### FEDERAL TRADE COMMISSION

#### I N D E X (PUBLIC RECORD)

WITNESS: DIRECT	CROSS	REDIRECT	<u>RECROSS</u>
<b>Crisp</b> 3354	3461	3583	
<u>EXHIBITS</u>	FOR ID	<u>IN</u> EVID	<u>WITHDRAWN</u>
CX			
Number 82		3352	
Number 750		3353	
Number 905		3460	
Number 929		3460	
Number 935		3460	
Number 1109		3461	
Number 1129		3461	
Number 1599		3353	
Number 2000		3353	
Number 2006		3375	
Number 3031		3555	
Number 3102		3353	
<u>RX</u>			
Number 293		3493	

3348

<u>EXHIBITS</u> <u>FOR ID</u> <u>IN EVID WITHDRAWN</u>

JХ

None

 $\overline{\mathsf{DX}}$ 

Number 28 3458

### UNITED STATES OF AMERICA FEDERAL TRADE COMMISSION

> Thursday, May 29, 2003 9:30 a.m.

# TRIAL VOLUME 18 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

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#### PROCEEDINGS

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JUDGE McGUIRE: This hearing is in order.

Any items that we need to take up this morning?

MR. OLIVER: No, Your Honor.

JUDGE McGUIRE: If not, you may proceed at this time, Mr. Oliver.

Mr. Crisp, how are you this morning?

THE WITNESS: I'm very tired, Your Honor.

JUDGE McGUIRE: Yes.

All right, Mr. Oliver, go ahead.

MR. OLIVER: Thank you, Your Honor. Before we start, I'd like to move to admit five documents from complaint counsel's exhibit list that we've used in the past day. First is CX-82. These are the JC-16 meeting minutes from the March 14, 1995 meeting.

MR. PERRY: No objection.

JUDGE McGUIRE: Entered.

### (CX Exhibit Number 82 was admitted into evidence.)

MR. OLIVER: Second is CX-750. This is an August 11, 1994 letter from Mr. Roberts to Mr. Vincent, appears to be identical to the May 5, 1994 letter.

MR. PERRY: No objection to it coming in, Your Honor. On that one, we think that's just the computer

spitting it out again with a different date. We're not at all sure that was actually sent twice with the same language.

JUDGE McGUIRE: All right, so noted and entered on that basis.

## (CX Exhibit Number 750 was admitted into evidence.)

MR. OLIVER: Third, CX-1599. This is the license agreement between Hyundai and Rambus.

MR. PERRY: No objection.

JUDGE McGUIRE: Entered.

## (CX Exhibit Number 1599 was admitted into evidence.)

MR. OLIVER: Fourth is CX-2000, one of the sets of Mr. Vincent's green sheets or billing records.

MR. PERRY: No objection.

JUDGE McGUIRE: Entered.

## (CX Exhibit Number 2000 was admitted into evidence.)

MR. OLIVER: And fifth is CX-3102, this is the file wrapper for the Rambus '575 patent.

MR. PERRY: No objection.

JUDGE McGUIRE: Entered.

### (CX Exhibit Number 3102 was admitted into evidence.)

Whereupon--

#### RICHARD CRISP

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

#### DIRECT EXAMINATION (cont.)

BY MR. OLIVER:

- Q. Good morning, Mr. Crisp.
- A. Good morning, Mr. Oliver.
- Q. Mr. Crisp, as you may recall, we left off yesterday having discussed the December 1995 JEDEC meeting. Do you recall that?
  - A. Yes, sir, I do.
- Q. And that was the meeting at which various responses to the survey ballot were tabulated. Do you recall that?
  - A. I generally recall we discussed that.
- Q. Now, about a week after that December 1995 meeting, things with respect to Rambus' involvement in JEDEC really started to go south, didn't it?

MR. PERRY: Your Honor, objection, that's vague.

MR. OLIVER: Your Honor, I'll --

JUDGE McGUIRE: Sustained.

MR. OLIVER: Thank you, Your Honor.

JUDGE McGUIRE: Restate.

BY MR. OLIVER:

- Q. Well, shortly after that December 1995 meeting, Mr. Crisp, Rambus received a letter from the IEEE, right?
  - A. I don't remember.

MR. OLIVER: May I approach, Your Honor?

JUDGE McGUIRE: Yes.

BY MR. OLIVER:

Q. Mr. Crisp, I've handed you a document marked as CX-487. That is on the letterhead of IEEE dated December 13, 1995, addressed to Mr. Geoff Tate from Cheryl Rhoden.

Now, in this letter, the IEEE was following up on the possibility that Rambus might have patent rights relating to the proposed synchronous standard. Is that right?

- A. Yes, sir, I believe that's what this says.
- Q. And then a few days after that, Mr. Lester

  Vincent forwarded to Rambus the FTC's proposed order in

  the Dell case, right?
  - A. I don't know about that.

MR. OLIVER: May I approach, Your Honor?

JUDGE McGUIRE: Yes.

BY MR. OLIVER:

Q. Mr. Crisp, I've handed you a document marked as CX-1990. It is on Blakely Sokoloff letterhead dated December 19, 1995, addressed to Mr. Anthony Diepenbrock from Mr. Lester Vincent, and the first sentence reads, "Enclosed for your review are materials relating to the proposed consent order regarding Dell Computer."

Does CX-1990 refresh your recollection that in December of 1995, Mr. Lester Vincent forwarded to Rambus a copy of the FTC's proposed consent in the Dell matter?

- A. No.
- Q. But you certainly heard discussions of the FTC Dell consent during the course of December and January, didn't you?
- A. I remember hearing some discussion about it. I don't remember the time frame.
- Q. And these two events caused considerable concern within Rambus management, didn't they?
  - A. I don't know.
- Q. Well, a meeting was held in early January 1996 to discuss whether Rambus should continue to participate in JEDEC or withdraw. Isn't that right?
  - A. I don't remember that date.
- Q. You do remember a meeting on that topic, though?

- A. I can remember a meeting on that topic, yes.
- Q. And you attended that meeting, right?
- A. Well, I'm not sure which meeting you're referring to. It's possible there was another meeting. I did attend one meeting where that was the topic.
- Q. Okay. You attended a meeting with respect to whether Rambus should remain a member of JEDEC or withdraw. Isn't that right?
  - A. That's correct, I did.
  - Q. And Mr. Lester Vincent attended that meeting?
  - A. That's right.
- Q. And Mr. Ed Taylor, a senior partner at his firm, also attended that meeting?
  - A. That's correct.
  - Q. And CEO Geoff Tate was there?
  - A. I think that's right.
  - Q. And vice president David Mooring was there?
  - A. Yes, he was.
- Q. And in-house counsel Tony Diepenbrock was also there, right?
  - A. I don't remember.
- Q. And the decision was made to withdraw from JEDEC, right?
  - A. I believe that was the result from the meeting.

    MR. OLIVER: May I approach, Your Honor?

JUDGE McGUIRE: You may.

BY MR. OLIVER:

Q. Mr. Crisp, I've handed you a document marked CX-858. This is an email from you to CEO Geoff Tate and a number of others dated January 22nd, 1996.

Do you see that?

- A. Yes, sir, I do.
- Q. And if I could direct your attention to page 2 of this email and specifically to the sixth paragraph toward the bottom of the page, do you see the sentence there, "So in the future, the current plan is to go to no more JEDEC meetings due to fear that we have exposure in some possible future litigation."

Do you see that?

- A. Yes, sir, I do.
- Q. Now, you did not agree with that decision, did you?
  - A. I don't think that's entirely accurate.
- Q. Well, you thought that Rambus gained a lot of intelligence by attending the JEDEC meetings, didn't you?
- A. I think that we gathered some intelligence. I think we had some useful contacts we had established there. And I also agreed with Mr. Taylor that there could be some potential downside to attending the

meetings. I mean, he had told us we had done nothing wrong but that if we did wind up in some litigation at some point in time, it could be misunderstood by a jury what our role was there.

MR. OLIVER: Your Honor, move to strike everything after the first sentence of his answer as nonresponsive.

JUDGE McGUIRE: Sustained.

BY MR. OLIVER:

- Q. Now, Mr. Crisp, isn't it true that you thought the concerns about equitable estoppel and potential exposure were less than other people were expressing at that meeting? Isn't that right?
- A. I had that belief at least at some point in time.
- Q. But others expressed concern about the JEDEC patent policy, didn't they?
- A. I think some people did express some concern about that, yes.
- Q. And they were concerned about potential exposure in the event of future litigation?
- A. I don't think I necessarily remember hearing it said that way, but I did hear the topic of potential future litigation coming up.
  - Q. Let me direct your attention to page 2 of

CX-858, the fourth paragraph, the second sentence there. It reads, "I understand the concerns about the patent policy and some potential exposure we could have in the event of a future litigation."

Do you see that?

- A. Yes, I do.
- Q. And the concern expressed related to equitable estoppel and laches, right?
  - A. I believe I heard those concerns expressed.
- Q. And in fact, Lester Vincent said no further participation in any standards body, do not even get close. Do you recall that?
  - A. Not -- no, I don't recall that.

    MR. OLIVER: May I approach, Your Honor?

    JUDGE McGUIRE: Yes.

BY MR. OLIVER:

Q. Mr. Crisp, I've handed you a document marked CX-1928. It's a page of handwritten notes from Mr. Lester Vincent, and if I could direct your attention beginning about seven lines down, lines 7 through 10, it reads, "No further participation in any standards body (if there has been any) -- don't even get close," with three underlines under the word "close" and a couple of exclamation points.

Does that refresh your recollection that Mr.

Vincent said no further participation in any standards body, don't even get close?

- A. No.
- Q. So, the decision was made to stop attending JEDEC meetings because of fear of exposure in some possible future litigation. Is that right?
- A. My recollection was that was one of the considerations.
- Q. Well, that's the only consideration that you listed in CX-858. Isn't that right?

MR. PERRY: Your Honor, he hasn't allowed him to read the entire document. He's certainly only been showing the snippets he likes. That's not a fair question.

JUDGE McGUIRE: All right, then let's take a minute, and sir, you may read the entire document.

THE WITNESS: Thank you, Your Honor. (Document review.)

BY MR. OLIVER:

- Q. Have you had a chance to look at CX-858?
- A. Yes, sir.
- Q. And directing your attention to the sixth paragraph on page 2, the concern you identified there is the fear that we may have exposure in some possible future litigation. Isn't that right?

- A. Yes, that's what I wrote there.
- Q. Now, even though Rambus had decided not to attend any more JEDEC meetings, Rambus had not officially withdrawn from JEDEC at this point. Isn't that right?
- A. Well, we hadn't sent any letter to the effect that we were going to discontinue our membership.
- Q. Well, Rambus was still being carried as a member on the JEDEC records. Isn't that right?
- A. I don't really have any knowledge of that. I think it's true, but I don't really know that.
- Q. Well, you do know that you received a copy of the JEDEC minutes from the interim JEDEC meeting held in January 1996, right?
  - A. Yes, sir, that's correct.
- Q. And in fact, when you received a copy of those minutes, you distributed them to CEO Geoff Tate, vice president Mooring, vice president Roberts and a number of other individuals. Isn't that right?
- A. I know I distributed them. I don't know who I gave them to. I don't remember.

MR. OLIVER: May I approach, Your Honor?

JUDGE McGUIRE: Yes.

BY MR. OLIVER:

Q. Mr. Crisp, I've handed you a document marked

CX-868. This is an email from you dated February 20, 1996. Now, does this refresh your recollection that you, in fact, sent a copy of the JEDEC meeting minutes to vice president Mooring, CEO Tate, vice president Roberts and certain others?

- A. Yes, sir, it does.
- Q. And you included in-house lawyer Tony Diepenbrock in that list as well, right?
  - A. Yes, sir, that's right.
- Q. And in your cover note, you point out in particular a Micron presentation with separate transmit and receive clocks.

Do you see that?

- A. Yes, sir, I do.
- Q. Okay, let's take a look at the presentation that caught your attention.

May I approach, Your Honor?

JUDGE McGUIRE: Yes.

BY MR. OLIVER:

Q. Mr. Crisp, I've handed you a document marked JX-29. It is a copy of the minutes of interim meeting JC-42.3 committee dated January 31, 1996.

If I could ask you to turn, please, to page 17 in JX-29, now, this is a page captioned at the top, Future SDRAM - Clock Issues, and then handwritten on

the side, "Attachment F." I believe the lower right-hand side bears the caption of Micron.

Now, this presentation is directed at a standard for future SDRAMs, right?

MR. PERRY: That's vague as to "standard for future DRAMs." That's unintelligible.

JUDGE McGUIRE: Mr. Oliver, do you want to respond?

 $$\operatorname{MR.}$  OLIVER: I'll rephrase the question, Your Honor.

JUDGE McGUIRE: All right, restate it.

BY MR. OLIVER:

Q. This presentation was not intended to revise any earlier JEDEC standard. Isn't that right?

MR. PERRY: Also speculation. He is not from Micron. He didn't make the presentation.

MR. OLIVER: Your Honor, he did receive the minutes, he read the minutes, and he circulated the minutes within Rambus with comments.

JUDGE McGUIRE: Well, you -- the question was that the presentation was not intended to revise any earlier JEDEC standard. To the extent that he can comment on that based on his observation at -- now, was he at the meeting?

MR. OLIVER: Your Honor, he was not at the

meeting. If you like, I could rephrase the question.

JUDGE McGUIRE: All right, restate it.

BY MR. OLIVER:

- Q. Mr. Crisp, when you saw this set of minutes, you understood that the Micron presentation was not intended to revise an earlier JEDEC standard. Isn't that right?
  - A. Yes, sir, I think that's right.
- Q. In other words, your understanding was that this was a presentation related to a future SDRAM standard. Isn't that right?
  - A. May I have a moment to look at the --
  - Q. Oh, certainly, sure.
- A. -- minutes in addition to the presentation, since I wasn't at the meeting? (Document review.) The minutes indicate it as being a first presentation on clock issues. That's all the information that I have as to anything regarding their intent behind the presentation.
- Q. But you do see the caption at the top of the first page, "Future SDRAM"?
  - A. Yes, sir, I do.

MR. PERRY: Your Honor, I'll object that he hasn't allowed -- he hasn't been allowed to see the rest of it. If he's going to be asked to make a

conclusion based on that one page, there's other stuff that relates to the intent of Micron, and I object that we're trying to get testimony about the intent of Micron. Let's ask Micron.

JUDGE McGUIRE: Well, in his last question, he's just asking about the headings, so I'm going to entertain that question. If he asks about other portions, then I'll uphold that objection to the extent he hasn't had a chance to go through it.

So, you may proceed, Mr. Oliver.

MR. OLIVER: Certainly. Thank you, Your Honor. BY MR. OLIVER:

- Q. Mr. Crisp, why don't you go ahead and take a look at pages 17 through 22 of JX-29.
  - A. (Document review.)
- Q. Mr. Crisp, you don't see anything in there that would indicate that this presentation was not directed at future SDRAMs, do you?
- A. The only thing I can see that makes me in any way confused about whether it was directed solely at future SDRAMs is just the comments that they made on page 4 of that presentation, which is page 20 of the exhibit, where they just speak of DRAMs. So, I'm not sure that it's limited solely to future SDRAMs.
  - Q. But it would certainly appear to encompass

future SDRAMs. Is that right?

- A. Well, certainly based on their title on each of the pages of it, it seems that's what their -- their focus was.
- Q. Okay. If I could direct your attention back to page 17, which was the first page of the Micron presentation, the presentation starts off by noting that PLL/DLL circuits are being considered to reduce the apparent access time.

Do you see that?

- A. Yes, sir, I do.
- Q. So, in other words, you understood when you saw this that PLL/DLL circuits were being considered for future SDRAMs within JEDEC. Isn't that right?
- A. All I know is when I saw this that Micron stated they were being considered.
- Q. Now, when you circulated this presentation to CEO Tate, vice president Mooring, vice president Roberts, Tony Diepenbrock and others, you suggested that Rambus have a long, hard look at its IP, right?
  - A. Yes, sir, that's right.
- Q. And you suggested that if there's a problem, Rambus should tell JEDEC, didn't you?
  - A. Yes, sir, that's correct.
  - Q. But Rambus never did tell JEDEC that this

presentation could raise a problem with respect to Rambus' IP, did it?

MR. PERRY: Assumes facts not in evidence, that it did raise problems, Your Honor.

JUDGE McGUIRE: Mr. Oliver?

MR. OLIVER: Your Honor, I'm not assuming any facts. I'm simply asking for his -- his answer that Rambus, in fact, did not say these things to JEDEC.

JUDGE McGUIRE: Overruled. I'll hear the question.

THE WITNESS: I have no information that we provided any information to Micron or to JEDEC that there might possibly be any sort of problem.

BY MR. OLIVER:

- Q. Now, during this time, Rambus was also following the progress of its '646 application very closely, wasn't it?
  - A. I'm not sure I know what that is, sir.
- Q. You were involved during the course of 1996 in negotiations with a company by the name of Mosys, right?
- A. I sat in a meeting with Mosys, representatives of Mosys as well as Mr. Tate and Mr. Mooring.
- Q. And one of the issues being discussed with Mosys was possible infringement of a Rambus patent.

Isn't that right?

- A. Yes, sir, that's what I remember from the meeting I sat in.
- Q. And do you recall that one of the features of the Mosys DRAM that Rambus believed infringed its patents was dual edge clocking technology?

MR. PERRY: It's overbroad, Your Honor, as to dual edge clocking technology.

MR. OLIVER: Your Honor, I'm simply asking for his understanding as to what the issue was.

JUDGE McGUIRE: Overruled. I'll hear the answer.

THE WITNESS: What I remember was there was a particular implementation that we had a patent on that had some relation to dual edge clocking. It was a way of actually implementing it on the chip, and my recollection is that was the subject of the patent that we discussed with them.

BY MR. OLIVER:

- Q. And you recall that during the early months of 1996, Rambus was engaged in preparations for negotiations with Mosys?
- A. I -- I learned of that sometime in the mid part of 1996, that there was some sort of preparatory work being done within Rambus for a meeting with Mosys.

MR. OLIVER: May I approach, Your Honor?

JUDGE McGUIRE: Yes.

BY MR. OLIVER:

Q. Mr. Crisp, I've handed you a document marked CX-1316. It has a caption at the top with the Rambus logo. Underneath that, it reads, "Mosys Competitive Summary," and a date in the lower left-hand corner of January 19, 1996.

Does CX-1316 refresh your recollection that in the early part of 1996, Rambus was preparing for either potential enforcement or potential negotiations -- excuse me, potential enforcement against or potential negotiations with Mosys?

A. No, sir, it doesn't.

MR. OLIVER: May I approach, Your Honor?

JUDGE McGUIRE: You may.

BY MR. OLIVER:

Q. Mr. Crisp, I've handed you a document marked CX-1319. This is a document also bearing a Rambus logo, also entitled Mosys Competitive Summary, with a date in the lower left-hand corner of March 29, 1996.

Does this document refresh your recollection that as of March 1996, Rambus was preparing for either enforcement against or negotiations with Mosys?

A. No, sir, it doesn't.

- Q. Now, Mr. Crisp, during the -- during early 1996, Rambus was also preparing a letter for its formal withdrawal from JEDEC, right?
  - A. Yes, sir, that's correct.

MR. OLIVER: May I approach, Your Honor?

JUDGE McGUIRE: Yes.

BY MR. OLIVER:

- Q. Mr. Crisp, I've handed you five documents marked CX-873, CX-874, CX-876, CX-880 and CX-879. Do you recognize these as five drafts of a letter from you to the Electronic Industries Association?
  - A. Yes, sir, I do.
- Q. Now, your signature appears on CX-873, 874, 876 and 880, but as I understand it, that was a computer-generated signature. Is that right?
- A. Pretty close to that. It was part of the template file that I used for documents that were created on my PC, so it just appeared basically on any document that I created.

JUDGE McGUIRE: Wait, I don't understand that answer. He asked you about the signature, and I'm not sure I understand what your answer is, so --

THE WITNESS: I'm sorry, Your Honor. You want me to clarify?

JUDGE McGUIRE: Yes, go ahead and clarify if

you don't mind, Mr. Crisp.

THE WITNESS: The way we had our document creation program set up is it had an electronic signature in file on our computer, and so documents that I created using that program automatically had a signature affixed to them.

JUDGE McGUIRE: I see, okay.

THE WITNESS: So, it wasn't truly computer generated. I originally created the signature, but it automatically appeared.

JUDGE McGUIRE: I understand, okay.

All right, Mr. Oliver.

MR. OLIVER: Thank you, Your Honor.

BY MR. OLIVER:

- Q. In any event, the fact that there is a signature on CX-873, 874, 876 and 880 does not indicate that those documents were ever sent. Is that right?
  - A. Yes, sir, that's correct.
- Q. Now, Mr. Crisp, you prepared CX-873, CX-874, CX-876 and CX-880. Is that right?
- A. No, sir, I don't believe that I did create those.
  - O. Who did create those?
- A. I had a role in creating at least one of these documents. Mr. Diepenbrock had a role in editing these

documents, and Mr. Vincent did as well from my recollection.

- Q. So, it would be fair to say, then, that CX-873, CX-874, CX-876 and CX-880 reflect joint work of you, of Mr. Diepenbrock and of Mr. Vincent?
- A. I think that's true. It's possible there may have been some other inputs as well from other people.
  - Q. Did vice president Mooring have some input?
  - A. I'm not certain, but I -- I think that he did.
- Q. Wasn't it vice president Mooring's suggestion that Rambus include a list of its issued patents in this letter?
- A. I don't remember who suggested that. It may have been Mr. Mooring. I just -- I really don't remember.
- Q. In any event, CX-873, CX-874, CX-876 and CX-880 all do contain a list of issued Rambus patents. Is that right?
- A. Yes, sir, that's what I understand those -- those numbers to be.
- Q. Now, on March 26th, 1996, you spoke with Mr. Lester Vincent with respect to JEDEC. Isn't that right?
  - A. I don't remember.

MR. OLIVER: May I approach, Your Honor?

JUDGE McGUIRE: Go ahead.

BY MR. OLIVER:

Q. Mr. Crisp, I've handed you a document marked CX-2006. These are handwritten notes from Mr. Lester Vincent, the date in the upper left-hand corner 3/26/96, the caption at the top, Telecon, for teleconference, with Richard Crisp.

If I could direct your attention towards the top of the page underneath "Thursday," it reads, "Voted one time on 4 ballots."

Do you see that?

- A. Yes, sir, I do.
- Q. And underneath that, there's a reference to early 1992, a reference to SDRAM.

Do you see that?

- A. Yes, sir, I do.
- Q. And then some further details follow. If you look further down the page, it's "Richard Cri," I assume for Richard Crisp; underneath that, "Billy Garrett, alternate member."

Do you see that?

- A. Yes, sir, I do.
- Q. Now, does this refresh your recollection that on March 26th, 1996, you had a conversation with Mr. Vincent concerning the Rambus role in JEDEC?

A. No.

MR. OLIVER: May I approach, Your Honor?

JUDGE McGUIRE: Yes.

MR. OLIVER: Your Honor, before I proceed, at this time complaint counsel moves to admit CX-2006.

MR. PERRY: No objection.

JUDGE McGUIRE: Entered.

### (CX Exhibit Number 2006 was admitted into evidence.)

BY MR. PERRY:

Q. Mr. Crisp, I've handed you a document marked CX-2005. These are handwritten notes of Lester Vincent dated March 27, 1996. Again, at the top, Telecon, for teleconference, with Richard Crisp.

If I could direct your attention to the beginning of the handwritten text, "JC-16, JC-42.X, Richard Crisp went to." Underneath that, "The other ones, John Dillon."

Do you see that?

- A. Yes, sir, I do.
- Q. And if you look about 10 or 12 lines down, there's a notation, "Take off email list circulating."

  Do you see that?
  - A. Yes, sir, I do.
  - Q. And then four lines from the bottom, it reads,

"JEDEC, if member, you are a voting member."

Do you see that?

- A. Yes, I do.
- Q. Now, does this refresh your recollection that on March 27th, 1996, you also had a telephone conference -- conversation with Lester Vincent concerning the Rambus role in JEDEC?
  - A. No, sir, it doesn't.
- Q. Now, on March 27th, you also sent Lester Vincent copies of the draft letters that you had prepared, right?

MR. PERRY: Objection, Your Honor, he didn't say he had prepared them. There's already been testimony.

MR. OLIVER: I'll withdraw the question, Your Honor.

JUDGE McGUIRE: Restate.

BY MR. OLIVER:

- Q. On March 27th, 1996, you sent Lester Vincent copies of the draft letters that reflected the work of you, of Mr. Diepenbrock, Mr. Vincent and possibly Mr. Mooring. Is that right?
  - A. I don't remember the date.

MR. OLIVER: May I approach, Your Honor?

JUDGE McGUIRE: Yes.

#### BY MR. OLIVER:

Q. Mr. Crisp, I've handed you a document marked CX-882. It's a facsimile sheet with the Rambus logo in the upper left-hand corner, the date March 27, 1996. The left-hand box, to Lester Vincent, and the right-hand box, from Richard Crisp, and in the text below, the first sentence reads, "As we discussed Tuesday the 26th of March, I am sending you several draft letters we have considered sending to JEDEC letting them know of our intention not to renew our membership."

Do you see that?

- A. I see something that's pretty close to that.
- Q. Does that refresh your recollection that on March 27th, 1996, you did send a set of several draft letters to Lester Vincent?
  - A. Yes, sir, it does.
- Q. Now, after this date, things were -- things were put on hold for a while, weren't they?
  - A. I'm not sure what -- what you mean by that.
- Q. Well, no letter was actually sent to JEDEC for three months after this. Isn't that right?
  - A. Yes, that's what I now understand.
- Q. Now, in the meantime, on April 30, 1996, Rambus' '327 patent issued. Isn't that right?

A. I didn't --

MR. PERRY: No foundation, Your Honor.

MR. OLIVER: I don't know if there is or not. I'm asking him if he knows.

JUDGE McGUIRE: Overruled.

THE WITNESS: I know that the '327 patent issued at some time in 1996, but I don't know what date it issued on, sir.

MR. OLIVER: May I approach, Your Honor?

JUDGE McGUIRE: Yes.

BY MR. OLIVER:

Q. Mr. Crisp, I've handed you a document marked CX-1494. It bears a caption in the upper left-hand corner, United States Patent, Farmwald, et al., the right-hand side patent number, 5,513,327. Underneath that, date of patent, April 30, 1996.

Does CX-1494 refresh your recollection that Rambus' '327 patent issued on April 30th, 1996?

- A. No, sir, it doesn't.
- Q. Well, Mr. Crisp, Rambus' '327 patent is the patent that Rambus was considering enforcing against Mosys. Isn't that right?
  - A. Yes --

MR. PERRY: Vague as to time, Your Honor.

JUDGE McGUIRE: Sustained. Restate.

MR. PERRY: Your Honor, may I strike the answer? I don't think there was an answer, but there's one that appears in the transcript. The objection was sustained.

JUDGE McGUIRE: Sustained.

BY MR. OLIVER:

- Q. Mr. Crisp, as of May and June 1996, Rambus'
  '327 patent was the patent that Rambus was considering
  enforcing against Mosys. Isn't that right?
- A. I'm not sure of the time frame, but I know we were planning to enforce some sort of a patent -- or the '327 patent against Mosys, but I just don't remember the time frame when I first learned that.

MR. OLIVER: May I approach, Your Honor?

JUDGE McGUIRE: Yes.

BY MR. OLIVER:

Q. Mr. Crisp, I've handed you a document marked CX-889. The first page appears to be a fax page to Lester Vincent from Anthony Diepenbrock. The second page is a letter to Lester Vincent from Anthony Diepenbrock dated June 17, 1996.

If I could direct your attention to the first five lines, it reads, "Pursuant to our discussion of June 13, 1996 regarding our issued patent, U.S. 5,513,327," and I'll skip the description, picking up

with the next line, "we would like your firm to give a legal opinion on the enforcement readiness of this patent. We would also like your firm's opinion regarding whether this patent would be infringed, literally or otherwise, if a device were constructed according to the information sent to you on June 14th."

Now, do you see that?

- A. Yes, sir, I do.
- Q. Does this refresh your recollection that as of June 1996, Rambus was considering enforcing the '327 patent with respect to Mosys?
  - A. No, sir, it doesn't.
- Q. Now, on June 17, 1996, Rambus also sent its final withdrawal letter to JEDEC. Isn't that right?
  - A. I don't remember the date, sir.

MR. OLIVER: May I approach, Your Honor?

JUDGE McGUIRE: Yes.

BY MR. OLIVER:

Q. Mr. Crisp, I've handed you a document marked CX-887. It consists of two pages. The first page is a letter addressed to Mr. McGhee dated June 17, 1996 from you, and attached to that is a second page with the caption Rambus U.S. and Foreign Patents, also with a date in the upper right-hand corner of June 17, 1996.

