not sure that I did care. The -- just the
25 topic of discussion, as I explained in my deposition,

1 this would be dinner conversation. Some people would
2 talk about prior art for many things, and when
3 something was very active, there were discussions at
4 that time was IP around, something relevant to what was
5 going on at that company, and I think at that time
6 Rambus was probably pretty active in the press, and so
7 I suppose the topic of Rambus came up, perhaps because
8 of that. I can't give you an explanation. I don't
9 have one.

10 Q. Well, you were going to SyncLink meetings in
11 that time period, right? You went to one in December
12 of --

13 A. Yeah, in '96 I was.

14 Q. I think you went to one in December of '96 and
15 '97, but --

16 A. Okay.

17 Q. -- take my word for it right now.

18 A. Okay.

19 Q. Did you hear at SyncLink meetings discussions
20 of prior art on Rambus patents?

21 A. Actually, I don't recall any discussions like
22 that taking place at any of the SyncLink meetings that
23 I attended. I have heard anecdotal evidence that
24 perhaps it may have taken place, times when I was not
25 there.

1 Q. At SyncLink meetings when you weren't there?

2 A. Or related to perhaps SyncLink meetings, maybe
3 it was over lunch or dinner. I don't -- I'm not sure.

4 Q. Was there any effort made that you were aware
5 of by SyncLink to examine the Rambus patent portfolio
6 to see if the SyncLink device that you folks were
7 developing might run into that portfolio?

8 A. I have no idea.

9 Q. So, as far as you know, there was none?

10 A. I have no idea one way or the other.

11 Q. All right. Well, let's -- you talked a little
12 about SyncLink yesterday when there was a SyncLink
13 presentation made to JEDEC. Do you remember that short
14 discussion?

15 A. Yes, I do. I do.

16 Q. And was it your practice to create a trip
17 report or a memo when you came back from a meeting and
18 give it to your supervisors at VLSI?

19 A. Pretty infrequently. The reason is because
20 VLSI wished for me to take this responsibility, and
21 most of the rest of the -- VLSI was small enough that
22 there wasn't a wide interest level. Everybody had
23 specific tasks that they -- and specific job functions,
24 and there were times that -- and occasionally I would
25 put together maybe a little brown bag presentation

1 about activities and such, but on a regular basis, I
2 did not create trip reports, no.

3 Q. Thank you.

4 And you've been gone from VLSI for a while, so
5 if there was a trip report for any particular JEDEC
6 meeting, it stayed back at VLSI or it's long gone or
7 whatever?

8 A. Well, VLSI was purchased by Phillips, and it's
9 since been chopped up in many, many pieces. I highly
10 doubt anything is there.

11 Q. But in any event, let me ask this question that
12 I was trying to get to.

13 A. Sure.

14 Q. In any of your testimony, has any of it been
15 based upon your review of any notes you took or memos
16 you created at any JEDEC meeting?

17 A. If you can add some more clarification to your
18 question. Is any of what involved?

19 Q. Testimony you've given over the past two days,
20 has any of it been based your review of any notes you
21 took or memos or trip reports you created at any JEDEC
22 meeting between '91 and '96?

23 A. It could -- it could have been in my own mind.
24 Are you asking me is it based on notes that I still
25 have in my possession or something or --

1 Q. Let me ask it this way.

2 A. Okay.

3 Q. Have you seen in the past six months any notes
4 or memos that you created between '91 and '96 about
5 what went on in JEDEC meetings?

6 A. In the deposition that you took from me, sir,
7 there were a number of things that you showed me that I
8 hadn't seen in a number of years, and so I have seen
9 some things, yes, certainly, and I've seen some other
10 things in response to other depositions, and perhaps
11 even here in trial. So, yes, I have in some period of
12 time over the last perhaps six months seen them, but
13 I'm -- if you can be more specific, I'd be glad to try
14 to answer your question.

15 Q. Let me be very specific. I'm talking about
16 notes you took, either on a computer or handwritten,
17 and let's start with those.

18 A. Okay.

19 Q. Have you seen notes you took, either
20 handwritten or on a computer, that you prepared while
21 at a JEDEC meeting or thereafter to describe what was
22 going on at the JEDEC meeting, have you seen those in
23 the past six months?

24 A. I have not.

25 Q. Have you seen any memo or trip report that you

1 wrote between '91 and '96 to describe what went on at a
2 JEDEC meeting in the past six months?

3 A. Memo or trip report, it -- well, it depends on
4 your definition of memo or trip reports. Certainly
5 there were emails that I have seen that related to
6 that. In some ways, those could be gauged as trip
7 reports.

8 Q. And is any of your testimony here based upon
9 those emails?

10 A. Based on my reading of those emails or based on
11 my recollection that I have of that time period? My
12 testimony is based on my recollection of the time
13 period.

