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(Recess)
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               THE COURT: Let's get the jury.
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                (WHEREUPON, the jury enters the proceedings.)
               THE COURT: Mr. Holley.
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               MR. HOLLEY: Thank you, Your Honor.
     BY MR. HOLLEY
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          Mr. Muglia, a couple of times this morning you
8
     mentioned that changes were made to the implementation of
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     the namespace extension APIs to address robustness issues.
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     Can you tell me what those changes were, sir?
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          Well, if my memory and understanding is correct, after
     Bill made the decision that we would not publish the
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     namespace extension APIs because of this ongoing issue with
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     the Windows NT group, they were removed -- the
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     documentation was -- we did not update the documentation for
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     a period of time, and we actually removed the headers from
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     the header file, so they were no longer part of the programs
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     and the things that you could actually compile and write to.
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     But the actual code for the namespace extensions was not
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     removed from the operating system. It was still in the
     operating system so the code was still present.
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          However, fortunately, Satoshi, who was the developer
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     that worked on the namespace extensions in the Chicago team,
     made a change to the implementation. I don't recall why he
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     did this change. I know that there were arguments about
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ways to actually implement it, but he did an important change where instead of opening up -- when you actually use them to, for example, click on an e-mail message, instead of it opening up inside the operating system, inside the Explorer and actually running like out ware inside the Explorer, he actually spawned a new process, created a new process, and it ran separately from the operating system. That significantly reduced the robustness issues of these interfaces. That changed. And, I mean, one of the reasons why we didn't -- well, we needed it to change fundamentally in order for it to be more robust, but he left them in. Don't know why he left them in, don't recall, but he did fortunately change it to be more robust. The interfaces were at a later point re-documented. think it was a year or a year and a half later they were re-documented in an article that we published for developers in a magazine called Microsoft Systems Journal or MSJ. But the interfaces were there and they were changed to be more robust and they are still present. They are not broadly used, but they are still present. Thank you, Mr. Muglia. Q. MR. HOLLEY: I pass the witness. THE COURT: Mr. Johnson. MR. JOHNSON: Thank you, Your Honor.

CROSS-EXAMINATION

- 1 BY MR. JOHNSON
- 2 Q. Good morning, Mr. Muglia.
- 3 A. Good morning.
- 4 Q. We have not met. My name is Jeff Johnson. I represent
- 5 Novell, and I am going to have a few questions here for you
- 6 this morning.
- A lot of hate for those namespace extensions, sir.
- 8 | had not heard dog meat before. Tell me something, did
- 9 anybody tell those ISVs that you were publishing these
- 10 namespace extensions to that they were dog meat?
- 11 A. Well, I think there was -- again, I did not go out and
- 12 personally evangelize them to anyone because I did not like
- 13 them, and I'm sure other people -- certainly the author of
- 14 the extensions might have had a different view at the time.
- 15 | That was my view, however.
- I do know that when we talked to ISVs that we explained
- 17 to them that these extensions were for very limited
- 18 purposes, for things like e-mail programs, not for general
- 19 applications like word processors or spreadsheets, and I
- 20 think we said to ISVs that they might be subject to change.
- 21 | That is my understanding.
- 22 Q. You mentioned that the inventor might not think so.
- 23 | That would be Mr. Nakajima, right?
- 24 A. That is correct.
- 25 Q. Yes. Do you recall that Mr. Nakajima actually when he

- 1 | came to Microsoft started work for Cairo?
- 2 A. I do.
- 3 Q. And, in fact, he left Cairo because all you guys did
- 4 was have meetings and didn't do any actual real work.
- 5 Do you recall that, sir?
- 6 A. Well, I don't recall exactly why Satoshi left, but I do
- 7 know that he left the team and moved over to Chicago.
- 8 Q. And do you recall he left because he wanted to do some
- 9 real work, do some coding?
- 10 A. That would be perhaps his perspective and his point of
- 11 view. I can't say what his perspective was. As I said, the
- 12 | two teams fought like cats and dogs.
- 13 Q. Yes. I have heard cats and dogs a number of times this
- 14 morning.
- 15 Let me talk a little bit about this Cairo. So Cairo
- 16 was this code name for a future version of an operating
- 17 system that never shipped, right?
- 18 A. That is correct.
- 19 | Q. And Cairo was at least planned to be built on the
- 20 Windows NT platform but that never happened, right?
- 21 A. Right. Windows NT certainly happened and it is very
- 22 broadly used. I mean, it is the code base for Windows 7
- 23 | today, but the Cairo project in its entirety didn't ship.
- Now, to be fair, there are parts of what Cairo was
- 25 developing that did ship. There were some underlying

- 1 technologies called remote procedure calls, and so there was
- 2 technology in Cairo that did ship, but certainly the project
- 3 as we envisioned it did not ship.
- 4 Q. As I understand your testimony, you worked on Cairo
- 5 during the 1990s, early 1990s?
- 6 A. Yes, I did. I think for about two years.
- 7 Q. And you would agree with me, sir, that in early 1993,
- 8 that you were concerned that the Chicago shell extensions
- 9 were not implementing in OLE, correct?
- 10 A. That is correct.
- 11 Q. And you were concerned because you wanted to ensure
- 12 | that the Chicago shell extensions would be compatible with
- 13 future versions of Microsoft's operating systems that
- 14 planned to implement OLE including, for instance, Cairo?
- 15 A. That is correct.
- 16 Q. And it is fair to say that in mid 1993 that you were
- 17 | against the Windows 95 group publishing the shell extensions
- 18 | to ISVs that were not OLE compatible?
- 19 A. That is correct.
- 20 Q. I am going to hand you now Plaintiff's Exhibit 62,
- 21 | which I believe you already have in your stack. If you
- 22 | can't find it I will give you another one.
- 23 Maybe it might be just as easy for me to give you
- 24 another one?
- 25 A. Maybe it might be just as easy to give me another one.

