| 1  | FEDERAL TRADE COMMISSION               |  |  |  |  |  |  |
|----|--|--|--|--|--|--|--|
| 2  | I N D E X (PUBLIC RECORD)              |  |  |  |  |  |  |
| 3  | WITNESS: DIRECT CROSS REDIRECT RECROSS |  |  |  |  |  |  |
| 4  | Crisp 3136                             |  |  |  |  |  |  |
| 5  |  |  |  |  |  |  |  |
| 6  | EXHIBITS FOR ID IN EVID WITHDRAWN      |  |  |  |  |  |  |
| 7  | CX                                     |  |  |  |  |  |  |
| 8  | Number 154A 3135                       |  |  |  |  |  |  |
| 9  | Number 171 3135                        |  |  |  |  |  |  |
| 10 | Number 426 3135                        |  |  |  |  |  |  |
| 11 | Number 703 3175                        |  |  |  |  |  |  |
| 12 | Number 1957 3149                       |  |  |  |  |  |  |
| 13 | Number 1961 3207                       |  |  |  |  |  |  |
| 14 |  |  |  |  |  |  |  |
| 15 | RX                                     |  |  |  |  |  |  |
| 16 | Number 1885 3345                       |  |  |  |  |  |  |
| 17 | Number 1895 3345                       |  |  |  |  |  |  |
| 18 | Number 2050 3345                       |  |  |  |  |  |  |
| 19 | Number 2103-14 3345                    |  |  |  |  |  |  |
| 20 |  |  |  |  |  |  |  |
| 21 | JX                                     |  |  |  |  |  |  |
| 22 | None                                   |  |  |  |  |  |  |
| 23 |  |  |  |  |  |  |  |
| 24 | DX                                     |  |  |  |  |  |  |
| 25 | None                                   |  |  |  |  |  |  |

| 1  | UNITED STATES OF AMERICA                |
|----|---|
| 2  | FEDERAL TRADE COMMISSION                |
| 3  |   |
| 4  | In the Matter of: )                     |
| 5  | Rambus, Inc. ) Docket No. 9302          |
| 6  | )                                       |
| 7  |   |
| 8  |   |
| 9  | Wednesday, May 28, 2003                 |
| 10 | 9:30 a.m.                               |
| 11 |   |
| 12 |   |
| 13 | TRIAL VOLUME 17                         |
| 14 | PART 1                                  |
| 15 | PUBLIC RECORD                           |
| 16 |   |
| 17 | BEFORE THE HONORABLE STEPHEN J. McGUIRE |

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- 2 - -
- JUDGE McGUIRE: This hearing is now in order.
- 4 Are there any items we need to take up this morning,
- 5 Counsel?
- 6 MR. STONE: Just a couple of little
- 7 housekeeping items, I think, Your Honor. First, from
- 8 the Krashinsky deposition, from the Krashinsky
- 9 testimony, we left open which exhibits we would move
- 10 into evidence, and I do have -- and I have shared this
- 11 the other day with complaint counsel and haven't heard
- 12 any objection -- seven exhibits we would like to move
- in. They are CX-154A, CX-171, CX-426, RX-1885,
- 14 RX-1895, RX-2050 and RX-2103-14.
- 15 JUDGE McGUIRE: Mr. Oliver, any objection?
- MR. OLIVER: Your Honor, we have no objection
- 17 to the three CX exhibits that were noted. I just don't
- 18 know enough about the other four exhibits and I was not
- 19 present in the courtroom when they were used. If I
- 20 could perhaps have a chance to consult with one of my
- 21 colleagues and report back on the other four exhibits?
- 22 MR. STONE: I have no objection to that, Your
- Honor.
- JUDGE McGUIRE: All right, let's go ahead then
- 25 and enter the three -- was it three -- perhaps we

1 should just go ahead and restate those three so it's

- 2 clear in the record.
- 3 MR. STONE: Yes, I think what Mr. Oliver has no
- 4 objection to are CX-154A, CX-171 and CX-426.
- 5 MR. OLIVER: That's correct.
- JUDGE McGUIRE: Okay, then those are entered at
- 7 this time.
- 8 (CX Exhibit Number 154A was admitted into
- 9 evidence.)
- 10 (CX Exhibit Number 171 was admitted into
- 11 evidence.)
- 12 (CX Exhibit Number 426 was admitted into
- evidence.)
- 14 JUDGE McGUIRE: Then you can confer on the
- other four -- the other three, and then you can get
- 16 back to me on those.
- 17 MR. STONE: That's fine, Your Honor.
- 18 Then my other housekeeping matter, yesterday,
- 19 as you know I think, complaint counsel filed their
- 20 opposition to the motion for reconsideration.
- JUDGE McGUIRE: Yes.
- 22 MR. STONE: We would like a chance to file a
- 23 short reply if we could on that. We expect it to be
- 24 quite short, certainly under ten pages.
- JUDGE McGUIRE: How much time would you need?

- 1 MR. STONE: Our preference would be to file it
- on Monday if it's acceptable to the Court.

1 recall that shortly before we left off yesterday, we

- looked at a couple of emails from February of 1993
- 3 between you and Mr. Ware concerning certain
- 4 technologies with respect to which you suggested that
- 5 Rambus pursue patent claims. Do you recall that?
- A. I remember a discussion regarding some emails
- 7 between me and Mr. Ware. I'm not sure they were
- 8 exactly as you represented.
- 9 O. You do recall the emails had a list of
- 10 technologies identified in them?
- 11 A. Yes, sir, I do.
- 12 Q. And then I believe that we had gotten to the
- point where we were beginning to discuss the next
- 14 regularly scheduled JEDEC meeting, which I believe was
- 15 in March of 1993.
- Your Honor, may I approach?
- JUDGE McGUIRE: You may.
- 18 BY MR. OLIVER:
- 19 Q. Mr. Crisp, I've handed you a document marked as
- 20 JX-15. Do you recognize these as minutes from the
- 21 JC-42.3 subcommittee meeting held on March 3rd and 4th,
- 22 1993?
- 23 A. Yes, sir, I do.
- Q. Now, you were not present at this meeting, were
- 25 you?

- 1 A. That's correct, I was not present.
- Q. But Rambus was represented at this meeting by
- 3 Billy Garrett. Is that right?
- 4 A. I believe that's correct, yes.
- 5 Q. If I could ask you to turn to the second page
- of JX-15, and if you look about two-thirds of the way
- down the page, you'll see under the list Others
- 8 Present, Billy Garrett is listed there?
- 9 A. Yes, sir, I see that.
- 10 Q. Now, once again at this meeting, Mr. Townsend
- 11 presented the patent policy, right?
- 12 A. I'm not sure.
- 13 O. Can you turn to page 4 of JX-15? Do you see
- item 4 about halfway down that page?
- 15 A. Yes, sir, I see it.
- Q. And do you see a reference there that Mr.
- 17 Townsend presented the patent policies and showed the
- 18 tracking files?
- 19 A. Yes, I see something to that effect.
- 20 O. Now, it was at this March 1993 JC-42.3
- 21 subcommittee meeting that the subcommittee approved the
- 22 last of the ballots making up the SDRAM standard.
- 23 Isn't that right?
- MR. PERRY: Your Honor, he's testified he
- 25 wasn't there. If he saw it in the minutes, he can

1 O. And you probably also would have received some

- 2 type of report from Billy Garrett from the meeting as
- 3 well?
- 4 A. Probably so, yes.
- 5 Q. Now, it was at this March 1993 meeting of the
- 6 42.3 subcommittee that the subcommittee approved the
- 7 last of the ballots making up the SDRAM standard.
- 8 Isn't that right?
- 9 A. I don't know.
- 10 Q. If I could ask you to turn, please, to page 14
- 11 in JX-15, and if I could direct your attention to
- 12 paragraph 12, about halfway down that page. Do you see
- 13 there that it reads, "Conclusion of All Synchronous
- 14 DRAM Pass/Hold Ballots"?
- 15 A. Yes, sir, I do.
- Q. And underneath that it reads, "VLSI moved to
- send all pass/hold ballots on to council. Seconded by
- 18 TI. The vote was 26 yes, 0 no. Motion passed."
- 19 Do you see that?
- 20 A. Yes, I do.
- 21 Q. Does that refresh your recollection that it was
- 22 at the March 1993 meeting that the JC-42.3 subcommittee
- 23 passed the last of the ballots making up the SDRAM
- 24 standard?
- 25 A. No.

1 O. You have no reason to doubt that this wasn't at

- 2 the meeting what happened, do you?
- 3 A. No, sir, I don't.
- 4 Q. Now, do you recall that in March 1993, the
- 5 JC-42.3 subcommittee issued a press release announcing
- 6 that they had passed the last of the ballots making up
- 7 the SDRAM standard?
- 8 A. No, sir, I don't remember that.
- 9 Q. Mr. Crisp, if I could ask you to turn to page
- 10 99 in JX-15, it has a handwritten note at the upper
- 11 right-hand corner, "Attachment Z." Under the JEDEC
- 12 caption, there's a title Press Release.
- Do you see that?
- 14 A. Yes, sir, I do.
- 15 Q. And underneath that it reads, "JEDEC JC-42.3
- 16 Committee Approves Synchronous DRAM Standards."
- 17 Do you see that?
- 18 A. Yes, sir, I do.
- 19 O. Does that refresh your recollection that
- following the March 1993 JC-42.3 subcommittee meeting,
- 21 the subcommittee issued a press release announcing the
- 22 passage of the last of the ballots making up the SDRAM
- 23 standard?
- 24 A. No.
- Q. Again, you have no reason to doubt that the

1 42.3 subcommittee, in fact, issued the press release we

- 1 yesterday?
- 2 A. It looks sort of familiar.
- 3 O. Do you recall that this is a document that was
- 4 produced from JEDEC files by way of Infineon and
- 5 contains a number of pages from various points in time?
- 6 A. I'm not sure that I remember that.
- 7 O. Okay. In any event, if I could direct your
- 8 attention, please, to page 11. Do you recognize this
- 9 as an invoice sent to you by JEDEC on or about January
- 10 4th of 1993?
- 11 A. No, sir, I don't recognize this.
- 12 Q. Do you see the address in the upper left-hand
- 13 corner?
- 14 A. Yes, sir, I do.
- 15 Q. And the typed name William Garrett has been
- 16 crossed out, and handwritten, the name Richard Crisp
- 17 appears in its place?
- 18 A. Yes, sir, I see that.
- 19 O. Do you have any reason to believe that you did
- 20 not receive this invoice in January 1993?
- 21 A. No, sir, I have no reason to believe that.
- Q. If I could ask you to turn to page 5 of CX-602,
- 23 please.
- MR. PERRY: Your Honor, we're willing to
- 25 stipulate that Rambus paid its dues to JEDEC in 1993 if

- 1 this will move things forward.
- JUDGE McGUIRE: All right, so noted.
- 3 MR. OLIVER: Your Honor, if I could clarify,
- 4 Mr. Perry is willing to stipulate that Rambus actually
- 5 paid the dues on or about April 21st of 1993?
- 6 MR. PERRY: Well, that's -- I think the check
- 7 is dated April 7th, so it depends on what you mean by
- 8 payment, when it's received or date they signed the
- 9 check, but I'm certainly willing to stipulate it was in
- 10 April.
- 11 MR. OLIVER: Okay, thank you.
- 12 BY MR. OLIVER:
- 0. So, in other words, Mr. Crisp, Rambus was a
- 14 member of JEDEC until April of 1993 even though it had
- 15 not paid its dues up until that point?
- 16 A. I'm not sure, sir.
- 17 Q. In any event, no one objected to Rambus
- 18 continuing to attend meetings up until April of '93,
- 19 did they?
- 20 A. I have no information about that one way or the
- 21 other.
- 22 Q. And you certainly didn't have any interruption
- in the materials you received from JEDEC up until April
- 24 1993, did you?
- 25 A. I don't recall one way or the other.

1 Q. Now, also in April 1993 you learned that Lester

- 2 Vincent had completed the drafting of a number of the
- 3 claims you wanted to add. Isn't that right?
- 4 A. I'm not sure about that, sir.
- 5 MR. OLIVER: May I approach, Your Honor?
- JUDGE McGUIRE: Go ahead.
- 7 BY MR. OLIVER:
- 8 Q. Mr. Crisp, I've handed you a letter addressed
- 9 to Mr. Farmwald from Mr. Vincent dated April 22nd,
- 10 1993. If you look in the lower left-hand corner, do
- 11 you see that you are copied with enclosures on this
- 12 letter?
- 13 A. Yes, sir, I see that.
- 14 Q. And do you see that the letter states,
- 15 "Enclosed for your review are draft preliminary
- 16 amendments for the above-referenced patent
- 17 applications"?
- 18 Do you see that?
- 19 A. Yes, sir, I do.
- 20 MR. OLIVER: May I approach, Your Honor?
- JUDGE McGUIRE: Yes.
- 22 BY MR. OLIVER:
- Q. Mr. Crisp, I've also handed you a document
- 24 marked as CX-1457. It is a document with a caption at
- 25 the top In the United States Patent and Trademark

1 Office, about halfway down, Request to Approve Drawing

- 2 Changes, and at the right is Draft, 4/28/93.
- 3 Do you see that?
- 4 A. Yes, sir, I see that on the front page.
- 5 Q. Then if I could also ask you to turn to page 4
- of CX-1457, please. Do you have page 4 of CX-1457 in
- 7 front you?
- 8 A. Yes, sir, I do.
- 9 Q. Do you see that that bears a caption about
- 10 halfway down, Preliminary Amendment?
- 11 A. Yes, sir, I see that.
- 12 Q. If I could ask you to turn to page 8 of
- 13 CX-1457, please, and if I could direct your attention
- 14 to the top of the page, "In The Claims, Add the
- 15 following claims."
- 16 Do you see that?
- 17 A. Yes, sir, I do.
- Q. And then what follows from that are the various
- 19 claims that Mr. Vincent was proposing to add. Is that
- 20 right?
- 21 MR. PERRY: Your Honor, complete lack of
- 22 foundation. These are questions for Mr. Vincent. He
- hasn't established that Mr. Crisp had anything to do
- 24 with the drafting of these claims.

- 1 BY MR. OLIVER:
- Q. Mr. Crisp, if I could ask you to turn, please,
- 3 back to CX-1957, and if I could direct your attention
- 4 to the caption in CX-1957, Re:, Rambus, Inc., and under
- 5 that are listed three U.S. patent applications.
- 6 Do you see that?
- 7 A. Yes, sir, I do.
- Q. And number 2, U.S. patent application serial
- 9 number 07/847,961, do you see that?
- 10 A. Yes, sir, I do.
- 11 Q. Now, if I could ask you to look back at
- 12 CX-1457, please, and on page 4, do you see in the upper
- 13 left-hand corner in the box serial number 07/847,961?
- 14 Do you see that?
- 15 A. Yes, sir, I do.
- 16 Q. Does that refresh your recollection that
- 17 CX-1457, beginning at page 4, Preliminary Amendment,
- 18 was one of the documents that you received enclosed
- 19 with a copy of the letter which is CX-1957?
- 20 A. No.
- 21 Q. You have no reason to doubt that you received
- 22 draft 1457 at the time of April 22nd, 1993, do you?
- 23 A. I'm not sure that I've seen this.
- Q. Well, you have no reason to doubt that Mr.
- 25 Vincent sent you a copy of his letter of April 22nd,

- 1 1993, CX-1957?
- 2 A. I see my name on it. I don't have any
- 3 recollection of actually receiving the letter or the
- 4 attachments.
- 5 Q. But you have no reason to doubt that you did
- 6 receive such a letter, do you?
- 7 A. Other than the fact that I don't remember
- 8 receiving it.
- JUDGE McGUIRE: All right, now, that's not the
- 10 question, Mr. Crisp. If you can answer the question,
- 11 answer it. If you can't, just say I can't answer it,
- but, you know, that's three times he's asked it, and
- 13 you haven't answered it yet.
- 14 THE WITNESS: Thank you, Your Honor. Please
- 15 ask the question again.
- 16 BY MR. OLIVER:
- Q. You have no reason to doubt that you received a
- 18 copy of the letter marked CX-1957 on or about April
- 19 22nd, do you?
- 20 A. No.
- 21 Q. And you have no reason to doubt that one of the
- 22 enclosures that you received with that letter was the
- 23 preliminary amendment appearing at CX-1457, beginning
- 24 at page 4?
- 25 A. No, sir, I have no reason to doubt it.

1 MR. OLIVER: Your Honor, complaint counsel

- 2 moves to admit CX-1957 into evidence.
- JUDGE McGUIRE: Any objection?
- 4 MR. PERRY: No objection.
- JUDGE McGUIRE: So entered.
- 6 (CX Exhibit Number 1957 was admitted into
- 7 evidence.)
- 8 BY MR. OLIVER:
- 9 Q. Now, Mr. Crisp, in May of 1993, Lester Vincent
- 10 sent you the presentation handout that we looked at
- 11 yesterday regarding industry standards. Do you recall
- 12 that?
- 13 A. I don't remember receiving that, no, sir.
- 14 Q. Do you recall that the letter that we did see
- 15 yesterday was dated May 4th, 1993?
- 16 A. I don't remember the date on it, but I do
- 17 remember it was sometime in 1993.
- 18 Q. A few days later, also in May of 1993, you and
- 19 Mike Farmwald spoke to Lester Vincent about the draft
- amendments in Rambus' patent applications, right?
- 21 A. I don't remember.
- 22 MR. OLIVER: May I approach, Your Honor?
- JUDGE McGUIRE: Go ahead.
- 24 BY MR. OLIVER:
- Q. Mr. Crisp, I've handed you a document marked as

MF

- 1 CX-1930. Again, it consists of billing sheets or
- 2 billing records of Mr. Lester Vincent, and if I could
- 3 ask you to turn to page 83 of CX-1930. Again, the
- 4 paper copies are difficult to read. It might be easier
- 5 if we bring it up on the screen.
- Do you see a reference there, May 13, 1993,
- 7 Lester J. Vincent, "Conference with Richard Crisp and
- 8 Mike Farmwald regarding preliminary amendment"?
- 9 A. Yes, sir, I do.
- 10 Q. Does that refresh your recollection that on May
- 11 13th, 1993, you and Mr. Farmwald did speak with Mr.
- 12 Vincent concerning the preliminary amendments?
- 13 A. No.
- Q. You have no recollection one way or another?
- 15 A. That's correct.
- 16 Q. Now, four days after that, on May 17th, Mr.
- 17 Vincent sent the preliminary amendment to the Patent
- 18 and Trademark Office, right?
- 19 A. I'm not sure.
- 20 MR. OLIVER: May IepRI A.22 weight?
- 1 1 noA. That's correct. 21epRI A.22 JUDGE McGUIRE:

1 halfway down the statement Preliminary Amendment, and

- 2 if I could ask you to turn, please, to page 11.
- 3 You'll see there, respectfully submitted,
- 4 Blakely Sokoloff, signed by Thomas Li, dated May 17,
- 5 1993. Do you see that?
- 6 A. Yes, sir, I do.
- 7 O. Does this refresh your recollection that on May
- 8 17, 1993, Lester Vincent's law firm submitted on behalf
- 9 of Rambus the preliminary amendments that you had
- 10 discussed?
- 11 A. No.
- 12 Q. Again, you have no recollection one way or
- 13 another?
- 14 A. That's correct.
- 15 Q. Mr. Crisp, if I could ask you to turn, please,
- to page 5 of CX-1458, the top of the page reads, "Add
- 17 the following claims."
- Do you see that?
- 19 A. Yes, I do.
- Q. And then within claim 151, subheading (D), do
- 21 you see that?
- 22 A. Yes, sir, I do.
- Q. And if you read paragraph (D) to yourself,
- 24 please, do you see that there is a discussion in there
- of circuitry for storing a first value corresponding to

- 1 a predetermined time period during which the interface
- 2 circuitry must wait before transmitting reply
- 3 information?
- 4 MR. PERRY: Your Honor, there has been no
- 5 foundation. There has been no showing that this set of
- 6 preliminary amendments was ever copied to Mr. Crisp,
- 7 and he's being asked to interpret documents he hasn't
- 8 seen.
- 9 MR. OLIVER: Your Honor, I would like to ask if
- 10 this refreshes his recollection concerning discussions
- 11 with Mr. Vincent four days earlier.
- 12 JUDGE McGUIRE: Overruled. I'll hesrhlieevMR. O.2. O.2.
- 16. I'll hesrBY this refreso

1 Q. Does this refresh your recollection that on May

- 2 13, 1993, you discussed with Mr. Farmwald and Mr.
- 3 Vincent a draft claim to be added to Rambus' patent
- 4 application relating to programmable access time?
- 5 A. No, sir, it doesn't.
- 6 Q. It does not refresh your recollection one way
- 7 or another?
- 8 A. That's correct.
- 9 Q. Mr. Crisp, you knew at this time, though, that
- 10 Mr. Vincent was working on an amendment to the patent
- 11 application, the purpose of which was to add claims
- that specifically would cover control register and
- 13 programmable CAS latency. Isn't that right?
- 14 A. I'm not sure that I knew that he was doing
- 15 that. I know I had requested to him that he should
- look into that, whether we could -- whether or not we
- 17 had invented such a concept, and if so, if he could
- 18 write some claims on it if we didn't have them already.
- 19 MR. OLIVER: May I approach, Your Honor?
- JUDGE McGUIRE: Yes.
- 21 BY MR. OLIVER:
- Q. Mr. Crisp, I've handed you CX-1959. This is an
- 23 email from Fred Ware to John Dillon, Allen Roberts,
- 24 Rick Barth, yourself, Mike Farmwald, dated June 18,
- 25 1993.

- 1 Do you see that?
- 2 A. Yes, sir, I do.
- Q. And if I could direct your attention to the
- 4 first paragraph, it reads, "I spoke with Lester Vincent
- 5 and Tom Li, the other one, on the phone yesterday. The
- 6 current status of the additional claims that we want to
- 7 file on the rpFsOR to

- 1 we did have a discussion about that.
- 2 O. You also recall that you actually spoke
- 3 directly with Mr. Lester Vincent in September of 1992
- 4 concerning the same technology, right?
- 5 A. I'm sorry, I'm having a hard time remembering
- 6 that.
- 7 O. Do you recall yesterday we looked at Lester
- 8 Vincent's handwritten notes from a meeting that you had
- 9 with him on September 25th, 1992?
- 10 A. I remember we looked at a number of Mr.
- 11 Vincent's handwritten notes. I don't remember the
- dates and which topics were in particular notes.
- Q. In any event, you do recall discussing this
- 14 topic with Mr. Vincent, right?
- 15 A. I do remember talking about -- about that, yes.
- 16 I just don't remember which date it was.
- Q. And you also recall in your email exchange with
- 18 Fred Ware in February of 1993 that programmable latency
- 19 was again one of the technologies that was identified?
- 20 A. I think I remember an email to Mr. Ware where
- 21 he had asked me about some claims, and I think that was
- one of the ones he had asked me about.
- O. So, here in June 1993, Fred Ware is now writing
- 24 a follow-up saying writable configuration register
- 25 permitting programmable CAS latency, this claim has

- 1 been written up and filed.
- 2 Do you see that?
- 3 A. Yes, sir, I do.
- 4 Q. And do you see the next sentence reads, "This
- 5 is directed against SDRAMs"?
- 6 Do you see that?
- 7 A. Yes, I do.
- 8 Q. Now, you received this in June of 1993, right?
- 9 A. I believe I did.
- 10 Q. And you agreed with that statement, didn't you?
- 11 A. Agreed with which statement?
- 12 Q. The statement I've just read, "Writable
- configuration register permitting programmable CAS
- 14 latency. This claim has been written up and filed.
- 15 This is directed against SDRAMs."
- 16 A. You asked if I agreed with that?
- 17 Q. If you agreed with that statement at the time
- 18 of this email.
- 19 A. I don't know whether I agreed with it or not at
- 20 the time.
- 21 MR. OLIVER: May I approach, Your Honor?
- JUDGE McGUIRE: Yes.
- 23 BY MR. OLIVER:
- Q. Mr. Crisp, I've handed you a document marked as
- 25 CX-703. This is an email from you to Fred Ware also

- 1 dated June 18, 1993.
- 2 Do you see that?
- 3 A. Yes, sir, I do.
- 4 O. And the first sentence reads, "First of all
- 5 this all sounds really good and matches what I have
- 6 requested and what I believe has happened."
- 7 Do you see that?
- 8 A. Yes, I do.
- 9 Q. So, as of June 18, 1993, you agreed with what
- 10 Fred Ware set forth in his email. Isn't that right?
- 11 A. This -- I have no reason to doubt that.
- MR. OLIVER: Your Honor, complaint counsel
- moves to admit CX-703 into evidence.
- MR. PERRY: No objection.
- JUDGE McGUIRE: Entered.
- 16 (CX Exhibit Number 703 was admitted into
- 17 evidence.)
- 18 BY MR. OLIVER:
- 19 Q. Now, Mr. Crisp, you attended the next meeting
- of the JC-42.3 subcommittee on May 19th and 20th, 1993,
- 21 right?
- 22 A. I'm not sure, sir.
- MR. OLIVER: May I approach, Your Honor?
- JUDGE McGUIRE: Yes.
- 25 BY MR. OLIVER:

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

- 2 JX-16, the minutes of the JC-42.3 subcommittee meeting
- of May 19 and 20, 1993. If I could direct your
- 4 attention to the first page, you'll see your name
- 5 appearing about three-quarters of the way down the
- 6 page.
- 7 A. Yes, sir, I do see that.
- 8 Q. That indicates that you attended this 42.3
- 9 subcommittee meeting on May 19th and 20th of 1993?
- 10 A. Yes, sir, it does.
- 11 Q. Now, again, I'd just like to pause for a moment
- 12 to place this in perspective. Do you recall a few
- moments ago we looked at Lester Vincent's billing
- 14 records indicating that you and Mr. Farmwald had a
- 15 conversation with Mr. Vincent concerning the
- 16 preliminary application on May 13, 1993?
- MR. PERRY: Your Honor, there's no jury here.
- 18 I think that there's no need for this summary, and
- 19 we're just going to struggle through it is my guess,
- 20 because he is going to summarize it in a way that might
- 21 not exactly capture the testimony, and I object to
- 22 that.
- JUDGE McGUIRE: Mr. Oliver?
- 24 MR. OLIVER: It is only two questions. I'm
- 25 just trying to set the stage.