14 Q. Was any of your testimony refreshed, was any of
15 your recollection refreshed by your reading those
16 emails?

17 A. To be -- I want to try to be accurate here,
18 because I cannot read something without a certain
19 amount of refresh taking place, and so perhaps there is
20 refresh of my memory as I go through this material
21 again, yes, that is true.

22 Q. All right. Well, let me get real specific,
23 then. I want to show you a trip report by Gordon
24 Kelley about --

25 A. Okay.

1 Q. -- the meeting where the SyncLink presentation
2 occurred that you described yesterday.

3 A. Okay.

4 Q. And then I'll ask you if you've seen a trip
5 report and a memo by you describing the events of that
6 meeting.

7 A. Okay.

8 Q. All right, I'm going to show you Exhibit
9 RX-575.

10 May I, Your Honor?

11 JUDGE McGUIRE: Approach.

12 BY MR. PERRY:

13 Q. Now, yesterday you were shown the JEDEC -- the
14 official JEDEC meeting minutes for this meeting, which
15 was I believe May 1995. This -- I can represent to you
16 that we believe Gordon Kelley will testify, as he did
17 at his deposition, that these are -- that this is a
18 trip report that he prepared about that meeting, that
19 May 1995 meeting.

20 A. Okay.

21 Q. And I'll start with asking you if you in the
22 past six months have seen any document you've prepared
23 that describes the events of that June 1995 -- I'm
24 sorry, May 1995 42.3 meeting.

25 A. I don't believe so.

1 Q. Thank you.

2 Now, we will look -- to see if this refreshes
3 your recollection about this meeting, we will look to
4 see how Gordon Kelley describes the SyncLink
5 presentation. I'll ask you to go to page 6, and I'll
6 ask you to look at the last discussion at the bottom
7 after Hyundai.

8 A. Okay.

9 Q. Now, Mr. Tabrizi was the Hyundai JEDEC rep at
10 the time, right?

11 A. He among others.

12 Q. And you remember him giving the SyncLink
13 tutorial presentation?

14 A. I'm not sure he gave the whole thing, because
15 Dr. Oh may have also given part of it, but mostly from
16 Mr. Tabrizi.

17 Q. Why don't you read that to yourself and see if
18 it brings back any memory.

19 A. (Document review.)

20 Q. I see you have gone to the top of page 7. Why
21 don't we go to the top of page 7, because that's where
22 I have some questions for you.

23 It says, "None of the SyncLink companies are
24 aware of any patents that apply to this protocol,
25 interface, design; however, the Rambus patents should

1 be closely reviewed."

2 Do you see that?

3 A. Yes.

4 Q. And does looking at Mr. Kelly's trip report
5 about that presentation by Hyundai, does that refresh
6 your recollection about any statement that any of the
7 SyncLink companies made about patents that related to
8 the SyncLink presentation?

9 A. Well, the statements that were made all along
10 was -- to my recollection, still is my recollection --
11 is that they always intended the SyncLink to be -- to
12 follow the JEDEC patent policy, and this was a
13 statement by one of the presenters, there were multiple
14 presenters, of the activity. IBM was part of the
15 development of SyncLink, so were other people.

16 I believe the statement -- perhaps I will have
17 to paraphrase, I'm not sure what Mr. Kelly intended to
18 write here, but perhaps he was making the statement
19 that there were no -- as you said, no patents outside
20 of SyncLink that they felt like applied at the time,
21 and it would obviously be Mr. Kelly's opinion, I would
22 think -- and here I have to speculate about -- he says,
23 however, Rambus patents should be watched or reviewed
24 or something like that.

25 Q. He says "closely reviewed," but we will get to

1 that.

2 A. All right, closely reviewed, right.

3 Q. Is it your present recollection that Mr.
4 Tabrizi said that the companies that belonged to the
5 SyncLink consortium intend to obtain patents covering
6 various SyncLink features, but we will give licenses on
7 reasonable and nondiscriminatory terms, or words to
8 that effect?

9 A. I do not recall Mr. Tabrizi ever having said
10 that. I recall, as I said before, I recall hearing
11 that in relationship to Mr. Peter Gillingham and other
12 people that were involved in the design and development
13 of SyncLink.

14 Q. At this meeting, did some representative in a
15 SyncLink presentation tell 42.3 that SyncLink intended
16 to get patents on something?

17 A. I do not know.

18 Q. Did someone say in this meeting that the Rambus
19 patents should be closely reviewed?

20 A. I have no recollection.

21 Q. Now, you said a few moments ago that IBM was
22 developing SyncLink. Did you -- do you believe that
23 IBM was developing the SyncLink device as of June '95?

24 A. IBM was part of the SyncLink consortium.

25 Q. When you joined it, they were there. That's

1 true, right?

