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UNITED STATES OF AMERICA
FEDERAL TRADE COMMISSION

In the Matter of:)
Rambus, Inc.) Docket No. 9302
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TUESDAY, JULY 15, 2003
9:32 A.M.

TRIAL VOLUME 42
PART 1
PUBLIC RECORD

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

Reported by: Paula G. Satkin, RPR

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1 P R O C E E D I N G S

2 JUDGE McGUIRE: This hearing is now in order.
3 Before we start today, any items that we need to pick
4 up, Mr. Weber?

5 MR. WEBER: Yes, Your Honor. I forgot to
6 introduce the document I introduced with Dr. Horowitz,
7 CX 1322.

8 JUDGE McGUIRE: All right. Entered.
9 (CX Exhibit 1322 was admitted into evidence.)

10 MR. STONE: I have a similar issue to raise
11 during the Chin deposition, three exhibits. They are
12 RX 1299, RX 1188, and RX 2090.

13 MR. OLIVER: No objection, Your Honor.

14 JUDGE McGUIRE: Okay. At this time, those are
15 all in.

16 (RX Exhibit 1299, RX Exhibit 1188, and RX
17 Exhibit 2090 were admitted into evidence.)

18 MR. STONE: One other housekeeping matter I
19 might raise after we had a chance to review the matter.
20 Page limits on the briefs.

21 JUDGE McGUIRE: That was an idea that I had and
22 I have given that some thought myself and I would
23 certainly be happy to confer with the parties on that
24 issue.

25 MR. STONE: I've conferred with Complaint

1 Counsel. I suggested initially, maybe we would do 75
2 pages on the opening and 50 on the reply. They felt
3 that might be a bit short, so I've now suggested and I
4 think they're thinking about 100 on the opening and 75
5 on the reply. The findings, I think, are going to be
6 unlimited in pages because the findings are whatever
7 they are, but it seems to me --

8 JUDGE McGUIRE: I think that's a good idea.
9 That was something I've already considered. I didn't
10 put it in the Order because what I actually
11 contemplated at some point before now and the close of
12 this hearing, that we talk about what's contained in
13 that order and then, as I said, we'll entertain any
14 comments anyone may have as to what we want to do and,
15 obviously we're all involved in this, so I want to get
16 your input, as well.

17 Do you have any comment to that proposal,
18 Mr. Oliver?

19 MR. OLIVER: Your Honor, the one concern that
20 we had in particular is that we thought it would be
21 very helpful for you, frankly, if in our post trial
22 brief we were able to actually quote from testimony and
23 quote from documents, and our concern with the page
24 limit was in order to make our arguments, that may
25 leave us simply citing a string of CX numbers and

1 forcing you to go rummaging through documents.

2 JUDGE McGUIRE: That is a problem and I don't
3 intend to do that. It is not my job -- I will be doing
4 that once I know what the testimony is, but I don't
5 have the time nor the interest in going back and
6 confirming citations without even knowing what the
7 quote is.

8 Once the quote is made, I'll go back and
9 confirm that that is, in fact, the evidence that's been
10 stated, but I understand the point he's making and I
11 agree with it.

12 Now, in that context, if we still determine
13 that we should put some sort of a page limit on it
14 where it doesn't go on four or 500 pages, I'm more
15 attuned to that, but I do want it clear that when you
16 make a citation to the evidence, that you indicate what
17 that point is that you're trying to argue and to cite
18 to. I can't possibly go back and check every citation
19 when I don't know what the evidence is I'm cited to.

20 MR. STONE: I agree with that too, Your Honor.
21 I didn't mean to suggest limits that would prevent
22 someone from citing you to the evidence.

23 JUDGE McGUIRE: What I want from the parties is
24 your best effort, your best argument and the best
25 approach that's going to apprise me of the evidence in

1 this case that supports the arguments that you intend
2 to make.

3 Now, maybe there's a compromise somewhere in
4 there where we can accomplish each end, but, no, I just
5 don't want to see something that says CX 218 without
6 knowing what is in CX 218.

7 MR. STONE: Right.

8 JUDGE McGUIRE: We'll take this up again maybe
9 in the meantime the two sides can confer on it and see
10 if you can't reach some sort of accommodation.

11 MR. STONE: Thank you.

12 JUDGE McGUIRE: Okay. At this time, the
13 respondent may call its next witness.

14 MR. STONE: Thank you, Your Honor. At this
15 time, we would call Martin Fliesler.

16 JUDGE McGUIRE: Okay. Sir, would you please
17 approach the bench and you'll be sworn in by the court
18 reporter.

19 Whereupon--

20 MARTIN FLIESLER
21 a witness, called for examination, having been first
22 duly sworn, was examined and testified as follows:

23 JUDGE McGUIRE: All right. Sir, have a seat
24 right there if you would.

25 DIRECT EXAMINATION

1 BY MR. STONE:

2 Q. Good morning. Would you state your full name
3 for the record, please?

4 A. Martin C. Fliesler.

5 Q. Mr. Fliesler, how are you currently employed?

6 A. I am a partner in the law firm of Fliesler,
7 Dubb, Meyer and Lovejoy.

8 Q. Where is that firm located?

9 A. San Francisco, California.

10 Q. Would you briefly share with us your
11 educational background?

12 A. I have a bachelor of engineering degree with
13 some specialties in electrical engineering from the
14 Stevens Institute of Technology.

15 Q. Where is that located?

16 A. Hoboken, New Jersey. Graduated in 1965 and
17 then went directly to law school at Brooklyn Law
18 School. Graduated in 1968 with a JD degree and then
19 those are the two degrees. Eventually, I did some
20 postgraduate work at George Washington University in
21 their MBA -- in their Master's program, JD program in
22 intellectual property law.

23 Q. Okay. How many courses did you take at George
24 Washington University in their intellectual property
25 program?

1 A. All the ones they gave on intellectual
2 property.

3 Q. Did there come a time when you first became
4 fully employed or employed full-time?

5 A. Yes.

6 Q. When was that?

7 A. That was just when I graduated law school in
8 June of 1968.

9 Q. What was your first job?

10 A. I became a patent examiner in the Patent and
11 Trademark Office.

12 Q. How long did you work there?

13 A. Approximately 18 months.

14 Q. And did you take another job after that?

15 A. Yes.

16 Q. And what was your next job?

17 A. I became in-house patent counsel for
18 Communications Satellite Corporation, known as COMSAT,
19 here in Washington, D.C.

20 Q. How long did you hold that job?

21 A. Approximately three years.

22 Q. Let me go back to when you were in the patent
23 office, was there a particular area of art or subject
24 matter you examined patents in?

25 A. Yes, it was in the electrical arts.

1 Q. When you were at COMSAT, in-house for the three
2 years you mentioned, what were your job
3 responsibilities there?

4 A. As patent counsel, I was responsible for
5 basically all the technology labs that COMSAT had which
6 was about seven labs, as I remember it, in Gaithersburg
7 and my responsibilities around that was to do patent
8 prosecution, oversee the writings of applications and
9 prosecution by outside counsel in Washington, D.C.,
10 basically. Do contract work, licensing work in
11 relation to intellectual property matters that appeared
12 in various contracts that COMSAT entered into.

13 Q. What different areas of art or subject matter
14 were you involved in, either writing or supervising the
15 writing of patent applications while you were at
16 COMSAT?

17 A. It was the gamut of satellite communications.
18 It was everything from basically digital signal
19 processing, signals that go up to the satellite. It
20 was echo canceling techniques and speech recognition
21 techniques. There was the technology of actually
22 accessing the satellite, which we called TDA or SDA
23 time division multiple access. Solar cell technology,
24 I was responsible for converting the solar energy into
25 electrical energy. Video processing was a separate

1 area that I was directly responsible for and earth
2 station technology, actually how you -- from the earth
3 station point of view, how you transmit and receive the
4 signals.

5 Q. Okay. And after the three years at COMSAT,
6 what was your next employment?

7 A. I became an associate in the intellectual
8 property specialty firm of Stevens, Davis, Miller and
9 Moser, which was located here in Washington, D.C. area.

10 Q. How long were you there?

11 A. Approximately four years.

12 Q. And in the general sense, what were your job
13 responsibilities in that position?

14 A. Well, I was in the electrical group there at
15 Stevens Davis and primarily was in patent preparation
16 and patent prosecution area around electrical
17 inventions and working intimately with matters that
18 were going on in the Patent and Trademark Office.

19 Q. And about when was it, what year when you left
20 Stevens Davis?

21 A. It was the summer of 1976.

22 Q. And what did you do at that point?

23 A. I came to San Francisco and started work as a
24 senior associate in another specialty intellectual
25 property law firm in San Francisco called Stevens --

1 I'm sorry, called Phillips, Moore, Lampio,
2 Weissenberger & Strabala.

3 Q. How long were you there?

4 A. Approximately six years.

5 Q. And did you become a partner in that firm?

6 A. Yes, after a few years as senior associate I
7 became a partner.

8 Q. And what were the kinds of work that you did
9 there?

10 A. That was continuing in the patent -- primarily
11 in the intellectual property point of view, primarily
12 in the patent prosecution, patent preparation area.
13 Also, from a technology point of view, in electronic
14 and software arts that was starting to develop in the
15 Silicon Valley and also some litigation support for
16 some of the senior partners at that time.

17 Q. At that time, did you take any sort of training
18 or courses to work in the new areas of the art that you
19 were involved in?

20 A. Yes. One of the technical courses that I took
21 was a four or five day intensive semiconductor chip
22 design course designed for engineers. It was run by a
23 company called Integrated Circuit Engineering, ICE.
24 That was one of the courses to get familiar with chip
25 technology, architect, all levels to mass work level.

1 Q. After you left Phillips Moore, what did you do?

2 A. Started our firm.

3 Q. How many of you started that firm?

4 A. Myself and three other partners.

5 Q. How large is the firm today?

6 A. Approximately twenty attorneys.

7 Q. When was that founded, what year?

8 A. May 1, 1982.

9 Q. And what types of work have you done since
10 founding your own firm?

11 A. Again, we are a specialty intellectual property
12 law firm focused, from a technology point of view, on
13 high technology matters that you see in Silicon Valley
14 and we do what we call full service intellectual
15 property firm.

16 So from day one, we were always involved with
17 preparing and writing patent applications, prosecuting
18 patent applications, other matters to copyrights, trade
19 secrets and also litigation.

20 Q. In the IP area?

21 A. Intellectual property litigation, yes.

22 Q. Have you had any involvement or experience in
23 the technologies that are at issue in this case such as
24 memory technologies?

25 A. Yes.

1 Q. Just in general sense, what has been your
2 background in that particular area of the art?

3 A. It's been both from the prosecution point of
4 view and litigation point of view. Primarily for one
5 particular client that comes to mind, is advanced micro
6 devices, AMD, which at one time had a memory group and
7 the memory group did works in DRAMs, SRAMs, other kinds
8 of memory which we called E squared properly, double E
9 properly memories all surrounding circuitry to support
10 those memories and so there was patent prosecution work
11 around those technologies. Not only what I did, but
12 also at that time, as we were hiring associates,
13 overseeing associates in those areas and then from a
14 litigation point of view, again, particularly with AMD,
15 we tried a case for them for -- they were sued by a
16 company called Brooktree, down in San Diego.

17 Brooktree had some patents around SRAMS so we
18 tried that case then AMD did get into another type of
19 memory called flash memory, which has become very, very
20 successful as a technology and so I was developing
21 flash memory matters for AMD and we did wind up suing a
22 company called Alliance Semiconductor on two of AMD
23 fundamental flash memory patents.

24 Alliance Semiconductor was a DRAM company, at
25 the time, getting into the flash memory business and

1 part of that litigation involved understanding Alliance
2 Semiconductor's business around DRAMs and why they were
3 getting into flash.

4 Q. Okay. Let me ask you, if I can, about things
5 somewhat outside our practice. Have you been involved
6 in a professional capacity in assisting the courts, in
7 any way, in assisting with patent issues and patent
8 law?

9 A. Yes.

10 Q. Could you briefly describe that for us?

11 A. Primarily in the Northern District of
12 California, which takes into account San Francisco, San
13 Jose and Oakland. The Northern District wanted to put
14 together an updated, revised series of model patent
15 jury instructions in light of the fact that that
16 district was receiving a lot of patent litigation and
17 fundamentally Chief Judge Patel of the Northern
18 District asked me to be the chairman of what we call
19 the working committee, that included a number of other
20 attorneys, professors and Judge White to prepare a new
21 jury -- patent jury instructions that would basically
22 do two things: Take into account the new developing
23 law from a substantive point of view and present them
24 in a way -- try to present them in a way to a jury in
25 plain English. That was a real challenge of presenting

1 them in plain English, and we worked and prepared and
2 put together a whole set of model patent jury
3 instructions which the Northern District uses now it's
4 on their web site and literally as we speak.

5 Right now I'm in the process, right before I
6 came here and when I get back, Judge White has put the
7 working committee together again to update the model
8 patent jury instructions.

9 Q. Have you been involved in any other court
10 appointed responsibilities beyond the one you've just
11 described?

12 A. Yes.

13 Q. What's that?

14 A. The Northern District had a need for some new
15 magistrate judges and the San Jose Division needed a
16 magistrate judge and the San Francisco division needed
17 a magistrate judge and there were federal procedures
18 for pulling together a magistrate merit selection panel
19 under the federal rules and guidelines. And Judge
20 Patel asked me to be a member of the committee that was
21 working on the applications and advisement to the court
22 for the San Jose division of a new magistrate, and I
23 did that as a member of that committee and then I
24 chaired the similar committee for the San Francisco
25 division in recommending -- evaluating and recommending

1 candidates for the position of magistrate judge up in
2 San Francisco.

3 Q. Let me just take you back to, specifically,
4 patent law issues for a moment. And I don't really
5 want to ask you about all your different activities
6 related to patent law outside of your practice, but if
7 you wouldn't mind, can I ask you about involvement that
8 you've had with the inns of court in the northern
9 districts?

10 A. We called it the Intellectual Property Inns of
11 Court, which is based on the American version of Inns
12 of Court, which is a membership of approximately 100
13 attorneys throughout the Bay Area involved in
14 intellectual property litigation.

15 I was one of the original members of the court,
16 Inns of Court, which was formed about 1992, '93.
17 Ultimately, became a vice president for two years and
18 then a president for two years of that court and
19 fundamentally the -- with judges present, they were
20 members. As well, we would have eight meetings a year
21 and put on programs related to intellectual property.

22 Q. Have you ever been retained as an expert
23 witness before?

24 A. Yes.

25 Q. How many occasions?

1 A. Twice.

2 Q. Okay. And in one of the occasions, were you
3 retained by the Federal Trade Commission?

4 A. Yes.

5 Q. What case was that?

6 A. That was the Schering-Plough case,
7 Schering-Plough. I believe the defendant or the other
8 party in the Schering-Plough case -- the FTC versus
9 Schering-Plough.

10 Q. And did you prepare an expert report in that
11 particular matter?

12 A. Yes.

13 Q. And did you give a deposition?

14 A. Yes.

15 Q. Did you testify at any hearing in that matter?

16 A. No.

17 Q. Is this your first hearing to testify at?

18 A. Yes.

19 Q. Is testifying as an expert witness a
20 significant portion of what you do in the day-to-day of
21 your practice or a small percentage or some other
22 percentage?

23 A. It's -- it's minuscule.

24 MR. STONE: Your Honor, at this time, we tend
25 that Mr. Fliesler is an expert in patent law and patent

1 prosecution.

2 JUDGE McGUIRE: Any objection?

3 MS. MICHEL: No objection, Your Honor.

4 JUDGE McGUIRE: He shall be qualified in the
5 areas noted.

6 MR. STONE: Thank you, Your Honor.

7 BY MR. STONE:

8 Q. Mr. Fliesler, when were you retained in
9 connection with this particular matter?

10 A. I believe it was around October 2002.

11 Q. After you were retained, have you reviewed
12 materials that relate to this case?

13 A. Yes.

14 Q. Could you briefly summarize for us what you've
15 reviewed?

16 A. Well, there are -- certainly the basic 898
17 patent application and PCT application and a number of
18 patents that have issued, Rambus patents that have
19 issued from that. Their corresponding prosecution
20 histories. Various JEDEC standards, materials and
21 meetings and meeting notes. The -- I read the reports
22 of Professor Jacobs and Mr. Nussbaum, expert reports of
23 professor Jacobs and Mr. Nussbaum. I certainly read
24 the opinion that came down from the Federal Circuit in
25 the Rambus case and the FTC complaint, the reply, those

1 kind of things.

2 Q. Okay. Did we, together, prepare sort of a
3 summary of your opinions that you expect to present
4 today?

5 A. Yes.

6 MR. STONE: Your Honor, I have a set of
7 demonstratives. If I can hand them up to the court,
8 I've given plaintiff's counsel a set. The witness has
9 a set, I have one for you. We can take them back when
10 we're done. I took the gamble of premarking them with
11 numbers.

12 JUDGE McGUIRE: Okay.

13 MR. STONE: If we could bring up the first one
14 which I marked as DX 262.

15 (DX Exhibit 262 was marked for identification.)

16 BY MR. STONE:

17 Q. Does this particular demonstrative, DX 262, is
18 this a copy of the summary of opinions we prepared
19 together?

20 A. Yes.

21 Q. Would you tell us first, I note there are five
22 paragraphs on this, I would like to ask you just
23 briefly to tell the court which each of your five
24 opinions is and let's start with the first one, if you
25 would?

1 MS. MICHEL: Your Honor, I object as
2 Mr. Fliesler summarizes his first opinion. It is
3 asking him to give the viewpoint of a knowledgeable
4 engineer. He has been qualified as an expert in patent
5 prosecution, not as an expert in engineering.

6 MR. STONE: Let me lay further foundation.

7 JUDGE McGUIRE: Go ahead.

8 BY MR. STONE:

9 Q. Mr. Fliesler, in connection with the patent
10 work you have done, have you become familiar with the
11 concept of a person of ordinary skill in the art?

12 A. Yes.

13 Q. Tell us if you would the significance to a
14 patent lawyer or patent examiner of a person of
15 ordinary skill in the art?

16 A. Fundamentally, many areas in patent law,
17 particularly the claims and disclosure and legal
18 analysis is done from a perspective of what one of
19 ordinary skill in the art would understand, and by that
20 we basically mean that for a given patent matter, one
21 of ordinary skill in the art, the art is technology
22 related to that particular -- to the technology that's
23 disclosed and claimed in that particular patent.

24 Q. Have you, from time-to-time, prepared opinions
25 on the validity of patents?

1 A. Yes.

2 Q. And when you prepare opinions on validity of
3 patents? Does the perspective of a person of ordinary
4 skill in the art figure in your opinions?

5 A. Yes.

6 Q. How does it figure into your opinions?

7 A. Well, the law requires it, first of all. The
8 law requires that, but more significantly in my
9 particular specialty, putting on my patent lawyer's
10 hat, my experience is from a technology point of view,
11 is in-depth with engineers in all areas, lots of areas
12 of chip technology and other areas of software.

13 Almost everything you can imagine that's been
14 coming out of Silicon Valley, so I've had intimate
15 direct contact with lots of engineers across lots of
16 disciplines, technology disciplines, including the
17 memory matters that I mentioned and I work with them on
18 a day-to-day basis.

19 Q. In connection with your work in this case, have
20 you determined what level of background and experience
21 a person of ordinary skill in the art involved in this
22 case would have?

23 A. Yes.

24 Q. And what is that?

25 A. It would be somebody with -- in my view, an

1 electrical engineering degree, at least two, three
2 years of experience, actual practical experience in
3 designing DRAMs and memory and circuitry that supports
4 the memory and circuitry that interfaces with the
5 memory.

6 Q. And do you feel that you have enough knowledge
7 of what someone with that level of training and
8 experience would know to express opinions as to what a
9 person of ordinary skill in that art would understand?

10 A. Yes.

11 Q. And is that based upon your training as a
12 lawyer and a patent examiner and your own experience?

13 A. Yes.

14 Q. Have you worked with people who have a level of
15 training and experience that you've described as
16 someone of ordinary skill in this art?

17 A. Yes.

18 MR. STONE: Your Honor, at this time, I would
19 like to offer his opinions of what a person of ordinary
20 skill in the art would know with respect to the
21 particular art at issue here.

22 JUDGE McGUIRE: Okay.

23 MS. MICHEL: Continue to object, Your Honor. I
24 would like to voir dire the witness on this issue.

25 JUDGE McGUIRE: I'm going to overrule the

1 objection. I think it goes more to weight and you can
2 take that up in cross examination.

3 MS. MICHEL: Thank you.

4 BY MR. STONE:

5 Q. Mr. Fliesler, let me ask you now about the
6 first opinion, if we can, DX 262. Could you tell us?

7 JUDGE McGUIRE: I'm sorry. You know what, I
8 have trouble hearing you and I didn't really hear your
9 request to voir dire the witness. So if you want that
10 opportunity now, you can have it.

11 MS. MICHEL: Thank you, Your Honor.

12 JUDGE McGUIRE: I have trouble hearing you.
13 You had indicated that you opposed the testimony, but I
14 didn't realize you wanted to conduct any voir dire, so
15 you may have that opportunity.

16 MS. MICHEL: I apologize, Your Honor. I'll
17 speak up.

18 JUDGE McGUIRE: Okay.

19 VOIR DIRE EXAMINATION

20 BY MS. MICHEL:

21 Q. Mr. Fliesler, you do not consider yourself a
22 person of ordinary skill in the art; do you?

23 A. No.

24 Q. You received your bachelor's degree in 1965?

25 A. Yes.

1 Q. And you went straight to law school from there?

2 A. Yes.

3 Q. You've never worked as an engineer?

4 A. No.

5 Q. The first time you did any work that you could
6 recall related to DRAMs was in about 1982?

7 A. No, it was earlier. In connection with taking
8 the chip design course that was '77, just after I came
9 to San Francisco. '77 -- about '77.

10 Q. Other than taking the five day course, you
11 don't recall doing any work related to DRAMs prior to
12 1982?

13 A. I don't recall, right.

14 Q. From 1982 through about 1990, the amount of
15 your work directed to all kinds of memory was about 10
16 to 15 percent; is that right?

17 A. I know you asked me that. That's about right.

18 Q. And DRAMs were only one of the types of memory
19 that you worked on within that 10 to 15 percent?

20 A. Yes.

21 Q. From 1990 to the present, most of your time
22 directed to memories was actually spent on flash
23 memories?

24 A. Most of my -- yes.

25 Q. You did not discuss your understanding of the

1 patent disclosure, patent specification with any
2 technical person; is that right?

3 A. Discuss --

4 Q. Let me rephrase the question.

5 A. I read professor Jacobs' material.

6 Q. But you did not discuss your understanding of
7 what the patent discloses with any technical expert; is
8 that right?

9 A. That's correct.

10 MS. MICHEL: Your Honor, we continue to object
11 to Mr. Fliesler offering an opinion from the point of
12 view of a knowledgeable engineer in the DRAM industry,
13 given his limited experience with DRAMs and given the
14 fact that Rambus is intending to call a technical
15 expert on these matters, Dr. Soderman.

16 JUDGE McGUIRE: Mr. Stone, I'll give you a
17 chance to respond.

18 MR. STONE: Thank you, Your Honor.

19 The opinions we tend to elicit from
20 Mr. Fliesler is one of ordinary skill in the art.
21 That's one the patent lawyers have to understand, it
22 goes to the opinions they render. I think we asked him
23 to express the opinion as he would in connection with
24 making a decision on validity or expressing opinion.

25 JUDGE McGUIRE: He can do so on the issue you

1 just stated, regarding ordinary skill in the art, but
2 he will not be qualified as an expert to testify
3 regarding what a knowledgeable engineer would
4 understand or should understand. So are we clear on
5 that distinction?

6 MR. STONE: Yes, Your Honor.

7 MS. MICHEL: Yes, Your Honor.

8 JUDGE McGUIRE: To that extent I'll uphold the
9 objection. Go ahead.

10 BY MR. STONE:

11 Q. Mr. Fliesler, let me direct you to paragraph 1
12 of DX 262. Would the opinion we stated there, if we
13 took out the words a knowledgeable engineer and
14 replaced it with a person of ordinary skill in the art,
15 referring to the art in this case with respect to
16 DRAMs, would your opinion be as it is expressed there?

17 MS. MICHEL: Your Honor, I object to the way
18 the question is phrased. Because Mr. Fliesler is not a
19 person of ordinary skill in the art, I understand your
20 ruling he could not give the viewpoint of a person of
21 ordinary skill, but of an attorney.