- 1 JUDGE McGUIRE: Overruled.
- THE WITNESS: Please ask the question again,
- 3 sir.
- 4 BY MR. OLIVER:
- 5 Q. Yes. Do you recall that we looked at Lester
- 6 Vincent's billing sheets indicating that you and Mr.
- 7 Farmwald had a conversation with Mr. Vincent concerning
- 8 the preliminary amendment on May 13, 1993?
- 9 A. I'm sorry, I don't remember the date, but I do
- 10 remember we saw that in the billing records.
- 11 Q. And then we saw a preliminary amendment that
- 12 Mr. Thomas Li had signed on behalf of Blakely Sokoloff,
- filed with the Patent and Trademark Office on May 17,
- 14 1993?
- 15 A. I think that's right. Again, I'm not clear on
- 16 the date, but...
- Q. And then two days later, May 19, 1993, is when
- 18 you attended the JC-42.3 subcommittee meeting. Is that
- 19 right?
- 20 A. Yes, sir, that's right.
- 21 Q. Now, at the May 1993 JC-42.3 subcommittee
- 22 meeting, Mr. Gordon Kelley gave a report on the status
- of the packet of 14 SDRAM ballots that had been sent to
- the council, right?
- 25 A. I don't remember.

- Q. If I could ask you to turn, please, to page 5
- of JX-16, and if I could direct your attention
- 3 specifically to paragraph 8.1 appearing about halfway
- down that page. Now, you see there, 8.1, Sync DRAM
- 5 Ballots, it reads, "Mr. Kelley noted that the 14 Sync
- 6 DRAM ballots had gone to Council. There was only one
- 7 no vote from ATT on JCB-93-15. Mr. Kelley showed his
- 8 response to ATT's comment. (See Attachment H)."
- 9 Does that refresh your recollection that Mr.
- 10 Kelley gave a summary of the current status of the
- 11 SDRAM ballots before the council?
- 12 A. No, sir.
- 13 Q. If I could point your attention to the next
- sentence, "During the meeting, Mr. Kelley distributed
- 15 copies of all the SDRAM Council ballots to allow
- 16 companies to review them."
- 17 Do you see that?
- 18 A. Yes, sir, I do.
- 19 O. Do you have any recollection of Mr. Kelley
- 20 actually distributing copies of the council ballots at
- 21 this meeting?
- A. No, sir, I don't.
- Q. Now, at this May 1993 meeting, you did not make
- 24 any disclosure of any Rambus patent or patent
- 25 application that might relate to these SDRAM council

- 1 ballots, did you?
- 2 A. I think that's correct, yes.
- 3 Q. Now, in May and June of 1993, there were also
- 4 other people at Rambus who were attempting to add
- 5 claims specifically directed at SDRAMs. Isn't that
- 6 right?
- 7 A. Which dates, sir?
- 8 Q. May and June of 1993.
- 9 A. I think the answer is yes. Would you ask the
- 10 question again? I want to make sure I gave you the
- 11 right answer.
- 12 Q. Sure. In May and June of 1993, there were also
- other individuals at Rambus who were working to help
- 14 add claims to Rambus' existing patent applications that
- were directed at SDRAMs. Isn't that right?
- 16 A. I think there were people at Rambus that were
- 17 working with the lawyers to better write claims or to
- 18 help suggest claims that they felt should be a part of
- 19 our applications.
- Q. And some of those claims were specifically
- 21 directed against SDRAMs. Isn't that right?
- 22 A. I believe that's correct. I think that's what
- 23 the documents show.
- Q. So, for example, we just looked at Fred Ware's
- email of June 18, 1993, the first item of which stated

1 that the claim relating to programmable CAS latency is

- directed against SDRAMs. Do you recall that?
- A. Yes, that's what I was thinking of when I was
- 4 answering your question.
- 5 Q. Now, at that time, Fred Ware and others were
- 6 also working on claims relating to DRAM with PLL clock
- 7 generation. Isn't that right?
- 8 A. I'm not real sure.
- 9 Q. If I could ask you to locate CX-1959 in front
- of you, that's the Fred Ware email we looked at a few
- 11 minutes ago. Do you have CX-1959 in front of you, sir?
- 12 A. Yes, sir, I do.
- 13 O. If I could direct your attention to item number
- 14 3, DRAM with PLL clock generation. Do you see that?
- 15 A. Yes, sir, I do see that.
- 16 Q. And if I could read that paragraph to you,
- 17 "This claim is partially written up. They need to
- 18 finish it up and file it. They are not waiting for
- 19 anything from us. This is directed against future
- 20 SDRAMs and RamLink."
- 21 Do you see that?
- 22 A. Yes, sir, I do see that.
- Q. Does this refresh your recollection that in
- June of 1993, Fred Ware and others were

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- directed against future SDRAMs and RamLink?
- A. Well, you say "working on." I'm not sure I'd
- 3 go that far, but it certainly does refresh my
- 4 recollection there were some activities in that area.

1 O. Now, Rambus was also pursuing claims with

- 2 respect to external supplied reference voltage. Isn't
- 3 that right?
- 4 A. I think that was something that was desired,
- 5 but I'm not sure exactly where that stood in the
- 6 process of executing that.
- 7 O. Would it be fair to say that Rambus was
- 8 exploring the possibility of adding claims to cover
- 9 external supplied reference voltage?
- 10 A. Well, I think I would prefer to say that Rambus
- 11 had given some consideration to requesting that our
- 12 patent lawyer look to see if such claims existed or if
- they didn't if they could have been created and added
- 14 to our existing applications.
- 15 Q. Well, Rambus certainly had such claims in mind,
- 16 didn't it?
- 17 A. I think that's right.
- Q. And in fact, Rambus had such claims in mind to
- 19 be directed against so-called CTT technology. Isn't
- 20 that right?
- 21 A. I think that's true, in part.
- 22 Q. And that's something that had been discussed at
- 23 JEDEC, isn't it?
- A. I'm sorry, what was discussed at JEDEC?
- Q. Using external supplied reference voltage

- 1 against CTT technology.
- 2 A. It's possible that it was. I don't really
- 3 remember.
- 4 MR. OLIVER: Your Honor, may I approach the
- 5 table?
- JUDGE McGUIRE: Yes.
- 7 BY MR. OLIVER:
- 8 Q. You do recall yesterday that one of the
- 9 technologies we had noted being discussed at JEDEC was
- 10 external reference voltage?
- 11 A. I think I remember that, yes. I'm not sure
- 12 exactly what the context was, but I think we did
- 13 establish that yesterday.
- Q. Now, Rambus was also pursuing claims relating
- 15 to low voltage swing signal. Isn't that right?
- 16 A. I believe our patent attorneys were looking
- 17 into that.
- 18 Q. Well, in fact, they went beyond looking into
- 19 it; they had actually filed a patent amendment,
- 20 correct?
- 21 A. That may be true. I'm not sure that I
- 22 completely remember.
- Q. If I could ask you to locate CX-703 in front of
- 24 you, this is the email that you wrote dated June 18,
- 25 1993.

1 Do you have CX-703 in front of you?

- 2 A. Yes, sir, I do.
- Q. After the first paragraph we looked at a moment
- 4 ago, is that a piece of embedded text in here? Do you
- 5 see that?
- 6 A. Yes, I do.
- 7 O. And do you see that is item number 6 from Fred
- 8 Ware's email concerning low voltage swing signal
- 9 levels?
- 10 A. Yes, I do.
- 11 Q. And then under that you have added two more
- 12 lines of your own text, right?
- 13 A. Yes, that's correct.
- Q. And that reads, "This has already been done.
- 15 It is the one you and Allen and I talked about
- 16 yesterday."
- 17 Do you see that?
- 18 A. Yes, I do.
- 19 O. Now, does that refresh your recollection that
- 20 claims concerning low voltage swing signal had already
- 21 been filed?
- 22 A. Yes, it does refresh my recollection.
- Q. Now, on June 28, 1993, Lester Vincent filed
- 24 with the Patent and Trademark Office an amendment to
- 25 the '692 application. Isn't that right?

- 1 A. I'm not sure, sir.
- MR. OLIVER: May I approach, Your Honor?
- JUDGE McGUIRE: Yes.
- 4 BY MR. OLIVER:
- 5 Q. Mr. Crisp, I've handed you a document marked as
- 6 CX-1459. It bears a caption at the top In the United
- 7 States Patent and Trademark Office, about halfway down,
- 8 a statement Preliminary Amendment, and do you see in
- 9 the box in the upper left-hand corner serial number
- 10 07/847,692, and the stamp on the right-hand side has a
- 11 written date of June 28, 1993?
- 12 Do you see that?
- 13 A. Yes, sir, I see that.
- MR. OLIVER: Your Honor, may I approach?
- JUDGE McGUIRE: Yes.
- 16 BY MR. OLIVER:
- Q. Mr. Crisp, I've also handed you a document
- 18 marked CX-1961. This is a letter from Lester Vincent
- 19 to Fred Ware dated June 30, 1993, and if you look in
- the lower left-hand portion, you'll see a cc with
- 21 enclosures, and you're the second person listed there.
- Do you see that?
- 23 A. Yes, sir, I do see that.
- Q. And if you look in the caption at the top,
- 25 you'll see that the reference there -- the first

1 reference there is U.S. patent application, serial

- 2 number 07/847,692.
- 3 Do you see that?
- 4 A. Yes, I do see that.
- 5 Q. Does this letter, CX-961, refresh your
- 6 recollection that Mr. Vincent, in fact, sent you a copy
- 7 of the preliminary amendment to the '692 application
- 8 when it was filed?
- 9 A. No, sir, it doesn't.
- 10 Q. Now, the following month, in July 1993, you and
- 11 Fred Ware met again with Lester Vincent. Isn't that
- 12 right?
- 13 A. I don't remember that.
- MR. OLIVER: May I approach, Your Honor?
- 15 JUDGE McGUIRE: Yes.
- 16 BY MR. OLIVER:
- 17 Q. Mr. Crisp, I've handed you a document marked as
- 18 CX-1963. These are a set of Lester Vincent's
- 19 handwritten notes. The date in the upper right-hand
- 20 corner, July 9, 1993, and the top is Conf, for
- 21 conference, with Fred Ware and Richard Crisp.
- 22 If I could direct your attention to page 3,
- please, at the top of that page, it reads, "P001,
- 24 preliminary amendment, DRAM using double terminals."
- Do you see that?

1 A. I think it says something a little different

- 2 than that, sir.
- Q. Well, do you see the first line does say,
- 4 "P001, prelim," for preliminary, "amendment"?
- 5 Do you see that?
- 6 A. "Prelim amendment," yes, I see that.
- 7 O. Okay. If I could then direct your attention to
- 8 the bottom three lines on that page, there is an arrow,
- 9 "We might need to add combination of low voltage swing
- 10 signaling."
- 11 A. Was there a question?
- 12 Q. Do you see that?
- 13 A. Oh, yes, I do see that.
- Q. We'll focus on a couple more pages of the
- document, and then I will ask you a couple of follow-up
- 16 questions.
- 17 If I could ask you to turn, please, to page 4,
- about halfway down the page, you will see a reference
- 19 to number 5, "Externally supplied reference voltage."
- 20 Do you see that?
- A. On page 4, item number 5?
- 22 O. That's correct.
- 23 A. I -- oh, okay. Yes, I see that.
- Q. Okay. And then underneath that, number 6,
- 25 "Already filed."

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- 1 Do you see that?
- 2 A. Yes, I do.
- Q. Do these notes refresh your recollection that
- 4 on July 9, 1993, you and Fred Ware had a conference
- 5 with Lester Vincent concerning Rambus' preliminary
- 6 amendment, for which you discussed among other topics
- 7 low voltage swing signaling and external supplied
- 8 reference voltage?
- 9 A. No, sir, it doesn't.
- 10 Q. If I could ask you to look at page 4 of Lester
- 11 Vincent's notes from July 9, 1993, number 5, external
- supplied reference voltage, and then if you could
- 13 please compare that to CX-1959, which was the Fred Ware
- 14 email.
- 15 A. I'm sorry, compare what to what?
- 16 Q. Page 4 of Lester Vincent's notes --
- 17 A. Yes.
- 18 Q. -- which state, "Externally supplied reference
- 19 voltage."
- 20 A. Right.
- 21 Q. Compare that to number 5 in CX-1959, Fred
- 22 Ware's email. You'll see that item 5 in Fred Ware's
- email is, "DRAM with external supplied reference
- voltage"?
- 25 A. Yes, for input receivers.

1 O. And then if I could ask you to look again at

- 2 Lester Vincent's handwritten notes, page 4, number 6,
- 3 "Already filed."
- 4 Do you see that?
- 5 A. Yes, I see that under number 5.
- 6 Q. And then if you could look back again at Fred
- Ware's email, CX-1959, number 6, do you see that's the
- 8 low voltage swing signal reference?
- 9 A. Yes, I see that.
- 10 Q. And do you recall that's the one that you wrote
- 11 back to Fred Ware informing him that it had already
- 12 been filed?
- 13 A. I think that's right.
- Q. Does that refresh your recollection that at
- this July 9, 1993 meeting, you and Fred Ware sat down
- 16 with Lester Vincent and discussed the contents of Fred
- 17 Ware's June 18, '83 -- 1993 email, CX-1959?
- 18 A. No, sir, it doesn't. I still don't remember
- 19 it.
- 20 MR. OLIVER: Could I have just a moment, Your
- 21 Honor?
- JUDGE McGUIRE: Go ahead.
- 23 (Counsel conferring.)
- 24 BY MR. OLIVER:
- Q. Now, Mr. Crisp, in September 1993, you attended

- 1 the next regularly scheduled JC-42.3 subcommittee
- 2 meeting, right?
- A. I'm not sure of the date for the next meeting.

- 1 A. That's right.
- Q. Does that refresh your recollection that the
- 3 next JEDEC meeting you attended was in September 1993?
- 4 A. Yes, it does.
- 5 Q. Now, this is the meeting that we discussed
- 6 yesterday at which Texas Instruments was -- let me
- 7 strike that question.
- 8 This is the meeting we discussed yesterday at
- 9 which a dispute between Micron and Texas Instruments
- 10 related to patent disclosure arose?
- 11 A. I know it came up in the meeting. I don't know
- 12 if that was the first time it had arisen.
- Q. Now, at this September 1993 meeting, you also
- 14 disclosed Rambus' '703 patent. Isn't that right?
- 15 A. Yes, that's correct.
- Q. And you disclosed that because it was the first
- 17 Rambus patent that had issued, and it had issued
- 18 shortly before?
- 19 A. I think that was part of the reason.
- Q. Now, the '703 patent was not related to JEDEC's
- 21 SDRAM work, was it?

1 A. That may be correct. I just simply don't

- 2 remember.
- Q. If you had testified previously that it was not
- 4 related, you have no information today that would
- 5 contradict that, do you?
- 6 A. I'm sorry, could you ask the question again?
- 7 O. Yes. If you had testified previously that the
- 8 '703 patent was not related to JEDEC's work, you have
- 9 no information today to contradict that, do you?
- 10 A. I think that's correct.
- 11 Q. Now, when you disclosed Rambus' '703 patent,
- 12 you didn't tell JEDEC about any of Rambus' pending
- patent applications, did you?
- 14 A. I don't -- I don't believe I explicitly said
- anything about any pending applications.
- Q. You didn't say anything about any of Rambus'
- 17 pending applications, did you?
- 18 A. That's correct, I didn't say anything about
- 19 that.
- Q. Now, following the September 1993 meeting, you
- 21 discussed with vice president David Mooring the fact
- 22 that you had discussed -- that you had disclosed the
- 23 '703 patent. Isn't that right?
- A. Yes, that's correct.
- Q. And Mr. Mooring was your boss at Rambus at the

- 1 time?
- 2 A. Yes, that's correct.
- Q. And in that conversation, he led you to believe
- 4 that he was annoyed with you for having made that
- 5 disclosure. Isn't that right?
- 6 A. Yes, I think that's true, in part.
- 7 O. In fact, he chastised you, didn't he?
- 8 A. I think those are the words that I used.
- 9 Q. Now, following that time, you made no specific
- 10 disclosures of any SDRAM-related patents at any time
- 11 until Rambus withdrew from JEDEC. Isn't that right?
- MR. PERRY: Your Honor, that assumes facts not
- in evidence, that there were any SDRAM-related patents
- 14 to disclose.
- JUDGE McGUIRE: Overruled.
- 16 THE WITNESS: Would you please ask the question
- 17 again?
- 18 BY MR. OLIVER:
- 19 O. Yes. Following your disclosure of the '703
- 20 patent, you made no specific disclosures of any
- 21 SDRAM-related patents at any time at JEDEC until the
- time that Rambus withdrew. Isn't that right?
- A. Well, I'll agree with the first part. I'm not
- 24 sure that at the time of the withdrawal there were any
- 25 SDRAM-related patents to disclose. I know there was a

list of patents, but I'm not sure what all they

- 2 covered.
- Q. Well, let me rephrase the question to be
- 4 certain the record is clear.
- 5 Between the time that you disclosed the '703
- 6 patent and the list that you've referred to attached to
- 7 your withdrawal letter, you did not disclose any Rambus
- 8 patents at JEDEC, did you?
- 9 A. That's correct.
- 10 Q. Between the time that you disclosed the '703
- 11 patent and the time that you submitted the withdrawal
- 12 letter to JEDEC, you did not disclose any Rambus patent
- applications at JEDEC, did you?
- 14 A. That's correct.
- 15 Q. In the interest of time, let's skip ahead a
- little bit in the story and move up into 1994, if we
- 17 could.
- 18 First of all, again, at the beginning of 1994,
- 19 Rambus renewed its membership in JEDEC. Is that right?
- 20 A. I think that's right. I don't really remember,
- 21 but we must have.
- 22 Q. I'd like to ask you to find CX-602 in front of
- 23 you.
- MR. PERRY: Your Honor, again, Rambus will
- 25 stipulate that it paid its dues for that year.

- 1 \$4,000, has now been increased to \$5,000.
- 2 Do you see that?
- A. Yes, I see that the numbers were changed.
- 4 O. So, it would be fair to say that this reflects
- 5 an increased participation by Rambus within JEDEC?
- A. Well, it depends on what you mean by
- 7 "participation." It looks like we joined another
- 8 committee.
- 9 Q. I'd like to move ahead now to May of 1994. I'd
- 10 like to show you a letter from Rambus vice president
- 11 Allen Roberts to Mr. Vincent and then ask some
- 12 questions about that.
- May I approach, Your Honor?
- 14 JUDGE McGUIRE: Yes.
- 15 BY MR. OLIVER:
- Q. Mr. Crisp, I've handed you a document marked as
- 17 CX-734. This is a two-page letter on Rambus letterhead
- dated May 5, 1994, addressed to Lester Vincent, signed
- 19 by Allen Roberts.
- 20 If I could direct your attention to the first
- 21 paragraph, Mr. Roberts said, "We have reviewed the
- 22 teachings of the original Rambus patent application and
- 23 feel we can enhance our claim coverage. We would like
- you to consider the following areas as inclusion into
- the current divisional patents P009D, P010D, P011D,

- 1 P012D, P013D, P014D, P015DC or potentially as new
- divisionals. It is possible that some of these
- 3 enhancements are already in the existing applications,
- 4 but we would like to re-assess the strength of those
- 5 claims." (Sic)
- 6 Do you see that?
- 7 A. I think it largely said what you did, but I
- 8 think that there was one of the numbers you got wrong.
- 9 Q. Do you recall which number I got wrong?
- 10 A. The first one.
- 11 O. P009DC?
- 12 A. That's correct.
- 0. Okay. Then following that there is a list of
- 14 enhancements that he wants Mr. Vincent to consider?
- 15 A. Sir, this was written by Mr. Roberts.
- MR. PERRY: I think it's a belated objection by
- me, Your Honor, that there's no foundation that he ever
- 18 saw this or was involved in any of this work at this
- 19 time given his job at the company.
- 20 JUDGE McGUIRE: Sustained on that one, Mr.
- 21 Oliver.
- MR. OLIVER: Thank you, Your Honor.
- 23 BY MR. OLIVER:
- Q. Mr. Crisp, if I could direct your attention to
- item 2.0 on the list, it reads, "Multiple and

1 independently controlled and addressed internal DRAM

- 2 memory regions (banks)."
- 3 Do you see that?
- 4 A. Yes, sir, I do.
- 5 Q. Do you recall yesterday that we discussed two
- 6 banks and saw that that appeared in various JEDEC
- 7 minutes?
- 8 A. I have a recollection similar to that, yes.
- 9 Q. And do you recall that we discussed your
- 10 conversations with Mr. Lester Vincent concerning
- 11 multiple address rows? Do you recall that?
- 12 A. I think it was a little different than that.
- Q. Do you recall a discussion of technology along
- 14 those lines?
- 15 A. Something similar, yes.
- Q. Now, do you recognize the statement here of
- 17 multiple and independently controlled regions or banks
- as similar to the technology that you discussed with
- 19 Mr. Vincent in September 1992?
- MR. PERRY: Your Honor, still no foundation
- 21 laid for questioning on this document.
- MR. OLIVER: Your Honor --
- JUDGE McGUIRE: Yes, go ahead, Mr. Oliverment.
- f\*\*( .01 Tc0 23at. wLIVUlnlGUIRE: Yes, go ahonin)Tj

- 1 possible conversations with Mr. Roberts.
- MR. PERRY: Well, but right now he's asking --
- JUDGE McGUIRE: We are still talking about the
- foundation on this oneac( e about the )TjT\*( abouT.8 -a3ined.