- Q. Your stack is not too big. You should have seen it when the experts were here.
- Now, this is an e-mail which you sent to Mr. Maritz
- 4 with a copy to Mr. Graham and Jim Allchin on July 1st, 1993,
- 5 correct?
- 6 A. That is correct. And it looks like I subsequently sent
- 7 it to Chris Graham again. I don't know whether he didn't
- 8 receive the first copy or not.
- 9 Q. It looks like maybe he didn't get the first one and you
- 10 sent it to him again, right?
- 11 A. It looks like it.
- 12 Q. Now, you stated on your direct examination that this
- 13 was an effort to get Chris Graham on board with your views,
- 14 right?
- 15 A. That is correct. The purpose of the mail was to, you
- 16 | know, convince Chris and the Office group to really advocate
- 17 | for the Cairo vision and the Cairo shell.
- 18 Q. But actually you addressed this e-mail to Mr. Maritz,
- 19 correct, sir?
- 20 A. That is correct.
- 21 Q. And Mr. Maritz was your boss, right, sir?
- 22 A. That is correct.
- 23 Q. He ran the systems division at Microsoft?
- 24 A. That is correct.
- 25 Q. Now, you state in the first line of his e-mail that I

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have talked to both Chris and Jim in detail about this. I
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     assume you're talking about Chris Graham and Jim Allchin,
 3
     right?
          That is right. I mean, the way I would describe this
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     is that I was sending this to Paul summarizing the
 5
     conversation that I had with Chris and Jim about advocating
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7
     the use of the Cairo shell and that technology in Office.
8
          And you essentially lay out what you believe are the
9
     three options presented in July of 1993 with respect to --
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     and really what you're talking about here is the Office
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     shell?
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          No. What I am really talking about here is the ongoing
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     battle between the Cairo shell and the Chicago shell, where
     what I was doing was I was saying that option one, the
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     status quo, was a bad option, you know, this idea of an
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     office shell, which was just an idea that had been, you
17
     know, dreamed up in a brainstorming session a few weeks
     prior was also a bad idea, and that what we should do was
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     continue to drive forward on a Cairo shell, which is what my
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     team was working on.
          The subject of this e-mail says office shell, right?
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     Q.
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     just want to make that clear.
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          Sure.
     Α.
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25 So these three options that you had, the first was to

Right? Okay.

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Q.

- 1 keep the primary shell in Chicago, which was the status quo
- 2 as of that time, right?
- 3 A. That is correct.
- 4 Q. The second option is to create an alternative shell in
- 5 Office, correct?
- 6 A. That is correct.
- 7 Q. And the third option is to move forward with Cairo,
- 8 correct?
- 9 A. Correct.
- 10 Q. Now, your preferred option was number three, to move
- 11 forward with the Cairo shell, because you believed that
- 12 Cairo would provide the most functionality for customers,
- 13 right?
- 14 A. That is correct.
- 15 Q. Now, if we turn to that --
- MR. JOHNSON: Thank you very much, Mr. Goldberg.
- 17 BY MR. JOHNSON
- 18 Q. Now, even in July of 1993 you new option three, the
- 19 | Cairo option, was a long shot, right?
- 20 A. Well, I think at that point in time I didn't think it
- 21 was a long shot. I wouldn't say that. I was sensing that
- 22 the project was in trouble and I was trying to get support
- 23 | for the project, but I was very much engaged in making the
- 24 project successful in July of 1993.
- Q. Well, let's look at your words at the time. Right at

the top there you state at one point long ago I think this
was the plan, dot, dot, dot -- I guess that is a winking,
smiley face before they little icons would pop up when you

4 did that?

- A. Yes. That is what that would be. Occasionally you still see it in a text message as well. The icon means the same thing then as it does today.
- Q. So that was the plan at one point long ago, right?
- A. Yeah. I think I was, you know, giving an analogy in that sentence, and I was trying to point out the fact that, in fact, the company was supposed to be betting on Cairo.
  - Q. And down at the bottom there in the last paragraph, the first sentence says although I know it is a stretch for people to consider this, so you're even acknowledging here that I know this has got no chance.

Isn't that correct, sir?

A. No. Definitely not. I mean, you have to understand the culture of Microsoft, and in a sense you have to see it — you can see it in the Chicago/Cairo battle that I talked about, which is different groups focus on what they think is best for their customers. You know, the Office team could have moved forward and done whatever they were going to do, and if Cairo had been able to succeed on its own we would have built it. If it had been a successful project we would have built it.

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I was by no means -- I was by no means saying that Cairo was not relevant. It was very much relevant and I was very much focused on it. At the time the Office group was not working very effectively with us, and I was advocating to Chris that by working with us they could better meet their customers' goals. But that culture of separate teams with separate objectives was a problem at Microsoft at the time and, frankly, was prevalent when I left three months ago. Mr. Muglia, I want to again direct you to what you said at the time. I think it is the fourth paragraph there. issue is, of course, that nobody outside building five believes Cairo will sell in volume in an acceptable time frame. Yes, I said that. I assume building five is the Cairo building?

- 16
  - It was the building that Cairo was working in and that Α. I mean, and I'll tell you right now that in that same time frame nobody outside building five and the Windows NT group believed that Windows NT would be a successful file server. Nobody believed we would be successful in that business, and yet Windows NT has gone on to be a phenomenal success in file servers. But I will tell you that in 1993 nobody outside building five would have believed that.

Again, it was the culture of Microsoft, and so I was

- advocating in this mail that, in fact, that we'll be
  successful, and I was very much determined and focused on
  making it a success.

  Q. Mr. Muglia, Mr. Maritz has already testified that
  during this time period Windows NT sales were anemic.
  - A. Well, in July of '93 there may not have been any sales.