2 A. That's correct.

3 Q. Do you know if they were at the consortium in
4 June of '95?

5 A. I do not know.

6 Q. Okay. Let me talk about something else you
7 discussed yesterday, and that's Mr. Townsend's patent
8 tracking list.

9 A. Okay.

10 Q. And I'll show you a legible copy, I hope,
11 that's RX-559.

12 May I?

13 JUDGE MCGUIRE: Approach.

14 BY MR. PERRY:

15 Q. Now, this is dated May 10, 1995. Do you see
16 that?

17 A. Oh, May 10th, yes, I see it.

18 Q. And I believe you are listed as a recipient?

19 A. Yes.

20 Q. And you were at VLSI at the time?

21 A. Yes, I was.

22 Q. Now, I want you to look at the names of the
23 people who are listed as recipients. Yesterday I think
24 I heard you say that you thought Mr. Townsend addressed
25 these patent tracking lists to JEDEC leaders, and I

1 want you to look at this list and see if it's
2 consistent with that testimony.

3 Is that really what you think he was doing when
4 he picked the names of the people that he sent this to?

5 A. I'm not certain how he picked the names in the
6 list. I testified that I thought that that's what --
7 where he got the list.

8 Q. All right. Now, I want you to look actually at
9 the page 4 where it's the list of patents and
10 applications, it's entitled Patent Issues to Track.

11 A. Page 4, okay.

12 Q. Now, when you were a JEDEC representative from
13 '91 to '96, first for HP and then for VLSI, did you at
14 any time do anything with this patent tracking list?

15 A. I did not.

16 Q. Did you provide it to anyone because they
17 wanted to review anything on it?

18 A. I do not recall ever doing that, no.

19 Q. Was it someone's job at Hewlett Packard to
20 provide this list to someone to take a look at?

21 A. It was not.

22 Q. How about at VLSI?

23 A. It was not.

24 Q. Look on page 2 of the list itself, which is
25 page 5, page 5 of the exhibit, we're still in the

1 patent tracking list. Do you see it appears to be
2 alphabetical, right? It appears to be alphabetical?

3 A. It's alphabetical by at least one of the
4 columns, yes.

5 Q. And about a little less than halfway down, do
6 you see a patent that's attributed to Rambus?

7 A. Yes, I do.

8 Q. And it's entitled Sync Clock?

9 A. Yes.

10 Q. Now, I don't want you to guess about whether
11 that was Mr. Townsend's name that he picked for that --
12 to describe that patent or somebody else's, but does
13 the phrase "sync clock," did that phrase mean anything
14 to you between '91 and '96?

15 A. It had the meaning of the Rambus loop clock. I
16 referred to it as the loop clock, but in their
17 architecture, they have a -- a clock that originates
18 and then returns to the controller.

19 Q. Now, did you ever go and review the patent?

20 A. I did not.

21 Q. Did you ever go and review the Motorola patent
22 that's listed as Sync DRAM?

23 A. I did not.

24 Q. Did you ever go and look at the Hitachi patents
25 that are listed as Sync DRAM?

1 A. I did not.

2 Q. Or rather, SDRAM.

3 If you look back at that page to the Hitachi
4 SDRAM patents, that's what it says, it says SDRAM, and
5 it says Toshiba was the source of the information about
6 Hitachi.

7 Do you remember when Toshiba disclosed to the
8 committee that Hitachi had patents relating to SDRAM?

9 A. I don't remember exactly. It may have been
10 actually in a previous version of the patent tracking
11 list. Since Mr. Townsend was with Toshiba at the time,
12 he may have chose to do it through the tracking list
13 himself. I'm not certain.

14 Q. Now, was it sometimes the case that one company
15 would disclose that another company had a patent and
16 that other company hadn't said anything about it? Did
17 that happen at meetings?

18 A. The patent tracking list represents that, yes.

19 Q. Now, what level of knowledge did a
20 representative have to have about another company's
21 patents or applications before being required to make a
22 disclosure to the committee?

23 A. There's no guideline for level of knowledge,
24 I'm afraid. In this case, obviously, they had
25 knowledge of patent numbers, so I would think that was

1 a high level of detail. I do not recall ever
2 discussing a level of knowledge.

3 Q. Now, I apologize if you were asked this
4 yesterday, but what was your understanding between '92
5 and '96 of Mr. Townsend's purpose in circulating the
6 list of patents and applications and whatever it is are
7 on his list that's pages 4 and 5 of Exhibit 559?

8 JUDGE McGUIRE: I'm sorry, was that RX-559?
9 I'm not getting on your case. I'm just trying to
10 clarify.

11 MR. PERRY: No, it's good to teach everybody a
12 lesson at the same time, and I hope that's what you're
13 doing, Your Honor.