- 1 CAS latency? Do you recall that?
- 2 A. Yes, I think it spoke to that in part.
- Q. Do you recall any conversations that you had
- 4 with vice president Roberts in about May of 1994
- 5 relating to additional claims relating to control
- 6 registers to control CAS access timing?
- 7 A. No, sir, I don't remember.
- 8 Q. If I could direct your attention back to the
- 9 first page, please, item number 1. It reads, "Use of
- 10 both edges of the clock for transmission of address,
- 11 commands, or data (or any combination) on DRAM device
- to increase effective bandwidth/pin."
- Do you see that?
- 14 A. Yes, sir, I do.
- 15 Q. Now, do you recall any conversation with vice
- president Roberts in about May of 1994 concerning
- 17 claims to be added relating to use of both edges of the
- 18 clock?
- 19 A. No, sir, I don't recall.
- Q. Now, Mr. Crisp, the so-called auto-precharge
- 21 technology was also a technology that you've seen
- 22 discussed at JEDEC. Do you recall that discussion from
- 23 yesterday?
- A. No, sir, I'm sorry, I don't remember that

1 MR. OLIVER: Your Honor, if you could give me

- just a moment, please.
- JUDGE McGUIRE: Go ahead.
- 4 (Counsel conferring.)
- 5 MR. OLIVER: Could we have just a moment, Your
- 6 Honor?
- JUDGE McGUIRE: Yes, all right.
- 8 MR. OLIVER: Actually, Your Honor, would this
- 9 be an appropriate place for a mid-morning break?
- 10 JUDGE McGUIRE: I guess it would be. So, off
- 11 the record, we will take a ten-minute break.
- MR. OLIVER: Thank you, Your Honor.
- 13 (A brief recess was taken.)
- JUDGE McGUIRE: Let's go on the record.
- Mr. Oliver, you may proceed.
- MR. OLIVER: May I approach, Your Honor?
- 17 JUDGE McGUIRE: Yes.
- 18 BY MR. OLIVER:
- 19 Q. Mr. Crisp, I've handed you a document marked
- 20 CX-1708. Do you recognize this as an email that you
- 21 wrote following the April 1992 JEDEC task group
- 22 meeting?
- 23 A. Yes, sir, I remember this.
- Q. If I could direct your attention, please, to
- page 5, CX-1708, and to the second paragraph on that

- 1 page. There's a sentence in the middle of that
- 2 paragraph reading, "The precharge functionality is
- 3 getting complicated."
- 4 Do you see that?
- 5 A. Yes, sir, I do.
- 6 MR. OLIVER: May I approach, Your Honor?
- 7 JUDGE McGUIRE: Yes.
- 8 BY MR. OLIVER:
- 9 Q. Mr. Crisp, I've handed you a document marked
- 10 CX-680, again a document that we discussed yesterday.
- 10 Do you recognize this as Mr. Garrett's trip report from
- the September 1992 meeting?
- 13 A. Yes, sir, I do.
- Q. And you also attended the September 1992 JEDEC
- meeting along with Mr. Garrett. Is that right?
- 16 A. That's correct, sir.
- Q. Il Q. eEouldr. kalso toecf marked

- 1 autoprecharge will be done."
- 2 Do you see that?
- A. Yes, sir, I do see that.
- 4 O. Now, does CX-1708 and CX-680 refresh your
- 5 recollection that auto-precharge is a technology that
- 6 was discussed at JEDEC meetings during 1992?
- 7 A. Yes, sir, it does.
- 8 MR. OLIVER: May I approach, Your Honor?
- 9 JUDGE McGUIRE: Yes.
- 10 BY MR. OLIVER:
- 11 Q. Mr. Crisp, I've handed you a document marked
- 12 CX-738. This is an email from John Dillon to the
- executive group, Rick Barth, Fred Ware, dated June 16,
- 14 1994. Now, just to confirm, the executive group in
- 15 1994 would have included, among others, CEO Geoffrey
- 16 Tate, vice president David Mooring and vice president
- 17 Allen Roberts. Is that right?
- 18 A. Yes, sir, that's correct.
- 19 JUDGE McGUIRE: Can we indicate for my clarity
- 20 who is John Dillon?
- 21 MR. OLIVER: That was my next question, Your
- 22 Honor, thank you.
- JUDGE McGUIRE: Okay.
- 24 BY MR. OLIVER:
- Q. Mr. Crisp, could you please explain what

- 1 position John Dillon had in June of 1994?
- 2 A. Yes, sir. My recollection is that he was the
- 3 head of the architecture group inside of Rambus.
- 4 Q. He was also Rambus' representative at JEDEC's
- 5 JC-15 committee. Is that right?
- 6 A. I'm not sure if he was the representative or
- 7 not. I think he was involved in that along with at
- 8 least one and possibly two other Rambus employees.
- 9 Q. Now, the subject line on Mr. Dillon's email is,
- "An overlooked patent claim?"
- 11 Do you see that?
- 12 A. Yes, sir, I do.
- O. Now, I'd like to direct your attention to a few
- 14 portions of this email and then ask you some questions.
- 15 First, if I could direct your attention to the
- 16 first paragraph and the first sentence, the first
- 17 sentence reads, "Several Sync DRAMs and the MOST DRAM
- include the auto-precharge feature."
- 19 Do you see that?
- 20 A. Yes, sir, I do.
- 21 Q. Now, to your understanding at the time, the
- 22 MOST DRAM was manufactured by a company called Mosys.
- 23 Is that right?
- A. Technical point, I don't think it was actually
- 25 manufactured by them. They were a fabless company, but

- 1 they sold it.
- Q. So, Mosys designed the MOST DRAM. Would that
- 3 be accurate?
- 4 A. That's my understanding, yes.
- 5 Q. Now, if I could direct your attention to the
- 6 fourth paragraph, Mr. Dillon states, "Claim 89 actually
- 7 claims this feature. However, claim 89 is dependent on
- 8 the much narrower claim 82 of a DRAM with internal
- 9 select decoding. We may be able to make a broader
- 10 claim on auto-precharge for \*any\* DRAM and therefore
- 11 gacean ler, a foor, SAM and thST D. "TjT\*( 11 2
- 413 A. ThY, "Csi clI do
- Q. NoA therenf I couanirect your attention to the
- 61 clo usefulnessf a SAM ano ST D. Butarantionnghis fejT\*(
- 422 A. Thy, "Csi clI do

- 1 technology used in SDRAMs?
- 2 A. I don't really remember.
- Q. Did anyone within Rambus have any discussions
- 4 with you in the May or June 1994 time period about how
- 5 patenting the auto-precharge feature would have high
- 6 harassment value, especially with respect to the
- 7 third-party SDRAM controllers?
- 8 A. I don't remember.
- 9 Q. Now, you attended the next regularly scheduled
- 10 JEDEC meeting in May of 1994. Is that right?
- 11 A. Sir, I'm not sure what the date was.
- MR. OLIVER: May I approach?
- JUDGE McGUIRE: Yes.
- 14 BY MR. OLIVER:
- 15 Q. Mr. Crisp, I've handed you a document marked
- 16 JX-20. These are the minutes of the JC-42.3
- 17 subcommittee meeting held on May 25th, 1994. If I
- 18 could direct your attention to the first page, about
- 19 four-fifths of the way down, do you see your name in
- the list of members present?
- 21 A. Yes, sir, I do.
- Q. Now, again, at this meeting, Mr. Townsend
- 23 discussed the JEDEC patent policy, right?
- A. I'm sorry, I don't remember.
- Q. If I could ask you to turn, please, to page 4,

and if I could direct your attention specifically to

- 2 paragraph 3 --
- 3 A. Excuse me, sir, could you tell me what the
- 4 JEDEC number is, because the JX numbers are cut off?
- 5 Q. Yes, sir, it would be JEDEC 0015874.
- 6 A. Thank you, sir.
- 7 O. Do you see item number 3 almost halfway down
- 8 the page? It reads "Patent Policies."
- 9 A. Yes, sir, I do see that.
- 10 Q. And it states that the patent policies were
- 11 shown. It also states that, "It as," probably means
- is, "noted that the WANG patent case is coming up for
- 13 trial on June 14."
- 14 Do you see that?
- 15 A. Yes, sir, I do.
- Q. Now, let me ask you to find Exhibit CX-711 in
- 17 front of you, please. This is the thick collection of
- 18 emails. Within CX-711, if you could please turn to
- 19 page 26.
- Now, do you see on page 26 an email beginning
- 21 at the top from you to yourself and M. Johnson dated
- 22 May 22nd, 1994?
- 23 A. Yes, sir, I see that.
- O. Who is M. Johnson?
- 25 A. That's Mark Johnson.

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- 1 O. Who was Mark Johnson at this time?
- 2 A. He was a design engineer that was -- I think at
- 3 that time was working for Rambus.
- Q. And the subject is, "JEDEC memory meeting
- 5 report 2."
- 6 Do you see that?
- 7 A. Yes, I do see that.
- 8 Q. And again, these would have been notes that you
- 9 were typing on your laptop at the time of this Q. Aeaw100tCyc
- 1 3 paragraphng opage 26, it starts outis,4M (x16at
- 1 4 organizatig ) SDRAM v no 2."
- 15 6 Do you see that?
- Do you see that?

  F for thReTSldes,nc.90

- of that same discussion. Is that right?
- A. Yes, sir, that's correct.
- O. And if I could direct your attention to the
- 4 first paragraph on page 27, it reads, "Note that many
- of the SDRAMs use an externally supplied reference
- 6 voltage in the input buffers. I believe we have a
- 7 claim we added to cover this configuration. We should
- 8 make note of this."
- 9 Do you see that?
- 10 A. Yes, sir, I do.
- 11 Q. Now, if I could ask you to turn, please, to
- page 31. You may want to check the pages as you go. I
- 13 believe it's still a continuation of the same email.
- 14 Is page 31, in fact, a continuation of the same
- 15 email?
- 16 A. I believe it is, yes, sir.
- 17 Q. So, in other words, a continuation of your
- 18 notes from that same meeting?
- 19 A. I think that's correct.
- Q. And if I could direct your attention to a
- 21 caption appearing almost halfway down the page that
- 22 reads, "Second Presentations."
- 23 A. Yes, sir.
- Q. And a few lines underneath that, there is a
- 25 block about five lines I'd like to read for you. It

- begins, "Again." Do you see that?
- 2 That section reads, "Again, we need to check
- 3 claims about DRAM with input receivers using an
- 4 external supplied reference voltage. We may be able to
- 5 slow down or stop (or at least collect from) all of the
- 6 CTT, GTL and HSTL devices if this claim is allowed.
- 7 (Allen, I believe this was one of the claims you,
- 8 Lester, Tracy and I wrote up in late '91, right?)."
- 9 Do you see that?
- 10 A. Yes, sir, I do.
- 11 Q. Now, the Allen that you were referring to there
- is vice president Allen Roberts?
- 13 A. That's correct.
- 14 O. And Lester is Mr. Lester Vincent?
- 15 A. That's also correct.
- 16 Q. Who is Tracy?
- 17 A. Tracy -- I believe her name was Tracy Hurt or
- 18 Tracy Hurst.
- 19 JUDGE McGUIRE: All right, I would like to
- inquire here for the Court's clarity again, could you
- 21 explain to me what a CTT, GTL and HSTL are, Mr. Crisp?
- THE WITNESS: Your Honor, you're speaking to
- 23 me?
- JUDGE McGUIRE: Yes, I am.
- 25 THE WITNESS: Oh, can you tell me -- it's very

- 1 technical, so could you give me an idea of what you're
- 2 looking for so I can --
- JUDGE McGUIRE: Well, I just want to know what
- 4 that is. I mean, what is CTT, GTL and HSTL?
- 5 THE WITNESS: Oh, those were acronyms for
- 6 signaling technologies that were just various different
- 7 either standards or proposals for standards.
- 8 JUDGE McGUIRE: Okay, all right, that's fine.
- 9 THE WITNESS: They were used on all sorts of
- 10 different kinds of chips.
- JUDGE McGUIRE: All right, thank you.
- 12 All right, Mr. Oliver, you may proceed.
- 13 BY MR. OLIVER:
- Q. So, in other words, Mr. Crisp, just to be
- 15 clear, at this JEDEC meeting of May 27th, 1994, you
- wrote an email back to Rambus noting two separate
- 17 points in the proceedings involving external supplied
- 18 reference voltage. Is that right?
- 19 A. Well, I wrote the email back to myself and Mr.
- Johnson, so if you call that Rambus, then sure, it was
- 21 Rambus, but yes, it was mentioned twice.
- 22 Q. Well, the second passage that I've read to you
- 23 appears to be addressed to Allen Roberts. Isn't that
- 24 right?
- 25 A. Yes, sir, it is.

1 O. So, it was your understanding that at least

- 2 Allen Roberts would also see this email. Is that
- 3 right?
- 4 A. It must have been. I don't really remember.
- 5 Q. In any event, the first of the occasions which
- 6 external supplied reference voltage arose was during
- 7 the tabulation of the ballots. Is that right?
- 8 A. I -- I don't remember if that was the first
- 9 time I'd seen that.
- 10 Q. With respect to this email, the first passage
- 11 that we just looked at at the top of page 27.
- 12 A. Let me look at that again, sir. Yes, sir, I
- think that was the first time it had come up in that
- 14 meeting.
- 15 Q. Now, you never informed JEDEC at this meeting
- that you had worked on claims relating to externally
- 17 supplied reference voltage, did you?
- 18 A. Yes, that's correct.
- 19 O. You never informed JEDEC that Rambus might be
- 20 able to slow down or stop or at least collect from
- 21 various devices relating to externally supplied
- 22 reference voltage if the claim is allowed, did you?
- 23 A. That's also correct.
- 24 MR. OLIVER: May I approach, Your Honor?
- JUDGE McGUIRE: Yes.

- 1 "A dynamic random access memory (DRAM) capable of being
- 2 coupled to a bus, the DRAM comprising: A first circuit
- 3 for generating a clock signal; a conductor for coupling
- 4 the DRAM to the bus; and a receiver circuit coupled to
- 5 the conductor and the first circuit. The receiver
- 6 circuit for latching information received from the,"
- 7 continuing at the top of page 5, "conductor in response
- 8 to a rising edge of the clock signal and a falling edge
- 9 of the clock signal."
- 10 Do you see that?
- 11 A. Yes, sir, I do.
- 12 Q. Now, in or about August of 1994, do you recall
- having any discussions with vice president Roberts
- 14 concerning claims involving a rising and falling edge
- of the clock signal?
- 16 A. Regarding the what, the clock signal?
- 17 Q. Let me restate the question.
- 18 A. Thank you.
- 19 O. In or about -- excuse me.
- 20 I apologize, Your Honor.
- JUDGE McGUIRE: That's all right.
- BY MR. OLIVER:
- Q. Mr. Crisp, in or about August of 1994, do you
- 24 recall having any conversations with vice president
- 25 Roberts concerning claims to be added to Rambus'

1 pending patent applications relating to use of a rising

- 2 edge and a falling edge of a clock signal?
- 3 A. No, sir, I don't.
- 4 O. If I could ask you to turn, please, to page 9,
- 5 I'd like to direct your attention to claim 167. This
- 6 claim carries over to page 10, but I'll only be
- 7 focusing on a portion of it.
- 8 Claim 167 reads, "A dynamic random access
- 9 memory (DRAM) comprising an array of memory cells
- 10 connected in rows and columns, the array of memory
- 11 cells corresponding to a range of addresses, wherein
- 12 the array of memory cells is subdivided into a
- 13 plurality of memory sections, each of the memory
- 14 sections being assigned a portion of the range of
- 15 addresses, " then it continues.
- 16 Do you see that?
- 17 A. Yes, sir, I do.
- 18 Q. Do you recall in or about August of 1994 having
- 19 any conversations with vice president Roberts with
- 20 respect to claims to be added to Rambus' pending patent
- 21 applications regarding use of arrays of memory cells
- 22 subdivided into sections?
- 23 A. No, sir, I don't.
- Q. All right, let me ask you if you could turn,
- 25 please, to page 10, and let me direct your attention

- 1 specifically to claim number 171, and you'll see that
- this is a dependent claim. Do you have that, Mr.
- 3 Crisp?
- 4 A. Yes, sir, I do.
- Q. Claim 171 reads, "The DRAM of claim 170,
- 6 wherein sense amps coupled to columns of a first memory
- 7 section are for selectively precharging the columns of
- 8 the first memory section to a value intermediate to
- 9 logical 0 and 1 when an access mode for the first
- 10 memory section is a normal mode."
- 11 Do you see that?
- 12 A. Yes, sir, I do.
- 13 O. In or about August of 1994, do you recall
- 14 having any discussions with vice president Roberts with
- respect to claims to be added to Rambus' pending patent
- applications with respect to use of selectively
- 17 precharging columns?
- 18 A. No, sir, I don't.
- 19 O. Mr. Crisp, let me direct your attention to the
- 20 first page of CX-746. Again, Mr. Roberts' statement,
- 21 "This is Lester's attempt to work," or u res.lTc3

1 president Roberts in or about August of 1994 concerning

- 2 Mr. Vincent's attempts to write claims for the SDRAM
- 3 defense?
- 4 A. No, sir, I don't.
- 5 Q. Now, Mr. Crisp, you attended the next regularly
- 6 scheduled JEDEC meeting in September of 1994, right?
- 7 A. I'm not certain of the date, sir.
- 8 MR. OLIVER: May I approach, Your Honor?
- 9 JUDGE McGUIRE: Yes.
- 10 BY MR. OLIVER:
- 11 Q. Mr. Crisp, I've handed you a document marked
- 12 JX-21. These are the minutes from the September 13,
- 13 1994 JC-42.3 subcommittee meeting. Now, Mr. Crisp, do
- 14 you recall whether you attended this meeting?
- 15 A. Yes, I do.
- 16 Q. Did you attend this meeting?
- 17 A. Yes, I did.
- 18 Q. Now, again, at this meeting, Mr. Townsend
- 19 presented the JEDEC patent policy, didn't he?
- 20 A. I don't remember.
- 21 Q. If I could ask you to turn to page 4, item
- 22 number 4, Patent Presentation. Do you see that?
- 23 A. Yes, sir, I do.
- Q. "Mr. Townsend presented the patent policies
- 25 (see Attachment A). Various news articles relating to

- 1 patents were shown (see Attachment B)."
- 2 Do you see that?
- 3 A. Yes, I do.
- 4 Q. Does that refresh your recollection that Mr.
- 5 Townsend showed the JEDEC patent policy at this
- 6 meeting?
- 7 A. Yes, it does.
- 8 Q. Now, Mr. Crisp, if I could ask you to turn,
- 9 please, to page 86, this is a page that bears the
- 10 handwritten caption Attachment AA, and turned sideways,
- 11 the lower right-hand corner, NEC, and across the top,
- 12 About Mode "Number of Banks."
- 13 Do you see that?
- 14 A. Yes, I do.
- 15 Q. Now, you recognize this is a presentation made
- by NEC that you observed at this JEDEC meeting?
- 17 A. Yes, sir.
- Q. Let's skip ahead, if we could, to page 91.
- 19 This is a page with the caption PLL Enable Mode, and
- underneath that, "On-Chip-PLL Improves Access Time,"
- 21 and underneath that two diagrams, on the left-hand
- 22 side, "Without PLL," and on the right-hand side, "With
- 23 PLL."
- 24 Do you see that?
- 25 A. Yes, sir, I do.

1 O. Now, you recognize this as part of the NEC

- 2 presentation that you observed at the September 1994
- 3 JEDEC meeting?
- 4 A. Yes, sir.
- 5 O. We can set this aside now.
- 6 If I could ask you to locate again CX-711 in
- 7 front of you, that's the 200-page collection of emails.
- 8 If I could ask you to turn within CX-711, please, to
- 9 page 36. If I could direct your attention to the
- 10 portion towards the top of the page, there's a short
- 11 space, and there's a line, "From," with a series of
- 12 question marks.
- Do you see that?
- 14 A. Yes, sir, I do.
- 15 Q. And if you could look at the series of lines
- 16 following that, that indicates that this is an email
- 17 from you to the executive group and the marketing group
- 18 at Rambus dated September 14, 1994. Is that right?
- 19 A. Yes, sir, that's right.
- Q. And again, the executive grouping at this time
- 21 would have included CEO Geoff Tate, vice president
- 22 Allen Roberts and vice president David Mooring, among
- 23 others, right?
- A. Yes, sir, that is correct.
- Q. And this is an email that you wrote from the

- 1 JEDEC meeting, right?
- 2 A. Yes, sir.
- Q. JEDEC number 3 is the third set of notes that
- 4 you wrote from this particular JEDEC meeting?
- 5 A. I'm not sure about that, but that's what it
- 6 says.

- 1 A. Yes, sir, I do.
- Q. And the line underneath that, "They plan on
- 3 putting a PLL on board their SDRAMs."
- 4 Do you see that?
- 5 A. Yes, I do.
- 6 Q. Now, if I could direct your attention down to
- 7 the next to latsd th

- 1 Do you see that?
- 2 A. Yes, I do.
- Q. And although you used the word "patent" in that
- 4 sentence, you actually were referring to a patent
- 5 application. Is that right?
- 6 A. That's probably true.
- 7 O. That is, you were asking what is the status of
- 8 the pending patent application that contained the PLL
- 9 claim, right?
- 10 A. Well, it was really -- I guess I wasn't even
- 11 sure if we had an application filed yet, but that's
- 12 what my concern was about roughly.
- Q. Well, do you recall in September of 1992 you
- 14 met with Mr. Lester Vincent, and you discussed claims
- 15 relating to PLL, right?
- 16 A. I'm not sure about the date. I think we did
- discuss yesterday that I had such a discussion with Mr.
- 18 Vincent. Again, I don't remember the date.
- 19 Q. And you recall in your email exchange with Mr.
- 20 Fred Ware in February of 1993 that PLLs was one of the
- 21 items on your list?
- 22 A. Something related to PLLs, yes, I do recall
- 23 that.
- Q. And do you recall that in Fred Ware's email of
- June 18, 1993 that we looked at, in fact, earlier this

- 1 morning, that one of the items on this list also
- 2 related to PLLs? Do you recall that?
- A. I think that's right, yes.
- Q. And do you recall we also saw a letter that
- 5 Lester Vincent had written to you dated June 30, 1993
- 6 enclosing a copy of the application that he had filed?
- 7 MR. PERRY: Your Honor, I believe that
- 8 misstates the evidence if he's referring to -- if he's
- 9 referring to the same document I think he is. I may be
- 10 wrong.

- 1 MR. PERRY: No objection, Your Honor.
- JUDGE McGUIRE: Entered.
- 3 (CX Exhibit Number 1961 was admitted into
- 4 evidence.)
- 5 BY MR. OLIVER:
- 6 Q. Mr. Crisp, just so that the record is clear, as
- 7 of the time that you wrote your email in September of
- 8 1994, the documents I've just shown you refresh your
- 9 recollection that you had had information with respect

- 1 A. I'm not really sure.
- Q. But in any event, you did not bring this patent
- 3 issue up at this September 1994 JEDEC meeting, did you?
- 4 A. I don't believe I did, no, sir.
- 5 Q. So, in other words, you did not say anything at
- 6 this JEDEC meeting concerning the patent application
- 7 that Rambus had on file at this time relating to PLLs.
- 8 Is that right?
- 9 A. I believe that's correct, yes.
- 10 Q. However, that very same day, you had further
- 11 correspondence with vice president Allen Roberts and
- 12 others concerning this same patent application. Isn't
- 13 that right?
- 14 A. I'm not certain of that.
- MR. OLIVER: May I approach?
- 16 JUDGE McGUIRE: You may.
- 17 BY MR. OLIVER:
- 18 Q. Mr. Crisp, I've handed you a document marked
- 19 CX-757. Now, you recognize this as an email that you
- 20 sent to the Rambus executive group also on September
- 21 14, 1994?
- 22 A. Yes, sir, I do.
- Q. Now, you recognize this as an email you sent
- 24 after the email we looked at just a moment ago. Is
- 25 that right?

- 1 A. I'm not sure of the order, sir.
- Q. If I could ask you to turn back to CX-711, page
- 3 36. If you could look in the caption, you'll see a
- 4 number of different timestamps. You'll see a timestamp
- of 14:56, and next to the date 14 September 1994 is a
- 6 timestamp of 15:59, and the very top line a timestamp
- 7 of 16:00.
- 8 Does this refresh your recollection that this
- 9 email was sent sometime around 3:00 or 4:00 in the
- 10 afternoon?
- 11 A. Yes, sir, it does.
- 12 Q. If I could ask you to turn back now, please, to
- 13 CX-757.
- 14 A. Yes, sir.
- 15 Q. And next to the date, you'll see a timestamp of
- 16 19:30. Do you see that?
- 17 A. Yes, sir, I do.
- 18 Q. Does this refresh your recollection that CX-757
- 19 was sent at about 7:30 in the evening?
- 20 MR. PERRY: Your Honor, if I could ask for
- 21 clarification in the question about what time zone
- 22 we're in? I see one was PDT.
- JUDGE McGUIRE: Mr. Oliver?
- 24 BY MR. OLIVER:
- Q. Mr. Crisp, do you recall what time zone you

- 1 were in?
- A. Well, I was in Albuquerque, New Mexico, so I
- 3 think that's the Mountain Time Zone.
- 4 O. Does the timestamp refresh your recollection
- 5 that CX-757 was sent at around 7:30 p.m. in either the
- 6 Mountain Time Zone or the Pacific Time Zone?
- 7 A. I'm sorry, I can't -- I can't remember it just
- 8 from looking at this document.
- 9 Q. In any event, the timestamps we just looked at
- 10 refresh your recollection that CX-757 was sent later
- 11 than page 36 of CX-711?
- 12 A. No, looking at the documents doesn't help me
- 13 remember that.
- Q. Okay. Looking at CX-757, towards the top, do
- 15 you see four lines with arrows in front of them?
- 16 A. Yes, sir, I do.
- 17 Q. Now, this, again, is a portion of an embedded
- 18 email that was sent to you. Is that right?
- 19 A. Yes, sir, I think that's what that means.
- 20 Q. And this particular portion was sent to you by
- 21 Allen Roberts, right?
- 22 A. I think that's right.
- Q. And above that there's a line that says, "Stuff
- 24 about concern that a PLL on a DRAM may not be
- defendable from a patent challenge perspective

- 1 deleted."
- 2 Do you see that?
- 3 A. Yes, sir, I do.
- Q. And then Allen -- or a portion of Allen
- 5 Roberts' message that survives here reads, "So if we
- 6 want to fight this one (after the claim is issued), we
- 7 better stock up our legal warchest."
- 8 Do you see that?
- 9 A. Yes, sir, I do.
- 10 Q. And then you -- the following text is your
- 11 response to his email. Is that right?
- 12 A. Yes, sir, that's right.
- 0. But you responded not only to him but to the
- 14 entire executive group?
- 15 A. That's correct.
- 16 Q. If I could direct your attention to the third
- 17 paragraph of your portion of the email, the first
- 18 sentence there reads, "With nature running its usual
- 19 course, there could be an issued patent with an
- infringing product about the time we are making an
- 21 IPO."
- Do you see that?
- 23 A. Yes, sir, I do.
- Q. And then directing your attention to the -- to
- 25 the next paragraph, you write, "It seems likely we will

- 1 have to fight litigation at some point in the future,"
- 2 right?
- 3 A. Yes, sir.
- 4 Q. Now, in that sentence, you are referring to
- 5 patent infringement litigation to enforce a patent on
- 6 PLL in DRAM, right?
- 7 A. I'm not sure to what I was referring here.
- 8 MR. OLIVER: May I approach, Your Honor?
- 9 JUDGE McGUIRE: Yes.
- 10 BY MR. OLIVER:
- 11 Q. Mr. Crisp, I've handed you a copy of a
- deposition of you that was taken in the FTC matter on
- 13 February 14, 2003. I'd like you to turn, please, if
- 14 you could to page 46, and I'd like to direct your
- attention simply to lines 3 through 6 on that page.
- 16 A. I'm sorry, could you repeat that?
- 17 Q. Yes, page 46.
- 18 A. Yes.

1 MR. OLIVER: Your Honor, let me set the

- 2 transcript aside and let me see if I can get at this
- 3 with one or two other questions.
- 4 JUDGE McGUIRE: All right.
- 5 MR. PERRY: Thank you.
- 6 BY MR. OLIVER:
- 7 Q. Mr. Crisp, if you could set that transcript
- 8 aside, and if I could ask you to take another look at
- 9 CX 757.
- 10 A. I'm sorry, which one, 757?
- 11 Q. CX-757 is your email of September 14, 1994,
- 12 19:30, containing the embedded lines from Allen
- 13 Roberts.
- 14 A. I think I lost it. Let me see.
- 15 MR. PERRY: I have one. He can have mine.
- MR. OLIVER: May I approach?
- 17 THE WITNESS: Thank you.
- 18 BY MR. OLIVER:
- 19 O. Mr. Crisp, let me direct your attention back to
- 20 the embedded portion of the -- the embedded text in
- 21 this email, the portion written by Allen Roberts. Now,
- 22 you understood that when Allen -- when Allen Roberts
- was referring to "if we want to fight this one," he was
- referring to a patent claim related to PLL on a DRAM?
- 25 A. I think that's possible. I don't -- I don't

- 1 really remember this email very well, but that's
- 2 certainly possible.
- Q. That's your best recollection, though, isn't
- 4 it?
- 5 A. Well, there's -- there's a possible second
- 6 recollection, and I'm just not really sure which one it
- 7 is, and it relates to the comment that I made back in
- 8 my JEDEC minutes about NEC potentially using the Tom Li
- 9 PLL. So, I don't remember which -- which thing I was
- 10 thinking about.
- 11 Q. Okay, then let me ask you to pick up your FTC
- 12 deposition transcript, please.