22 MR. STONE: Let me see if I can rephrase.

23 JUDGE McGUIRE: Go ahead.

24 BY MR. STONE:

25 Q. Mr. Fliesler, in your opinion, would a person

1 of ordinary skill in the art, reviewing the '898
2 application, have realized that Rambus might have
3 claims broad enough to cover programmable CAS latency,
4 programmable burst length, dual-edge clocking, and
5 on-chip DLL?

6 A. Yes.

7 Q. If we could modify and keep in mind your first
8 paragraph to be as I just framed it, I would appreciate
9 it.

10 If you would describe for us just briefly and
11 generally what your second opinion is?

12 A. From a patent lawyer's point of view, a patent
13 lawyer reviewing the '898 application would form the
14 same view, that Rambus claims broad enough to cover the
15 four features that are involved in this case.

16 Q. Okay. And your third opinion set forth on the
17 summary DX 262, if you would briefly just tell us what
18 your third opinion is?

19 A. Basically that patent applications, while
20 they're being prosecuted through the Patent and
21 Trademark Office, are held confidential and they're
22 held confidential for a number of reasons. From a
23 business point of view, the public and business people
24 want that to be held confidential because there are a
25 number of valid business reasons to do so.

1 Q. I'm going to come back and ask you about those
2 reasons in a moment.

3 If you would tell us briefly what your fourth
4 opinion is that you've arrived at in connection with
5 your work in this case?

6 A. Yes. I looked at the claims that -- as is
7 called Complaint Counsel had set forth in connection
8 with this matter, particularly those that were pending
9 prior to June of 1996, and I have determined that all
10 of those claims would not necessarily have been
11 infringed by-products if they were built to the JEDEC
12 SDRAM and DRAM standards.

13 Q. When you say, not necessarily have been
14 infringed, would you tell us what those words mean as
15 phrased that way?

16 A. Basically the claims were of a scope where they
17 included certain features, that if one were doing a
18 full, what we call a full blown infringement analysis,
19 having actual products in front of you, you would want
20 to see that, but the claims were of a scope where they
21 had limitations in there that if the products were
22 built according to the SD -- according to the
23 standards, that the limitations in there would not be
24 covered by those products so therefore they wouldn't be
25 infringing.

1 Q. Okay. Finally, what's your final and fifth
2 opinion, if you could summarize that for us?

3 A. I was asked to look at a few other Rambus
4 patents that basically do not have the chain of the
5 '898 application, they had a different chain, different
6 area of priority, and I looked at those claims and have
7 determined that those would be infringed by products if
8 they were -- if those products were designed to the
9 JEDEC DDR SDRAM standard.

10 Q. Do you understand Complaint Counsel for
11 purposes of this case -- I wouldn't say they've
12 conceded, but they don't argue to the contrary that
13 Rambus does have claims from the '898 application that
14 do read on SDRAM and DDR products?

15 A. Yes.

16 Q. And I haven't asked you and you haven't looked
17 at those particular claims to see whether that
18 contention is one you agree with or disagree with; is
19 that right?

20 A. That's correct.

21 Q. You've focused just on the other claims they've
22 identified?

23 A. Yes.

24 Q. Okay. Did you, as part of your work, look at
25 the '898 application?

1 A. Yes.

2 Q. And based upon reviewing that application, did
3 you form some conclusions about the scope of the
4 inventions described in that application?

5 A. Yes.

6 Q. What conclusions did you arrive at in that
7 regard?

8 A. The disclosure that was a very full, complete
9 disclosure, well written of the technology, that these
10 inventors had invented and described and they went
11 through a series of discussions of various features,
12 technical features that they described in that basic
13 '898 disclosure, patent disclosure.

14 Q. In your opinion as a patent lawyer, when you
15 reviewed that disclosure, did you understand the
16 inventions that were described in it to be limited by a
17 narrow bus limitation?

18 A. No.

19 Q. In your opinion, would someone of ordinary
20 skill in the art, having read that application, have
21 thought the inventions were limited to a narrow bus?

22 A. No.

23 Q. Why is that?

24 A. Well, it starts with at a high level, just the
25 way the application was prepared and the flow of the

1 technology that's described from the very beginning,
2 which is what we call the field of the application,
3 called the field of the invention, leading through the
4 background of the art and the summary and then leading
5 into the detailed -- brief description of the drawings
6 and the detailed description, the way the application
7 was laid out, you just get a flow without even
8 understanding necessarily the underlying technology,
9 that there were a series of features that the
10 applicants were disclosing in that patent application.

11 Then as you get a little deeper into it, with
12 knowledge of the technology, you start to realize very
13 quickly that there are quite a few technical features
14 that the applicants considered independent of one
15 another, yet, of course, they were also trying to and
16 did describe how the entire system would be put
17 together.

18 Q. Okay. Did you look in the -- let me ask you a
19 foundational question first.

20 Is there some relationship between claims in a
21 patent and the specification in the patent?

22 A. Yes.

23 Q. And just in a general sense, what is that
24 relationship?

25 A. Well, the specification is there to describe

1 the technology and explain the technology, again, at a
2 level to one of ordinary skill in the art.

3 And then having described the technology, the
4 claims function to inform, if you're in the application
5 stage, the examiner certainly once the patent issues,
6 the public, the various -- through the claims, the
7 various combination of features that you're actually
8 claiming to be your new nonobvious invention or pleural
9 inventions.

10 Q. Did I ask you to review the specification of
11 the '898 application to see whether it provided support
12 for each of the four features that are in dispute in
13 this case?

14 A. Yes.

15 Q. Okay. I have two binders in front of you,
16 Mr. Fliesler, and let me give a set of the binders to
17 Complaint Counsel, as well. Hopefully I have gotten in
18 these binders all of the documents that I'll be asking
19 you to review and let me ask you if you would to turn
20 to Volume 1, which I put on the top. And ask you to
21 take a look at the first document in the binder, which
22 is CX 1451.

23 Do you have that in front of you?

24 A. Yes.

25 Q. And do you recognize CX 1451?

1 A. Yes.

2 Q. And what is it?

3 A. This is the original copy -- copy of the
4 original '898 patent application that was filed in the
5 Patent and Trademark Office.

6 Q. And you'll notice in various places in
7 Exhibit CX 1451 there's some handwritten notations.
8 There's lines drawn through the text on some pages.
9 There's letters written from time to time.

10 Do you recognize the source of those
11 handwritten notations?

12 A. I believe there -- particularly when you get
13 into the claims, those are notations that are put on by
14 the Patent and Trademark Office.

15 Q. Okay. I'm going to try to move this forward,
16 if we can, by directing you to certain pages. And what
17 I want to do is direct you to certain pages and ask you
18 whether on those pages you find support in the
19 specification for each of the four features, if I
20 might, so I'm going to ask you first about programmable
21 CAS latency.

22 Are you familiar with that feature?

23 A. Yes.

24 Q. And you've seen it discussed in other testimony
25 and reports?

1 A. Yes.

2 Q. Turn, if you would, to page 16 of CX 1461 and
3 tell us, if you can, whether you see described on that
4 page of the '898 application the programmable CAS
5 latency feature, as you understand it?

6 A. Exhibit, page 16, in both full paragraphs
7 there's various descriptions of what the applicants
8 call, access time registers, and that leads into the
9 area of latency.

10 Q. And how -- what's the relationship, because the
11 words CAS latency don't appear; correct?

12 A. That's correct.

13 Q. Tell us, if you can, the relationship between
14 the words you just talked about, access time registers
15 and programmable CAS latency?

16 A. From a functional point of view, higher level
17 point of view, access time is the time and latency is
18 related -- the term latency is related to that. Access
19 time is the time by which a given semiconductor device
20 would either put the data out onto the bus or read data
21 from the bus after receiving basically a request to do
22 so.

23 Q. Have you formed an opinion as to whether
24 someone of ordinary skill in this art would understand
25 that CAS -- that programmable -- I'm sorry, let me

1 rephrase, if I can.

2 Have you formed an opinion whether someone of
3 ordinary skill in the art would have understood that
4 they could program CAS latency by the use of the access
5 time register, as you've just described?

6 A. Yes.

7 Q. And what is your opinion in that regard?

8 A. They would.

9 Q. Okay. Let me ask if you would to turn to page
10 23 of Exhibit CX 1461.

11 Is there any further reference on this page to
12 the concept of programmable CAS latency?

13 A. Yes.

14 Q. And where is that?

15 A. Well, quickly, one area is in the middle
16 paragraph, approximately line 8, which starts to talk
17 about the fact that the time after which a data block
18 is driven on to the bus is selected in value stored
19 access registers.

20 Q. That one sentence is the one that begins at
21 line 13 and ends on line 15?

22 A. Yes.

23 Q. Maybe we can highlight that one on the screen.

24 Have you formed an opinion as to whether a
25 patent lawyer or a person of ordinary skill in the art

1 would have understood from this language, that CAS
2 latency could be programmed or controlled in a fashion
3 described here, through the use of access time
4 registers?

5 A. Yes.

6 Q. And what is your opinion?

7 A. They would.

8 Q. Okay. Let me ask you then to turn, if you
9 would, to page 29 of Exhibit CX 1451 and tell us, if
10 you can, whether there is described on page 29 of this
11 exhibit the concept of variable burst length?

12 A. Yes. Variable burst length, basically on page
13 29, starts to be described on, I guess it's line 23,
14 which begins BlockSize and actually goes on into page
15 30, about line 14.

16 Q. And what is shown on page 30 that describes
17 variable burst length?

18 A. On page 30 there is the table at the very top
19 that basically, the left-hand column which is labeled
20 BlockSize and in parentheses it has some bits, 0:2.
21 Basically that left side means if the BlockSize code is
22 one of those numbers on the left side, and the right
23 side is the column that indicates the number of bytes
24 that would be associated with each of those codes and
25 those number of bytes, as you see, in the table vary

1 from zero to 1024.

2 Q. So a different code gives you a different
3 BlockSize?

4 A. Yes.

5 Q. My simpleminded way of thinking about it, if
6 you'll excuse me?

7 A. Yes.

8 Q. I want to ask you now about dual edge clocking.
9 Did you find a description in the specification of the
10 '898 application, which is Exhibit 1451, which is the
11 concept of dual edge clocking?

12 A. Yes.

13 Q. Let me ask you to turn to page 49 of that
14 particular exhibit.

15 Is there a description of dual edge clocking on
16 this page that you could point us to?

17 A. Yes.

18 Q. Where is that?

19 A. Well, it begins on this particular page. The
20 whole concept begins on, I guess it's line 6 and goes
21 through to about line 10.

22 Q. Okay.

23 MS. MICHEL: I object to this testimony as
24 outside the scope of his report and his deposition. In
25 his report, Mr. Fliesler pointed only to figures 10 and

1 13 in supporting dual edge clocking and this exhibit is
2 not related to those figures. He did not point to this
3 paragraph.

4 JUDGE McGUIRE: Mr. Stone, I'll let you
5 respond, but if that's the case, we're not going to
6 hear this testimony.

7 MR. STONE: I think, consistent with the
8 stipulation, including responding to Complaint
9 Counsel's expert, it is appropriate for Mr. Fliesler to
10 have expanded the basis for his opinion in response to
11 his work and testimony he heard from their experts. I
12 can point him to those figures for further support of
13 those opinions.

14 JUDGE McGUIRE: My own standard has been, and
15 I've tried to apply in this proceeding, if it's not in
16 his expert report, I don't want to hear about it.
17 That's pretty much what I think we determined in an
18 earlier point and order. I said we will not admit
19 expert reports in this case and they can only testify
20 to the extent of the information that was contained in
21 their expert report.

22 MR. STONE: I think, just as you ruled and just
23 as we conceded with Professor McAfee, to the extent
24 work is necessitated, either to respond to things that
25 occurred in trial or review evidence that has come out

1 in trial, it is appropriate for experts to have
2 additional support. His opinions haven't changed.

3 JUDGE McGUIRE: Let's make it clear then. That
4 line of inquiry is based on the testimony heard in this
5 proceeding and I'll let Complaint Counsel go back into
6 that on cross. Before we go further, let me hear from
7 you again.

8 MS. MICHEL: My point, Your Honor, would be
9 that I understand that this paragraph is not cited in
10 his report. However, Mr. Fliesler did have Professor
11 Jacobs and Mr. Nussbaum's rebuttal reports at the time
12 of his deposition. So my objection is actually, even
13 after having those rebuttal reports available to him,
14 he did not raise this topic in his deposition when
15 asked for other bases to support his opinion in the
16 specification.

17 JUDGE McGUIRE: On that basis, I'm going to
18 uphold the objection.

19 MR. STONE: Let me see if I can lay a
20 foundation.

21 JUDGE McGUIRE: Okay.

22 BY MR. STONE:

23 Q. In your report, Mr. Fliesler, did you express
24 your view as to whether the '898 application describes
25 dual edge clocking?

1 A. Yes.

2 Q. And what was your opinion in that regard at the
3 time of your report?

4 A. That it did.

5 Q. Were you asked about that by Ms. Michel at your
6 deposition?

7 A. Yes.

8 Q. What, if any, did you express at your
9 deposition?

10 A. That it did.

11 Q. What did you point to at that time as support
12 in the specification for your opinion?

13 A. I don't quite believe that that is exactly what
14 I said in the deposition. I believe what I said was,
15 maybe even in the report, it's disclosed in figure 10
16 and 13 and the corresponding descriptions that you find
17 in connection with those figures. And that's generally
18 how you look at a patent. If you look at a figure and
19 you want to understand it, you look to the written
20 description portions, as well.

21 Q. Let me ask you to look at figure 10, which is
22 on page 147 of this exhibit.

23 A. Yes.

24 Q. Does figure 10 describe dual edge clocking?

25 A. Yes.

1 Q. And could you explain to us how it does
2 describe dual edge clocking?

3 A. Well, you see there are on the left side, on
4 this particular figure, there are two what we call
5 input receivers, which is a drawing of -- a schematic
6 drawing of the on-chip input circuitry of a DRAM and
7 other rams, quite frankly, other memory that's
8 disclosed in the application, but it's the input
9 circuitry and data that comes in through the pad 75 to
10 those input receivers that are there and there is
11 clocking and the clocking is done on one edge and the
12 clocking is done on another edge to clock in the data.

13 Q. We see two symbols that are clock and I think
14 what is referred to as clock bar?

15 A. Yes.

16 Q. What's the meaning of those two terms as used
17 in figure 10?

18 A. It's the same clock, but one is an inverted
19 version of the other.

20 Q. And in terms of -- is there a relationship
21 between inverting a clock and using it in conjunction
22 with a clock that is not inverted and dual edge
23 clocking?

24 A. Yes. They're basically the same clock. You
25 want to -- generally, you want to -- in this case,

1 input data on a rising edge of a clock. You only do it
2 on the rising edge. So when one clock goes up -- when
3 the clock goes up, that's the rising edge. When it
4 goes down -- as that clock goes down, the other clock
5 goes up. It's the inverted portion so you have that
6 portion of the clock is the rising edge to clocking
7 data.

8 Q. Is that a description of what you understand to
9 be dual edge clocking?

10 A. That's part of the description, yes, that's in
11 the application.

12 Q. Turn, if you would, to figure 13, which is on
13 page 149.

14 Did you also -- is dual edge clocking also
15 described in this figure?

16 A. Well, it's illustrated in figure -- yes. It's
17 a timing diagram and it illustrates the clocks we're
18 talking about.

19 Q. Okay. Now, did you in your report or in your
20 deposition also state that there was text associated
21 with the figures that describe dual edge clocking?

22 A. It would surprise me if I didn't.

23 Q. Did you find any discussion in the testimony of
24 Mr. Jacobs or Mr. Nussbaum that led you to want to
25 point to any of the descriptive language in the '898

1 application with respect to dual edge clocking?

2 A. Yes.

3 Q. And is what you identified earlier on page 49,
4 beginning on line 6, the text that the you wanted to
5 point to, having read their testimony?

6 A. That was certainly one area of the whole
7 specification that I talked about, the dual edge
8 clocking.

9 JUDGE McGUIRE: I want to see this. Can we
10 blow that up?

11 MR. STONE: Yes. Blow up that middle
12 paragraph.

13 JUDGE McGUIRE: All right. Now, sir, you can
14 tell us as to how that's currently described in that
15 description, dual edge clocking.

16 THE WITNESS: It's the starting point in this
17 application, talking about a clock, clock distribution
18 problems and it mentions that the problems can be
19 further reduced by using a bus clock and a device clock
20 rate that is equal to the bus clock data rate. So
21 there's -- on the bus, there's data going at a certain
22 rate and then there's a clock to clock in data.

23 The next sentence talks about the actual
24 examples. It says, "thus a 500 megahertz bus
25 preferably uses a 250 megahertz clock rate," meaning

1 the data is coming down at a rate of about -- you look
2 at those two sentences in their entirety, the data is
3 coming down at a rate of 500 megahertz. The clock is
4 half of that and so to clock the data in from that, you
5 basically use the edges of the clock that -- both edges
6 of the clock that we're talking about, which is
7 described further in other parts of the specification
8 and in figures 10 and 13.

9 JUDGE McGUIRE: I have some other questions,
10 but I'm going to let you go ahead and I guess complete
11 this inquiry, then I'm going to interject and ask two
12 or three more, Mr. Stone, so why don't you proceed.

13 MR. STONE: I'm really finished with this
14 particular area.

15 JUDGE McGUIRE: I know the testimony is '898
16 application, that you're saying that the concept for
17 these four, I think, technologies is involved in these
18 descriptions.

19 I'm a little concerned by the term, concept.
20 To me, a concept is some broad, perhaps even a vague
21 idea that's being expressed. Whereas, I would think in
22 a patent claim that the idea is more honed, more clear,
23 more articulated. So I want you to expand on your
24 explanation as to how these concepts are involved in
25 this application, as opposed or included as claims that

1 are clearly defined.

2 THE WITNESS: Yes.

3 JUDGE McGUIRE: You kept talking about concepts
4 and I'm troubled by that.

5 THE WITNESS: I can understand that. There's
6 actually -- concept is kind of very highest level. So,
7 for example --

8 JUDGE McGUIRE: You mean, the very broadest
9 level.

10 THE WITNESS: Yes, broadest level.

11 JUDGE McGUIRE: I think in the every day
12 understanding of that term, that's what that would
13 entail.

14 THE WITNESS: But the patent application, the
15 '898 application, takes that and provides a description
16 through structure and function as to how that
17 particular concept is carried out. So the idea, for
18 example, of programmable burst length, that kind of
19 concept where you're going through on a given matter,
20 you may want to send only this amount of data through
21 and a different time you may want to send this amount
22 of data through and another time a different matter,
23 that's different kinds of burst length. Then how do
24 you implement that. That's shown in the application at
25 the next level down, which is some of the areas I

1 already pointed to where you have many ways of doing
2 the software hardware. Basically, where you put in
3 code, that tells basically the system if the code is
4 this then -- you're going to transfer this amount of
5 data. That's the functional aspects. If the code is
6 this.

7 JUDGE McGUIRE: Are you saying -- each time you
8 described that, the concept was described. I'm still a
9 little uncertain and, again, a little vague on the idea
10 that, to me, a concept is perhaps not inherently
11 clearly defined as a claim.

12 Are you saying what you called this concept on
13 these four technologies are clearly defined as claims
14 in the '898 application.

15 THE WITNESS: Not in the '898 application.
16 They eventually did become claims --

17 JUDGE McGUIRE: It's a concept that's described
18 in the '898 application, or am I applying too broadly
19 the '898 application.

20 MR. STONE: I think Your Honor is struggling
21 with an issue that is a good one to struggle with. I
22 don't think you're -- could I ask a couple of questions
23 and try to help frame it?

24 JUDGE McGUIRE: Go ahead.

25 MR. STONE: I don't mean to cut you off.

1 JUDGE McGUIRE: No, go ahead.

2 MR. STONE: Let me cover one feature and I'll
3 come exactly to your point.

4 BY MR. STONE:

5 Q. Let me ask you about DLL, is that the fourth
6 feature you describe?

7 A. Yes.

8 Q. Is that described in one of the figures in the
9 '898 application?

10 A. Yes.

11 Q. If you would turn to figure 12 on page 148.

12 A. Yes.

13 Q. And do you see the feature of on-chip DLL
14 described in this figure?

15 A. Yes.

16 MR. STONE: Let me see if I can turn to Your
17 Honor's question and maybe be helpful with this.

18 BY MR. STONE:

19 Q. Mr. Fliesler, do you understand from the '898
20 application, claims have ultimately issued that cover
21 programmable CAS latency, variable burst length, dual
22 edge clocking, and on-chip DLL?

23 A. Yes.

24 Q. Is there a requirement that those claims
25 ultimately issued the invention they claimed have been

1 described in a particular fashion in the original
2 application?

3 A. Yes.

4 Q. Let me bring up, if I can, a chart which is DX
5 263?

6 JUDGE McGUIRE: Then, again, you're still
7 talking about the claims under the '898 application?

8 MR. STONE: I'm going to try to draw the
9 distinction, Your Honor.

10 BY MR. STONE:

11 Q. The claims, I want you just to assume for these
12 purposes that the claims in the original '898
13 application did not claim standing alone the four
14 features that we've talked about, okay. Just assume
15 that. I want you also to assume that later claims did
16 issue in divisionals and continuations that do claim
17 those four features standing alone; can you assume
18 that, as well?

19 A. Yes.

20 Q. Okay. Is there in the patent law requirement
21 for those claims to issue later, they had -- the
22 invention they claimed had to be described in a certain
23 way in the original '898 application?

24 A. Yes.

25 Q. What part of the original '898 application has

1 to have that description?

2 A. What we call the written description and the
3 drawings. That's part of the specification.

4 Q. Okay. Is what you pointed us to this morning,
5 have you pointed us to things that are in the written
6 descriptions, the drawings or something else?

7 A. Primarily it was the written drawings and the
8 written description, yes.

9 Q. Okay. Did you find in the written description
10 and the drawings a description of each of those
11 inventions that were later claimed, based on my
12 assumption that they were, in fact, later claimed?

13 A. Yes.

14 Q. Is that something that when a patent examiner
15 looks at a patent application they have to find that
16 description, as well?

17 A. Yes.

18 Q. Do we show on this chart, DX 263 with the
19 heading, written description requirement, does that
20 summarize the legal standard that's imposed here?

21 A. Yes.

22 Q. Could you briefly describe for his honor what
23 the legal standard is for finding a description in the
24 specification?

25 A. Yes. The first bullet quotes the statute, 35

1 USC Section 112 paragraph 1, which actually that
2 paragraph talks about three requirements of the
3 specification, which is what we're talking about here.
4 The written description and it does include the
5 drawings, but that specification basically has three
6 requirements.

7 One of them that you see here is that it have a
8 written description of the invention. And then the
9 case law, the next bullet, the case law has developed,
10 just what does that mean a written description of the
11 invention and basically it means as set forth in the
12 second bullet that it must disclose -- you start with
13 now we look at the claim that we're take willing a look
14 at and for purposes of the written description
15 requirement, we're looking at what is now a claim and
16 what is now a claim, is that disclosed in the written
17 description portion. By that, they mean under the case
18 law the case that we cited here, that was the inventor
19 in possession of that claimed invention at basically
20 the time the application was filed.

21 Q. And in addition to the inventor being in
22 possession of that invention, is there some requirement
23 that the inventor describe that invention that they're
24 in possession of so that people, including the
25 examiner, can see it in writing?

1 A. Yes.

2 Q. Let me see if I can ask it this way.

3 Assume, again, that the patents that have
4 ultimately issued from the '898 application are many in
5 numbers, let's say in the forties. We've seen the tree
6 that shows all that.

7 In your experience, if each of those patents
8 that ultimately issues claims, a priority date of the
9 filing of the original application, do all of the
10 inventions claimed in those subsequent patents need to
11 have been described in the written specification or
12 written description of the original application?

13 A. Yes.

14 MR. STONE: I don't know if that's helpful or
15 not.

16 JUDGE MCGUIRE: I think I have a little clearer
17 picture.

18 I think what you're saying if I'm off base, let
19 me know.

20 You're talking about concepts. You're talking
21 about the '898 application that has been described in
22 this requirement. That the claims themselves may
23 emanate from patent applications that may be filed, I
24 guess subsequent to the '898 application?

25 THE WITNESS: Yes.

1 JUDGE MCGUIRE: So that's what you're talking
2 about the concept that's been described in the '898
3 application? We're talking about these four
4 technologies?

5 THE WITNESS: Yes.

6 JUDGE MCGUIRE: I think that gives me some
7 further insight and I'm sure that opposing counsel can
8 inquire on cross-examination if she feels the need to
9 go into that further.

10 MR. STONE: Thank you, Your Honor.

11 BY MR. STONE:

12 Q. In your opinion, Mr. Fliesler, would a person
13 of ordinary skill in this art, having read the '898
14 application, have seen a description in the written
15 specification of each of the four features in dispute
16 here?