Does CX-887 refresh your recollection that June

- 17, 1996 was the date that you sent the final version of -- or I should say the operative version of the Rambus withdrawal letter to JEDEC?
  - A. No, sir, it doesn't.
- Q. Mr. Crisp, if I could direct your attention to page 2 of CX-887, this is the list of patents. Now, you are aware that Rambus' '327 patent has been omitted from that list, right?
  - A. Yes, I'm aware that it's not on the list.
- Q. Now, Mr. Crisp, you had suggested that Rambus inform JEDEC that it was providing a list of all issued U.S. patents in the spirit of full disclosure, right?
- A. I don't know that that was me who made that suggestion.
- Q. In any event, somebody made that suggestion in the earlier draft letters. Isn't that right?
  - A. Yes, sir, that's correct.
- Q. If we take a look back at the draft letters we looked at earlier, CX-873, 874, 876 and 880, do you still have those in front of you?
- A. I think I have them here. Just give me a moment to find them. Yes, I do have them in front of me, sir.
  - Q. Thank you.

If I could ask you to look first at CX-873,

please, and if I could direct your attention to the -towards the bottom of the page, the paragraph appearing
just before the list of patent numbers, it reads, "In
the spirit of full disclosure, Rambus, Inc. would like
to bring to the attention of JEDEC all issued U.S.
patents held by Rambus, Inc. "

Do you see that?

- A. Yes, sir, I do.
- Q. And then if I could ask you to turn next to CX-874, and again looking at the line appearing just before the list of patents, do you see the identical language appearing there?
- A. I'm sorry, could you ask the question again, please?
- Q. Yes. In CX-874, if I could direct your attention to the line appearing immediately before the list of Rambus patents.
  - A. Yes, I see --
- Q. And do you see the same language appearing there, "In the spirit of full disclosure, Rambus, Inc. would like to bring to the attention of JEDEC all issued U.S. patents held by Rambus, Inc."?
  - A. Yes, I see that.
- Q. And if you take a look at CX-876 and CX-880, you'll see the identical language appears in those two

drafts as well?

- A. Yes, I do see that.
- Q. If you could look now at CX-887, the letter that was actually sent to JEDEC, that language does not appear there, does it?
  - A. Yes, sir, that's correct.
- Q. Now, in the earlier drafts, possibly you, possibly someone else, but someone has suggested that Rambus also confirm to JEDEC that the list of patents was complete, right?
  - A. That's the conclusion I would reach.
- Q. Let me ask you to turn again back to CX-873, please. If you look after the sentence we just looked at a moment ago, the last sentence before the list of patents reads, "The list is complete as of this writing and follows below."

- A. Yes, sir, I do.
- Q. And again, if you could turn to CX-874, please, and you'll see the identical language appearing in CX-874?
  - A. Yes, sir, that's right.
- Q. And if you look also at CX-876 and CX-880, you'll see that the same language appears in those two drafts as well?

- A. Yes, sir, that's correct.
- Q. But again, if you look at CX-887, the letter that was actually sent to JEDEC, there's no statement that the list of patents is complete as of the time of the writing, is there?
  - A. That's correct.
- Q. And in fact, the list of patents attached to the letter sent to JEDEC was not complete, was it?
  - A. At what point in time?
- Q. At the time that the letter was sent to JEDEC on June 17, 1996.
- A. What I know is the '327 patent is not on there. I'm not sure about any -- anything else other than that.
- Q. But in other words, because of that, the list attached to the letter sent to JEDEC was not complete. Isn't that right?
  - A. Yes, sir, that's correct.
- Q. Now, someone had also suggested that Rambus tell JEDEC that Rambus would not agree to the terms of the JEDEC patent licensing policy. Isn't that right?
  - A. Yes, sir, that's correct.
- Q. If I can direct your attention specifically to CX-873, and the third paragraph there, the second sentence beginning, "Accordingly."

- A. Yes.
- Q. That reads, "Accordingly, Rambus, Inc. cannot agree to the terms of the JEDEC patent policy as it limits our ability to solely control the dissemination and use of our intellectual property."

Do you see that?

- A. Yes, sir, I do.
- Q. And then if I could ask you to take a look at CX-874, please, and again, if I could direct your attention to the third paragraph there, please, the second sentence in this paragraph reads, "Rambus, Inc. cannot agree to the terms of the JEDEC patent policy as it limits our ability to conduct business according to our business model."

- A. Yes, sir, I do.
- Q. But neither of those statements appears in the final letter that was sent to JEDEC, does it?
  - A. That's correct, yes.
- Q. Now, the final letter that was sent to JEDEC does not identify any specific pending patent applications, does it?
  - A. That's correct.
- Q. It just makes a general reference to Rambus having applied for a number of additional patents?

- A. Yes, sir, that's correct.
- Q. Now, the earlier suggestion was that Rambus at least tell JEDEC that the pending patent applications related to high bandwidth memory and signaling technology, right?
  - A. I don't remember that.
- Q. If I could ask you to turn to CX-880, please. If I could direct your attention to the next to last sentence, please, it reads, "In addition, there are numerous pending applications relating to high bandwidth memory and signaling technology."

Do you see that?

- A. Yes, sir, I do.
- Q. But again, that language did not appear in the final letter sent to JEDEC, did it?
  - A. That's correct.
- Q. Instead, it was replaced with a sentence reading -- and I'll direct your attention here to CX-887, the last sentence of the letter, it was replaced with the sentence reading, "Rambus has also applied for a number of additional patents in order to protect Rambus technology."

That's what was put in the final letter to JEDEC, right?

A. Yes, sir, that's correct.

- Q. So, as Rambus was withdrawing from JEDEC,
  Rambus didn't tell JEDEC that it had any SDRAM-related
  patent applications, did it?
  - A. That's correct, sir.
- Q. In fact, the withdrawal letter basically just said it has applications relating to Rambus technology, right?

MR. PERRY: Misstates the document, Your Honor, which by this point ought to speak for itself.

JUDGE McGUIRE: Sustained.

BY MR. OLIVER:

- Q. Mr. Crisp, the letter actually sent to JEDEC reads that the patent applications protect Rambus technology. Isn't that right?
- A. No, sir, I don't see those words on this document.
- Q. Looking again at CX-887, the last sentence, "Rambus has also applied for a number of additional patents in order to protect Rambus technology."

Isn't that right?

- A. Yes, sir, it does say that.
- Q. Now, Mr. Crisp, don't you think it's misleading to send to JEDEC a withdrawal letter that refers to a list of Rambus patents, but you leave off the list the only issued Rambus patent that relates to ongoing JEDEC

work?

MR. PERRY: Objection, assumes facts not in evidence that it was intentional.

JUDGE McGUIRE: Mr. Oliver?

MR. OLIVER: Your Honor, I'm not assuming it was intentional. I'm just asking whether he understands that to be misleading.

MR. PERRY: If he's not going to claim that "misleading" has any intent element, Your Honor, then that's fine. I had not understood from his many briefs that that's what his view was of the word "misleading."

JUDGE McGUIRE: Then sustained.

BY MR. OLIVER:

Q. Mr. Crisp, I'll move on.

After Rambus withdrew from JEDEC, it continued to monitor the activities of JEDEC, right?

- A. Maybe you could be a little more specific by what you mean when you say "monitored."
- Q. Well, you still had an interest in the activities of JEDEC. Isn't that right?
- A. I certainly was curious what was going on within JEDEC, yes.
- Q. And you also had an interest in what was going on with SyncLink. Isn't that right?
  - A. Yes, sir, I had an interest in any areas that

may represent potential competition.

MR. OLIVER: Could I have just a moment, Your Honor?

JUDGE McGUIRE: Yes.

## (Pause in the proceedings.)

BY MR. OLIVER:

- Q. Mr. Crisp, in about August of 1996, CEO Geoff Tate passed on some thoughts regarding 200-megahertz SDRAM. Is that right?
  - A. I don't remember that.

MR. OLIVER: May I approach, Your Honor?

JUDGE McGUIRE: Yes.

BY MR. OLIVER:

Q. Mr. Crisp, I've handed you a document marked CX-897. This is an email from CEO Geoff Tate to the executive group and a number of others at Rambus. I'll note that you are not listed on this list, but I will follow up to see if you did, in fact, become aware of this document at this time.

Let me start, though, by directing your attention under the caption 200-Megahertz SDRAM, and there's a statement, "Do we know that the proposal is clocking on both edges of a 100 megahertz clock?"

Do you see that?

JUDGE McGUIRE: Mr. Perry?

MR. PERRY: Your Honor, could we establish some foundation that he's seen this before instead of reading the whole thing and wasting much more time?

JUDGE McGUIRE: Yes.

MR. OLIVER: Your Honor, I am trying to establish a foundation. I do need to read this --

JUDGE McGUIRE: Well, you don't need to read it. You need to ask him if he's ever seen this document, and then we'll go from there, and then maybe at that point I'll let you make some reference, but let's ask the most inherent question, which is have you seen this document.

MR. OLIVER: Your Honor, may I approach?

JUDGE McGUIRE: Yes.

BY MR. OLIVER:

Q. Mr. Crisp, I've handed you a document marked CX-89 -- excuse me, 898. This is from Rick Barth to CEO Tate, copying the executive group and a number of other individuals also dated August 15, 1996, and you'll see here the first sentence reads, "I think Richard Crisp might know something about both edges of the clock."

- A. Yes, sir, I do.
- Q. Now, with that in mind, if I could ask you to

look back at CX-897, and if I could direct you to the statement under 200-Megahertz SDRAM --

MR. PERRY: Your Honor, excuse me, but you directed Mr. Oliver to ask him if he had seen that document before, and all he's shown is another document he's not listed as receiving where his name's in it.

JUDGE McGUIRE: Yes, I did that, Mr. Perry, that's true.

Mr. Oliver?

MR. OLIVER: Your Honor, I want to -- the next question I want to ask about is whether he had any conversations with individuals about this issue, but I need to establish what the issue is in order to be able to ask whether he had conversations.

JUDGE McGUIRE: All right, I am going to give him that opportunity, Mr. Perry, and then you are going to ask him that question that I asked you to ask him, right?

MR. OLIVER: Yes, Your Honor.

JUDGE McGUIRE: Okay, very good.

BY MR. OLIVER:

Q. Let me start by asking the question, with respect to CX-897, do you recall seeing this document in or about August 15, 1996?

A. No.

Q. If I could direct your attention to the line 200-Megahertz SDRAM, "Do we know that the proposal is clocking on both edges of a 100 megahertz clock?"

Do you see that?

- A. Yes, sir, I do see that.
- Q. Now, do you recall discussing with CEO Tate or any other members of the executive group or Rick Barth in about August of 1996 whether 200-megahertz SDRAM was clocking on both edges of the 100-megahertz clock?
  - A. No.
- Q. Now, Mr. Crisp, a couple of weeks later, you prepared a series of slides on the so-called rambler, right?
  - A. I don't remember.

MR. OLIVER: May I approach, Your Honor?

JUDGE McGUIRE: Yes.

BY MR. OLIVER:

Q. Mr. Crisp, I've handed you a document marked CX-1320. It's a document that consists of about four slides per page and five pages. The lower left-hand corner, in the small print, reads, "R. Crisp, Rambler, 8/30/96."

Do you see this?

- A. Yes, sir, I do.
- Q. Now, CX-1320 is a document that you prepared on

or before August 30, 1996. Is that right?

- A. Yes, that's right.
- Q. Now, the Rambus -- excuse me, the rambler was a document that was circulated within Rambus. Is that right?
  - A. I'm sorry, could you ask that question again?
- Q. Yes. The rambler was a document that was circulated within Rambus?
- A. The rambler was actually the name of a meeting that we held from time to time in the company over lunch hour, and whoever made a presentation generally circulated their presentation to those that were in attendance at the meeting and anyone else that might not have been that was interested in it.
- Q. So, CX-1320 is a presentation you made at one of those meetings. Is that right?
  - A. Yes, sir, that's correct.
- Q. And your presentation was based on the theme of why SDRAMs won't run fast?
- A. Actually, what it says is why SDRAMs won't run fast in PCs.
- Q. Okay. Now, within your discussion of SDRAMs, you also asked what about double clocked data, right?
  - A. Yes, sir, that's correct.
  - Q. And if I could direct your attention to page 4

and specifically to the slide in the lower right-hand corner, it's the beginning of your discussion of what about double clocked data.

- A. Yes, sir, I do.
- Q. And the wave diagrams in the bottom part of that slide reflect data transition on both the rising and falling edges of the clock, right?
  - A. Yes, sir, that's correct.
- Q. And if I could ask you to turn to page 5, please, do you see the top two slides outline double clocked data, one for read case and one for write case?
  - A. Yes, sir, that's correct.
- Q. So, in other words, a little over two months after submitting your withdrawal letter to JEDEC, you were outlining for others within Rambus SDRAMs using double clocked data, right?
  - A. I would describe this document differently.
- Q. Well, in fact, CX-1320 is based in part on information you had obtained at JEDEC. Isn't that right?
- A. Well, certainly nothing that had anything to do with double clocked data. It was just simply some of the wave forms of the other nets that are shown on the circuit diagram I had on the front page.

MR. OLIVER: May I approach, Your Honor?

JUDGE McGUIRE: Yes.

BY MR. OLIVER:

Q. Mr. Crisp, I've handed you a document marked CX-905. This is an email from you to all Rambus staff dated September 4, 1996, and if I could direct your attention to the first line, "One more time so that all hear: The material I presented in my Rambler contained some JEDEC material which is not permitted to be shared with any company who is not a member of JEDEC."

So, this was actually a follow-up reminder you issued to various individuals at Rambus. Isn't that right?

- A. Yes, sir, that's correct.
- Q. Now, during this time period, you continued to follow events of SyncLink, right?
- A. I'm not sure how to answer that question. I -I certainly had a curiosity about what sort of things
  were happening in the area of development of the
  SyncLink specification.

MR. OLIVER: May I approach, Your Honor?

JUDGE McGUIRE: Yes.

BY MR. OLIVER:

Q. Mr. Crisp, if I could ask you to turn, please, to page 183 in CX-711, if I could direct your attention

about one-third of the way down page 183, you'll see that there's the beginning of a new email. It is sent from you to the executive group at Rambus, also business development group and to -- I think that's a Ms. Laura Fleming of Rambus. Is that right?

- A. Yes, sir, that's correct.
- Q. And the date of this document was August 30, 1996?
  - A. Yes, sir, that's right.
- Q. And if you look at the Subject line about halfway down the page, it's towards the bottom of the caption, "SyncLink/Toshiba/NEC/Intel's request for questions."

- A. Yes, I do.
- Q. And you understand that a portion of the email was describing events at SyncLink?
- A. I'd like to have a chance to look over the document before I answer that question.
  - Q. Okay.
  - A. (Document review.) I've looked it over.
- Q. Do you see a number of references to SyncLink throughout this email?
  - A. Yes, sir, I do.
  - Q. Now, if I could direct your attention to page

184, do you see the last four lines there, the discussion of Intel? Let me read the passage to you.

"I have this great concern that Intel has simply realized that they have us and the rest of the DRAM industry over a barrel, that they can play us off of them, and when the time is right from their perspective, they will actually make their decision of what to actually use. In the meantime, they," and carrying over now to the top of page 185, "will say internally that they are pushing forward two if not three different potential technologies (R2, SyncLink, and 200-plus megahertz SDRAM?), Are keeping the players 'honest' by playing one off the other."

- A. Yes, I do.
- Q. Now, in the passage that I've just read, with R2, you were referring to a version of the RDRAM, right?
  - A. Yes, sir, that's correct.
- Q. And by 200-megahertz SDRAM, you meant the next generation of SDRAM. Isn't that right?
- A. Well, I didn't know what the next generation was, but that represented something we'd heard about that was under consideration.
  - Q. Certainly it was more advanced that any SDRAMs

that were being sold as of 1996. Isn't that right?

- A. Yes, I believe that's correct.
- Q. Now, once again at this point, you were recommending to the executive group that Rambus review its intellectual property to figure out what it had that would cover SyncLink. Isn't that right?
- A. I don't remember. Yes, that's right, I see something in here about -- let me reread that again before I answer your question. (Document review.)

  Yes, would you please ask your question again?
- Q. Yes. You were recommending that Rambus take another look at its intellectual property with respect to SyncLink, right?
- A. I -- yes, sir, we needed to always monitor where our intellectual property position was relative to SyncLink.
- Q. Maybe we can just bring up the last paragraph of the email, the conclusion there that you have written, "Finally, I want to again bring up the issue of IP and the importance that we have our issued patents and any pending claims looked at long and hard to do as much as we can to anticipate the SL work."

- A. Yes, sir, I do.
- Q. And the reference to SL there is SyncLink,

right?

- A. Yes, sir, that's correct.
- Q. "If they are successful (I doubt it) but we can collect royalties from them, then it probably doesn't matter other than to our pride. As long as we collect big royalty checks every quarter, then we should be OK."

Do you see that?

- A. Yes, sir, I do.
- Q. And that was your conclusion that you passed on to the executive group, right?
- A. Well, it was a conclusion I had reached that I passed on to the executive group as well as the other people that were on the distribution list.
- Q. And that conclusion applied equally to the 200-megahertz SDRAM, didn't it?
- A. I don't think I spoke to that in this -- in this email, sir.
- Q. Your rationale would be the same for the 200-megahertz SDRAM, wouldn't it?

MR. PERRY: Your Honor, it should be clear he's asking him at the time, I mean because he's already answered that he wasn't --

JUDGE McGUIRE: Is that clear, Mr. Oliver?

MR. OLIVER: Yes, Your Honor, I did mean at

that time.

JUDGE McGUIRE: At that time.

MR. PERRY: Having changed his question, I object to it on the grounds that it's essentially been asked and answered.

JUDGE McGUIRE: Overruled.

THE WITNESS: Would you please ask the question again, sir?

BY MR. OLIVER:

- Q. Yes. The conclusion that you state in the last paragraph of your email with respect to SyncLink would have applied equally at that time to the 200-megahertz SDRAM. Isn't that right?
- A. I think we would have wanted to understand where our IP looked -- how it might have any anticipation or read on what might happen with higher speed SDRAM. I didn't speak to that in this, but I think we would have had that same feeling.
- Q. And if you had IP that would have applied, you would have wanted to collect royalty checks with respect to 200-megahertz SDRAM. Isn't that right?
  - A. Yes, sir, I think we would have.

MR. OLIVER: May I approach, Your Honor?

JUDGE McGUIRE: Yes.

BY MR. OLIVER:

Q. Mr. Crisp, I have handed you a document marked CX-911. It is an email to the executive group from a Mr. Toprani dated October 30, 1996, the subject is "An off site proposal."

Mr. Crisp, let me start by asking, did you attend an off-site meeting held by Rambus in the latter half of 1996?

- A. I don't remember. Was there a particular time frame?
  - Q. In the latter half of 1996.
  - A. I don't remember for sure.
- Q. Did Rambus have off-site meetings for all staff?
  - A. I'm sorry, the echo got me again.
- Q. In the 1996 time frame, did Rambus have off-site meetings for all staff?
- A. We did have some off-site meetings. I can't remember now whether all staff was invited or if it was just most of the staff or some smaller portion.
- Q. But you did attend some off-site meetings from time to time. Is that right?
  - A. Yes, sir, that's correct.
- Q. Let me direct your attention to the third numbered paragraph in CX-911. It reads, "Competitive Alternatives. 200 megahertz SDRAM, possible? Pros and

cons. SyncLink; is it real or is it Memorex?" Then it goes on to discuss embedded DRAM and SGRAM.

Do you see that?

- A. I didn't see the last thing you mentioned.
- Q. SGRAM?
- A. Yes, sir, I see SGRAM. I thought you said SDRAM. I just want to make sure the record's correct, sir.
  - Q. Thank you.

Do you recall attending an off-site meeting in the latter half of 1996 at which there was a discussion of competitive alternatives, including 200-megahertz SDRAM and SyncLink?

- A. I don't really remember right now.
- Q. If I could ask you to turn to the second page of CX-911, please, and if I could direct your attention to item number 8, IP Strategy.

It reads, "What protection do we have against SDRAM, SyncLink, Embedded DRAM. What more should we be doing."

- A. Yes, I do.
- Q. Do you recall attending an off-site meeting in the latter half of 1996 in which there was a discussion of IP strategy and what protection Rambus had against

SDRAM and SyncLink and what more it should be doing?

- A. I'm sorry, I still -- I don't remember that meeting or at least I don't remember having these topics in discussion at a meeting. I know there was an off-site I attended. I just don't remember exactly what all it was that we discussed.
  - Q. Now, early in 1997, Rambus held a -- excuse me.

    (Counsel conferring.)

MR. OLIVER: Your Honor, would this be an appropriate place for a break?

JUDGE McGUIRE: I'm sure it would be. Let's take ten minutes. Off the record.

## (A brief recess was taken.)

JUDGE McGUIRE: On the record.

Mr. Oliver, you may proceed.

MR. OLIVER: Thank you, Your Honor.

BY MR. OLIVER:

- Q. Now, Mr. Crisp, in early 1997, a certain individual at Rambus held a DDR threat assessment meeting. Isn't that right?
  - A. I don't remember that, sir.

MR. OLIVER: May I approach, Your Honor?

JUDGE McGUIRE: Yes.

BY MR. OLIVER:

Q. Mr. Crisp, I've handed you a document marked

CX-919. It is an email to the executive group at Rambus, a number of named individuals at Rambus, subject, "Conclusions and Action Items from DDR Threat Assessment Meeting, 2/10/97," and then follows with ccs, including CEO Geoff Tate, Anthony Diepenbrock, the executive group, the business development and marketing group, engineering managers group, and again, some more individuals.

- A. Yes, sir, I do.
- Q. Again, in February 1997, you were part of the business development and marketing group. Is that right?
  - A. Yes, sir, I was.
- Q. So, you would have received this email in February of 1997?
  - A. Yes, that's right.
- Q. And you recognize this email as CEO Geoff
  Tate's description of the conclusions and action items
  from the DDR threat assessment meeting from February
  10, 1997, right?
  - A. Yes, I know it came from Mr. Tate.
- Q. If I could direct your attention, please, towards the bottom of the page, specifically about seven lines up from the bottom, there's a statement

that reads, "Action."

Do you see that?

- A. Yes, I do.
- Q. And following Action, "1, keep pushing our patents through the patent office."

Do you see that?

- A. Yes, sir.
- Q. And you understood this to refer to various patent applications that were pending before the Patent and Trademark Office as of February 1997?
- A. Yes, there and maybe perhaps some foreign patent offices as well.
- Q. And then item number 2 reads, "Do \*NOT\* tell customers/partners that we feel DDR may infringe our leverage is better to wait."

- A. Yes, sir.
- Q. And you understood that to be Mr. Tate's instruction to staff not to tell individuals that DDR may infringe Rambus patents, right?
- A. Yes, that's right, or at least to the people to whom this was addressed.
- Q. And again, you understood this action item coming out of the DDR threat assessment meeting, right?
  - A. Yes, sir, that's right.

- Q. And you also understood that the conclusion from that meeting was that Rambus' leverage was better to wait before telling others that DDR might infringe Rambus patents. Isn't that right?
- A. I don't think he has that listed as conclusion.

  I think that was just action item, sir. There's a section in the email that he has conclusion.
- Q. If I could direct your attention to the second line of the caption, the subject is, "Conclusions and Action Items from DDR Threat Assessment Meeting."

- A. I'm trying to find that. Can you show me where that was again, please?
- Q. It's being blown up on the screen. It's in the second line, part of the --
  - A. Oh, yes, yes.
- Q. So, you see that it reads, "Subject:
  Conclusions and Action Items from DDR Threat Assessment
  Meeting"?
  - A. I see that, yes.
- Q. And then the portion I pointed you to towards the bottom of the page is one of those actions. Isn't that right?
- A. Yes, that's certainly one of the actions. I'm just trying to make sure the record's clear that there

THE WITNESS: I'm sorry, Your Honor.

JUDGE McGUIRE: You may proceed, Mr. Oliver.

MR. OLIVER: Thank you, Your Honor.

BY MR. OLIVER:

- Q. Now, Mr. Crisp, in August of 1997, Rambus' '481 patent issued. Isn't that right?
  - A. I don't know.

MR. OLIVER: May I approach, Your Honor?

JUDGE McGUIRE: Yes.

BY MR. OLIVER:

Q. Mr. Crisp, I've handed you a document marked CX-1503. It has a caption in the upper left-hand corner of United States Patent, Farmwald, et al. on the right-hand side, patent number 5,657,481, date of patent, August 12th, 1997.

- A. Yes, sir, I do.
- Q. Does that refresh your recollection that the '481 patent issued in August of 1997?
  - A. No, sir, it doesn't.
  - Q. Now, Mr. Crisp, at the time that the '481

patent issued, Rambus took steps not to let on to the public that it thought DDR SDRAMs would infringe Rambus patents. Isn't that right?

- A. Well, I think Mr. Tate had explained to people in that memo you had previously cited that he didn't want us to make any allegations that there might be some infringement.
- Q. That was the conclusions of the DDR threat assessment meeting in February of 1997. Isn't that right?
- A. I'm sorry, I don't remember the date, but we were just looking at the document. Yeah, we were -- we were basically told to not be telling customers and partners that we think DDR might infringe our patents.
- Q. And then as of August 1997, at the time that the '481 patent issued, Rambus took further steps to ensure that staff would not tell others outside of Rambus that Rambus thought DDR SDRAM would infringe Rambus patents. Isn't that right?
  - A. I don't remember, sir.

MR. OLIVER: May I approach, Your Honor?

JUDGE McGUIRE: Yes.

BY MR. OLIVER:

Q. Mr. Crisp, I've handed you a document marked CX-947. It is from Michele Clarke dated August 15,

1997. In the form that it was produced to us, the "to" line, cc line or bcc line were blank. If you look at the document, however, you'll see the subject is, "Rambus Confidential: Approved Q&A for latest patent," and towards the bottom of the first page and the second page a series of apparently approved questions and answers.

Do you recognize this document?

- A. No, sir, I don't.
- Q. Does this appear to you to be a document -- actually, strike that.

Who was Michele Clarke as of August 1997?

- A. She was -- I don't remember her title, but her responsibility was handling public relations.
- Q. Do you recognize this as a document that a public relations person in Rambus would have circulated to all Rambus staff?

MR. PERRY: Your Honor, he's already said he doesn't recognize the document. It's a waste of time.

MR. OLIVER: Your Honor, I'm trying to understand that since we don't have a "to" line here or cc line here, I'm trying to understand something about this document.

JUDGE McGUIRE: Well, that last question is inappropriate, because he's already answered it.

BY MR. OLIVER:

Q. Mr. Crisp, let me direct your attention to question number 3 and the answer towards the bottom of the page. The question reads, "Do Double Data Rate (DDR) SDRAMs use this patent? Answer: We don't know yet. No DDR products exist for us to evaluate."

- A. Yes, sir, I do.
- Q. Do you recall receiving any instructions or having any conversations during the course of the summer of 1997 to answer that you didn't know to any questions concerning whether or not DDR SDRAMs use Rambus patents?
- A. I don't have any recollection of that or any -- I just don't remember.
- Q. Now, Mr. Crisp, in the latter part of 1997, Mr. Joel Karp joined Rambus. Is that right?
- A. I believe that's the approximate time frame at which he joined the company.
- Q. And at the time that Mr. Karp joined Rambus, you understood that his responsibilities would include assessing potential application for Rambus patents or patent applications to competing technologies?
- A. I think I remember his title was -- I think it was vice president of intellectual property, and I

don't remember all of his role in that job, but I think his primary responsibility was managing the Rambus intellectual property portfolio.

- Q. Well, you understood that part of his role was that he would be assessing DDR SDRAM with respect to Rambus patents. Isn't that right?
- A. I think I would have understood him to have that responsibility, yes.
- Q. And at the time that he was hired, Rambus took steps to conceal that role from the outside world, didn't it?
  - A. I don't know about that.

MR. OLIVER: May I approach, Your Honor?

JUDGE McGUIRE: Yes.

BY MR. OLIVER:

Q. Mr. Crisp, I've handed you a document marked CX-963 from CEO Geoff Tate dated October 21, 1997 to staff, subject, "Joel Karp joins Rambus; \*note\* message to outside is only that 'Joel is going to help us with contract negotiations.'"

- A. Yes, sir, I do.
- Q. If I could then direct your attention down to the beginning of the fourth paragraph that begins with, "Currently."

Do you see that?

- A. Yes.
- Q. The sentence there reads, "Currently we expect based on datasheets that both ddr sdram/sgram and sldram will infringe our patents."