    I don't recall. We didn't ship Windows NT until 1993, and I would have thought it was the fall of '93, but I don't recall the exact date. So certainly at the time, you know, Windows NT would have sold almost nothing.

You would agree with that, wouldn't you, sir?

- Now, Microsoft sold roughly 350 million copies of Windows NT last year. It was called Windows 7, but at the time, of course --
- Q. I am trying to stick to the relevant time here --
- 16 A. Sure.

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- 17 Q. -- if we can.
- So in '93 and '94, certainly, you would agree that
  Windows NT sales were anemic, right?
- 20 A. In '93 and '94 Windows NT was a brand now operating
  21 system and it just hit the market and, in fact, had very few
  22 sales.
- 23 Q. So you criticize --
- MR. JOHNSON: Let's go back to option one, if we could again, please. The status quo there.

1 BY MR. JOHNSON

- 2 Q. You criticized option one, the status quo, because you
- 3 believed at that time that the Chicago shell extensions
- 4 | would not be compatible with either Office or Cairo, right,
- 5 which were using OLE?
- 6 A. That is correct.
- 7 Q. You also say here in addition to it being a bad option,
- 8 and in looking at the third paragraph, if we could bring
- 9 that up, that if the status quo continued, meaning going
- 10 forward with Chicago extensibility, you state Word and Excel
- are forced to battle against their competitors on even turf.
- 12 | Given that Lotus and WordPerfect have largely caught up,
- 13 | they almost certainly will lose ground if not in market
- 14 share then in margins.
- 15 That is what you stated in this e-mail, correct, sir?
- 16 A. Yes, I did.
- 17 Q. And the they in that last sentence, they almost
- 18 | certainly lose ground, is a reference to Microsoft's Word
- 19 and Excel, correct, sir?
- 20 A. That is what the reference to the word is, sir.
- 21 Q. Because if you have competition on a level playing
- 22 | field, Word and Excel will either lose market share, or
- 23 | Microsoft will have to cut its price on those products,
- 24 | right? That is what you were saying here?
- 25 A. Not exactly. Let me be clear here. What I was

advocating again at the macro level in this e-mail was that the Cairo team and the Office team could work together to build a better solution for customers. That is what I was advocating at the whole of this mail.

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This single sentence, this paragraph, one paragraph in this mail was basically saying that if we don't work together on this then Office won't be able to get the advantages for their customers and do the right things for their customers. So I was just fundamentally arguing that the Chicago interfaces and the approach that Chicago was taking was not going to help Office, and that the best approach was, once again, to work with the Cairo team. And one of the arguments that you made in support of 0. your position, is that if Chicago went forward with its extensibility plan, Word and Excel are forced to battle against their competitors on even turf, correct, sir? Yes, which is effectively what happened. Chicago went Α. forward with the extensibility plan and it was released into the market. What I didn't understand at the time was that WordPerfect was going to do such a bad job in building a product that they were not successful in the market, and that Word and Excel would do a much better job. Let's talk about option two, shipping a shell in Office. That certainly was not your preferred option, but

you thought it addressed some of the problems outlined in

the status quo option, correct? 1 2 Well, again, you know, I really didn't like the status Α. 3 quo option, because I didn't like those interfaces, but this Office shell had been discussed as a concept a few weeks 4 prior, and so it was something that was being discussed, 5 although it certainly never went forward. But I clearly was 6 7 advocating against it in this e-mail. 8 Well, the Office shell, as you outlined it, would have 9 pulled some of the Cairo features into Office, allowing 10 Microsoft's applications to move forward significantly and 11 to differentiate Microsoft's applications, correct? 12 That is right. The idea was that Cairo would be very 13 available to end users and if we implemented those features 14 as Office features users would get the benefit of it, but 15 they would only get it in Office. But, as I say, it is not 16 something that ever happened or really got -- there was 17 never a team working on this. Now, based upon your direct testimony, Mr. Muglia, I 18 Q. 19 take it that you are now aware that a plan to ship the 20 extensible shell in Office originated at the executive retreat held at the getaway at Hood Canal in June of 1993. 21 22 Isn't that correct, sir? 23 Well, I don't know for sure if it originated there.

think it probably did, because I think it happened in one of those breakout sessions that we described earlier.

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- 1 Q. I was somewhat surprised by all your testimony about
- 2 the retreat. Do you recall that at your deposition you said
- 3 that you didn't recall the retreat at all?
- 4 A. Well, since the deposition I have had a chance to
- 5 review some additional material and I was reminded of it.
- 6 Q. Well, now you say you recall it pretty vividly, I think
- 7 were your words.
- 8 A. Well, there are some things that I do recall vividly.
- 9 To be clear, I don't remember these breakout sessions and
- 10 the details of what happened there. I do remember being at
- 11 Bill's house. That was kind of a big deal for me. I was a
- 12 | pretty young program manager and being invited to Bill's
- 13 house on Hood Canal was really kind of special. I remember
- 14 that.
- I remember, you know, one particularly fun presentation
- 16 where we were laughing with Bill and some of the things that
- 17 he -- sort of some of the classic Bill Gates statements. I
- 18 remember some things quite vividly.
- 19 | O. Have you now refreshed yourself that Mr. Gates
- 20 personally approved of the plan to ship the extensible shell
- 21 in Office?
- 22 A. No.
- 23 | Q. So when an e-mail says Bill G says do it, that means
- 24 don't do it?
- 25 A. No. When an e-mail that a program manager in the

Chicago team sends talking about — recounting his notes about the discussion that happened following a breakout session that says Bill said do it, that is not Bill Gates approving a plan. I mean, that is Bill Gates, you know, in a moment of discussion, and perhaps he said those words and perhaps he didn't say those words, I don't know, but it was certainly not an approved plan.