14 JUDGE McGUIRE: That's all I'm doing. I just
15 want it for clarification this time.

16 BY MR. PERRY:

17 Q. Let me ask the question again.

18 Did you from '92 to '96 have an understanding
19 of what Mr. Townsend's purpose was in circulating the
20 list of patent issues that appear on pages 4 and 5 of
21 this exhibit, RX-559?

22 A. I didn't have direct knowledge from Mr.
23 Townsend of the exact purpose. My assumption was that
24 he was circulating the patents for knowledge of the
25 people. It also was a very useful tool to demonstrate

1 to the people that were coming the working of the
2 patent policy within JEDEC, showing all of the various
3 aspects in process right here on the page before you,
4 because he usually -- he would present this at the same
5 time that he was presenting the patent policy, so it
6 was an excellent example to show how the process works.

7 Q. So, he would show the list up on the screen?

8 A. Almost always, he would show the whole thing.

9 Q. When he would show the list, would he describe
10 it? Would he say what it was?

11 A. He would have words to describe it. I can't
12 recall his exact -- what he exactly said, I can't
13 recall that.

14 Q. You told us yesterday you've seen him give this
15 presentation over and over and over again, sometimes as
16 many as three or four times a week.

17 A. Sometimes three or four times a day, but yes.

18 Q. Did he -- what was the substance of what he
19 said to the 42.3 committee or any other committee when
20 he showed the list of patents up on the screen?

21 A. Some of the phrases that he would use, he would
22 say I want to make you aware of the patents that we
23 have here that are shown, make you aware of the
24 disclosures that have taken place. It was a teaching
25 of the JEDEC patent policy itself. He would go through

1 the JEDEC patent policy, spend substantially more time
2 on the policy itself, and then go through the list
3 here, and normally follow up and ask if anybody in the
4 group had anything to add or any changes or
5 modifications to make.

6 Q. Did he -- strike that.

7 And then Mr. McGhee would -- well, did Mr.
8 McGhee ever make any presentation about the patent
9 policy at any meeting?

10 A. That was not his role, no.

11 Q. But did you ever see him do it?

12 A. I can't recall if he did.

13 Q. Let me -- His Honor's question about prior art
14 left a question in my mind. You said something about a
15 one-year period. You're aware that in the United
16 States, it's the first to invent as opposed to the
17 first to file the application that is entitled to the
18 patent?

19 A. Exactly, that's why the term "prior art" exists
20 in the United States and basically nowhere else.

21 Q. So, in prior art, you're looking to see who was
22 the first inventor in the United States.

23 A. That is correct.

24 Q. And is it the case that in other countries,
25 it's whoever gets to the local patent office first with

1 an application who gets the patent, if all the other
2 requirements are met?

3 A. Remember, I'm not a patent attorney, but it is
4 my understanding that it is first to file, and in those
5 cases, the concept of prior art doesn't exist, because
6 you've established whoever was first to the patent
7 office by whoever got the letter.

8 JUDGE MCGUIRE: Well, then let's expand on
9 that. I'm a little uncertain what you're talking about
10 then if you're saying in our country, it's the first to
11 invent. You know, what does that mean if you already
12 have an application on file on that invention?

13 THE WITNESS: Okay, I think -- and Your Honor,
14 I will do my best to explain.

15 JUDGE MCGUIRE: I understand, in the context of
16 your understanding.

17 THE WITNESS: Only in the context that I
18 understand it, okay?

19 JUDGE MCGUIRE: That's the only context that
20 I'm going to ask about.

21 THE WITNESS: It is my understanding that in
22 every other country besides the U.S., it is the first
23 to file, and so when an invention occurs, then the
24 first person to get to the patent office with the
25 invention has the rights to that invention.

1 JUDGE McGUIRE: Right.

2 THE WITNESS: In the United States, a person or
3 company may file for a patent, and if in later, further
4 discovery it's proven that someone else had invented
5 this earlier, then the original filer could -- could
6 lose their rights to it, and that's the term of prior
7 art.

8 JUDGE McGUIRE: I understand.

9 THE WITNESS: So, the term of prior art only
10 exists, as far as I know, in the United States. It
11 does not exist elsewhere. And it's also very confusing
12 for international companies because of the U.S. --

13 JUDGE McGUIRE: Okay, I don't need to know
14 that. That's a little more than we need to know at
15 this point.

16 BY MR. PERRY:

17 Q. Let me ask this: The disclosure you've been
18 talking about this morning and yesterday about the
19 disclosures that needed to be made by an individual
20 representative, if the representative at a JEDEC
21 meeting discloses an invention of his company pursuant
22 to what you've described as his obligation before his
23 company has filed a patent application, and somebody in
24 the room runs off to Japan and files a patent
25 application before the representative's company can get

1 to the patent office with it, doesn't the
2 representative risk throwing away his company's rights
3 to that invention?