1 he was expressing about whether or not we would be able

- 2 to successfully defend a patent claim.
- 3 "QUESTION: Do you understand what patent claim
- 4 he had in mind?
- 5 "ANSWER: What I remember is this was relating
- 6 to a patent claim being -- having a PLL on a DRAM."
- 7 Do you see that?
- 8 A. Yes, sir, I do.
- 9 Q. Now, when you wrote your text in CX-757, that
- was what you were responding to. Is that right?
- 11 A. It must have been.
- 12 Q. All right. And you had in mind litigation
- 13 against DRAM manufacturers, didn't you?
- 14 A. Well, I don't think I quite state that. I
- 15 thought it was possible there could be some litigation
- 16 in the future.
- 17 Q. And that litigation would naturally involve
- 18 DRAM manufacturers, wouldn't it?
- 19 A. Well, it might, and it might not. I just don't
- 20 know.
- 21 Q. In any event, litigation might involve some of
- 22 the other companies sitting in the very JEDEC room that
- 23 day, wouldn't it?
- A. That's certainly a possibility.
- Q. If I could direct your attention back to

- 1 CX-757, continuing with the fourth paragraph in the
- 2 text that you wrote, the last two sentences of that
- 3 paragraph read, "I think it is very important to go
- 4 after one we are certain we can win first. We don't
- 5 need a loss on the first challenge."
- 6 Do you see that?
- 7 A. Yes, sir, I do.
- 8 Q. So, in other words, you were contemplating
- 9 patent litigation that Rambus would instigate. Isn't
- 10 that right?
- 11 A. You say "contemplate." I -- I guess I was.
- 12 I'm not sure how strongly I believed it was -- it would
- happen, but you know, I said in here it seems likely.
- 14 It seemed like it was a -- it was a real possibility.
- Q. In any event, in your email, you then go on to
- 16 talk about the possibility of getting NEC to sign a
- 17 license agreement, right?
- 18 A. Yes, that's right. They were one of our
- 19 licensees, and we had a pretty good relationship with
- 20 them.
- 21 Q. And pursuant to the license agreement you had
- in mind, Rambus could get some bucks out of the deal in
- 23 license fees and royalties?
- A. Generally we got paid when we licensed our
- 25 technologies.

1 O. And then you added, and let me direct your

- 2 attention here to the last paragraph on the first page
- of CX-757, the fifth line, "I think if we can get them
- 4 to agree to such a deal that the patent issue could be
- 5 brought up in JEDEC."
- 6 Do you see that?
- 7 A. Yes, sir, I do.
- Q. And the "them" you're referring to in that
- 9 sentence is NEC?
- 10 A. Yes, I think that's right.
- 11 Q. So, in other words, if Rambus could get NEC to
- 12 agree to a license, then Rambus could bring up the
- patent issue in JEDEC, right?
- 14 A. I think that's what that says.
- Q. And then you carry on to the next page, page 2
- 16 of CX-757.
- 17 A. Yes.
- 18 Q. And your concluding sentence is, though, "The
- 19 last paragraph is probably only a dream."
- 20 Do you see that?
- 21 A. Yes, I do.
- 22 Q. And again, those were your views that you sent
- 23 to CEO Geoff Tate, vice president David Mooring, vice
- 24 president Allen Roberts and the rest of the executive
- 25 group in September 1994 after having seen the PLL

- 1 presentation at JEDEC. Isn't that right?
- 2 A. Well, I don't agree with that. What I saw at
- 3 JEDEC was a presentation for a proposal for how to
- 4 modify the mode register that had already been a part
- 5 of the standard.
- Q. Let me ask you to turn back to CX-711, please.
- 7 This is the 200-page compilation of emails. If I could
- 8 ask you to turn, please, to page 36, looking at the
- 9 Subject line, "JEDEC number 3, NEC proposes PLL on
- 10 SDRAM."
- 11 Do you see that?
- 12 A. Yes, I do.
- 0. And looking about three-quarters of the way
- down, the line with the stars, "the PLL mode," do you
- 15 see that?
- 16 A. Yes, I do.
- 17 Q. The next line reads, "They plan on putting a
- 18 PLL on board their SDRAMs."
- 19 Do you see that?
- 20 A. Yes, I do.
- 21 Q. That's what you summarized and that's what you
- 22 wrote home based on what you observed at that JEDEC
- 23 meeting. Is that right?
- A. Well, that's part of it. I think there was a
- lot more to it that you didn't mention. For example,

- 1 a license to construct the RDRAM --
- 2 A. That's right.
- 3 O. -- DRAM?
- 4 A. That's right.
- 5 Q. But Samsung actually wanted to negotiate a
- 6 general purpose license. Isn't that right?
- 7 A. Well, I'm not sure that that was what they
- 8 wanted. I think they wanted a somewhat broader
- 9 license.
- 10 Q. In any event, they wanted a license that would
- 11 be broader than just RDRAM. Is that right?
- 12 A. I believe that's correct, yes.
- 0. And they wanted that so Samsung could
- manufacture other types of DRAMs, and if they happened
- 15 to use the Rambus technology in doing so, that they
- 16 wouldn't be sued. Isn't that right?
- 17 A. Well, I think that's what their goals were, and
- 18 I think we were trying to come up with a compromise
- 19 situation that both parties would like.
- 20 O. Now, internal discussions within Rambus
- 21 concerning PLL came up in connection with these Samsung
- 22 negotiations, right?
- 23 A. Yes, that's correct. That's what I remember.
- Q. Now, with respect to CX-763, once again,
- there's an embedded portion of the email at the top.

- 1 Do you see that?
- 2 A. Yes, sir, I do.
- Q. And that embedded portion of the text is from
- 4 Allen Roberts. Is that right?
- 5 A. I believe that's correct.
- 6 O. And it consists of his comments to CEO Geoff
- 7 Tate?
- 8 A. Yes.
- 9 Q. And if I could direct your attention to I guess
- it's the third paragraph of the embedded text, it
- 11 starts, "Is the following a mistype on your part?"
- 12 Do you see that?
- 13 A. Yes, I do see that.
- Q. And in the next sentence, Allen Roberts writes
- to CEO Geoff Tate, "Why can't we sue for using PLL on
- 16 an SDRAM if we granted that patent?"
- 17 So, that's what Allen Roberts wrote to Geoff
- 18 Tate, right?
- 19 A. Yes, that looks right.
- 20 Q. And then the following portion is the part of
- 21 the email that you wrote?
- 22 A. Yes.
- Q. And again, you sent this in response to vice
- 24 president Roberts' comments, but you sent it to all
- 25 executives, right?

- 1 A. Yes, that's right.
- Q. And you stated, "I've felt for some time that
- 3 we need to hold this as one of our key technology
- 4 patents."
- 5 Do you see that?
- 6 A. Yes, sir, I do.
- 7 Q. And you continue, "If it is allowed, we need to
- 8 be able to collect on it, " right?
- 9 A. Yes, sir.
- 10 Q. What you meant by that is that Rambus needed to
- 11 be able to collect royalties. Isn't that right?
- 12 A. Royalties, license fees, whatever -- whatever
- monies we could get for it.
- Q. If I could direct your attention, then, down to
- 15 the next to the last paragraph, at that point you
- 16 wrote, "I would hope we would sue other companies, in
- 17 particular those that are not licensed."
- 18 Do you see that?
- 19 A. Yes, sir.
- Q. And by that you meant that you hoped Rambus
- 21 would sue in particular companies that had not signed a
- 22 license for RDRAM. Is that right?
- 23 A. Yes, sir, I think that's what that's saying.
- Q. But you also wanted to sue companies that were
- licensed for RDRAM. Isn't that right?

- 1 A. Sure.
- Q. Your next sentence reads, "For those that are
- 3 licensed --" and you mean there licensed for RDRAMs,
- 4 right?
- 5 A. That's correct.
- 6 Q. "For those that are licensed, I would like to
- 7 see us collect a similar royalty as for RDRAMs."
- In other words, you wanted to have Rambus
- 9 collect a similar royalty for using PLLtyorreit2s5t0otvo htTjsi'ifylar oyalaalty fo?oyalty as for RDRAM17"

DoT jT\*s 8 eYF1 1"Foi 1"Foi 1"F8i 1"F00gp 7 ose do A. That's correls

1 Samsung for using PLL on SDRAMs in the future. Isn't

- 2 that right?
- A. Yes, sir. Of course, our real goal would be
- 4 just to have a license agreement with them, and if
- 5 necessary, we need to back that up with the threat of
- 6 suit if they were unwilling to license.
- 7 Q. So, your real goal was to have a license
- 8 agreement providing for the payment of royalties, but
- 9 if that were not possible, then you would seek to
- 10 obtain royalties. Is that right?
- 11 A. Yes, sir, I think that was implicit in that
- 12 entire email.
- 13 Q. Now, Geoff Tate then responded that it was not
- possible to weasel the language back, didn't he?
- 15 A. I don't recall.
- MR. OLIVER: May I approach?
- 17 JUDGE McGUIRE: Yes.
- 18 BY MR. OLIVER:
- 19 O. Mr. Crisp, I've handed you a document marked
- 20 CX-765. This is an email from Geoff Tate to the
- 21 executive group and to you dated October 25, 1994.
- 22 Again, it contains a section of text with arrows in
- 23 front of it that appears to be embedded text that has
- the attachment "Allen sent."
- Do you see that?

- 1 A. Yes.
- 2 Q. Then there is a portion of the text that does
- 3 not have arrows, but a portion at the top that says
- 4 "Richard sent."
- 5 Do you see that?
- 6 A. Yes, that's right.
- 7 Q. And do you recognize that as the same language
- 8 that's in CX-763 that we just looked at?
- 9 A. I think that's right.
- 10 Q. And then looking three paragraphs up from the
- 11 bottom, there's a caption, "Geoff's Reply."
- 12 Do you see that?
- 13 A. Yes, I do.
- 14 O. That indicates that the remainder of the text
- in this email is from Geoff Tate?
- 16 A. Well, at least down to a certain level.
- 17 Q. At least down to the first of the double dotted
- 18 lines on page 2. Is that right?
- 19 A. Yes, that's what I had in mind when I said
- 20 that.
- 21 Q. Now, Geoff Tate wrote that Rambus couldn't get
- 22 a Samsung deal without something like the IP compromise
- that Rambus had already offered Samsung. Isn't that
- 24 right?
- 25 A. That's what he says in here.

- 1 A. Yeah, it largely says that.
- Q. And it continues, "As others that we have not
- 3 made the covenant not to sue follow, we get
- 4 opportunities to sue them. This assumes that the
- 5 patent issues with that claim intact."
- 6 Do you see that?
- 7 A. Yes, sir, I do.
- 8 Q. So, in other words, what you were saying here
- 9 is that by having Samsung licensed to put PLLs on
- 10 DRAMs, they would then start to do that, and other
- 11 companies would follow Samsung, right?
- 12 A. I believed that that was a real possibility.
- Q. And then when other companies did that, Rambus
- 14 would then have the opportunity so sue other companies
- 15 for using PLLs on SDRAMs, right?
- 16 A. Yes, that's correct.
- 17 Q. Now, again, you never told the JEDEC 42.3
- 18 subcommittee that you, Allen Roberts and others
- 19 contemplated that Rambus would fight litigation against
- 20 other DRAM manufacturers to enforce a patent on using
- 21 PLL on an SDRAM, did you?
- 22 A. I think that's correct, yes.
- Q. And you also never informed the JEDEC JC-42.3
- 24 subcommittee that Rambus might have opportunities to
- 25 sue other companies if they followed Samsung in using

- 1 PLLs on SDRAMs. Isn't that right?
- 2 A. Could you ask the question again, please?
- O. Yes. You never informed the JEDEC JC-42.3
- 4 subcommittee that Rambus might have opportunities to
- 5 sue other companies if they followed Samsung in putting
- 6 PLLs on SDRAMs. Isn't that right?
- 7 A. Yes, that's correct.
- 8 MR. OLIVER: Your Honor, this is perhaps --
- 9 it's still a bit early, but this would be a good
- 10 breaking point. Would this be a convenient place to
- 11 break for lunch?
- MR. PERRY: No objection, Your Honor.
- JUDGE McGUIRE: All right, it's 12:10. Why
- don't we take a break for lunch and reconvene at 1:30,
- 15 okay?
- MR. OLIVER: Thank you, Your Honor.
- 17 JUDGE McGUIRE: Hearing in recess.
- 18 (Whereupon, at 12:10 p.m., a lunch recess was
- 19 taken.)

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1 AFTERNOON SESSION

- 2 (1:30 P.M.)
- JUDGE McGUIRE: This hearing is now in order.
- 4 I guess at this time you may continue, Mr. Oliver, with
- 5 your inquiry of the witness.
- 6 BY MR. OLIVER:
- 7 O. Thank you, Your Honor.
- 8 Good afternoon, Mr. Crisp.
- 9 A. Good afternoon, Mr. Oliver.
- 10 Q. Mr. Crisp, I just wanted to wrap up one point
- 11 left from this morning. Do you recall the September
- 12 1994 JEDEC meeting, we looked at your email that you
- wrote back to Rambus from that meeting?
- 14 A. Maybe you could tell me a little more about it.
- 15 I'm not sure I remember exactly which meeting that was
- or which email to which you refer.
- 17 Q. There was an email to which you made reference
- 18 with respect to an NEC proposal. Do you recall that?
- 19 A. Yes, sir, now I remember which one you're
- 20 talking about.
- 21 Q. And I believe you stated that they were
- 22 proposing to put PLLs on SDRAMs. Do you remember that?
- 23 A. That's what I said in my email, yes.
- Q. Now, was that also known as on-chip PLL?
- 25 A. Are you referring to the proposal?

- 1 Q. To the technology, yes.
- 2 A. Well, the proposal --
- 3 MR. PERRY: Objection, vague as to what he
- 4 means by "the technology."
- JUDGE McGUIRE: I'm sorry, Mr. Oliver, I
- 6 couldn't hear you, to the technology. Restate it, if
- 7 you would, Mr. Oliver.
- 8 BY MR. OLIVER:
- 9 Q. Yes, Your Honor.
- 10 With respect to the NEC proposal that I believe
- 11 you characterized as they were proposing to put PLLs on
- 12 SDRAMs, is that technology also known as on-chip PLL?
- MR. PERRY: Your Honor, I would object that
- 14 there's no foundation. He doesn't even have a
- 15 presentation in front of him that it's in the minutes.
- 16 He ought to be shown that before he can say what the
- 17 technology is.
- 18 MR. OLIVER: Your Honor, I can show him his
- 19 email if he would like.
- JUDGE McGUIRE: All right, go ahead.
- 21 MR. OLIVER: May I approach, Your Honor?
- JUDGE McGUIRE: Yeah, go ahead.
- 23 BY MR. OLIVER:
- Q. Mr. Crisp, I've handed you CX-711, if you could
- 25 please turn to page 36. Do you see the email beginning

- 1 on that page?
- 2 A. Yes, sir, I do.
- Q. If I could direct your attention to the caption
- 4 and specifically to the subject line that reads, "JEDEC
- 5 number 3, NEC proposes PLL on SDRAM." Do you see that?
- 6 A. Yes, sir, I do.
- 7 Q. Now, the technology that you were describing in
- 8 the caption of your email there, that's also known as
- 9 on-chip PLL. Is that right?
- 10 A. I would characterize it that way, yes.
- 11 MR. OLIVER: Your Honor, if I could approach
- 12 the chart I would like to add that to the chart.
- JUDGE McGUIRE: Yeah, go ahead.
- 14 BY MR. OLIVER:
- Q. Okay, Mr. Crisp, before the lunch break we had
- walked through a number of events in 1993 and 1994.
- 17 This afternoon I would like to turn now to 1995. Now,
- in January of 1995, Lester Vincent filed an additional
- 19 preliminary amendment with the Patent & Trademark
- 20 Office, didn't he?
- 21 A. I don't know.
- Q. Let me see if I can show you a couple of
- documents that might help to refresh your recollection.
- 24 May I approach, Your Honor?
- JUDGE McGUIRE: You may.

- 1 BY MR. OLIVER:
- Q. Mr. Crisp, I've handed you a document marked
- 3 CX-734. Do you recognize this as a letter from Allen
- 4 Roberts to Lester Vincent that we looked at this
- 5 morning?
- 6 A. Yes, sir, I do.
- 7 Q. And you recall this morning we looked at the
- 8 first paragraph of CX-734?
- 9 A. I'm sorry, would you ask the question again?
- 10 Q. Yes, do you recall that this morning we looked
- 11 at the first paragraph of CX-734?
- 12 A. Yes.
- 13 O. Now, let me direct your attention again to the
- last sentence of that paragraph. "It is possible that
- 15 some of these enhancements are already in existing
- applications, but we would like to re-assess the
- 17 strength of those claims."
- 18 Do you see that?
- 19 A. Yes, sir, I do.
- 20 MR. PERRY: Your Honor, I believe this is one
- 21 where we had objections to foundation and there was no
- 22 foundation established that he had ever seen it. So, I
- don't know if he's going to go any further with this
- one, but I think we did that this morning.
- JUDGE McGUIRE: Any response, Mr. Oliver?

1 MR. OLIVER: Yes, Your Honor, I would like to

- 2 use this together with two additional documents that I
- 3 have not yet used with Mr. Crisp to see if the three
- 4 documents together help to refresh his recollection
- 5 with respect to an amendment filed in January 1995.
- 6 MR. PERRY: Well, Your Honor, on this one, I
- 7 think we went over this morning, and there was no
- 8 foundation laid to use it for any purpose, but I guess
- 9 we'll see what happens. But we've got that objection.
- 10 JUDGE McGUIRE: Well, I'll give you a chance to
- go into it, and then, you know, the point is here,
- 12 please lay a proper foundation, Mr. Oliver, and if not,
- 13 I'm sure we'll also hear again from opposing counsel.
- 14 BY MR. OLIVER:
- 15 Q. Thank you, Your Honor.
- 16 Mr. Crisp, if I could direct your attention to
- page 2 of CX-734. And item number 6 reads, "Use
- 18 control registers to contain values which control RAS
- 19 and CAS access timing." Do you see that?
- 20 A. Yes, sir, I see that.
- 21 MR. OLIVER: May I approach, Your Honor?
- JUDGE McGUIRE: Yes.
- BY MR. OLIVER:
- Q. Mr. Crisp, I've handed you a document marked as
- 25 CX-750, it's a letter from Allen Roberts to Lester

1 Vincent dated August 11, 1994, and apart from the

- 2 different date, the text appears to be identical to
- 3 CX-734. Do you have any recollection of having seen
- 4 CX-750 before?
- 5 A. No.
- 6 Q. If I could direct your attention to the
- 7 right-hand side of the page of CX-750. Do you see that
- 8 item 6.0 there also reads, difficult to make out on the
- 9 paper copy, but it reads, "Use control registers to
- 10 contain value which control RAS and CAS access timing."
- 11 Do you see that?
- 12 A. Yes, sir, I do.
- MR. OLIVER: May I approach, Your Honor?
- 14 JUDGE McGUIRE: Yes.
- 15 BY MR. OLIVER:
- Q. Mr. Crisp, I've handed you a document marked
- 17 CX-1470, it bears a caption at the top, in the United
- 18 States Patent & Trademark Office, about halfway down
- 19 the page is a caption reading Amendment. The upper
- left-hand corner of the box, serial number 07/847,961,
- 21 the date on the right-hand side of the page reads
- 22 January 6th, 1995.
- 23 And if I could direct your attention in
- 24 particular to page 6. And particularly to the claim
- 25 160 appearing at the bottom of page 6, carrying over to

- 1 the top of page 7. And particularly the top of page 7,
- 2 if you see the language in the carry-over part of the
- 3 claim 160, starting about the third line down, "The
- 4 semiconductor device storing information received from
- 5 the bus lines in the register during configuration of
- 6 the semiconductor device and thereafter responding to
- 7 the transaction requests in the manner specified by the
- 8 information stored in the register."
- 9 Do you see that?
- 10 A. I'm sorry, I was unable to follow where you
- 11 were reading from.
- MR. PERRY: Your Honor, can I ask that there be
- some foundation laid for examining the witness on the
- document? He's never seen it before, it's a part of
- the responsibility, something.
- 16 JUDGE McGUIRE: All right, sustained on that.
- 17 BY MR. OLIVER:
- 18 Q. Mr. Crisp, do you recall having seen CX-1470 in
- 19 or about January of 1995?
- 20 A. No.
- 21 MR. OLIVER: Your Honor, I would nevertheless n reRori. E3y tn2rtheless

- 1 BY MR. OLIVER:
- Q. If I could direct your attention back to claim
- 3 160, please, beginning at the bottom of page 6 and
- 4 carrying over to the top of page 7. And if you'll look
- 5 in particular at the top of page 7, beginning with the
- 6 third line.
- 7 A. May I read the entire claim, please?
- 8 Q. Certainly.
- 9 A. Thank you.
- 10 Q. And then if you look at the top of page 7,
- 11 beginning with the third line, "The semiconductor
- device storing the information received from the bus
- lines in the register during configuration of the
- semiconductor device and thereafter responding to
- transaction requests in the manner specified by the
- information stored in the register."
- 17 Do you see that?
- 18 A. infs, redo
- 10 9 Q. And then if yocould diasyou. o theurnplease, be
- ge 7,8f thCX-1470 And if yocould diasyou. o thok at thjT\*(

1 operative to wait for the access time before using the

- 2 bus in response to a transaction request specifying the
- 3 semiconductor device."
- 4 Do you see that?
- 5 A. Yes, sir, I do.
- Q. Now, do any of the documents that we have just
- 7 looked at refresh your recollection that Mr. Vincent
- 8 filed an amendment to a pending Rambus patent
- 9 application in January of 1996?
- 10 A. No.
- 11 Q. Do you recall having any discussions with
- 12 anyone else at Rambus with respect to the two claims
- that we've just looked at in CX-1470 in late 1994 or
- 14 early 1995?
- 15 A. No.
- Q. Now, Mr. Crisp, you attended the next JEDEC
- meeting in March of 1995. Is that right?
- 18 A. I'm not sure of the dates.
- 19 MR. OLIVER: May I approach, Your Honor?
- JUDGE McGUIRE: Yes.
- 21 BY MR. OLIVER:
- Q. Sorry, Your Honor.
- Mr. Crisp, I have handed you a document marked
- as CX-83, these are the minutes of the JC-42.5
- committee meeting. The date here is on March 14, 1995.

- 1 Now, if you look on the first page, about three
- 2 quarters of the way down, you see that you attended
- 3 this meeting?
- 4 A. Yes, I see that.
- 5 Q. Now, you also attended the JC-16 meeting on the
- 6 same day. Is that right?
- 7 A. I'm not sure which day it was, sir.
- 8 MR. OLIVER: May I approach, Your Honor?
- 9 JUDGE McGUIRE: Yes.
- 10 BY MR. OLIVER:
- 11 Q. Mr. Crisp, I've handed you a document marked as
- 12 CX-82. These are minutes of the JC-16 committee
- meeting, also on March 14, 1995. If you look on the
- left-hand side, about three quarters of the way down,
- do you see your name on that list?
- 16 A. Yes, sir, I do.
- Q. Now, at the JC-16 committee meeting, you saw a
- 18 Fujitsu presentation relating to high-speed bus
- 19 transceiver logic. Is that right?
- 20 A. I don't remember.
- 21 Q. Mr. Crisp, do you have Exhibit 711 in front of
- 22 you?
- 23 A. CX-711?
- 24 O. Yes.
- 25 A. Yes, sir, I do.

1 Q. If I could ask you to take up that document,

- 2 please. And if I could ask you to turn, please, to
- 3 page 52. Do you have that page in front of you?
- 4 A. Yes, sir, I do.
- 5 Q. If I could direct your attention to the bottom
- of that page, you see that it has the beginning of a
- 7 new email at the bottom of that page?
- 8 A. I'm sorry, could you say that again, please?
- 9 Q. Yes. Directing your attention to the bottom of
- 10 page 52.
- 11 A. Yes.
- 12 Q. Specifically the last six lines on that page,
- do you see that that is the beginning of a new email?
- 14 A. Yes, I do.
- 15 Q. And the date of that email is March 14, 1995?
- 16 A. Yes, that's correct.
- 17 Q. And then if we look at the top of the following
- 18 page, we see that this is an email sent from you to the
- 19 executive group and the business development marketing
- 20 group at Rambus.
- 21 A. Yes, that's correct.
- Q. And the subject there is the JC-16 and JC-42.5
- 23 JEDEC meeting. Is that right?
- A. Yes, that's correct.
- Q. If I could ask you to turn, then, to page 54,

1 please. Now, looking about one-third of the way down

- the page, there's a paragraph that begins, "Fujitsu
- 3 presented their STBUS material." Do you see that?
- 4 A. Yes, sir, I do.
- 5 Q. Does that refresh your recollection that at
- 6 this meeting you observed a presentation by Fujitsu on
- 7 the STBUS material?
- 8 A. No, sir, it doesn't.
- 9 Q. If I could direct your attention to the
- 10 following paragraph, the paragraph begins, "Key to the
- operation of the STBUS." Do you see that?
- 12 A. Yes, I do.
- 13 O. Now, let me direct your attention to the last
- sentence of that paragraph that reads, "Taken along
- 15 with the fact that they rely on an externally bussed
- 16 reference (this should be anticipated by some of our
- 17 claims), I would say that the proposal may well
- infringe our work." Do you see that?
- 19 A. Yes, I do.
- 20 Q. Now, your reference there to an externally
- 21 bussed reference, that is in reference to an externally
- 22 bussed reference voltage. Is that right?
- 23 A. Yes, that's correct.
- Q. And then if I could direct your attention
- 25 further down the page about three quarters of the way

down the page, the paragraph begins, "So, in summary."