17 A. Yes.

18 Q. And would they have understood, in your
19 opinion, that the inventors, Doctors Farmwald and
20 Horowitz, claim to have made inventions as to the use
21 of each of those four features?

22 A. Yes.

23 Q. And is your opinion the same with respect to a
24 patent attorney reviewing the '898 application?

25 A. Yes.

1 Q. Let me ask you to turn, if you would, to the
2 next exhibit in your binder which is CX 1454.

3 Could you tell us what this is?

4 A. This is the, what we call the PCT or the
5 international application that is based on the original
6 '898 patent application that was filed in the patent
7 office.

8 Q. And what's the relationship between the
9 language of the PCT application and CX 1454 and the
10 language of the '898 application CX 1451?

11 A. For all relevant purposes it's the same
12 description, same application.

13 Q. And would you be able to point us to the same
14 language in the PCT application, CX 1454, that you
15 pointed us to in the '898 application?

16 A. Yes.

17 Q. Okay. I'm not going to ask you to do it now.
18 We could all look through it and find it and it would
19 be there?

20 A. Yes.

21 Q. Is your opinion with respect to what a person
22 of ordinary skill in the art, based upon reading the
23 original '898 application, the same opinions with
24 respect to the PCT application, CX 1454?

25 A. Yes.

1 Q. Okay. I'm going to leave it at that
2 conclusionary level for a moment, if I might, Your
3 Honor.

4 Let me ask you to turn next to the next
5 document in your binder which is RX 425.

6 Can you tell us what RX 425 is?

7 A. That is US patent 5,243,703.

8 Q. And is it related to the '898 application?

9 A. Yes.

10 Q. How is it related to the '898 application?

11 A. It is a divisional -- it is a divisional -- it
12 is a patent that flowed from a divisional application
13 of the '898 application.

14 Q. Is there a relationship between the language in
15 the '703 patent, Exhibit RX 425, and language in the
16 original '898 application?

17 A. Yes.

18 Q. What relationship is there?

19 A. With respect to the written description and the
20 drawings, they should be identical.

21 Q. Point us, if you could --

22 A. Basically the same. Substantially the same.

23 MR. STONE: Let me first, if I might, Your
24 Honor, offer RX 425 in evidence.

25 MS. MICHAEL: No objection.

1 JUDGE McGUIRE: Entered.

2 (RX Exhibit 425 was admitted into evidence.)

3 BY MR. STONE:

4 Q. Turn, if you could, in RX 425, which is the
5 '703 patent, and show us the portion of the description
6 you've been referring there as the specification. What
7 page does it start on?

8 A. RX 0425.

9 Q. Yes. What page on RX 0425 does the
10 specification or written description start? The page
11 numbers are on the left-hand side?

12 A. I'm sorry. Page 11.

13 Q. What's the heading there on page 11 where it
14 all starts?

15 A. It's, "Apparatus With Synchronously Generating
16 Clock Signals in a Data Processing System."

17 Q. There is a heading underneath that which is,
18 "Cross-reference to Related Applications." Do you see
19 that?

20 A. Yes.

21 Q. What does that set forth?

22 A. That sets forth basically a series of
23 divisional applications that at that time were on file
24 in the patent office that were divisionals of the
25 original '898 patent application.

1 Q. So would someone reading this know the original
2 '898 application had at least been split into at least
3 these different applications?

4 A. Yes.

5 Q. There is a heading that says, "Field of the
6 Invention?"

7 A. Yes.

8 Q. Right at the bottom of column 1 of page 11.
9 What is that section? What does that refer to?

10 A. Well, first of all, it actually says, "Filed of
11 the Invention," but that is a editing error. It should
12 be field of invention. That starts to set off the
13 basic areas, fundamental areas that the whole invention
14 and disclosure is going to be dealing with.

15 Q. Column 2 on page 11, still Exhibit RX 425,
16 there is a heading, "Background of the Invention?"

17 A. Yes.

18 Q. Could you tell us briefly what that section
19 refers to?

20 A. Generally, that's setting up for readers,
21 including the examiner, a basic description of the
22 technology with more detail than what's in the field.
23 The technology that the inventors are dealing with and
24 from which they're going to show their improvements.

25 Q. What's the heading at the bottom of column 2

1 page 11, "Comparison With Prior Art," what does that
2 refer to?

3 A. In this case, the inventors went pretty far and
4 laid out specific pieces of prior art. It goes on into
5 column 3. It identified the prior art. I guess it's
6 primarily patents, as I look through this. It could be
7 other things, too, but patents and not only identified,
8 they go through a description of what that art is and
9 give some indication, at this point, as to what those
10 problems are and the disadvantages and kind of leading
11 into what the inventors have done to innovate over that
12 prior art.

13 Q. Okay. Turn, if you would, to the next page,
14 page 12 of Exhibit RX 425, and referring you to column
15 4 about halfway down where it says, "Summary of
16 Invention." What is that section?

17 A. Basically just what it reads. It usually is
18 put in terms of -- at this point, the summary of the
19 invention is put in terms of the summary of the claimed
20 invention. Now it's talking a little more about the
21 summary of what we -- what the inventors are actually
22 claiming so you start to get a feel from reading this,
23 after going through the field, background, okay this is
24 the summary of what my improvements are all about.

25 Q. Okay. Turn, if you would, to the next page. I

1 only have a couple more headings here to go. Turn to
2 page 13 of RX 425. In column 5 where you see the
3 heading, "Brief Description of the Drawings, and tell
4 us, if you can, what that refers to?

5 A. This is just exactly what it says. It's part
6 of the -- it's how we're advised or instructed or
7 taught how to write patent applications, it is in the
8 MPEP. This application includes this brief description
9 where you're generally describing all the figures that
10 you're going to be talking about in detail.

11 Q. Okay. So there's a brief description here of
12 figures 10, 12, and 13 that you pointed us to earlier?

13 A. Sure. Yes.

14 Q. Then on column 6, still on the same page, page
15 13 of RX 425, there is a heading, "Detailed
16 Description." Tell us, if you can, what the detailed
17 description heading is?

18 A. Well, again.

19 Q. What follows that heading is what I mean.

20 A. Now, it starts to describe in detail from the
21 conceptual matters and high level matters which are
22 kind of set forth up until this point through the
23 summary and other areas that I just talked about.
24 Starting to set forth in detail the structure, the
25 function, the operation of particular embodiments that

1 the inventors had come up with at the time that the
2 application was filed.

3 Q. And this section headed, "Detailed
4 Description," is fairly lengthy; is it not?

5 A. Yes.

6 Q. Turn, if you would, to page 24 of Exhibit RX
7 425 and look at column 27. Does the, "Detailed
8 Description," section continue all the way until line
9 16 on column 27 where it starts then with what is
10 claimed?

11 A. Yes.

12 Q. So if someone were to pick up this patent and
13 read the detailed description starting on page 13 and
14 continuing on to page 24, would they find a description
15 of the inventions that is in all material respects the
16 same as the description in the '898 application?

17 A. Yes.

18 Q. If you claim priority back to the '898
19 application, will you always find included the same or
20 essentially the same detailed description?

21 A. Yes.

22 Q. Earlier, when you told us you looked to the
23 patent for a written description of the invention,
24 referring to Section 112; you recall that testimony?

25 A. Yes.

1 Q. Is this section that begins on page 13 and
2 continues to 24 one of the places you look for that?

3 A. Yes. I would say it's not only 13, actually,
4 you go back to really the -- almost to page 11. That's
5 all part of the written description. It's the whole --
6 you can't take things out of context, you read the
7 whole specification.

8 Q. Does the detailed description that's set forth
9 in the '702 patent, RX 425, contain various
10 subheadings?

11 A. Yes.

12 Q. What's the purpose of those subheadings?

13 A. Well, I believe in this case -- you don't --
14 you don't always find subheadings, it just depends, but
15 when you're describing a whole system and components of
16 the system and subcomponents of the system, where each
17 represents and can represent, from inventors point of
18 view, the work that they've done, they have worked not
19 only on the whole system, the system as a whole, but
20 they've done work on individual components and
21 subcomponents and you can take it down to even a lower
22 level than that. You try to explain that in a way that
23 is understandable, again, to one of ordinary skill. I
24 believe what -- just clear from this disclosure, that
25 what these inventors did was to lay it out almost like

1 chapter and verse format to recall work that they did.

2 Q. In your opinion, Mr. Fliesler, would a patent
3 attorney reviewing the '703 patent, which is RX 425,
4 have understood that various different inventions were
5 being claimed as a result of the '898 application?

6 A. Yes.

7 Q. Why is that?

8 A. Well, primarily because going back to I think
9 it was page 11, you see -- on this particular document,
10 the '703 patent, you see that there were divisional
11 applications and then, in addition, as you read the
12 content of the descriptive -- the description of what
13 they've done, as you read it step by step, you just get
14 a realization that whether they're talking about burst
15 mode -- there are a lot of things in here I understand
16 are not part of this case, memory mapping, bus
17 arbitration, even physical layout of the chip and the
18 pins, all those features are set forth and they
19 indicate that the inventors believed that that was new
20 things that they were doing and would be claimed.

21 Q. Is there in the '703 patent, Exhibit RX 425, do
22 we find a description of each of the four features that
23 are at issue in this case?

24 A. In my opinion, yes.

25 Q. Okay. Would we go look for the same language

1 you pointed us to in the '898 application here?

2 A. Yes.

3 MR. STONE: Your Honor, I don't know if this
4 would be a convenient --

5 JUDGE McGUIRE: This would be a fine time.
6 Let's take a ten minute break.

7 (A brief recess was taken.) (10:55 a.m. -
8 11:00 a.m.)

9 JUDGE McGUIRE: Let's go on the record.
10 Mr. Stone, you may proceed.

11 MR. STONE: Thank you, Your Honor

12 BY MR. STONE:

13 Q. Mr. Fliesler, I want to refer to the concept
14 language you used earlier.

15 Does the '898 application and the '703 patent,
16 for example, let's take them together, do they give a
17 concrete example, concrete description of how one might
18 implement programmable burst length?

19 A. Yes.

20 Q. If I could point you for one moment to, just to
21 the '703 patent which is RX 425, and turn, if you
22 would, to page 16, column 12, carrying over to page 17,
23 column 13, and you see a table there at the bottom?

24 A. Yes.

25 Q. And the text that precedes the table beginning

1 on column 12, line 54, I think it is. Would you
2 describe the language there as a description of a way
3 to implement programmable burst length or as a concept
4 or something else?

5 A. A way to implement it.

6 Q. Okay. Thank you.

7 MR. STONE: I hope I responded to some of Your
8 Honor's questions in that regard.

9 JUDGE McGUIRE: Yes.

10 BY MR. STONE:

11 Q. After your deposition in this case, did we give
12 you, make available to you some documents that had only
13 recently been produced by Mitsubishi?

14 A. Yes.

15 Q. Did you review at our request those Mitsubishi
16 documents?

17 A. Yes.

18 Q. Did you find the Mitsubishi documents we gave
19 you supported or undercut or had no effect, at all, on
20 your opinions as to what someone of ordinary skill in
21 the art would understand from reading the '898
22 application?

23 A. I believe they supported it.

24 Q. How is it, in a general sense, they supported
25 it?

1 A. You look at the documents as a whole. It
2 appears they had the '898 application or the PCT
3 application or maybe even the '703 patent, one or more
4 of those documents, and it appeared they were reading
5 the disclosure and discerning things from that,
6 including the fact there were various features that
7 were being described independent of the multiplex bus.
8 There were -- they recognized in some of the documents
9 particular features like delay lock loop that was
10 specifically from the application and delay lock loop
11 and phase lock loop that was there. They recognized
12 latency, talking -- they used the term CAS latency or
13 latency. The application talks about access time.
14 Basically, equating the two. They recognized that
15 the -- that from the disclosure that Rambus would -- if
16 they hadn't already, just from the disclosure, the
17 written description portion would be able to claim a
18 lot of things that are described in the application.
19 They went through all of that in the various documents.

20 MS. MICHEL: Your Honor, I'm going to move to
21 strike that last answer. Mr. Fliesler is interpreting
22 a document that I have not seen at this point, but also
23 that is not a document he either wrote or received or
24 has any direct knowledge of.

25 JUDGE MCGUIRE: Sustained.

1 MR. STONE: Your Honor, may I be heard before?

2 JUDGE McGUIRE: Go ahead.

3 MR. STONE: I think expert witnesses are
4 completely entitled to rely upon documents they have
5 not written.

6 JUDGE McGUIRE: It is one you haven't seen or
7 heard or he hasn't seen?

8 MS. MICHEL: Your Honor, right now, because
9 they have not shown us the document that Mr. Fliesler
10 is currently testifying to, I'm not clear at this point
11 exactly what document.

12 JUDGE McGUIRE: Let's tell you what we'll do.
13 Let's restate the question and lay a foundation as to
14 what we're really talking about here and if there's
15 objection I'll entertain it.

16 MR. STONE: Sure.

17 BY MR. STONE:

18 Q. If you would turn in your binder to RX 504 A.
19 This is a document that's in evidence. Is this one of
20 the documents you reviewed?

21 A. Yes.

22 Q. Look at the next one, if you would, in your
23 binder, RX 2214 A, which is also in evidence. Is this
24 one of the Mitsubishi documents you reviewed?

25 A. Yes.

1 Q. Look at the next one, if you would, RX 406,
2 which is also in evidence. Is this one of the
3 Mitsubishi documents you reviewed?

4 A. Yes.

5 Q. Look, if you would, at the next document in
6 your binder, RX 2208, also in evidence. Is this one of
7 the Mitsubishi documents you reviewed?

8 A. Yes.

9 Q. Look at the next one, if you would, RX 2203,
10 which is in evidence. Is this one of the Mitsubishi
11 documents that you reviewed?

12 A. Yes.

13 Q. Look, if you would, at the next document in
14 your binder, RX 2211, which is in evidence. Is this
15 one of the Mitsubishi documents you reviewed?

16 A. Yes.

17 Q. Then look, if you would, at RX 2213A, the next
18 one in your binder. Is that one of the Mitsubishi
19 documents you reviewed?

20 A. Yes.

21 Q. It is also in evidence?

22 JUDGE McGUIRE: Do we have to go through all
23 these? Complaint Counsel? I'm asking Complaint
24 Counsel do we have to go through all these so you
25 understand now what he's referring to.

1 MS. MICHEL: Your Honor, we don't need to go
2 through all of them any further. However, I do
3 continue to maintain the motion to strike the answer
4 and Mr. Fliesler's testimony regarding these documents,
5 in a sense I believe what he's doing is interpreting
6 what these documents mean to Mitsubishi and what they
7 show about what Mitsubishi thought. I don't believe
8 that's proper testimony, given no foundation has been
9 laid that he knows these documents. I also understand,
10 with regard to Professor McAfee, he was not allowed to
11 offer such testimony interpreting what documents meant
12 to others.

13 MR. STONE: Professor McAfee's testimony was
14 restricted to the basis for his assumptions, not the
15 basis for his opinions. He testified -- it is consist
16 with the type of work Mr. Fliesler does, he will look
17 at evaluations of patents and applications.

18 JUDGE MCGUIRE: I'm going to overrule the
19 objection, but I'm only going to give that answer its
20 due weight based on the points that have been stated by
21 Complaint Counsel, but I'm not going to have it
22 stricken, but I am cognizant of those concerns, and if
23 this testimony becomes part of my overall review I'm
24 going to attach, as I do any other evidence, only its
25 due weight in this proceeding. All right, Mr. Stone.

1 MR. STONE: Thank you, Your Honor.

2 BY MR. STONE:

3 Q. May I also ask, if I might, Mr. Fliesler,
4 whether you also as part of this review looked at RX
5 620 A?

6 A. Yes.

7 Q. Did you look at RX 2218 A?

8 A. Yes.

9 Q. And RX 756 A?

10 A. Yes.

11 MR. STONE: Your Honor, I don't want to belabor
12 this point. Can I maybe ask the court's guidance for a
13 moment. I could ask Mr. Fliesler to point to the
14 various portions of each of these documents where he
15 found support for his conclusions and we can do it
16 document by document.

17 We also can point that out to you in our
18 briefing if you prefer we do it that way and not
19 through Mr. Fliesler. I think the language he would
20 point to is fairly obvious to the court and I don't
21 want to belabor the point beyond where you want to hear
22 this.

23 JUDGE MCGUIRE: Like I said earlier, if this is
24 already in evidence, then I think in your best
25 opportunity to offer the argument is in the briefs and

1 I want to be sure this evidence is in the record.

2 If you feel compelled to support the arguments
3 and the conclusions that you hope to offer in the post
4 hearing pleadings with his testimony, that's up to you,
5 but I don't have to have it if it's already in
6 evidence. That's up to you, Mr. Stone.

7 MR. STONE: I appreciate that, Your Honor.
8 Thank you for the guidance.

9 BY MR. STONE:

10 Q. Let me ask you, if I might, just to turn to a
11 couple of these documents, Mr. Fliesler and turn, if
12 you would, first to RX 2203 and I, again, I'm referring
13 you to what is the English translation of the document
14 that is pages 3 and 4 of the document, not to the
15 portion which is in Japanese, which follows. And let
16 me ask you to turn to those two English language
17 portions and ask if you would simply point out for all
18 of us the portions of the English language translation
19 of RX 2203 that you relied upon as supporting your
20 opinions?

21 A. Yes. I believe with this particular document
22 it would have been at the bottom of page 3 and going
23 onto the top of page 4 under the heading,
24 "Conclusions" -- principally conclusions number 2 and 3
25 that I did take a look at.

1 Q. Then if you would turn to RX 2211, the first
2 page of which consists of three columns, most of the
3 writing being in Japanese. From time-to-time there
4 appear to be English language references and then the
5 translation beginning at page 3 and continuing onto
6 page 4 of RX 2211.

7 Could you just point us to the portions here in
8 which you found support for your opinions?

9 A. Well, I believe on page 1 of the drawings, the
10 middle column, there's about, I guess a third of the
11 way up or two-thirds of the way down there's some
12 notations about Rambus and clock and clock bar, which
13 is the inverted clock which I talked about earlier, and
14 they use the term PLL, which is phase lock loop and
15 there are issues about the delay lock loop and what's
16 going on.

17 Then on page 3, just -- again, the way it's set
18 out they seem to be, in my view, looking at the various
19 features that are described in any application, talking
20 about them under the heading clock on the one hand,
21 memory on the other and within that there is, for
22 example, under clock, again, you can see down, I guess
23 the next to the last bullet item, again, they're
24 talking about clock, clock bar, phase lock loop, things
25 that are -- high speed bus, right below that with

1 respect to Rambus. You get the impression from reading
2 this and similar matters under the memory session that
3 they're evaluating the technology that's described in
4 the application or the '703 patent that they may have
5 had available to them.

6 MR. STONE: Okay. I think that's all I need to
7 do at this point, Your Honor, thank you.

8 BY MR. STONE:

9 Q. Let me bring back up our first slide, if we
10 could. You now testified, at least in a general sense,
11 to the first two opinions set forth on our first slide
12 which is DX 262; Mr. Fliesler?

13 A. Yes.

14 Q. I want to turn your attention to the third
15 opinion, if we can, listed on DX 262 and if you could
16 explain to us the bases for your opinion that patent
17 applications are generally kept confidential for as
18 long as possible?

19 A. Well, the fundamental basis -- there are lots,
20 but the fundamental basis, when you prepare a patent
21 application, you are disclosing in there basically the
22 heart and guts of what the inventors had invented at a
23 particular point in time. In making that disclosure in
24 the patent office with the intent of trying to get
25 patent protection downstream, which takes a couple of

1 years and you go through the examination process.

2 So on the one hand you're making a disclosure,
3 on the other hand you don't have any patent rights to
4 enforce and most business people do not want to have
5 their technology disclosed to competitors or others
6 before they have a legal right to do something with
7 respect to it. So they try to -- they want to have
8 these applications for various business reasons held
9 confidential.

10 Q. Let me see if I can interpose a question here.

11 What does the patent office do with the patent
12 application back in the time frame the one at issue
13 here was filed in 1990?

14 A. They hold it secret confidential.

15 JUDGE MCGUIRE: Up until when it issues as a
16 patent.

17 THE WITNESS: Yes. Once the patent issues
18 you're entitled to get copies --

19 JUDGE MCGUIRE: The PTO does not offer patent
20 applications, say on the Internet, as we've heard other
21 testimony, where anyone can access the PTO's Internet
22 site or some Internet site issued patents; it is your
23 testimony, patent applications are not disclosed by the
24 PTO until they actually are issued as patents?

25 THE WITNESS: Yes.

1 That's the old law.

2 JUDGE McGUIRE: What's the new law?

3 THE WITNESS: You still -- basically the
4 applicant has the right now to keep that same process
5 going, but there is a provision under the new law which
6 became effective, I think around 1999, which says that
7 applications will be published 18 months after the
8 filing date and so -- but there are some rights given
9 to the applicant.

10 JUDGE McGUIRE: I think we heard at some point
11 in this hearing, on average it takes over two years
12 from the time a patent application is filed until it's
13 issued; is that correct?

14 THE WITNESS: Yes. That's correct. It's about
15 a two-year period.

16 BY MR. STONE:

17 Q. While we're on this issue of patent
18 applications, when you file an application -- when you
19 file what's called a PCT application that we looked at
20 earlier and referred to in the 1990 time frame, did
21 that become public after a certain point in time?

22 A. Yes.

23 Q. What was that point in time?

24 A. That was by PCT and foreign law, that was
25 usually published 18 months after the original filing

1 date.

2 Q. And the original filing date would be the
3 claimed priority date or some other date?

4 A. The basic priority date of the application.

5 Q. Okay.

6 One more question. Is the patent prosecution
7 you described, is it generally thought of to be
8 adversarial or ex parte or somewhere in between?

9 A. For the most part, it is ex parte and it is far
10 from adversarial. The whole statutory scheme, not only
11 from the statutory point of view, but the way examiners
12 are instructed to examine is to have applications
13 issued -- legitimate applications issued so that the
14 disclosure that we're talking about becomes available
15 to the public and then the public learns from that.

16 What they're mainly concerned about is in
17 filing the application, in seeking claim protection,
18 you're not taking away from the public domain. So they
19 want to give you what you're entitled to, but they are
20 obligated to issue applications as patents so the
21 disclosure gets out there.

22 Q. In the time period from before 1990 up until
23 the law changed to some extent in 1999, how important
24 was the confidentiality provisions of the PTO
25 procedures, that is that they would keep applications

1 confidential?

2 A. Extremely important.

3 Q. Why is that?

4 A. Well, the -- as I said, the applications
5 themselves are the -- they describe the development
6 work and the effort of a given company at a given point
7 in time, usually with what I'm working with with
8 matters that are eventually going to be in commercial
9 products.

10 JUDGE MCGUIRE: I want to expand on this.
11 We've heard the term and we've used the term throughout
12 this proceeding in the patent context, the prior art.
13 Are patent applications included in the prior art,
14 let's say there is a pending application on an idea and
15 at some point before that application issues there's a
16 new application that's filed that could well
17 incorporate the prior application's concepts, is that
18 included in the prior art? So would an applicant be
19 able to ascertain that there is prior art out there,
20 but yet it hasn't been issued as a patent?

21 THE WITNESS: If I understand, there is a
22 statutory provision, if I understand the question,
23 Section 102 E that says that patents become prior art
24 not as of their issue date, but they can become prior
25 art as of their filing date.

1 JUDGE McGUIRE: But is that something that
2 occurs after the fact?

3 THE WITNESS: Yes.

4 JUDGE McGUIRE: So applicant 2 might have the
5 same idea as applicant 1 when he or she is doing a
6 search for the prior art and he or she would not have
7 access to the applicant 1.

8 THE WITNESS: That's correct. That's correct.

9 BY MR. STONE:

10 Q. So let me see how I can follow up on that.

11 If person A files an application and seeks a
12 patent on an invention and then sometime later person B
13 files an application and seeks a patent on the same
14 invention, is there a patent office procedure for
15 addressing that claiming of the same invention by
16 different people?

17 A. Yes.

18 Q. What's that called?

19 A. It's called an interference proceeding.

20 Q. Just in general terms, explain to us how an
21 interference proceeding works, if you would?

22 A. That's an area, basically what we call a first
23 to invent system, not a first to file system. So when
24 two applicants file within the patent office, basically
25 a claim on the same invention, they both invented it,

1 in our system the one who is entitled to the patent is
2 not the one who was first to file the application, but
3 the one who was first to invent, which goes back
4 earlier in time. That creates certain evidentiary and
5 procedural matters, so the patent office has a
6 procedure called an interference procedure where the
7 two applicants get into that procedure and present
8 evidence and arguments as to who was the first to
9 invent and that's what that's all about.