Do you see that?

- A. Yes, I do.
- Q. Then if you look down to the following paragraph, you'll see again "\*\*NOTE\*\* We are not making any public statement outside of Rambus about Joel joining."

Do you see that?

- A. Yes, I do.
- Q. Then the final sentence of that paragraph, "Our strategy is to downplay the whole infringement/IP issue until there is actual infringement."

- A. Yes, I do, sir.
- Q. Does that refresh your recollection that Rambus took steps at the time that Mr. Karp joined Rambus to conceal his true role from the outside world?
  - A. No, it doesn't.
- Q. Now, Mr. Crisp, after Rambus withdrew from JEDEC, you continued to monitor what was going on within JEDEC with respect to SDRAM and DDR SDRAM

standardization, didn't you?

- A. I guess it depends on what you mean by "monitor."
- Q. Well, you actually obtained information from a number of different sources within JEDEC, right?
- A. Obtained information? I certainly had conversations with people that I knew that attended JEDEC meetings. Sometimes they offered me information; sometimes I asked for information.
- Q. And in fact, a number of sources leaked information to you from JEDEC meetings. Isn't that right?
  - A. I think there may have been one or two.
- Q. Do you recall receiving an email from a so-called "deep throat"?
- A. I don't have a specific memory of that. I don't remember that.

MR. OLIVER: May I approach, Your Honor?

JUDGE McGUIRE: Yes.

BY MR. OLIVER:

Q. Mr. Crisp, I've handed you two different documents marked CX-929 and CX-932. They appear to be copies of an identical email. One is missing the date, and the other is missing the "to" and the cc and the bcc line, but I think putting the two documents

together, we will have the complete information.

Do you recognize the CX-929 and CX-932 as being an email that you forwarded to the business development and marketing group, the entire executive group of Rambus and the engineering managers of Rambus on June 13, 1997?

- A. Yes, I do.
- Q. And the subject there is, "JEDEC G2."

  Do you see that?
- A. Yes, sir, that's right.
- Q. And by G2, you are referring to a type of military intelligence. Is that right?
- A. I'm not sure where that term came from. I generally understood it to mean just information, rumors, those types of things.
  - Q. A type of intelligence, shall we say?
  - A. I think you could call it that.
- Q. In the first sentence of your email to the business development and marketing group, the executive group and the engineering managers, "My 'deep throat' source told me that the DDR bandwagon is moving fast within JEDEC with all companies participating."

- A. Yes, I do.
- Q. Now, you also received information from -- from

3415

your so-called Carroll contact within JEDEC. Is that right?

- A. Mr. Carroll was not a JEDEC person.
- Q. But you nevertheless received information from him concerning activities at JEDEC, right?
- A. Yes, he -- he was a reporter invited to go to a meeting, and he told me what happened there.
- Q. And again, you circulated that information to the executive group and others within Rambus, right?
- A. I don't remember exactly what I did with it.

  It's very possible I would have done that.

MR. OLIVER: May I approach, Your Honor?

JUDGE McGUIRE: You may.

BY MR. OLIVER:

Q. Mr. Crisp, I show you a document marked CX-935. This one does not have a date. At the top, it's to business development/marketing at Rambus, execs at Rambus, subject, "More stuff on Taipei JEDEC meeting," cc Crisp, and at the bottom you'll see your initials and your name.

Does this refresh your recollection that you did, in fact, forward information from the Carroll contact to the entire executive group and others within Rambus?

A. Yes, it does.

- Q. Now, Mr. Crisp, you also received an email from a so-called Mixmaster. Is that right?
- A. I received an email with a return address from something called Mixmaster, that's correct.
  - Q. I'm sorry, were you finished?
  - A. Yes, sir, I am.
- Q. Mixmaster is a so-called anonymizer. Is that right?
  - A. That's my understanding.
- Q. Permits someone to send an email without revealing the email address. Is that right?
  - A. I believe that's correct, yes.
  - Q. And the -- strike that.

Once again, you forwarded the information that you received from Mixmaster to others within Rambus. Is that right?

- A. My recollection is that I mentioned it to a very small group of people.
- Q. But you did forward it to some people within Rambus, right?
- A. I can't remember if I forwarded an email or just discussed it.
- Q. You also received email from a source known as Secret Squirrel. Is that right?
  - A. I did receive an email with a return address

indicating something like Secret Squirrel.

- Q. Again, providing information to you related to proceedings at JEDEC?
- A. I don't know if it had anything to do exactly with JEDEC. I -- it may have; it may not have. But it did have some information in there that was of interest to me.
- Q. Now, one of the purposes that -- strike that.

  One of the reasons that you were interested in keeping tabs on JEDEC discussions was that Rambus would know what technologies JEDEC was planning to incorporate in its next generation standard. Isn't that right?
- A. I think we were just more interested in the competitive landscape, how devices that were being discussed for standardization might stack up from a performance perspective with what we were doing and what sort of schedules we might see for those devices.
- Q. But that also included an understanding of the features that were to be used. Isn't that right?
- A. Sometimes the features are helpful in understanding the viability of the device proposals and making some sort of estimation of their performance.
- Q. Now, that in turn also permitted Rambus to continue the process of amending the scope of its

patent claims in order to cover the next standard. Isn't that right?

- A. It's not clear. Usually data sheets were more useful for that.
- Q. But in any event, Rambus was still in the process of amending its patent applications to cover technologies. Isn't that right?
- A. I know Rambus has been in the process of filing and amending and prosecuting patent applications ever since I joined the company, and I assume they continue doing it even to this day.
- Q. And information that you would gather was used for that purpose. Isn't that right?
  - A. I would -- I would think that it would be.
- Q. We looked at a document a moment ago relating to Mr. Joel Karp joining Rambus. Once Mr. Karp started at Rambus, he began planning a campaign to collect royalties from DDR SDRAM and other non-RDRAM products. Isn't that right?
- A. I think he was working on a project like that, ves.
- Q. Now, during the course of 1998, Mr. Joel Karp also instituted a document retention policy at Rambus, right?
  - A. I can't remember if Mr. Karp instituted it or

not, but we did have one that went into place, and Mr.

Karp certainly was the one that communicated to me that such a program would be put into place.

- Q. And he held a number of meetings to explain the policy to staff. Is that right?
  - A. I can remember one meeting.
- Q. And Mr. Karp also circulated a number of documents relating to the policy, right?
- A. What I remember was him showing some slides at one of those company rambler meetings.

MR. OLIVER: May I approach, Your Honor?

JUDGE McGUIRE: Yes.

BY MR. OLIVER:

- Q. Mr. Crisp, I've handed you two documents marked as CX-1045 and CX-1048.
  - A. I'm sorry, I only got one document.
  - Q. I apologize. Which one do you have?
  - A. I have 1048, sir.
- Q. Do you now have a copy of CX-1045 and a copy of CX-1048?
  - A. Yes, I do.
- Q. Do you recognize CX-1045 as an email from Joel Karp to all staff dated August 24, 1998 regarding document retention at Rambus?
  - A. Yes, sir, I do.

- Q. The first sentence reads, "By now, everyone at Rambus should have heard at least one presentation on the implementation of the document retention policy."
  - A. Yes, I see that.
- Q. And then if you look at CX-1048, you'll see it's another email from Joel Karp to all staff dated August 31, 1998, "Document Retention (Make Up Session)."

Do you see that?

- A. Yes, I do.
- Q. And that reads, "There will be a make up session on Document Retention at 11 a.m. today in San Diego conference room. If you missed seeing the presentation or if you have questions you would like answered, please attend."

Do you see that?

- A. Yes, I do.
- Q. Does that refresh your recollection that Mr. Karp actually had a number of different sessions regarding the document retention plan?
  - A. No.

MR. OLIVER: May I approach, Your Honor?

JUDGE McGUIRE: You may.

BY MR. OLIVER:

Q. Mr. Crisp, I've handed you a document marked

CX-1264. It consists of a number of what appear to be slides. The first one has a caption Email - Throw It Away.

When you referred a moment ago to Mr. Karp showing some slides at the meeting that you attended, is CX-1264 what you had in mind?

- A. I -- I can't remember if these are the slides he showed or not.
- Q. Let me direct your attention to the top of the first page underneath Email Throw it Away, the first bullet point reads, "Email is Discoverable in Litigation or Pursuant to a Subpoena."

Do you see that?

- A. Yes, I do.
- Q. Do you recall Mr. Karp explaining that you should throw email away because it is discoverable in litigation or pursuant to a subpoena?
  - A. I don't really remember that.
- Q. Now, Mr. Ed Larsen informed staff that Rambus had hired a shredding service to come to Rambus, right?
  - A. I don't remember that either.

MR. OLIVER: May I approach, Your Honor?

JUDGE McGUIRE: You may.

BY MR. OLIVER:

Q. Mr. Crisp, I've handed you a document marked

CX-1044. This is an email from Ed Larsen dated August 19, 1998, to staff, subject, "Thursday 9/3: Shredder Day."

- A. Yes, I do.
- Q. Now, in August 1998, who was Ed Larsen?
- A. He was the vice president of  $\ --$  I think it was human relations or personnel or whatever we called that department.
- Q. Does CX-1044 refresh your recollection that Rambus had hired a shredding service to come to Rambus?
  - A. Yes, it does.
- Q. And Mr. Larsen also announced that Rambus would hand out burlap bags to all employees for those paper documents that needed to be shredded in compliance with Rambus' document retention policy. Is that right?
  - A. Yes, that's what this email indicates.
- Q. He also announced that they have food and drinks to celebrate completion of the project, right?
- A. Yes, we had food and drinks lots of times at Rambus.
- Q. In fact, they even named Thursday, September 3, 1998 as Shred Day, right?
- A. I don't know that. I don't think I was there that day.

MR. OLIVER: May I approach, Your Honor?

JUDGE McGUIRE: Yes.

BY MR. OLIVER:

Q. I've handed you a document marked CX-1051.

That's an email from Ed Larsen to staff dated September

2, 1998, subject, "Shred Day 1998."

If I could direct your attention to the first sentence, "Thursday is Shred Day 1998."

Do you see that?

- A. Yes, I do.
- Q. Does that refresh your recollection that Rambus named Thursday, September 3, 1998 as Shred Day?
  - A. No, I'm sorry, it doesn't.
- Q. Now, a day before Shred Day, Mr. Larsen reminded people that they should start reviewing the documents that very day. Isn't that right?
- A. Well, according to this email, he made a statement similar to that. I think it was encouraging people to get it done if they haven't yet done it.
- Q. The second sentence reads, "If you haven't started reviewing your documents for compliance with our Document Retention Policy, please do so TODAY," today being in all caps.

Do you see that?

A. Yes, that's right.

Q. Then that's follow by the next sentence, "The shredding service will be here Thursday a.m. to begin the process. Please leave your burlap bags in the hallway outside your cube."

Do you see that?

- A. Yes, sir, I do.
- Q. Then on Shred Day, Mr. Joel Karp sent around a status report, right?
  - A. I don't know.

MR. OLIVER: May I approach?

JUDGE McGUIRE: Yes.

BY MR. OLIVER:

Q. Mr. Crisp, I've handed you a document marked CX-1052. It is an email from Joel Karp to all staff sent Thursday, September 3, 1998, subject, "Shred Day: Status Report."

Does that refresh your recollection that Mr. Karp, in fact, sent around a status report during the course of Shred Day?

- A. No, I think I was -- I don't think I knew about that. I was overseas or something.
- Q. But nevertheless, you would have received a copy of the email, right?
  - A. I probably would have. I just don't remember.
  - Q. One of the points that Mr. Karp informs staff

is that it took five hours to fill the shredding truck with a capacity of 20,000 pounds. Is that right?

- A. That's what the document says.
- Q. Then it says that they think they can come back and finish the job tomorrow, right?
  - A. Yes, it also says that.
- Q. But worst case, they might have to come back Tuesday to pick up anything else, right?
  - A. Yes, that's -- that's right.
- Q. But if you look at the end of the second paragraph, he says, "Next time we do this it should be a lot easier," right?
  - A. Yes, that's right.
- Q. Now, in response to Mr. Karp's directives, you went through your files, right?
  - A. Yes, sir, I did. Excuse me. I'm okay now.
- Q. And you knew that you were expected to dispose of paper, right?
  - A. Yes, that's right.
- Q. But no one gave you any advice as to what to keep or what to throw away, did they?
- A. Well, I think I got some advice on that.

  MR. OLIVER: If I could have just a moment,
  please, Your Honor.

JUDGE McGUIRE: Go ahead.

## (Pause in the proceedings.)

MR. OLIVER: May I approach, Your Honor?

JUDGE McGUIRE: Yes.

BY MR. OLIVER:

Q. Mr. Crisp, I've handed you a copy of your transcript, the deposition taken in the Micron litigation dated Tuesday, April 24, 2001, and I'd like to ask you to turn, please, to page 236. I'd like to direct your attention to the bottom of page 236, the question beginning on line 24.

"QUESTION: I take it no one provided you any advice as to what you ought to keep or what you ought to throw away?

"ANSWER: That's correct."

Do you see that?

MR. PERRY: You can answer.

THE WITNESS: Yes, I do see that line, yes.

#### (Counsel conferring.)

MR. PERRY: Okay, Your Honor, the very next page it talks about what he was told, and we would object to that as attempted impeachment. The very next page of the transcript.

MR. OLIVER: Your Honor, if they want to cover that in their questioning, they're entitled to do that.

JUDGE McGUIRE: Overruled.

BY MR. OLIVER:

Q. Now, basically, Mr. Crisp, everything that -- Mr. Crisp, why don't you set the transcript aside, if you would, please.

Basically, Mr. Crisp, everything that you couldn't justify keeping, you put in a burlap sack to be shredded. Isn't that right?

- A. I think that's basically correct.
- Q. At the time, you had a business trip planned to Asia?
  - A. Yes, that's what I remember.
- Q. And as a result, you didn't have a lot of time, did you?
- A. I'm not sure what you mean by having a lot of time.
- Q. Well, I think you had stated that you did not have a lot of time to complete this project. Isn't that right?
  - A. Yes, that's right.
- Q. So, you didn't give a lot of thought to what to keep, did you?
- A. Well, actually, I made every attempt that I could to try to keep the documents that I'd been advised that I should keep.
  - Q. Isn't it true, though, Mr. Crisp, that at the

time that you were putting the documents in the burlap sack that you really didn't give it a lot of thought?

- A. I'm not sure what you mean by that. I know what I had in mind that I should be keeping and be looking for to keep, and that's what I did.
- Q. Isn't it true that you pretty much just dumped most of the paper you had in your office --
- A. Yes, that's right, because most of the paper I had in my office were things I knew I didn't need to keep. Most of the things I needed to keep were electronic files that I had on my computer.
- Q. So, you didn't have a lot of time, and you really didn't give it a lot of thought, did you?
- A. Well, I think I gave a great deal of thought to what I needed to keep that was on my computer. The kinds of documents that I had been asked to keep were things that were in electronic form, and I made an attempt to preserve those documents, many of which we have been reviewing in this case.
- Q. You pretty much dumped most of the paper in your office, though, right?
- A. Yes, I -- I had a lot of paper in my office, data books and brochures from marketing conferences that I had attended and --

JUDGE McGUIRE: Okay, that's enough. Just

answer the question.

THE WITNESS: I had a lot of paper in my office.

JUDGE McGUIRE: All right, Mr. Crisp, I just want you to answer the question he asked you. If he wants you to expand, he'll give you that opportunity.

THE WITNESS: Yes, sir, Your Honor.

MR. OLIVER: Thank you, Your Honor.

BY MR. OLIVER:

- Q. And then after you put the documents in the burlap sack, you went off on a business trip to Asia, right?
  - A. Yes, that's correct.
- Q. And you presumed the materials in the burlap sack were shredded, right?
  - A. Yes, that was my assumption.
- Q. And among the materials you threw out were copies of JEDEC minutes, right?
  - A. Yes, that's right.
- Q. And any other JEDEC-related material you had on paper you also basically threw away, right?
- A. I think that probably would have been correct, yes.
  - Q. Excuse me?
  - A. I said I think that probably would have been

correct, yes.

- Q. And to the extent that you still had any documents relating to the patent prosecution work you did with vice president Roberts or Lester Vincent, those documents would have been destroyed as well, right?
- A. Well, I don't know that I had any of those documents.
- Q. To the extent that you did, they would have been destroyed, right?
- A. It's possible I had some of those that were electronic. I don't know what I had that related to that work that I had done earlier, but if it was in paper form, there was a good chance it was thrown away.
- Q. Now, about a year later, you were looking for one of the original DDR SDRAM data sheets from the 1996 and '97 time frame. Do you recall that?
  - A. No, I don't remember that.

MR. OLIVER: May I approach?

JUDGE McGUIRE: Yes.

BY MR. OLIVER:

Q. Mr. Crisp, I've handed you a document marked CX-1079. This is an email from you. Again, the "to" line and the cc line are blank in the copies that have been provided to us. The date is October 28, 1999.

The subject is, "Original DDR datasheet anyone?"

It reads, "I am looking for a copy (paper or electronic) of one of the original DDR datasheets from the 1996/1997 timeframe."

Do you see that?

- A. Yes, I do.
- Q. Now, does that refresh your recollection that you were, in fact, trying to find an original DDR data sheet in 1999?
  - A. Yes, it does.
- Q. And then you wrote in your email, "Hopefully someone here has one that hasn't fallen victim to the document retention policy."

- A. Yes, I do.
- Q. And then at the end of that sentence, you followed that with an emoticon, right?
  - A. Yes, that's what I call a smiley.
- Q. Okay, indicating that you thought that was humorous, right?
  - A. Sure.
- Q. And the joke was that the document retention policy actually called for destruction of documents. Isn't that right?
  - A. Well, I don't think that was the joke. I

think -- I think I had been frustrated because I couldn't find some of the things that I wanted later. Everybody that I asked personally for it didn't seem to have it, so I just thought it was funny at the time.

- Q. Now, in 1998, JEDEC adopted its DDR SDRAM standard, right?
  - A. I don't know when they did it, sir.
- Q. Do you recall that in 1999 that JEDEC published the DDR SDRAM standard?
  - A. No, I don't recall that.
- Q. Do you recall that as early as 1998, before the DDR SDRAM standard was published, companies were actually producing DDR SDRAM parts?
  - A. What year now?
  - Q. 1998.
- A. I think I had heard of some of those chips existing, and I think there were some data sheets floating around by that time frame.
- Q. Now, at one point in time, Intel announced that its next generation of chipsets would only support the Rambus interface. Is that right?
  - A. Yes, I remember that.
- Q. Do you recall that happening sometime in late 1996 or early 1997, during that time frame?
  - A. The time frame sounds familiar, but I'm not

exactly sure of it.

- Q. In any event, the impact of the Intel announcement was that its chipsets or its planned future chipset would only work with RDRAM. Is that right?
- A. Well, at least that was true I believe for their desktop PCs. I think they had some other roadmap for their portable and server chipsets, if I remember correctly.
- Q. So, in other words, for a certain period of time, it appeared as though other companies might produce chipsets that would work with DDR SDRAMs, but that Intel would not?
- A. I think there was at least one company that had mentioned that they were planning to build a DDR-based chipset. It wasn't Intel.
- Q. And then in the latter half of 1999, Intel indicated that it was having second thoughts about its earlier decision. Isn't that right?
  - A. I don't remember that.
- Q. Well, do you recall that in the latter half of 1999, Intel announced that it would, in fact, build chipsets to support DDR SDRAMs?
  - A. I don't remember that.
  - Q. Now, also in late 1999, Rambus began to assert

patents against companies manufacturing SDRAMs and DDR SDRAMs. Isn't that right?

A. I know Rambus asserted its patents at some point. I don't remember exactly when that happened.

MR. OLIVER: May I approach, Your Honor?

JUDGE McGUIRE: Yes.

MR. OLIVER: I apologize, Your Honor, I'm getting a little bit ahead of the rest of my team here.

BY MR. OLIVER:

Q. Mr. Crisp, I've handed you a document marked CX-1084. This is an email from you. Again the "to" line and the cc line are blank in the copy that was provided to us. The date is November 19, 1999. The subject, "DDR meaning."

It reads, "Here is what it currently means:

Desperate to Destroy Rambus. It will prove to mean:

Didn't Destroy Rambus. And in a year or two: Doubled

DRAM Royalties (for Rambus)."

- A. Yes, I do.
- Q. Does that refresh your recollection in the late 1999 time period that Rambus began to assert patents against SDRAM and DDR SDRAMs?
- A. No, this doesn't refresh -- refresh my memory on that.

- Q. Do you recall that in January of 2000, Rambus sued Hitachi for patent infringement?
- A. I don't remember when that happened. I know that Rambus did sue Hitachi at one point for patent infringement.
- Q. And do you recall that the infringement suit was for SDRAM and DDR SDRAMs produced by Hitachi?
- A. Gosh, I don't remember if it was just for SDRAMs or DDR and SDRAMs. I just don't remember for certain.
- Q. Do you also recall in roughly the same time period Rambus began to threaten a number of other companies as well?
- A. You say "threaten." I'm not sure what you mean by that.

MR. OLIVER: Could we have just a moment, please, Your Honor?

JUDGE McGUIRE: Yes.

## (Pause in the proceedings.)

MR. OLIVER: May I approach, Your Honor?

JUDGE McGUIRE: Yes.

BY MR. OLIVER:

Q. Mr. Crisp, I've handed you two documents.

CX-1109, that is a document to a Dr. Nagasawa of

Mitsubishi Electric Corporation from Neil Steinberg

dated April 3, 2000. Also, CX-1129, a letter to Dr.

Sang Park of Hyundai Microelectronics dated June 23,

2000, also from Neil Steinberg. I'll give you a chance
to look over those letters.

- A. (Document review.)
- Q. Mr. Crisp, if I could direct your attention in particular in CX-1129 to page 2 in that document, and do you see that page 2 consists of a table, Rambus IP, Hyundai Product Line Overview, a list of Hyundai products on the left-hand side and a series of patents across the top of the table?

- A. Yes, sir, I do.
- Q. Does either CX-1109 or CX-1129 refresh your recollection that in the first part of 2000, Rambus began to enforce its patents against a number of other companies?
  - A. Yes, it does.
- Q. Now, beginning in the year 2000, a number of other companies started to sign license agreements with Rambus with respect to SDRAMs and DDR SDRAMs. Isn't that right?
- A. I'm not sure of the time frame in which that occurred, but I do recall that a number of companies did sign license agreements as you mentioned.

Q. In other words -- strike that.

But in any event, you do understand that companies including Toshiba, NEC, Samsung, Mitsubishi, Elpida and OKI all signed license agreements with Rambus that would cover production of SDRAMs and DDR SDRAMs?

- A. I'm not sure who all was on the list, but I know some of those company names were for sure. I'm just not sure about all of them.
- Q. But you also understand that a few companies did not sign license agreements with Rambus for SDRAMs and DDR SDRAMs?
  - A. Yes, that's my understanding.
- Q. And you understand that Rambus sued Infineon in U.S. district Court in Virginia?
  - A. Yes, I am aware of that.
- Q. And the Rambus lawsuit against Infineon in Virginia pertained to Infineon's production of SDRAMs and DDR SDRAMs. Is that right?
  - A. I think that's correct, yes.
- Q. Now, do you also understand that Rambus sued Infineon in Germany?
  - A. I think that's correct.

MR. PERRY: Your Honor, these are all facts of public record about when lawsuits were filed, and I

just think we're wasting our time with this witness who had no involvement in that other than being a witness.

JUDGE McGUIRE: Mr. Oliver, response to that?

MR. OLIVER: I'll move on, Your Honor.

JUDGE McGUIRE: It seems well-founded.

MR. OLIVER: Your Honor, we're approaching the end of what I'd like to do with Mr. Crisp, but I would ask if I could have a short break at this time.

JUDGE McGUIRE: Okay, how much more time do you need?

MR. OLIVER: I'm guessing it would be about 20 to 25 minutes, Your Honor.

JUDGE McGUIRE: Okay, let's take a five-minute break, then.

MR. OLIVER: Thank you, Your Honor.

JUDGE McGUIRE: Off the record.

#### (A brief recess was taken.)

MR. OLIVER: On the record.

At this time, you may proceed, Mr. Oliver.

MR. OLIVER: Thank you very much, Your Honor.

May I approach, Your Honor?

JUDGE McGUIRE: Yes.

BY MR. OLIVER:

Q. Mr. Crisp, I've handed you a copy of Exhibit CX-711. If I could ask you to turn in that document to

page 187, please, there's an email that I wanted to direct your attention to beginning about a quarter of the way down page 187. That is an email from you to certain individuals and the entire executive group, the business development and marketing group at Rambus, and the engineering managers, and then A. Diepenbrock. I understand that is Mr. Tony Diepenbrock. Is that right?

- A. I'm sorry, I'm still trying to find where we are. Page 187?
  - Q. Page 187.
  - A. Okay, I'm there.
- Q. There's a caption about a quarter of the way down the page.
  - A. Yes, I see that.
- Q. That begins, "from," question marks, and then Tuesday, December 5, 1995.

- A. Yes, yes, I see that.
- Q. A few lines down below that, do you see the "to" line?
  - A. Yes, I do.
- Q. And it's to certain individuals, the business development and marketing group, the executive group, engineering managers, and then I believe that's Mr.

Diepenbrock there?

- A. Yes, that's right.
- Q. And the subject, again, is "JEDEC meeting notes." Is that right?
  - A. Yes, that's right.
- Q. Now, if I could direct your attention towards the bottom of page 187, start with the paragraph -- the last paragraph there that starts with, "Townsend of Toshiba."

- A. Yes.
- Q. And if I could ask you to read to yourself that paragraph and then carry over onto the next page, about three-quarters of the following page.
  - A. I'm sorry, on the second page do what?
- Q. I'd like you to read to yourself, go through it, the last paragraph at the bottom of page 187.
  - A. Yes.
- Q. And then most of page 188 down to the short dotted line.
  - A. Okay. (Document review.)
- Q. Mr. Crisp, I just want to be clear about what was happening at this point. At this meeting you were seeking additional guidance into the JEDEC patent policy. Is that right?

- A. Yes, I -- the reason I was doing that, of course, is because I was planning on making a presentation and --
  - Q. Mr. Crisp --
- A. You said you were wanting to clarify it, so I'm trying to clarify it for you.

MR. OLIVER: Your Honor, could we please have everything stricken after the --

JUDGE McGUIRE: Mr. Crisp, I have asked you this two or three times now, just answer the question.

THE WITNESS: Yes, sir. Yes, sir, Your Honor.

BY MR. OLIVER:

- Q. So, when you were looking for additional clarification with respect to the JEDEC patent policy, the first person you went to speak with was Mr. Townsend, right?
  - A. Yes, sir, that's correct.
  - Q. And then you also went to speak to Mr. Sussman?
  - A. Yes, that's right.
- Q. And Mr. Townsend, of course, is the person who was giving the presentation at the beginning of each meeting, right?
  - A. Generally that was true, yes.
- Q. And Mr. Sussman is somebody that you knew as a long time JEDEC leader and current task group chairman

of the JC-42.4 committee?

- A. I think that's right.
- Q. And you also chose to go speak with Mr. Desi Rhoden, right?
  - A. Yes, that's also correct.
- Q. Because he was a long-time JEDEC veteran and chair of the SDRAM group. Is that right?
  - A. Yes, that's right. That's what I wrote.
- Q. Now, I'd like to put in context what you were doing at this JEDEC meeting. Now, do you recall that we discussed yesterday Mr. Tony Diepenbrock started at Rambus in September of 1995?
  - A. I think that's the date, yes.
- Q. And in September of 1995, Mr. Diepenbrock expressed to you concern with respect to Rambus' participation in JEDEC. Isn't that right?
  - A. He had raised that issue with me, yes.
- Q. And his concern was because of risk of equitable estoppel associated with JEDEC's participation in Rambus, right?
- A. Yes, I believe that's what he had expressed, among other things.
- Q. And it would be fair to say that Mr.

  Diepenbrock would have preferred it if Rambus didn't participate in JEDEC, right?