- 2 A. Yes.
- Q. That paragraph reads, "So, in summary, I would
- 4 say that the STBUS scheme is inferior to RSL from a
- 5 power, a noise immunity, and a power supply scaling
- 6 perspective. In addition, it may well infringe our
- 7 patents." Do you see that?
- 8 A. Yes, I do.
- 9 Q. Now, you didn't tell anybody at that JEDEC
- 10 meeting that you thought that proposal would infringe
- 11 Rambus patents, did you?
- 12 A. No, sir, I didn't.
- 13 O. You just typed that into your email and sent
- 14 this to the folks at Rambus but didn't tell anyone at
- 15 JEDEC. Is that right?
- MR. PERRY: Misstates the email, Your Honor.
- 17 JUDGE McGUIRE: Sustained.
- MR. PERRY: Thank you.
- 19 BY MR. OLIVER:
- Q. You just typed into your email, "In addition,
- 21 it may well infringe our patents," but you didn't say
- 22 anything about that to JEDEC, did you?
- 23 A. That's correct.
- Q. Now, the next day, March 15, you attended the
- regularly scheduled meeting of the JC-42.3

1 subcommittee, didn't you?

- 1 all the pages.
- JUDGE McGUIRE: That's all right.
- 3 MR. PERRY: It's RX-545, if you want to pull it
- 4 up and use this copy for yourself, that's fine.
- 5 MR. OLIVER: Thank you.
- If we could pull page 5 up on the screen,
- 7 please. Okay, Mr. Crisp, we've pulled up on the screen
- 8 what's marked as page 3 of the exhibit's internal page
- 9 5 to the document. I would like to direct your
- 10 attention to paragraph 8.3.
- 11 THE WITNESS: Excuse me, sir, which document is
- it that we're referring to?
- 13 BY MR. OLIVER:
- Q. I'm sorry, the document that you have in your
- 15 hand is out of order, so if I could ask you to look on
- 16 the computer screen instead, please.
- 17 A. It's much easier for me to read off of the
- 18 document. I'm having a hard time with my vision at
- 19 those kind of distances.
- MR. OLIVER: May I approach, Your Honor?
- JUDGE McGUIRE: Yeah, go ahead.
- BY MR. OLIVER:
- Q. If we could perhaps bring up paragraph 8.3.
- 24 That paragraph reads, "Patent Statement on quad CAS: A
- letter from TI was received at JEDEC complying with the

1 EIA patent policy. A motion from Toshiba to take the

- 2 ballot JC-42.3-93-82 item 521 off hold, seconded by
- 3 VLSI. The vote was unanimous. Toshiba moved to kill
- 4 the council ballot on quad CAS also, seconded by VLSI.
- 5 Unanimous."
- 6 Do you see that?
- 7 A. Yes, I do.
- 8 Q. Does this refresh your recollection that this
- 9 was a meeting at which Texas Instruments resolved the
- 10 quad CAS issue?
- 11 A. No, sir, it doesn't.
- 12 Q. Now, Mr. Crisp, at this meeting, there was also
- discussion of an AT&T patent that was not reflected in
- 14 the minutes. Is that right?
- 15 A. I don't know.
- Q. If I could ask you to look, please, at CX-711.
- 17 Do you still have that in front of you?
- 18 A. One moment, please. Yes, I have it.
- 19 Q. If I could ask you to turn, please, to page 56.
- 20 If I could direct your attention to an email beginning
- 21 about halfway down that page, you recognize this as an
- 22 email from you to the executive and business
- development groups dated March 15, 1995?
- 24 A. Yes, sir.
- Q. And the subject is the JC-42 meeting. Is that

- 1 right?
- 2 A. Yes, sir, that's correct.
- Q. And if I could ask you to turn to page 57,
- 4 please. And you look almost halfway down the page,
- 5 there's a paragraph beginning, "During the patent
- 6 review session." Do you see that?
- 7 A. Yes, I do.
- Q. "During the patent review session, it was noted
- 9 that AT&T has a patent on EDO. They are now trying to
- 10 figure out what the patent covers and what policy AT&T
- 11 will adopt relative to licensing." Do you see that?
- 12 A. Yes, I do.
- 13 O. Does that refresh your recollection that at the
- March 15, 1995 JEDEC meeting, there was a discussion of
- 15 the AT&T patent?
- 16 A. No, sir, it doesn't.
- Q. Now, at this March 1995 JC-42.3 subcommittee
- 18 meeting, you also observed a presentation by NEC
- regarding a 256 megabit DRAM, didn't you?
- 20 A. I don't remember.
- 21 MR. OLIVER: Your Honor, if I may have just a
- 22 moment, we're trying to work around another document
- 23 problem. I'll see if I can work around it.
- JUDGE McGUIRE: Okay, go ahead.
- 25 BY MR. OLIVER:

1 O. Mr. Crisp, if I could ask you to take up CX-711

- 2 again, please. And within the email, beginning at page
- 3 56, I would like to direct your attention to page 58.
- 4 If you want to take a look at the intervening pages to
- 5 confirm it's part of the same email, please feel free
- 6 to do so. Do you have page 58 in front of you?
- 7 A. Yes, sir, I do.
- 8 Q. If you look a little bit more than halfway down
- 9 the page, it is a paragraph beginning, it's actually
- immediately under "Meeting Notes," a paragraph begins,
- "NEC presented a family of 256M device." Do you see
- 12 that?
- 13 A. Yes, sir, I do.
- Q. If I could then direct your attention about ten
- or so lines further down to the paragraph beginning
- 16 "Fujitsu." Do you see that?
- 17 A. Yes, sir, I do.
- 18 Q. That paragraph reads, "Fujitsu (Adrian
- 19 Cosoroaba)" -- did I read that correctly?
- 20 A. I think he pronounces his name Cosoroaba.
- 21 Q. "Fujitsu (Adrian Cosoroaba) suggested that they
- 22 will need two clocks (a clock-in and a clock-out) for
- 23 high speed operation. It appears that they are
- 24 starting to figure out that we have a very good idea
- 25 with respect to source synchronous clocking. Of course

- 1 they may get into patent trouble if they do this."
- 2 Do you see that?
- 3 A. Yes, I do.
- 4 Q. Now, source synchronous clocking was a
- 5 technology that you had seen presented at JEDEC in
- 6 1992. Is that right?
- 7 A. I'm not sure what the date is, sir.
- 8 Q. You do recall that technology was discussed
- 9 yesterday and seeing that added to our table yesterday?
- 10 A. I do remember doing that, yes.
- 11 Q. And so, what you are then writing to the
- 12 executives at Rambus and the business development group
- in March 15, 1995 is that if Fujitsu goes ahead with
- 14 this proposal, using source synchronous clocking, they
- 15 may get into patent trouble with Rambus patents. Is
- 16 that right?
- 17 A. I think that's what I was implying, yes.
- 18 Q. But again, you didn't say anything about that
- 19 to the JC-42.3 subcommittee at this time, did you?
- 20 A. That's correct.

- JUDGE McGUIRE: Yes.
- 2 (Brief pause.)
- 3 MR. OLIVER: May I approach, Your Honor?
- 4 JUDGE McGUIRE: Yes.
- 5 BY MR. OLIVER:
- Q. Mr. Crisp, I've handed you a document marked as
- 7 CX-602. You recognize this as a document that we
- 8 looked at this morning?
- 9 A. Yes, sir, I do.
- 10 Q. And if I could ask you to turn, please, to page
- 11 6. This document is captioned at the top Electronic
- 12 Industries Association, underneath that there's a word
- that appears to be slightly cut off on the left-hand
- 14 side, but appears to be "Invoice for," and after that
- there's an address, "Rambus, Inc." Do you see that?
- 16 A. Yes, I do.
- 17 O. And the attention line there is to Richard
- 18 Crisp. Do you see that?
- 19 A. Yes, I do.
- 20 Q. Now, do you recognize this as an invoice for
- 21 1995 JEDEC dues?
- 22 A. I don't really recognize it as such, but that's
- 23 what it looks like it is.
- Q. Do you recall receiving an invoice from JEDEC
- for dues at the beginning of 1995?

For The Record, Inc.

- 1 A. No.
- Q. Let me direct your attention to a line towards
- 3 the upper right-hand side and slightly diagonal to the
- 4 stamp, "APR 26, paid." Do you see that?
- 5 A. Yes, I do.
- Q. Does that refresh your recollection that Rambus
- 7 paid its dues for the 1995 membership year on or about
- 8 April 26 of 1995?
- 9 A. No.
- 10 Q. In any event, you don't recall JEDEC barring
- 11 you from any meetings or anything between January and
- 12 April of 1995, do you?
- 13 A. No, I don't believe they did.
- Q. And you don't recall JEDEC not sending you
- minutes between January and April of 1995, do you?
- 16 A. No, sir.
- Q. Now, Mr. Crisp, you attended the next JEDEC
- 18 meeting in May of 1995. Is that right?
- 19 A. Yes, I did.
- MR. OLIVER: I'm sorry, Your Honor, we're
- 21 having another copying problem, if we could have just a
- 22 moment.
- 23 (Brief pause.)
- 24 MR. OLIVER: Your Honor, may I approach?

- 1 BY MR. OLIVER:
- Q. Mr. Crisp, I've handed you a document that is
- 3 marked as CX-88a, it is a copy of the meeting minutes
- 4 from the May 24, 1995 JC-42.3 subcommittee. If I could
- 5 direct your attention to the first page, left-hand
- 6 side, about three quarters of the way down the list,
- 7 you see your name under the listed members present?
- 8 A. Yes, sir, I do.
- 9 Q. Now, at this meeting, Mr. Townsend again made
- 10 the presentation of the JEDEC patent policy. Is that
- 11 right?
- 12 A. I don't remember.
- 13 Q. If I could direct your attention to page 4.
- MR. PERRY: Of the exhibit?
- 15 BY MR. OLIVER:

- 1 was shown (see attachment E). Intel noted that the EDO
- 2 patent issue is being worked internally towards a
- 3 resolution."
- 4 Do you see that?
- 5 A. Yes, sir, I do.
- 6 Q. Now, at this May 1995 JC-42.3 subcommittee
- 7 meeting, there were a series of presentations involving
- 8 SyncLink. Is that correct?
- 9 A. Yes, that is correct.
- 10 Q. Let me digress for a moment to put this into
- 11 perspective. In 1995 you were involved in licensing
- 12 negotiations between Rambus and Hyundai. Is that
- 13 right?
- 14 A. Yes, that's correct.
- 15 Q. Hyundai is now known as Hynix?
- 16 A. Yes, that's correct.
- Q. And in February of 1995, you had a meeting with
- various representatives of Hyundai, didn't you?
- 19 A. I'm not sure about the dates, sir.
- MR. OLIVER: May I approach?

- 1 The subject is Hyundai meeting 2/24/95. Does this
- 2 refresh your recollection that you met with
- 3 representatives of Hyundai in February of '96? Excuse
- 4 me, February of '95?
- 5 A. No, sir, it doesn't.
- 6 Q. Let me direct your attention to the first
- 7 paragraph, it begins, "I met with G. M. Han. Do you
- 8 see that?
- 9 A. Yes, sir, I do.
- 10 Q. Do you recall who G. M. Han was?
- 11 A. Yes, I do.
- 12 Q. Who was he?
- 13 A. He was he was a technical marketing manager at
- 14 Hyundai.
- 15 Q. Now, G. M. Han said that he thought that
- 16 Rambus's price for licensing was too high. Is that
- 17 right?
- 18 A. I really don't remember.
- 19 O. If I could direct your attention to the third
- 20 paragraph of your email, and the fourth line, the
- 21 sentence reads, "The issue that was raised by G. M. Han
- 22 was that they felt our price was too high." Do you see
- 23 that?
- 24 A. Yes, sir, I do.
- Q. And you invited Hyundai to make a

- 1 counterproposal. Is that right?
- 2 A. I'm sorry, I couldn't understand your question.
- 3 Q. Yes, you invited Hyundai to make a
- 4 counterproposal?
- 5 A. Yes, sir, that's right.
- 6 Q. But you also told them that as the risk
- 7 decreased over time, Rambus's price would increase. Is
- 8 that right?
- 9 A. Yes, that's what it says here in the note.
- 10 Q. Now, at the time of these negotiations, your
- 11 understanding, one impediment to Rambus reaching an
- 12 agreement with Hyundai was SyncLink. Is that right?
- 13 A. I think it was a factor, yes.
- Q. Now, you understood that SyncLink referred to a
- 15 proposal being developed by a group working under the
- 16 auspices of the IEEE. Is that right?
- 17 A. Yes, that's true.
- 18 Q. And it grew out of earlier work known as
- 19 RamLink?
- 20 A. Yes, I believe that's true.
- 21 Q. You understood the SyncLink proposal to involve
- 22 a packetized system, right?
- 23 A. Yes, sir, that was my understanding.
- Q. And, in fact, the SyncLink proposal was similar
- to the Rambus architecture in a number of places?

- 1 A. Yes, sir, that's my opinion.
- Q. So, you knew that Mr. Farhad Tabrizi from
- 3 Hyundai was one of the original participants in
- 4 SyncLink. Is that right?
- 5 A. Yes, sir.
- 6 Q. And you were concerned that SyncLink could
- 7 potentially be a threat to Rambus, right?
- 8 A. Yes, sir, I was.
- 9 Q. And you advised others within Rambus that one
- 10 angle Rambus could take was to address the issue
- 11 head-on with Hyundai, right?
- 12 A. Yes, sir, that's right.
- 0. And by that you meant that Rambus could tell
- 14 Hyundai that when SyncLink was finished, they would
- 15 find themselves part of the intellectual property trap.
- 16 Is that right?
- 17 A. I think I wrote something to that effect.
- MR. OLIVER: May I approach, Your Honor?
- 19 JUDGE McGUIRE: Yes.
- 20 BY MR. OLIVER:
- 21 Q. Mr. Crisp, I've handed you a document marked as
- 22 CX-783. This is an email from you to the executives
- group and to the development group dated February 26,
- 24 1995, the subject is Farhad Tabrizi/Hyundai/SyncLink.

1 sentence there, "I would not worry at all if it were

- only RamLink, but SyncLink could potentially prove to
- 3 be a threat."
- 4 Do you see that?
- 5 A. Yes.
- 6 Q. And then if I could direct your attention down
- 7 to the last paragraph on the first page, the first
- 8 sentence there reads, "One angle we can take is to
- 9 address the issue head-on with the Korea folks." Do
- 10 you see that?
- 11 A. Yes, sir, I do.
- 12 Q. And that paragraph continues on to page 2, if I
- 13 could ask you to turn, please, to the second page. And
- 14 if I could direct your attention to the last four lines
- of this paragraph, actually picking up a couple of
- 16 words before that, it states, "And then tell them that
- when they get finished, they will probably find
- 18 themselves mired in a big intellectual property trap
- 19 which may result in higher royalty being paid to Rambus
- 20 than if they simply licensed the technology and use it
- 21 for 100 percent compatible products."
- 22 Do you see that?
- 23 A. Yes, sir, I do.
- Q. And your reference there to 100 percent
- compatible products, again, is a reference to RDRAM.

- 1 A. I'm sorry, I thought you said 673.
- Q. I may have misspoken, my apologies. CX-783.
- 3 Do you see that?
- 4 A. Yes, I do.
- 5 Q. On page 2, the third paragraph, the first
- 6 sentence there, "I do believe that this type of
- 7 argument may be effective in Korea with the Koreans."
- 8 A. Yes, I see that.
- 9 Q. But you didn't want to bring up this
- intellectual property issue with Hyundai without
- 11 careful consideration, did you?
- 12 A. That's right.
- 13 O. And that's because you did not want the issue
- of Rambus intellectual property related to SyncLink all
- 15 over JEDEC. Is that right?
- 16 A. Well, yeah, I think I said that in the
- 17 paragraph before this.
- 18 Q. That's where you're referring to in the
- 19 beginning of the paragraph 2 on this page?
- 20 A. Yes, sir, that's correct.
- 21 Q. Now, that sentence reads, "I certainly do not
- 22 want to bring this intellectual property issue up
- 23 without careful consideration. I especially do not
- 24 want it all over JEDEC." And that's the portion that
- 25 you were referring to?

- 1 A. Yes, sir, that's correct.
- Q. Okay, with that background, if we can now turn
- 3 back to the May 1995 JC-42.3 subcommittee meeting. And
- 4 it was at this May 1995 meeting that you saw three
- 5 different presentations at JEDEC relating to SyncLink.
- 6 Is that right?
- 7 A. Yes, sir, that's correct.
- 8 Q. In effect, three companies had been working on
- 9 SyncLink within the IEEE working group who brought that
- 10 idea to JEDEC. Is that right?
- 11 A. I'm sorry, would you ask the question again,
- 12 the echo was bothering me.
- 0. Yes, the three different companies who had been
- 14 working on SyncLink within the IEEE brought that idea
- 15 to JEDEC and presented to JEDEC. Is that right?
- 16 A. I don't know which idea you're referring to.
- 17 Q. SyncLink.
- 18 A. I remember that there were some first showings
- 19 from different companies.
- Q. I'm sorry, Your Honor, I'm still trying to work
- 21 around the copying problem, if I could have a moment.
- JUDGE McGUIRE: All right.
- 23 (Brief pause.)
- BY MR. OLIVER:
- Q. Mr. Crisp, if you have the minutes from the May

- 1 24, 1995 meeting in front of you.
- 2 A. Yes, sir, I do.
- Q. If I could ask you to turn, please, to page 57.
- 4 As you see on the right-hand side of this page, there's
- 5 a caption, Mitsubishi Electric, and then underneath
- 6 that, "64 Mbit SyncLink SDRAM." Do you see that?
- 7 A. It says something close to that.
- 8 Q. Do you recognize this as one of the
- 9 SyncLink-related presentations you saw at this May 1995
- 10 meeting?
- 11 A. Yes, sir, I do.
- Q. Now, the Mitsubishi presentation relating to
- 13 SyncLink involved using both edges of the clock for
- 14 input. Isn't that right?
- 15 A. It was actually a reference to a signal they
- 16 called a strobe.
- 171 Q'Ogdo.r( Qelf2 ough.elit gsuhuputcalled a strobe. )TjT\*. It

1 side, "Reference clock, both edge for input, positive

- 2 edge for output." Do you see that?
- 3 A. Yes, I do.
- 4 O. Now, in fact, not long after this JEDEC
- 5 meeting, you received an email from a Mr. Don Stark,
- 6 right?
- 7 A. I don't remember.
- 8 Q. If I could ask you to find CX-711 in front of
- 9 you, which again is the 200-page collection of emails.
- 10 If I could ask you to turn to page 156, please. Do you
- 11 see an email starting on page 156?
- 12 A. Yes, sir, I do.
- 13 O. Is that email from Don Stark to staff dated
- 14 July 21, 1995. Do you see that?
- 15 A. Yes, sir, I do.
- 16 Q. Who was Don Stark at this time?
- 17 A. Don was an engineer that worked for Rambus.
- 18 Q. And the subject is SyncLink and Rambus
- 19 Comparison Article. Do you see that?
- 20 A. Yes, sir, I do.
- 21 Q. Now, if I could ask you to turn, please, to the
- 22 next page, page 157. And if I could direct your
- 23 attention underneath the caption Adoption of Dual Port
- 24 Organization, the paragraph that follows about eight
- lines down, there's a line that reads, "For data

- 1 input."
- 2 Do you see that?
- 3 A. Yes.
- 4 Q. That reads, "For data input, both the rising
- 5 and falling edges of the clock are used." Do you see
- 6 that?
- 7 A. Yes, sir, I do.
- 8 Q. Now, we had discussed yesterday a reference in
- 9 one of your emails to presentations that you had made
- 10 at JEDEC concerning dual edge output. Do you recall
- 11 that?
- 12 A. I have some recollection of the discussion
- 13 yesterday.
- Q. And in fact, item number 6 that we added to the
- 15 table yesterday was dual edge output. Is that right?
- MR. PERRY: Your Honor, if I could have Mr.
- 17 Oliver for a second.
- 18 MR. OLIVER: Your Honor, there may be a --
- 19 either I misspoke or the record is unclear. I was
- 20 referring to presentations that Mr. Crisp observed at
- 21 JEDEC.
- JUDGE McGUIRE: Okay, fine.
- MR. OLIVER: No reference to any presentation
- 24 that Mr. Crisp had made.
- MR. PERRY: Thank you.

- 1 BY MR. OLIVER:
- 2 Q. Do you recall with respect to the presentations
- 3 that you observed at JEDEC, we added to the table
- 4 yesterday a reference to dual edge output. Do you
- 5 recall that?
- 6 A. Yes, I remember that being added to the board
- 7 yesterday.
- 8 Q. And what we're seeing here is dual edge input.
- 9 Is that right?
- 10 A. I suppose you could call it that.
- 11 MR. OLIVER: Your Honor, if I could approach
- 12 the table.
- 13 JUDGE McGUIRE: Yes.
- 14 BY MR. OLIVER:
- 15 Q. I have now added input underneath or next to
- 16 output underneath dual edge.
- Now, at the May 1995 JEDEC meeting, Mr. Tabrizi
- 18 of Hyundai explained that one of the things behind
- 19 motivation of SyncLink was to develop a bandwidth
- 20 device that was presumably free of royalties. Is that
- 21 right?
- 22 A. I'm not sure that I remember that statement.
- O. If I could ask you to turn within CX-711 to
- 24 page 68, please. If I could direct your attention to
- 25 the bottom of page 68, this is another email, this time

- dated May 24, 1995. Do you see that?
- 2 A. Yes, sir, I do.
- Q. If you turn to the top of page 69, you see it's
- 4 an email from you to the executive group, the business
- 5 development group and another group, ENGR MGRS.
- 6 A. Yes, I do.
- 7 O. What does ENGR MGRS stand for?
- 8 A. Engineering managers.
- 9 Q. So, in other words, this email was sent to the
- 10 executive group, the business development group and
- 11 engineering managers. Is that right?
- 12 A. Well, it was more than the business development
- group, it's the business development and marketing
- 14 group, but yes.

- 1 high bandwidth device that is presumably free of
- 2 royalties." Do you see that?
- 3 A. Yes, I do.
- 4 Q. Their goal was that companies would not have to
- 5 pay royalties if they followed the standard. Is that
- 6 right?
- 7 A. Was that something in the email?
- Q. I'm just asking if that was your understanding.
- 9 A. I think that was their goal.
- 10 Q. Now, at the time of this presentation, Mr.
- 11 Gordon Kelley asked whether companies had patent issues
- 12 with material. Is that right?
- 13 A. I don't remember precisely.
- Q. If I could direct your attention on page 72 of
- 15 CX-711, about three quarters of the way down the page,
- the sentence begins, "Gordon Kelley." Do you see that?
- 17 A. Yes, sir, I do.
- 18 Q. "Gordon Kelley asked whether or not any
- 19 companies have patent issues with material." Do you
- 20 see that?
- 21 A. Yes, I do.
- 22 Q. And then if you see in the following paragraph,
- the last sentence, excuse me, next to the last sentence
- is another reference, "Kelley asked whether or not HP,
- 25 Hyundai, Mitsubishi or TI had any patents covering any

- 1 of this." Do you see that?
- 2 A. I'm sorry, I haven't seen that yet.
- 3 Q. This is the --
- 4 A. Where was that?
- 5 Q. The next to the last paragraph.
- 6 A. Okay, I see that now.
- Q. And it reads, "Kelley asked whether or not HP,
- 8 Hyundai, Mitsubishi or TI had any patents covering any
- 9 of this. All stated they did not." Do you see that?
- 10 A. Yes, that's right.
- 11 Q. Now, at this meeting, Sam Calvin of Intel asked
- whether or not there were any Rambus patents covering
- 13 SyncLink. Is that right?
- 14 A. That's correct.
- 15 Q. And then Mr. Kelley also followed up on that,
- 16 didn't he?
- 17 A. I'm not sure that I remember.
- 18 Q. Let me ask you to turn, please, to page 73.
- 19 A. Okay.
- Q. At the top of the page beginning the third
- 21 line.
- 22 A. Yes.
- Q. "Kelley asked to have us state whether or not
- 24 Rambus knows of any patents, especially ones we have
- 25 that may read on SyncLink." Do you see that?