10 JUDGE McGUIRE: That term means what? To
11 invent that would go back to maybe prior circumstances,
12 that may go back to even a prior patent or a prior
13 application like we have in this case, or how would
14 that -- we're getting somewhat off the subject, but
15 while we're on it, let's just clarify.

16 How does the patent office determine who was
17 the first to invent?

18 THE WITNESS: In this context, when we say the
19 first to invent, invention is, again, under our system,
20 who was the first to conceive of the idea and reduce it
21 to practice in some form. So you can see, for example,
22 you can conceive of programmable burst length. You
23 have an idea for that basically in your mind, you
24 conceive of that and you're going to put that down on
25 paper, describe that in your engineering notebook or

1 whatever. That is basically a conception.

2 It isn't quite the invention yet, but then the
3 next thing you have to do is to what we call reduce it
4 to practice. There are two ways to reduce it to
5 practice. One way is what we call a constructive
6 reduction to practice where you actually describe that,
7 what you put down on paper in a patent application.

8 The second way is where you actually reduce it
9 to practice so you take those drawings like, for
10 example, that we were just talking about in the patent,
11 in the tables and burst length you actually take that
12 and build some device that actually carries that out,
13 that's an actual reduction to practice. Our system
14 looks at that activity as between two competing
15 inventors who may be doing the same thing at about the
16 same time. One can conceive first, the other second.
17 The second can reduce to practice faster, the other one
18 maybe a little slower. There is a lot of evidence that
19 goes on there under Section 102 G to determine as to
20 between those two inventors who is entitled to the
21 patent.

22 JUDGE McGUIRE: Okay. Go ahead, Mr. Stone.

23 MR. STONE: That's fine, Your Honor.

24 BY MR. STONE:

25 Q. If someone should file for a patent application

1 and the patent office ultimately does no not allow the
2 patent to issue, again, I'm referring you to the laws
3 that stood in the 1990 to 1996 time frame, would there
4 be any trade secret protection or any other
5 confidentiality that would continue after the patent
6 office decided not to allow a patent?

7 A. Yes.

8 Q. Explain to us, if you can, what protection
9 there would be when the patent office decided not to
10 allow it?

11 A. Application itself remains secret within the
12 patent office and no one in the patent office can have
13 access to it, so it remains secret.

14 Q. Let me ask you -- we looked earlier at the '703
15 patent that had issued by the particular date; correct?

16 A. Yes.

17 Q. And Rambus still had patent applications
18 pending as indicated on one of the pages of the '703
19 patent we looked at; right?

20 A. Yes.

21 Q. Is there any reason that a company would want
22 to keep confidential applications that were pending,
23 when one of the patents that had issued from that
24 original application had already been issued and so
25 some of them was public?

1 A. Yes.

2 Q. What reasons are there for wanting to keep the
3 other continuation or divisional applications
4 confidential?

5 A. The claims. What you're actually claiming in
6 those additional applications from the entirety of a
7 written disclosure which is now publicly available
8 through the '6703 patent that issued, but that
9 application discloses a lot of different features and a
10 competitor would want to know which of those are you
11 actually claiming to be your invention, which one or
12 more. And having those claims, knowledge particularly
13 of what those claims were would be of extreme value to
14 competitors, to others in the marketplace and by
15 inversely then it's valuable to the applicant to keep
16 the claims that they're prosecuting in the divisional
17 applications secret until those patents issue.

18 Q. You described a moment ago that in the United
19 States it's a first to invent rule?

20 A. Yes.

21 Q. Is that consistent throughout all of the
22 different nations?

23 A. No.

24 Q. What other rule or rules are applied?

25 A. Well, to my knowledge, I think every other

1 jurisdiction in the world -- it could be the
2 Philippines, I'm not quite sure or Taiwan, but every
3 other jurisdiction in the world has a first to file
4 system.

5 Q. What does that mean?

6 A. Meaning -- an example we're talking about, if
7 you have inventor A and inventor B who are conceiving
8 and reducing to practice and working independently, but
9 simultaneously on the same invention in a foreign
10 country, it is a race to the patent office. It is the
11 first one that files the application that is otherwise
12 entitled to a patent, will get the patent, even under
13 our system. For example, under our system, it could be
14 inventor A was the first to invent, but if inventor B
15 was the first to file in a foreign country he would get
16 it.

17 Q. With respect to the first to file, if someone
18 were to file first in the United States, would that
19 give them any rights with respect to filings in other
20 countries?

21 A. Yes.

22 Q. How so?

23 A. Through the various treaties that we have, but
24 basically if you file in the example we're talking
25 about in the US, you have up until -- basically up to

1 one year to file that application, US application
2 fundamentally in the foreign jurisdictions, and in
3 doing that from a legal point of view, the legal date
4 of invention relative to the foreign countries goes
5 back to what you would be calling the date of priority
6 of the original US application.

7 Q. Let me go back. You mentioned business reasons
8 earlier. What are the business reasons that companies
9 might have for not wanting to disclose patent
10 applications?

11 A. Well, you -- if you have -- if I'm a company
12 and I have a competitor and I'm a company, I'm the CEO,
13 CFO, investing a lot of money in this new development,
14 in this new area that may not see fruition commercially
15 for another few years to begin with and let alone not
16 being able to get the patent for another two years
17 after filing, you would not want your competitor to
18 know the areas of technology that you're developing,
19 the areas of technology that you're seeking protection
20 for, the scope of matters that you're dealing with.
21 That gives business leverage to competitors and it
22 shouldn't be the patent system and the applications
23 that give that knowledge to your competitors.

24 Q. In your opinion, are there business reasons for
25 maintaining an application in confidence after say the

1 PCT or corresponding PCT application has been
2 published?

3 A. Yes.

4 Q. What are those reasons?

5 A. Well, again, it gets back to the particular
6 claims. The claims at the end of the day are the
7 jewels. Claims are the matter that the patent office
8 had said, this is new you're not taking it away from
9 the public, you're not taking anything out of the
10 public domain. From a legal point of view, this is
11 your stuff and you're entitled to patent protection for
12 it. It gives competitors the understanding,
13 information that is valued to know exactly what the
14 protection is that your competitor is going to have.
15 It's just strategic information that a competitor would
16 want to have.

17 Q. Could a competitor do anything to slow down or
18 interfere with your patent prosecution if information
19 about pending applications was disclosed to them?

20 A. Yes.

21 Q. What could they do?

22 A. Well, one thing, of course, they can, and this
23 does happen, you have to deal with this, literally
24 disclose to you, to the patent lawyer or to the
25 company, your client, patents, prior art, with the

1 intent of -- it may or may not be relevant prior art,
2 but as we counsel clients, there's a duty of disclosure
3 so once you receive prior art, you're already thinking
4 about well do I have to disclose this to the patent
5 office and normally you want to do that because you
6 don't want to deal with issues downstream about making
7 unilateral decisions, so it has the capability of
8 confusing -- potentially confusing the, delaying the
9 patent prosecution if you receive prior art from a
10 competitor, particularly if it's not particularly
11 relevant and those things do happen.

12 And then it's possible, getting to interference
13 proceedings issue, where the competitor might have an
14 application on file and by seeing his competitor's
15 application and the claims, realize that there's
16 something that they should be claiming in their
17 application because they think they're first and they
18 want to then -- the process is to provoke an
19 interference and once you do that, provoke an
20 interference, that just delays the issuance of the
21 patents.

22 Q. In your experience and in your practice, how do
23 you generally counsel clients with respect to the
24 confidentiality of applications and how they should
25 treat them?

1 A. You start with -- you don't disclose them to
2 your -- you don't disclose them, you keep them
3 confidential.

4 Q. Have you had occasions where clients have said
5 well, they wanted to, for one reason or another?

6 A. Yes, sure.

7 Q. In that context, do you have any portions of an
8 application that you would counsel them to keep
9 confidential, even if they disclosed other parts? In
10 other words, is there any hierarchy that you discern in
11 an application in connection with the advice you give?

12 A. Yes.

13 Q. What is that?

14 A. It is a tiered system you engage with a
15 competitor or some other party for the purpose of
16 entering potentially some kind of agreement with them,
17 whether it is a license agreement, joint venture
18 agreement, cross-license agreement, lots of things that
19 go on. Before you do that, before you kind of reveal,
20 again, your family jewels in the sense we're talking
21 about it, the patent applications, you want to go
22 through a tiered process where first you get a feel for
23 whether the other side is negotiating or talking to you
24 in good faith and trust so they're really interested
25 and at that point you just may generally describe,

1 talking about concepts again, things like I'm in the
2 area of DRAMs and going programmable burst mode and are
3 you interested in that. That doesn't tell you very
4 much about what's in the application. If you get
5 beyond that level and even that level is done on a
6 nondisclosure agreement, a confidentiality agreement.

7 Then the next level down would be, okay, we've
8 got a level of trust so -- and this working both ways,
9 it happens to me both ways. I mean on the receiving
10 end for clients and on the giving end.

11 Next level down would be, well, let's have our
12 engineers talk to one another on this technology base
13 and learn a little more about the technology without
14 disclosing the applications. That could be the next
15 tier you get into a little tighter nondisclosure
16 agreement.

17 Then the next area usually is, okay, the
18 parties have now decided perhaps they really do want to
19 invest the time, money, effort in this area of
20 technology. The question comes up from an investor
21 point of view, from a reasonable business point of
22 view, what kind of protection do I have? We entered
23 into this agreement, what kind of protection do I have?
24 Of course, the end of the day, the only protection you
25 have in our system is the patents so the next thing you

1 would be willing to disclose under the right
2 circumstances and maybe a little tighter NDA would be
3 the application, but even then the specification for
4 the time being because the claims, again, are the
5 family jewels. And then eventually, if everything is
6 working well, at some point things tightened up and
7 everyone takes a little risk and wind up disclosing the
8 whole nine yards. The claims and maybe all of the
9 applications that are in the chain, not just one.

10 Q. Okay. Thank you.

11 I want to go back now to the chart we have up,
12 DX 262. Have you explained to us now, generally the
13 bases for your third conclusion set forth on that
14 chart?

15 A. Yes.

16 Q. Let me ask you then if you would to look at the
17 fourth paragraph of DX 262 and let me ask you, if I
18 can, did we identify for you particular claims and
19 particular applications and ask you to look at those?

20 A. Yes.

21 Q. So, in other words, the set of claims and
22 applications that you looked at are ones that we
23 specifically directed you to?

24 A. Yes.

25 Q. Did you understand those based on your review

1 of the Jacobs and Nussbaum reports and testimony to be
2 ones that were either mentioned in their reports or in
3 their testimony?

4 A. Yes.

5 Q. Okay. Let's turn, if we could, to the next
6 chart, which would be DX 264, labeled '961 application.

7 We brought up DX 264 on the screen,
8 Mr. Fliesler. The first bullet point, does this
9 summarize the claims we asked you to review in the '961
10 application?

11 A. Yes.

12 Q. Okay. Let me ask you if you would to turn in
13 your binder, what's going to be binder number 2. Now
14 to the first tab labeled CX 1504 and what we've done is
15 we've just pulled certain of the pages out of these
16 exhibits because they're very voluminous. We just
17 pulled out the pages I think you referred to.

18 The first tab has behind it a portion of CX
19 1504, beginning at page 216, and continuing on to page
20 226. Do you see that?

21 A. Let me get a little oriented again.

22 Q. Turn to the first tab.

23 A. I'm sorry. I missed the first tab. Sorry.

24 Q. The first tab. You'll see at the bottom, CX
25 1504?

1 A. Yes.

2 Q. The pages behind this tab are 216 through 226?

3 A. Yes.

4 Q. Do these pages contain the text of the claims
5 151, 159, 160, 164, 165 and 168?

6 A. Yes.

7 Q. Okay. And can you tell from the documents we
8 placed in front of you, including these pages from CX
9 1504, when these claims were first filed?

10 A. Yes. They, pursuant to the document, they were
11 first filed on January 6, 1995.

12 Q. And where do you see that on the document?

13 A. In the portion there there's what's called a
14 "Certificate of Mailing," and it has a date January 6,
15 1995. Leslie D. Rogan is the person in the signature
16 and actually signs January 6, 1995.

17 Q. Which page is that on?

18 A. 216.

19 Q. Have you determined what happened to these
20 particular six claims in the '961 application?

21 A. Yes.

22 Q. What happened to them?

23 A. They were canceled.

24 Q. Turn, if you would, to the next tab which is CX
25 1504, again, but different pages, pages 258 through 271

1 and look at that. It should be the second tab.

2 Do you have those documents in front of you?

3 A. Talking about CX 1504?

4 Q. Yes.

5 A. Yes.

6 Q. Do you have page 258, the first page?

7 A. Yes.

8 Q. Okay. Do these -- do the documents or the
9 pages of CX 1504 here indicate the cancellation of the
10 claims?

11 A. Yes.

12 Q. Where do we find that?

13 A. Well, you see that on the very bottom it says,
14 in the claims it says, please cancel claims 151-168
15 without prejudice. That is where the applicant is
16 canceling the claims.

17 Q. Which page is that on?

18 A. 258.

19 Q. Now, did we ask you with respect to these six
20 claims, the '961 application, 151, 159, 160, 164, 165,
21 168, did we ask you to consider whether or not any of
22 these claims would read on a device built to the JEDEC
23 SDRAM specification or standard?

24 A. Yes.

25 Q. Did you form an opinion as to that?

1 A. Yes.

2 Q. What opinion did you reach?

3 A. At this stage, I formed they were not covered.

4 Q. What are the -- let me see if I can phrase it
5 this way. At the time you wrote your report, did you
6 explain the bases for certain portions of that opinion?

7 JUDGE MCGUIRE: Ms. Michel.

8 MS. MICHEL: I have an objection, Your Honor,
9 with regard to any testimony regarding claims 151 and
10 165. Those claims were cited in Professor Jacobs
11 rebuttal report. I specifically asked Mr. Fliesler at
12 his deposition and I can read it if you would like, the
13 question and answer, but whether he had formed an
14 opinion with regards to claims 151 and 165 and he
15 explicitly answered no.

16 MR. STONE: He had only Your Honor -- let me
17 just respond. I don't think she needs to read it, I'm
18 not disputing that. Mr. Fliesler had only had the
19 rebuttal report for a short period of time before his
20 deposition was taken. It is appropriate and consistent
21 with the stipulation we entered into with Complaint
22 Counsel that he be entitled to express a basis for
23 opinions that would respond to rebuttal reports given
24 by Complaint Counsel's expert, even at this stage of
25 proceeding since he had not had sufficient time, at

1 that point, in order to do so and in part he's
2 responding to their opinions expressed here at the
3 proceeding which expound upon the opinions they gave in
4 their rebuttal reports.

5 JUDGE McGUIRE: Do you want to comment on that,
6 Ms. Michel? Is that part of the parties' agreement.

7 MS. MICHEL: Your Honor, I'm afraid I don't
8 know what our understanding is with that regard. I
9 would defer how this issue was handled with Professor
10 McAfee that we should do similarly. I would respond
11 there was a couple of months between the time of
12 receiving the rebuttal report and the deposition, at
13 least, and I believe that there was sufficient time to
14 form an opinion so I could explore it.

15 JUDGE McGUIRE: I'm going to hold that
16 objection in abeyance until the post hearing briefs.
17 You can argue the point there. In the meantime, you
18 may proceed, Mr. Stone.

19 MR. STONE: Thank you, Your Honor.

20 BY MR. STONE:

21 Q. After you wrote your report, did the Federal
22 Circuit decision come down?

23 A. Yes.

24 Q. And does -- I notice on chart -- I'm trying to
25 short circuit this. Let me put it to you differently.

1 What's the basis for the opinion you're going
2 to express here today at this hearing, for your
3 conclusion the six claims you just identified in the
4 '961 application wouldn't read on devices built to the
5 JEDEC SDRAM specification or standard?

6 A. The Federal Circuit's opinion.

7 Q. How so?

8 A. Well, that's what they said in their opinion,
9 that the claims in the relevant application, that's
10 exactly what they said.

11 Q. And does the Federal Circuit have the last word
12 on claim interpretation issues unless the Supreme Court
13 decides to hear a case?

14 A. Yes.

15 Q. Let me ask you then to bring up another
16 application or a slide that relates to another
17 application. Let's bring up DX 265, which is headed
18 '490 application, if we might.

19 Did we also ask you to look at three claims in
20 the '490 application?

21 A. Yes.

22 Q. I want you to turn, if you would, to the -- you
23 should be on the tab right now which is the second tab
24 in your binder. CX 1504 at page 258?

25 A. Yes.

1 MS. MICHEL: Your Honor, I would like to just
2 maintain for the record a similar objection with regard
3 to claims 184 and 185, that there was no opinion
4 expressed at the deposition.

5 JUDGE McGUIRE: Noted and also held in
6 abeyance.

7 BY MR. STONE:

8 Q. Directing your attention to the pages of CX
9 1504, 258 through 271, if I might. Let me ask you if
10 you would turn to page 264 and carrying over to 265 and
11 266.

12 Is that where we find the text of claims 183,
13 184 and 185 in this application?

14 A. Yes.

15 Q. Can you tell from the documents in front of you
16 when these particular claims were filed with the patent
17 office?

18 A. Yes.

19 Q. When was that?

20 A. These were filed as part of the preliminary
21 amendment shown on page 258 on January 23rd, 1995.

22 Q. And then what was their history? What happened
23 with them next, if you know?

24 A. Essentially the examiner looked at those claims
25 and believed that they should be restricted out. They

1 were misapplication. They related to, in his view, a
2 different invention.

3 Q. What does that mean when they're restricted
4 out?

5 A. Basically it's divisional applications we're
6 talking about. Basically the examiner said for
7 purposes of this application you're claiming this area,
8 these claims 181 to 185, go to a different area and
9 they need to be examined, if at all, in a different
10 application we call divisional.

11 Q. Do you know when that occurred?

12 A. Yes.

13 Q. Would you turn to -- it should be the fourth
14 tab in your binder. Again, it's labeled CX 1504, it's
15 pages 273 through 277.

16 A. 273.

17 Q. Yes. It should be tab 4. My tabbing system is
18 obviously not working well. It follows the Federal
19 Circuit's decision?

20 A. Right. Got it.

21 Q. Okay. Can you tell us what pages 273 through
22 77 of Exhibit CX 1504 are?

23 A. This is an office action that was mailed by the
24 Patent and Trademark Office on November 27th, 1995 in
25 which he sets forth -- the examiner sets forth the

1 restriction point of view groups of claims, one of
2 which group was claims 183 to 185 that eventually gets
3 restricted out.

4 Q. Turn to page 274 of Exhibit CX 1504?

5 A. Yes.

6 Q. If you'll look at it, under the heading
7 "Election/Restriction," are these three claims
8 referenced there?

9 A. Yes.

10 Q. And then what was the -- when there's an
11 election restriction like this, what are the
12 applicant's objections?

13 A. Well, the applicant -- by the way, it's on the
14 next page, 275, the examiner points out that there is
15 an election that had been made in claims 183 to 185
16 were withdrawn from further consideration.

17 Q. Where is that on page 275? If you can
18 highlight that for us?

19 A. That's paragraph 5 of the office action.

20 Q. Okay. When did this occur, this election to
21 withdraw them from further consideration?

22 A. Well, pursuant to the patent office and based
23 on the provisional election, it specifically occurred
24 when they mailed the office action November 27, 1995.

25 Q. Go back, if you would, to the second tab in

1 your binder which you referred to earlier. Could you
2 tell us, this is the one that has the language of those
3 three claims beginning on page 264, 265 and continuing
4 to page 266 of Exhibit CX 1504. Can you tell us from
5 looking at this document when these three claims you
6 just described were elected for no further prosecution,
7 when these claims were filed?

8 A. When these claims refiled?

9 Q. When were they originally filed?

10 A. They were originally filed with respect to this
11 amendment that's shown on page 258, the preliminary
12 amendment, on June 23rd, 1995.

13 Q. Okay. Now, have you formed an opinion whether
14 these three claims of the '490 application would read
15 on advice built to the JEDEC SDRAM standard?

16 A. Yes.

17 Q. What is your opinion?

18 A. It would not.

19 Q. Why not?

20 A. Well, they're similar in many respects -- in
21 relevant respects to what I believe the Federal Circuit
22 said about the claims that were just previously talked
23 about. Basically, for similar reasons that they found
24 there, you would find that these three claims would not
25 read on the standards.

1 Q. Okay. Let me ask you then to -- maybe we can
2 bring up DX 266, which is our next demonstrative for
3 the '646 application.

4 Did we ask you to look at Claim 151 of the '646
5 application?

6 A. Yes.

7 Q. Let me ask you to turn in your binder to a tab
8 that is labeled CX 1493, and there are two such tabs
9 labeled 1493, so go to the first one, if you would?

10 A. Okay.

11 Q. And you have CX 1493, beginning at page 153?

12 A. 183.

13 Q. I'm sorry. Yes, it is 183.

14 Do you have that one in front of you?

15 A. Yes.

16 Q. And let me ask you if you would to turn to page
17 184 and at the bottom of page 184. Is that the
18 beginning of the Claim 151 we asked you to look at?

19 A. Yes.

20 Q. Can you tell us from looking at this document
21 when this Claim 151 was filed?

22 A. Yes.

23 Q. When was it filed?

24 A. September 6, 1994.

25 Q. Okay. Then what happened with it, if you know?

1 A. This was canceled.

2 Q. And can you look to the next tab labeled CX
3 1493?

4 A. Yes.

5 Q. This is pages 243 through 244; correct?

6 A. Yes.

7 Q. Okay. And what does this document reflect?

8 A. This is an amendment filed by the applicant in
9 which, as you see on 243, the applicant is canceling
10 claims 151 and 160.

11 Q. What was the date of the applicant's amendment
12 that canceled Claim 151?

13 A. September 14, 1995.

14 Q. Okay. Were you asked to compare Claim 151 with
15 a Samsung presentation?

16 A. Yes.

17 Q. Okay. And was the date -- do you recall the
18 date of the Samsung presentation?

19 A. About March of 1996.

20 Q. Okay. Would this Claim 151, if it had issued
21 in the form we see it in Exhibit CX 1493 at page 184
22 through 185, in your opinion, would that Claim 151 had
23 read on the JEDEC DDR SDRAM standard?

24 A. No.

25 Q. Why not? I'll direct you to look at the claim,

1 if you would, which is on pages 184 and 185, if that's
2 helpful to you?

3 A. Fundamentally there's an element that is part
4 of the claimed combination of Claim 151 that calls for
5 basically writing or reading in or receiving data in
6 response to the rising edge of a clock signal and the
7 falling edge of a clock signal. So this claim relates
8 to doing things with respect to a clock signal, rising
9 and falling edge and the DDR SDRAM matters that I
10 looked at do not have that feature.

11 Q. What do they have for -- DDR stands for double
12 data rating; right?

13 A. Yes.

14 Q. What does the DDR SDRAM standard have that is
15 in some way different from what you just described?

16 A. The standard talks about using a different
17 signal called the DQS or data stroke signal to help
18 read in the data, as opposed to a clock signal.

19 Q. In your opinion, is that difference sufficient
20 to avoid infringement?

21 A. Yes.

22 Q. Okay. Did we also ask you to look at the '327
23 patent itself, an issued patent?

24 A. Yes.

25 Q. And let me see if I can turn you to CX 1494 in

1 your binder?

2 A. Okay.

3 Q. Is this the '327 patent?

4 A. Yes.

5 Q. Can we bring up the next slide, DX 267, for a
6 moment.

7 Did we ask you to look at claims 1 and 7 of the
8 '327 patent?

9 A. Yes.

10 Q. Did we ask you to compare those to the DDR
11 SDRAM standard?

12 A. Yes.

13 Q. Did we also ask you to compare them to a
14 Samsung presentation?

15 A. Yes.

16 Q. Go back one --

17 MS. MICHEL: Your Honor, I would like to
18 object. I would like to maintain our objection to any
19 testimony regarding a comparison with claims 1 and 7 to
20 the Samsung March '96 proposal, given that the question
21 was asked if Mr. Fliesler had formed an opinion at the
22 deposition and he had not.

23 JUDGE MCGUIRE: Does this go back, again, to
24 the agreement of the parties that you're unsure of at
25 this point, the stipulation he mentioned earlier?

1 Because that was the foundation upon which I held the
2 prior two in abeyance because you weren't sure to what
3 extent the stipulation covered this.

4 MS. MICHEL: Your Honor, I have a second
5 objection regarding this testimony. Professor Jacobs
6 in his opening report compared claims 1 and 7 to the
7 Samsung March '96 proposal and Mr. Fliesler did not
8 address that issue in his report. So this is somewhat
9 different in that he does not need this testimony to
10 respond to a rebuttal report. This is actually
11 something that could have been, but is lacking in
12 Mr. Fliesler's report.