- A. I think that was his position.
- Q. And you did not necessarily agree with Mr. Diepenbrock's concerns, did you?
- A. I had a  $\operatorname{\mathsf{--}}$  we had a difference of opinion on that.
- Q. You wanted to continue participating in JEDEC, right?
- A. I saw some advantages in continuing to participate and thought we should do that.
- Q. Now, this December 1995 meeting was the first JEDEC meeting you attended after the conversation with Mr. Diepenbrock, right?
- A. I imagine that was true. I don't remember what other meeting dates there were in between, so that's probably -- that's probably right.
- Q. So, you took the opportunity, then, to speak with a number of individuals concerning the JEDEC patent disclosure and licensing policies, right?
  - A. Yes, that's correct.
- Q. And you drafted the email that we've just looked at, right?
  - A. Yes, that's also correct.
- Q. And again, the email was circulated not only to Tony Diepenbrock but to all executives and the entire business development and marketing group. Is that

# right?

- A. Yes, that's right, among others.
- Q. And you wanted to persuade them that the JEDEC disclosure policy shouldn't cause Rambus to decide to leave JEDEC. Is that right?
- A. Actually, I think it was a little different than that.
- Q. Well, you wanted to continue participating in JEDEC. Is that right?
- A. Well, we were considering making a proposal there, and we needed to understand what it was, and there had been a misunderstanding I think on the part of some individuals.
- Q. My question, Mr. Crisp, was you wanted to continue to participate in JEDEC. Isn't that right?
  - A. I think that's right, yes.
  - Q. And Mr. Diepenbrock didn't. Is that right?
  - A. He was recommending that we not.
- Q. Now, if I could direct your attention to page 188 of CX-711, there's a line appearing almost halfway down the page that begins, "So the conclusion I reach."

- A. Yes.
- Q. And this appears immediately after your discussion of your lunch with Mr. Townsend and your

conversations with Mr. Sussman and Mr. Rhoden, right?

- A. I'm sorry, could you ask the question again, please?
- Q. Yes. The sentence that I've just pointed to, "So the conclusion I reach," that appears immediately after your discussion of your lunch with Mr. Townsend and your discussions with Mr. Sussman and Mr. Rhoden, right?
  - A. Yes, it does.
- Q. And you write there, "So the conclusion I reach here is that we can abide by the patent policy on a case-by-case basis."

Do you see that?

- A. Yes.
- Q. And what you're referring to there is the JEDEC license policy, right?
  - A. Yes, that's right.
- Q. And then if you look a few lines further down, there's a sentence that begins, "As long as we mention."

Do you see that?

MR. PERRY: Your Honor, I would just like to state for the record he didn't finish reading the sentence. I didn't want the record to say that he finished that sentence as it's appearing there in the

transcript.

JUDGE McGUIRE: So noted.

BY MR. OLIVER:

- Q. If I could direct your attention a few lines further down, that begins, "As long as we mention."

  Do you see that?
  - A. Yes, I see that.
- Q. That reads, "As long as we mention that there are potential patent issues when a showing or a ballot comes to floor, then we have not engaged in 'inequitable behavior.'"

Do you see that?

- A. Yes, I do.
- Q. Now, at that point you were talking about the JEDEC patent disclosure policy, right?
  - A. Yes, for presenters.
- Q. And then if I could direct your attention down to the next paragraph, it begins, "The things we should not do."

- A. Yes, I do.
- Q. And it reads there, "The things we should not do are to not speak up when we know that there is a patent issue, to intentionally propose something as a standard and quietly have a patent in our back pocket

we are keeping secret that is required to implement the standard and then stick it to them later (as WANG and SEEQ did)."

Do you see that?

- A. Yes, I do.
- Q. And then the next sentence reads, "I am unaware of us doing this -- doing any of this or of any plans to do this."

- A. Yes, I do.
- Q. Now, isn't it true, though, Mr. Crisp, that you were, in fact, aware of Rambus plans to do that?
- A. No, sir. Again, I was speaking about making a presentation or a proposal there at JEDEC.
- Q. Well, you certainly were aware of Rambus plans not to tell JEDEC when it knew that there was a patent issue and then to stick it to the industry later.

  Isn't that right?
  - A. I'm sorry, could you ask that question again?
- Q. Yes. You were aware -- excuse me. You were aware of Rambus plans not to speak up at JEDEC when Rambus knew that there was a patent issue and then to stick it to the industry later. Isn't that right?
- A. I don't think I had that knowledge. Again, I was speaking about making a presentation there, making

a proposal. This was the first time I had been faced with that.

- Q. My question is unrelated to a proposal. My question is simply, isn't it true that you knew of Rambus plans not to speak up at JEDEC when you knew that there was a patent issue and then to stick it to the industry later? Isn't that right?
- A. I'm not sure how to answer your question, because I -- it's taken out of context.
- Q. Mr. Crisp, why don't you set the document down for a moment.

Isn't it true that in December 1995, you were aware of Rambus plans not to tell JEDEC when there was a patent issue at JEDEC and then to stick it to the industry later?

A. Well, I certainly knew that we were not making any disclosures of our patents at JEDEC. I'm not sure about the last part of it.

MR. OLIVER: May I approach, Your Honor?

JUDGE McGUIRE: Yes.

BY MR. OLIVER:

Q. Mr. Crisp, I've handed you a number of documents that I actually do not think you will need, my questions will not necessarily reference the documents, but I did want to give those documents to

you for your reference in case you do want to look at them.

I should note also that you do have the CX-711 in front of you, and there are tabs on certain pages that you may want to consult if you choose to do so, but as I said, I don't think you'll necessarily have to.

Mr. Crisp, we probably don't have time to discuss all the events, but I would like to run through my top ten list of instances of patent issues involving JEDEC of which you were aware and of which you did not inform JEDEC and which you understood that Rambus could stick it to the industry with.

MR. PERRY: Your Honor, excuse me. I don't think that ought to be a part of the question. It's pure argument. There is no jury.

JUDGE McGUIRE: Mr. Oliver, that's true.

That's argument. Now, that's something you can certainly make in your post-hearing brief, but I am not going to hear pure argument in the form of a question.

MR. OLIVER: Thank you, Your Honor.

BY MR. OLIVER:

Q. Mr. Crisp, I'd like to run through ten events.

I won't put these in any particular order, just chronologically.

Number ten, in February 1992, Billy Garrett told you and others, based on events at a JEDEC meeting, that Rambus could use its patents to keep current mode interfaces off of DRAMs, but you're not aware that you or anyone else ever told JEDEC that. Isn't that right?

- A. Yes, that's true. I don't know that we had any patents for that.
- Q. Number nine, in September of 1992, you met with Lester Vincent to propose claims covering DRAM with multiple open rows and a DRAM with programmable latency in order to cause problems with synchronous DRAMs, but you never told JEDEC that Rambus was pursuing those claims. Isn't that right?

MR. PERRY: Compound and misstates the testimony and the evidence. Objection.

JUDGE McGUIRE: Mr. Oliver?

MR. OLIVER: Your Honor, I am asking him if he can answer the question. If he believes it misstates the testimony, he can correct it.

JUDGE McGUIRE: Overruled.

THE WITNESS: Please ask the question again.
BY MR. OLIVER:

Q. Yes. In September of 1992, you met with Lester Vincent to propose claims covering DRAM with multiple

open row addresses and DRAM with programmable latency in order to cause problems with synchronous DRAMs, but you never told JEDEC about that, did you?

MR. PERRY: Same objection.

JUDGE McGUIRE: Overruled.

THE WITNESS: I never told JEDEC about the meeting I had with my attorney, that's correct.

BY MR. OLIVER:

- Q. Number eight, in June 1993, you received an email from Fred Ware following his discussion with Mr. Lester Vincent discussing claims covering programmable CAS latency as being directed against SDRAMs and claims covering PLL clock generation as being directed against future SDRAMs, but you never told JEDEC that Rambus was pursuing those claims, did you?
- A. That's correct, I never said anything about that.
- Q. Number seven, in May 1994, in response to a presentation at JEDEC, you stated that Rambus might be able to slow down or stop or at least collect from various devices using external supplied reference voltage, but you never told JEDEC that, did you?
  - A. That's correct.
- Q. Number six, in September 1994, after having seen a presentation at JEDEC relating to on-chip PLL,

you wrote in an email that it seemed likely that Rambus would have to fight litigation, but you never told JEDEC that, did you?

- A. I never said anything to JEDEC about that, that's correct.
- Q. Number five, in October 1994, one month after having seen a presentation at JEDEC regarding on-chip PLL, you wrote that you hoped Rambus would sue other companies, but you never informed JEDEC of that, did you?
- A. Well, I think we discussed yesterday that that presentation was different than what you've represented, but the fact is I never said anything to them about it.
- Q. Number four, in March 1995, after observing a presentation at JEDEC involving an external reference voltage, you stated that the proposal may well infringe Rambus' work, but you never informed JEDEC of that, did you?
  - A. That's correct.
- Q. Number three, also in March 1995, after observing a separate presentation at JEDEC involving source synchronous clocking, you wrote that they might get into patent trouble if they did this, but you never told JEDEC that, did you?

- A. That's correct.
- Q. Number two, after identifying intellectual property issues relating to SyncLink following a May 1995 presentation, and the issues you identified including low voltage -- I'm sorry, please allow me to start that question again.

Number two, at a May 1995 JEDEC meeting, after identifying intellectual property issues relating to SyncLink, including low swing signaling and programmable access latency, you advised others at Rambus that it was not a really key issue, it makes no sense to alert them to a potential problem they could easily work around, right?

- A. I'm having trouble with the first part of your question. I think the issues that you or the things you referred to as issues I think I identified as potential issues, but no matter, I did not inform JEDEC of any of that.
- Q. Number one, in June of 1995, you undertook to help get a claim to shoot SyncLink in the head, but you never told JEDEC what you were doing. Isn't that right?
- A. Well, I'm not sure exactly what you mean by "undertook."
  - Q. You took ownership of trying to do work to get

claims to shoot SyncLink in the head. Is that right?

- A. I think my recollection was I offered to take ownership.
  - Q. And you never told JEDEC about that, did you?
  - A. That's correct, I never did.

MR. OLIVER: Your Honor, may I approach the table?

JUDGE McGUIRE: Yes.

BY MR. OLIVER:

Q. Mr. Crisp, you never told JEDEC that you believed that Rambus could obtain patent rights covering low voltage output swings. Isn't that right?

MR. PERRY: Assumes facts not in evidence.

JUDGE McGUIRE: Mr. Oliver?

MR. OLIVER: Your Honor, I'm simply asking the question.

MR. PERRY: I'm sorry, Your Honor, there's no evidence to support it. If the question is did you ever say those words, you know, we've already been over all this. There weren't any disclosures, and we're going to hear now what the reason for that was, but he hasn't established that there was any state of mind of this individual that there was patent coverage for these technologies, and I think it's just a waste of time to go through that.

JUDGE McGUIRE: I'll let you take that up on your cross.

Go ahead.

MR. OLIVER: Thank you, Your Honor.

BY MR. OLIVER:

- Q. Mr. Crisp, you never told JEDEC that you believed that Rambus could obtain patent coverage over low voltage output swings. Isn't that right?
  - A. That's correct.

MR. PERRY: Your Honor, I am going to object that it's vague as to the coverage of swings with respect to what?

JUDGE McGUIRE: All right, sustained on that one.

BY MR. OLIVER:

- Q. You never informed JEDEC that you believed that Rambus could obtain patent coverage with respect to low voltage output swings as being discussed in JEDEC.

  Isn't that right?
  - A. That's correct.
- Q. You never informed JEDEC that you believed Rambus could obtain coverage -- could obtain patent coverage over programmable CAS latency as that technology was being discussed within JEDEC. Isn't that right?

- A. Yes, that's correct.
- Q. You never informed JEDEC that you believed Rambus could obtain patent coverage over programmable burst or wrap length as that technology was being discussed within JEDEC. Isn't that right?
  - A. Yes, that's correct.

 $$\operatorname{MR.}$  OLIVER: May I approach the table, Your Honor?

JUDGE McGUIRE: I'm sorry? Yes.

BY MR. OLIVER:

- Q. Mr. Crisp, you never informed JEDEC that you believed Rambus could obtain patent coverage over external reference voltage as that technology was being discussed within JEDEC. Isn't that right?
  - A. Yes, sir, that's correct.
- Q. You never informed JEDEC that you believed Rambus could obtain patent coverage over use of two banks as that technology was being discussed within JEDEC. Isn't that right?
  - A. Yes, that's correct.
- Q. You never informed JEDEC that you believed Rambus could obtain patent coverage over use of dual edge output or input technology as that technology was being discussed within JEDEC. Isn't that right?
  - A. Yes, that's also correct.

- Q. You never informed JEDEC that you believed Rambus could obtain patent coverage over source synchronous clocking as that technology was being discussed in JEDEC. Isn't that right?
  - A. Yes, that's correct.
- Q. You never informed JEDEC that you believed that Rambus could obtain auto-precharge -- excuse me, could obtain patent coverage over auto-precharge as that technology was being discussed in JEDEC. Isn't that right?
  - A. Yes, that's correct.
- Q. You never informed JEDEC that you believed that Rambus could obtain patent coverage over on-chip PLL or DLL technology as that technology was being discussed within JEDEC. Isn't that right?
  - A. Yes, that's correct.

MR. OLIVER: Your Honor, I would like to have the table marked as the next demonstrative, and with permission of opposing counsel, I would like to use a darker marker to go over the title one more time.

JUDGE McGUIRE: Well, you can do that at the break, but we ought to mark it -- I think we're up to about, what, DX-28 or something like that at this point? Does anyone have -- been tracking that? How about our court reporter?

THE REPORTER: I can find out at the lunch break, how about that?

JUDGE McGUIRE: I think we will call it in the interim DX-28, and if that's improper, when we come back, we will change it.

# (DX Exhibit Number 28 was marked for identification.)

MR. OLIVER: Thank you, Your Honor.

At this point we will pass the witness, Your Honor.

JUDGE McGUIRE: Okay, it's 20 until 1:00.

Let's take off until 2:00, and at that time we will come back. Mr. Perry, you may at that point have your inquiry.

MR. PERRY: Thank you.

JUDGE McGUIRE: Off the record.

(Whereupon, at 12:40 p.m., a lunch recess was taken.)

#### AFTERNOON SESSION

(2:00 p.m.)

JUDGE McGUIRE: On the record. Any items that need to come up for the Court's consideration?

MR. STONE: I think either now or at the end of the day we should talk about schedule, Your Honor.

JUDGE McGUIRE: Okay, let's do it at the end of the day, because I anticipate issuing an order sometime this afternoon that may impact on that, so we'll take it up at that time.

MR. STONE: Okay.

JUDGE McGUIRE: Do we intend to go today until, what, 4:30 or 5:00 or are we going to --

MR. PERRY: Your Honor, Mr. Crisp and I would both prefer that this be his last day of testimony.

JUDGE McGUIRE: I can understand.

 $$\operatorname{MR.}$$  PERRY: And I have whittled down what I need to do to the bare minimum, I hope it is at least the minimum.

JUDGE McGUIRE: Okay, let's proceed on that basis, and then when these other issues come up, we'll take them up at the end of the day or at whatever point it's convenient, but yeah, I would like to go ahead and I think conclude with him, you know, for his benefit as well, and so we'll attempt to do that this afternoon.

Okay, anything else?

MR. OLIVER: Your Honor, there's five exhibits from this morning that I omitted to move into evidence, if I may do so.

JUDGE McGUIRE: Okay, go ahead.

MR. OLIVER: The first is CX-905, an email from Mr. Crisp to staff dated December 4, 1996.

MR. PERRY: Can I just look at this list and we can do it all at once? That's fine.

MR. OLIVER: CX-905?

MR. PERRY: No objection.

JUDGE McGUIRE: Entered.

#### (CX Exhibit Number 905 was admitted into evidence.)

MR. OLIVER: CX-929?

MR. PERRY: No objection.

JUDGE McGUIRE: Entered.

### (CX Exhibit Number 929 was admitted into evidence.)

MR. OLIVER: CX-935?

MR. PERRY: No objection.

JUDGE McGUIRE: Entered.

## (CX Exhibit Number 935 was admitted into evidence.)

MR. OLIVER: CX-1109?

MR. PERRY: No objection.

JUDGE McGUIRE: Entered.

### (CX Exhibit Number 1109 was admitted into evidence.)

MR. OLIVER: CX -1129?

MR. PERRY: No objection.

JUDGE McGUIRE: Entered.

### (CX Exhibit Number 1129 was admitted into evidence.)

MR. OLIVER: Thank you, Your Honor.

JUDGE McGUIRE: Mr. Perry, you may proceed with your examination.

MR. PERRY: Thank you, Your Honor.

#### CROSS EXAMINATION

BY MR. PERRY:

- Q. Mr. Crisp, are you ready?
- A. Yes, sir.
- Q. When we finished or Mr. Oliver finished just before lunch, he asked you a series of questions about whether or not you had informed JEDEC that you believed that Rambus could obtain patent coverage over this list of technologies that he put on that piece of butcher paper.

Do you remember that?

A. Yes, sir, I do.

Q. Well, I want to follow up on that just before I get started with the rest of my questions and ask you with respect to each one a couple of questions.

Can you see the list from there?

- A. Yes, sir, I can.
- Q. During the time that Rambus was a JEDEC member, did you ever see a Rambus patent or patent application with claims that would read on an SDRAM with low voltage output swings as that technology was being discussed at JEDEC?
  - A. No.
- Q. While Rambus was a JEDEC member, did you ever see a Rambus patent or patent application with claims that would read on an SDRAM that had programmable CAS latency as that technology was being discussed at JEDEC?
  - A. No.
- Q. While Rambus was a JEDEC member, did you ever see a Rambus patent or patent application with claims that would read on an SDRAM that had programmable burst or programmable wrap length as that technology was being discussed at JEDEC?
  - A. No.
- MR. PERRY: Let me -- may I approach and turn the page?

JUDGE McGUIRE: Go ahead.

BY MR. PERRY:

Q. While Rambus was a JEDEC member, Mr. Crisp, did you ever see a Rambus patent or patent application with claims that would read on an SDRAM with external reference voltage as that technology was being discussed at JEDEC?

MR. OLIVER: Objection, Your Honor, I have been unfortunately slow to object, but these questions are calling for legal conclusions. To the extent he's asking about "reading on," that's a technical, legal patent term.

JUDGE McGUIRE: Do you want to comment on that, Mr. Perry?

MR. PERRY: I was asking for his understanding throughout.

JUDGE McGUIRE: Well, that's not going to do it if it's a question of law. I mean --

MR. PERRY: It was his understanding as to whether or not the claims would read on it, but I'm happy to revise the question --

JUDGE McGUIRE: All right, why don't you revise them to address the objection, if you will.

MR. PERRY: I am going to have to go back and do them again, though.

JUDGE McGUIRE: That depends on his opposition.

Do you -- is your current opposition to all the questions he's asked so far or just to the --

MR. OLIVER: Yes, Your Honor, it is.

JUDGE McGUIRE: Then let's go back.

MR. PERRY: May I?

JUDGE McGUIRE: You may.

BY MR. PERRY:

Q. Let me ask the question as Mr. Oliver phrased it when he finished with you.

While Rambus was a JEDEC member, did you ever see a Rambus patent or patent application over an SDRAM with low voltage output swings as that technology was being discussed at JEDEC?

- A. No.
- Q. While Rambus was a JEDEC member, did you ever see a Rambus patent or patent application with claims over an SDRAM with programmable CAS latency as that technology was being discussed at JEDEC?
  - A. No.
- Q. While Rambus was a JEDEC member, did you ever see a Rambus patent or patent application with claims over an SDRAM that had programmable burst length or wrap length as that technology was being discussed at JEDEC?

- A. No.
- Q. While Rambus was a JEDEC member, did you ever see a Rambus patent or patent application with claims over an SDRAM with external reference voltage as that technology was being discussed at JEDEC?
  - A. No.
- Q. While Rambus was a JEDEC member, did you ever see a Rambus patent or patent application with claims over an SDRAM with two banks as that technology was being discussed at JEDEC?
  - A. No.
- Q. While Rambus was a JEDEC member, did you ever see a Rambus patent or patent application with claims over an SDRAM with dual edge output or input as that technology was being discussed at JEDEC?
  - A. No.
- Q. While Rambus was a JEDEC member, did you ever see a Rambus patent or patent application with claims over an SDRAM with source synchronous clocking as that technology was being discussed at JEDEC?
  - A. No.
- Q. While Rambus was a JEDEC member, did you ever see a Rambus patent or patent application with claims over an SDRAM that had auto-precharge as that technology was being discussed at JEDEC?

- A. No.
- Q. While Rambus was a JEDEC member, did you ever see a Rambus patent or patent application with claims over an SDRAM with on-chip PLL or on-chip DLL as that technology was being discussed at JEDEC?
  - A. No.
- Q. With respect to any of these technologies listed on this demonstrative, interim DX-28, did you, while Rambus was a JEDEC member, know one way or the other whether Rambus had patents or patent applications with claims over an SDRAM with any of those features?
  - A. No.
- Q. I want to take you back to 1992. Was it in 1992 -- just a little background. Was it in 1992 when you first started attending JEDEC meetings on behalf of Rambus?
  - A. Yes, sir, it was.
  - Q. Had you ever been to a JEDEC meeting before?
  - A. Yes, I had, one time.
  - Q. One time. Was that before you came to Rambus?
  - A. Yes, sir, that's correct.
- Q. Now, when you came to Rambus, what was your title?
  - A. DRAM project manager.
  - Q. What time was that, again?

- A. That was in early October of 1991.
- Q. All right. And how long did you remain a DRAM project manager at Rambus?
- A. I think it was a little  $\mbox{--}$  well, I  $\mbox{--}$  I changed

jobs in March of '93 within the company, so however much time that was, about a year and a half, something like that.

- Q. When you say you changed jobs, did you leave Rambus?
- A. No, sir, I changed departments, had a different job function.
- Q. All right. So, is it correct that you were in the engineering department from October '91 to March '93?
- A. Yes, that's correct, until sometime in March.

  It was sometime during the middle of March when I changed departments.
- Q. What were your principal duties and responsibilities while you were in the engineering department at Rambus in that time period?
- A. Well, my principal responsibilities were overall project management and staffing for all the DRAM projects that we were engaged with the various Rambus licensees that we had at the time. Those were my primary responsibilities.

- Q. And when you say "DRAM projects," is that RDRAM?
  - A. Yes, sir, that's correct.
- Q. In connection with -- in connection with your engineering responsibilities, did you have occasion to meet with or talk with Lester Vincent?
  - A. Yes, I did.
- Q. What about your engineering responsibilities led you to talk or meet with Lester Vincent?
- A. Many of the people that worked for me were inventing things, and part of my responsibility was to ensure that we were getting patent applications well, at least disclosures of what we thought we had invented to the patent attorney so that he could write up patent applications and file them.
- Q. When you say "disclosures" in that answer, what does that mean?
- A. I'm sorry, that's a technical term. Basically when somebody invented something, we had a practice of essentially writing up on a few sheets of paper what the invention was and what we thought the key elements were so that the attorney had something to go by when he wrote the patent applications.
- Q. Now, as -- did you have an understanding one way or the other at the time about whether these

inventions that your engineers were working on were part of the original Farmwald-Horowitz patent application?

- A. I'm sorry, would you ask the question again?
- Q. Yeah. Did you have an understanding when you were doing this engineering work that the inventions your engineers were working on were independent inventions that were going to be filed separately, or were they going to be filed as part of the Farmwald-Horowitz original application?
- A. No, these were new inventions that would be filed separately with new patent applications.
- Q. In addition to talking with and meeting with Lester Vincent about these new inventions, did you from time to time meet with him or talk to him about some ideas you had for the Farmwald-Horowitz application?
  - A. Yes, sir, I did.
- Q. And let me show you some of Lester Vincent's notes that Mr. Oliver showed you, if we could bring up CX-1942.

May I approach?

JUDGE McGUIRE: Yes.

BY MR. PERRY:

Q. Now, Mr. Oliver represented yesterday that the date on this was March 27, 1992, may have been the day

before yesterday at this point, and said these were Mr. Vincent's notes of a conference with you and Mr. Roberts, and I want to focus you on something that he asked you to look at, and that's the bottom half that begins with, "I said there could be."

Now, read that to yourself, if you would.

- A. (Document review.)
- Q. Did Mr. Vincent at this meeting advise you or Mr. Roberts not to go to JEDEC meetings?
  - A. No, sir, he didn't.
- Q. Did you take away a message from the meeting with Mr. Vincent?
  - A. Yes, sir, I did.
  - Q. And what was the message you understood?
- A. Well, the two key things that I walked away from the meeting understanding was that Rambus should not go and promote a standard, and we should not mislead JEDEC into thinking that we wouldn't enforce our property rights.
- Q. Did you do anything with the advice he gave you?
  - A. Yes, sir.
  - Q. What did you do with it?
  - A. I followed it.
- Q. I want to -- did you -- how long did you follow

it?

- A. I followed it throughout the duration of the time that I attended JEDEC meetings.
- Q. Now, I want to show you a document close to the end of that time period that Mr. Oliver also showed you, and that's CX-837.

May I approach?

JUDGE McGUIRE: Yes.

BY MR. PERRY:

- Q. Is this an email that you wrote in about September 23, 1995 to Mr. Diepenbrock and other folks at Rambus?
  - A. Yes, it is.
- Q. And was this right after Mr. Diepenbrock joined, September 1995?
- A. Yes, sir, I believe he joined sometime in 1995 -- or September 1995.
- Q. Let me ask you to focus on the -- some of the portions that Mr. Oliver did ask you about, and let's start with at the bottom of this first page just after the break marks where it says, "Having said all of that." Let's pull up that paragraph, just the paragraph.

Now, just for background, this says, "Having said all of that, Tony brings up a good point regarding

our patent position within the standards organizations."

Do you see that?

- A. Yes, sir, I do.
- Q. And then it goes on to say, "At the time we began attending JEDEC we did so to learn what the competition was working on and what sort of performance systems using that technology would be able to achieve," goes on from there.

Do you see that?

- A. Yes, sir, I do.
- Q. Now, look at, if you could, at the top of the next page, the first full paragraph. Now, Mr. Oliver asked you if a group within Rambus had decided not to disclose patent applications to JEDEC. Do you remember that question? Do you remember the question that he asked you?
  - A. I think I remember that being asked today.
- Q. Well, the record will show it. Let's look at this paragraph. It says, "During the beginning of this period, we had no issued patents."

What period is that talking about?

A. Well, that was -- that was when we first began attending or when I first began attending JEDEC meetings. That was in early 1992.

Q. "During the beginning of this period, we had no issued patents."

Do you see that?

- A. Yes, sir, I do.
- Q. Then you said, "We decided that we really could not be expected to talk about potential infringement for patents that had not issued both from the perspective of not knowing what would wind up being acceptable to the examiner, and from the perspective of not disclosing our trade secrets any earlier than we are forced to."

Do you see that?

- A. Yes, sir, I do.
- Q. Who had you learned that information from?
- A. Well, that was primarily from Mr. Vincent, as I recall.
- Q. When you talk about this decision in this paragraph, is that somehow related to the conversation you had with Mr. Roberts and Mr. Vincent back in March of '92?
- A. I'm not sure of the date, but it would have been in a meeting with them, yes.
- Q. Now, in the rest of this page, you talk about patents and disclosure of patents. Is that right?
  - A. Let me read it, sir.

- Q. Sure, just read it to yourself.
- A. (Document review.)
- Q. Let me ask a different question. Is there anything in the rest of this memo after that paragraph that talks about patent applications?

Let me see if I can cut through this, Mr.

Crisp. I'm trying to hurry it up. Let me focus on a different issue.

In September of 1995, that was when you had that JEDEC meeting where you brought in this letter about your response to the JEDEC questions about SyncLink. Do you remember that?

- A. Yes, sir, I do.
- Q. In connection with your efforts to come up with a response to the questions that had been asked to you at the May 1995 meeting, did you do anything to get any information about the JEDEC patent policy?
  - A. Yes, I did.
  - Q. Tell us what you did.
- A. I contacted Mr. Townsend, and I had a conversation with him asking him, among other things, what written documents I could get that would better help me understand what those policies were.
- Q. Now, the first day you were here, I think that was Tuesday of this week, Mr. Oliver asked you about

JEDEC Manual 21-I, and you said you had gotten it, and he showed you the publication date of October 1993, and you said you had gotten it well after that.

When did you get 21-I?

- A. I don't remember the exact date, but it was after that meeting in May of 1995 and before the September meeting of 1995.
  - Q. Who provided it to you?
  - A. Mr. Townsend did.
- Q. And as you understood it, was he providing it to you in response to your inquiry that you just described?
  - A. Yes, that's right.
- Q. And you told Mr. Oliver on Tuesday that he had given you two manuals, right?
  - A. That's correct.
- Q. What was the other manual that you got from Mr. Townsend?
  - A. It was the JC-42 Members' Manual.
- Q. And did you look at both manuals when you got them?
  - A. Yes, sir, I did.
- Q. Let me show you the Members' Manual. It's RX-507.

May I?

JUDGE McGUIRE: Yes.