Clearly it was not an approved plan because it was being discussed actively as something, in this mail that followed a couple weeks later as something we absolutely shouldn't do. I mean, you have to realize that this was a retreat. It was a brainstorming session. It was a discussion following a brainstorming session. I can easily see Bill, who sometimes gets a little flip, saying go do it. But that does not mean that the team does it by my means. It absolutely was not a plan.

- Q. The operative phrase that you used in that long answer was I don't know. Isn't that --
- 19 A. No.

- Q. -- correct, sir, that you don't know whether Bill said
  that at the retreat? You did not hear those words one way
  or the other, did you, sir?
- A. I don't recall what Bill specifically said. I know
  that we did not have a plan to build an Office shell, that
  we did not assign a team to create an Office shell. There

- 1 was never an active project working on an Office shell where
- 2 Chicago would not have extensible interfaces and where all
- 3 | the interfaces were in the Office shell. That didn't
- 4 happen.
- 5 Q. Yes. You will recall on direct you said something to
- 6 the effect that no one ever looked at that option.
- 7 Is that what you said, sir?
- 8 A. No one ever seriously -- I don't know exactly what I
- 9 said, but it is not that people didn't necessarily look at
- 10 it, but we did not do it. We did not move forward with it.
- 11 Q. In fact, a lot of people looked at it, didn't they,
- 12 sir?
- 13 A. No, I don't think so.
- 14 Q. In fact, Chris Graham looked at it and draw up a
- proposal to do exactly what Bill G said to do, correct, sir?
- 16 A. That may have happened. I don't know that. I do know
- 17 that it didn't happen.
- 18 Q. Let me see if I can refresh your recollection on that.
- 19 This is PX-61.
- 20 Mr. Muglia, you have just been handed PX-61. Is that a
- 21 document that you were shown in preparation for your
- 22 testimony here today?
- 23 A. No, it was not.
- 24 Q. Do you recall seeing it before?
- 25 A. No, I don't.

- Q. Can you see that this document is maintained by Chris
  Graham from the header there which is on the screen?
  - A. That appears to be the case, yes.
- 4 Q. And in looking down at the summary it states this paper
- 5 investigates a proposal that the next major version of
- 6 Office after Chicago should consist of a Windows shell and
- 7 | applications optimized to work together. The proposal
- 8 originated at a senior technical retreat at Hood Canal in
- 9 June of 1993.

- Now, does that refresh your recollection that the idea
- 11 for the Office shell and the advancement of the idea
- 12 occurred after the retreat at Hood Canal?
- 13 A. It appears to. Again, that makes sense to me.
- Q. Mr. Graham, in fact, was recommending the aggressive
- 15 | version of this plan, correct, sir?
- 16 A. I don't -- well, first of all, I have not read the
- 17 document. If you would like me to take the time to read the
- 18 document, I could. This is the first time I have seen it.
- 19 In glancing at the document that does not appear to be the
- 20 case. I see pros, I see cons, you know, I see disadvantages
- 21 | and advantages being listed out. I see a proposal for what
- 22 it would do.
- I mean, this is a classic example of a document that is
- 24 prepared to take an idea and flesh out the details of an
- 25 | idea to understand if it makes sense or not. And I don't

see any point in this document where Chris actually
advocates doing it. It might be in here. As I said, I have
not read it. He seems to be fleshing out the details of
what an Office shell would look like to provide more

information.

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- But, as I said, it was not something that went forward.

  There was never a team put on this. It was not a project that was actively moved forward at Microsoft and we didn't do it.
- Q. Mr. Muglia, my question was pretty simple. My question
  was wasn't it a fact that Chris Graham recommended following
  the aggressive version of the plan that he outlined in this
  memo? I don't want to trick you here. If you look right
  under summary, sir, can you see that, sir?
- 15 A. I do. This is the first time I saw it. Yes, I see that.
- Q. That was my question to you. You would acknowledge that Mr. Graham was recommending following the aggressive version of this plan, right?
- 20 A. I see that for the first time this morning. Yes, I see
- 21 that. Again, it is not something that happened.
- Q. And the plan was to ship Chicago and to have it provide limited extensibility, correct?
- 24 A. I don't know, because I have not read the document.
- Q. You can put that one aside, Mr. Muglia.

Let's get back to the Chicago shell extensions. You would agree, sir, that the Chicago shell extensions were changed to both support and be consistent with OLE?

A. Yes. There was a point in the evolution, and I honestly don't remember when it was, where Satoshi changed them to be consistent with the way OLE does things, although it was designed to not use OLE. It is kind of a confusing point, because OLE is a mechanism for doing things, but it also defines a specific set of interfaces.

Originally when the Chicago shell interfaces were envisioned they had nothing compatible with OLE, and Satoshi wanted changing the interfaces so that you could — they would work without OLE on the system and save the memory, but then if you had OLE it would still work, so they were made more consistent.

- Q. And, in fact, Mr. Muglia, the Windows 95 group, Mr. Nakajima in particular implemented a lightweight OLE version of the Chicago shell extensions specifically to ensure compatibility with future versions of Microsoft's operating systems including Cairo, correct?
- A. No, not exactly. What he did, what Satoshi did was he made those interfaces compatible with the approach that OLE used, but the interfaces were still very different than the interfaces that the Cairo shell used. So while what they did was they allowed an OLE app, an app that supported OLE

to better interoperate with the shell, they did not make that shell more compatible with Cairo by any means.

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You have to understand that OLE is a mechanism that allows you to do a series of things like object linking embedding and a specific set of interfaces. You can still define different interfaces, and the interfaces that were defined for Chicago were still different than the interfaces for Cairo.