- 1 A. Yes, I do.
- Q. And essentially what was happening here is when
- 3 you did not respond at the meeting itself, Mr. Kelley
- 4 asked you to go back to Rambus and then report back in
- 5 September as to whether Rambus knows of any patents
- 6 that may read on SyncLink. Is that right?
- 7 A. I think I remember something basically to that
- 8 effect.
- 9 Q. And then in your email, back to the executive
- 10 group, the business development and marketing group,
- 11 and the engineering managers, you discussed how Rambus
- 12 may want to proceed with respect to that request. Is
- 13 that right?
- 14 A. I -- maybe you could point that to my email.
- Q. Well, that's the general gist of what follows
- in your email. Isn't that right?
- 17 A. I think there's actually more than -- more than
- 18 that in this.
- 19 O. Well, let me direct your attention almost
- two-thirds of the way down page 73.
- 21 MR. PERRY: Your Honor, if he's going to ask
- 22 him about the general gist of the email, can I ask that
- 23 he be given a chance to read the email?
- JUDGE McGUIRE: Yes, you can. Just give him a
- 25 chance, Mr. Oliver.

- 1 A. Yes.
- Q. Number 2 is "DRAM with low swing signaling."
- 3 A. Yes.
- 4 O. And again, that number 2 is an item that's on
- 5 our table from yesterday. Is that right?
- 6 A. I don't see the table right now.
- 7 MR. OLIVER: May I approach the table?
- 8 THE WITNESS: It was something that sounds like
- 9 that, but I don't remember exactly what you wrote down.
- JUDGE McGUIRE: What's the question, Mr.
- 11 Oliver, again?
- 12 BY MR. OLIVER:
- Q. The question is number 2, "DRAM with low swing
- signaling," that's the same as item number 1 we put on
- 15 the table yesterday.
- 16 JUDGE McGUIRE: Is that a comment or question?
- 17 MR. OLIVER: That's a question, Your Honor.
- 18 JUDGE McGUIRE: All right, Mr. Crisp?
- 19 THE WITNESS: It sounds very similar.
- 20 BY MR. OLIVER:
- 21 Q. Number 3, "DRAM with a two wire initialization
- 22 system," excuse me, do you see that?
- 23 A. Yes, I do.
- Q. And number 4, "DRAM with programmable access
- 25 latency." Do you see that?

- 1 A. Yes, I do.
- Q. And again, number 4 on your list is similar to
- 3 item number 2 from the table yesterday. Is that right?
- 4 A. Yes, it's similar to that.
- 5 Q. And then number 5 is "DRAM with on chip address
- 6 space decoding." Do you see that?
- 7 A. Yes, I do.
- 8 Q. Now, what you're talking about in this part of
- 9 the email is various aspects of Rambus technology that
- 10 might apply against SyncLink?
- 11 A. Yes, sir, that's correct.
- 12 Q. Then after that, you make certain suggestions
- as to how Rambus may wish to respond to the request of
- 14 Mr. Kelley. Is that right?
- 15 A. I think that's fair.
- Q. You write, "I think it makes sense to review
- our current issued patents and see what we have that
- 18 may work against them. If it is something really key,
- 19 then we may want to mention it to Hyundai in our
- 20 attempts to get negotiation under way again." Now,
- 21 negotiations with Hyundai, these are the negotiations
- 22 we referred to taking place in February as well as
- 23 other times this year?
- A. Yes, that was a negotiation for the RDRAM
- 25 license.

1 Q. And then you write, "If it is not a really key

- 2 issue, such as the initialization issue, then I think
- 3 it makes no sense to alert them to a potential problem
- 4 they can easily work around." Do you see that?
- 5 A. Yes, sir, I do.
- 6 Q. In other words, what you're saying here is that
- 7 if it was not a really key issue, then it made no sense
- 8 to alert them that Rambus might have patents or patent
- 9 applications in the area because they didn't have to
- 10 work around the patents or applications. Isn't that
- 11 right?
- 12 A. Yeah, I think the them in this case is Hyundai,
- again, this is speaking to us trying to get our
- 14 negotiations back under way with them.
- 15 Q. Well, your discussion in this email also
- 16 pertains to JEDEC, doesn't it?
- 17 A. Yeah, there's actually a number of different
- things that are in this email.
- 19 O. And in fact, the very next sentence refers to
- 20 JEDEC, right?
- 21 A. That's right.
- Q. Again, another suggestion that you make to the
- group at Rambus is that "We may want to walk into the
- 24 next JEDEC meeting and simply provide a list of patent
- 25 numbers which have issued and say, we are not lawyers,

- 1 Q. And again, the concern there was that if
- 2 nothing was particularly strong, and it was easy for
- 3 others to figure out what Rambus had, it would be
- 4 easier to work with. Isn't that right?
- 5 A. It might be right. I mean, it was easy to find
- 6 out what we had anyhow. You could find the patents on
- 7 the Worldwide Web.
- 8 Q. Now, you didn't raise any of these issues at
- 9 the JEDEC meeting, did you?
- 10 A. That's correct.
- 11 MR. PERRY: Objection, vague as to "these
- 12 issues." It's vague.
- 13 JUDGE McGUIRE: Overruled. I'll hear the
- 14 question.
- THE WITNESS: I didn't raise any issues at that
- 16 particular JEDEC meeting.
- 17 BY MR. OLIVER:
- 18 Q. And certainly with respect to the intellectual
- 19 property issues that you list in numbers 1 through 5 on
- 12 EDEC meeting, did you?
- 122 A. That's correct., I didnhow.

- 1 SyncLink, didn't you?
- 2 MR. PERRY: Your Honor, if we are moving to a
- 3 different subject, I hate to interrupt, but if we could
- 4 take a break, that would be much appreciated, if this
- 5 is a decent time.
- 6 MR. OLIVER: Actually this would be a good time
- for a break, Your Honor.
- JUDGE McGUIRE: All right, let's take a break,
- 9 ten minutes. Off the record.
- 10 (Whereupon, there was a recess in the
- 11 proceedings.)
- 12 JUDGE McGUIRE: On the record. Mr. Oliver, you
- may proceed.
- 14 BY MR. OLIVER:
- 15 Q. Thank you, Your Honor.
- Mr. Crisp, before the break, we had been
- discussing the May 1995 JEDEC meeting. Do you recall
- 18 that?
- 19 A. Yes, sir, I do.
- Q. Now, after that meeting, you returned to Rambus
- 21 and you tried to figure out what intellectual property
- 22 Rambus had that might block SyncLink. Is that right?
- 23 A. I think that's true in part, I was actually
- doing a general sort of read of it to see what all we
- 25 actually had.

1 Q. You started investigating, among other things,

- 2 Rambus's P015D application?
- A. Yeah, I'm not really sure what the application
- 4 numbers were.
- 5 MR. OLIVER: May I approach, Your Honor?
- JUDGE McGUIRE: Yes.
- 7 BY MR. OLIVER:
- 8 Q. I've handed you a document marked as CX-796.
- 9 This appears to be a chain of emails that if I could
- 10 direct your attention to the first to an email
- 11 appearing on the bottom of the first page and carrying
- over to the second page, it's text with a number of
- 13 arrows in front of it, and in italics. Do you
- 14 recognize this as an email that you sent to vice
- president Roberts on June 5th, 1995?
- 16 A. It looks like I created it, yes.
- Q. And you see the subject in your email there is
- 18 73305.P015D. Do you see that?
- 19 A. Yes, sir, I do.
- Q. And does that refresh your recollection that
- 21 this email was about the patent application that Lester
- 22 Vincent referred to as the P015D application?
- A. Yes, sir, it does.
- Q. And now, the reason for your renewed interest
- in this application was SyncLink. Isn't that right?

1 A. I think that was the primary motivation. That

- 2 and this desire to get this negotiation with Hyundai
- 3 unstalled.
- 4 O. Well, the email here refers only to SyncLink.
- 5 Isn't that right?
- 6 A. Yes, that's correct, because I felt like that
- 7 was the necessary thing to do before we spoke with
- 8 Hyundai again.
- 9 Q. So, the last sentence in the first page, the
- 10 last full sentence that is on the first page reads,
- 11 "The reason for the renewed interest is SyncLink." Is
- 12 that correct?
- 13 A. Yes, that's correct.
- Q. Now, if you read the email immediately above
- 15 that, that is the response of vice president Roberts to
- 16 your email. Is that right?
- 17 A. It looks that -- it looks like that's what it
- 18 is.
- 19 O. And again, at this point you were trying to
- 20 understand exactly what Rambus might still be able to
- 21 claim to ensure that SyncLink coalition's plans would
- infringe Rambus's IP. Is that right?
- 23 A. That was pretty close to right, yes.
- Q. And Allen Roberts replied that the lawyers
- 25 thought it was impossible to salvage the P015D

- 1 application?
- 2 A. Well, that's what he wrote, yes.
- Q. And he responded to you that if Rambus wanted
- 4 to resurrect the P015D, it would have to be a new
- 5 division with new claims, right?
- 6 A. It looks like that's what he said.
- 7 Q. And then Rick Barth responded with an email at
- 8 the top of the page. Is that right?
- 9 A. Yes, that's correct.
- 10 Q. And he replied that this would be a lot of

1 that.

- 1 responsibility to do that, right?
- 2 A. Yes, I did.
- O. And you said that you would take ownership of
- 4 this so we would make the time to do it. Is that
- 5 right?
- 6 A. That's what I said, yes.
- 7 O. And the reason for that is that you thought it
- 8 was really important to get a firm block for SyncLink.
- 9 Is that right?
- 10 A. Well, I made the statement that I think it was
- 11 really important to do that, but I wouldn't say that
- 12 that was the primary motivation.
- 13 Q. You certainly thought it was important to get a
- 14 firm block for SyncLink, right?
- 15 A. Yes, that's correct.
- Q. And you also believed that what Rambus had
- filed in 1990 should be able to block them, but you
- 18 needed to sweat through the details. Is that right?
- 19 A. Yes, that was my feeling.
- Q. And by that you meant that the specification in
- 21 the application that had been filed in 1990 would
- 22 support the claims to block SyncLink, but someone had
- 23 to sweat through the details of drafting the relevant
- 24 claims. Is that right?
- 25 A. Yeah, that was my belief.

- 1 Q. Now, at about that time, you and Reese Brown
- 2 exchanged a couple of rather testy emails. Is that
- 3 right?
- 4 A. I'm not sure what the time was.
- Q. If I could ask you to turn back to CX-711,
- 6 please. If you could turn, please, to page 79. If I
- 7 could direct your attention to the bottom of page 79
- 8 about seven lines up from the bottom, there's a line
- 9 that reads, "From," and a number of question marks. Do
- 10 you see that?
- 11 A. Yes, I do.
- Q. And there's no space before that line, but that witsrmenkkT\*( waseveeo,1TjT\*( seb 13 appe?, plehgppe( wa poro )

- 1 Is that right?
- JUDGE McGUIRE: All right, again, just for my
- 3 edification, could you tell me who is a Reese Brown,
- 4 his title?
- 5 MR. OLIVER: I apologize, Your Honor.
- 6 JUDGE McGUIRE: I'm sorry, Mr. Crisp, you can
- 7 answer that if you wish.
- 8 THE WITNESS: I'm sorry, Your Honor, I didn't
- 9 realize that you were speaking to me.
- JUDGE McGUIRE: Well, I wasn't, just generally
- 11 speaking, I guess, but if you have an answer, you can
- 12 answer that.
- 13 THE WITNESS: Yes, Your Honor. Reese Brown, I
- 14 believe his title was consultant to JEDEC.
- 15 JUDGE McGUIRE: Okay. Go ahead. So, he was
- not a paid employee by any other company, he was just
- an outside I guess consultant to JEDEC. Is that right?
- 18 I mean, was he part of any other DRAM manufacturer?
- 19 THE WITNESS: Your Honor, I don't believe that
- 20 he was, I believe that he was just a consultant. I
- 21 believe that he was just an independent consultant,
- 22 Your Honor.
- JUDGE McGUIRE: I'm just trying to get that
- 24 clear for the record.
- MR. PERRY: If I could help, I think the

- 1 evidence will show that he had been a representative
- 2 and employee of a company called Unisys up until 1985
- 3 at which time he retired and then he had become a
- 4 consultant to JEDEC and attended meetings on behalf of
- 5 JEDEC.
- 6 JUDGE McGUIRE: That's in your motion, too.
- 7 MR. PERRY: As an outside consultant.
- JUDGE McGUIRE: All right, Mr. Oliver, you may
- 9 proceed.
- 10 BY MR. OLIVER:
- 11 Q. Thank you, Your Honor.
- 12 Again, in essence, with respect to the exchange
- of emails here, you had become upset when Mr. Brown
- 14 posted some material related to Su.E: All right, Mr.t, ctbl33iv

- 1 to do ahead of time. Is that right?
- 2 A. I think that's fair to say.
- 3 O. Now, when Mr. Brown received this email from
- 4 you, he forwarded that to Mr. Hans Wiggers, right?
- 5 A. That's my understanding.
- 6 Q. And at this time, who was Mr. Hans Wiggers?
- 7 A. I'm not sure what you're looking for, could you
- 8 be a little more specific?
- 9 Q. Yes. Can you please explain in the context of
- 10 emails relating to JEDEC and to SyncLink, what role, if
- any, was played by Mr. Hans Wiggers?
- 12 A. Mr. Wiggers was an employee of Hewlett Packard
- and worked in their memory technology center and he had
- 14 some development in the development of the Rambus
- 15 standard and then later on the SyncLink standard, and
- 16 he also regularly attended JEDEC meetings.
- Q. All right, at this time, he was the chairman of
- 18 the IEEE task group working on the SyncLink proposal,
- 19 correct?
- 20 A. I'm not really sure. It's possible that he
- 21 was. I thought Mr. Gustafson was, but perhaps it was
- 22 Mr. Wiggers.
- Q. Now, at this time, you understood the IEEE to
- have a very different patent policy than JEDEC, right?
- 25 A. Yes, that was my understanding.

- 1 O. And you understood that the IEEE did not
- 2 require disclosure of patents or applications. Is that
- 3 right?
- 4 A. I think that's fair, yes.
- 5 Q. Nevertheless, after Mr. Brown forwarded your
- 6 email to Mr. Wiggers, Mr. Wiggers then wrote to you
- 7 saying that as chairman of the proposed standard, he
- 8 took your comment about patent issues very seriously,
- 9 right?
- 10 A. Yeah, I don't remember exactly what he said.
- 11 Q. If I could ask you to turn within CX-711 to
- page 90, please. And on page 90, looking a little bit
- more than halfway down, you see again the beginning of
- 14 a new email there?
- 15 A. Yes, sir, I see that.
- Q. And this appears to be an email from you to Mr.
- 17 Hans Wiggers dated June 10, 1995?
- 18 A. Yes, that's correct.
- 19 Q. If I could ask you to turn to the next page,
- 20 please.
- 21 A. Yes.
- 22 Q. And if I could direct your attention to a
- 23 paragraph appearing in the middle of the page beginning
- 24 "Firstly." Do you see that?
- 25 A. Yes, I do.

1 O. And the third line there reads, "However, as

- 2 chairman of the proposed standard" -- actually, I'm
- 3 sorry, let me take a step back to clarify this. You
- 4 see that above that, there's text with arrows above it
- 5 indicating, again, embedded text. Is that right?
- 6 A. Yes, I see that.
- 7 Q. But you recognize the text beginning at the
- 8 middle of the page there to be the text sent to you by
- 9 Mr. Hans Wiggers?
- 10 A. I'm sorry, which text was that you're referring
- 11 to?
- 12 Q. The text in the middle of page 91 that does not
- 13 have any arrows in front of it.
- 14 A. Yes, that's correct.
- 15 Q. And again looking at the text beginning with
- 16 the third line of that paragraph.
- 17 A. Um-hmm. Yes.
- 18 Q. It reads, "However, as chairman of the proposed
- 19 standard, I have to take your second comment about
- 20 patent issues very seriously." Do you see that?
- 21 A. Yes.
- Q. And again, this was Mr. Wiggers' follow-up
- 23 after Mr. Brown forwarded your email to him. Is that
- 24 right?
- A. Yes, sir, that's correct.

- Q. Mr. Wiggers went on to state, "We have held all
- 2 our work group meetings in the public domain and you
- 3 have attended these meetings I assume in good faith.
- 4 If you know of any way in which the proposed RamLink
- 5 standard violates patents held by Rambus or others,
- 6 then I think you have a moral obligation to bring this
- 7 to my attention, including information about which
- 8 patents are being violated."
- 9 Do you see that?
- 10 A. Yes, sir, I do.
- 11 Q. And you understood his reference to RamLink in
- that sentence as applying to SyncLink?
- 13 A. It wasn't entirely clear. There was certainly
- 14 a thinning relationship between RamLink and SyncLink.
- 15 Originally SyncLink was fairly tightly connected to
- 16 RamLink, but as time went on, they became less so.
- 17 Q. But you certainly recognize that there was some
- 18 relationship between RamLink and SyncLink?
- 19 A. Yes. Well, certainly the people in the working
- 20 group that was working on RamLink later sort of
- 21 abandoned that effort and focused on SyncLink. There
- 22 was a continuity, I guess, of the people doing that.
- Q. Now, your reaction to receiving this email from
- 24 Mr. Wiggers was to blame Reese Brown, right?
- A. Again, I'm not sure exactly what you mean by

- 1 that. Perhaps you could be a little clearer.
- Q. Well, let me ask you to turn within CX-711 to
- 3 page 102. And if I could direct your attention to an
- 4 email appearing at the bottom of page 102. You see
- 5 there an email from you to R. Brown dated June 13,
- 6 1995, Subject: Patent Issues and Name-Calling. Do you
- 7 see that?
- 8 A. Yes, I do.
- 9 Q. And you write there, "Reese, I wanted to tell
- 10 you that I do not appreciate you forwarding private
- 11 communication which I made to you to others, including
- 12 Hans." Do you see that?
- 13 A. I see something that says pretty close to what
- 14 you just said.
- 15 Q. And the reference to Hans in that sentence was
- 16 Mr. Wiggers, correct?
- 17 A. That's correct, yes.
- 18 Q. And you then went on to state, "Your action is
- 19 a gross violation of net etiquette and warrants an
- 20 endless stream of flames." Do you see that?
- 21 A. Yes, that's right.
- Q. In the meanwhile, you told Hans Wiggers that
- you had nothing to say to him or to the rest of the
- 24 IEEE committee about Rambus's patent position. Is that
- 25 right?

- 1 A. I don't recall that, but perhaps there's some
- 2 email document that you have that can speak to that.
- Q. Let me ask you to turn to page 103 within
- 4 CX-711. If you look at the top of page 103, you see
- 5 that this is an email from Hans Wiggers to you dated
- 6 June 13, 1995, the Subject: Patent Issues and
- 7 Name-Calling. Do you see that?
- 8 A. Yes, I do.
- 9 Q. And then if you look, if you will just flip
- 10 quickly through pages 103, 104, 105, 106 and 107,
- 11 you'll see various passages with arrows in front of
- them, and various other passages without arrows in
- 13 front of them. Do you see that?
- 14 A. Yes, I see a lot of text as you described you see that?
  - 7 1 Namewrit Isyou Mr.gers to you emyoudTjronis al fromahen ifT\*(

1 O. And I would like to direct your attention to

- 2 the third line at the top of the page, and again, this
- 3 is in the portion of the text that you wrote. Is that
- 4 right?
- 5 A. Yes.
- Q. And it reads there, "In the mean time, I have
- 7 nothing else to say to you or the rest of the committee
- 8 about our patent position." Do you see that?
- 9 A. Yes, I do.
- 10 Q. Now, you also told Mr. Wiggers that your email
- 11 to him was private, and you withheld all copyright for
- 12 the material. Is that right?
- 13 A. Yes, that's correct.
- Q. That appears on page 107?
- 15 A. Yes.
- 16 Q. The passage there just above your name, I
- 17 assume this is the final portion of your email, reads,
- 18 "Finally, I regard this to be private communication to
- 19 you. I claim and withhold all copyrights for the
- 20 material. This means you are not free to copy and
- 21 distribute it to others without my permission. Please
- 22 respect this request."
- Do you see that?
- 24 A. Yes, I do.
- Q. And then Mr. Wiggers agreed to that, didn't he?

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- 1 A. Yes, he did.
- Q. The next line, "I agree with this and expect
- 3 that you will do the same with this communication." Do
- 4 you see that?
- 5 A. Yes, he was a gentleman about it.
- 6 Q. You then attended the next SyncLink meeting in
- 7 June 1995, right?
- 8 A. I'm not sure what the date was, I know I went
- 9 to a SyncLink meeting after the May JEDEC meeting.
- 10 Q. Let me ask you to turn, please, to page 110
- 11 within CX-711. Now, let me direct your attention to
- the caption beginning about halfway down the page, it
- appears to be, again, the beginning of a new email.
- 14 This is an email from you to the executive group and
- 15 the business development and marketing group at Rambus
- 16 dated June 15, 1995. Do you see that?
- 17 A. Yes, sir, I do.
- 18 Q. And the subject is RamLink meeting of June 15.
- 19 Do you see that?
- 20 A. Yes.
- 21 Q. And if you could just flip quickly from page
- 22 110 through 114, I just want to confirm that up through
- the middle of page 114 is all part of that same email.
- A. Yes, sir, that's correct.
- Q. Now, as you observed and participated in that

- 1 SyncLink meeting of June 1995, you became more
- 2 convinced than ever that Rambus had to be absolutely
- 3 sure that it had SyncLink standard adequately covered
- 4 by patents. Is that right?
- 5 A. I seem to remember thinking that at some point.
- 6 Q. Let me direct your attention to the bottom of
- 7 page 113, the top of page 114 of this email. And
- 8 again, what you're telling Rambus executives and the
- 9 Rambus business development and marketing group at this
- 10 time, beginning the very last line of page 113, "It is
- 11 essential, "flipping to page 114, "That we be
- 12 absolutely sure we have the standard adequately covered
- 13 by patents. I am more convinced of this than ever."
- 14 Do you see that?
- 15 A. Yes, I do.
- Q. Now, the following month, in July 1995, Mr.
- 17 Wiggers contacted you again, right?
- 18 A. I don't remember.
- 19 O. Let me ask you to turn, please, to page 130
- 20 within CX-711. Now, if I could direct your attention
- 21 to an email appearing at the bottom half of page 130.
- 22 This is an email from Hans Wiggers dated July 12, 1995,
- 23 Subject: Patent Issues and Private Email. Do you see
- 24 that?
- 25 A. Yes, at the bottom?

- 1 O. The subject line is the last line.
- 2 A. Yes, sir, I do see that.
- Q. And then turn to page 131, the top of the page,
- 4 you see that it's addressed to you.
- 5 A. Yes, sir, that's correct.
- Q. Now, Mr. Wiggers informed you that he felt an
- 7 obligation to report portions of your earlier
- 8 communication with him to the IEEE standards board. Is
- 9 that right?
- 10 A. Yes, that looks like what he was saying there.
- 11 Q. Now, you responded to him by saying that you
- were disappointed that he was planning to send your
- private communications to the world, right?
- 14 A. I'm sorry, I don't remember saying that.
- 15 Q. If I could ask you to turn, please, to page 135
- 16 in CX-711.
- 17 I'm sorry, Your Honor, apparently we're having
- 18 problems with our realtime screen here.
- 19 (Brief pause.)
- MR. OLIVER: Thank you, Your Honor.
- JUDGE McGUIRE: You're welcome.
- BY MR. OLIVER:
- Q. Again, Mr. Crisp, if I could direct your
- 24 attention to page 135 of CX-711, to the email appearing
- 25 at the bottom part of this page. This again is an

- 1 email from Mr. Wiggers to you dated July 12, 1995. Is
- 2 that right?
- A. Yes, sir, that's correct.
- 4 Q. Then if you turn to page 136 at the top, again,
- 5 you see some embedded text with arrows in front of it,
- 6 followed by apparently Mr. Wiggers' response to you.
- 7 A. Yes, that's correct.
- 8 Q. And the embedded text was written by you,
- 9 right?
- 10 A. I believe that's correct.
- 11 Q. And you told Mr. Wiggers you received the email
- 12 and you were disappointed that Mr. Wiggers felt a need
- 13 to send your private comments to the world. Isn't that
- 14 what you said?
- 15 A. In so many words.
- 16 Q. And then you followed up again by telling Mr.
- 17 Wiggers that you had nothing to say to the group,
- 18 right?
- 19 A. Are you speaking down at the bottom of the
- 20 page?
- Q. Yes, take a look at the bottom of page 136,
- 22 this is what I believe to be the next email in the
- 23 chain. Is that right?
- A. Yes, it's the next one in this group of emails.

- 1 also dated July 12, 1995?
- 2 A. Yes, sir, that's correct.
- 3 Q. And again, you recognize the embedded text at
- 4 the bottom of page 136 as what we were just looking at
- 5 a moment ago?
- 6 A. Yes, sir, that's right.
- 7 Q. And the new text begins in the first -- excuse
- 8 me, the last line of page 136, and that reads, "As I
- 9 have stated before, I have nothing to say to the group
- 10 regarding our position. What I say in private
- 11 correspondence to others is not to be construed as
- 12 anything like an official position of the company. To
- interpret it otherwise is a mistake."
- 14 Do you see that?
- 15 A. Yes, sir, I do.
- 16 Q. And that's the response you sent back to Mr.
- 17 Wiggers, right?
- 18 A. Yes, that's correct.
- 19 O. All right, after this exchange, Mr. Wiggers
- then offered to summarize in his words your earlier
- 21 communication, right?
- 22 A. Yes, he made a proposal to do that.
- Q. And you responded, "Not acceptable,"
- 24 exclamation point, right?
- 25 A. I'm not sure.