BY MR. PERRY:

- Q. When you got this, did you understand the purpose of the 42 -- the JC-42 Members' Manual?
  - A. Well, my -- yes, yes.
  - Q. What was your understanding?
- A. Well, my understanding was that it was to be used as a guide for members of JC-42 subcommittee.
- Q. And did you -- did you review it with any purpose in mind?
  - A. Yes, sir, I did.
  - Q. What was your purpose?
- A. Well, my purpose was to learn what the patent policy was.
- Q. Well, would you look on page -- I think it's page 15 of the exhibit, but my copy doesn't have numbers, but in the lower right-hand corner, it says, R156900, if you could find that page.
  - A. Yes, sir.
- Q. And I'll ask you to look at the paragraph numbered 4.1, First Presentation, and let's pull that up. Did you read this paragraph when you were reviewing this back in the summer of 1995?
  - A. Yes, sir, I did.
  - Q. Did you reach any conclusion -- did you arrive

at any understanding with respect to the JEDEC patent policy as a result of reading this paragraph?

- A. Yes, I did.
- Q. What was that understanding?
- A. My understanding was that presenters, at the time of their proposal, were required to disclose both patents as well as patent applications they were aware of that was in their company that would be required by the standard.
- Q. Now, did you also read the patent-related sections of Manual 21-I that Mr. Townsend gave you?
  - A. Yes, sir, I believe I did.
- Q. Did you get any understanding about obligations of non-presenters, people who weren't proposing technology for standardization, from that manual?
  - A. Yes, sir.
- Q. And was that the first time you had gotten 21-I, the summer of '95?
  - A. Yes, sir, that was.
- Q. What conclusion or understanding did you get after reading 21-I and JC-42 Members' Manual together about obligations of non-presenters?
- A. Non-presenters were obligated to disclose any known patents they had at the time of the committee letter ballot if those patents were required to -- were

required by the standard.

- Q. And did you have any understanding at any point in time while you were at JEDEC that there was any obligation to disclose patents or patent applications by non-presenters before the time of the committee letter ballot?
  - A. I'm sorry, would you ask the question again?
- Q. Yeah. At any time while you were a JEDEC representative on behalf of Rambus, did you ever believe that there was an obligation on the part of a non-presenter to disclose either a patent or a patent application prior to the time of the committee letter ballot?
  - A. No, sir.
- Q. Now, I want to show you another document that Mr. Oliver asked you about I think today, and it's in CX-711, which is that big collection of emails that's in front of you. If you'll pull up page 187, do you have that in front of you?
  - A. Yes, sir, I do.
- Q. Do you recognize that to be a December 5, 1995 email from you that Mr. Oliver asked some questions about to you?
  - A. Yes, sir, that's correct.
  - Q. I want to ask you to go over it, take a little

bit longer with it. Let's go to the bottom of the first page of the email where it says, "Townsend of Toshiba," and pull up that portion. Thank you. Read that to yourself, if you could.

- A. (Document review.)
- Q. Well, let me read it. It says, "Townsend of Toshiba (general chairman of JEDEC JC42) and I had lunch together and we talked a bit about the patent policy, and how we could get an R-Module standardized."

Do you see that?

- A. Yes, sir, I do.
- Q. At that point in time, what was an R-Module?
- A. An R-Module was a memory module that had been developed by Rambus that would contain RDRAMs.
- Q. And it says, "how we could get an R-Module standardized."

Were you considering making a proposal at JEDEC to standardize the R-Module?

- A. Yes, sir, that's correct.
- Q. Now, what did that have to do with your lunch with Jim Townsend? What was your purpose in having lunch with him?
- A. Well, my purpose was I wanted to make sure I understood what the patent policy would be if I were to do that and if we might be able to propose the R-Module

for standard without having to propose the RDRAMs as a standard.

- Q. By the time of that December 5, 1995 lunch with Mr. Townsend, had you looked at the JC-42 Members'
  Manual and the 21-I Manual?
  - A. Yes, that's correct.
- Q. And by that time, had you developed some understandings about the obligations of the presenters that you talked about a few minutes ago?
  - A. Yes, that's correct.
- Q. And let's look at the next page, if we could, and pull up the part that starts with, "Sussman," about five lines down and go about 15 lines down from that. Thank you.

And after you had lunch or at the same meeting, the same JEDEC meeting, I don't know if it was after or before, you talked to Howard Sussman, right?

- A. Yes, sir, that's correct.
- Q. And he was with NEC at the time?
- A. Actually, he was working for Sanyo by that time.
  - Q. Sanyo, that's right.

And did he tell you something about what the definition was of "reasonable license fees and royalties" under the JEDEC patent policy?

- A. Yes, sir, he did.
- Q. What did he say?
- A. What I remember him telling me was that "reasonable" meant almost anything we wanted it to mean.
- Q. Did he say that JEDEC had some role in determining what "reasonable" was?
  - A. No, sir.
- Q. Did he say that JEDEC didn't have any role in determining --
  - A. Yes, he said that.
- Q. And then you also talked to Mr. Rhoden about the patent policy. Is that right?
  - A. Yes, sir, that's correct.
- Q. And did he say anything to you about the disclosure parts of the patent policy in that meeting, in that conversation?
- A. I need to read this to refresh my recollection, sir.
  - Q. Go ahead.
  - A. (Document review.)
- Q. Let me ask it a different way. Let me push that through.

When you were talking to Mr. Rhoden of VLSI, did you explain to him why you were asking questions?

- A. I believe I did, yes.
- Q. What did you say?
- A. I told him that I was giving consideration to promoting or proposing an R-Module as the JEDEC standard.
  - Q. And did Mr. Rhoden respond to you?
  - A. Yes, sir, he did.
- Q. And let me just read what the email says. It says, "He says the same thing as Sussman: We can say on a case-by-case basis that we will abide by the policy where it is relevant, we can say when a showing is made that there may be patent activity in that area."

Do you see that?

- A. Yes, sir, I see that.
- Q. Did you have an understanding of whether he was responding to your inquiry about getting the R-Module standardized?
  - A. Yes, sir.
- Q. What was your understanding? Was it your understanding that that's what he was talking about?
- A. Yes, that's what he was talking about. He was answering my question.
- Q. So, then when we get to the next line -- pull up four or five -- when we get to the next line in

this, it says, "So the conclusion I reach here is that we can abide by the patent policy on a case-by-case basis, are free to set the terms of our license arrangements to what we like (as long as we agree to license all-comers to build our modules), and we give up nothing else in the process."

Do you see that?

- A. Yes, sir, I do.
- Q. Were you referring to the R-Module standardization possibility in that line?
  - A. That's correct.
- Q. And then it says, "So the patent policy is something that you deal with on a ballot by ballot basis as Sussman had recently advised me."

Do you see that?

- A. Yes, sir, I do.
- Q. Is that a reference to the R-Module standardization possibility?
  - A. That's correct.
- Q. And then you say, "Personally, I don't think this is nearly as onerous as some of us had earlier believed."

Why do you say that?

- A. Well, I --
- Q. Why did you say that?

- A. I'm sorry?
- Q. Why did you say that?
- A. The reason I said that was a number of us had believed that we couldn't charge a royalty higher than 1 percent.
  - O. If what?
- A. If -- if we were to license our patents to all-comers for building a product that we had proposed as a standard.
  - Q. Do you know where that belief had come from?
  - A. I don't know, sir.
- Q. Okay. And then it goes on, "As long as we mention that there are potential patent issues when a showing or a ballot comes to floor, then we have not engaged in inequitable behavior."

What did that refer to?

- A. Well, that -- that referred to our obligation as a presenter to make any required patent or patent application disclosures at the time that we made our proposal for one of these ballots, for a standard.
- Q. And then the -- jumping one sentence, let's go to the one that says, "The things." It says, "The things --" this is the part that Mr. Oliver read to you. "The things that we should not do are to not speak up when we know that there is a patent issue, to

intentionally propose something as a standard and quietly have a patent in our back pocket we are keeping secret that is required to implement the standard and then stick it to them later (as WANG and SEEQ did). I am unaware of us doing any of this or of any plans to do this."

In that section that I just read, what were you referring to?

- A. Well, I was referring to what we would have to do and what we should not do in the event that we were to propose the R-Module as a standard.
- Q. Now, was there a decision made at Rambus not to propose the R-Module for standardization?
  - A. Yes, there was.
- Q. Let's go back, if we could, for a second to that March 1992 Lester Vincent notes that's in front of you. That was CX-1942. Just one page of handwritten notes from March 1992.

Do you see in the second bullet point, it says, "Allen is ordering JEDEC bylaws"?

Do you see that?

- A. Yes, sir, I do.
- Q. Now, I want to show you the EIA Legal Guides that Mr. Oliver asked you to look at. That's CX-204.

May I?

Do you remember that he asked you to look at these Legal Guides?

- A. Yes, sir, I believe I remember that.
- Q. I want you to look at a couple of sections that we didn't look at earlier this week. If you will look at 204-3, and if you'll look under the heading, it says, "General Guides Applicable to all EIA Activities."

Do you see that?

- A. Yes, I do.
- Q. And it's a little hard to read, the italicized part. "This Part I includes general guides applicable to all Electronic Industries Association activities."

Do you see that?

- A. Yes, sir, I do see that.
- Q. And I think you told Mr. Oliver that it was your understanding that JEDEC activities were conducted under the EIA Legal Guides. Is that what you recall?
  - A. Yes, sir, that's what I recall.
- Q. Now, if we look down at Section A, Improper Activities and Programs, do you see that heading?
  - A. Yes, sir, I do.
- Q. And then it says, "EIA activities or programs relating to any of the following subjects are improper and are not permitted."

Do you see that language?

- A. Yes, sir, I do.
- Q. And look down at item 5. It says, "Programs involving the exchange of company information relating to future plans affecting the design, research and development, production, and distribution or marketing of products are also improper."

Do you see that?

- A. Yes, sir, I do.
- Q. Now, look on the next page, page 4, and look under Section B on the right side, Statement of Policy, and that says, "The following statement of policy, reflecting the basic objectives of all standardization programs, shall be included in all EIA standards."

Do you see that?

- A. Yes, sir, I do.
- Q. And then the second paragraph under that says, "Standards are proposed or adopted by EIA without regard to whether their proposal or adoption may in any way involve patents or articles, materials, or processes."

Do you see that?

- A. Yes, I do.
- Q. When you first joined JEDEC, did anyone at any JEDEC meeting in 199 -- in the spring of 1992 -- let me

back up.

You went to a task group meeting in February '92, is that right, in Santa Clara?

- A. Yes, sir, that's correct.
- Q. And you went to an April '92 meeting in Dallas, right?
  - A. Yes, sir, that's correct.
  - Q. Of the task group, correct?
  - A. Yes, that's correct.
- Q. And we've seen your notes from that one. And you went to your first official meeting in May 1992, right?
  - A. Yes, sir, that's correct.
- Q. At any of those three meetings, did anyone at the meeting suggest that JEDEC was not following that basic objective, which is, "Standards are proposed or adopted by EIA without regard to whether their proposal or adoption may in any way involve patents"?
  - A. I don't remember that happening, sir.
- Q. Well, let's talk now about the -- about some of the events that happened chronologically that Mr. Oliver took you through, and I'm going to start with that April 1992 task group meeting in Dallas that you said you attended.
  - I'll show you your -- what you have identified

as an email or a memo from that meeting, CX-1708.

May I?

JUDGE McGUIRE: Yes.

BY MR. PERRY:

Q. I just have a couple of questions about this one.

This was April 1992. Did Rambus have any issued patents on anything as of April 1992?

- A. No, sir.
- Q. If you look at paragraph 2 on the first page, and pull up that -- that -- there you go, thank you, Matthew.

Mr. Oliver asked you to look at that paragraph as well, and that says in the second sentence that, "Hardell from Austin had a proposal for what was basically an asynchronous DRAM with a dual edge triggered output register."

Do you see that?

- A. Yes, sir, I do.
- Q. Now, was Gordon Kelley at this meeting?
- A. Yes, he was.
- Q. And these other folks from IBM that you mentioned were also at the meeting?
  - A. Yes, they were there.
  - Q. Did any of the IBM people at the meeting

disclose that IBM had patents relating to their proposal for an asynchronous DRAM with a dual edge triggered output register?

- A. No, they didn't.
- Q. Let's go to the May 1992 meeting, and I'll ask you to look at one of your emails back from that meeting, CX-673.

Do you remember that Mr. Oliver showed you this?

- A. Yes, I do.
- Q. If we look at item number 3, it's about five lines down, and pull up about three sentences.

Do you see where it says, "3, Siemens expressed concern over potential Rambus Patents covering 2 bank designs"?

Do you see that?

- A. Yes, sir.
- Q. "Gordon Kelley of IBM asked me if we would comment which I declined."

Did that happen?

- A. Yes, it did.
- Q. When you declined to comment, did Gordon Kelley or anyone else in the room tell you that under the JEDEC patent policy, you were required to answer that question?

- A. No, no one told me that.
- Q. Did anyone in the room suggest that you had done anything wrong by declining to comment?
  - A. No, sir.
- Q. Now, you described Mr. Kelley in that prior email we just saw from April as a senior statesman for IBM. Did you understand him to have a leadership position with this subcommittee that you were attending?
- A. Yes, sir, he was the subcommittee chairman for the JC-42.3 subcommittee.
- Q. Did he indicate to you at this meeting that he had concluded the week before in a presentation he had made that Rambus was a serious competitive threat to IBM?
  - A. No, sir, he didn't.
- Q. At any time during the time you were going to meetings and Mr. Kelley was the chair of the subcommittee, did he tell you that it was his conclusion that if Rambus became a standard at JEDEC, that IBM would likely suffer competitive harm?
  - A. No, sir, he didn't.
- Q. Now, Mr. Oliver asked you a little bit about --going back to the meeting notes, Mr. Oliver asked you a little bit about some comments that you attributed to

Mr. Sussman, and if we could pull up item 4, if you see item 4.

Mr. Crisp, do you see where it says, "In response to the patent issue, Sussman stated that our patent application is available from foreign patent offices, that he has a copy, and has noted many, many claims that we make that are anticipated by prior art"?

Do you see that?

- A. Yes, I do.
- Q. He also stated, "The Motorola patent predated ours (not the filing date) and it too was anticipated by prior art."

- A. Yes.
- Q. Is that what he said at the meeting?
- A. Yes, that's right.
- Q. Did you have an understanding at the time of what he meant by "prior art," what that term meant?
  - A. My under -- yes, sir, yes.
  - Q. What was that understanding?
- A. My understanding is prior art means that somebody else had invented whatever it was that was of interest prior to the person in question.
- Q. So, what was your understanding of the message that he was trying to deliver?

- A. Well, what I heard him basically saying was that everything that he thought Rambus had invented, somebody else had invented first.
- Q. Did you know at that meeting in May of '92 whether or not, in fact, Rambus had been first with what it thought it had -- with what Farmwald and Horowitz thought they had invented?
  - A. No, I didn't know.
- Q. Let me show you an email dated the next day. It appears to be from Mr. Tate to you, May 7, 1992, RX-293.

May I?

JUDGE McGUIRE: Yes.

BY MR. PERRY:

- Q. And I simply want to know if this is an email that Geoff Tate sent to you in response to your May 6, 1992 email.
  - A. Yes, sir, he did.

MR. PERRY: Your Honor, we would move RX-293 into evidence.

JUDGE McGUIRE: Objection?

MR. OLIVER: No objection, Your Honor.

JUDGE McGUIRE: So entered.

(RX Exhibit Number 293 was admitted into evidence.)

BY MR. PERRY:

Q. Now, let's move forward a bit to the next JEDEC meeting and to a ballot that Mr. Oliver showed you. I'll bring you CX-252A.

May I?

JUDGE McGUIRE: You may.

BY MR. PERRY:

Q. Now, he actually showed you four ballots. This is the one for it says the DRAM mode register.

- A. Yes, sir, I do.
- Q. Dated June 1992. This was a ballot that Rambus actually voted on, correct?
- A. Yes, this is one of the four ballots we voted on.
  - Q. And did you vote at more than one meeting?
  - A. No, sir, just one meeting.
  - Q. And how did you vote on these four ballots?
  - A. We voted the same in that we voted no.
  - Q. On each of the ballots?
  - A. That's correct.
- Q. Now, if you look on page 2 that Mr. Oliver had some questions about, there's four or five boxes, and the last box states, "If anyone receiving this ballot is aware of patents involving this ballot, please alert

the Committee accordingly during your voting response."

Do you see that?

- A. Yes, I do.
- Q. Now, that says "patents." Did you ever see any ballot during the time you were attending JEDEC meetings that asked for disclosure -- well, strike that.

Did you ever see any ballots during the time you were attending JEDEC meetings that had the words on it "patent applications"?

- A. No.
- Q. And as of June 1992, did Rambus have any issued patents covering anything?
  - A. Not -- not by June of 1992.
- Q. Did you have any understanding from any source as of June 1992 with respect to Rambus' position on disclosure of patent applications to anybody?
  - A. I'm sorry, would you ask the question again?
  - Q. That was a terrible question.

Going back to your meeting in the spring of 1992 with Mr. Vincent, do you remember that?

- A. Yes, sir.
- Q. And did you also meet with him from time to time in that time period about these new inventions that your engineers were coming up with?

- A. Yes, that's true.
- Q. Did he at any time give you any legal advice with respect to the disclosure of patent applications?
  - A. Yes, he did.
  - Q. What was that advice?
- A. He told us to not disclose our patent applications. They were confidential.
- Q. Did you have an understanding in that time period of any consequences that might result from disclosure of applications?
  - A. Yes, I did.
  - Q. What was your understanding at the time?
- A. I understood that companies could potentially file interference actions on our patent applications in the patent office; that in certain countries where the rules are first to file, somebody could potentially file a claim before we actually did; and that we basically would be disclosing trade secrets that could work against us in terms of our competitive position in the marketplace.
- Q. Did you do anything with this advice from Mr. Vincent?
  - A. Yes, I did.
  - Q. What did you do?
  - A. I followed it.

- Q. Did you follow it at JEDEC meetings?
- A. Yes, I did.
- Q. Mr. Oliver also showed you a September 1992 Rambus business plan which is CX-545.

May I?

JUDGE McGUIRE: Yes.

BY MR. PERRY:

- Q. Did you prepare this?
- A. No, sir, I didn't.
- Q. Did you prepare any part of it?
- A. No, sir, I didn't.
- Q. If you look on page 22 of this September '92 business plan, do you see where it says, "Corporate Organization, Staffing"? Why don't you pull up that first paragraph down to the policies.

Now, that says, "Rambus currently consists of 42 employees."

- A. Yes, I do.
- Q. Is that consistent with your recollection that in the fall of '92, there were only about 42 people there?
  - A. That's about -- about right.
- Q. Now, if you look down below that -- well, strike that.

In these boxes that we see, is your name in any of those boxes?

- A. No, sir.
- Q. And then if you look down below, it says, "7.2, The Management."

Do you see that?

- A. Yes, I do.
- Q. And then there's a list of some people on that page and the next page as well? You're not listed there, are you?
  - A. No, I'm not.
- Q. And I don't mean to offend you, but did you consider yourself to be part of Rambus management during that time period?
  - A. No, sir, I wasn't.
- Q. Did you consider yourself to be part of Rambus management at any time in the early to mid-nineties?
  - A. No, I didn't consider myself to be.
- Q. Now, let's -- proceeding as best we can chronologically, let's go back to some JEDEC meetings, and let's look at an email that Mr. Mooring apparently sent from the December 1992 JEDEC meeting.

Mr. Mooring came to one or two meetings with you?

A. Yes, he was -- he was there at a couple of

meetings.

- Q. Now, you told us before that you had moved -you had changed from the engineering department to a
  different function. When did you make the move?
- A. It was sometime during approximately the middle of March of 1993.
  - Q. What did you -- what was your new job?
- A. My new job was working in the business development group.
  - O. At Rambus?
  - A. That's correct.
- Q. What were your responsibilities in the business development group?
- A. Well, my primary responsibility was to promote and license Rambus DRAM and Rambus controller technology to the large semiconductor manufacturers.
- Q. And after you moved from engineering over into business development, did that increase or decrease the amount of time you spent talking to Mr. Vincent?
  - A. Oh, it decreased it.
  - Q. By how much?
  - A. Ouite a lot. I don't have a number.
- Q. Well, let's go back then to that December 1992 JEDEC meeting, and I'll show you CX-685.

May I?

JUDGE McGUIRE: Yes.

BY MR. PERRY:

Q. And this is the email that Mr. Oliver identified as having come from Mr. Mooring about what was going on at that JEDEC meeting, and Mr. Oliver asked you about the third paragraph, if we can pull that up, "IBM."

Do you see it says, "IBM raised the issue that they were aware that some 'voting' JEDEC attendees have patents pending on SDRAMs that they have not made the committee aware of"?

Do you see that?

- A. Yes, I do.
- Q. Then it says, "They will come to the next meeting with a list of the offenders."

Do you see that?

- A. Yes, I do.
- Q. Now, in your recollection, did IBM come to the next meeting with a list of offenders, companies that had patents pending on SDRAMs that they hadn't disclosed?
  - A. I -- I don't know.
- Q. Well, let me show you the minutes of the next meeting, which was March 1993, JX-15.

May I?

JUDGE McGUIRE: Yes.

BY MR. PERRY:

- Q. Now, you saw these yesterday, and you told us you hadn't gone to this meeting, right?
  - A. Yes, sir, that's correct.
- Q. This is the meeting Mr. Garrett attended, right?
  - A. Yes, I believe he did.
- Q. I think his name is listed under Others Present.
  - A. Yes, that's right, he did go to the meeting.
- Q. And you told Mr. Oliver that you regularly received JEDEC minutes, and he asked you a few questions about these minutes. Do you remember that?
  - A. Yes, I think I remember that.
- Q. And this is March 1993. I want you to look at page 6 up at the top where it starts, "The Committee."
  - A. I see it.
- Q. And it says, "IBM noted that their view has been to ignore patent disclosure rule because their attorneys have advised them that if they do then a listing may be construed as complete."

- A. Yes, I do.
- Q. Does that refresh your recollection as to

whether or not IBM had come to the next meeting with some list of offenders of the JEDEC patent policy?

MR. OLIVER: Objection, Your Honor, he has already testified he was not at the meeting.

JUDGE McGUIRE: Sustained.

BY MR. PERRY:

- Q. Now, were you at any JEDEC meetings when anyone from IBM said anything about the position they were going to take about the patent policy?
  - A. Yes, I was.
- Q. Let me show you some minutes for a meeting where you were present, JX-18.

May I?

JUDGE McGUIRE: Yes.

- Q. Do you see that this somewhat illegibly says December 1993, JC-42.3?
- A. Yeah, it looks like it says December something or other, 1993.
- Q. And do you see your name about two-thirds of the way down the first page, Richard Crisp from Rambus, correct?
  - A. Yes, I see that.
  - Q. And you were present at this meeting, right?
  - A. Yes, I was.

- Q. In San Diego?
- A. Yes, that's correct.
- Q. Let me point you to JX-18-8, and let's pull up the third to the last paragraph. You might be able to read this better on the screen, but that says, "As a side issue, IBM noted that in the future they will not come to the Committee with a list of applicable patents on standards proposals. It is up to the user of the standard to discover which patents apply."

- A. Yes, I do.
- Q. Do you have any recollection apart from the document of Mr. Kelley, Gordon Kelley, the chair of the committee saying anything about IBM's position with respect to the patent disclosures?
  - A. Yes.
- Q. What do you remember Gordon Kelley saying about the disclosure of patents or patent applications?
  - A. He said he wasn't going to do it.
  - Q. Wasn't going to do what?
  - A. Disclose patent applications.
  - Q. What do you remember him saying?
- A. I remember him saying that IBM was not going to disclose patent applications at the  $\,$ -- at the JEDEC meetings.

- Q. Did you -- did you reach any conclusion from hearing that?
  - A. Yes, I did.
  - Q. What was your conclusion?
- A. The disclosure of patent applications was not a requirement.
- Q. After that meeting in December 1993, did you ever see any IBM representative disclose a patent application at a JEDEC meeting?
  - A. No, sir.
- Q. Are you aware that during that time period, IBM got more semiconductor-related patents issued by the United States Patent Office than any other company?
  - A. No, sir.
- Q. Now, let's just see what kind of stuff Mr. Townsend was showing you folks, if you will look at page 14.
  - A. Which exhibit, sir?
- Q. Of the one you're in, the minutes from December '93.
  - A. That would be JX-18?
- Q. Yes. And does it say, "Please refer to the existing rules of the EIA governing patentable matters, which follow"?

- A. Yes, I do.
- Q. And do you see the attached two pages, pages 15 and 16, which follow?
  - A. Yes, I do.
- Q. Do you recognize this to be the viewgraphs that Mr. Townsend showed at most of the JEDEC 42.3 meetings?
  - A. Yes, I do.
- Q. Well, let's look at the minutes quickly of the next meeting, the March 1994 meeting of the JC-42.3 committee in Orlando. That's JX-19.

May I?

JUDGE McGUIRE: You may.

- Q. Do you see that -- this is one that Mr. Oliver also asked you about. Do you see your name about two-thirds of the way down, it says Richard Crisp?
  - A. Yes, I do.
- Q. Were you present at this March '94 Orlando meeting?
  - A. Yes.
- Q. Let's go to page 4. This is the page where Mr. Oliver had a question for you. It's four paragraphs down from the top where it says, "TI presented." He pointed out to you that, "TI presented a four page clarification to the Committee on their interpretation

of the patent policy. A motion was made as part -- a motion was part of the letter shown. TI then made the motion. The Committee did not second the motion and felt it may be beyond the scope of this Committee. IBM noted that the issue should have been taken to the JEDEC Council because Council has been working on patent policies for some time and are beyond the scope of the Committee."

Do you see that?

- A. Yes, I do.
- Q. Was it your understanding at the time, March 1994, that making a patent policy was something for the JEDEC Council or some higher body as opposed to the 42.3 committee?
  - A. Yes, that was my understanding.
- Q. I want you to follow up on the IBM point that we've already talked about by looking at this attachment from TI, this clarification that Mr. Oliver asked you about, and if you will look at page 27 of the exhibit and pull up the header, it says, "Texas Instruments, Clarification of JC-42.3 Committee's Interpretation of JEDEC Patent Policy."

- A. Yes, I do.
- Q. I want you to look at page 29 and pull up the

carryover paragraph.

Do you see that what TI said there in part is,

"It is perhaps because of the unworkable nature of such
an interpretation that IBM has advised the committee
that in the future it will not come to the committee
with a list of applicable patents as contemplated by
the JEDEC Patent Policy, leaving it up to the user of
the standard to determine which patents apply"?

Do you see that?

- A. Yes, I do.
- Q. Had you heard Gordon Kelley say precisely that?
- A. Yes, I think so.
- Q. Now, I want to go back in time just slightly to May 1993 to another JEDEC meeting. This is JX-16.

May I approach?

JUDGE McGUIRE: You may.

- Q. Do you see your name about two-thirds of the way down these May 1993 meeting minutes?
  - A. Yes, I do.
  - Q. It says, "Richard Crisp, Rambus," right?
  - A. That's right.
- Q. You were present at this meeting in Chicago in May 1993?
  - A. I was.

Q. If you will look on page 5, it says, "Patent Tracking," paragraph 7.

Do you see that?

"Mr. Townsend showed the EIA/JEDEC patent policies and the tracking list --"

- A. Let me find it first.
- Q. Page 7 -- I'm sorry, page 5. Page 5 up at the top, Patent Tracking.
  - A. Yes, I see it.
- Q. "Mr. Townsend showed the EIA/JEDEC patent policies and the tracking list." Then it says, "Chipworks patent analysis service was reviewed (See Attachment E)."

- A. Yes, I do.
- Q. Were you present at the May 1993 meeting for some presentation by somebody from a company called Chipworks?
  - A. Yes.
- Q. Did you have an understanding at the time of what Chipworks was?
  - A. Only a vague understanding.
- Q. That's the best we can get. What was your vague understanding?
  - A. My understanding was they provide

reverse-engineering services and other expert opinion type services for -- for companies.

- Q. For companies trying to figure out what, did you know?
- A. Trying to -- either engaged in litigation or trying to figure out what other companies were doing in their chips. That was pretty much my understanding of what they did.
  - Q. Did it have something to do with patents?
  - A. Pardon?
  - Q. Did it have anything to do with patents?
- A. I didn't really know until I heard this presentation. I was aware they offered reverse-engineering services.
- Q. Let's look at the presentation. It starts at page 25. Do you see this is on Chipworks letterhead dated April 20, 1993?
  - A. Yes, I see that.
- Q. Let me -- it says in the second paragraph, let's focus on that, it says, "I have attached a brief capsule review of some of the patents on your list along with a couple of others which JEDEC may want to track."

Do you see that?

A. Yes, I do, sir.

- Q. And then it says, "I have attempted to merely flag the issue which the patent deals with," right?
  - A. Yes.
- Q. And you were present for this presentation about these capsule issues -- capsule analyses of the patents, right?
  - A. Yes, sir.
- Q. Well, let's look at the next page, and please bring up the third item from the top.