- Q. Mr. Muglia, you would agree, would you not, sir, that you were actually involved in the discussion that led to the decision to document the Chicago shell extensions in the fall of 1993, correct?
- A. I was involved in discussions about the documentation
  of the shell interfaces. Remember, we are now referring to
  the broad set of shell interfaces not just the namespace
  extensions, but I don't recall being supportive of it. It
  was not something I advocated by any means.
- Q. Well, you would agree with me that the shell extensions include the namespace extensions, correct?
- 20 A. They do, but I never -- I definitely did not advocate 21 the namespace extensions.
  - Q. Let me show you another document that you were shown on your direct examination. This is PX-473. I will just hand you another one to make it easier.
- I would like to, again, direct your attention to the

- 1 last e-mail on the page, which is this e-mail from Brad
- 2 | Silverberg to Dennis Adler and CC'g David Cole sent on
- 3 September 27, 1993.
- 4 Do you see that, sir?
- 5 A. I do.
- 6 Q. Now, Mr. Silverberg, he was in charge of Chicago,
- 7 right?
- 8 A. Yes, he was.
- 9 Q. And Mr. Adler, he was the group program manager for
- 10 | core Chicago, right?
- 11 A. That is probably right, yes.
- 12 Q. And David Cole, he was the group manager of Chicago?
- 13 A. Right. David ran the engineering team.
- 14 Q. Now, Mr. Silverberg says that he and David met with you
- 15 and Mr. Allchin last week, right?
- 16 A. That is what it says. Now, remember I didn't receive
- 17 | this e-mail and I just reviewed it yesterday in preparation
- 18 for my testimony, but that is what it says.
- 19 Q. Yeah. And certainly you have no reason to believe that
- 20 Mr. Silverberg did not have this meeting, correct, sir?
- 21 A. I'm pretty sure we had a meeting. Like I said, we
- 22 talked about these things all the time.
- 23 Q. And Mr. Silverberg is here reporting that the decision
- 24 | has been made to document the shell extensibility after we
- 25 have finalized on the API, correct?

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A. That is what he writes. That is correct. Remember, he says shell extensibility, so he means all of the extensibility interfaces of the shell.

Q. I understand that, and I thought we just established
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- that if we talk about shell extensibility in Chicago during this time period that would have included the namespace extensions, right?
- A. Those extensions are part of the shell APIs, but I don't know what was agreed to in this meeting or not. As I said earlier in my direct testimony, I think Brad was getting a bit ahead of himself when he sent this mail.
- Q. Mr. Muglia, if you look up in Mr. Dennis Adler's response, he says there in the second sentence of his response, the APIs I think this covers are those for hooking into the right left pain of the Explorer.
- Now, that would be the namespace extensions, correct?
  - A. That is the namespace extensions, correct.
- Q. Now, going back, please, to Mr. Silverberg's e-mail,

  Mr. Silverberg states that we decided that it is A list and

  that you, Bob Muglia, was having a team determine how to
- 21 wrap the APIs under Cairo.
- 22 Right, sir?

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- 23 A. That is what Brad says.
- Q. And, in fact, that is what you did, isn't that correct, sir?

A. I was looking at ways to figure out how to support those interfaces. That is true. Ultimately I came to the conclusion that it was very difficult for us to support them in the Cairo shell.

I will also point out that if we could go to the top of this e-mail, the mail from David, where he says at the very top, Dennis, don't spin up another API synergy. As I said before, we're trying to get this resolved with Bob Moon. It makes it very clear that this was not resolved at that time. It was not done. It is not like a decision had been made to move forward. It was not done. David was saying he was in that meeting with Brad, again, in an e-mail chain I was never copied on that, hey, this is still open and we're still working.

Q. And, in fact, Mr. Muglia, Mr. Nakajima was tasked with ensuring that the Chicago shell extensions would be compatible with Cairo.

Isn't that correct, sir?

- A. If he was tasked with that I didn't know it and he sure didn't do it. I can tell you that for sure. Satoshi did not make a set of APIs that were compatible with Cairo.
- Q. Now, Mr. Silverberg goes on to say that, quote, all I will agree, however, that we should not use OLE2 for extensibility given how late it is coming in, and we were told we had made the right decision, which we knew all along

but was nice to hear the others, particularly Bob Mu say it. 1 2 That, again, would be referring to you, right, sir? 3 That would refer to me. Α. Do you have any reason to doubt that you, in fact, 4 Q. 5 agreed that it was the right decision? Yeah. Actually I do not. I think that what I was 6 7 reflecting on there was the fact that I recognize that 8 Chicago has these memory constraints, and while I don't know 9 when Satoshi made changes to the APIs to make them OLE 10 compatible -- and I always thought that was a clever piece 11 of work on this part, that the idea of being compatible with 12 the APIs but not using the actual more broad functions, the 13 mechanisms of OLE, I always thought that was a clever piece of work that Satoshi did. 14 15 It didn't change the fact that the interfaces were still incompatible with Cairo. It didn't change the fact 16 17 that the interfaces and the design had robustness problems, but I did recognize that there were real memory constraints 18 that the Chicago team was working under. 19 20 Mr. Muglia, you would agree that Mr. Allchin, Mr. Silverberg, Mr. Cole and you agreed that the shell 21 22 extensions would be documented and put on the A list, 23 correct?

That is not what I recall. Again, the fact that he

No, I don't. That is what Brad says in this e-mail.

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didn't -- I think the simple fact that this mail didn't copy

Jim and myself indicates that it was not an agreement. When

you have a meeting and you decide on something, and

particularly something that is contentious with two parties

arguing, typically you copy the other people on the mail,

and you say we met, we decided and this is what we're doing,

and you have an e-mail that attempts to close it.

I mean, the only way you really know it is closed is if Brad had sent that e-mail to Jim and myself and said we had this meeting, as we discussed this is what we're doing, Jim, please confirm this is correct. And Jim had sent a response saying, yes, Brad, I agree. In fact, we know that didn't happen. We know that was not what was going on, because I have already seen other documents this morning that I believe were from a period slightly later than this where Jim and Brad are arguing like crazy over the fact that Brad is going ahead and publishing this.