1 JUDGE McGUIRE: Where is that, Mr. Oliver, that

- 2 you're now quoting from? Is that on the same page?
- 3 MR. OLIVER: We have now moved on to another
- 4 page, Your Honor, this is page 142 of CX-711.
- JUDGE McGUIRE: All right.
- 6 BY MR. OLIVER:
- 7 O. Again, let's set the context, looking at the
- 8 top of page 142, this is now an email from you to Mr.
- 9 Wiggers dated July 13, 1995, right?
- 10 A. Yes, sir.
- 11 Q. That began the first line, "Not acceptable,"
- 12 exclamation point. "You have just changed 'I' to 'he
- 13 says'." Is that right?
- 14 A. Yes, that's what I wrote down there. If I
- 15 could have an opportunity to explain. I think my issue
- 16 was exactly -- I didn't have a problem with him writing
- a summary, just I didn't agree with what his summary
- 18 had said. I wanted it to be factual rather than
- 19 editorial in nature.
- Q. Well, we'll take a look at what ultimately was
- 21 written. Now, if I could direct your attention to page
- 22 145. If you could actually take a look at the
- intervening pages as well, there's -- there appears to
- 24 be quite a bit of embedded material here, but I wanted
- 25 to determine that the text at the top of page 145 is

- 1 part of the same email that starts at page 142.
- A. Yes, sir, that's correct.
- Q. Directing your attention, then, to the top of
- 4 page 145, and again, this is part of your statement to
- 5 Mr. Wiggers, right?
- 6 A. Yes, that's right.
- 7 O. Beginning at the third line there, "I have no
- 8 obligation under the agreements I have made with anyone
- 9 to report anything to anyone relative to the Rambus
- intellectual property or the IEEE working group. There
- 11 is no charter I have signed, there is no agreement I
- 12 have signed or anything that obligates me to do
- 13 anything."
- 14 Do you see that?
- 15 A. Yes, sir, I do.
- Q. Now, the net result was that Mr. Wiggers agreed
- to add only a very short statement with respect to the
- 18 Rambus position. Is that right?
- 19 A. I don't know if I remember that, but we can
- 20 review it.
- 21 Q. If I can ask you to turn to page 146 in CX-711.
- 22 A. Yes.
- Q. And do you see beginning about halfway down
- this page, the next email, this one is from Mr. Wiggers
- to you dated July 14, 1995. Do you see that?

- 1 A. Yes, sir, that's right.
- 2 Q. And looking at the text at the very bottom of
- 3 page 146, "Richard, I will put in a statement, Mr.
- 4 Crisp has expressed a personal opinion that the
- 5 SyncLink proposal may infringe Rambus patents."
- 6 Do you see that?
- 7 A. Yes, sir, I do.
- 8 Q. And let's, in fact, take a look at what the
- 9 minutes from the next SyncLink meeting show.
- 10 May I approach, Your Honor?
- 11 JUDGE McGUIRE: Yes.
- 12 BY MR. OLIVER:
- Q. Mr. Crisp, I have handed you a document marked
- 14 as RX-590, these are the minutes of the IEEE SyncLink
- meeting of August 21, 1995. Now, if you look at the
- list of attendees at the top left-hand column, do you
- 17 see your name there?
- 18 A. Yes, sir, I do.
- 19 O. So, does that refresh your recollection that
- 20 you were at the SyncLink meeting in August of 1995?
- 21 A. Yes, sir, it does.
- 22 Q. If I could then direct your attention to page
- 23 2. I would like to look at a specific paragraph
- 24 appearing a little more than halfway down the page,
- which reads, "Richard Crisp of Rambus informed us that

- in their opinion both RamLink and SyncLink may violate
- 2 Rambus patents that date back as far as 1989. Others
- 3 commented that the RamLink work was public early enough
- 4 to avoid problems, and thus might invalidate such
- 5 patents to the same extent that they appear to be
- 6 violated. However, the resolution of these questions
- 7 is not a feasible task for this committee, so it must
- 8 continue with the technical work at hand."
- 9 Do you see that?
- 10 A. Yes, I do.
- 11 Q. Now, the first sentence of that paragraph is
- 12 the statement that you agreed to allow Mr. Wiggers to
- make after your email exchange. Is that right?
- 14 MR. PERRY: Misstates the document, Your Honor.
- JUDGE McGUIRE: Sustained.
- 16 BY MR. OLIVER:
- Q. Mr. Crisp, the first sentence in the paragraph

1 O. Well, that sentence does not provide any

- details about Rambus's issued patents, does it?
- 3 A. That's correct, it doesn't.
- 4 Q. That sentence does not provide any details
- 5 about Rambus's pending patent applications, does it?
- A. No, sir, it doesn't.
- 7 Q. That sentence does not explain what aspects of
- 8 the SyncLink work might infringe Rambus patents, does
- 9 it?
- 10 A. That's correct, it does not.
- 11 Q. And nothing in that paragraph identifies dual
- 12 edge clock technology as a feature of SyncLink that
- might violate Rambus patents, does it?
- 14 A. That's correct.
- 15 Q. Now, five days after the conclusion of your
- 16 email exchanges with Mr. Wiggers that we just looked
- 17 at, you reported to Rambus vice president Allen
- 18 Roberts, CEO Geoff Tate and vice president David
- 19 Mooring that you had completed a review of several
- 20 Rambus divisional applications and issued patents,
- 21 right?
- A. I'm not sure about that or the time line.
- MR. OLIVER: May I approach?
- JUDGE McGUIRE: Yes.
- 25 BY MR. OLIVER:

For The Record, Inc. Waldorf, Mar

- Q. Mr. Crisp, I've handed you a document marked
- 2 CX-824, this is an email from you to vice president
- 3 Roberts with copies to CEO Geoff Tate and David Mooring
- 4 dated July 19, 1995. Do you see that?
- 5 A. Yes, sir, I do.
- Q. And the subject line is, "I want to talk to
- 7 Lester Vincent about some claims." Do you see that?
- 8 A. Yes, I do.
- 9 Q. And you told vice president Roberts, CEO Tate
- 10 and vice president Mooring that you had done a review
- of several Rambus's divisionals and issued patents, and
- 12 can see several opportunities for better describing the
- patents with some additional claims. Isn't that right?
- 14 A. Yes, that's correct.
- 15 Q. And you were essentially asking for their
- 16 permission to speak to Lester Vincent about better
- 17 describing those claims, right?
- 18 A. Yes, that's correct.
- 19 O. And vice president Roberts suggested that
- 20 before doing so that you speak with Rick Barth. Is
- 21 that right?
- 22 A. I don't remember.
- MR. OLIVER: May I approach, Your Honor?
- JUDGE McGUIRE: Yes.
- 25 BY MR. OLIVER:

1 O. Mr. Crisp, I have handed you an email marked

- 2 CX-825. This is an email from vice president Roberts
- 3 to you, also copying CEO Tate and vice president
- 4 Mooring dated July 1995. And if you look at the last
- 5 line of Mr. Roberts' text, it reads, "Please talk with
- 6 Rick about the best way to proceed."
- 7 Do you see that?
- 8 A. Yes, sir, I do.
- 9 Q. Now, shortly thereafter, you and Rick Barth, in
- 10 fact, met with Lester Vincent to discuss claim
- 11 coverage, right?
- 12 A. I don't remember.
- MR. OLIVER: May I approach, Your Honor?
- 14 JUDGE McGUIRE: Yes.
- 15 BY MR. OLIVER:
- Q. Mr. Crisp, I've handed you a document marked
- 17 CX-2000, again, it consists of green sheets or billing
- 18 records of Mr. Lester Vincent. If I could ask you to
- 19 turn, please, to page 12 of CX-2000. Again, the paper
- 20 copy is rather difficult to read, it might be easier on
- 21 the computer screen. If you look at one of the entries
- next to what appears to be August 2, 1995, Vincent,
- 23 "Conference with Richard Crisp and Rick Barth
- 24 regarding" -- it appears to be "claim coverage,
- including travel to and from meeting."

- 1 Do you see that?
- 2 A. Well, I don't think the date says the year that
- 3 you indicated. I'm having a hard time with it and here
- 4 on the screen. '96? This document seems to begin in
- 5 January of '96.
- Q. Let me represent to you that Mr. Vincent's
- 7 billing records he sometimes carried over entries for a
- 8 particular month into future months. The relevant date
- 9 for the entry is the date that appears to the left of
- 10 the entry itself.
- MR. PERRY: Well, Your Honor, that nihe entfetiJ

- 1 additional billing records we'll look at in just a
- 2 moment, will establish that this is, in fact, August
- 3 1995.
- 4 JUDGE McGUIRE: Okay, proceed on that basis.
- 5 BY MR. OLIVER:
- Q. In any event, Mr. Crisp, does the entry that we
- 7 just looked at refresh your recollection in any way as
- 8 to whether you and Rick Barth met with Lester Vincent
- 9 in August of 1995?
- 10 A. No, it doesn't.
- 11 Q. Mr. Crisp, in the latter parts of 1995, Lester
- 12 Vincent was actually working on drafting claims to
- 13 cover SyncLink. Isn't that right?
- 14 A. I'm not sure about that. I don't know.
- 15 Q. Mr. Crisp, if I could ask you to turn to the
- next page, to page 13 within CX-2000. If I could
- direct your attention to a number of entries at the top
- 18 of this page. The first entry reads, "12/5/95,
- 19 Vincent, prepare preliminary amendment, including
- 20 review of SyncLink proposed standard."
- 21 Do you see that?
- 22 A. Yes, sir, I do.
- Q. Under that, 12/14/95, "Prepare preliminary
- 24 amendment, including review of SyncLink disclosure."
- 25 Do you see that?

- 1 A. Yes, sir, I do.
- Q. The next entry below that, 12/15/95, "Prepare
- 3 amendment, including review of SyncLink disclosure."
- 4 Do you see that?
- 5 A. Yes, sir, I do.
- Q. Does that refresh your recollection that in the
- 7 latter parts of 1995, Lester Vincent was, in fact,

- technologies, et cetera."
- 2 Do you see that?
- 3 A. Yes, sir, I do.
- Q. And the next paragraph he writes, "To fill this
- 5 gap, we are hiring Tony Diepenbrock." Do you see that?
- 6 A. Yes, sir.
- 7 O. Now, Tony Diepenbrock is Rambus's first
- 8 in-house lawyer. Is that right?
- 9 A. Yes, that's correct.
- 10 Q. And Mr. Tate described Mr. Diepenbrock's
- 11 responsibilities including analysis of Rambus's IP
- 12 portfolio versus competitive technologies. Is that
- 13 right?
- 14 A. Among other things.
- 15 Q. Now, in September of 1995 you had the next
- 16 regularly 6heduled meeting for the JC-42.3
- 17 subcommittee. Is that right?
- 18 A. Yes, that's right.
- 19 MR. OLIVER: May I approach, Your Honor?
- JUDGE McGUIRE: Yes.
- 21 BY MR. OLIVER:
- 22 Q. Mr. Crisp, I've handed you a document marked
- JX-27, these are the minutes of the JC-42.3
- subcommittee meeting of September 1995. Now, at this
- 25 meeting again, the JEDEC patent policy was presented,

- 1 right?
- 2 A. I don't remember.
- Q. If I could direct your attention to page 4, to
- 4 item 6 at the top of that page. That reads, "Patent
- 5 Policies: Patent policies are shown as attachment B.
- 6 SyncLink/RamLink patents were discussed." Do you see
- 7 that?
- 8 A. Yes, I do.
- 9 Q. Now, at this meeting, you presented Rambus's
- 10 position with respect to Mr. Kelley's request in the
- 11 May 1995 meeting to determine whether Rambus knew of
- any patents applying to SyncLink. Is that right?
- 13 A. Yes.
- Q. And the response that you provided was to show
- the 42.3 subcommittee a letter, right?
- 16 A. Yes, that's what I recall.
- Q. If I could ask you to turn, please, to page 26
- 18 within JX-27. Page 26 has a handwritten note in the
- 19 upper right-hand corner, attachment C, underneath that
- 20 facsimile sheet, and the date September 11, 1995. This
- 21 is, in fact, the letter that you presented to the 42.3
- 22 subcommittee, right?
- A. Yes, sir, that's correct.
- O. And this letter is in the form of a fax
- 25 addressed to you because it was sent to your hotel room

- 1 immediately before the meeting, right?
- A. Yes, that's correct, I didn't have a printer
- 3 with me.
- 4 O. Now, Rambus vice president David Mooring was
- 5 involved in editing this letter, right?
- A. Yes, sir, that's correct.
- 7 O. And the letter begins, I'm reading now in the
- 8 text box under message, "At the last JEDEC meeting it
- 9 was noted that the subject of the SyncLink DRAM
- 10 proposal bears a strong resemblance to Rambus DRAMs and
- 11 so I was asked to make a comment about the Rambus
- intellectual property position as it may relate to the
- 13 SyncLink proposal."
- 14 Do you see that?
- 15 A. Yes, sir.
- Q. And then if I could direct your attention down
- to the concluding paragraph at the bottom of the page
- 18 -- I'm sorry, before we get there, let me direct your
- 19 attention to paragraph third from the last paragraph
- that begins, "Additionally." Do you see that?
- 21 A. Yes, I do.
- Q. This paragraph states, "Additionally, SyncLink
- is being sponsored by an organization with a less
- 24 stringent patent policy than JEDEC. Under the bylaws
- of the IEEE working groups, attendees represent

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- 1 themselves only, not their employers. Furthermore,
- 2 they are free to patent whatever they desire, and are
- 3 not bound to relinquish any of their rights to the
- 4 patents by presenting their ideas for standardization."
- 5 Do you see that?
- 6 A. Yes, D

Rambus elec quismak 4 patents by pr9y pra specific commdesion ourding

- 4 patents by plly, n 6 A. Yes, 12
  - T\*9 6 A. Yes, 13. Yes, Q Now, would iishhataard say

Q. Mr. Crisp, the letter generated discussion at

- 2 Rambus. Is that right?
- 3 MR. PERRY: At JEDEC.
- 4 BY MR. OLIVER:
- 5 Q. Excuse me, let me try again. The Rambus letter
- 6 generated discussion at JEDEC. Is that right?
- 7 A. I remember at least one comment.
- Q. Well, Mr. Gordon Kelley, the chairman, said
- 9 that he heard a lot of words, but didn't hear anything
- 10 said. Isn't that right?
- 11 A. Yes, that's the comment that I recall hearing
- 12 at the time.
- O. Let me ask you to turn, please, to CX-711 at
- 14 page 166. If I could direct your attention to an email
- 15 beginning the middle of page 166. This is an email
- from you to Allen Roberts dated September 11, 1995. Is
- 17 that right?
- 18 A. I'm sorry, I'm not following you.
- 19 O. Are you within CX-711?
- 20 A. Yes, sir, I am.
- 21 Q. And at page 166?
- 22 A. Yes, I am there, too.
- 23 Q. There is an email beginning about halfway down
- the page from, and question marks, and September 11,
- 25 1995.

- 1 A. Yes, I see that.
- Q. Now, that email is -- that's an email to you
- 3 from Allen Roberts. Is that right?
- 4 A. Yes, now I'm with you.
- Q. Okay. And again, if you look at the three
- 6 lines beginning at the bottom of page 166 and then
- 7 continuing on in the following pages, there are a
- 8 number of lines with arrows in front of them. Do you
- 9 see that?
- 10 A. Yes.
- 11 Q. And again, that is embedded text written by
- 12 you. Is that right?
- 13 A. Yes, sir, that's correct.
- Q. And that embedded text represents your email
- 15 summarizing the JEDEC meeting. Is that right?
- 16 A. Yes, sir.
- 17 Q. The last three lines on page 166 read, "The
- 18 patent statement --"
- 20 because your colleague is not inputting this at the
- 21 same time that you're asking your questions. I want to
- 22 be able to see it on the screen. So, if we could get a
- better coordination on how you're asking these
- 24 questions and have him -- have this blown up at the
- 25 same time so I can get a feel, I would appreciate it.

- 1 MR. OLIVER: I apologize, Your Honor.
- 2 JUDGE McGUIRE: No, that's all right. There is
- 3 no apology due, I just want to so it's clear to me, and
- 4 before you start the I guess quotations that I'm seeing
- 5 what is actually in this email.
- 6 MR. OLIVER: Okay, I'll give my colleagues a
- 7 bit more time, thank you, Your Honor.
- JUDGE McGUIRE: Okay.
- 9 BY MR. OLIVER:
- 10 Q. If I could direct your attention to the last
- 11 three lines on page 166. The text there reads, "The
- 12 patent statement was read and generated some
- discussion. Basically, Kelley of IBM said that he
- heard a lot of words, but did not hear anything said."
- 15 Do you see that?
- 16 A. Yes, sir, I do.
- 17 Q. Now, following that, you essentially tried to
- 18 diffuse the tension within the meeting. Isn't that
- 19 right?
- 20 A. I don't know that I would characterize it that
- 21 way.
- 22 Q. Well, you resorted to humor to keep things
- 23 civil?
- A. Well, I did inject a humorous comment.
- Q. You joked about Washington, DC in order to help

- 1 keep things civil. Is that right?
- 2 A. Yes, that's correct.
- 3 JUDGE McGUIRE: Can we see that comment?
- 4 MR. OLIVER: Unfortunately the original comment
- is not reflected in the email, Your Honor.
- 6 MR. PERRY: It's right there.
- 7 JUDGE McGUIRE: Can we go off the record?
- 8 MR. PERRY: It's right here on the screen.
- 9 MR. OLIVER: Well, we can.
- 10 JUDGE McGUIRE: No, I'm kidding, go ahead.
- 11 BY MR. OLIVER:
- 12 Q. But during this discussion, Mr. Crisp, you also
- reminded the 42.3 committee that Rambus had reported a
- 14 patent list to JEDEC in the past, right?
- 15 A. Yeah, I knew we weren't in the -- under any
- obligation to do so, but I did tell them that we had
- 17 reported a patent before, yes.
- 18 Q. You're referring to your disclosure of the '703
- 19 patent in September 1993, right?
- 20 A. Yes, that's correct.
- 21 Q. And your statement that you were under no
- 22 obligation to do so meant that you were under no
- obligation to disclose the '703 patent in September
- 24 1993. Is that right?
- 25 A. That's correct.

Q. Is that because that patent is not related to

- 2 the JEDEC work. Is that right?
- 3 A. Actually, I think the reason was is because it
- 4 didn't -- it wasn't in connection with any ballot
- 5 proposal that was going out, nor was it -- were we a
- 6 presenter for anything.
- 7 O. Now, when you raised the issue of the
- 8 disclosure of the '703 patent in the September 1995
- 9 meeting, you were implying to members that Rambus was
- 10 observing the JEDEC disclosure rules, right?
- 11 A. No, I don't think I was saying that at all, I
- 12 just think I was saying that we had disclosed the
- 13 patent, at least a patent, and I knew that others had
- 14 not disclosed any patents.
- 15 Q. But you were saying that that put you in the
- 16 category of JEDEC members who had disclosed patents,
- 17 right?
- 18 A. Yes, that's correct.
- 19 Q. And that put you in the category of JEDEC
- 20 members who were complying with JEDEC disclosure
- 21 policy, right?
- 22 A. I don't think I said that.
- Q. Well, that was certainly your implication,
- 24 wasn't it?
- 25 A. It wasn't my intention to imply that.

- 1 Q. Now, you never told JEDEC what you had told
- 2 Reese Brown, did you?
- A. Yes, that's correct.
- 4 Q. And the statement that appeared in SyncLink was
- 5 never -- or that you never conveyed that statement to
- 6 JEDEC, did you?
- 7 A. That's also correct.
- Q. So, even though Hans Wiggers eventually got you

1 to pass on any information he received to other people.

- 2 Isn't that right?
- 3 A. Could you ask the question again, please?
- 4 O. Yes. You used threats of copyright to extract
- 5 a promise from Hans Wiggers not to pass on your
- 6 comments to any other people. Isn't that right?
- 7 A. I did remind him that the emails that I had
- 8 sent to him were copyrighted and I asked him to not
- 9 distribute it to other people without my permission,
- 10 that's correct.
- 11 Q. And after some exchange of emails, he agreed to
- 12 that. Is that right?
- 13 A. Yes, that's correct.
- Q. As a result of that, Mr. Wiggers, in fact, even
- 15 sent a letter to JEDEC clarifying that his earlier
- 16 comments were his own personal opinion. Isn't that
- 17 right?
- 18 A. It was not a result of that, sir.
- 19 O. Well, in any event, Mr. Wiggers never did pass
- 20 on the comments that Mr. Brown passed on to him to
- 21 JEDEC, did he?
- 22 A. I don't know what Mr. Wiggers did and didn't
- do, other than submit that letter that you just
- 24 referenced.
- Q. Well, ultimately, you were successful in not

disclosing much information to JEDEC. Isn't that

- 2 right?
- A. I didn't disclose any patent applications or
- 4 any patents to JEDEC while I was a member. Other than
- 5 the '703 patent.
- Q. Well, you never told the JC-42.3 subcommittee
- 7 that you were working to help identify claims that
- 8 might apply to SyncLink, did you?
- 9 A. That's correct, I didn't.
- 10 O. You didn't tell the JC-42.3 subcommittee that
- 11 you had met with patent counsel on that subject, did
- 12 you?
- 13 A. Yeah, that's right, I don't think I had any
- 14 obligation to do so.
- Q. You didn't tell the 42.3 subcommittee that you
- were working to draft claims to shoot SyncLink in the
- 17 head, did you?
- 18 A. That's correct.
- 19 O. You made no statement to the 42.3 subcommittee
- 20 that you believed that SyncLink would violate Rambus
- 21 patents. Isn't that right?
- 22 A. That's correct.
- Q. And you made no statement to the 42.3
- 24 subcommittee to identify what particular aspects of the
- 25 SyncLink technology might infringe Rambus intellectual

- 1 property. Isn't that right?
- 2 A. That's correct.
- Q. And you certainly did not identify SyncLink's
- 4 dual edge clocking feature as a feature that might
- 5 violate Rambus intellectual property. Isn't that
- 6 right?
- 7 A. That's correct.
- Q. Now, despite your lack of disclosure to JEDEC,
- 9 there was still a reaction, right?
- 10 A. Maybe you could be a little bit more specific

816 there pe Rnidessue Isn'hat right?

- 1 Q. If I could direct your attention about three
- 2 quarters of the way down the page, there's a line

- 1 it?
- 2 A. I don't know.
- Q. Now, Mr. Crisp, you were also involved in
- 4 license negotiations with Hyundai during the course of
- 5 1995, right?
- A. Yes, that's correct.
- 7 Q. And after the events of June through September
- 8 1995 that we've been looking at, Hyundai changed its
- 9 negotiating position, didn't it?
- 10 A. I'm not sure that I remember. I know we
- 11 eventually got a license with them, but I'm not sure
- 12 exactly what the time frame was on that.
- 0. Well, after this, Hyundai insisted that any
- 14 license agreement that they have with Rambus provided
- rights not only with respect to RDRAM, but also with
- 16 respect to SyncLink, right?
- 17 A. I'm sorry, could you ask the question again?
- 18 couldn't hear you.
- 19 O. Yes. Hyundai insisted that any license
- 20 agreement provide rights not only with respect to
- 21 RDRAM, but also with respect to SyncLink. Isn't that
- 22 right?
- A. To SyncLink? Is that what you said, sir?
- 24 O. Yes.
- 25 A. I don't recall that.

- Q. Well, you recall that the final agreement
- 2 between Rambus and Hyundai contained a provision
- 3 granting Hyundai rights beyond RDRAM. Is that right?
- 4 A. I don't think it was quite that simple.
- 5 Q. Would it be fair to say that the license
- 6 agreement between Rambus and Hyundai included a
- 7 so-called other DRAM provision?
- 8 A. I think it had a provision that said that we
- 9 would agree to negotiate in good faith for other kinds
- of DRAMs, if such a need arose. But I don't remember
- 11 precisely, but that's my recollection.
- MR. OLIVER: M ld cg apoviach, Your Honor
  - MRJUDGE McGUIRE M You may

1 A. Yes, that's the definition at the beginning of

- 2 the contract.
- O. So, you recognize that as being a DRAM other
- 4 than an RDRAM. Is that right?
- 5 A. That's my interpretation. Yes, that's right.
- 6 Q. If I could then ask you to turn, please, to
- 7 page 12.
- 8 MR. PERRY: Can we take that down for a second,
- 9 please. I just consulted with Hynix's counsel, since
- 10 this is their agreement as well. Go ahead.
- 11 JUDGE McGUIRE: All right, proceed, Mr. Oliver.
- 12 BY MR. OLIVER:
- 13 O. If I could then direct your attention to page
- 14 12, paragraph 5.3. Do you see that?
- 15 A. Yes.
- Q. And under that, if you would look at 5.3(a)(1),
- 17 you'll see it sets out royalty rates with respect to
- 18 Rambus memories. Do you see that?
- 19 A. I'm sorry, I'm not following you.
- Q. Under 5.3, Royalties, subsection (a) Royalty
- 21 Rate.
- 22 A. Yes, I see that.
- Q. And about three lines below that (i), "With
- respect to Rambus memories, the royalty rate shall be
- 25 as follows." Do you see that?

1 A. Yes, I do. ii) is with Yes, I do. Waldorf, MarylandYes, I do.

- 1 conclusion.
- 2 MR. OLIVER: Okay.
- 3 Mr. Crisp, we can return to the September 1995
- 4 JC-42.3 subcommittee meeting. Do you still have those
- 5 minutes in front of you?
- 6 THE WITNESS: Yes, sir, I do.
- 7 BY MR. OLIVER:
- Q. Now, at the September 1995 JEDEC meeting, there
- 9 was more discussion of the next generation SDRAM
- 10 standard, right?
- 11 A. I don't recall.
- 12 Q. If I could ask you to turn within JX-27 to page
- 13 14, please. And if I could direct your attention on
- 14 page 14 to paragraph appearing a little bit more than
- 15 halfway down beginning, "What is next." Do you see
- 16 that?
- 17 A. Yes, I do.
- 18 Q. "What is next? Higher frequency and lower
- 19 power devices. Therefore, the next generation issues
- 20 that need to be addressed were stated." It has a list
- of features. Do you see that?
- 22 A. Yes, sir.
- Q. And do you see that item number 7 on that list
- is "Output Clock?"
- 25 A. Yes, I do.