If you will look at the third patent listed, does that appear to you to be a Hitachi patent?

- A. Yes, sir.
- Q. And it says, "Synchronous DRAM related patent."
- A. Yes.
- Q. Then the next patent do you see is also listed as a Hitachi patent?
  - A. Yes, sir.
- Q. And that one also says, "Synchronous DRAM related patent"?
  - A. Yes, sir, it does.
- Q. And then it says, "The patent describes a method of synchronizing the input of the row and column addresses to the operation of a clock signal."

Do you see that?

A. Yes, sir, I do.

Q. Then it says, "Claims 1 and 4 seem to be limited by the requirement for a master Chip Collect signal. Claim 15 does not have this limitation and covers the basic specification for SDRAM. This could be a very powerful patent covering the basic specification for SDRAM."

Do you see that?

- A. Yes, I do, sir.
- Q. When you were in the meeting and this was shown to the JC-42.3 and it was revealed that Hitachi had a patent that appeared to be a very powerful patent covering the basic specification for SDRAM, did you hear anyone in the meeting say that Hitachi had violated any basic or fundamental objective of JEDEC by getting a patent covering the basic specification for SDRAM?

MR. OLIVER: Objection, Your Honor, incomplete question, does not give any information in terms of what patent, when the patent was obtained.

JUDGE McGUIRE: Sustained.

MR. PERRY: All right.

- Q. My question relates to what you heard in the meeting, Mr. Crisp.
  - A. Okay.

- Q. And my question is about what you heard in the meeting when the -- when the fellow from Chipworks showed his little capsule analyses of these two synchronous DRAM-related patents, okay? I'm asking what you heard.
  - A. Okay.
- Q. When it was described to the meeting that Hitachi had "a very powerful patent covering the basic specification for SDRAM," did anyone in the meeting say that Hitachi had violated some basic fundamental objective of JEDEC by obtaining a patent covering the basic specification for SDRAM?

MR. OLIVER: Objection, Your Honor, it assumes facts not in evidence, unclear again whether he's referring to a patent that was obtained before JEDEC did the work, whether it refers to a patent obtained after JEDEC did the work. It's simply unclear what he's asking.

MR. PERRY: Your Honor --

JUDGE McGUIRE: Go ahead.

MR. PERRY: -- I'm just asking if he heard somebody say that in the question.

JUDGE McGUIRE: Overruled. I think that's a good question.

- Q. You can answer it, Mr. Crisp.
- A. No, I didn't hear anything stated like that.
- Q. Did anyone suggest in more general terms that Hitachi should not be trying to get patents that relate to SDRAM because SDRAM was being standardized at JEDEC?
  - A. No.
- Q. Let's look at the next page, and let's pull up the Motorola reference, the third item listed. Do you see that? Are you with me?
  - A. I see it, yes, sir.
- Q. And that says, "Motorola," and then it gives a number, and then it says, "Dynamic Random Access Memory (Synch DRAM)," and then it says, "Synchronous DRAM specification patent." Then it says, "Claim 1 is the most general. It describes the Synchronous DRAM specification in words. It includes a little extra detail of the chip architecture but should be general enough to cover almost any SDRAM design."

- A. Yes, I do, sir.
- Q. Now, thinking back to that meeting where you saw this presentation, did anybody in the room say that Motorola was acting in bad faith or violating any fundamental JEDEC objectives by obtaining a patent broad enough to cover almost any DRAM design?

- A. No, sir.
- Q. Was there any discussion in the meeting when the Chipworks fellow was talking about these SDRAM-related patents that people shouldn't be getting SDRAM-related patents who were JEDEC members?
  - A. No, sir.
- Q. Now, I'm going to move away from JEDEC minutes in a moment, but let me cover some miscellaneous issues that came up in JEDEC that also came up in Mr. Oliver's presentation -- I'm sorry, his examination, and I'll ask you to look at JX-21, except I don't have a copy to give you, so I am going to have to give you mine or ask my friends across the aisle if they have JX-21. Thank you very much.

May I?

JUDGE McGUIRE: Yes.

- Q. And do you see that this appears to be minutes of the JC-42.3 subcommittee from September 1994 in Albuquerque?
  - A. Yes, I do.
- Q. And do you see your name on the second page as attending? Whoops, you know, I think this is the one where the second page is cut off. I think we can probably work together to get a different second page,

but I think there's some information that's been cut off from here.

Do you remember being at this meeting in Albuquerque?

- A. Yes, sir, I remember being there.
- Q. Okay. And Mr. Oliver asked you a few questions about a presentation by NEC, I believe, at this meeting.
  - A. Was that a question?
- Q. Well, I'm trying to find it. Here we go. I lost my tag.

Let me ask you to look at the presentation that Mr. Oliver asked you to look at, which begins on or about page 86, I believe. It's Attachment AA to these minutes, and I believe it begins on page 86.

Now, Mr. Oliver was asking you some questions about the PLL that's referenced in some of these pages. Do you remember that?

- A. Yes, I do.
- Q. And I think on several occasions you answered questions about what you understood the purpose of this presentation to be. Can you just look through these viewgraphs or slides that go up to about page 92, and my question -- before you do that, let me tell you what my question's going to be.

My question's going to be, what was your understanding of what NEC's presentation was all about when you sat there in the meeting and heard it? And please don't get too technical on us, but what was your understanding of what this was all about, this NEC presentation that Mr. Oliver was asking you about?

- A. NEC wanted to define some bits in the 16-meg SDRAM mode register that had not previously been defined by the standard and wanted to define those bits in such a way that they could have new and optional definition. So, in other words, they wanted to create some options for how they might be able to utilize these bits that currently weren't used and not really make that a requirement for the standard. They wanted to, in effect, create some options for the implementation of the standard.
- Q. Was it your understanding at the time that NEC was proposing that JEDEC standardize a requirement for using a PLL or DLL on DRAM?
  - A. That was not my understanding.
- Q. In any event, did this particular presentation ever come to ballot? Did this proposal ever come to ballot?
  - A. No, sir, it never did.
  - Q. Let me jump around a little bit and ask you a

few more questions about some of the things Mr. Oliver showed you, and I'll show you now an October 1995 survey ballot, CX-260.

May I?

JUDGE McGUIRE: Yes.

BY MR. PERRY:

- Q. Now, do you remember looking at this survey ballot which was entitled Future Synchronous DRAM Features? Do you see that? It's October 1995.
  - A. Yes, I do see it.
- Q. I have a general question for you about survey ballots. At any time when you were attending JEDEC meetings, did anyone -- anyone -- at any time suggest that anyone was obligated by any patent policy to disclose any patent-related information in response to a survey ballot?
  - A. No.
- Q. Now, I have a few questions about some of the materials that Mr. Oliver showed you that relate to the Blakely Sokoloff firm's efforts to prosecute some patents, and really it's just a couple of them, and I will want to know if you've ever seen the documents before. These are documents that Mr. Oliver showed you. Let's look at CX-1482 and CX-1988.

May I?

JUDGE McGUIRE: Yes.

BY MR. PERRY:

- Q. Take as much time as you need, Mr. Crisp, and my question for you is, at any time while you were going to JEDEC meetings, did you ever see either of these documents?
  - A. (Document review.) No, I never saw them.
- Q. I'll ask you now to dig out CX-711. That's the big collection of emails. I'll ask you to turn to page 52. Take your time. Have you got it?
  - A. Yes, sir, I do.
- Q. Now, this was not an email that Mr. Oliver asked you about, so I'll ask you to take a look at it just so that you are familiar with it.

Do you see at the bottom of the page, it says, "March 14, 1995"?

- A. Yes, I do, sir.
- Q. Well, why don't you -- why don't you -- what I'm going to be asking you about is the discussion at the top of page 54, but I think you probably should read the bottom of page 53 to yourself as well.
  - A. (Document review.)
- Q. What I'd like to point you to is a statement in -- is this -- well, let me back up.

Is this an email that you prepared in March of 1995 and sent to various folks at Rambus about a JC-16, JC-42.5 report?

- A. Yes, it is.
- Q. And the portion on page 53 is about the JC-16 meeting. Is that right? Starting with the JC-16 --
  - A. Yes, that's correct.
  - Q. Okay.
  - A. That's correct.
- Q. And going on to the top of the next page, and let's pull up that first paragraph, and that says, "Much discussion went forth about why should EIAJ," let's stop there.

It was your understanding that was EIA Japan?

- A. Yes, that was my understanding.
- Q. That's a Japanese standard-setting body you understood?
  - A. Yes, that was my understanding.
- Q. It says, "Much discussion went forth about why should EIAJ be standardizing a high speed interface when all the companies in EIAJ are members of JEDEC."

- A. Yes, I do.
- Q. Then it says that, "Sussman's point was that everyone is in the room at JEDEC meetings, so why

should not JEDEC do the job?"

Then it says -- then it attributes a quote, in quotes, to Wiggers at HP. Do you see that?

- A. Yes, I do.
- Q. It says, "Wiggers --" is that Hans Wiggers?
- A. Yes, sir, it is.

JUDGE McGUIRE: I'm sorry, I didn't hear that last --

THE WITNESS: Pardon me, Your Honor.

JUDGE McGUIRE: It's a little ambiguous.

MR. PERRY: He's pretty tired. I'm going as fast as I can, Mr. Crisp, stay with me.

BY MR. PERRY:

Q. It says, "Wiggers of HP said bluntly 'because JEDEC has been working for over two years to standardize a high speed interface and has not reached consensus, and the Japanese companies are tired of waiting so they will do it themselves.'"

- A. Yes, I do.
- Q. And was that your effort to quote as best you could what Mr. Wiggers said?
  - A. Yes, it is.
- Q. What did you understand his statement to be about when he says a "high speed interface"?

- A. He was talking about the signaling technology that could be used on almost any kind of a chip.
- Q. And was that something that was within JC-16 as opposed to 42.3?
  - A. Yes, that's correct.
- Q. And if somebody said that his quote that's in your email was about DDR SDRAM, would that be true?
  - A. No.
- Q. Let's look, if we could, to an email about another issue that Mr. Oliver raised with you when he was talking about whether or not people believed that the Rambus DRAM cost too much. Do you remember that discussion?
- A. I think I remember something about it -- about that.
- Q. Let me ask you to look in the set of emails to page 31. Do you see down at the bottom an email that starts in July of 1994?
  - A. Yes, sir.
- Q. And if you look at the top of the next page, it says, "Notes are attached from the JC-16 and JC-42.5  $\,$  JEDEC meetings."

- A. Yes, I do.
- Q. Is this an email that you sent to a group of

people at Rambus about some JEDEC meetings?

- A. Yes, I did.
- Q. Let me stop there for a second and ask you some general questions.

In this time period, '93, '94, '95, you were doing business development, is that right, marketing at Rambus?

- A. Business development, yes, that's correct.
- Q. And you were also a JEDEC representative for Rambus, correct?
  - A. That's correct.
- Q. What percentage of your time on the job in those years did you spend in connection with JEDEC-related responsibilities?
  - A. I'd say somewhere between 5 and 10 percent.
- Q. And did that stay true over those three years, or did it vary?
- A. It varied a little bit. I mean, the number wasn't precise, but that's approximately what it was. It was about three or four meetings per year.
- Q. Now, in these meetings, by -- you know, we're talking here about 1994, were you typing these emails on a laptop, sometimes actually in a meeting?
  - A. Yes, sir, that's correct.
  - Q. Did you see other people using laptops in JEDEC

meetings?

- A. Oh, yeah. It was very common. People would rush in there first thing in the morning to get next to an electrical outlet so they could keep their laptops running all day. Very common.
- Q. Did anyone ever suggest to you in the meeting that you were not allowed to report back to your company on what was going on in the meeting?
  - A. No.
- Q. Well, let's move on from those general questions to talk about this particular email from the JC-16 and JC-42.5 meeting in July of 1994, and you'll remember I introduced this by saying I was going to talk about the cost of Rambus, and I want you to look at page 34 and a portion near the -- actually, this is a portion that Mr. Oliver did talk to you about, I believe, down towards the bottom where it says, "Even Mr. Sync DRAM Desi Rhoden"?
  - A. Yes, I see that.
- Q. And you say that Mr. Rhoden says they're going to have a hard time getting sync parts introduced and used. His customers tell him they want the cheapest memory solution, period.

Do you see that?

A. Yes.

Q. And then it says in your email, "The implication here is that customers are willing to leave performance on the table in exchange for having lower cost systems," right?

Do you see that?

- A. Yes, that's right.
- Q. And Mr. Oliver pointed that out to you in his examination, right?
  - A. Yes, I think I remember that.
- Q. Well, I want you to look at the next few sentences. It says, "This may play into our hands regarding lower cost Pentium systems (the ones that will sell in high volume)."

- A. Yes, I do.
- Q. And then read that paragraph to yourself about system cost and cost of Rambus versus competitors, and then I want to ask you what point you were making in that email.
  - A. (Document review.)
- Q. What point were you making to the executives back at Rambus when you were talking about costs?
- A. The point that I was making was that if systems were built using the Rambus technology, they just didn't take up as much real estate area on the PC

board, and so that all of the key functions that you found in a PC at the time, which were on both the main board as well as the plug-in cards, could all be put on the -- just the main board without having to use any plug-in cards, because there was plenty of room by using the really small Rambus footprint chips to put all that function just on one PC board inside the computer, that that should make a lower cost computer, and that should be attractive for the very high volume, cost-sensitive applications.

- Q. And was that something you were telling your licensees and customers and prospective customers?
- A. Yes, I was. I spoke to a number of companies about that -- about that concept.
- Q. Let me ask you something about this architectural issues document that Mr. Oliver showed you. It's CX-1821.

May I?

JUDGE McGUIRE: Yes.

- Q. This won't take long. Directing you to 1.2 on the first page, Pressure Points?
  - A. Yes.
- Q. And there are some letters or acronyms or something down there, and one of them happened to be

RDC.

- A. Yes.
- Q. And he asked you if that was you, and you said it wasn't you.
  - A. That's correct.
  - Q. Do you know what RDC means in this document?
  - A. Yes, sir, it means Rambus display controller.
- Q. Is that some kind of device that Rambus was thinking about making?
  - A. Yes, we were having discussions with --
  - Q. Just yes or no, Mr. Crisp.
  - A. I'm sorry, the answer is yes.
- Q. But it wasn't you, was it? You weren't the pressure point?
- A. That's correct. It was actually a proposed chip.
- Q. All right, let's talk a little bit -Your Honor, this would be a good time for a
  short break.

JUDGE McGUIRE: Yes, I think it would be. It's 25 to. Why don't we break for 15 minutes, and we'll return here at 10 until 4:00. Off the record.

## (A brief recess was taken.)

JUDGE McGUIRE: Mr. Perry, you may proceed with your examination.

MR. PERRY: Thank you, Your Honor. My anticipation is that I'm going to be finished by 5:15.

JUDGE McGUIRE: Fine.

BY MR. PERRY:

- Q. Mr. Crisp, I'm going to change the subject again, move around some in time, and I want to talk now about SyncLink, which we spent some time on yesterday afternoon, and you were asked to describe SyncLink just a little bit, and I want to have you give just a minute of background about what you understood the SyncLink device to be.
- A. Okay, I'm trying to figure out what you're looking for.
  - Q. Well, was it a memory device?
  - A. Well, it was actually --

MR. OLIVER: Objection, Your Honor, if I could ask for a time clarification on this.

- Q. Sure, let's talk about 199 -- 1995.
- A. Okay.
- Q. In the spring of 1995, the summer of 1995, was it a memory device?
- A. It was a proposal for a memory device. It was actually an unfinished proposal. It was just beginning.

- Q. And was there a group of companies trying to come together to develop this memory device?
- A. Yes, that's right, a group of companies and then some individuals.
- Q. Did you have an understanding of what kind of time frame they were talking about it being available in the marketplace? Was it going to be available the next month, the next year, three years down the road? Did you have an understanding?
- A. Well, they were -- I guess that was one of the points of confusion. There was a -- sort of a representation that it would be a year or two years away. Other people like I thought it might be five years away, three years away. At any rate, it was going to be more than a year away from the time that they actually firmed up their spec.
- Q. And you were attending some of these SyncLink meetings at least in early to mid-'95. Is that correct?
  - A. Yes, that's correct.
- Q. And you would send some emails about the SyncLink meetings, some of which we looked at yesterday, right?
  - A. Yes, sir, that's correct.
  - Q. And I think you testified yesterday that you

viewed it as a potential competitor to RDRAM.

- A. Yes, sir, that's correct.
- Q. Well, let me show you some of those emails that you were shown yesterday about SyncLink, and this first one is dated February 26th, 1995, CX-783.

I've got an extra, Geoff.

May I?

JUDGE McGUIRE: Yes.

- Q. Is this an email that you prepared in February of 1995 with the heading "Farhad Tabrizi/ Hyundai/SyncLink"?
  - A. Yes, sir, it is.
  - Q. And Mr. Tabrizi was who at the time?
- A. I forgot his exact title. I think it was something like marketing manager for Hyundai Semiconductor.
  - Q. And was he based in this country?
  - A. He was based in San Jose, California.
  - Q. Where was Hyundai's home base at that point?
- A. They were located -- I forgot which city, it might have been Seoul, but they were in Korea. They were a Korean company.
- Q. And he had some position at Hyundai here in this country?

- A. Yes, Hyundai Electronics America, HEA as they called it.
- Q. And you saw him at JEDEC meetings as well as at SyncLink meetings, right?
  - A. Yes, that's correct.
- Q. Now, let me just get some background on this particular email, and let's pull up the fourth paragraph. You can read that yourself, Mr. Crisp.

It says, "Anyway I think that this development could create a lot of problems for us by confusing the market again for the nth time, and if it appeared that TI and Hyundai and a few others decided to jump on that bandwagon, we could suffer an airwar setback that could result in delaying the main memory design in cycle."

Do you see that?

- A. Yes, I do.
- Q. And that was something I think we looked at yesterday afternoon.

Then I think Mr. Oliver asked you to look at the last paragraph on this page that says, "One angle we can take is to address the issue head-on with the Korea folks," and then you describe in that paragraph, which goes on to the next page, what you meant by that. Is that right?

A. Yes, that's right.

- Q. And when you -- when you were talking about addressing the issue head-on with the Korea folks, was one of the things you were talking about is warning them about they might run into some intellectual property that Rambus owned in the future?
  - A. Yes. Yes, that's right.
- Q. And I think Mr. Oliver asked you to look at the last sentence in that paragraph that says, "And then tell them that when they get finished, they will probably find themselves mired in a big intellectual property trap which may result in higher royalties being paid to Rambus than if they simply license the technology and use it for 100% compatible products."

- A. Yes, I do.
- Q. Now, let me ask you, who was setting that trap as you understood the email you were writing?
- A. Well, it was -- my belief is that Mr. Tabrizi was setting the trap.
- Q. I want you to explain that, because Mr. Tabrizi worked for Hyundai, so please explain what you meant by that.
- A. Well, Mr. Tabrizi in my opinion was not paying attention to the hard problems facing people that would develop the SyncLink standard both in terms of

underestimating the technical problems and not realizing or maybe not recognizing that as they started to solve the hard technical problems that were really identical to the same problems that Rambus had already solved, not recognizing that they were likely to have to resort to the same sort of conventions that Rambus had invented many years before, and so my feeling was is that they were going to really work very hard to go and solve a lot of technical problems we had already solved and that when they got finished, they were going to find that Rambus was going to have -- very well may have patents that covered their solutions to these problems. So, that's why -- that was my concern.

- Q. Now, this email was dated February 26th, '95 and talks about one angle we can take is to address the issue head-on with the Korea folks. Did you, in fact, follow through and address the issues raised in your email with the Hyundai folks in Korea?
  - A. Yes, sir, I did.
- Q. Let me show you a letter produced to us by Hyundai dated April 12, 1995 on Rambus letterhead, RX-555.

May I?

JUDGE McGUIRE: Yes.

Q. Now, I'm going to try, if I can ask for assistance from Mr. Duvall over here, to do a little side by side, if we can bring back up -- do we have that capability? If we can bring back up CX-783, and I want to bring up that last paragraph on the first page.

Is this a letter you wrote to Hyundai?

- A. Yes, it is. I wrote it to certain individuals at Hyundai.
  - Q. Is that your signature at the end?
  - A. Yes, it is.
- Q. And your title then, at least one of your titles, was Asia technology business development manager. Is that correct?
  - A. That's correct.
- Q. And did you write this letter to K. H. Ho and G. M. Han in Hyundai Korea?
  - A. Yes, that's right.
- Q. And was this your effort to address those issues head-on that you had raised in your February '95 email?
  - A. Yes, or at least most of those issues.
- Q. Well, let's see. The first one listed in your email was, "Emphasize the immensely difficult problem that will have to be solved technically to make the proposal work."

Point out, if it appears, where in your April 12, 1995 letter that explanation is in the letter, if it's there. And you can just refer generally to the pages if you find it.

- A. (Document review.)
- Q. Can I help you, Mr. Crisp?
- A. Sure, please do.
- Q. Look at page 5 where it talks about RamLink.
- A. Yes.
- Q. And if you look in the second paragraph under RamLink, do you see about midway through that paragraph that RamLink will be "no simpler to design than a Rambus DRAM, would have the same difficult circuit to develop, would have the same need for a specialized cell," and so on and so forth?
  - A. Yes, I do see that.
- Q. And does that correspond to your suggestion in your February '95 email about explaining all the difficult problems that they are going to have to solve to make SyncLink work?
  - A. Yes, that's certainly a lot of it.
- Q. Well, let's get to what we're talking about here in this intellectual property, and if we can pull up for our comparison the second page of CX-783, and just pull up that carryover paragraph at the top, and

then let's pull up the third paragraph under RamLink.

So, on the screen, we've got the February '95 email on the top part, and at the bottom part, we have got the portion of your April '95 letter.

Did you in your April 1995 letter tell the folks in Korea or Hyundai that since Rambus was the first low pin count, high bandwidth DRAM and since Rambus has filed and had issued a number of very fundamental patents, it seems unlikely that a device such as RamLink could avoid infringing one or more Rambus patents? Did you tell that to Hyundai?

- A. Yes, I did, sir.
- Q. What did you mean by low pin count, high bandwidth DRAM? What's a pin, why is it important to have a low pin count, and why is high bandwidth useful? Give us five minutes.
- A. Okay, a pin, when you make a chip or an integrated circuit, the common way to bring the signals into and out of that chip are through what are called pins. They're just little metal things that kind of look like a sewing pin. And the more they can only be placed so close together on the package that the chip is contained placed within, and the chip itself can only have the places where the pins connect only placed so close together. They can't be less distance

than that. So, the more pins, the larger the footprint or the size of the chip will be when it's -- both in the chip form as well as when it's put in the package.

In the electronics business, the more space that these things occupy, the higher it really costs both to make them as well as to use them in an electronic system. So, that has a cost impact, to have more pins.

Additionally, high bandwidth —— high bandwidth is sort of like what we've seen happen over the years with our PCs when they used to just run Windows 3.1, and they would boot up real slow, and the display didn't look so good, and now we have these really fast PCs, and we have really high-speed internet connections, so it doesn't take forever for something to download. Well, that's sort of the idea of bandwidth. So, it's how many bits you can move into or out of a chip in a certain amount of time.

I guess the best example of that is, like I said, a high-speed internet connection versus using a dial-up modem. So, as a general rule, the higher the bandwidth, the more desirable it is from a user's point of view. And a number of applications that these kinds of chips are used in have a certain minimum amount of bandwidth that's required to get the job done, and if

you can't have a certain amount there, then you're just not going to be able to get the job done, and if it goes beyond it, then it may be beneficial, but you have to have a certain minimal amount.

So, what Rambus had done was to develop a very high bandwidth DRAM so that it could move a lot of data into and out of it quickly and do so with a very small number of pins. So, it actually had the highest bandwidth of any single chip DRAM in the world at the time of --

JUDGE McGUIRE: Okay, I think he's answered your question there.

THE WITNESS: Sorry, sir, sorry.

MR. PERRY: Thank you, Your Honor.

- Q. And that's what you were telling --
- A. Yes, that's what I was telling --
- Q. -- the folks in Korea that Rambus was the first low pin count, high bandwidth --
  - A. Yes, I was.
- Q. Now, let's move on to SyncLink, some of the stuff Mr. Oliver was showing you, and I am going to get back into CX-711, the big email collection. I'll ask you to turn to page 68, and you'll see there's an email that starts at the bottom of that page dated May 24,

- 1995. You talked about it yesterday afternoon, I believe. This is one from the JC-42 meeting that happened in May 1995. Is that right?
- A. Yes, sir, that's -- let me double-check -- yes,

sir, that's correct, May 1995.

Q. Thank you. Well, it's a long email. I want to move forward, if I can, to the SyncLink presentation that's described on page 72, and if you will look up at the top, it says, "Mitsubishi 64-meg SLDRAM."

Do you see that?

- A. Yes, I do.
- Q. And was SLDRAM somehow related to SyncLink?
- A. Yes, that was an abbreviation for SyncLink DRAM.
  - Q. So, S and L -- SL stood for SyncLink?
  - A. That's correct.
- Q. And it says, "Mitsubishi showed a pinout of their desired implementation of SyncLink."

- A. Yes, sir, I do.
- Q. Now, when Mitsubishi showed that, did Desi Rhoden stand up and say he hoped to get a patent on that pinout?
  - A. No, sir, he didn't.
  - Q. Or Hans Wiggers, did Hans Wiggers say that at

the meeting?

- A. No, sir, he didn't either.
- Q. Let's move down to the part that Mr. Oliver showed you, and that's about halfway down, the line that starts, "One of the primary issues."

Do you see that?

- A. I'm sorry, which page?
- Q. The same page, about halfway down.
- A. Yes, I do see that.
- Q. "One of the primary issues is regarding patents. The operative assumption is that there are no patents, which Townsend of Toshiba questioned."

Do you see that?

- A. Yes, sir, I do.
- Q. And then it says, "Rhoden asked Tabrizi to cool the marketing promotion comments in his presentation."

- A. Yes, sir, I do.
- Q. Had Mr. Tabrizi promised that there would be no royalties for SyncLink?
  - A. Was -- did that -- was that in here?
- Q. Yeah -- well, it's a question. I'm just trying to see if you remember that, that's all.
- A. I remember there being a representation that he felt it would be free of royalties.

- Q. Now, if you will look on the next page, and pull up the paragraph that starts at the top with, "Kelley asked." This is something you looked at yesterday.
  - A. Yes, sir.
- Q. It says, "Kelley asked us to state --" it says, "Kelley asked to have us state whether or not Rambus knows of any patents especially ones we have that may read on SyncLink."

- A. Yes, sir, I do.
- Q. And he specifically asked that of Rambus. Is that right?
  - A. He asked -- he asked me that.
- Q. Did he ask you to go back and research and find out?
  - A. I ended up with that assignment.
- Q. Well, did he ask Rambus -- did he ask you as the representative --
- A. He asked me  $\,$  -- he asked me as the Rambus JEDEC representative.
  - Q. To go back and research your company's patents?
- A. He asked me to state whether we would make a comment on our intellectual property position on SyncLink or whether we had any patents that would apply

to it.

- Q. Okay, all right. And as a result of that, did you do anything?
  - A. Yes, I did.
  - Q. What did you do?
- A. I first found out what I could find out about what the JEDEC patent policy was to find out what my obligation was. Then I also talked with some people internally to find out which patents and patent applications would be the best ones to look at to see if we had anything that might already exist that covered the SyncLink spec as we understood it to be, and I took that information with me on a trip that I made to Asia and spent basically the whole plane flight on the way to I think it was Taiwan reading this material.
  - Q. How long was that flight back then?
- A. Oh, it was probably a 12 or 13-hour flight from San Francisco to Taipei. I'm not going to say I read it for the whole flight but, you know, a good portion of the flight.
- Q. And you took both patents and patent applications?
  - A. That's what I remember.
  - Q. And was one of the things that you had seen

about SyncLink is that they were using some form of dual edge clocking?

- A. Yes, sir, that's right.
- Q. Were you looking in part to see if there was any patent coverage, patent applications, patents covering dual edge clocking?
- A. I'm sure I looked for that, among other things.

  I had a list here that I had made.
- Q. Was -- are you talking about the list on page 73?
  - A. Yes, I had --
- Q. Or was there some other list that you made after you talked to people?
- A. Well, I had this list here on page 73, and then I had some other things that I also had thought of in my mind, so I -- I had a few key features that I was looking for to see if I could find that in any of our patents or patent applications.
- Q. And did you reach any conclusions -- after reviewing the patents and patent applications that you took with you on this trip and looked through, did you reach any conclusions about the scope of Rambus' patents and patent applications?
  - A. Yes, I did.
  - Q. What were those conclusions?