4 A. Well, it's also my understanding, the way
5 international patent law is, is that the moment that
6 you have disclosed it, then there is no longer the
7 possibility that anyone can go and race to the patent
8 office, because once it has been disclosed outside your
9 company, then you can no longer file it.

10 Q. So, making the disclosure that you say the
11 representative is required to do before the application
12 has been filed --

13 A. In --

14 Q. -- donates the invention into the public
15 domain, as you understand it?

16 A. Well, and recognize, I'm not a patent attorney,
17 and I do not understand all the patent laws around the
18 world. This is merely my -- my simple memory about
19 what international patent law entails, and it's a much
20 simpler process than we have in the United States, but
21 I believe that once disclosed, that -- some companies
22 perhaps have something. Within the U.S., you can
23 disclose and you still have I believe it's a year to
24 still apply.

25 Q. Let me ask it this way.

1 A. Okay.

2 Q. As you understood it between '91 and '96, if
3 you disclosed at JEDEC, you were giving away your
4 rights to go to a foreign country to get a patent on
5 whatever it was you were disclosing if you hadn't
6 already gone to that country and applied for a patent?

7 A. I think that's reasonable, yes.

8 Q. All right. Well, following up on this issue of
9 prior art, and you talked about it a little this
10 morning when you were shown the March 1997 JEDEC
11 meeting minutes, and I have a copy here, I don't know
12 if these were the ones that were introduced, but this
13 is a much more legible copy, so I am going to use
14 JX-31 -- JX-36.

15 A. JX-36?

16 Q. Thirty-six, and I am going to bring you one,
17 Mr. Rhoden.

18 A. Okay.

19 MR. PERRY: May I?

20 JUDGE McGUIRE: Yes.

21 BY MR. PERRY:

22 Q. If this is already in the record, I apologize,
23 but I want to point you to that paragraph from these
24 March '97 meeting minutes that you talked about earlier
25 today, and that's on page 7, and we'll focus on

1 paragraph 6.6 entitled NEC DDR SDRAM for High End
2 Systems.

3 Do you see that?

4 A. Yes, I do.

5 Q. And you remember that you talked about this
6 already today?

7 A. Yes, I do.

8 Q. And I think that the sentence that you spent
9 some time on was, "Some on the Committee felt that
10 Rambus had a patent on that type of clock design." And
11 then you described what your understanding was of that
12 reference, right?

13 A. Yes.

14 Q. All right. The next sentence says -- in the
15 minutes says, "Others felt that the concept predated
16 Rambus by decades."

17 Do you see that?

18 A. Yes, I do.

19 Q. Do you have a recollection now of who made a
20 comment that the concept involved predated Rambus by
21 decades?

22 A. I -- I'm sorry, I do not have a recollection of
23 the individual.

24 Q. Was it your understanding in March 1997 that
25 the concept of using a read clock signal as a separate

1 clocking signal to determine the flow had been used for
2 decades?

3 A. The -- a read clock signal to determine the
4 flow of data had been in use in some systems, I
5 believe, and in systems that I designed and systems
6 that I designed when I was at HP and systems that I was
7 aware of in the acquisition of Apollo, when HP bought
8 Apollo, I was aware of systems that implemented
9 circuitry that was very similar.

10 Q. I want to point you to Attachment F that Mr.
11 Oliver asked you to look at this morning.

12 A. Okay, yes.

13 Q. And I believe it's at page 56 and 57.

14 A. Okay.

15 Q. And do you have page 57 in front of you?

16 A. I have 56. If you want 57, okay.

17 Q. That's a pin-out that you talked about this
18 morning?

19 A. Yes, it is.

20 Q. And when Mr. Oliver asked you in connection
21 with the phrase "Some on the committee felt that Rambus
22 had a patent on that type of clock design," you
23 explained what you thought that meant in reference to
24 this schematic, correct?

25 A. Yes, I explained what I thought that it meant,

1 that is correct.

2 Q. And is that same concept, that some people said
3 at that meeting Rambus had a patent on, is that same
4 concept the one that some people said, oh, that concept
5 predated Rambus by decades?

6 A. Well, I believe you're trying to get to a level
7 of detail that I'm not prepared to go to, because I
8 can't tell you for sure what was in the minds of the
9 people that were actually making the comments. So, I'm
10 not sure I can answer your question.

11 Q. Isn't it true that at the meeting, various
12 members of the committee said that dual edge clocking
13 had been around before Rambus and that, therefore, the
14 Rambus patent claims on dual edge clock, if there ever
15 were any, would be invalid because of prior art?