13 MR. STONE: Let me withdraw that question for
14 the time being, Your Honor.

15 JUDGE MCGUIRE: All right.

16 MR. STONE: Let me hold that one until maybe
17 after the lunch break if we can.

18 JUDGE MCGUIRE: All right.

19 MR. STONE: Let me try to go forward.

20 BY MR. STONE:

21 Q. Did we ask you to look at claims 1? Did we ask
22 you to review claims 1 and 7 of the '327 patent to
23 determine whether they agreed to products built to the
24 JEDEC DDR SDRAM standard?

25 A. Yes.

1 Q. Let me direct you back to CX 1494, the '327
2 patent, and ask you if you would to turn to page 23 of
3 CX 1494.

4 A. Okay.

5 Q. Do you see claims 1 and 7 on that particular
6 page of this exhibit?

7 A. Yes.

8 Q. And where are they, if you would just point
9 them out to us?

10 A. Claim 1 on page 23 is at column 25 starting
11 about line 14.

12 Q. Where is claim 7?

13 A. On column 26 at the very top starting at line
14 1.

15 Q. What's the basis for your opinion, these two
16 claims would not read on products built to the JEDEC
17 DDR SDRAM standard?

18 A. Claim 1, the previous claim I talked about
19 references or specifies a clocking -- using a clock
20 signal to clock in data to write data into the -- into
21 the memory, it's the clock signal that they're using.
22 DDR SDRAM standard, I believe uses the DQS strobe
23 signal to do that which is a different signal.

24 When you get to claim 7, it is a different --
25 now you look at the output side of the DRAM and what

1 the structure is to allow data to be read from or sent
2 out from the DRAM and one feature that or element that
3 is described and there's a multiplex of this in the
4 optic path. I believe the DDR SDRAM standard requires
5 the use of a multiplex circuit in that path.

6 Q. For those two reasons, is that the basis for
7 your opinion?

8 A. Yes.

9 Q. Okay. Did we also ask you to look at a '692
10 application?

11 A. Yes.

12 Q. Let me bring up DX 268, if we could, the next
13 in order.

14 Let me direct you to CX 1502, the first of two
15 tabs labeled 1502, I want to direct you to pages 205
16 through 213, if we might?

17 A. Okay.

18 Q. If you turn to page 208 -- it's pointed out to
19 me I probably asked you a messed up question so as to
20 make the record clear, let me go back, if I might,
21 Mr. Fliesler.

22 With respect to -- I'm going to take you back
23 to the '327 patent for just a moment and with respect
24 to claim 7 of the '327 patent, which is on page 23 of
25 CX 1494, would you state again the bases for your

1 opinion that claim 7 does not read on a product that
2 would be manufactured in accordance with the JEDEC DDR
3 SDRAM standard?

4 A. Claim 7?

5 Q. Yes, please.

6 A. Basically there is a multiplexer in the output
7 path of the -- of the claimed subject matter and I
8 don't believe the DDR SDRAM standard requires the use
9 of a multiplexer in that path.

10 Q. The standard does or does not require the use
11 of a multiplexer?

12 A. Does not.

13 Q. That's what I didn't hear earlier was the not.

14 A. Okay.

15 Q. I just want to be clear so you're clear.

16 A. Right.

17 Q. The claim does require it?

18 A. The claim requires it, I'm sorry. The standard
19 does not.

20 JUDGE MCGUIRE: It, meaning the multiplexer?

21 THE WITNESS: Yes. The claim sets forth a
22 limitation. The multiplexer that's required in the
23 claim. The standard does not have that.

24 MR. STONE: Okay. Thanks for clarifying. I'm
25 sure it was my confusion.

1 BY MR. STONE:

2 Q. Let me take you back to where we were, which
3 was the '692 application. Let me ask you to look at
4 the first tab for CX 1502.

5 Do you have page 205 through page 213 in front
6 of you?

7 A. Yes.

8 Q. Okay. Looking at those first group of pages
9 and beginning with page 205, can you tell us what this
10 document is?

11 A. This is a preliminary amendment in connection
12 with an application that was filed on June 28th, 1993.

13 Q. Okay. Turn, if you would, to page 208?

14 A. Yes.

15 Q. Does this have the text of Claim 151 there?

16 A. Yes.

17 Q. Okay. Then flip to the next tab, CX 1502 pages
18 233 through 239. And what is this document?

19 A. This is not a preliminary amendment, this is an
20 amendment for the prosecution that was filed on October
21 23rd, 1995.

22 Q. Same application?

23 A. Yes.

24 Q. And does it make any amendment to or changes in
25 Claim 151?

1 A. Yes.

2 Q. Where do we see the amended language of
3 Claim 151?

4 A. It's on the bottom of 233 going up to the
5 remainder of the claim on 234 where, first of all, it
6 says in the parenthetical, amended and the actual
7 amendments are shown bracketed. Material is deleted,
8 underlined material is added to the claim and that's
9 how the claim is amended.

10 Q. Okay. At this point in Exhibit 1502, at pages
11 233 through 239, do you see claims 152, 166 and 167
12 being added?

13 A. Well, 152 is not being added. 152 is being
14 amended in this document, but 166 and 167 are being
15 added.

16 Q. And if we want to see 152 before it was
17 amended, can we go back to the preceding portion of CX
18 1502 and look at page 208?

19 A. Yes.

20 Q. Okay. And do we see it there with a line
21 through the number 152?

22 A. Yes.

23 Q. Okay. With respect to these four claims in the
24 '692 application, were you asked to compare them with
25 an NEC presentation?

1 A. Yes.

2 Q. And let me ask you to turn -- don't lose the
3 place of these claims or we'll find it if you do, but
4 turn, if you would, to JX 21.

5 A. Okay.

6 Q. And, again, this is an excerpt of a lengthy
7 document, I have here pages 86 through 92. Do you have
8 those pages?

9 A. Yes.

10 Q. And is this the NEC presentation that you were
11 asked to look at?

12 A. Yes.

13 Q. And in particular if you turn to page 91 of
14 Exhibit JX 21?

15 A. Okay.

16 Q. Were you asked to compare the four claims in
17 the '692 application with this chart?

18 A. Yes.

19 Q. Did you arrive at a conclusion as to whether
20 those four claims would, if you will, read on a device
21 that was manufactured in accordance with the chart on
22 page 91?

23 A. Yes, I did.

24 Q. How did you do that? How did you go about
25 doing that?

1 A. Well, I read the claims, understood the scope
2 of the claims and compared them to this drawing which
3 is shown on page 91.

4 Q. Okay. So let's go back and look if you
5 would -- let me ask you first. What was your
6 conclusion as to the four claims in the '692
7 application, 151, 512, 166 and 167, with respect to
8 whether or not they would read on a device that looked
9 like what is described on page 91 of JX 21?

10 A. They would not. Those would not read on the
11 device illustrated in page 91.

12 JUDGE MCGUIRE: Mr. Stone, let me interject for
13 a moment. You say you compared these to the standard
14 and such, are you relying on your experience as an
15 engineer to make that determination or did you, I guess
16 consult other individuals that would have a technical
17 understanding of these drawings? Because at this point
18 we're not just talking about pure patent issues, we're
19 talking about engineering issues.

20 THE WITNESS: Right.

21 JUDGE MCGUIRE: I'm just curious how you came
22 to your conclusions.

23 THE WITNESS: Right. A good deal of my
24 practice is not only to understand the patents, but the
25 drawings, the specifications of how the devices are

1 structured and work. This is a big part of the
2 practice so I bring a tremendous amount of knowledge of
3 knowing how to read drawings at a certain level and
4 this is -- I bring that knowledge.

5 Also in this particular case, if I remember
6 correctly, I think Professor Jacob commented to some
7 extent on this page, I believe he did, but basically in
8 addition to being a lawyer --

9 JUDGE McGUIRE: I understand that in any patent
10 prosecution the engineering aspect is a key component
11 and I know your average patent attorney is also an
12 engineer, but I was just curious when you said you had
13 read the two and then came up with these conclusions.
14 I'm assuming that you relied on your own expertise as
15 an engineer to do that? I just want to be clear.

16 THE WITNESS: I'm not an engineer, but all of
17 my engineering type experience through --

18 JUDGE McGUIRE: I thought you said earlier that
19 you were an engineer by training.

20 THE WITNESS: Yes, sure. That's true. My
21 undergraduate degree, sure.

22 JUDGE McGUIRE: But -- and you went from there
23 to law school and ever since you've been an attorney.

24 THE WITNESS: That's right.

25 JUDGE McGUIRE: I assume you have some

1 experience in both training and on the job as a patent
2 attorney in the field of engineering.

3 THE WITNESS: Yes.

4 JUDGE McGUIRE: Is it on that basis you were
5 able to compare these two, the claim versus the
6 standard?

7 THE WITNESS: Yes.

8 JUDGE McGUIRE: All right, Mr. Stone.

9 MR. STONE: Thank you, Your Honor.

10 BY MR. STONE:

11 Q. Let me ask a couple follow-up questions to make
12 sure what you can and can't do with your expertise.

13 Look at the chart, again, the NEC presentation
14 JX 21 on page 91. Would you be able to build a device
15 that had the feature shown on this chart where it says
16 with PLL, would you be able to build it?

17 A. No.

18 Q. Do you need to know how to build it for
19 purposes of the opinions you expressed in this case?

20 A. No.

21 Q. What do you need to know about that chart for
22 your opinions?

23 A. To have a level of understanding, which I have,
24 of what these components are, how they're
25 interconnected and how basically -- this is really in a

1 sense, this one is like many areas of circuitry that
2 I've dealt with over the years. Either other patents,
3 the AMD work at that level is very typical of the level
4 with which I deal with and have to understand and
5 explain to clients and adversaries.

6 Q. Okay. Let me direct you then. I'm going to
7 ask you about each of the claims you were asked to look
8 at. Look, if you would, at the amended Claim 151 which
9 is on CX 1502 at page 233 continuing over to 234.

10 A. Yes.

11 Q. Parts A, B and C. Am I referring to the right
12 portions?

13 A. Yes.

14 Q. Okay. Did you determine as to whether or not
15 that claim would be infringed by a product which had a
16 with PPL feature like we see on page 91 of JX 21?

17 A. Yes.

18 Q. What did you conclude?

19 A. It would not.

20 Q. Could you describe for us the bases of that
21 conclusion?

22 A. The claim language itself. There are some
23 specific limitations that are called for in the claim
24 that are not found in the drawing that's shown on page
25 91.

1 Q. What features are not shown?

2 A. Two particularly that are called for in the
3 claim. One is that the things are happening, I'll
4 quote the language generating -- clause B of Claim 151
5 the clock signal, receiving control -- clock signal
6 receiving circuit generating a local clock signal for
7 controlling and here's the key part, memory operations
8 with respect to the memory array.

9 So there is -- something is being done with
10 respect -- specified with respect to the memory array
11 and then the second feature and then I'll explain on
12 the NEC drawing.

13 The second feature is in clause C of the claim
14 it specifies that there is a phase locked loop that is
15 coupled to the clock signal receiving circuit and the
16 memory array. So it's coupled to the memory array,
17 that particular component.

18 If you go to the NEC drawing, those two
19 features are not there. In the NEC drawing things are
20 being done not with respect to the memory array, but
21 with respect to the output buffer and that's that
22 little triangular.

23 MR. STONE: Let's put that up on the screen, JX
24 21 at page 91. Just bring up the right side of that,
25 where it says with PPL. That should make it as large

1 as we can make it that way.

2 BY MR. STONE:

3 Q. You're referring to this chart then?

4 A. Yes.

5 Q. I'm sorry to interrupt you.

6 A. The first thing you can see the memory array
7 described there is there by itself. Where all the
8 activity is going on with respect to this drawing is
9 with respect to this output buffer shown by that
10 triangle to the right of the memory array. And coming
11 into that is what you see right above that is a signal
12 called ICLK, which stands for I clock or internal
13 clock. In this particular device, things are being
14 done, clocking is being done with respect to the output
15 buffer not the memory array called for in the claim,
16 specifically called for in the claim. Also the clock
17 you see there is not coupled to the memory array, it is
18 coupled to the output buffer. It is a different
19 structure than what is being called for in the claim.

20 Q. Let me ask you to look at the original
21 Claim 151 before the amendment. Go back to the first
22 tab, CX 1502, and turn, if you would, to page 208?

23 A. Yes.

24 Q. If we could bring up claims 151 and 152 on that
25 page.

1 Did you also look at Claim 151 in the version
2 set forth originally before the amendment?

3 A. Yes.

4 Q. Did you reach the same conclusion there?

5 A. Yes.

6 Q. Can you explain to us why you concluded that
7 the original Claim 151 wouldn't be infringed by what's
8 described on page 91 of JX 21?

9 A. Fundamentally the claimed amendments that were
10 made to Claim 151 that I just talked about, the amended
11 claim didn't change the areas that I was looking at
12 that are in the claim to show noninfringement. That
13 doesn't read -- the claim does not read on the NEC
14 device. It still has the, original claim still has the
15 feature of performing memory operations with respect to
16 the memory array and it also has the feature that this
17 device called the phase locked loop is coupled to the
18 memory array. It doesn't say it's coupled to the
19 output buffer.

20 Q. While we're on that page, look at Claim 152.

21 Did you arrive at the same opinion with respect
22 to Claim 152?

23 A. Yes.

24 Q. And why?

25 A. It's a dependent claim.

1 Q. What does that mean?

2 A. A dependent claim is a claim that depends from
3 a previous claim. In this instance, it's a -- it
4 depends from an independent Claim 151 and if it's a
5 proper dependent claim, as this one is, it either adds
6 a further element or further defines a feature that's
7 in the independent claim from which it depends. In
8 either event, it includes a -- a dependent claim
9 includes the subject matter from which it depends. So
10 if the subject matter from which it depends doesn't
11 infringe or doesn't read on a device, then the
12 dependent claim which has that as well doesn't read on
13 that device.

14 Q. Okay. Is it a simple way for others of us to
15 think about it, that a dependent claim is going to be a
16 subset of an independent claim? You don't like that?

17 A. Subset -- I'm not sure I'm comfortable with
18 that word. It further defines. It has all the
19 features of the claim from which it depends.

20 Q. What about limitations? Does it have all the
21 limitations?

22 A. Yes. When I say features, limitations. Some
23 people call it elements. Whatever was in Claim 151 in
24 this example is in Claim 152 plus what's in 152.

25 Q. Okay. So then go back to the amendments, which

1 is the second tab labeled CX 1502, if you would, and
2 let me ask you to turn to page 234 and look at
3 Claim 166.

4 A. Okay.

5 Q. Do you have Claim 166 in front of you?

6 A. Yes.

7 Q. Okay. Can you explain to us the basis for your
8 conclusion that Claim 166 would not be infringed by a
9 device that was as depicted on page 91 of JX 21?

10 A. Yes. Relative to the issues we're talking
11 about, Claim 166 has the same limitations, same
12 features, same elements, however you want to call it,
13 that Claim 151 has.

14 Q. Okay. If you turn to the next page, CX 1502,
15 at page 235 and look at Claim 167, can you tell us the
16 basis for your opinion there?

17 A. It's a dependent claim. It depends from 166 as
18 a depending claim would read on.

19 Q. Okay. Thank you.

20 Could we go back to the original chart that
21 summarized your opinions, which is DX 262, I believe,
22 and bring that up. And let's go to opinion number 5,
23 if we could.

24 Have you looked at the Rambus patents that are
25 outside the '898 family that we've asked you to look

1 at?

2 A. Yes.

3 Q. Did we ask you to consider whether the claims
4 of those patents would be infringed by products that
5 were built to the JEDEC DDR SDRAM standard?

6 A. Several of those claims, yes.

7 Q. Did you do what I would refer to, but probably
8 I'm using language a little loosely, did you do what I
9 would refer to as a full blown infringement analysis?

10 A. No.

11 Q. What was the level at which you did your
12 analysis, if you could describe that?

13 A. Well, for one of the patents, it's hard for
14 me -- which is the '405 patent, I looked at the Claim 1
15 and the other -- took a look at the other claims in
16 that patent. I reviewed the patent itself. I had
17 available and reviewed the substantive portions that
18 was given to me, the substantive portions of the patent
19 prosecution history of the '405 patent which went
20 back -- it itself has a chain of applications from
21 which it issued and I had the substantive portions of
22 those prosecutions -- by substantive, I mean I don't
23 believe I was given things like request for extension
24 of time or some other formal matters, signed forms that
25 are filed, things like that. Substantive being the

1 amendments and rejections made by the -- amendments
2 made by the applicant, objections made by the patent
3 office. I had those and looked at those for the '405
4 patent.

5 Q. Let me ask you about the '405 patent. Let me
6 turn you to that in a moment.

7 If we could turn in your binder the next to the
8 last document, RX 2122-15. The numbering system got a
9 little carried away here, RX 2122-15?

10 A. Yes.

11 Q. Directing you first to page 1 of the 46 pages
12 that make up that exhibit. Is that the cover page of
13 what you referred to as the '405 patent?

14 A. Yes.

15 Q. When did that patent issue?

16 A. October 22nd, 2002.

17 Q. And when was the particular application filed
18 that this patent issued from?

19 A. October 19, 1995.

20 Q. That would have been an original application?

21 A. Yes.

22 Q. And then can you tell from what's on the first
23 page of '405, something of the history of this
24 application?

25 A. Yes.

1 Q. What can you tell us about the history of this
2 application?

3 A. On the first page is what we call a title page.
4 There's a field that's under the heading related US
5 application data and in the field 60 there's a whole
6 listing of the chain of applications from which this
7 '405 patentee eventually issued.

8 Q. You found the October 19, 1995 date at the
9 bottom of that discussion?

10 A. Yes.

11 Q. Is that the date on which the original
12 application was filed from which this issued?

13 A. Pursuant to this data, yes.

14 Q. If we could go back to the full page of
15 Exhibit 2122-15 and bring up a little ways up above
16 that where it says, "filed," and it has a May date.

17 What's the May 29, 2001 date referred to there?

18 A. That's the date that the particular -- this --
19 the particular application from which -- the immediate
20 application from which the '405 patent issued was
21 actually filed in the patent office. That was filed on
22 May 29th, 2001. That was the actual filing date. Its
23 legal filing date goes back to October 15th, 1995.

24 Q. Turn, if you would, while you're in this
25 exhibit, which is the patent, to page 45.

1 A. Yes.

2 Q. Does this have the text of Claim 1 on it in
3 column 41 beginning at line 2 and continuing through
4 about line 21?

5 A. Yes.

6 Q. Okay. Did you analyze this claim and compare
7 it to the products built to the JEDEC DDR SDRAM
8 standard?

9 A. Yes.

10 MR. STONE: Do you want to bring that claim up
11 for me, if you would.

12 BY MR. STONE:

13 Q. What conclusion did you reach with respect to
14 this claim?

15 A. That this claim would read on, it would be
16 covered by the DDR standard.

17 Q. And what features in this claim do you think
18 read on the DDR SDRAM standard?

19 A. Well, the particular features would be the --
20 would be the features that are called for on precharge
21 and the feature relating to using a strobe signal to
22 process data.

23 MR. STONE: Let me bring up DX 269, the last of
24 the demonstratives, if I can.

25 BY MR. STONE:

1 Q. Does DX 269 summarize your conclusions with
2 respect to the '405 patent?

3 A. Yes.

4 Q. And the second bullet point there says, "the
5 claim that eventually issued as Claim 1 was not filed
6 until May 29, 2001;" do you see that?

7 A. Yes.

8 Q. Is that something you were able to determine as
9 part of your work?

10 A. Yes.

11 Q. How did you determine that?

12 A. Through the prosecution history of the '405
13 patent.

14 Q. Let me also ask you to look at one more
15 document, which is the last one in your binder, which
16 is a copy of US patent number 6,591,353?

17 A. Okay.

18 Q. Can you tell us, if you would, when this patent
19 issued?

20 A. Just last week, July 8th, 2003.

21 Q. Did you, at our request, after this patent
22 issued, review it?

23 A. I looked at Claim 1 and generally reviewed it,
24 yes.

25 Q. Okay. If you turn to?

1 MS. MICHEL: Your Honor, I'll object to this
2 testimony. In that we obviously have had no notice
3 there would be testimony regarding the patent. I
4 understand that it did not issue until just fairly
5 recently on July 8th. However, I would point out
6 typically patent applicants know a patent has been
7 allowed by the patent office a full six months before
8 the patent issues, so I believe Rambus would have had
9 notice prior to July 8th that they had this claim.

10 JUDGE MCGUIRE: Mr. Stone, I'll let you
11 respond, but I can appreciate her point.

12 MR. STONE: Thank you, Your Honor. One of the
13 issues in this case is the VISS issue, whether Rambus
14 has other patents that would read on that fall outside
15 the '898. This is a patent that issued last week
16 consistent with our practice. We would not have
17 asserted or asked a witness to look at a patent before
18 it issued. It might have issued after this proceeding
19 concluded.

20 JUDGE MCGUIRE: Problem is opposing counsel
21 hasn't had a chance to look at it so they're not
22 prepared for his testimony.

23 MR. STONE: I understand they didn't have a lot
24 of time, but neither did the witness.

25 JUDGE MCGUIRE: It would have been helpful if

1 you offered Complaint Counsel a copy at the same time
2 it issued. On that basis, I'll uphold the objection.

3 MR. STONE: Thank you, Your Honor. I have at
4 this time no further questions for the witness.

5 JUDGE McGUIRE: Very good. It is 12:35. I
6 suggest we take a break for lunch and return here at 10
7 minutes until 2:00.

8 MR. STONE: There was that open issue on the
9 one presentation the Samsung presentation. Could I
10 reserve the right to clarify that after the lunch break
11 if I think I need to, in light of the stipulation.

12 JUDGE McGUIRE: That will be fine. We'll
13 convene at 10 minutes until 2:00.

14 (Whereupon, at 12:32 p.m., a lunch recess was
15 taken.)

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1 AFTERNOON SESSION

2 (1:52 p.m.)

3 JUDGE McGUIRE: This hearing is now in order.

4 Mr. Stone, did you complete your direct?

5 MR. STONE: I did, Your Honor.

6 JUDGE McGUIRE: Okay. At this time we'll
7 entertain the cross examination of the witness.

8 Would you have a seat again on the stand.

9

10 CROSS EXAMINATION

11

12 BY MS. MICHEL:

13 Q. Okay. Good afternoon. I'm going to try as
14 much as possible to use the two binders for the
15 exhibits, since we have those handy.

16 A. Okay.

17 Q. If I could first ask you please to turn to
18 Exhibit 1454, which is the PCT application.

19 A. Is that in binder 1?

20 Q. That is in binder number 1, yes.

21 A. Yes.

22 Q. All right. Now, the cover page indicates that
23 the PCT application was published on approximately
24 October 31, 1991; is that right?

25 A. Yes.

1 Q. The PCT application has a legal effective date
2 of April 18, 1990?

3 A. Yes.

4 Q. And that's the date of the filing of the US
5 '898 application; is that right?

6 A. Yes.

7 Q. So a printed publication published after April
8 18, 1990, could not be prior art to this PCT
9 application; could it?

10 MR. STONE: Objection, Your Honor. That calls
11 for a legal conclusion that is beyond the scope on
12 which this witness has been asked to opine, and is a
13 matter of law, not a practice and procedure.

14 JUDGE MCGUIRE: Go ahead.

15 MS. MICHEL: Your Honor, Mr. Fliesler did offer
16 testimony as to the effect of certain disclosures and
17 what effect those disclosures might have on the
18 patentability of foreign patent applications, and I'm
19 simply exploring his testimony there.

20 JUDGE MCGUIRE: I'll entertain the question.

21 BY MS. MICHEL:

22 Q. I'll repeat the question.

23 A printed publication published after April 18,
24 1990, would not be prior art to this PCT application;
25 would it?

1 A. Well, I believe not, but the way you're asking
2 the question, some of that depends on the
3 interpretation of foreign patent law, what they would
4 do. In the US, no.

5 Q. If Rambus had given a public description of the
6 '898 application after April 18, 1990, that disclosure
7 could not have affected the patentability of any
8 foreign rights arising -- foreign patents arising out
9 of this PCT application; correct?

10 A. That isn't necessarily true. There are some
11 issues about -- it isn't necessarily true.

12 MS. MICHEL: Your Honor, if I may approach I
13 would like to hand Mr. Fliesler his deposition.

14 JUDGE MCGUIRE: Go ahead.

15 MS. MICHEL: Your Honor, may I approach?

16 JUDGE MCGUIRE: Yes.

17 BY MS. MICHEL:

18 Q. Mr. Fliesler, if I could direct you to page 101
19 of your deposition, and specifically at line 18. And
20 at line 18 I asked you:

21 "QUESTION: If Rambus had made any disclosures
22 concerning its US application, the '898 application
23 after April 18th, 1990, could that disclosure have
24 affected the patentability of any foreign application
25 that might come out of the PCT application?" And your

1 answer was.