- A. Well, I reached the conclusion that we didn't have any patents or pending patents that I could find that were required for the SyncLink proposal as I saw it at that point. I also didn't see that we had anything that applied to SDRAM at the time either. And I also concluded that in a lot of cases, we really hadn't done a very good job of protecting RDRAM, to my both surprise and disappointment.
- Q. Now, when you went to the September 1995 JEDEC meeting and made that presentation of the letter that talked about Rambus' response to the request about SyncLink, had you done that review of Rambus' patents and patent applications before you went to that meeting?
  - A. Yes, I did.
- Q. Well, before we get to that meeting, let me ask you about a different document. Actually, it's within CX-711, and I'll just point you to a different page, and I'll point you to 128, and you were asked about these particular notes. Do you -- are you with me on 128?
  - A. I just got there.
  - Q. All right, well, take your time.

    Do you see they are dated July 11, 1995?
  - A. I'm sorry -- yes, yes.

- Q. You're on page 128, right?
- A. That's correct, yes.
- Q. There's an email that starts on that page that's dated July 12, 1995, right?
- A. Yeah, or it actually says July 11 down where it says "date."
  - Q. Oh, yeah, look at that.
  - A. That's what I was confused about.
- Q. I'm looking at the date at the top. I'm sorry, my fault.

And your subject was, "SyncLink board meeting notes," correct?

- A. Yes, that's right.
- Q. You had been to a SyncLink meeting, right?
- A. That's correct, yes.
- Q. Okay. And Mr. Oliver showed you this yesterday, but I want to ask you about a part of it we didn't see the other day, and that is at the bottom of page 129. Let's pull up everything from, "The talk is going like this," down to the bottom.

Do you see that -- is that a reference -- in that paragraph that I'm asking you to look at, is that a reference to what you heard going on at the SyncLink meeting?

A. I'm trying to find it here in this document.

This is on page 128?

- 0. 129.
- A. Oh, I'm sorry, I'm on the wrong page.
- Q. Sorry.
- A. Yes, I see that, "The talk is going like this."
- Q. "The talk is going like this," and I'm just trying to establish whether or not what you're doing is capturing what you saw going on at the meeting in that paragraph.
  - A. Okay.
  - Q. Is that right? Is that right, you're --
- A. Yes, that's what I was trying to do. I was trying to capture essentially what I saw occurring.
- Q. And here's where I'm headed. It then says, "The talk moved temporarily to patents."

Do you see that? At the very bottom.

- A. Yes, I do.
- Q. What did you mean by "the talk"?
- A. Well, there was -- it was a meeting, and the focus of the discussion was what I was calling "the talk."
- Q. Okay. So, the discussion moved temporarily to patents, and Walther -- who is Walther?
- A. That's Terry Walther. He was a gentleman from Micron.

Q. "And Walther was adamant in pointing out that the bylaws permit the member companies to retain their own intellectual property."

Which bylaws did you understand him to be talking about?

- A. Those were either the SyncLink -- they had this consortium they were forming, I'm not sure if it was formed yet, either that or it was the IEEE bylaws, but anyhow, it was the bylaws under which the group was operating.
- Q. And then you said, "This further strengthens my contention that there will be intellectual property baggage, some will be Rambus, some will come from other companies, some of which are undoubtably in attendance at the meetings. So the way it is likely to work is that if the standard becomes real, ships in volume, that folks will attempt to collect royalties." (Sic)

Do you see that?

- A. Yes, I do.
- Q. Then it says, "This totally shoots Farhad's number one premise that it will be free of patent encumbrances from my perspective."

- A. Yes.
- Q. And did that give you any additional

information as to what you had referred to as Mr. Tabrizi's intellectual property trap?

- A. Well, again, that was my speculation. That was my reading of what I thought would happen in the future, and this further reinforced that belief in my mind, that what I had believed would happen would, in fact, turn out that way.
- Q. Now, one document before we get to the September 1995 meeting, it just happens to fall in this time period, is dated June 1995, RX-580.

May I?

JUDGE McGUIRE: Yes.

- Q. Now, this was produced to us from the JEDEC files. It's dated June 1995, June 30, 1995, to JC-42, and it appears to be an email header. Do you recognize that email header as being one that was used to send out mail to JEDEC members like yourself?
- A. Yes, sir, there was a -- what they referred to as a reflector.
  - O. A reflector?
  - A. Yes.
- Q. Was that some kind of internet email thing back then? To use a technical term.
  - A. It was something that I understood that Mr.

Wiggers at HP had set up so that people that wanted to broadcast an email to the entire JEDEC working group could simply send it to that address, and it would go to everyone.

- Q. And it was at Hewlett Packard was where it was based?
  - A. That's correct.
- Q. All right. And you got information from time to time through that reflector, right?
- A. Yes, I was on their mailing list, and so anything that was sent to the reflector also I believe would have been sent to me.
- Q. And this email says it's from A. Cosoroa. Do you recognize who that is?
- A. Yes, that was Adrian Cosoroa, the Fugitsu representative.
  - Q. To JEDEC?
  - A. To JEDEC-42, that's right.
- Q. And then it says, "The new Patent office site on the WWW --" was that worldwide web?
- A. Yes, that's right. It was kind of a new thing in 1995 for people.
- Q. "The new Patent office site on the worldwide web that Richard Crisp posted some time ago is great for searches."

- A. Yes, I do, sir.
- Q. Do you understand what that reference is to a patent office website that you had posted?
- A. Well, I had mentioned or told somebody in one of the JEDEC meetings that there was a place on the worldwide web where you could search the U.S. Patent Office database for issued patents. I don't know that it was really the U.S. Patent Office that ran that website, but it was some website that had that information.
- Q. And could you search it by like the word "SDRAM" or the word "synchronous" or that kind of thing? What do you remember about that?
- A. It had a pretty -- a pretty good search engine, as I called it, where you could search by inventor's name or patent number or assignee company or key words or any combination of those things --
  - Q. And --
- A. -- depending on how clever you were at writing your search key.
- Q. And that's information you brought to the attention of JEDEC?
- A. That's correct, it -- I believe it was either in the minutes or somehow or another it came up

publicly in JEDEC.

Q. Well, let's look at the September 11, 1995 minutes, JX-27, very briefly that you were shown yesterday afternoon.

May I?

JUDGE McGUIRE: Yes.

BY MR. PERRY:

Q. And I'm just going to ask you one or two questions about the September 11 letter that's attached here at page 26, and I know it's hard to read, but I want to point you to the fifth paragraph which talks about SyncLink being sponsored by an organization with a less stringent patent policy than JEDEC.

Do you see that?

- A. Yes, I do see that.
- Q. And Mr. Oliver asked you about that paragraph, and you say, "Furthermore, they are free to patent whatever they desire," and this is within IEEE?
  - A. Yes, sir, that was -- that was the context.
- Q. "And are not bound to relinquish any of their rights to their patents by presenting their ideas for standardization."

Why did you talk about people who presented their ideas as being a distinction here?

A. Well, because my understanding of the JEDEC

patent policy was that if you were a presenter of a proposal, that you had additional burden in terms of patent application disclosure that you did not have if you were just a member or a person attending the meetings. And the IEEE had a -- had a different requirement in that regard.

Q. Now, you did see I believe it was this morning a letter from IEEE, I don't know if you had seen it before, but let me show it to you again. It's CX-487.

May I?

JUDGE McGUIRE: Yes.

BY MR. PERRY:

Q. Now, I think you were shown this this morning. It appears to be a letter from the IEEE to Geoff Tate that asks Rambus to advise whether or not any of Rambus' patented technology applies to a particular IEEE standard.

- A. Yes, I do.
- Q. And do you know whether that was talking about the SyncLink device that was being thought about to design for the future or something else?
- A. I think it was -- I think the P1596.4 standard was the RamLink and SyncLink standard. They were both carried together in the same standard from my

recollection, and this was in reference to that.

- Q. Okay. Now, you knew a person named David Gustavson who was involved in the RamLink/SyncLink design work, correct?
- A. Yes, my recollection of Mr. Gustavson was he was the person that conducted all those meetings under the P1596.4 working group.
- Q. Well, I want to show you an email that he apparently wrote and was produced to us by the FTC describing a conversation he had with you, and this is CX-3031.

May I?

JUDGE McGUIRE: You may.

- Q. Now, this is a series of emails, I believe, and I'm going to ask you to turn to page 6 of the exhibit.

  Now, I suspect that you haven't seen this before today, so I want you to take a minute, because I want to ask you about this telephone call. It says, "I had a call from Rambus' Richard Crisp," but just take a minute and read that to yourself. Just the first page is all I care about at this point.
  - A. (Document review.)
  - Q. You've had a chance to read this?
  - A. Yes, sir, I have.

- Q. Do you see it says it's from David B. Gustavson to Wiggers? Do you see that?
  - A. Yes, sir.
- Q. And there's a dkv@apple.com. Do you recognize that address?
  - A. Yes, that's David James.
  - Q. Was he at SyncLink meetings that you attended?
  - A. Yes, he was.
- Q. And then I see Bill Vogley, do you see Mr.
- Vogley's name?
  - A. That's correct.
- Q. Was he at SyncLink and some JEDEC meetings that you attended?
  - A. Yes, that's right.
  - Q. And then Farhad Tabrizi you've talked about.
  - A. That's correct.
- Q. And this February 23, 1996 email says, "I had a call from Rambus' Richard Crisp recently, reacting to a draft of --"
  - A. Do you want some help with that one?
  - Q. Yes, please.
  - A. Przybylsi.
- Q. I believe you, "-- annual RAM update, which led him to believe I was misinterpreting Rambus's position relative to RamLink.

"I had heard conflicting reports from the IEEE as to whether Rambus had responded to their request for a clear statement whether Rambus felt the standard conflicted with their patents.

"Crisp explained that they did not respond --"
I'm sorry, "Crisp explained that they did respond, but
their response was basically to the effect that they
were not able to determine at this time whether there
was a conflict."

Was that true, that you couldn't determine at the time that Rambus was responding to the IEEE letter as to whether or not there was, in fact, a conflict with SyncLink?

- A. That was our belief, that it was impossible to make any determination at that point.
- Q. Now, then he says, "We discussed the situation re: patents in general, and seem to be in agreement that standards ought to make no assurance to the eventual user that no patent conflicts are involved."

Do you see that?

- A. Yes, I do.
- Q. Then he goes on to say that, "Crisp's and Rambus's positions were entirely reasonable in this regard," at least as far as he could tell.

- A. Yes, I do.
- Q. Now, does looking at this bring back any memory of a conversation with Mr. Gustavson or Dr. Gustavson in this general time period about the response to the IEEE request?
  - A. No.
- Q. You do know that he was involved with RamLink and SyncLink, though.
  - A. Yes, I do know that, yes.

MR. PERRY: Your Honor, we would move in CX-3031.

JUDGE McGUIRE: Objection?

MR. OLIVER: No objection, Your Honor.

JUDGE McGUIRE: So entered.

## (CX Exhibit Number 3031 was admitted into evidence.)

BY MR. PERRY:

Q. Now, moving a little bit further ahead with respect to SyncLink, one more SyncLink-related email that Mr. Oliver showed you all the way into 1996, and it's at page 183 of CX-711.

Do you recognize this as an August 30, 1996 email that you sent with respect to SyncLink?

- A. Yes. Yes, I do.
- Q. Now, the point that -- the portion that Mr.

Oliver asked you about, and in the interest of time, that's all I'm going to ask you about, is on page 185, and we can pull up the part that starts with, "Finally." You can read that part to yourself.

Let me read it to you. It says, "Finally, I want to again bring up the issue of IP and the importance that we have our issued patents and any pending claims looked at long and hard to do as much as we can to anticipate the SL work."

By SL, did you mean SyncLink?

- A. Yes, sir, that's correct.
- Q. And is it correct that as of the point in time that you're writing this in August 1996 -- well, let me ask you, at the point in time when you're writing this in 1996, August 1996, did you know at that point in time whether or not Rambus had patents or patent applications that covered the SyncLink DRAM or any portion of it? Did you know one way or the other?
  - A. I don't think I did, sir.
- Q. Is that one of the reasons you were saying we've got to take a long and hard look at it?
  - A. Very possibly.
- Q. Well, let me go back to just a few more things that Mr. Oliver covered with you this morning. I think it was this morning. I'm going to show you now CX-858.

What I'm going to be talking about now is the issues that we talked about this morning with respect to Rambus' departure from JEDEC. Are you focused on that? Rambus' withdrawal, Rambus' decision not to go to any more meetings, that's what I mean to talk about.

May I?

JUDGE McGUIRE: Yes.

- Q. If you can please look at this memo just enough to confirm that it's an email that you wrote back in January of 1996.
  - A. Yes, sir, that's right.
- Q. Now, you were asked this morning about the reasons that were talked about in the meeting with Ed Taylor, and this email mentions Mr. Taylor. Who was Mr. Taylor?
- A. He was -- well, T for Taylor was BSTZ. He was one of the guys at Blakely, Sokoloff, Taylor & Zafman, the law firm.
  - Q. He was a named partner?
  - A. If that's the right term.
  - O. His name was in the law firm's?
  - A. Right, exactly.
  - Q. That's what you were trying to say.
  - A. Thank you very much.

- Q. And did you understand him to be a lawyer at Rambus' outside law firm?
  - A. That's correct.
- Q. And you were talking this morning about some of the reasons that were discussed in a meeting where he was present and you were present?
  - A. That's right.
- Q. For either staying in or leaving out -- staying in or leaving JEDEC, right?
  - A. That's correct.
- Q. Okay. Now, I want you to describe more for us about what Mr. Taylor said that you can remember about up sides or down sides or -- what did he say? What did he say, if you can remember, about Rambus and whether or not Rambus ought to leave or stay in JEDEC?
- A. Well, he -- he said that we -- if we could get the information that we got in the JEDEC meetings and the contacts that we had there other ways, that that would be probably advisable to do that. He said that we haven't done anything wrong from our discussion that we had in the room, but he did express a concern that in the event that Rambus found itself in any sort of litigation involving our patents or whatever, that it might be misunderstood by a jury if somebody brought up the fact that we'd been in JEDEC meetings and maybe the

litigation had some involvement with our participation in JEDEC. So, he recommended that, you know, unless there was a real compelling reason for us to continue staying within JEDEC, that we should get out.

Q. Well, if you look on page 2 of your email, and let's pull up the middle paragraph that says, "This is precisely."

The third sentence says, "However court opinions I have read on the subject of Equitable Estoppel and laches give me the feeling that these issues can be avoided by careful planning."

- A. Yes, sir, I do.
- Q. You had actually gone out and read some court opinions?
  - A. Yes.
  - Q. How did you get these?
- A. Mr. Diepenbrock gave me some documents that I guess either were -- I think they were just summaries of some court opinions.
- Q. Okay. Well, what did you mean by that you had the feeling that the issues of equitable estoppel and laches can be avoided by careful planning?
- A. Well, I meant that you should be able to avoid that by doing things properly.

- Q. Now, did you think you had avoided it?
- A. Yes, I did.
- Q. At any point in time while you were going to a JEDEC meeting, while you were going to JEDEC meetings, between whenever it was in early '92 and your last meeting in December of 1995, at any point in time did you get the feeling that you were doing something that violated a policy that was in place at JEDEC, a patent policy that was in place at JEDEC?
  - A. No.
- Q. At any point in time, did anyone at a JEDEC meeting say that any statement you had made violated some JEDEC patent policy?
  - A. No.
- Q. At any point in time, did you hear from anyone at Rambus that they thought you had violated JEDEC's patent policy?
  - A. No.
- Q. Now, I want to look at this February 20, 1996 email, and we're going to have to pull it up on the screen. It was used this morning, CX-068 -- CX-0868. Can you pull up the entire thing? It's not that big.

This was used by Mr. Oliver this morning, and you described it as your February 20, 1996 email. I can use the screen if you would rather have a hard

copy.

A. I would prefer a hard copy. It's easier to read.

JUDGE McGUIRE: Yes.

BY MR. PERRY:

- O. It's real short.
- A. Thank you, sir.
- Q. This is your email where you had put copies of the January JEDEC minutes, 42.3 meeting minutes, in the mail slots of these folks at Rambus, right?
  - A. Yes, sir, that's correct.
- Q. And you said, "Notice the Micron presentation especially the part about the separate transmit and receive clocks." Then you said, "I think we should have a long, hard look at our IP and if there is a problem, I believe we should tell JEDEC that there is a problem."

Did you say that?

- A. Yes, sir.
- Q. And at the time you wrote that, did you believe -- strike that.

At the time you wrote that part that I just read about taking a long, hard look at your IP, did you know at that point whether or not the IP covered the technology that Micron had presented at that meeting?

- A. No, I didn't know.
- Q. Is that why you were suggesting that somebody take a look at it?
  - A. Yes, sir, that's why.
- Q. Was it part of your job responsibilities in 1995 or 1996 to monitor patent prosecution efforts with respect to the Farmwald and Horowitz patents?
  - A. No, sir, it wasn't.
- Q. Let me ask you to look at a different document that we also looked at this morning, and that's the letter that was sent in June of 1996 to JEDEC, CX-887.

May I?

JUDGE McGUIRE: Yes.

BY MR. PERRY:

Q. Now, this is the letter by which, as you understood it, Rambus was officially informing JEDEC that it was not going to pay the 1996 JEDEC dues.

- A. Yes, that's correct.
- Q. Now, the decision had been made, you've already testified, at Rambus to withdraw from JEDEC, the decision had been made -- what was it, December of '95 or January '96 or around that time period?
- A. My recollection is it was near the beginning of 1996 that we actually decided that we were, in fact,

going to leave JEDEC.

- Q. And in the three and a half years or so that you had been attending JEDEC meetings, had you gotten to know some people? You had some friends and acquaintances, right?
  - A. That's true, yes.
- Q. And do you think it likely that at some point in time around the time the decision was made to leave JEDEC that you told some of your friends and acquaintances you were going to not be going to JEDEC meetings anymore?

MR. OLIVER: Objection, Your Honor, calls for speculation.

JUDGE McGUIRE: Sustained.

BY MR. PERRY:

- Q. Did you in January or February or March of 1996 tell some of your friends and acquaintances that you weren't going to be going to JEDEC anymore because Rambus was withdrawing?
  - A. I think that's possible.
- Q. And I want to show you now RX-695, see if that jogs your recollection, and I only have one copy. I'll give you my copy, RX-695.

May I?

JUDGE McGUIRE: Go ahead.

#### BY MR. PERRY:

Q. This was produced to us by Micron, but I understand it to be from Texas Instruments' files.

Micron acquired, as I understand it, Texas Instruments' Memory Division. Will you pull up the "to" and "from" at the time, the Ramesh Gidwani, down to the first paragraph, the end of the first paragraph. Thanks, so I can see it.

Now, I suspect you haven't seen this before today, but I'm just trying to see if this jogs your recollection. This is dated March 22, 1996.

Do you see that, Mr. Crisp?

- A. Yes, I do.
- Q. And it says it's from Bill Vogley. Do you remember him from going to JEDEC meetings?
  - A. Yes, I remember Mr. Vogley.
  - Q. Was he a Texas Instruments representative?
- A. I'm not sure whether he was a representative or not, but he was a person employed by Texas Instruments that frequently attended those meetings.
- Q. And it appears to be written to someone named Ramesh, R A M E S H, do you see that?
  - A. Yes, Ramesh Gidwani.
  - Q. You knew him?
  - A. Yes, I did.

Q. "Ramesh, I have attended JEDEC this week and learned that Rambus has been ousted from JEDEC because of their threats and other grievances presented by members." Then it says, "The IBM representative stated IBM held patents still in effect that cover Rambus and that anybody cross licensed with IBM did not have to worry about their patents."

Do you see that?

- A. Yes, I do.
- Q. Does that refresh your recollection at all that you had let slip to anybody or told anybody that Rambus wasn't going to be attending JEDEC meetings anymore?
- A. Well, it helps me remember -- yeah, it helps me remember a chance encounter I had with a person in Taiwan.
- Q. You told somebody in Taiwan you are not going to go to JEDEC anymore?
  - A. That's right.

JUDGE McGUIRE: Now, who is "somebody in Taiwan"?

MR. PERRY: I was going to ask that, Your Honor.

JUDGE McGUIRE: Please do.

BY MR. PERRY:

Q. Who's the somebody in Taiwan and when did you

tell them?

- A. It was either Mr. Barnum or Mr. McGrath, and I always get those two people confused. They both work for connector companies and would frequently go to JEDEC meetings, and I bumped into one of them at the Cirrus Logic sales office in Taipei, and they were making connectors that we used with the R-Module, so we had some business relationships, and I think I mentioned to whichever of those two gentlemen it was that we were withdrawing from JEDEC.
- Q. Let's move on, if we can, to another few documents to talk about that you were shown this morning. Let's look at CX-919, and this is moving all the way into February of 1997.

May I?

JUDGE McGUIRE: Yes.

BY MR. PERRY:

Q. Now, this is dated February 10, 1997. I think it was represented this morning that it was from Mr. Tate. This is something from a DDR threat assessment meeting.

Do you see that?

- A. Yes, sir, I do.
- Q. And the language that Mr. -- pardon me, the language that Mr. Oliver pointed you to down towards

the bottom, let's look at a little bit more. Let's start with item number 5 and pull up the rest.

That says -- do you see where it says, "Re: IP"?

- A. Yes, sir, I do see that.
- Q. Okay. Then it says, "There are many issued and in-process patents that DDR SDRAMs/SGRAMs might infringe, but with so little hard data and no silicon there are no patents that we can definitely say are infringed."

Do you see that?

- A. Yes, sir, I do.
- Q. Now, this was an internal memo from Mr. Tate to various people at Rambus, including you, right?
  - A. Yes, sir, that's correct.
- Q. Was it consistent with your understanding as of February 10, 1997 that Rambus didn't know at that point in time if a DDR SDRAM device would infringe any Rambus patent or patent application?
  - A. Yes, I think we didn't know.
- Q. Now, Mr. -- the portion that you were asked about this morning, it says, "Action: 1, keep pushing our patents through the patent office; 2, do not tell customers/partners that we feel DDR may infringe our leverage is better to wait."

Did you have an understanding of what -- at the time, when you got this, of what that meant by "leverage," it is better to wait until something happens?

- A. Perhaps a vague understanding. That word can mean different things to different people.
- Q. Well, let's look up above. It says, "There are many issued and in-process patents that DDR SDRAMs might infringe, but with so little hard data and no silicon there are no patents that we can definitely say are infringed," and then in the next sentence after that, it says, "Do not tell customers/partners that we feel DDR may infringe our leverage is better to wait."

Did you have an understanding -- and I'm just asking from your memory -- from reading that what that was a reference to?

MR. OLIVER: Objection, Your Honor, he's already testified he only has a vague understanding, that it means different things to different people.

MR. PERRY: I'm just asking for his understanding, if he can give it to me.

JUDGE McGUIRE: I know we talked about this during complaint counsel's inquiry. I'll let you go into it, but he has already answered on this once, so

if you want to --

MR. PERRY: Well, can I ask him what his vague understanding was?

JUDGE McGUIRE: Yeah, you can ask him that.

BY MR. PERRY:

- Q. What was your vague understanding, Mr. Crisp?
- A. Well, my vague understanding was that from a business perspective, it was better to wait until we were sure, that we would be in a stronger negotiating position with anybody that we thought was an infringer if we were absolutely certain that there was an infringement instead of a -- just a mere suspicion.
- Q. Did you ever have any understanding at any time of the possible consequences of a company making a public statement that a product infringes somebody's intellectual property?
  - A. I had some idea of what that could mean.
- Q. What was your understanding? What was your "some idea"?
- A. Well, if you tell somebody they're infringing a patent and you don't have a patent, I think you can get sued under that, and if you tell somebody they're infringing, they may also still sue you, and it's really important to make sure you're right before you play that card, so to speak.

Q. I want to show you a document to see if you've ever seen it before. This was one shown to you this morning, CX-889.

May I?

JUDGE McGUIRE: You may.

BY MR. PERRY:

- Q. Now, this is one you were shown before, and I don't believe you were asked if you had ever seen it before, so my question to you is whether you've seen this June 17, 1996 letter at any time prior to today.
  - A. No, sir, I haven't.
- Q. Now, let's talk very briefly about the document retention program that Mr. Oliver talked to you a little bit about, and I want to show you again the document that he showed you, CX-1264.

May I?

JUDGE McGUIRE: You may.

BY MR. PERRY:

- Q. Now, you talked this morning about

  JEDEC-related materials. What -- can you describe for

  us what hard copy paper JEDEC-related materials that

  you had in your possession as of 1998?
- A. Yes, I had meeting minutes, such as I've been handed here in this proceeding.
  - Q. By "meeting minutes," what do you mean? Whose

meeting minutes?

- A. I mean these documents that were supplied from the JEDEC office that were mailed to me.
  - Q. Okay.
- A. These kinds of things, I had a whole collection of those. I had a number of committee letter ballots that had been mailed to me, most of which were still in their original envelopes. I think that was pretty much all the paper material I ever had from JEDEC. It's possible —— wait a minute, there was one other thing I had. I had a binder that contained the Standard 21, which I think were their pinouts and other kinds of standards that had been passed. I believe I kept that one, but...
- Q. And the ballots and the unfilled-out ballots and the official JEDEC meeting minutes, did you throw those away as part of this --
- A. Yes, I did. Those were the things that I threw away.
- Q. And that's what you threw away as part of the document retention program?
  - A. That's correct.
- Q. Did you have at the same time electronic copies of other JEDEC-related materials?
  - A. Yes, sir, I did.

- Q. And what did you have electronically that was JEDEC related?
- A. Well, I had the trip reports or these contemporaneous notes that we've seen so many of in this proceeding, I had those. I had probably some number of -- some number of emails that had come from the JEDEC reflector. I'm not certain about that, but I may have had some of those.
- Q. Did you take any steps at any point in time to preserve electronic JEDEC-related materials?
  - A. Yes, sir, I did.
- Q. Did you at any time change computer systems at Rambus?
  - A. Yes, at least two different times.
- Q. Did you take any steps in connection with those changes to preserve JEDEC-related electronic materials?
  - A. Yes, I did.
  - Q. Tell us what you did briefly.
- A. Well, when I -- when I got -- when we switched from Mcintoshes to IBM PCs, whatever year that was, I had a big file conversion problem to solve, and I effectively used our server with our network to copy files from my Macintosh onto the server, then from the server onto my PC, but unfortunately, not all of those files could go over the network because of funny

characters in the names that were permitted under the Macintosh --

- Q. Too much information, Mr. Crisp.
- A. I'm sorry.
- Q. What did you do to preserve --
- A. Well, I tried to copy the files from one computer to another, and I did -- most of that I was able to do at work, and some of it I needed to use some tools I had at my home.
  - Q. You had home computer equipment?
- A. That's correct, and it was a little bit easier for me to do it at home because of the way I could take the computers apart and plug the disks into different computers.
- Q. And did that mean that there ended up being preserved at your home JEDEC-related emails?
- A. That's correct, because I copied them onto one computer and then copied it from that one to another one.
- Q. At some point in time, did you find -- after litigation had begun, did you find at your home these JEDEC-related emails?
  - A. I did.
  - Q. Did anybody else know about them?
  - A. At what point in time?

- Q. At the time you found them, did anybody else know they existed?
  - A. No, no.
  - Q. What did you do with them?
  - A. I turned them in.
  - O. Turned them in to who?
  - A. I believe to Mr. Steinberg.
  - Q. Neil Steinberg, the general counsel of Rambus?
- A. Yes, I believe that's who I gave them to. I recall handing him a floppy disk that had things in it that I thought were subject to the discovery order.
- Q. Now, you were asked this morning about what you were told about the document retention and document destruction policy. Do you remember that?
- A. Yes, we talked -- we talked some about that this morning.
- Q. And there was a portion from the Micron deposition that you were asked about, and I asked to read another portion of it. Do you remember that part?
  - A. Yes, sir, I do remember that.
- Q. I want to show you that other portion about what you were told now and ask you some questions about it.

May I?

JUDGE McGUIRE: Yes.

BY MR. PERRY:

Q. This is from page 237 of Volume 2. Do you see the question, "What's your understanding?"

MR. OLIVER: Could I have just a moment, please?

MR. PERRY: Sure.

MR. OLIVER: Okay.

MR. PERRY: Do you have it? May I lean over your shoulder?

MR. OLIVER: You may.

BY MR. PERRY:

- Q. Do you see the question at line 9, "What's your understanding of the document retention and destruction policy?"
  - A. Yes, I do.
- Q. Do you see, "I don't remember the exact details of it"? Do you see that?
  - A. Yes.
- Q. "QUESTION: Generally speaking, what do you recall?"