16 A. That was not the statement that I recalled in
17 relation to this particular statement. What I recall
18 about this particular presentation was a representation
19 that there was a separate read clock and separate write
20 clock implemented in this particular device, and it was
21 the use of a separate read clock and separate write
22 clock that was related to the concerns that some people
23 did have. Nothing whatsoever about dual edge clocking.

24 Q. Thank you.

25 I want to show you a memo from one month later.

1 It's RX-920.

2 May I?

3 JUDGE McGUIRE: Approach.

4 BY MR. PERRY:

5 Q. This is dated April 17, 1997. It was produced
6 to us by Micron.

7 A. Okay.

8 Q. Now, you're familiar with Terry Lee whose name
9 appears at the top?

10 A. Yes, I am.

11 Q. He was a JEDEC representative for Micron at the
12 time, wasn't he? Feel free to read it, Mr. Rhoden. I
13 don't want to rush you through it.

14 A. Okay. (Document review.)

15 MR. OLIVER: Excuse me, Your Honor, according
16 to our records, apparently there is a pending motion
17 that this be treated in camera.

18 MR. PERRY: The motion was denied, Your Honor.

19 JUDGE McGUIRE: It was denied.

20 MR. OLIVER: Thank you, Your Honor.

21 JUDGE McGUIRE: But I do appreciate you being
22 on top of that, because that's going to be something
23 we're all going to have to be very cognizant of during
24 the course of this proceeding.

25 THE WITNESS: Yes, I'm familiar -- I haven't

1 read the whole thing. It's very long.

2 BY MR. PERRY:

3 Q. Some of the names of the people in this email
4 chain at Micron are Kevin Ryan, Terry Lee, Terry
5 Walther, Jeff Mailloux, and you're familiar with each
6 of those individuals because they attended JEDEC
7 meetings in the past, correct?

8 A. That's correct.

9 Q. Some of them were Micron's official JEDEC
10 representatives, correct?

11 A. That's correct.

12 Q. Mr. Ryan was?

13 A. At this time frame, I'm not sure, but perhaps.

14 Q. Did any of those individuals inform you that
15 they had heard in April 1997 that, "Rambus feels DDR
16 for any memory is under their patent coverage"?

17 A. I do not recall.

18 Q. Did you hear from anyone in March or April 1997
19 in any context that Rambus believed that the use of
20 dual edge clocking in any memory device would be
21 subject to patent claims that Rambus had filed?

22 A. I -- I recall that there were claims made about
23 dual edge clocking, and I heard that they did come from
24 Rambus. I cannot give you the specific time frame. In
25 the late nineties sometime. I do not know if it

1 happened in 1997 or otherwise.

2 Q. Did you ever hear from Terry Walther that he
3 believed that any Rambus patent claim on using both
4 edges of the clock would be invalidated because it was
5 old technology?

6 A. I don't recall.

7 Q. If a disclosure had been made at a JEDEC
8 meeting by any Micron representative of this knowledge,
9 would it -- should it have been reflected in the
10 minutes of the meeting, as you understood how things
11 worked?

12 A. Well, normally, I would think so.

13 Q. And you testified yesterday about what the
14 committee has to do if a disclosure of IP is made if
15 there's no accompanying assurance of reasonable and
16 nondiscriminatory licensing, so let me ask you this:

17 If a representative of a JEDEC member says at a
18 JEDEC meeting that a non-JEDEC member has, they
19 understand, claims that cover a technology under
20 discussion for standardization, in that circumstance,
21 when we're talking about technology that might be owned
22 by a nonmember, does the committee work stop, as you
23 understand it?

24 A. The committee work -- inside the committee,
25 you're talking in terms of absolutes here, and perhaps

1 I would like to present to you that -- perhaps everyone
2 would like for it to be absolute, but things are not
3 necessarily absolute. When I say work stops, as in the
4 NEC presentation that we just discussed, work stopped,
5 but it was a slow stop. Essentially there was too much
6 concern and people -- it just died.

7 There was no action that said we're not going
8 to take further action on this, we're going to blow it
9 off. That's not -- there is not really a formal
10 process for that. The work stopped, and so in a sense,
11 if you were to look through the item log, you would see
12 that it died for lack of additional activity. So, what
13 I mean is the work stops, it stops in a practical
14 sense.

15 And the same thing in this particular case, it
16 would be relative to the knowledge as it had been
17 presented in subsequent investigations either inside --
18 well, definitely not inside, but subsequent
19 investigations by the participants inside JEDEC about
20 the path that they wished to take in terms of
21 proceeding.

22 And so, it's -- I'd like to represent to you
23 that it's a hard and fast, but in fact, things are not
24 necessarily hard and fast. Remember, this is a
25 standards organization with a lot of different people,

1 and there is not a traffic cop or a policeman that
2 actually beats people up.