2 "ANSWER: Yeah, I mean I don't believe so."

3 Is that still correct today?

4 A. Can we just focus on this question? The answer
5 to that question under the deposition is yes. The
6 answer is there, yes. The way I answered is there.

7 Q. You also stated, "I don't believe so"?

8 A. That's correct.

9 Q. And then you say --

10 A. I said more.

11 JUDGE McGUIRE: Leave that up to your attorney
12 if he wants to read a counter-excerpt. At this point
13 we'll entertain the question.

14 MR. STONE: Your Honor, just for context, we
15 can read the rest of the answer which is, "I think
16 there may be. It was under the PCT. No."

17 Thank you.

18 JUDGE McGUIRE: Noted.

19 BY MS. MICHEL:

20 Q. If Rambus had stood up in a JEDEC meeting in
21 1993 and said, I think I have a patent application that
22 can support claims covering programmable CAS latency,
23 that disclosure could not have acted as prior art to
24 this PCT application; could it?

25 A. The way you're referencing, it couldn't with

1 respect to the US -- the way it's interpreted under US
2 law.

3 To the extent it's a PCT application it
4 eventually finds its way in foreign jurisdiction.
5 There may be nuances in foreign law where that may have
6 an impact.

7 Q. Is your answer then that you don't know whether
8 or not the disclosure made by Rambus in 1993 concerning
9 what claims based on the '898 application would affect
10 or act as prior art to the PCT application?

11 A. Well, I just need to know in what jurisdiction.
12 With respect to the US I believe that's true. I
13 believe that's generally true in each foreign country,
14 but you're talking about hundreds -- at least 15, 20
15 relevant foreign countries where there might be
16 slightly different laws.

17 Q. Do you know the answer with regard to countries
18 which allow national stage application based on the PCT
19 application?

20 A. No, I don't. If you asked me that we would get
21 the opinion of counsel in foreign countries that might
22 be affected by that.

23 Q. If I could direct you to the cover page,
24 please, of this PCT application.

25 You'll notice there's a line with the number

1 30, and it says "priority date," and directly
2 underneath that, "18 April 1990;" do you see that?

3 A. Yes.

4 Q. What is your understanding of the significance
5 of the term "priority date" there?

6 A. That the effective or the legal date and
7 effective filing date or legal date of the PCT
8 application goes back to the actual filing date of the
9 US -- in this instance the US application 510,898.

10 Q. What is your understanding of the term,
11 priority date?

12 A. Fundamentally it has a legal date that is prior
13 to the actual application filing date that that
14 particular application was filed in a given patent
15 office.

16 So you see -- you want to continue right above
17 30 there's the international filing date on field 22,
18 there's an international filing date which is the
19 actual filing date of April 16, 1991, but right beneath
20 that is the priority date, the legal date, which is
21 April 18, 1990.

22 Q. All right. Now, is it true a printed
23 publication published after April 18, 1990 would not be
24 prior art to this PCT application?

25 A. In the US.

1 Q. Okay. If I can direct your attention, please,
2 to your deposition at page 101. And at this point I
3 would like to ask you to look at the discussion from
4 lines 6 through 17. And for context you may need to
5 look at the lines above that that demonstrate that we
6 were discussing the April 18th, 1990 priority date
7 listed on the PCT applications. And I asked you at
8 line 6:

9 "QUESTION: What is the effect of that legal
10 effective date, meaning April 18th, 1990, with regard
11 to prior art?" And you stated:

12 "ANSWER: Well, one thing is that if there was
13 a printed publication that was published for the first
14 time between the filing date of the proprietary US
15 application and the filing date of the international
16 application it would not be prior art, because the
17 international application, while that publication was
18 prior to the physical date actual date of the April 16,
19 1991, the legal date antedates that publication date."

20 Mr. Fliesler, if Rambus had announced any
21 intention to file continuations -- continuation
22 applications based on the '898 application after April
23 1990, that announcement could not have affected the
24 patentability of the PCT applications or any foreign
25 patents arising out of the PCT application; correct?

1 A. It wouldn't in the US, under the US system. It
2 gets a little complicated with respect the claims in
3 foreign countries, exactly what you're claiming. There
4 is some scenarios there where you just have to be
5 careful.

6 Q. So it's your testimony then that a public
7 statement made after April 18th, 1990, concerning an
8 intention to file a patent application based on the
9 '898 application, could have served as prior art to the
10 PCT application; is that right?

11 A. You're asking a couple different questions
12 here. I just want to understand.

13 Prior art with respect to the US application?

14 Q. I'm asking whether a public statement -- a
15 public statement made after April 18th, 1990,
16 concerning the '898 application could have any effect
17 as prior art to the PCT application, which is CX 1454.

18 A. No.

19 Q. Let's move back to the US law.

20 If a Rambus representative had stood up in a
21 JEDEC meeting in 1993 and said, I think we have a
22 patent application that can support claims covering
23 programmable CAS latency, that disclosure could not
24 have acted as prior art to the '898 application under
25 US law; correct?

1 A. That's correct.

2 Q. And if a Rambus representative had stood up in
3 1993 and said, we intend to file a continuation
4 application based on our '898 patent application that
5 might contain claims covering programmable CAS latency,
6 that disclosure could also not have acted as prior art
7 to the '898 application under US law?

8 JUDGE MCGUIRE: Is that a question?

9 MS. MICHEL: Correct, yes.

10 THE WITNESS: The statement itself, independent
11 of dates, doesn't have the content to constitute prior
12 art, it's just a statement. But it's a statement made
13 after the filing date, so it shouldn't have an impact
14 as prior art on the original application date. But the
15 way you're phrasing that statement it's not prior art.
16 It's not that category.

17 BY MS. MICHEL:

18 Q. Now, I believe you gave some testimony with
19 regard to first to file countries for foreign patent
20 applications, and I would like to ask if an inventor
21 already has a US application on file and a PCT
22 application based on that US application on file, and
23 he discloses his intent to file a continuation
24 application based on the US application, someone
25 hearing that information could not go to a first to

1 file country and file a patent application describing
2 what he just heard in that disclosure and claim to be
3 the first to file; correct?

4 A. No, not necessarily correct, no.

5 Q. So if a Rambus representative had stood up in a
6 JEDEC meeting in 1993 and said, we intend to file a
7 continuation application having claims related to CAS
8 latency, based on our 1990 application, a listener
9 could not have taken that information and filed in a
10 foreign first to file country in 1993 and claimed to be
11 the first to file with regards to that 1993
12 application, as opposed to the earlier PCT application
13 already on file?

14 JUDGE MCGUIRE: Correct?

15 MS. MICHEL: Correct.

16 JUDGE MCGUIRE: That's the end of the question.

17 BY MS. MICHEL:

18 Q. Isn't that right?

19 A. No, not with all the information you put in
20 that question, no.

21 Q. Now, you gave testimony that the
22 confidentiality of patent applications can be important
23 for a number of reasons; is that right?

24 A. Yes.

25 Q. But you don't know whether any of those reasons

1 were a factor in Rambus's decision not to disclose
2 patent applications to JEDEC; correct?

3 A. That's correct.

4 Q. And you don't know whether Rambus was advised
5 not to disclose any patent applications to JEDEC for
6 any of the confidentiality reasons that you testified
7 to; is that right?

8 A. That's correct.

9 Q. And you're not offering any opinion on whether
10 any of the confidentiality concerns that you testified
11 to affect what the JEDEC disclosure policy is; is that
12 right?

13 A. Yes, that's correct.

14 Q. And you have not testified that any of the
15 confidentiality concerns that you explained would
16 prevent a standard setting organization from requiring
17 its members to disclose patent applications; is that
18 right?

19 A. That's correct.

20 Q. Now, one reason I believe you testified that a
21 patent applicant might wish to keep a patent
22 application confidential is that he's entitled to trade
23 secret protection for that patent application; is that
24 right?

25 A. That's correct.

1 Q. Once a PCT application disclosing the original
2 or specification in the original claims has been
3 published, that confidentiality concern no longer
4 applies, at least to the content of the specification
5 and original claims; correct?

6 A. That's correct.

7 Q. So the only trade secret protection that a
8 patent applicant could claim -- I hate to use the word
9 claim, but could have at that point, would be with
10 regard to pending claims in the US Patent Office;
11 correct, or foreign patent offices?

12 A. If I understand the question, no, it's not just
13 that, there are more things.

14 Q. Okay. The trade secret protection would attach
15 only to the fact there were further applications --
16 continuation applications perhaps on file, the content
17 of the claims in those applications, and the examiner's
18 responses to those claims, that sort of information in
19 the prosecution history; is that right?

20 A. That and arguments and declarations that are
21 filed by business people and technical people. A lot
22 of information.

23 Q. And patent claims in pending applications can
24 provide important business and technical information to
25 competitors even after the specification has been

1 published; is that right?

2 A. I'm sorry, say that again.

3 Q. Let me try again.

4 Claims in pending patent applications can
5 provide business and technical information to
6 competitors even after the specification for that
7 pending application has been published perhaps through
8 the PCT process; is that right?

9 A. Yes.

10 Q. So you're saying that a patent applicant has
11 confidentiality concerns concerning the claims of
12 pending applications even after a specification has
13 been published through the PCT process; is that right?

14 A. Yes.

15 Q. And you often counsel clients in license
16 negotiations to reveal the specification of an
17 application, but not the claims of the application; is
18 that right?

19 A. Well -- counseling a client -- the starting
20 point is not to disclose the entire application, and
21 then you go from there.

22 Q. So you have counselled clients that they
23 should, when in a position to make a disclosure
24 concerning their application, to disclose the
25 specification, but not the claims; is that right?

1 A. That's a part of the -- in the course of the
2 negotiations there may come a time when you counsel
3 that, and also normally under -- only under a
4 nondisclosure agreement, so the whole process is being
5 done under a confidentiality relationship between the
6 parties.

7 Q. And one reason for giving that counsel is that
8 the content of the claims can provide information to a
9 competitor even beyond that provided by the
10 specification; is that correct?

11 A. Yes.

12 Q. As you said, claims are like the family jewels?

13 A. Yes. That's the only -- as we have in our
14 system that is the legal mechanism of enforcing your
15 rights is by looking at those claims, yes.

16 Q. That's true even when the specification has
17 already been published; correct?

18 You would call the claims of a pending patent
19 application the family jewels, even after the
20 specification of that application has been published
21 perhaps through the PCT process; is that right?

22 A. Yes.

23 Q. In fact, there can be a big gap between on the
24 one hand in the patent applicant's mind what he intends
25 to claim and on the other hand all the things that the

1 patent applicant hypothetically could claim, based on
2 the specification; is that right?

3 A. I'm sorry. The gap is between what?

4 MS. MICHEL: Could you read back the question,
5 please?

6 (The record was read as requested, as follows:)

7 "Q. In fact, there can be a big gap between on
8 the one hand in the patent applicant's mind what he
9 intends to claim and on the other hand all the things
10 that the patent applicant hypothetically could claim,
11 based on the specification; is that right?"

12 THE WITNESS: No, that's not right.

13 BY MS. MICHEL:

14 Q. If I could direct you to your deposition,
15 please, at page 115?

16 A. 115?

17 Q. Yes. Specifically the question starts at line
18 13. And if it's helpful to have your report, let me
19 know, and I'll supply that to you, because we were
20 talking about the report at this point.

21 The question is in the next sentence you
22 mention a broader universe of what one hypothetically
23 could claim from the specification, and I asked you to
24 please explain what you mean by that phrase, "the
25 broader universe," and your answer was:

1 "ANSWER: Well, when you are -- when you are at
2 that level where okay, you know, at the second meeting
3 with the potential licensee, you take a little risk
4 because you want to disclose a deal and show them the
5 specification, so from the specification you get some
6 idea. I mean it's not just DRAMs, it's things about
7 the DRAMs and, but that doesn't necessarily give you --
8 that's enough to entice somebody to move further in
9 enticing into a deal. So the recipient of that
10 disclosure, that specification would know
11 hypothetically, based on the disclosure, all the things
12 that one possibly could claim, but it wouldn't know
13 exactly what's in the mind of the licensor, exactly
14 what they are claiming. There is a big gap between the
15 two."

16 A. Yes, but in context, sure. The word's there,
17 but you're glossing over what I said on line 6, is
18 based on the disclosure. The gap that I was talking
19 about, everything is based on the disclosure. It's not
20 a gap that's this -- that's open ended. There's a gap
21 between the specification and what you can claim, but
22 there are some limitations, one of which we talked
23 about the written description requirement. You can't
24 claim the world.

25 So in the context of the question that you

1 asked me there and what you're asking me here, and
2 focusing on a gap, the specification does provide some
3 limitations on the expectations of what one could
4 claim.

5 JUDGE McGUIRE: Mr. Stone?

6 MR. STONE: Your Honor, I just wanted -- I
7 don't think Ms. Michel will disagree with me, I think
8 she misread a couple -- the initial introductory
9 question she read beginning at line 13 on line 15, it
10 says one "hypothetically could attempt to claim," and
11 she just omitted "could attempt."

12 And then in the answer she read on page 116 at
13 line 4, I believe she said in "enticing into a deal"
14 and I think the correct word is "entering into a deal."
15 That's all.

16 MS. MICHEL: Thank you.

17 BY MS. MICHEL:

18 Q. Let's look at page 19 of the report, please.

19 Your Honor, may I approach?

20 JUDGE McGUIRE: Yes.

21 BY MS. MICHEL:

22 Q. And we were talking there about the paragraph
23 that actually begins on page 18, which is paragraph 42,
24 according to the text of the deposition that I just
25 read, but the substance I would like -- the sentence I

1 would like to ask you about now is actually the last
2 sentence on page 19. That sentence reads:

3 "For example, if a competitor knows what one is
4 actually trying to claim, as opposed to the broader
5 universe of what one hypothetically could attempt to
6 claim from the specification that competitor could gain
7 insight into sensitive business and/or technical
8 strategies."

9 So the universe of what one hypothetically
10 could claim would be the universe of claims supported
11 by the specification; is that what you meant?

12 A. Well, sure, but the emphasis is not on the
13 universe, but what's disclosed in the specification.
14 That's the ground from which you work, yes.

15 Q. Right. The -- we're not talking about the
16 universe of all possible claims, we're talking about
17 what you've called here the broader universe of what
18 one hypothetically could attempt to claim, and that
19 could mean claims supported by the specification;
20 correct?

21 A. Yes, and in the confines of the, for example,
22 the written description requirement that we were
23 talking about, sure.

24 Q. Now, the point you're making here is that even
25 if a competitor knows that broader universe of claims

1 that the patent applicant hypothetically could claim,
2 it is still valuable information to know what the
3 competitor is claim -- excuse me -- it is still
4 valuable information to know what the patent applicant
5 is claiming; correct?

6 A. Correct.

7 Q. And that's because patent applicants often do
8 not claim everything they could in that broader
9 universe of what one hypothetically could claim;
10 correct?

11 A. No.

12 Q. There's in fact a lot of reasons why a patent
13 applicant might not claim that whole broader universe
14 of what one hypothetically could claim; correct?

15 A. Well, yes, but that's not the answer to the
16 previous question, but, yes, that's true.

17 Q. For instance?

18 JUDGE MCGUIRE: Why is that not an answer to
19 the prior question as well?

20 THE WITNESS: The latter question you can
21 abandon subject matter. You can actually abandon
22 subject matter, and so the competitor wants to know
23 that.

24 The prior question, as I understood it -- well,
25 a competitor would just want to know all aspects of

1 what the applicant is actually claiming, and in the
2 scope of that claim what it means, the interpretation
3 that's given to it, wants to know all of that. That is
4 all part of the whole story of competitors --
5 everybody, for that matter, but the competitor's
6 understanding what this claim means that this applicant
7 is going after, that may impact this competitor's
8 business.

9 BY MS. MICHEL:

10 Q. An engineer or a patent lawyer could not have
11 known for certain what Rambus would claim from reading
12 the '898 specification; could they?

13 A. Not certain. Correct, yes.

14 Q. If it were possible to know for certain what a
15 patent applicant would actually claim, based on a given
16 specification, just from knowing that specification,
17 the confidentiality concerns attached to the claims
18 which you discussed would not be nearly so great?

19 A. Well, the way you're putting it, not nearly as
20 great, but they're still there, because now it's not
21 just claim itself, it's how you're interpreting it.

22 There are declarations that are filed that the
23 applicants -- declarations filed from engineers, you
24 get declarations filed by the CEOs, from the patent
25 office explaining things. It is the whole process of

1 understanding the claim.

2 Q. You gave some description regarding the rent
3 description requirement. The rent description
4 requirement does not require that a person of ordinary
5 skill in the art be able to predict the claims that
6 would potentially come out of a patent specification;
7 is that right?

8 A. No, it does not require that, right.

9 Q. Okay. Let's talk about the specification
10 itself a little bit.

11 Is it your position that as of April 1990
12 Rambus had a patent application that indicated to
13 engineers and patent lawyers that it had invented
14 programmable CAS latency as it's used in SDRAM?

15 A. It's the date -- the way you're putting that
16 question.

17 You mean as of 1990, the filing date? I don't
18 understand. What time period are you talking about?

19 Q. I'll rephrase and leave out the date.

20 A. Okay.

21 Q. Is it your position that the '898 application
22 indicates to engineers and patent lawyers that Rambus
23 had invented programmable CAS latency as it's used in
24 SDRAM?

25 A. To the extent -- the words are different.

1 You're putting in words. The CAS latency in that
2 sense, that term does not exist in the patent -- in the
3 disclosure. The words don't exist, so the way you're
4 asking that question, CAS latency, that doesn't exist,
5 but the underlying features and functions that are
6 related to that are disclosed there.

7 Q. So let me see if I have this.

8 It's your testimony then that the '898 patent
9 application indicates to engineers and patent lawyers
10 that Rambus had invented, as of April 1990, the
11 function that CAS latency performs as it's performed in
12 an SDRAM?

13 A. Yes, with the proviso -- you say as it's
14 performed in an SDRAM. I want to know exactly what you
15 mean by that, "as it's performed." Yes. The answer is
16 yes.

17 Q. Okay. Well, I mean as CAS latency functions in
18 SDRAM according to the JEDEC standard. Does that
19 change your answer at all?

20 A. Not fundamentally, no.

21 Q. And then I take it it's your position that the
22 '898 application indicates to engineers and patent
23 lawyers that Rambus had invented programmable burst
24 length, as that function is used in SDRAM, described in
25 the JEDEC standard; is that right?

1 A. Yes.

2 Q. And it's your position also then that the '898
3 application indicates to engineers and patent lawyers
4 that Rambus had invented dual edge clocking and on-chip
5 DLL as those two features are present in the DDR SDRAM
6 standard described in the JEDEC standard?

7 A. Yes, but you're using terms. I mean oftentimes
8 you find -- what you're talking about, you find terms
9 that are used in a patent or an application that you
10 don't necessarily find in some other document, but they
11 mean basically the same thing.

12 Q. Now, you didn't discuss your understanding of
13 what the patent discloses with any technical experts;
14 did you?

15 A. That's correct.

16 Q. I would like to ask you to turn to, I believe
17 it's page 21 of CX 1451, and that is in the binder that
18 is front of you, binder 1. It's the first tab of
19 binder 1.

20 Now, at CX 1451-21 there is a heading near the
21 very bottom of the page, "Protocol and Bus Operation;"
22 do you see that?

23 A. I'm looking on page 21.

24 Q. That is page 21 of the exhibit number which is
25 actually page 19 of the document.

1 A. Yes.

2 Q. Okay. There's a heading there, and that
3 section entitled, "Protocol and Bus Operation" extends,
4 if I can get it -- extends to page 30 of the exhibit;
5 correct?

6 A. No.

7 Q. Okay. Where does it end?

8 A. Well, on page -- it's the exhibit page 26, but
9 the printed number would be number 24 on the bottom.
10 That page, it goes into high performance bus interface.

11 Q. Okay. All right. So the section entitled
12 "Protocol and Bus Operation" extends to the -- actually
13 I've noticed that the term, "high performance bus
14 interface," seems to be at the bottom of every page. I
15 wonder if that's some kind of footer?

16 A. Oh, you may be right about that. Okay.

17 Q. Okay. Assuming that that term, "high
18 performance bus interface," is some kind of a footer on
19 the application, am I correct that the section entitled
20 "Protocol and Bus Operation" extends to page 30 of the
21 exhibit?

22 A. Yes.

23 Q. Now, I believe that you pointed us to a
24 discussion beginning at about page 21 and, let's see, I
25 believe that was page 21 of the exhibit. It's

1 describing access time registers; is that right? No,
2 actually that's probably page 21 of the document, page
3 23 of the exhibit.

4 A. Yes.

5 Q. And this section that you directed us to in the
6 application discussing access time registers all falls
7 under this heading, "Protocol and Bus Operations;" is
8 that right?

9 A. Just so I understand the question, access time
10 registers is, I believe, is disclosed through various
11 portions of the specification, not just what you
12 mentioned here on these pages. But this morning I
13 don't quite remember. If I was referring to page 23 in
14 this section that's where access time registers is
15 disclosed, but it's disclosed throughout the whole
16 specification.

17 Q. Okay. But this morning I understand you
18 pointed to multiple sections as discussing access time
19 registers. One of those sections was this section
20 beginning at page 23 of the exhibit; is that right?

21 A. I believe so. Quite frankly, is this the page
22 we talked about this morning? Yes -- okay. If it was
23 23, yes.

24 Q. And this section that you pointed us to,
25 beginning on page 23, also occurs in the context of a

1 description of Figure 4 of the patent application;
2 isn't that right? And I believe if you look at the
3 paragraph beginning at the bottom of page 23 you'll see
4 it begins discussing Figure 4.

5 A. I just want to be clear. The paragraph you're
6 referring to up above, back on page 23, because you
7 always have to read things in context, and you have to
8 read the whole specification, but you don't -- I'll
9 answer your question as directly as I can.

10 Access time registers -- I'm back on page 23,
11 the paragraph you referred me to, fundamentally lines 8
12 to 20, in that paragraph is a basic general description
13 of access time registers.

14 And then as you read further you go to line 21
15 it says, "in a preferred implementation of this
16 invention in Figure 4."

17 Now, when you get to that portion you're
18 starting to look at Figure 4 for preferred
19 implementation around the feature that you were talking
20 to me about, but access time registers is disclosed
21 throughout the application outside the context of
22 Figure 4, as well.

23 Q. Okay. Let's back up for a minute.

24 I would like to back up to that heading,
25 "Protocol and Bus Operation," on page 21. And looking

1 at the description that begins at the bottom of page 21
2 and goes onto page 22, that discussion is talking about
3 a bus master that sends out a request packet; is that
4 right?

5 A. Just give me a second to read it.

6 Q. Okay. If it helps I can direct you to page 22,
7 lines 14 through 18.

8 A. 14 through 20 starts with talking about a
9 preferred implementation, and it goes on to initiate --
10 tells what a preferred implementation is, to initiate a
11 bus transfer, yes.

12 Q. The section then continues onto the paragraph
13 you directed our attention to on page 23, and then
14 begins with a description of Figure 4; correct?

15 A. It goes on -- well, I just want to make sure
16 we're talking about the same pages. I'm referring to
17 the exhibit number, so 22, it goes onto 23, and then at
18 the bottom of Exhibit 23, page 23 of the exhibit, it
19 starts to hone in on the preferred implementation and
20 looks at Figure 4. Is that answering your question?

21 Q. Yes, thank you.

22 Could we look at Figure 4, please. I believe
23 it's at CX 131 -- okay. It's page 131 of CX 1451. If
24 we could see that on the screen.

25 Now, Figure 4 of the patent application at page

1 131 shows a request packet that travels over nine bus
2 lines; is that right?

3 A. Figure 4?

4 Q. Yes.

5 A. It shows a packet. It shows cycles. I'm not
6 sure where you got the nine bus lines from that figure.

7 Q. The nine vertical lines across the top each
8 indicate a bus line; do they not? And you can also see
9 at the top of Figure 4 there is a statement, "bus data
10 07"?

11 A. Bus data 07. That's 8 lines. You don't get
12 that necessarily from the figure, you get it from the
13 figure and the context of the whole application.

14 Q. All right. So Figure 4, in the context of the
15 whole application, shows a packet traveling over nine
16 bus lines; is that right?