Do you see that?

- A. Yes, sir.
- Q. What was your answer?
- A. May I read from the deposition?
- Q. Yes, please do.

A. "I remember being told that we should try to keep copies of documents that had been presented publicly, data sheets, architecture manuals, corporate presentations, that type of thing. If we had old emails that seemed important for whatever reason, perhaps we should keep those. You know, I don't remember a lot of the details."

May I add something, a point of clarification?

JUDGE McGUIRE: No, you may not add anything.

BY MR. PERRY:

- Q. No, you have finished reading. Thank you.

  Did you preserve JEDEC emails pursuant to the document retention policy?
  - A. Yes, I did.
- Q. Now, let me ask you just a few more questions, and then I'm done. You can put that away.
  - A. Okay.
- Q. I want to switch to some questions about some of these technologies at JEDEC that are listed as the title of this demonstrative that Mr. Oliver has been using, and I want to show you one document that you were shown yesterday, I suspect, CX-1945. It's a letter that appears to be to you from Mr. Vincent dated April 7, 1992.

May I?

JUDGE McGUIRE: Go ahead.

BY MR. PERRY:

- Q. Now, Mr. Oliver showed you this letter that attaches various abstracts of patent applications. Do you see that?
  - A. Yes, I do.
- Q. Now, this lists it looks like about 10 to 12 patent applications. Do you see that?
  - A. Yes, sir.
- Q. Now, did Mr. Oliver reveal to you that many of these had been abandoned by Rambus?
  - A. No, sir, he didn't.
- Q. And did he tell you how many of these patent applications issued as patents and ended up on the list of patents that were given to JEDEC when the company withdrew from JEDEC?
  - A. No, sir, he didn't.
- Q. Well, let's talk for a minute about auto-precharge and look at the document you saw about auto-precharge, that's number 8 on his list, CX-738.

May I?

JUDGE McGUIRE: Yes.

BY MR. PERRY:

Q. Now, this was from Mr. Dillon. Do you remember this? June 1994.

- A. Yes, I do.
- Q. And what you were pointed to was paragraph 4, "Claim 89 actually claims this feature. However, claim 89 is dependent on the much narrower claim 82 of a DRAM with internal select decoding. We may be able to make a broader claim on auto-precharge."

Do you see that?

- A. Yes, sir, I do.
- Q. Did you at any point in time while you were still attending JEDEC meetings ever learn whether or not Rambus had, in fact, filed a broader claim on auto-precharge for any DRAM?
  - A. No.
- Q. Let me show you a document that Mr. Oliver showed you, CX-746.

May I?

JUDGE McGUIRE: Yes.

BY MR. PERRY:

- Q. I just want to know if you've ever seen this before.
  - A. In what time frame?
- Q. Oh, I'm sorry, prior to litigation commencing, prior to your participation in life as a deposition witness.
  - A. No.

Q. Thank you.

Let's talk for a minute about -- this is going to challenge me, but about external reference voltage, and I want to point you to JEDEC Standard 21-C. I believe you were shown this, November 1993, it's Exhibit JX-56, Joint Exhibit 56, Release 4 of JEDEC Standard Number 21-C.

Now, do you think you had in your office at some point a 21-C? Is that right?

- A. Yes, sir, I'm certain that I did.
- Q. What did you understand -- may I?

  JUDGE McGUIRE: Yes.

BY MR. PERRY:

- Q. What did you understand JEDEC Standard 21-C to be, a compilation of what?
- A. It was primarily what we called pinouts of memory components that were standardized through JEDEC.
- Q. Now, I put that in your lap, and I pointed you to a particular page. What's the page number? Because I gave you my only copy.
  - A. 106, JX-0056-106.
  - Q. Thank you, let's pull that up.
    What's this figure show?
- A. This shows a pinout of a 4-meg x4 SDRAM in a TSOP2 packaging.

- Q. Is there any pin in that pinout that takes a charge from an external reference voltage, if that's the right way to say it?
  - A. Takes -- pardon?
- Q. Takes a charge? I'm not an expert in the external reference voltage, Mr. Crisp. Please -- please tell us if you can look at -- can I ask a different question, Mr. Oliver?

MR. OLIVER: You may.

BY MR. PERRY:

- Q. You are familiar with external reference voltage, aren't you?
  - A. Yes, sir.
- Q. Can you tell from looking at this SDRAM pinout that's part of the 21-C Standard whether or not external reference voltage is referenced in the pinout picture?

MR. OLIVER: Objection, Your Honor. He should be asking about his understanding at the time. I don't think it's permissible for Mr. Crisp to be offering expert testimony.

JUDGE McGUIRE: Sustained.

BY MR. PERRY:

Q. Did you have an understanding at the time that this standard was passed in 1993 as to whether or not

external reference voltage was required to --

- A. Yes. Yes, I did have an understanding.
- Q. What was your understanding?
- A. It was not required. There is no VREF here.
- Q. And did you have that understanding in part that there was no VREF pin from looking at the pinout?
- A. Well, I could certainly determine that from looking at the pinout.
- Q. Well, let's talk briefly then about low swing voltage, and you were shown the file wrapper for a Rambus patent by Mr. Crisp, and that's CX-3102. Let me bring it to you, if I could.

May I?

JUDGE McGUIRE: Go ahead.

BY MR. PERRY:

Q. And I believe you represented that the file wrapper is a bunch of documents from the patent office, but what I'm going to point you to is a preliminary amendment contained within this collection of patent materials that's at page 171, which is the same document he showed you, and what he asked you to look at was a claim on page 172.

Do you remember him asking you to look at this, inside this?

A. Yes, sir.

- Q. Well, here's the only point I'm making: This is the file wrapper for patent -- if you look on the front -- 5,473,575. Do you see that? Do you see that patent number?
  - A. Yes, sir, I do.
- Q. I want to show you the Rambus patent with that number. That's Exhibit CX-1486.

May I?

JUDGE McGUIRE: Go ahead.

BY MR. PERRY:

- Q. And do you see that that has the same number on that patent, that Farmwald patent, 5,473,575, as this file wrapper that Mr. Oliver showed you?
  - A. Yes, sir, I see that.
- Q. Now, I want you to look one more place for that number, and that's in Rambus' withdrawal letter from JEDEC, CX-887.

May I?

JUDGE McGUIRE: Go ahead.

BY MR. PERRY:

- Q. I want you to tell me whether on that list of patents that was delivered to JEDEC this 5,473,575 patent that Mr. Oliver said had something to do with low voltage swing shows up on that list.
  - A. It does.

- Q. Now, did you put together that list of patents?
- A. No, sir.

MR. PERRY: I have nothing further, Your Honor.

JUDGE McGUIRE: All right, thank you, Mr.

Oliver -- I'm sorry, Mr. Perry.

Now, Mr. Oliver, you may proceed with your examination.

MR. OLIVER: Thank you, Your Honor. May we have a few moments?

JUDGE McGUIRE: Yeah, let's take a very short break, five minutes.

MR. OLIVER: Thank you. Also, if I could ask -- you showed RX-695, and I would like to see a copy.

MR. PERRY: I'll get it for you.

MR. OLIVER: Thank you.

JUDGE McGUIRE: Off the record.

#### (A brief recess was taken.)

JUDGE McGUIRE: On the record.

Mr. Oliver, you may proceed.

MR. OLIVER: Thank you, Your Honor.

#### REDIRECT EXAMINATION

BY MR. OLIVER:

Q. Mr. Crisp, do you recall that Mr. Perry asked you some questions concerning a letter that you had

written to I believe it was Hyundai in -- actually, I can't recall the date, but a letter in which you referred to low pin count. Do you recall that?

- A. I remember we had a discussion along those lines.
- Q. And Mr. Perry asked you to explain the concept of low pin count. Do you recall that?
  - A. Yes, sir, I do remember that.
- Q. Now, the pins connect to bus lines. Is that right?
- A. Well, they connect to -- they can do more than connect to bus lines, but in part, yes. Some of them connect to bus lines.
- Q. To the extent that pins connect to bus lines, having low pin count would correspond to having fewer bus lines. Is that right?
  - A. Not necessarily.

MR. OLIVER: May I approach, Your Honor?

JUDGE McGUIRE: Yes, you may.

## (Discussion off the record.)

BY MR. OLIVER:

Q. Mr. Crisp, I've handed you a document marked CX-798, consists of an email from Rick Barth to you dated June 6, 1995. Do you see it reads, "The procedure I have for making sure files return to the

cabinet is to never let them leave the cabinet except for my own use and duplication. The list you requested is roughly one to two legal file boxes. If you want the whole list then let me know and I will arrange to have them duplicated. That will likely take a day or two."

Do you see that?

- A. Yes, sir, I do.
- Q. Then following that, there is a list of numbers. Do you see that?
  - A. Yes, sir.
- Q. And the numbers that are listed there correspond to Mr. Lester Vincent's numbering system for the Rambus patent applications. Is that right?
  - A. I believe that's correct.
- Q. So, basically Rick Barth is telling you here that you had access to all of these files listed in this email. Is that right?
- A. Well, I think what he's telling me, he's the gatekeeper, but other than that, I could have access to them.
- Q. Okay. And do you recall from this list which ones you had access to?
- A. I would think that I'd have access to all of them.

- Q. Do you recall which ones you actually looked at?
  - A. No, I'm sorry, I don't remember.
- Q. As you sit here today, do you recall whether you looked at amendments to the '961 application?
  - A. No, sir.
- Q. As you sit here today, do you recall whether you looked at an amendment to the '490 application?
- A. I don't think I looked at any amendments to any of these applications.
- Q. Do you recall whether you looked at the '490 application?
- A. I don't know which one it is of these. I can't say that I looked at that application.
- Q. So, sitting here today, you don't know one way or another whether you looked at that application?
- A. I don't remember it by that number. I might remember it if I saw it.
- Q. Do you recall sitting here today whether you looked at the '692 application?
  - A. No, sir.
  - Q. No, you don't remember?
  - A. That's correct, I don't remember.
- Q. Sitting here today, do you recall whether you looked at the '646 application?

- A. No, sir, I don't recall.
- Q. Now, Mr. Perry asked you some questions about the electronic versions of certain documents. Do you recall that?
  - A. Yes, sir, I do.
- Q. And I believe you testified that they were preserved pursuant to the document retention policy. Is that right?
  - A. I think that's right.
- Q. We looked at a document over the course of the past couple of days, CX-711. Do you recall that?
  - A. Yes, sir.
- Q. Those are the 200-page collection of emails. Do you recall that?
  - A. Yes, sir, that's correct.
- Q. But that document was not produced from your files, was it?
- A. I'm not sure where it was produced from. I think the material came from my files.
- Q. You didn't have that in the paper files in your office, did you?
  - A. No, not the paper files, no.
- Q. You didn't have it on your computer either, did you?
  - A. I think I did.

- Q. Isn't it true that that's a directory that was left on a server when you transferred the documents from the Macintosh and then you forgot about them?
- A. I think that's possible, that some of them were on there. I think some of them were on my laptop at work, some of them were on the server, and I think some of them may have been on that computer at home. I don't today remember where all of those files came from.
- Q. Sitting here today, you don't recall that the other documents you had were later found on Rambus' main server?
- A. I seem to remember that there were some files that were on the main server, and I think I do -- I drew Rambus' attention to that.
- Q. These are, again, from the documents that you had copied from your Macintosh laptop to your IBM PC by way of the main server. Isn't that right?
- A. I copied a lot of files that way. I had a directory on my PC that was called JEDEC.MBX, and that's where I kept those files.
- Q. And then you forgot about the directory on the main server, right?
- A. I think I forgot about it for some period of time, yes, that's right.

- Q. And that's where those documents were found, right?
- A. I'm not sure which documents you're referring to.
  - Q. CX-711.
  - A. May I look at them?
  - Q. Yes, you may.
- A. (Document review.) There may have been a second copy of them on the -- on the server, but I know I used the Eudora mail program, and that's where this notation JEDEC.MBX came from, because I created a folder under Eudora for storing JEDEC-related emails.
- Q. You're talking about files that were stored at the time you created them, right?
- A. No, at the time I went through my emails looking for documents to keep under the document retention program.
- Q. Well, you do recall that there was a set of documents that were found on the main server in a directory that you had forgotten about, right?
- A. I do recall testifying in some deposition that there were some documents that were found on the main server.
  - Q. In a file that you had forgotten about, right?
  - A. That's correct, and I think they were very

early documents before we had our Mcintoshes, but

I'm -- I don't remember precisely that. So, I think
those are the 1992 documents.

- Q. Well, isn't it true, though, that the directory that you forgot about on the server was the directory created when you copied the documents from your Macintosh laptop?
- A. I don't think that's entirely true. I did create a temporary directory on the server when I copied the documents from the Macintosh to the PC, but long before we had the individual Macintosh laptops, we just used a UNIX-based email program, and I think it was that directory that there were some additional emails found that were on the server.
- Q. Well, perhaps we can take a look at certain of your prior deposition testimony.

May I approach, Your Honor?

JUDGE McGUIRE: Yes. Thank you.

BY MR. OLIVER:

Q. Mr. Crisp, I've handed you a copy of your deposition from the Infineon litigation dated April 13, 2001, and I'd like to ask you to turn, please, to page 841 in this transcript, and I'd like to direct your attention to line 23, specifically from page 841, line 23 to 842, line 12.

Your Honor, we actually do have a video clip of this portion that I'd like to play.

JUDGE McGUIRE: All right, go ahead.

"QUESTION: Why did you still have your JEDEC mailbox emails collected?

"ANSWER: Well, some of those fell into the category of things that I had felt were things that fell in the category of things worth keeping, and there were some other documents that I had later found on our main server that I had apparently copied over to that machine as a means for converting from a Macintosh laptop to an IBM PC laptop that they had issued us. I had a problem that -- I had a bunch of files that were on my Mac laptop that I needed to transfer over to my PC, and I didn't have a very easy way to do it except to copy them to our server and then to copy them back, and then I forgot about the directory that was on there. So that's where the second group of documents came from."

MR. OLIVER: May I approach, Your Honor?

JUDGE McGUIRE: Yes.

BY MR. OLIVER:

Q. Mr. Crisp, I've handed you a document marked CX-208. This is a copy of the JEDEC 21-I Manual dated October 1993. Do you recall that in responding to some

questions by Mr. Perry you testified with respect to your understanding of the patent policy based in part on this document?

- A. Yes, I remember that conversation.
- Q. If I could ask you to turn, please, to page 19.

  Now, Mr. Crisp, I believe that you had

  testified earlier today that your understanding was
  that presenters had an obligation to disclose patent
  applications. Is that correct?
  - A. Yes, sir, that's correct.
- Q. Let me direct your attention, please, to
  Section 9.3.1, and you'll see that it reads there, "The
  chairperson of any JEDEC committee, subcommittee, or
  working group must call to the attention of all those
  present the requirements contained in EIA Legal Guides,
  and call attention to the obligation of all
  participants to inform the meeting of any knowledge
  they may have of any patents, or pending patents."

Do you see that?

- A. Yes, sir, I do.
- Q. Now, I believe you also testified earlier today with respect to your understanding concerning disclosure at the time of a ballot?
  - A. Yes, that's correct.
  - Q. And do you see the language in the same section

we were just reading, "The obligation of all participants to inform the meeting of any knowledge they may have of any patents, or pending patents, that might be involved in the work they are undertaking"?

Do you see that?

- A. I'm not following you. Can you point to where we are?
  - Q. Yes, still within Section 9.3.1.
  - A. Okay, "All participants," yes.
- Q. I'll start reading with the third line, "the obligation of all participants to inform the meeting of any knowledge they may have of any patents, or pending patents, that might be involved in the work they are undertaking."

Do you see that?

- A. Yes, I do.
- Q. So, in other words, based on your understanding, the words here "all participants" meant presenters. Is that right?

MR. PERRY: It misstates his testimony, but -JUDGE McGUIRE: How does it misstate his
testimony?

MR. PERRY: He -- Your Honor, the record will speak for itself, but he set up a distinction between presenters and non-presenters in the testimony he gave.

JUDGE McGUIRE: Okay, Mr. Oliver?

MR. OLIVER: My understanding was that he was testifying that his understanding was that only presenters had to disclose pending patents.

JUDGE McGUIRE: That was my understanding.

MR. PERRY: Right, right, that's what I -- yes, but the question was relating to both patents and pending patents, because "all" describes both. That was my only objection, but -- you hadn't tied it to pending patents.

JUDGE McGUIRE: Well, can you restate on that, Mr. Oliver, and try to address the concern of opposing counsel?

MR. PERRY: I'm sorry.

 $$\operatorname{MR}.$  OLIVER: To the extent I understand it, Your Honor, I will try.

BY MR. OLIVER:

Q. In the lines that I just read, "The obligation of all participants to inform the meeting of any knowledge they may have of any patents, or pending patents," your understanding as of 1995 of that sentence was that all participants meant all participants with respect to patents but meant something different, namely presenters, with respect to pending patents. Is that the way you understood that

sentence in 1995?

- A. I don't remember stating that. I think we saw something different in this when we looked at it earlier today.
- Q. I'm simply asking what your understanding was in 1995 when you reviewed the 21-I Manual, and my question is, with respect to that sentence, "the obligation of all participants to inform the meeting of any knowledge they may have of any patents, or pending patents, that might be involved in the work they are undertaking," my question is, was it your understanding of the term "all participants" at that time that all participants meant, in fact, all participants with reference to the word "patents" in that sentence but meant something different, namely presenters, with respect to the pending patents in that sentence?
- A. My understanding was that presenters was what participants meant.
- Q. So, your understanding of this sentence is that the term "all participants" was restricted to presenters. Is that right?
  - A. I'm sorry, could you ask that question again?
- Q. Yes. Your understanding of this manual in 1995 is that the term "all participants" was restricted to presenters. Is that right?

- A. I think that's what -- I think that's what I said just a moment ago.
- Q. And I believe you also testified earlier today that you understood an obligation to disclose at the time of the ballot. Is that correct?
  - A. Yes, that was in the JEDEC Members' Manual.
- Q. With reference to the language here in Manual 21-I that you testified you also consulted, is it your understanding that the term "the work they are undertaking" in the 21-I Manual was restricted only to ballots?
- A. I think I testified earlier that I drew my conclusions from reading two different manuals, sir.
- Q. And my question is how you interpret the language in this manual, the 21-I Manual.
- A. Well, I interpret this language different than the language that I saw in the 42 Members' Manual.
- Q. Well, did you understand the term "the work they are undertaking" to include presentations?
- A. I think I -- I think I saw a conflict in the description of the policy in this manual and in the Members' Manual, and so I asked people -- the leadership what the policy was and confirmed my understanding of it. So, I think what you've found here is the same conflict that I must have seen back at

that time.

MR. OLIVER: Your Honor, move to strike the answer as nonresponsive.

JUDGE McGUIRE: Sustained.

BY MR. OLIVER:

Q. Mr. Crisp, with respect to your understanding of the term "the work they are undertaking," in 1995, did you understand that term to include presentations?

MR. PERRY: Can we start with whether or not he had an understanding at all? That's how we've been doing it. Objection, lacks foundation. Did he have an understanding at the time?

MR. OLIVER: Your Honor, he has testified that he read the 21-I Manual at the time, and this was one of the sources on which he based an understanding of the JEDEC patent policy.

JUDGE McGUIRE: Well, he said in terms of your understanding, so I assume that's the import of the question, right?

MR. OLIVER: Yes, Your Honor.

JUDGE McGUIRE: All right, Mr. Crisp, can you answer that?

THE WITNESS: Yes, sir, I'll try to. Could you please ask the question again?

BY MR. OLIVER:

- Q. Yes. With respect to the term "the work they are undertaking" in Section 9.3.1 of the 21-I Manual, in 1995, did you understand the term "the work they are undertaking" to include presentations?
  - A. I must have.
- Q. Now, Mr. Crisp, you've been deposed a number of times in connection with the Infineon and the Micron cases. Is that right?
  - A. Yes, sir, that's correct.
- Q. And Mr. Crisp, your testimony has changed over time, hasn't it?

MR. PERRY: Your Honor, that's vague and it's been two and a half, three days now.

JUDGE McGUIRE: Sustained.

THE WITNESS: Perhaps you could show me where --

JUDGE McGUIRE: All right, there is no question on the floor at this point, Mr. Crisp. Let's wait until he asks you a question.

THE WITNESS: Excuse me, Your Honor.

BY MR. OLIVER:

Q. Mr. Crisp, isn't it true that in your first
Infineon deposition, you testified that you were never
involved in any discussions at any time relating to the
prosecution strategy of the Rambus portfolio?

MR. PERRY: Your Honor, it's beyond the scope. I didn't talk anything about what he said in Infineon. He's just trying to impeach him with stuff I didn't even talk about.

MR. OLIVER: Your Honor, this goes to the witness' veracity. That's always an issue in testimony.

MR. PERRY: It's a little late, Your Honor. He had him for two and a half days, and I object to him going beyond the scope.

JUDGE McGUIRE: How is this still in the scope?

MR. OLIVER: Your Honor, this goes to the witness' veracity.

JUDGE McGUIRE: Okay.

MR. OLIVER: Frankly, Your Honor, Judge Payne found --

JUDGE McGUIRE: All right, make it very short.
I will hear it.

MR. OLIVER: Thank you, Your Honor.

BY MR. OLIVER:

- Q. Mr. Crisp, isn't it true that you testified in the Infineon deposition that you were never involved in any discussions at any time relating to the prosecution strategy of the Rambus portfolio?
  - A. I may have made a statement like that. I think

at the time I didn't understand -- I had a different meaning of the word understanding or prosecution than the questioner did. I think we've discovered what it was that I actually did in this.

- Q. Isn't it true that you also testified in November of 2000 that while Rambus was a JEDEC member, do you remember being concerned about making sure that Rambus had patents covering some of the key signaling technology and operative inventions protected in the context of the narrow bus and packet-oriented DRAM?
- A. It's possible I may have said that. I don't have a specific memory of that.
- Q. Isn't it also true that in November of 2000, you said that you didn't think that Rambus had claims covering SDRAMs in every case, you were always looking at that from the perspective of the narrow bus and the packet-oriented configuration? Isn't that right?

MR. PERRY: Your Honor, it is not impeachment, and it's an improper use of deposition testimony, and it's a waste of time. He just -- it's --

JUDGE McGUIRE: I'm not sure where you're going with this, Mr. Oliver.

MR. OLIVER: Your Honor, I think the next couple of questions will show that his answers later were very different, and frankly, Your Honor, this is

what led Judge Payne to --

MR. PERRY: Wait a second here, we are not here to try Judge Payne's case, and I object to him --

JUDGE McGUIRE: All right, that last comment from Mr. Oliver shall be stricken.

Now, let's keep this very tight. I don't want to go into this too much more. I'm going to give you some latitude here, but it's going to be a very short rope at this point. Now, if I have to intervene, then I am going to, and it's over. So, keep it short.

MR. OLIVER: Thank you, Your Honor.

Could we have the last question read back, please?

## (The record was read as follows:)

"QUESTION: Isn't it also true that in November of 2000, you said that you didn't think that Rambus had claims covering SDRAMs in every case, you were always looking at that from the perspective of the narrow bus and the packet-oriented configuration? Isn't that right?"

THE WITNESS: I don't remember. It's -- I may have said that. I don't remember.

BY MR. OLIVER:

Q. Now, Mr. Crisp, isn't it also true that after the formerly attorney-client privilege documents were

released, at the subsequent deposition, you then testified that that you were, in fact, interested in claims relating to SDRAMs?

A. I believe that I may have -- may have said that. I don't remember.

MR. OLIVER: Your Honor, if we could play a portion of his deposition, I think it might refresh his recollection.

MR. PERRY: Your Honor, let me just say that they've got the right from you over our objection to put into this record all of his prior 72 hours of deposition testimony and trial testimony, and what they're now doing --

JUDGE McGUIRE: I can't hear you very well, Mr. Perry, if you could move to the microphone.

MR. PERRY: Yes, over our objection you allowed them to put into the record 72 hours of deposition testimony, and all they're trying to do now is put it into the record, and you gave them that right, even though he wasn't an employee at the time, and this is -- at 6:00, he's had two and a half days. They can put this in, and it will be part of the record. They can do it any time. You gave them that right. We don't have to sit here and show him what he said from time to time in 72 hours.

JUDGE McGUIRE: Mr. Oliver, response?

MR. OLIVER: First, Your Honor, I'm almost finished with this, but second, Your Honor, I do think it's important in judging the credibility and veracity of this witness to recognize the changes in his testimony over time. I'd like to play this portion of the video to help --

JUDGE McGUIRE: Why does this have to be played at this point? Can't you put this in your brief or do you want to it introduced at this time?

MR. OLIVER: Your Honor, I would prefer to introduce it at this time.

JUDGE McGUIRE: How much longer is this going to take?

MR. OLIVER: Your Honor, I would like to play a segment that I believe runs for about -- I believe it's about a minute? It's about a minute, Your Honor.

JUDGE McGUIRE: All right, I will give him that one minute, Mr. Perry.

MR. PERRY: I hear you, Your Honor. Let me just say, they obviously had this planned. They didn't come in with this just now and put it together. It didn't matter what my examination of him was. It's sandbagging, and it's wrong, because it's not related to anything he testified to today in my examination.

They should have done this during their examination when I could have had the opportunity to visit it.

JUDGE McGUIRE: How is this within his scope, Mr. Oliver? And don't tell me again that it's about impeaching.

MR. OLIVER: Your Honor, it does relate to his testimony on --

JUDGE McGUIRE: How does it relate to his testimony?

MR. OLIVER: Well, the issue, Your Honor, is the credibility of this witness to the extent that he was testifying in response to Mr. --

JUDGE McGUIRE: So, why didn't this come in at an earlier point? This is not, you know, two bites at the same apple. You're confined to within the scope. You could have brought this up earlier, could you not have?

MR. OLIVER: Your Honor, to the extent that I was asking questions tied to documents, I did control his testimony through the documents and through depositions. To the extent that Mr. Perry was asking the questions he chose to ask, I, of course, had no way to control that, and I simply want to point out that this is a witness who has changed testimony over time, and I believe that that is an important factor to

consider in evaluating his credibility.

JUDGE McGUIRE: All right, it is going to last how long?

MR. OLIVER: One minute, Your Honor.

JUDGE McGUIRE: I will hear it, and this ultimately will go to the weight of the testimony. So, let's hear it and be done with it.

MR. OLIVER: Thank you, Your Honor.

"QUESTION: And at least in part, the ideas you had for new claims were ideas so that the new claims would be directed specifically towards SDRAMs; right?

"MR. MONAHAN: Overly broad, misstates his testimony.

"THE WITNESS: There were certainly some claims that I had suggested that I felt would protect our inventions, that I had seen being applied to some SDRAMs.

"QUESTION: So, those claims would apply to SDRAMs?

"MR. MONAHAN: That assumes facts not in evidence.

"THE WITNESS: The claims would apply to some of the SDRAMs that we had seen discussed -- that we had seen data sheets.

"QUESTION: I'm sorry?

"ANSWER: That we had seen data sheets."

MR. OLIVER: Thank you, Your Honor.

JUDGE McGUIRE: Okay. So, you're done with your examination?

MR. OLIVER: Yes, Your Honor.

JUDGE McGUIRE: All right, Mr. Perry?

MR. PERRY: I have nothing, Your Honor.

JUDGE McGUIRE: Thank you.

All right, sir, you're excused, and thank you for your testimony.

I know we had mentioned earlier this afternoon there were some items counsel wanted to take up regarding trial I guess scheduling. Is that something you want to do now or --

MR. STONE: Briefly I think, if I could, Your Honor.

JUDGE McGUIRE: Should this be on the record? Is there any point in this being on the record?

MR. STONE: I am ambivalent. It doesn't matter.

MR. PERRY: May Mr. Crisp be excused?

JUDGE McGUIRE: Yes, I have excused him just a moment ago.

JUDGE McGUIRE: All right, off the record.

(Discussion off the record.)

JUDGE McGUIRE: This hearing is adjourned until quarter after 9:00 in the morning.

(Whereupon, at 6:00 p.m., the hearing was adjourned.)

# CERTIFICATION OF REPORTER

DOCKET NUMBER: 9302

CASE TITLE: RAMBUS, INC.

DATE: MAY 29, 2003

I HEREBY CERTIFY that the transcript contained herein is a full and accurate transcript of the notes taken by me at the hearing on the above cause before the FEDERAL TRADE COMMISSION to the best of my knowledge and belief.

DATED: 5/30/03

SUSANNE BERGLING, RMR

# CERTIFICATION OF PROOFREADER

I HEREBY CERTIFY that I proofread the transcript for accuracy in spelling, hyphenation, punctuation and format.

DIANE QUADE