3 Q. Let me be very specific.

4 A. Okay.

5 Q. Based upon your understanding of how the JEDEC
6 process worked in this time period, in April '97, if
7 there had been a statement made by a JEDEC member
8 representative that Rambus, a nonmember, felt that DDR
9 for any memory is under their patent coverage, would
10 work have ceased on the standardization of dual edge
11 clocking until and unless an assurance letter was
12 obtained from Rambus with respect to licensing?

13 A. The -- well, I believe the answer is -- is less
14 concrete than what you would like. I'll try to
15 explain. DDR and DDR devices had been shipping within
16 JEDEC in multiple players, in SRAM devices, in --
17 indeed, by this time in DRAM devices, there were things
18 being developed at that time, and I suppose that
19 discussions would center around is this -- the -- the
20 person making the disclosure would be quizzed about
21 what level of understanding that they would have or
22 what level that they would understand, and to a certain
23 extent, it's a -- it's also about the process in and of
24 itself, how painful it would be to actually make a
25 change in that time frame.

1 And so, would something stop? The only way
2 something would stop -- and NEC was easy. NEC was a
3 new proposal, no one else had designed product, no one
4 was shipping product, no design had taken place, so
5 there -- no one was locked into actually using that
6 technology. If someone had made a statement like you
7 say, then the JEDEC member companies have to make a
8 determination, and the work -- JEDEC has to report it,
9 and JEDEC would have reported it I think in the
10 minutes. But in terms of absolute stopping, it is a
11 relative term, especially in light of the stage at
12 which development was in by that time.

13 Q. When did DDR SDRAM receive JEDEC Council
14 approval? It was in 1999, wasn't it?

15 A. JEDEC Council approval, that's correct.

16 Q. Yes. And it was balloted at 42.3, final
17 balloting, in late '98, September '98, something like
18 that?

19 A. That would be correct.

20 Q. Is it your testimony that by April 1997, JEDEC
21 42.3 was locked into using dual edge clocking --

22 A. I believe --

23 Q. -- in the DDR SDRAM standard?

24 A. Well, locked --

25 Q. Let me ask it this way.

1 A. Okay.

2 Q. Were there any commercially available
3 alternatives with reasonably close performance to dual
4 edge clocking that were available to the JEDEC
5 committee in April 1997 it could have used if it didn't
6 use dual edge clocking in that standard?

7 A. Absolutely.

8 Q. All right. So, let me ask it again, and then
9 we can break.

10 As you understood the process and the way it
11 worked at JEDEC in April of '97, if a Micron
12 representative had informed JEDEC -- if any
13 representative of a member company had informed JEDEC
14 that, "Rambus feels DDR for any memory is under their
15 patent coverage," Rambus was a nonmember --

16 A. Yes.

17 Q. -- would the work on standardization of dual
18 edge clocking have been suspended while somebody went
19 off and asked Rambus if they would give an assurance
20 letter of reasonable and nondiscriminatory licensing?

21 A. That would have been one of the paths. I
22 assume the other path people would have taken is to
23 find out if they had particular knowledge. So,
24 necessarily, if it had been disclosed, there would have
25 been additional activity that would have taken place,

1 and for practical purposes, the committee would have
2 suspended the discussion.

3 MR. PERRY: Your Honor, it's the agreed-upon
4 break time. I am not done with Mr. Rhoden. I would
5 like to move in Exhibit 9 -- RX-920.

6 JUDGE McGUIRE: You are getting better at that,
7 okay.

8 MR. OLIVER: I have no objection, Your Honor.

9 JUDGE McGUIRE: So entered.

10 (RX Exhibit Number 920 was admitted into
11 evidence.)

12 MR. PERRY: And I imagine there are a few I've
13 missed, and we will get together and --

14 JUDGE McGUIRE: That's why you need to get
15 together with the court reporter at the end of the
16 week, as we said before.

17 Now, do the two sides need to confer regarding
18 if we are going to hold further any cross on this
19 witness in abeyance, and if so, I would like to find
20 out on the record the understanding of the parties, or
21 if you wish to take this up with counsel and the
22 witness at a further time.

23 MR. PERRY: We're flexible, Your Honor, as long
24 as we can get him back for cross, and at that time we
25 would try to do whatever we would do in our case,

1 unless there was an objection to that. I do have a
2 subpoena I'd like to give him just in case if he's
3 willing to accept it.

4 JUDGE McGUIRE: Mr. Oliver, any --

5 MR. OLIVER: Your Honor, I would suggest that
6 we consult with counsel, perhaps over the weekend, and
7 likewise with Mr. Rhoden, see what we can work out.

8 I do wish to make a short statement with
9 respect to scheduling issues generally. I don't think
10 we necessarily need to hold Mr. Rhoden up for that.