17 A. I see the eight. 07 from the figures is eight,
18 and then there is an address valid which -- I see. You
19 need to know. The address valid is shown on the left
20 side, and that basically represents another line, but
21 you don't get that directly from the figure in terms to
22 in connection with bus lines. You've got to go back
23 into the specification to understand that.

24 Q. All right. Each of the lines symbolized
25 through Figure 4 would control address or data

1 information; right? Let me ask that again.

2 Each line symbolized in Figure 4, each bus line
3 can carry either control, address, or data information;
4 is that right?

5 A. I'm not sure about data. What's shown in
6 Figure 4 is control and address. It is the bus lines
7 you're talking about, and we know from the
8 specification preferred embodiment that there's data on
9 those lines, but this packet is access type, which is
10 control type, address information, which is control --
11 basically -- it is address information, and then
12 there's BlockSize which is back into control
13 information.

14 So I see address and control. I don't
15 necessarily see data in this figure.

16 Q. If I could direct your attention, please, to
17 page 23 of the application and the bottom paragraph?

18 A. Page 23?

19 Q. In Exhibit 23 it will be document page 21, and
20 you can leave Figure 4 up on the screen, please.

21 A. Okay.

22 Q. In the very last paragraph it states, "a
23 preferred implementation of this invention shown in
24 Figure 4 request packet 22 contains 6 bites of data,
25 4.4 address bites, and 1.4 control bits. Each request

1 patent uses all nine bits of the multiplex data address
2 lines;" is that correct?

3 A. That's correct.

4 Q. That statement would indicate the bus lines are
5 multiplex to carry both data and address information;
6 right?

7 A. In the combination of the drawing and the
8 description, yes, there's an indication that it's a
9 multiplexed bus for data, address, and even control,
10 yes.

11 Q. Now, looking at Figure 4 again, the top line in
12 the packet indicates that the request packet carries
13 access type information; is that right?

14 A. Yes.

15 Q. And the access type information indicates the
16 timing of the response to the request packet; is that
17 right?

18 A. It would. You don't know from this figure, but
19 again you have to go back into the specification.

20 Q. If it helps let's turn back to page 25 of the
21 specification. And I'll direct you to lines 4 through
22 6 on page 25. Do you have that?

23 A. Page 25?

24 Q. Yes. That's page 23 of the document.

25 A. Okay.

1 Q. At line 4 it states, "access type 1:2
2 preferably indicates the timing of the response which
3 is stored in an access time register, access reg,
4 capital N."

5 A. What lines were you reading again?

6 Q. I apologize. Page 25 of the exhibit, lines 4
7 through 6.

8 A. Yes, that's what it says.

9 Q. If you'll turn to page 29 of the exhibit you'll
10 see a table there up at the top?

11 A. Yes.

12 Q. That table demonstrates how specifying
13 different access types in the request packet can result
14 in different access times; doesn't it?

15 A. I'm sorry. You asked me about the access types
16 or the access timing?

17 Q. Does the table on page 29 indicate that by
18 choosing different access types, different access times
19 are chosen?

20 A. I don't believe this particular table talks
21 about time. It talks about -- if you look at the left
22 column is access type, and that's the coding for it,
23 and the middle -- the middle is use. So it's use, page
24 mode, normal mode, and the right column is access time.
25 It doesn't have exactly the time. It says access time.

1 That's correct.

2 Q. So the access type can be changed with every
3 packet; is that right?

4 A. Yes.

5 Q. The Protocol and Bus Operation section that
6 we've been looking at only discusses a packetised
7 protocol; does it not?

8 A. I believe so.

9 Q. The Protocol and Bus Operation section we've
10 been discussing only discusses the use of access time
11 registers in a system having bus lines that are
12 multiplex to carry both address, control, and data
13 information; is that right?

14 A. I wouldn't say it just discloses that. They're
15 describing a preferred implementation, and within that
16 when you look at the words in the paragraphs there are
17 other concepts that are built in there. I wouldn't say
18 that, no. The course -- go ahead.

19 Q. The only implementation described in the
20 section, "Protocol and Bus Operation," is an
21 implementation in which all of the bus lines carry
22 address, data, and control information; correct?

23 A. Throughout the specification, I don't know if
24 it falls within this particular area you're referring
25 to me, but throughout the specification is definitely

1 disclosure in one sentence, one paragraph you can be
2 talking about multiplex bus and in the next paragraph
3 can be talking about a more general bus and still
4 carrying out concepts, so I would have to read all of
5 these pages to see if what you're suggesting that this
6 portion of the specification talks only about multiplex
7 bus, as opposed to other kinds of busses. I would have
8 to take a look at that, because I know it does that
9 throughout the entire application.

10 Q. Focusing now just on the section that you had
11 earlier directed us to, which is the section titled,
12 "Protocol and Bus Operations" section, that section
13 does not describe any use of access time registers
14 outside of a packetised system; is that right?

15 A. I believe that's true.

16 Q. All right. You also directed us to page 16 of
17 the application, so let's look at that now.

18 A. Page 16?

19 Q. Yes. That would be document page -- excuse me,
20 exhibit page 16. I believe you directed us to the two
21 paragraphs on that page as describing access time
22 registers; is that right?

23 A. I'm sorry, would you orient me again?

24 Q. Okay. I'm asking you to look at CX 1451-16,
25 which would be page 14 of the application.

1 A. Okay.

2 Q. Okay. Now, did you directed us earlier to
3 these paragraphs as describing access time registered?

4 A. Yes.

5 Q. Now, those two paragraphs occur in an
6 introductory section to the Detailed Description of the
7 Invention section; is that right? And if you turn back
8 to page 13 you'll see the Heading Detailed Description
9 of the Invention -- I'm sorry, just "Detailed
10 Description."

11 A. That's correct.

12 Q. And beginning three lines from the bottom in
13 that very first paragraph of the detailed description,
14 the application states: "The bus carries substantially
15 all address data and control information needed by the
16 devices for communication with other devices on the
17 bus;" is that right?

18 A. Again, where are you now?

19 Q. I'm on page 13 of the application, the last
20 three lines.

21 A. I'm sorry, page 13 of the application?

22 Q. That is exhibit page 13, which is page 11 of
23 the application.

24 A. Okay. Okay. Go ahead.

25 Q. Okay. Now, third line from the bottom, that

1 first paragraph in the Detailed Description section
2 states: "The bus carries substantially all address
3 data and control information needed by devices for
4 communication with other devices on the bus;" is that
5 right?

6 A. That's what it says, yes.

7 Q. And if you'll now turn back to page 16, which
8 is the paragraphs that you had directed us to, these
9 paragraphs occur in the same section as the sentence I
10 just read; is that correct?

11 A. In the Detailed Description, yes.

12 Q. Now, looking at the paragraph that you directed
13 us to, that same paragraph discusses device
14 identification registers; does it not? Perhaps I can
15 orient you to page 16 lines 3 to 14.

16 A. Yes.

17 Q. So the discussion of access time registers in
18 that paragraph only occurs along with the description
19 of device identification registers; correct?

20 A. In this paragraph?

21 Q. Yes.

22 A. I'm not sure what you mean by "only." There
23 are a lot of things described here, so I'm not sure
24 what you mean by "only."

25 Q. Well, the paragraph is talking about the

1 registers on the device; is that right?

2 A. That's one thing, yes.

3 Q. And those registers can be device
4 identification registers; correct?

5 A. It describes the set of internal registers as
6 including, yes, the device identification brand, device
7 ID register, yes.

8 Q. I would like to move on now to the BlockSize
9 discussion and, particularly, I believe you directed us
10 to exhibit page 29.

11 Was the -- was the section beginning at page 29
12 and continuing over to page 30 the section that you
13 directed us to supporting claims to programmable
14 BlockSize?

15 A. Yes.

16 Q. Now, this discussion also occurs within that
17 same section that we were talking about that's entitled
18 "Protocol and Bus Operations;" is that right?

19 A. Yes.

20 Q. And if we could -- if you would like to look at
21 Figure 4, Figure 4 indicates in the last line of the
22 packet that the packet will carry BlockSize
23 information; is that right?

24 A. That's correct.

25 Q. And the description of that BlockSize

1 information begins at the bottom of page 29; is that
2 right?

3 A. Well, the Figure 4, referencing the figure,
4 part of the description of that figure begins on page
5 29 at that section. There are other sections in the
6 specification that impact on Figure 4, but the answer
7 to that question, yes.

8 Q. The description of the BlockSize shown in
9 Figure 4, the description of just BlockSize, not other
10 features of Figure 4, begins on page 29; is that right?

11 A. It's the section that I referred you to this
12 morning. I'm not sure if it's the beginning, but
13 that's the section that definitely talks about
14 BlockSize, yes.

15 Q. All right. Now, the BlockSize can be changed
16 with every packet; is that right?

17 A. I believe so, yes.

18 Q. And as shown at the top -- there's a table at
19 the top of page 30. That table indicates an
20 implementation for different BlockSizes that are
21 available in the system; is that right?

22 A. It's the coding. I wouldn't call it an
23 implementation. The implementation is the structure
24 and function and generally how things work. This is a
25 coding for it.

1 Q. And that table indicates, that table on page 30
2 indicates that the bytes in the BlockSize can vary from
3 0 to 1024 bytes; is that right?

4 A. That table says that, yes.

5 Q. Now, JEDEC compliant SDRAM programs a
6 register -- programs a BlockSize once at the start-up
7 of the computer; is that right?

8 A. Say it again.

9 Q. A JEDEC compliant SDRAM programs BlockSize once
10 at the start-up of the computer. At boot-up; is that
11 right?

12 A. I believe so, yes.

13 Q. And a JEDEC compliant SDRAM chooses a CAS
14 latency once at the start-up of the computer; is that
15 right?

16 A. You're saying "at the start." I believe so.
17 You're getting a lot of information in there, but I
18 believe so.

19 Q. Let me rephrase that. I don't mean to
20 confuse -- ask a confusing question.

21 A JEDEC compliant SDRAM chooses CAS latency for
22 operation one time in the initialization sequence; is
23 that right?

24 A. At the initialization sequence, yes, I believe
25 that's correct.

1 Q. And the same is true for JEDEC compliant DDR
2 SDRAMs; is that right?

3 A. I believe that's true, yes.

4 Q. Okay. I would like to move on to dual edge
5 clocking and ask you to look at Figure 13, which is at
6 page 138 of the exhibit of the '898.

7 It's also available -- did you find it? Okay.
8 It's also available at page 149, if that's easier. I
9 believe this exhibit might have the drawings attached
10 twice.

11 All right. Figure 13. Now, I believe you
12 testified that Figure 13 and the accompanying
13 description in the specification was one piece of
14 information in the specification that you pointed to
15 supporting claims of dual edge clocking; is that right?

16 A. Yes.

17 Q. Figure 13 is a timing diagram for the clocking
18 scheme described in the applications; is that right?

19 A. Yes.

20 Q. What Figure 13 shows is a timing diagram with
21 an early bus clock which is labeled, "bus clock 1,
22 number 53," up on top; is that right?

23 A. The figure doesn't say it's earlier. It says
24 bus clock 53, yeah. I believe you have to go back into
25 the specification to say that that's the early bus

1 clock.

2 Q. Do you recall that the specification refers to
3 clock signal 53 as an early bus clock?

4 A. I believe one of them was described as the
5 early bus clock. Whether it was 53 or 54 -- probably
6 53.

7 Q. And bus clock 2 is labeled number 54?

8 A. Yes.

9 Q. Do you recall whether the specification refers
10 to bus clock 54 as the late bus clock?

11 A. Late? I'm not sure about the word "late."

12 Q. And Figure 13 also shows an internal clock
13 labeled number 73; is that right?

14 A. Yes.

15 Q. And that internal clock is an average between
16 the two bus clocks which are labeled 53 and 54; is that
17 right?

18 A. I wouldn't call it -- it's not an average. I'm
19 not sure what you mean by the average. You don't add
20 up and take the average. That's not what it is.

21 Q. Does internal clock 73 represent a midpoint
22 between bus clock 53 and bus clock 54?

23 A. It's supposed to, yes.

24 Q. I would like to ask you now to please turn to
25 Figure 8A, which is on page 134.

1 This drawing I think is incomplete, and we'll
2 try to check if our exhibit has another Figure 8A
3 attached to it that we can use instead.

4 If we could look at exhibit page 145 you'll see
5 a complete picture of Figure 8A.

6 A. Where do you want me now?

7 Q. Looking at Figure 8A that is on 145 of CX 1451.

8 A. Okay.

9 Q. Now, what that drawing indicates is that bus
10 line 53, that the signal on clock line 1 will arrive at
11 chip O before it arrives at chip N; is that correct?

12 A. Which line are you pointing to?

13 Q. If you'll look at the line labeled clock
14 line 1.

15 A. Okay.

16 Q. And you follow clock line 1 out from the clock,
17 the signal on clock line 1 will arrive at chip O before
18 it arrives at chip N; is that correct?

19 A. Yes.

20 Q. Figure 8A labels that -- the signal on clock
21 line 1 as signal 53; is that right?

22 A. Yes.

23 Q. And that's the same signal 53 that we were just
24 looking at in Figure 13; isn't it?

25 A. Yes.

1 Q. And if you follow in Figure 8A, if you follow
2 clock line 1 out you see that it turns around and it
3 then heads back towards the clock; right?

4 A. That's correct.

5 Q. That line is labeled clock line 2; is that
6 right?

7 A. Yes.

8 Q. That return line. And --

9 A. Yes. Clock 2, yes.

10 Q. And Figure 8A labels the signal traveling there
11 as clock signal 54; right?

12 A. I think the clock is clock 2. The line is line
13 54. I think that's the nomenclature they're using.

14 Q. But in any event that's the same number 54 that
15 we saw in Figure 13; right?

16 A. I believe so.

17 Q. And the description associated with Figure 8A
18 explains that each of the chips here shown as chip 0
19 and chip N will sample the two signals, 53 and 54, to
20 generate its own internal device clock at the midpoint
21 of signals 53, 54; is that right?

22 A. Well, at the midpoint of the arrival of the
23 clocks that are coming in on those two inputs.

24 Q. That midpoint signal will be signal 73 that we
25 saw in Figure 13; is that right?

1 A. Yes.

2 Q. All right. Now, I would like to direct your
3 attention to the description of Figure 8A in the
4 specification, and I believe it begins at the bottom of
5 page 48 of the exhibit. That's page 46 of the
6 document. And if you read through the first paragraph
7 under the heading, Clocking -- actually, you don't need
8 to read it, but that continues to the top of page 49.
9 You'll see there this section is describing Figure 8A;
10 is that right?

11 A. Yes. Figure 8, but it's 8A and 8B, yes.

12 Q. And on page 50 of the specification there's a
13 paragraph that you earlier directed our attention to
14 and testified about as supporting claims to dual edge
15 clocking; is that right?

16 A. On page?

17 Q. That's on page 50. It's the middle full
18 paragraph on page 50 of the exhibit.

19 You know, I'm sorry. It's page 49.

20 A. And which area are you referring to?

21 Q. You see on page 49, the middle full paragraph,
22 that's the paragraph that you earlier indicated
23 supported claims to dual edge clocking; is that right?

24 A. Page 49 of the specification?

25 Q. It's page 49 of the exhibit, which is page 48

1 of the specification.

2 A. Yes. Okay.

3 Q. That paragraph occurs within the section that
4 begins on page 47 under the heading "Clocking;" is that
5 right?

6 A. Yes.

7 Q. Okay. I would like to ask you now to turn to
8 Figure 12. That's at exhibit page 137.

9 A. I had it on page 148. If you want me to look
10 at page 137. Yes.

11 Q. Now, the circuit in Figure 12 -- let me say.
12 You indicated or directed us to this figure as
13 supporting claims to on-chip DLL; is that right?

14 A. Yes.

15 Q. The circuit in Figure 12 has an input in the
16 top left-hand side labeled "early clock 53;" is that
17 right?

18 A. Yes, correct.

19 Q. That's the early clock that we saw in both
20 Figure 8A and in Figure 13; correct?

21 A. Yes.

22 Q. And the circuit on Figure 12 also has an input
23 labeled, "late clock 54," on the lower left-hand side;
24 right?

25 A. Yes.

1 Q. And that's the clock signal 54 that we saw in
2 both Figure 8A and in Figure 13; correct?

3 A. Yes.

4 Q. In the lower right-hand side of Figure 12
5 there's a line labeled "73;" do you see that?

6 A. Yes.

7 Q. Now, that's the midpoint internal clock signal
8 73 that we saw in Figure 13; is it not?

9 A. Yes.

10 Q. So what the circuit in Figure 12 does is that
11 it takes the early clock signal 53, the late clock
12 signal 54, and it generates a midpoint clock signal at
13 the internal clock signal 73; is that correct?

14 A. That's one of the functions, yes.

15 Q. There's no other output to the circuit shown in
16 Figure 12, other than the one labeled 73; is that
17 right?

18 A. That's correct. The only output of the
19 circuitry shown in Figure 12 is 73, right.

20 Q. I would like to talk a moment about your
21 testimony regarding the written description
22 requirement. You assumed in that testimony that Rambus
23 had claims covering SDRAMs and DDR SDRAMs; is that
24 right?

25 A. I don't believe I assumed that in that

1 particular testimony, no.

2 Q. Your testimony was that the fact that the
3 patent office had allowed claims covering programmable
4 CAS latency as used in SDRAMs was evidence that the
5 specification supported those claims; is that right?

6 A. I don't remember me being asked that direct
7 point on direct for purposes of written description.
8 The point was that any claims that -- if I remember it
9 this morning, any claims at issue by the patent office,
10 in any patent, basically, would meet the written
11 description requirement to be valid. I don't know if
12 we talked specifically about the particular claims.

13 Q. Do you recall providing any testimony with
14 regard to how the written description requirement
15 impacted your analysis of the content of the '898
16 specification?

17 A. Yes.

18 Q. Now, no court has yet addressed whether or not
19 the specification of the '898 application in fact
20 supports claims interpreted to cover programmable CAS
21 latency in an SDRAM; is that right?

22 A. Well, when you say, "any court," first of all I
23 don't know about any court. I don't know about that.
24 And then I would have to go back and look at the
25 Federal Circuit's opinion whether there was anything in

1 there on that issue.

2 Q. Do you know then whether the validity of
3 Rambus's claims it's asserting against SDRAM and DDR
4 SDRAMs have been litigated to date?

5 A. I don't know of any particular claims in
6 litigation or have been litigated.

7 Q. Do you know whether the District Court in the
8 Infinion case addressed whether or not any of the
9 asserted patents were valid?

10 A. In the Infinion case?

11 Q. In Rambus versus Infinion, yes.

12 A. The District Court case out of the Eastern
13 District of Virginia?

14 Q. That's right.

15 A. I read that opinion when I was doing my report.
16 That was a part of it.

17 And are you going to ask me about the details?
18 I'm not sure what you're asking.

19 Q. All I want to know is whether or not you're
20 aware whether or not the District Court in Rambus
21 versus Infinion made any rulings on the validity of the
22 asserted patents?

23 A. I believe they did.

24 Q. Do you recall whether or not the Federal
25 Circuit in the Rambus versus Infinion case made any

1 rulings on the validity of the asserted patents?

2 A. In the context of the fraud issue I believe
3 they were dealing with the issue whether the patents --
4 and the claims were involved.

5 Forgery can invalidate a patent. If you're
6 asking me about validity based on certain statutory
7 provisions like 112, 103, I don't believe at least on
8 the written record they addressed that.

9 Q. All right. I'm going to move on to another
10 topic now.

11 Shall I keep on going, Your Honor, or?

12 JUDGE McGUIRE: I think it is probably a pretty
13 good time to take a break. So let's break for 10
14 minutes.

15 (A brief recess was taken.) (3:15 p.m. - 3:22
16 p.m.)

17 JUDGE McGUIRE: Let's go on the record. At
18 this time you may proceed with your inquiry,
19 Ms. Michel.

20 BY MS. MICHEL:

21 Q. Now, you testified that the claims identified
22 by Complaint Counsel would not necessarily have been
23 infringed by products built to the JEDEC SDRAM and DDR
24 SDRAM standards; is that right?

25 A. Certain things -- yes.

1 Q. In your opinion, in order to determine whether
2 an SDRAM would infringe the claim you believe you have
3 to have the SDRAM in front of you; is that right?

4 A. I believe that anyone from that perspective,
5 including, quite frankly, the Federal Circuit, if
6 you're doing a full-blown infringement analysis need to
7 have an actual device in front of you to compare, under
8 the law.

9 Q. When you formed your opinion you did not know
10 whether or not the JEDEC standard for SDRAM required
11 the device to have a programmable CAS latency feature;
12 is that right?

13 A. I remember you talking about this in our
14 deposition. When you talk about "required."

15 The standard discloses the feature you're
16 talking about, and whether that means that anybody
17 building a DRAM is required to put that in, I guess
18 that's where we were having a little trouble. So if
19 that's the essence -- it's the question about required,
20 that I'm not sure.

21 To answer your question, it's there, it's part
22 of the standard. You're going to build it and go ahead
23 and do that using that standard, yes.

24 Q. But when you formed your opinion you weren't
25 sure whether anyone building a JEDEC compliant SDRAM

1 had to put in CAS latency feature in order to be JEDEC
2 compliant; is that right?

3 A. Yes. Yes.

4 Q. And you did not know whether the JEDEC standard
5 for SDRAMs required the use of a register to store the
6 programmable CAS latency information; did you?

7 A. There were disclosures of these things in the
8 standards. The standards disclosed a lot of things.
9 To the extent of which one or more or all a
10 manufacturer of a DRAM had to put in to meet the
11 standards, I thought that's what we were talking about.
12 That, I don't know.

13 Q. Well, to analyze whether it's possible to build
14 a JEDEC compliant SDRAM that does not have the
15 programmable CAS latency feature you would need the
16 assistance of a technical person; is that right?

17 A. I'm sorry. Say that again.

18 Q. To analyze whether it's possible to build a
19 JEDEC compliant SDRAM that does not have a programmable
20 CAS latency feature, you would need the assistance of a
21 technical expert; is that right?

22 A. Yes. Yes. Now you're talking about actually
23 building a device as opposed to doing some legal
24 analysis that involves technology, yes.

25 Q. I'm actually asking you whether for you to

1 analyze whether it's possible to build a JEDEC
2 compliant SDRAM that does not have a programmable CAS
3 latency feature you would need the assistance of a
4 technical person?

5 A. Yes.

6 Q. Now, when you formed your opinion regarding
7 whether claims cited by Complaint Counsel would
8 necessarily be infringed, you didn't know whether the
9 JEDEC standard for SDRAMs requires that the DRAM device
10 have a programmable burst length feature; is that
11 right?

12 A. In the context that we're talking about the
13 feature was there. Whether a particular device
14 required it, no, I didn't know that.

15 Q. And you didn't know whether for an SDRAM to
16 comply with the JEDEC standard it would have to have a
17 mode register for implementing the programmable burst
18 length feature; did you?

19 A. Again, in the sense you're using the term,
20 "required," that's true, yes.

21 Q. Claims are to be interpreted as they would be
22 understood by a person of ordinary skill in the art; is
23 that right?

24 A. Yes.

25 Q. And you did not discuss your claim

1 interpretation of these pending claims with any person
2 you considered to be a person of ordinary skill in the
3 art; did you?

4 A. That's correct.

5 Q. I would like to ask you now to turn to CX 1504,
6 page 221, and I'll try to use the exhibits that are in
7 the binder in front of you.

8 Now, that particular exhibit would be in
9 Volume 2, and it appears to be the first tab.

10 A. Okay.

11 Q. If you'll just turn to what is the first page
12 behind the tab, and there you'll see the amendment
13 filed on January 6, 1995; is that right?

14 A. Yes. Page 216 of the exhibit.

15 Q. Now, I believe you testified that you
16 interpreted the claims filed in this amendment to be
17 limited to a device identification feature; is that
18 right?

19 A. When did I do that?

20 Q. Actually I probably -- let me restate, because
21 I think I might have misstated your testimony. Let me
22 rephrase that.

23 The claims that you discussed that were filed
24 in this amendment and so, therefore, I don't mean all
25 of the claims in the amendment, but the claims you

1 discuss you interpreted to be limited to a device
2 identifier feature; is that right?

3 A. This morning?

4 Q. I misstated it again.

5 You interpreted the claims you discussed this
6 morning to include a limitation to a device identifier
7 feature; is that right?

8 A. I believe with respect to these claims in this
9 morning's testimony, if this is the set we're talking
10 about, it was that the Federal Circuit had said they
11 didn't read on the standards. Is that? You have to be
12 very clear about the claims we're talking about when we
13 go through this. Is this the set of claims we're
14 talking about?

15 Q. If you'll look, please, at the serial number on
16 the front page of this amendment it bears serial number
17 07/847961; right?