Brad was asserting to his guys that he was working the issue, but he certainly never closed it, and I certainly never agreed with Brad on this, not at that point in time.

- Q. Mr. Muglia, we can agree, can we not, that A list means fully documented and supported by Microsoft, correct?
- A. That is what A list means.
- Q. And the Cairo group --

A. Or meant at the time, I should say. It is not a term

we used. I recall it in this context. I don't recall it frequently, but I do remember it in this context.

- Q. The Cairo group as of October of 1993 understood that it needed to support the Chicago extensions, correct, sir?
- A. What the Cairo group understood was that the Chicago extensions we needed to have a set of extensions that would work compatibly between Chicago and Cairo. We needed to have apps be compatible. We were still, however, arguing about the form of those extensions at this time.
- Q. Let me show you what has been marked as Plaintiff's Exhibit 86.

Was this a document that you reviewed in preparation for your testimony here today?

A. In the current form, no. In other words, the reason I say that is I want to just confirm that this is the same e-mail for a second here. I don't recall this exact form.

Yeah. This e-mail is in another exhibit, Defendant's Exhibit 58, which I did review, but the version of it that I am seeing where Dennis is responding to Brad, that is not something that I have seen. In fact, you know, I never saw this variant of the e-mail trail, in other words, where Dennis has responded. But I did see the original e-mail from Brad, which we talked about earlier in my testimony, which was in Defendant's Exhibit 58.

MR. JOHNSON: If we could bring out the from and

- 1 to in Mr. Silverberg's e-mail there.
- 2 BY MR. JOHNSON
- 3 Q. The subject is shell issues, October 1st, 1993. You
- 4 can see that a copy of this e-mail went to Steve Madigan,
- 5 right?
- 6 A. That is right.
- 7 Q. Mr. Madigan was the program manager for Cairo, right?
- 8 A. He was a program manager in Cairo, yes.
- 9 Q. And he worked for you at the time, right?
- 10 A. He did, indeed.
- 11 Q. Mr. Silverberg writes in his e-mail at the top, I
- 12 talked to Paul Ma -- and that is Mr. Maritz, right?
- 13 A. That is correct.
- 14 Q. -- today about some shell issues, especially at the
- 15 global level such as apps plans in Cairo. He goes on to say
- in the third paragraph that the applications will not be in
- a position to have their Chic/Cairo -- I'm not sure how to
- 18 pronounce that --
- 19 A. Chic/Cairo I think is the pronunciation.
- 20 Q. Just Cairo?
- 21 A. It is a term that was almost never used, but it is the
- 22 | idea of some merger, I guess. Chic/Cairo is how you
- 23 pronounce it.
- 24 \ Q. It is bringing together Chicago and Cairo, right?
- 25 A. Yeah. Again, I don't know if it has been used in any

1 other discussion, but it was not a commonly used term.

- Q. And he says they won't be ready, the apps won't be
- 3 ready until very late '95 or '96, and certainly will not
- 4 require that Chicago/Cairo shell at that point, right?
- 5 A. Yeah. That is what it says.
- 6 Q. And he goes on to say that means that they, meaning the
- 7 | applications, plan to write a bunch of shell extensions to
- 8 the Chicago version one shell. Capone, for starters.
- 9 Do you see that, sir?
- 10 A. Yes.

- 11 Q. Capone was the e-mail client being developed by -- it
- 12 was an application being developed by Microsoft, right?
- 13 A. Yeah. It is an interesting thing, this paragraph
- 14 refers to Capone and REN. It turns out that this is sort of
- 15 another example of waring teams at Microsoft. Capone was
- 16 | the e-mail client that was being built by originally the
- 17 | exchange group as an e-mail client for exchange.
- 18 REN was another application code base that was being
- 19 built ultimately by the Office group, which eventually
- 20 became Outlook. So whenever you see REN that is today
- 21 Outlook. That code eventually turned into Outlook. Capone
- 22 was killed. But it is an interesting note that there were
- 23 | two of those at the same time, and those teams got along
- 24 | about as well as the Chicago and Cairo teams did.
- 25 Q. So Capone was an application, right, a Microsoft

1 application?

- 2 A. Yeah. It was also viewed as being something that
- 3 | potentially could have shipped in the operating system at
- 4 | the time, although I don't believe it ever did.
- 5 Q. Well, it certainly wasn't developed by the systems
- 6 division, right?
- 7 A. No, it wasn't. It was developed by the exchange group.
- 8 Q. And he goes on to say, in addition, REN is going to be
- 9 transferred over to work for Chris Peters who is going to
- 10 own Office and be done as a Chicago shell extension,
- 11 | correct, sir?
- 12 A. That is what it says, although that was never done. I
- mean, there are subsequent e-mails that I have reviewed, in
- 14 | fact, I think it was the later mail that I was talking about
- 15 with -- I think it was later. I don't remember the dates
- 16 | right now. The one with Chris Peters where it is very clear
- 17 | that REN was not meant to be compatible with Chicago and, in
- 18 | fact, it was never -- it was never -- while REN, slash,
- 19 Outlook uses the Chicago shell extensions, it never used the
- 20 namespace extensions.
- 21 Q. Well, you would agree, sir, that the plan at least at
- 22 | this time period, in October of 1993, was that REN was going
- 23 to be done as a Chicago shell extension.
- Isn't that correct, sir?
- 25 A. I don't know that. Let me describe that, which is that