1 Q. Now, if I can direct your attention to the

- 2 paragraph following that list of features, you see the
- 3 statement, "A survey ballot was requested on the next
- 4 generation issues stated above. Mr. Allan agreed to
- 5 prepare the survey." Do you see that?
- 6 A. Yes, that's right.
- 7 O. Now, does this refresh your recollection that
- 8 at this September 1995 meeting the committee decided to
- 9 issue a survey ballot with respect to features of the
- 10 next generation SDRAM standard?
- 11 A. Yes, it does.
- 12 Q. Now, Mr. Crisp, not long after the September
- 13 1995 JEDEC meeting, Rambus's new in-house counsel, Tony
- 14 Diepenbrock, brought up his concerns about equitable
- 15 estoppel to you, right?
- 16 A. I'm not sure exactly what the time frame was,
- 17 but I do remember we had some discussion about that.
- MR. OLIVER: May I approach, Your Honor?
- 19 JUDGE McGUIRE: Yes.
- 20 BY MR. OLIVER:
- 21 Q. Mr. Crisp, I've handed you a document marked
- 22 CX-837. This is an email from you to the executive
- group, and also to Tony Diepenbrock, dated September
- 24 23, 1995. And if you see the first line, "One other
- 25 thought I had regarding Tony's worst case scenario

- 1 regarding estoppel." Do you see that?
- 2 A. Yes, sir, I do.
- 3 Q. Now, does this refresh your recollection that
- 4 some time during September 1995 Mr. Diepenbrock brought
- 5 up with you his concerns about equitable estoppel?
- 6 A. I think it does. I don't really remember
- 7 precisely when, but it must have been during September.
- 8 Q. Well, Mr. Diepenbrock started with Rambus in
- 9 September of 1995. Is that right?
- 10 A. That's why I say that. Because this was dated
- in September and I believe he began in early September.
- So, I guess it doesvthat ctg rpussh your recol,s dated whe A. Iecaushale nedptember.
- 14 8 Q. leA. pDieewastembDo yhow buchoncernsecausember.
- 1 p wido really r Ansec so, p wih yognizwasection that
- about equitable eyouuld perhal yot. Bd with to lo Bn that
- 1 ec ability to enforceI g ps wnt againt iSyncL. ptember.
  - I it d5. Is that right?
- 9 6 A. I5. Ie thayou his had, pk itright?
- 20 3 Q.p wialso knewI5. IeiseBd with joinwas dated
- 2 JEDEC, haygbropptemindividuals startieBd with d7 dwas dated
- 22 ec Id with wuuld no d5alkoncernspo wntial fors dated
- 23 Ifbeenealnt temps wnt995. Idid no dissuo, s that right?
- 24 2 A.er and I bt A. corh ytitright?

1 position relative to what it decided to disclose and

- 2 what to keep quiet about, right?
- 3 A. I don't remember.
- 4 Q. Let me ask you to turn to the second page of
- 5 CX-837. If I could direct your attention to the third
- full paragraph appearing on that page, it begins, "It
- 7 seems to me." Do you see that?
- 8 A. Yes, I do.
- 9 Q. It reads, "It seems to me that we should
- 10 re-evaluate our position relative to what we decide to
- 11 keep quiet about, and what we say we have." Do you see
- 12 that?
- 13 A. Yes, I do.
- 14 Q. Now, you also suggested that Rambus redouble
- its efforts to get the necessary amendments completed
- and the new claims added to its pending patent
- 17 applications, right?
- 18 A. Yes, there were some claims that I believe that
- 19 I thought that we were working on and I thought those
- 20 needed to get completed if they weren't.
- 21 Q. But you said that you wanted to make damn sure
- 22 that the ship was water tight before you get too far
- 23 out to sea, right?
- A. Yes, that's correct.
- MR. OLIVER: Your Honor, I was going to suggest

1 that we have a very short break here, I might be able

- 2 to skip over some material in the interest of time.
- JUDGE McGUIRE: Let's take a five-minute break,
- 4 then. Off the record.
- 5 (Whereupon, there was a brief recess in the
- 6 proceedings.)
- 7 JUDGE McGUIRE: On the record. All right, Mr.
- 8 Oliver, you may proceed.
- 9 MR. OLIVER: May I approach, Your Honor?
- 10 JUDGE McGUIRE: Yes.
- 11 BY MR. OLIVER:
- 12 Q. Mr. Crisp, I've handed you a document marked
- 13 CX-836, it's an email from you to Rick Barth with a CC
- 14 to vice president Roberts, the executive group, Tony
- 15 Diepenbrock and Rick Barth. And I would like to direct
- 16 your attention to the last three lines, again, this is
- the tail end of an email exchange and I'm trying to
- 18 save time, I'm not going into the entire email exchange
- 19 at this point, but you recognize in the last three
- lines that you were "pinging folks to get them thinking
- 21 about low-level element details regarding
- implementation of our DLL/PLLs and the IP patent
- 23 protection that we have in that area."
- 24 Do you see that?
- 25 A. Yes, I do.

Q. And do you recall that you were pinging folks

- 2 to get them thinking about this in September of 1995?
- A. Yes, this is basically the nuts and bolts of
- 4 how we design the PLL circuits, so I think that's
- 5 important to the context of this.
- 6 Q. You see that it appears on the subject line
- 7 regarding "Let the IP war begin." Do you see that?
- 8 A. Yes, I do.
- 9 Q. Now, in October of 1995, Billy Garrett received
- 10 the survey ballot issued by JEDEC, right?
- 11 A. I don't know.
- 12 MR. OLIVER: May I approach, Your Honor?
- JUDGE McGUIRE: Yes.
- 14 BY MR. OLIVER:
- 15 Q. Mr. Crisp, I've handed you a document marked
- 16 CX-260, it bears the caption on the top JEDEC, a few
- 17 lines under that, "Committee Survey Ballot," a date
- 18 towards the upper right-hand corner, October 30, 1995,
- 19 with some handwriting in the upper right-hand corner
- 20 reading "Copy BD Market from BWG." Now, BWG were the
- 21 initials of Billy Garrett. Is that right?
- 22 A. Yes, sir, that's correct.
- Q. And CX-260 was the survey ballot that the JEDEC
- 42.3 subcommittee meeting decided to submit during the
- 25 September 1995 meeting. Is that correct?

- 1 A. Yes.
- Q. And Billy Garrett forwarded this ballot to the
- 3 entire business development group. Is that right?
- 4 A. Yes, the business development and marketing
- 5 groups.
- Q. And you were part of those groups at that time?
- 7 A. Yes, that's correct.
- Q. Now, the survey ballot asked the members
- 9 whether they believed it's important to standardize CAS
- 10 latency beyond the CAS latency 4. Is that right?
- 11 A. I don't know.
- Q. Let me ask you to turn to page 9. Do you see
- under the caption 3.6, "Increased CAS Latency," there
- 14 are a series of three questions. Do you see that?
- 15 A. Yes, sir, I do.
- 16 Q. 3.6-1 reads, "Does your company believe it is
- important to standardize CAS latency beyond a CAS
- 18 latency 4?"
- 19 A. Was there a question?
- Q. Yes, do you see that?
- 21 A. Yes, sir, I do see that.
- Q. Now, this ballot also asked members whether
- 23 they believed it was important that -- or excuse me,
- 24 whether they believed future generations of SDRAMs
- 25 could benefit from using both edges of the clock for

- 1 sampling inputs?
- 2 A. I don't know.
- Q. Let me ask you to turn, please, to page 12.
- 4 And on page 12 if I could direct your attention to
- 5 question 3.9-4 and ask if that refreshes your
- 6 recollection that the ballot asked companies whether
- 7 they believe that future generations of SDRAMs could
- 8 benefit from using both edges of the clock for sampling
- 9 inputs?
- 10 A. I've seen that, yes.
- 11 Q. Over on the page, let me also direct your
- 12 attention to 3.9-1, and ask whether that refreshes your
- 13 recollection that the survey ballot asks companies
- 14 whether they believe that on-chip PLL or DLL is
- 15 important to reduce the access time from the clock for
- 16 future generations of SDRAMs?
- 17 A. No, it doesn't refresh my recollection.
- 18 Was your previous question regarding 3.9-4?
- 19 Was that about refreshing my recollection or did I see
- 20 it? I want to make sure I answered the right question.
- 21 Q. Why don't I simply ask a new question and make
- 22 sure the record is clear. Does question 3.9-4 refresh
- your recollection that the ballots asked companies
- 24 whether future generations of SDRAMs would benefit from
- using both edges of the clock?

1 A. My answer was no. I thought you were asking me

- 2 if I saw it.
- 3 O. You do see it but it does not refresh your
- 4 recollection?
- 5 A. I do see it, it does not refresh my
- 6 recollection.
- 7 O. Do you see in 3.9-1 there's a reference to PLL
- 8 or DLL. Do you see that?
- 9 A. I'm sorry, could you say that again?
- 10 Q. Yes, in question 3.9-1, do you see that the
- 11 question there relates to on-chip PLL or DLL? Do you
- 12 see that?
- 13 A. Yes, I do.
- MR. OLIVER: Your Honor, if I could approach
- 15 the table.
- JUDGE McGUIRE: Go ahead.
- 17 BY MR. OLIVER:
- 18 Q. You recall that following the September 1994
- 19 meeting, we added on-chip PLL to the list, you see here
- in this ballot that they are now referring to PLL or
- 21 DLL?
- 22 A. I see that they're referring to what you said.
- MR. OLIVER: Your Honor, if I could approach
- 24 the table again.
- JUDGE McGUIRE: Yes.

- 1 BY MR. OLIVER:
- Q. Now, in October of 1995, Rambus received a
- 3 notice of allowability from the Patent & Trademark
- 4 Office with respect to its pending '646 application,
- 5 didn't it?
- 6 A. I don't know.
- 7 MR. OLIVER: May I approach, Your Honor?
- JUDGE McGUIRE: Yes.
- 9 BY MR. OLIVER:
- 10 Q. Mr. Crisp, I've handed you a document marked
- 11 CX-1482, it bears a caption at the top, United States
- 12 Department of Commerce, Patent & Trademark Office,
- underneath the caption serial number 08/222,646. And
- 14 the caption a few lines down reads, "Notice of
- 15 Allowability." Do you see that?
- 16 A. Yes, I do.
- Q. Does this document refresh your recollection
- 18 that in October of 1995 Rambus received a notice of
- 19 allowability relating to its pending '646 application?
- 20 A. No.
- 21 Q. Now, also during October 1995, Rambus in-house
- 22 lawyer Tony Diepenbrock was meeting with outside patent
- counsel with respect to Rambus's pending claims
- 24 concerning on-chip PLLs, right?
- 25 A. I don't know.

1 MR. OLIVER: May I approach, Your Honor?

- JUDGE McGUIRE: Yes.
- 3 BY MR. OLIVER:
- 4 Q. Mr. Crisp, I've handed you a document marked
- 5 CX-1988, if I could ask you to turn, please, to page 2,
- 6 it's a statement on Blakely Sokoloff letterhead
- 7 addressed to Rambus dated December 5, 1995, underneath
- 8 that reads, "Additional services rendered through
- 9 October 1995." And if you look under the caption
- 10 General Services, about five lines down is a section
- 11 that reads, "Meeting with Tony Diepenbrock regarding
- 12 status of DLL patents and preparation therefore."
- Do you see that?
- 14 A. Yes, I do.
- 15 Q. Does that refresh your recollection that during
- 16 October 1995 Tony Diepenbrock was meeting with Lester
- 17 Vincent concerning Rambus's PLL or DLL patents?
- 18 A. No.
- 19 O. Now, also in October 1995 Mr. Vincent filed on
- 20 behalf of Rambus an amendment to his pending '692
- 21 application relating to on-chip PLLs. Isn't that
- 22 right?
- 23 A. I don't know.
- 24 MR. PERRY: Your Honor, I would like to suggest
- 25 that we're wasting a lot of time here, that unless

1 there's some foundation that he had any involvement in

- 2 the patent prosecution process after Mr. Diepenbrock
- 3 came on board as a patent attorney, we're going through
- 4 this stuff that he's never seen before, he's not copied
- on, and he's just being shown stuff and asked does this
- 6 refresh your recollection that you had no involvement
- 7 in.
- 8 JUDGE McGUIRE: Mr. Oliver, that sounds like a
- 9 pretty good opposition to me. What's your response?
- 10 MR. OLIVER: Well, Your Honor, Mr. Crisp was
- 11 the representative of Rambus at JEDEC that during this
- 12 time period JEDEC was issuing survey ballots asking
- members whether they were interested in using, among
- other technologies, on-chip PLL/DLL in the future.
- 15 Companies were responding to the survey ballot between
- 16 September and December of 1995, during this very same
- time period, Rambus was meeting with outside counsel,
- 18 working on patent claims on the same technology.
- 19 Now, I don't know what Mr. Crisp has or has not
- 20 seen, I don't know what he does or does not know, but I
- 21 think I'm entitled to try to use these documents to see
- 22 what he does know.
- JUDGE McGUIRE: Mr. Perry?
- 24 MR. PERRY: But what he's not asking him is did
- 25 he know it or was he involved. He's just showing it to

- 1 him and saying does it refresh your recollection.
- JUDGE McGUIRE: Let's try to lay that
- 3 foundation. That's not a hard thing to do here, Mr.
- 4 Oliver, and that my expedite your own inquiry.
- 5 MR. OLIVER: Thank you, Your Honor. May I
- 6 approach, Your Honor?
- 7 JUDGE McGUIRE: Yes.
- 8 BY MR. OLIVER:
- 9 Q. Mr. Crisp, I've handed you a document marked
- 10 CX-1483, it bears a caption at the top of the United
- 11 States Patent & Trademark Office, about halfway down
- 12 the page the caption reads Amendment. The upper
- 13 left-hand corner, serial number 07/847,692. The upper
- 14 right-hand side, actually within the stamp, you see
- there's a date of October 23, 1995. Do you see that?
- 16 A. October 23? It looks like -- oh, down there.
- 17 Yes, sir, I see it.
- 18 Q. Did you have any involvement in the preparation
- 19 of the claims included in this amendment to Rambus's
- 20 patent application '692?
- 21 A. I don't know. I'm not sure even how to read
- 22 this.
- Q. In other words, as you sit here --
- JUDGE McGUIRE: Well, if he can't -- well, then
- you can inquire on that point, you know, even further.

1 If he says I don't know, then to me that opens the door

- 2 to allow you to inquire on that issue in greater
- detail. If he says no, I do not, then that should end
- 4 the inquiry on that question. So, now are we clear on
- 5 how to proceed?
- 6 MR. PERRY: Yes, Your Honor.
- 7 BY MR. OLIVER:
- 8 Q. Yes, Your Honor, and I probably have one more
- 9 follow-up on that point. Mr. Crisp, as you sit here
- 10 today, are you saying that you don't know one way or
- 11 the other whether you were involved in the preparation
- of this amendment?
- 13 A. Well, I guess it really depends on what you
- mean by preparation of the amendment. I don't have any
- 15 recollection of being involved in this. There's some
- 16 chance that this is work product that came as a result
- of a suggestion I may have made in 1992 or 1993 and
- 18 maybe it got filed whatever year this was, in 1995. I
- 19 don't know what the genesis is of the material that's
- in this amendment. I don't recall ever having seen
- 21 this document. So, I don't want to give you the wrong
- 22 answer, I just simply don't know.
- Q. Okay, again, I just want the record to be
- 24 clear, but as you sit here today, you just don't know
- one way or the other whether you had involvement in

- 1 this?
- 2 A. Let me read the document first.
- Q. Let me put it this way, if as you sit here
- 4 today you don't know, I am prepared to move on to the
- 5 next subject. I just want the record to be clear.
- 6 JUDGE McGUIRE: Go ahead, you can move on.
- 7 MR. OLIVER: If that's your answer, I want it
- 8 to be clear for the record.
- 9 MR. PERRY: Your Honor, if there is a question
- 10 pending, I would like to have him please --
- 11 JUDGE McGUIRE: It's been answered.
- 12 MR. PERRY: I think it has.
- 13 JUDGE McGUIRE: His answer as far as I can
- tell, I think there was some follow-up, but I think
- that's mooted by the previous answer, but he has
- decided to go ahead and end his inquiry, so I am going
- 17 to encourage him to do that.
- 18 BY MR. OLIVER:
- 19 O. Mr. Crisp, you attended the next regularly
- scheduled session of the JC-42.3 subcommittee in
- 21 December of 1995. Is that right?
- 22 A. Yes, sir, that's correct.
- Q. And you also attended the JC-42.5 subcommittee
- 24 meeting in December of 1995?
- 25 A. Yes, I -- that's also correct.

1 O. And do you recall at the JC-42.5 subcommittee

- 2 meeting you observed a vote on a so-called SSTL ballot?
- 3 A. Sir, I believe that an SSTL ballot would have
- 4 occurred in a JC-16 meeting, so I don't have any
- 5 recollection of that being in a modules meeting.
- 6 That's what the 42.5 committee was.
- 7 O. Okay. I might have misunderstood that, then.
- 8 If you can turn now, please, in CX-711 to page 187.
- 9 A. I don't seem to have a page 187 in here. I
- 10 have a page that's not -- that doesn't have any number
- on it. Up at the top left says JEDEC.MBX on it.
- MR. PERRY: That's what I've got, too.
- 13 THE WITNESS: I think it must be that page, it
- just didn't seem to have any stamp on it.
- 15 BY MR. OLIVER:
- 16 Q. If you look at the top of the page you're just
- 17 referring to, does it read, "Will do when it becomes
- 18 clear that they have lost?"
- 19 A. Yes, that's correct.
- Q. Okay, that's what I'm referring to.
- 21 Your Honor, I will try to address that problem
- overnight, in the meanwhile, I will move on.
- JUDGE McGUIRE: All right.
- 24 BY MR. OLIVER:
- Q. Mr. Crisp, at the next day at the 42.3

1 subcommittee meeting, you observed the tabulation

- 2 results of the survey ballot, right?
- 3 A. I believe I was there for a portion of that.
- 4 I'm not certain that I was there for the entire
- 5 tabulation.
- 6 MR. OLIVER: May I approach, Your Honor?
- 7 JUDGE McGUIRE: Yes.
- 8 BY MR. OLIVER:
- 9 Q. All right, Mr. Crisp, I've handed you a
- 10 document marked JX-28. These are the minutes of the
- 11 JC-42.3 subcommittee of December 6, 1995. If you look
- in the first page about four-fifths of the way down
- 13 you're listed as being present there.
- 14 A. Yes, sir, I see that.
- Q. If I could ask you to turn, please, to page 34.
- 16 Do you have that page in front of you, sir?
- 17 A. Yes, sir, I do.
- 18 Q. You recognize this as the beginning of the
- 19 discussion of the future SDRAM features survey ballot?
- 20 A. No.
- 21 Q. If I could ask you to turn, please, to page 35.
- 22 There's a page there that's captioned Conclusions. Do
- you see that?
- 24 A. Yes, sir, I do.
- Q. Do you recognize that as a tabulation of the

- 1 results of the survey ballot?
- 2 A. No.
- Q. Do you doubt that that is the tabulation
- 4 results of the survey ballot?
- 5 A. No.
- 6 Q. You just have no recollection one way or
- 7 another. Is that right?
- 8 A. That's correct.
- 9 Q. On page 35, if I could direct your attention
- 10 under "Issues With Strong Support," to the seventh
- 11 bullet point reads, "Standardize CAS latencies greater
- than 4, but make them optional." Do you see that?
- 13 A. Yes, sir.
- Q. And two lines below that, number 9, "On-chip
- 15 PLL/DLLs to reduce clock access time." Do you see
- 16 that?
- 17 A. Yes, sir.
- Q. Does that refresh your recollection that at the
- 19 December 1995 42.3 subcommittee meeting, that the
- 20 results of the survey ballot indicated strong support
- 21 for standardizing CAS latencies beyond 4 and for using
- on-chip PLL/DLLs?
- 23 A. No.
- Q. Let me direct your attention to the bottom of
- 25 the page under Issues With Mixed Support, the next to

last item, "Using both edges of the clock for sampling

- 2 inputs." Do you see that?
- 3 A. Yes, sir.
- 4 O. Does that refresh your recollection that the
- 5 results of the survey ballot at the December 1995 42.3
- 6 subcommittee meeting indicated mixed support for using
- 7 both edges of the clock?
- 8 A. No.
- 9 Q. Now, Mr. Crisp, at this December 1995 42.3
- 10 subcommittee meeting, you didn't say anything at all
- 11 with respect to any Rambus patent applications that
- 12 might relate to CAS latency, did you?
- 13 A. That's correct.
- Q. And you did not make any statements at all with
- 15 respect to any pending patent applications that might
- relate to the use of on-chip PLL or DLL?
- 17 A. That's correct.
- 18 Q. You also made no statement at all with respect
- 19 to any patent applications that might relate to use of
- 20 a dual edge clock?
- 21 A. That's also correct.
- 22 Q. At this December 1995 meeting, you saw that
- 23 MOSAID did make a patent disclosure, right?
- A. That's not my recollection.
- Q. If I could ask you to turn, please, to page 6.

1 If I could direct your attention to paragraph 8.8. The

- 2 caption reads, "SDRAM feature survey ballot results."
- 3 Do you see that?
- 4 A. Yes, sir, I do.
- 5 Q. "MOSAID made a presentation on the results of
- 6 the survey (see attachment G.) MOSAID noted that they
- 7 had a patent pending on DLL." Do you see that?
- 8 A. Yes.
- 9 Q. "And noted that it was a particular
- implementation and may not be required to use the
- 11 standard." Do you see that?
- 12 A. Yes.
- Q. Now, does that refresh your recollection that
- MOSAID, in fact, disclosed the patent application
- 15 relating to DLL at this December 1995 meeting?
- 16 A. I'm not sure what you mean by disclosing a
- patent application, I'm also not sure what they mean by
- 18 standard in here, but -- I do remember Mr. Foss making
- 19 a comment that he had a patent pending on a particular
- design of DLL. That's what I remember happening in
- 21 that meeting.
- Q. And that's, in fact, reflected in an email that
- 23 you wrote from that meeting to the executive, business
- development, marketing and engineering managers groups
- 25 at Rambus, right?

- 1 A. I believe I remember making a comment in my
- email. I don't remember exactly what the comment said,
- 3 but I do remember making a comment.
- 4 Q. If I could ask you to locate CX-711 in front of
- 5 you, please. If I could ask you to turn, please, to
- 6 page 191. Looking about halfway down the page 191, do
- 7 you see there an email from you to the executive,
- 8 business development, marketing, engineering managers
- 9 groups and Tony Diepenbrock dated December 6, 1995?
- 10 A. Yes, sir, I do.
- 11 Q. And the subject is JEDEC meeting notes?
- 12 A. Mine says "JEDEC meeting notes December 6," in
- 13 paren.
- 14 Q. Okay. If I could ask you to turn then to the
- 15 next page, page 192. And looking at a statement
- 16 appearing about a quarter of the way down the page
- beginning with what appears to be five stars, maybe
- 18 four, four or five stars. Do you see that?
- 19 A. Yes, sir, I do.
- Q. It reads, "Foss also presented information from
- 21 a survey ballot about DLLs and PLLs on SDRAMs. He
- 22 stated that MOSAID has a pending patent application for

1 wind up being an implementation patent rather than a

- 2 concept patent. In the event the patent winds up being
- a concept patent, he says they will be compliance with
- 4 the JEDEC patent policy." Followed by more stars.
- 5 Do you see that?
- 6 A. Yes, sir, I do.
- 7 Q. And that's what you were referring to a moment
- 8 ago when you described what you wrote back to Rambus
- 9 executives?
- 10 A. That's correct, that's what I remember writing
- 11 now.
- 12 Q. And even after seeing this disclosure of a
- patent application relating to PLLs/DLLs by MOSAID, you
- did not say anything with respect to any Rambus patent
- application concerning PLLs or DLLs. Is that right?
- 16 A. Yes, that's correct.
- MR. OLIVER: Your Honor, this is probably a
- 18 good spot to break for the day.
- 19 JUDGE McGUIRE: Okay. We will convene tomorrow
- 20 morning, then, on the 29th at 9:30 a.m. Everyone have
- 21 a good evening, thank you.
- MR. STONE: Your Honor, just before we break,
- 23 could I ask, Mr. Oliver told me that complaint counsel
- 24 had no objection to the four other exhibits that I had
- 25 offered this morning.

1 JUDGE McGUIRE: Are we still on the record,

- 2 Madam Reporter?
- 3 MADAM REPORTER: Yes.
- 4 JUDGE McGUIRE: Do you want to offer them at
- 5 this time?
- 6 MR. STONE: Yes, Your Honor, we would offer
- 7 RX-1885, RX-1895, RX-2050 and RX-2103-14.
- JUDGE McGUIRE: Mr. Oliver?
- 9 MR. OLIVER: No objection, Your Honor.
- 10 JUDGE McGUIRE: So entered.
- 11 (RX Exhibit Numbers 1885, 1895, 2050 and
- 12 2103-14 were admitted into evidence.)
- MR. STONE: Thank you, Your Honor.
- 14 JUDGE McGUIRE: This hearing is adjourned.
- 15 Thank you.
- 16 (Whereupon, at 4:57 p.m., the hearing was
- 17 adjourned.)
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