18 A. Right. It would help me if I go through -- if
19 we're going to talk about that if I can go back to the
20 demonstratives this morning.

21 Q. Sure. That would be great.

22 A. I'm looking at page 216 of the exhibit which is
23 the application serial number, last three digits are
24 the '961 application, and that's what is addressed in
25 the demonstrative this morning, these claims that were

1 in the '961 application, and what I testified this
2 morning was the Federal Circuit found that they were
3 not -- that the -- had determined these claims did not
4 cover devices built to the SDRAM standard. That's what
5 I said this morning.

6 Q. And do you recall the reason that the Federal
7 Circuit made the statement that you're talking about
8 right now?

9 A. Yes.

10 Q. And was that reason that the court said that
11 the claims of the '961 application all contained a
12 limitation to a device identifier feature?

13 A. I think it was a little broader in their term.
14 If you want to take me to the actual language, but I
15 think they said something the claims in that
16 application relate to device identifier feature or
17 something to that extent.

18 Q. Let's look at the language and make sure we're
19 all clear. You can find the Federal Circuit opinion at
20 two tabs back, RX 2111, and particularly --

21 A. Is that in Volume 1?

22 Q. I'm sorry, it's in the same volume you have
23 right now, Volume 2. Particularly I'll direct your
24 attention to page 34 of the opinion.

25 A. Okay. Uh-huh.

1 Q. If you'll look at the first full paragraph,
2 which is in the middle of the page?

3 A. Yes.

4 Q. Seven lines up from the bottom the sentence
5 states: "Similarly, claims in the '961 application
6 were limited to the device identifier feature," and
7 then it makes a comment about '651 application.

8 Is that the statement that you were referring
9 to when you said that the Federal Circuit considered
10 the '961 application to determine that the claims do
11 not cover devices built to the SDRAM standard?

12 A. Yes.

13 Q. I understand then that you are not offering
14 your own opinion that the claims in the '961
15 application are limited to the device identifier
16 feature?

17 A. Not at this stage, no. This is what the
18 Federal Circuit said, and that's the law.

19 Q. Did the Federal Circuit decision discuss the
20 claims of the '961 application in any other section,
21 other than the phrase I just pointed you to?

22 Do you recall whether or not the Federal
23 Circuit discussed the claims in the '961 application in
24 any other section than what I just directed you to?

25 A. Well, just briefly, just on the same page on

1 the very top, the sentence starts on the previous page,
2 they mention the '961 application.

3 Q. Are you relying on any other statement in the
4 Federal Circuit opinion regarding the claims in the
5 '961 application to support your opinion that the
6 Federal Circuit considered the '961 application and
7 determined that the claims do not cover devices built
8 to the SDRAM standard?

9 A. Not the purpose of this -- no. No.

10 Q. Now, isn't it true that Infinion never directly
11 addressed Rambus's assertions before the Federal
12 Circuit that the claims of the '961 application
13 contained limitations to a device identifier feature?

14 A. I didn't read the -- unless there is some
15 statement in the Federal Circuit opinion about that I
16 didn't read the briefs or trial transcript or anything
17 relating to what the arguments were.

18 Q. All right. If I could direct your attention,
19 please, to page 35 of this opinion, and particularly
20 the last five lines. The sentence begins, "despite
21 Rambus's repeated assertions"?

22 A. Yes.

23 Q. The sentence states: "Despite Rambus' repeated
24 assertions, e.g., its renewed JMOL motion, its opening
25 brief to this court, and at panel hearing before this

1 court that these claims were not necessary to practice
2 the SDRAM standard, Infinion does not directly address
3 Rambus' arguments."

4 Does that indicate to you that Infinion never
5 presented any evidence that -- to the Federal Circuit,
6 at least, that the claims of the '961 application were
7 not limited by a device identifier feature?

8 A. I don't know what Infinion provided to the
9 Federal Circuit. I, myself --

10 JUDGE MCGUIRE: Didn't you just ask him to
11 understand that sentence? Unless he has some
12 particular insight? I'm not sure where you're headed
13 with this, Ms. Michel. He can read that sentence, but
14 unless he has -- I'm not clear as to the point you're
15 getting to.

16 MS. MICHEL: Yes, Your Honor. I'm asking for
17 Mr. Fliesler's understanding of what the Federal
18 Circuit considered, based on the court's own opinion on
19 which he's relying.

20 JUDGE MCGUIRE: Why don't you just ask him his
21 understanding, because all you're doing is reading a
22 sentence and asking him if he's considered it. I don't
23 know if that's going to get us anywhere.

24 BY MS. MICHEL:

25 Q. My question was the sentence that I read

1 indicates to you, Mr. Fliesler, that the court did not
2 have information presented to it in reaching its
3 decision that the '961 application claims were not
4 limited to the device identifier feature.

5 A. No. It just says -- that sentence just says --
6 I read that and understand that to mean that the court
7 said Infinion didn't directly address the arguments. I
8 don't know that there's not underlying evidence.

9 JUDGE MCGUIRE: That speaks for itself. That's
10 why I don't know what you're headed toward here. Are
11 you asking him his understanding of the opinion?

12 MS. MICHEL: Yes, Your Honor. I'm probing him
13 for the fact that he relied on it that --

14 JUDGE MCGUIRE: You're asking for the court
15 opinion. It speaks for himself. If you want to ask
16 him overall his understanding and what basis, but I
17 don't know going through this sentence is --

18 BY MS. MICHEL:

19 Q. Mr. Fliesler, I would like to direct you back
20 to CX 1504, which is the first tab in your binder,
21 which is what we were just looking at?

22 A. Okay.

23 Q. In particular I would like to direct you to
24 page, let's see, it's page 222, and to Claims 61 and to
25 62?

1 A. Yes.

2 Q. Claim 61 recites an identification --

3 A. I'm sorry, 151 or 161?

4 Q. Claim 161, which is on page 222 of CX 1504.

5 A. Okay.

6 Q. Now, Claim 161 contains the limitation and
7 identification register; does it not?

8 A. Yes.

9 Q. And Claim 161 is dependent on Claim 160; is
10 that correct?

11 A. Yes.

12 Q. And Claim 160 does not contain the term, "an
13 identification register;" correct?

14 A. That's correct.

15 Q. And Claim 161 is a claim dependent from 160,
16 would be understood to be adding limitations to
17 Claim 160; is that right?

18 A. As a proper dependent claim, yes.

19 Q. I would like to direct your attention to
20 Claim 164, next, which is on page 223 of CX 1504.

21 A. Okay.

22 Q. Have you formed any opinion as to whether
23 Claim 164 is limited to a device identification
24 feature?

25 A. To the extent, again, the Federal Circuit, I

1 believe, covered that particular claim as well in the
2 statements we just talked about. So my opinion is
3 based on what the Federal Circuit said.

4 Q. You've not formed any independent opinion about
5 whether or not Claim 164 is limited to a device
6 identifier feature; is that right?

7 A. I don't -- I would have to go back to my
8 report. I don't remember at some point in this whole
9 process whether that occurred.

10 Q. In any event, you're not offering any testimony
11 today, based on your own analysis, separate from the
12 Federal Circuit's analysis that Claim 164 is limited to
13 a device identifier feature; is that right?

14 A. That's correct.

15 Q. With regard to Claims 183 through 185, which
16 are in the '490 application, and if it helps to look at
17 the demonstrative --

18 A. It does.

19 Q. Your statement there was --

20 JUDGE MCGUIRE: Your statement where?

21 MS. MICHEL: I'm -- excuse me. Your statement
22 in the demonstrative 265 was these claims are
23 pertinent -- the heading on that page is '490
24 application.

25 Your statement there was: "These claims are

1 similar in pertinent respects to claims in the '961
2 application."

3 That's just to orient you as to what your
4 previous testimony was to help you refresh your
5 recollection.

6 BY MS. MICHEL.

7 Q. Is your opinion that Claims 183 to 185, as they
8 issued, do not cover devices built to the SDRAM
9 standard based on the Federal Circuit's decision with
10 regards to claim '961?

11 A. Not based in the same way that it is with the
12 '961. I don't believe they opined on 183, 184, and
13 185.

14 Q. You're relying on the similarities between
15 Claims 183 and 185 and the claims in the '961
16 application and the fact that the Federal Circuit
17 indicated the claims in the '961 application don't
18 cover SDRAMs for your opinion today about Claims 183 to
19 185; is that right?

20 A. I'm not sure I can answer yes or no to that.

21 The Federal Circuit opined in the '961 that
22 they don't read on because the claims there relate to a
23 device identifier feature. And when you get to Claims
24 183 and 185, I believe they specified, there is
25 specific language in there about device identifying

1 feature. So --

2 JUDGE McGUIRE: Again, are we just asking him
3 the conclusions of the Court of Appeals?

4 MS. MICHEL: Your Honor, I'm only trying to
5 understand whether Mr. Fliesler is relying on the
6 conclusions of the court to support his opinion with
7 regard to the '490 application, or whether he has
8 independently.

9 JUDGE McGUIRE: Why don't we ask him -- perhaps
10 you have -- it seems we keep going back to what the
11 court held, and that's obvious what the court held. At
12 least the court here takes notice of that opinion, so
13 can't we better focus on his independent conclusions
14 and don't worry about that opinion right now?

15 BY MS. MICHEL:

16 Q. Mr. Fliesler, you did not offer any independent
17 analysis in your testimony this morning with regards to
18 Claim 183 to 185 in the sense of interpreting those
19 claims; is that right?

20 A. I'm looking at -- this demonstrative refreshes
21 my recollection, it doesn't reference the Federal
22 Circuit opinion. It references my opinions, which are
23 that the claims are similar in pertinent respects to
24 the claims in the '961 application. It goes on to say,
25 based on that, if issued in that form they would not

1 cover devices built to the SDRAM standard.

2 So this demonstrative, it doesn't reference the
3 Federal Circuit opinion in the sense that the previous
4 demonstrative did.

5 Q. Okay. I would like to ask you now to turn to
6 CX 1502, and I believe that should also be in binder
7 number 2.

8 A. Please give that to me again.

9 Q. CX 1502. And I'm looking for the early version
10 of Claim 151 of the '692 application, which I believe
11 will be in the first tab labeled CX 1502, bearing page
12 numbers 205 to 213.

13 A. Yes, I have that.

14 Q. And in particular you offered testimony with
15 regard to Claim 151, which is on page 208 of that
16 exhibit; is that right?

17 A. Yes.

18 Q. And with regard to the NEC presentation with
19 the PLL your testimony was that this claim would not
20 cover an SDRAM implementing that presentation, because
21 that presentation did not perform -- did not have a
22 phase locked loop coupled to the memory array; correct?

23 A. That was one of the reasons.

24 Q. Because the phase locked loop was -- there was
25 a line going to the output buffer; is that right?

1 A. Whether it was -- it wasn't so much the
2 emphasis on the phase lock loop, it was that that
3 element was coupled to the clock signal receiving
4 circuit and the memory array. The signal was coupled
5 to the memory array. The circuit is coupled to the
6 memory array.

7 Q. If you could turn, please, to JX 21 and page
8 91, and if we could show that on the screen, that's the
9 drawing from the NEC presentation. There's also a tab
10 in your binder.

11 A. I think I'm okay if you just put it up on the
12 screen.

13 Q. Sure.

14 A. Okay.

15 Q. With regard to the drawing there with PLL, in a
16 read operation when the SDRAM shown there outputs data
17 it is going to output data that had previously been
18 stored in the memory array; is that right?

19 A. That's the inference from that schematic, yes.

20 Q. And the SDRAM uses the output buffer to output
21 data that had been previously stored in the memory
22 array; is that right?

23 A. Yes.

24 Q. All right. Next I would like to ask you to
25 look at Claim 1 of the '327 patent.

1 For convenience I'm trying to work with the
2 binder, but I'm not quite as familiar with it. Is the
3 '327 patent in the binder, may I ask opposing counsel?

4 MR. STONE: You certainly can. It is CX 1904.

5 BY MS. MICHEL:

6 Q. In Volume 2 of the binder, CX 1994 is the CX
7 patent that you testified about earlier; is that right?

8 A. Yes.

9 Q. Looking at Claim 1, I believe you testified
10 Claim 1 would not cover DDR SDRAM built to the JEDEC
11 standard because you understood the JEDEC standard to
12 require a data strobe that the output -- I'm sorry, the
13 input occur on the edges of a data strobe rather than
14 on the edges of a clock; is that right?

15 A. Yes.

16 Q. Did you discuss your -- let me ask again.

17 I take it then that in your opinion the term,
18 "clock," as used in Claim 1, could not encompass a data
19 strobe; is that right?

20 A. Yes.

21 Q. And did you discuss your interpretation of the
22 term, "clock," with any person of ordinary skill in the
23 art?

24 A. Clock -- it brings up my whole 25 years of
25 experience with clocks, but it's just -- you know,

1 clocks. Clocks are the fundamental signal component
2 that sequences things through, so clocks are clocks.

3 Q. Solely for purposes of interpreting the term,
4 "clock," as it's used in Claim 1, you did not discuss
5 how the term clock is used in term 1 with any technical
6 person; is that right?

7 A. That's correct.

8 Q. Let me ask you to look at Claim 7, the next
9 column. I believe your testimony there is you do not
10 believe a DDR SDRAM made to the standard would infringe
11 Claim 7, because the standard did not require a
12 multiplexer; is that right?

13 A. That's correct.

14 Q. Did you consider whether or not the use of a
15 multiplexer was the most feasible way to implement the
16 requirements of the standard?

17 A. No.

18 Q. Did you consider whether or not there were any
19 methods of implementing the DDR standard without the
20 use of a multiplexer?

21 A. Going through the analysis, yes.

22 Q. Did you talk with any technical people about
23 whether or not it was possible to implement the DDR
24 standard without the use of a multiplexer?

25 A. I did not talk to any technical people, no.

1 Q. I'm going to ask you now to turn to Claim 405.
2 I believe it's also in the same binder.

3 I meant patent '405. RX 2122-15.

4 A. Thank you.

5 Q. Now, do you know whether or not Rambus has
6 asserted that any DDR SDRAMs infringe Claim 1 of the
7 '405 patent?

8 A. Asserted in their litigation? No, I don't
9 know.

10 Q. And you didn't discuss with any technical
11 person whether a DDR SDRAM --

12 A. I mean there are other assertions like
13 licensing and things like that. I don't know if
14 they're seeking to enforce that claim.

15 Q. I understand. And you don't know whether
16 Rambus has made any assertions in licensing or any
17 other way as to whether or not claim 405 would cover
18 DDR SDRAM; do you?

19 A. No.

20 Q. You didn't analyze the validity of the '405
21 patent; did you?

22 A. Only to the extent that I looked at the -- on
23 the first few pages a huge amount of prior art. I
24 looked at, as I testified earlier, the substantive
25 prosecution of the chains of applications that led to

1 this claim, and there was -- to that extent it seemed
2 valid.

3 Q. Let's look at Claim 1, which is probably near
4 the very end, and I'll give you the page number. The
5 page number would be page 45 of 46 in RX 2122.

6 A. Yes.

7 Q. Now, Claim 1 uses the term, "operation code;"
8 is that right? I'm sorry, "first code"?

9 A. Yes.

10 Q. You don't know whether that term of "first
11 code" is a commonly understood term in the art; do you?

12 A. No.

13 Q. But you assume -- based on your interpretation
14 you assumed that a DDR standard, in fact, uses a first
15 code; is that right?

16 A. Yes.

17 Q. And you didn't consult any technical
18 dictionaries in interpreting the term "a first code;"
19 did you?

20 A. I did look at dictionaries. I don't believe so
21 with this claim.

22 Q. Now, on the front page of this application --
23 I'm sorry, this '405 patent demonstrates that the
24 parent application was filed October 19th, 1995; is
25 that right?

1 A. Yes.

2 Q. Did you do any investigations into or review
3 any documents showing any JEDEC considerations of the
4 auto precharge feature prior to June 1996?

5 A. It's the prior to 1996 that -- lots of JEDEC
6 documents. There was auto precharge that was
7 described. Here today I'm trying to think of the
8 actual document or documents when auto precharge
9 started to appear.

10 Q. From the documents that you reviewed you
11 believe there was some discussion of auto precharge
12 within JEDEC prior to June 1996; is that right?

13 A. I can't say prior to 1996, but definitely there
14 was auto precharge.

15 Q. Okay. If I could have you look at JX 56,
16 please?

17 MS. MICHEL: Your Honor, may I approach?

18 JUDGE McGUIRE: Yes.

19 BY MS. MICHEL:

20 Q. Mr. Fliesler, do you recognize this document?

21 A. Yes.

22 Q. Did you review it in the course of preparing
23 your report?

24 A. Yes.

25 Q. And --

1 A. Portions of it.

2 Q. Okay. If I could ask you to turn to page 115
3 of the exhibit numbers.

4 A. Page -- hold it. Page 115. I see. It's cut
5 off at the bottom. Okay. I believe I have it, yes.
6 Okay. Oh, yes.

7 Q. All right. It's got Bates number 7794.

8 A. Yes.

9 Q. All right. Did you review this page of this
10 document?

11 A. Yes.

12 Q. And does that page indicate to you that the
13 JEDEC SDRAM standard has an auto precharge feature
14 described?

15 A. Yes.

16 Q. Did you consider at all whether Rambus had
17 any -- I withdraw the question.

18 MS. MICHEL: I have no further questions, Your
19 Honor.

20 JUDGE MCGUIRE: Okay. Thank you.

21 At this time do you have any further inquiry on
22 redirect, Mr. Stone?

23 MR. STONE: I do, Your Honor.

24 REDIRECT EXAMINATION

25 BY MR. STONE:

1 Q. Mr. Fliesler. Earlier Ms. Michel asked you
2 some questions about what the JEDEC standard required
3 or didn't require. Do you recall that line of
4 questioning?

5 A. Yes.

6 Q. For the purposes of the opinions you've
7 expressed here today have you assumed that the four
8 features in question are -- must be included in a JEDEC
9 compliant part?

10 A. Yes.

11 Q. I want to take you back to Volume 1, if I can.
12 I apologize. I'm going to try not to jump too much in
13 the volumes.

14 Go back to Volume 1 binder, go to the '898
15 application, which is CX 1451, if you would.

16 A. I have it.

17 Q. And turn to page 13 of CX 1451.

18 Do you recall Ms. Michel asked you about the
19 last full sentence on that page which reads: "The bus
20 carries substantially all address, data, and control
21 information needed by devices for communications with
22 other devices on the bus"?

23 A. Yes.

24 Q. Does the language, "the bus carries
25 substantially all address, data, and control

1 information," as it's written there imply that
2 multiplexing is necessary?

3 A. No, not that sentence, no.

4 Q. Okay. While we're on this document let me ask
5 you if you would turn to page 16, if you would.

6 And you'll see on page 16 of CX 1451, beginning
7 at line 21 there's a sentence which reads: "Each slave
8 may have one or several access time registers (four in
9 a preferred embodiment)." Do you see that language?

10 A. Yes.

11 Q. In the event where the slave has only one
12 access time register are you able to change the access
13 time or the CAS latency each time there's a
14 transaction?

15 A. No. It's done basically on initialization.

16 Q. Okay. Is there -- you were asked earlier about
17 foreign applications and some issues about the
18 implications with respect to foreign applications. Let
19 me just take you back there for a minute.

20 A. Sure.

21 Q. Is there a difference in terms of your
22 understanding between what would happen with respect to
23 countries where the -- they have adopted the patent
24 cooperation treaty, as opposed to countries which have
25 not?

1 A. Yes.

2 Q. So when some of your deposition testimony was
3 read compared to your testimony here at trial, was
4 there a difference how you would answer if the question
5 was limited to the PCT countries, as opposed to all
6 foreign countries?

7 A. Yes.

8 Q. Does the specification of the '898 application
9 that we've been looking at, CX 1451, indicate that
10 Rambus had invented the use of a register to store a
11 value representative -- representative of a number of
12 clock cycles to transpire between receipt of a read
13 request and output of data?

14 A. Yes.

15 Q. Is that your understanding of CAS latency, or
16 is your understanding of CAS latency different?

17 A. Fundamentally, that's it.

18 Q. Okay. Turn if you would to the table we looked
19 at in this exhibit that you were shown on cross
20 examination, I believe it's at page 29 of CX 1451.

21 A. Okay.

22 Q. Does the access type indicate which of the
23 access time registers you will use for your response?

24 A. Yes.

25 Q. Okay. Let me ask you while we're on this to

1 turn to page 104 of CX 1451. Tell me when you're
2 there.

3 A. I'm there.

4 Q. Does that set forth Claim 103?

5 A. Yes.

6 Q. Now, let me ask --

7 MS. MICHEL: Your Honor, I object. This is
8 outside the scope of the cross. I didn't go into the
9 claims in cross, simply because they weren't gone into
10 on direct.

11 MR. STONE: The only point I'm going to make,
12 Your Honor, respond to the suggestion that I thought
13 had been made on cross, maybe I'm wrong, the suggestion
14 this type of application doesn't in fact disclose the
15 CAS latency that appears in the JEDEC standard.

16 JUDGE MCGUIRE: Do you want to comment on that?

17 MS. MICHEL: All testimony previously had been
18 to the specification and not the claims.

19 MR. STONE: I think there --

20 JUDGE MCGUIRE: I'll hear the question.

21 BY MR. STONE:

22 Q. Does that show you Claim 103?

23 A. I'm sorry?

24 Q. Is Claim 103 on page --

25 A. Yes.

1 Q. Let me ask you to do one more flipping at the
2 moment, which is flip back to one of the documents
3 towards the back of the binder, RX 2213A.

4 A. Okay.

5 Q. Let me direct you to page 5.

6 A. Yes.

7 Q. Do you see a reference in the left-hand column
8 to 103?

9 A. Yes.

10 Q. Do you see written in English on the right-hand
11 side the word "latency"?

12 A. Yes.

13 Q. Now, turn if you would to page 27 of the same
14 document. Page 27 of RX 2213A.

15 A. Sure. Okay.

16 Q. Do you see there the translation where it says
17 "103"?

18 A. Yes.

19 Q. And the translation is similar to SDRAM latency
20 control?

21 A. Yes.

22 Q. Do you understand SDRAM latency control to be
23 programmable CAS latency or something else?

24 A. No, that.

25 Q. Excuse me?

1 A. Programmable CAS latency.

2 Q. Okay. Is there in the law a presumption of
3 validity that attaches to patents?

4 A. Yes.

5 Q. Can you explain to us just briefly what that
6 presumption is?

7 A. Well, by statute, any patentee has the
8 presumption of validity, which is just that,
9 presumption of validity. It basically is a burden
10 shifting mechanism whereby it's the person asserting
11 invalidity that has the duty to move forward and try to
12 show invalidity.

13 Q. In connection with what you reviewed in the
14 Infinion case in the Federal Circuit, did you look at
15 all at the Infinion Petition for Rehearing?

16 A. No.

17 Q. You don't know what it says in there about the
18 '961 application?

19 A. No.

20 Q. Okay. Let me direct you back to the second
21 binder, JX 21, at page 91.

22 A. Can you give me that again?

23 Q. Yes. JX 21, page 91. We can bring that chart
24 up on the screen.

25 A. Okay.

1 Q. You may be able to see it there.

2 A. I have it. NEC. Sure.

3 Q. Looking at just the right half of this screen,
4 where we see this signal that has gone through the box
5 labeled "PLL;" do you see that?

6 A. Yes.

7 Q. And the signal then comes into the triangular
8 shaped object which I think you told us earlier was a
9 buffer?

10 A. An output buffer.

11 Q. As you understand this particular diagram can
12 the signal that comes from the PLL affect the timing of
13 anything within the memory array?

14 A. No.

15 MR. STONE: I have no further questions on
16 redirect, Your Honor. Thank you.

17 JUDGE McGUIRE: Recross?

18 MS. MICHEL: No further questions, Your Honor.

19 JUDGE McGUIRE: Okay. Thank you very much for
20 your testimony. You're excused from this proceeding.

21 Mr. Stone, I'm hopeful that concludes your
22 presentation for today.

23 MR. STONE: It does.

24 JUDGE McGUIRE: Here's some hard copy up here
25 counsel might want to pick up. Otherwise this hearing

1 is adjourned until 9:30 tomorrow morning.

2 MR. STONE: Thank you.

3 (Hearing adjourned at 4:10 p.m.)

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C E R T I F I C A T E O F R E P O R T E R

DOCKET/FILE NUMBER: 9302
CASE TITLE: IN THE MATTER OF RAMBUS
HEARING DATE: JULY 15, 2003

I HEREBY CERTIFY that the transcript contained herein is a full and accurate transcript of the notes taken by me at the hearing on the above cause to the best of my knowledge and belief.

Dated:

Paula G. Satkin, RPR