- 1 this was a mail that Brad sent mostly to his guys, and he 2 copied Steve Madigan, explaining his view of what was 3 happening. But, again, I mean, the teams at Microsoft are independent. This is not -- the guy who ran REN is a guy 4 5 that still works at Microsoft by the name of Brian McDonald. This is not a mail from Brian McDonald saying this is the 6 7 plan of REN. It is a mail of Brad saying he thinks this is 8 the plan of REN. 9 Remember, this is a guy, Brad Silverberg, who is 10 strongly advocating for these Chicago shell extensions. 11 That is what Brad says, but I don't know that that was 12 Brian's plan. And certainly Brian never used the namespace 13 extensions. Can we at least agree, Mr. Muglia, that by October of 14 15 1993 REN was part of the Office group? 16 It did move over to Office, and it appears to have done 17 so at that time. Mr. Silverberg also says that other things that Office 18 Q. 19 wants from the shell will also be done at Chicago shell 20 extensions, correct?
- 21 A. That is what Brad says.
- Q. Do you have any reason to doubt that, sir?
- 23 A. I don't -- I have no reason to doubt Brad said that. I
- 24 | don't know what he ultimately referred to and what was done.
- 25 Again, I mean, the apps in general wound up using the shell

- extensions in a focused way. They didn't use them as broadly as was anticipated in 1993.
- Q. Then he goes on to talk about the online services
  project under Russ S. That would be Mr. Siegelman, correct?
- 5 A. That is right. That project was the work that
- 6 ultimately became what we know of as MSN.
- 7 Q. But back then it was called Marvel, correct?
- 8 A. That is right. There was a dedicated Windows client 9 for that online service.
- Q. And Marvel, in fact, used the namespace extensions to integrate into Chicago.
- 12 Isn't that a fact, sir?

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A. Marvel was using them. What they ultimately shipped
with I don't know. They were certainly looking at using
them, and they certainly did work to use them. Again, these
namespace extensions were ultimately not important
commercially in the marketplace, and so I don't even know if
they shipped with them.

I do know for sure that none of it made any difference, because about the same time that these products were coming to market, 1995, there was this other thing called the web and HG mail that happened, which made all of that irrelevant. In fact, MSN ultimately became a web application. It didn't matter ultimately. Again, I don't even think they shipped with it.

- Case 2:04-cv-01045-JFM Document 452 Filed 01/24/12 Page 33 of 66 59 So, Mr. Muglia, you would have to agree that at least 1 Q. as of October of 1993 there were a lot of groups within 2 3 Microsoft who appeared to like this dog meat? I mean, the Marvel guys were using it. I don't 4 know that -- I don't know that the Office group ever used it 5 at all for anything. I mean, they obviously do shell 6 7 extensions that you needed to do in order to run on Windows 8 95, but they certainly never implemented these namespace 9 extensions.
  - Other than those groups, I don't know of anyone else who was even discussing using them. Ultimately, like I say, nobody wound up using the namespace extensions in any commercially significant way.
  - Mr. Muglia, he goes on to say, Mr. Silverberg, this means, of course, that Cairo is going to have to run those Chicago shell extensions. This means that we really have to work well with the Cairo guys to develop the extensions so they can support both.

Do you see that, sir?

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- I do. This is Brad basically saying that, you know, our team is going to win and beat those Cairo guys, but let's at least work well with them as we move forward. He did it in a fairly nice way, actually.
- The idea at this time period was to have the extension mechanism for applications that was based on OLE2 or

- 1 | something that was simply wrapped to OLE2, right?
- 2 A. That is correct. It is that alternative mechanism
- 3 | that, you know, that I mentioned that Satoshi designed that
- 4 | I thought was clever.
- 5 Q. In fact, the Chicago shell extensions were made to be
- 6 OLE compatible, right?
- 7 A. Well, they used a mechanism that was compatible with
- 8 OLE. But, once again, that does not mean they were
- 9 compatible with Cairo.
- 10 Q. Let's turn to the second page of this e-mail.
- MR. JOHNSON: Highlight the first full paragraph.
- 12 BY MR. JOHNSON
- 13 Q. Mr. Silverberg states, Paul has discussed this in
- 14 detail with Bob Mu and he fully supports.
- Now, Paul would be Paul Maritz, right?
- 16 A. That would be who Brad is referring to, yes.
- 17 Q. And Paul Maritz was your boss?
- 18 A. Well, no. I mean, yes, but he was my boss's boss. I
- 19 | worked for Jim Allchin who worked for Paul.
- I do think it is really important, I mean, you're
- 21 asserting earlier in the e-mail that was sent from Brad
- 22 | Silverberg to Dennis Adler that this plan had been decided
- 23 on September 27th because of this meeting that I had. This
- 24 | whole e-mail chain is dated a few days later, October 1st.
- 25 But, I mean, what is really interesting is if you look at

Defendant's Exhibit 58, and you look at other e-mails that 1 were sent, my boss, Jim Allchin, the guy I worked directly 2 3 for, was really pissed off by this e-mail that Brad sent. I mean he writes, you know, I just read this mail. I phoned 4 both of you. You were both gone. You both know this was a 5 critical issue to me. I can't believe that neither one of 6 7 you discussed this with me personally. 8 He goes on to rant and rave about how he disagrees with 9 what Brad is saying in this e-mail. I mean, this issue was 10 very alive and being argued actively between our teams, and 11 certainly by my boss, my direct boss, Jim Allchin. So 12 Brad's assertion that Paul -- that I fully supported this 13 was certainly not correct, because I certainly supported my boss, Jim Allchin, and he was pissed off by this e-mail that 14 15 Brad wrote. 16 Mr. Muglia, did you just say that Office never used the 17 namespace extensions? I don't think they did anywhere, the namespace 18 Α. 19 extensions. They used the shell extensions, certainly. 20 don't believe they ever used the namespace extensions. Do you recall that you so testified in 2001 that 21 22 Office, in fact, used the namespace extensions? 23 No. I don't know what I said explicitly then, and I 24 don't know what you're saying that I was referring to.

All right. We'll get to that.

25

Q.