11 JUDGE McGUIRE: Okay, Mr. Perry, is that good
12 for you?

13 MR. PERRY: That's fine, the witness can be
14 excused.

15 THE WITNESS: Thank you.

16 JUDGE McGUIRE: I will ask counsel at the
17 conclusion of this hearing to please take their hard
18 copies that they have offered in the last two or three
19 days, and other than that, we will convene early on
20 Monday, same time, same place, and counsel, have a good
21 weekend.

22 MR. OLIVER: Your Honor, excuse me, I did want
23 to make a brief statement with respect to the
24 scheduling issues.

25 JUDGE McGUIRE: Okay, go ahead. We're still on

1 the record.

2 MR. OLIVER: Your Honor, you had earlier
3 requested some advance notice of our witnesses.

4 JUDGE McGUIRE: Yes.

5 MR. OLIVER: We, of course, have an agreement
6 with the other side that we will exchange information
7 72 hours in advance. Actually, today, I did want to
8 give you further advanced notice, even beyond our
9 agreement with the other side, just to give you an idea
10 both of what's coming up but also to help let you know
11 some of the scheduling issues that we may be
12 confronting.

13 JUDGE McGUIRE: Okay.

14 MR. OLIVER: We had expected to call on Monday
15 Mr. Brett Williams of Micron. He will be coming in
16 from Idaho. On Tuesday afternoon, Mr. Sam Calvin from
17 Intel. On Wednesday, Mr. Kevin Kettler from Dell in
18 Texas, as well as Mr. Henry Becker from Infineon in
19 Virginia. On Thursday, Mr. Howard Sussman from Sanyo.
20 And on Friday, Mr. John Kelly of JEDEC.

21 The following week, Monday the 12th, we already
22 notified the other side that we are expecting to call
23 Mr. Anthony Diepenbrock, former in-house counsel of
24 Rambus. On Tuesday, the 13th, Mr. Lester Vincent, the
25 former outside counsel of Rambus. And on the 14th,

1 15th and if necessary on the 16th, Mr. Richard Crisp,
2 also of Rambus.

3 Perhaps we are a little over-ambitious in
4 scheduling, but nevertheless, we are confronting a
5 situation now where the first two weeks are fairly
6 packed.

7 JUDGE McGUIRE: Okay.

8 MR. OLIVER: I think down the road we can space
9 it a little bit better.

10 JUDGE McGUIRE: Okay.

11 MR. OLIVER: But my concern is that if
12 witnesses start to spill over, it is going to have a
13 domino effect on --

14 JUDGE McGUIRE: I understand, that's why it's
15 important we all have these understandings, and to the
16 extent possible, so we can accommodate not only these
17 individuals but the parties themselves.

18 MR. PERRY: I just want to make one short
19 statement, which is some of these names we have just
20 heard, and it sounded to me like an overly aggressive
21 schedule for next week given the amount of cross that
22 we have for these particular witnesses, and I would
23 hate to end up next Friday not getting our cross done
24 of John Kelly, who's the EIA general counsel, and I
25 would hope that if that was the situation that we would

1 not start him, but we can talk about that further.

2 JUDGE McGUIRE: Okay, you all should confer on
3 that, because that sounds like that's going to be a
4 pretty full, you know, agenda on behalf of complaint
5 counsel, and I encourage -- you know, I'm pleased that
6 you've got it that well organized, but I think that's a
7 good point that has just been made by the other side,
8 so it's important that you all confer as much as
9 possible, perhaps after every day of hearing.

10 MR. PERRY: We have. We have, Your Honor.

11 JUDGE McGUIRE: Okay. Is there anything else
12 we need to discuss before this hearing is adjourned?

13 MR. PERRY: No, Your Honor.

14 JUDGE McGUIRE: So adjourned. Have a good
15 weekend.

16 MR. STONE: Thank you, Your Honor.

17 (Whereupon, at 4:30 p.m., the hearing was
18 adjourned.)

19

20

21

22

23

24

25

1 C E R T I F I C A T I O N O F R E P O R T E R

2 DOCKET NUMBER: 9302

3 CASE TITLE: RAMBUS, INC.

4 DATE: MAY 2, 2003

5

6 I HEREBY CERTIFY that the transcript contained
7 herein is a full and accurate transcript of the notes
8 taken by me at the hearing on the above cause before
9 the FEDERAL TRADE COMMISSION to the best of my
10 knowledge and belief.

11

12 DATED: 5/5/03

13

14

15

16 SUSANNE BERGLING, RMR

17

18 C E R T I F I C A T I O N O F P R O O F R E A D E R

19

20 I HEREBY CERTIFY that I proofread the
21 transcript for accuracy in spelling, hyphenation,
22 punctuation and format.

23

24

25 DIANE QUADE

For The Record, Inc.
Waldorf, Maryland
(301) 870-8025