1 Mr. Silverberg goes on to say Bob, and that would be 2 you, right?

- A. That would be me.
- Q. Accepts now that it has to be this way, that Cairo will have to support the Chicago extensibility approach, and that
- they may have to give up some of their pet ways of doing things.
- 8 A. Yep, our pet ways.
- 9 Q. Is it fair to say, sir, that by this time period,
  10 October of 1993, that you fully supported the idea that
  11 Cairo would have to support the Chicago extensibility
- 12 approach?

- 13 A. No. I mean, I have said this a number of times today.
- 14 I knew that Cairo and Chicago had to support a common
- approach to writing applications. That is certainly true.
- Did I support these extensibility mechanisms that Chicago was defining? No.
- In fact, I clearly advocated very vociferously in the
- months that followed this to not move forward with the
- 20 Chicago namespace -- or the Chicago shell extensions,
- 21 although ultimately that is what we did do by and large.
- 22 Q. So if the Chicago shell extensions were compatible with
- OLE, then the Chicago applications would also work on Cairo,
- 24 correct?
- 25 A. No. I have said this before. OLE is a mechanism for

- 1 how you make a programming interface call. You can define
- 2 many APIs using that mechanism. The Chicago team defined
- 3 one set of APIs. The Cairo team had a different set of
- 4 APIs. Just because Chicago used OLE does not mean that it
- 5 is compatible with Cairo.
- 6 Q. I hand you now what has been marked as Plaintiff's
- 7 Exhibit 94.
- 8 This is an e-mail that Mr. Maritz sent to Bill Gates on
- 9 October 13, 1993 entitled strategy, about the subject
- 10 strategy. Now, was this a document that you reviewed in
- 11 preparation for your testimony here today?
- 12 A. No, it was not.
- 13 Q. Now, Mr. Maritz was your boss's boss. Did I get that
- 14 right?
- 15 A. That is correct.
- 16 Q. He was also Mr. Silverberg's boss, right?
- 17 A. That is right. He was Jim and Paul's -- Jim and Brad's
- 18 boss, that is correct.
- 19 Q. I would like to direct your attention to the paragraph
- 20 with the number one in front of it. It is the third
- 21 paragraph down.
- 22 A. Yep.
- 23 Q. Where Mr. Maritz states, recognizing that Chicago is
- 24 | the next ISV target, and he goes on to say ensure that the
- 25 APIs exposed by Chicago are as close as we can make to the

OLE direction we want to go. Mainly, can we get shell extension APIs to be OLE? Answer, yes, we can by using lighter weight OLE implementation for just those scenarios that shell uses, i.e., not for general in place editing, et cetera. This will mean that any Chicago UI exploitative apps would work decently on Cairo, i.e., no need for ISVs to do different work to run on Cairo.

That is what Mr. Maritz, your boss's boss, was telling Mr. Gates in October of 1993, correct?

A. Yeah. That is what Paul said. As I said, I was not originally copied on this mail and I don't believe I have ever seen it before. I just saw it right now. I can't comment on it.

I will tell you that of what Paul said I don't believe that last sentence is correct. Everything else he said I would agree with. I mean, I would agree with Chicago being the next target at the time. I agree with the work that the Chicago team had done and, in fact, said something about and testified on this that Chicago had done some OLE work to make their APIs compatible. But that did not mean, that in last sentence that Paul said, was not to my knowledge correct.

23 Q. In fact --

A. Certainly we argued about it afterwards. You know, there were many arguments after this came out on October

- 1 13th. It was by no means a decision that decided anything.
- 2 Q. In fact, Mr. Maritz in this e-mail to Mr. Gates in
- 3 October of 1993 states, and immediately following what we
- 4 | have just read, contain Cairo to meet the following
- 5 | criteria. Number one, a proper superset of Chicago, all
- 6 apps including shell extension must run.
- 7 So Mr. Maritz was telling Mr. Gates in October of 1993
- 8 | that Cairo would have to be able to run the shell
- 9 extensions, correct, sir?
- 10 A. That is what Paul is saying to Bill.
- 11 Q. That is your boss's boss, and the boss of the bosses,
- 12 right?
- 13 A. That is right. I mean, it is interesting that this
- 14 mail didn't copy Jim, I will point out. That is kind of an
- 15 interesting thing. I have no idea what discussions Jim and
- 16 | Paul might have had about this, but this is what Paul was
- 17 | certainly advocating. At least this is what he appears to
- 18 be advocating in this mail I have never seen before.
- 19 O. Now, in fact, Mr. Muglia, Mr. Nakajima, the inventor of
- 20 the namespace extensions APIs, was working hard in the fall
- of 1993 to make the shell extensions OLE compatible so that
- 22 they would run fine on Cairo.
- Isn't that correct, sir?
- 24 | A. He was making the shell extensions OLE compatible
- 25 mostly to make it easier for OLE apps to work with the

shell. Just because those -- I continue to say the same
thing -- just because those APIs were OLE compatible did not
mean they ran on Cairo. Cairo exposed a different set of
OLE interfaces. They were different.

What Paul is asserting in this mail to Bill was not technically correct. That last sentence was not technically correct. Again, it is interesting that Jim was not copied on this mail. Because, again, when you make a plan and you decide something and you have two teams waring over something, usually you include the guys that have been waring with each other in the mail.

This is a case where Paul is advocating to Bill that we move forward in a given direction, and he was trying to drive a decision. I mean, it is his job to drive a decision. He was making sure that he could get agreement from his boss, Bill Gates, on driving a decision forward. What happened, in fact, was that the decision was not finalized fully until months later.

Q. Let me show you PX-114.

At the top here is an e-mail, if we go to the top e-mail, from Mr. Cole. I'm sorry, the second one down.

It is from Mr. Cole to Brad Silverberg and others. Mid month status report, November of 1993. And you see there where it states Satoshi, and that would be Mr. Nakajima, right?

A. Yes, that would be Mr. Nakajima. Satoshi.

Q. Satoshi. I'm sorry. Thank you very much.

Satoshi has been busy for the past month working on new interfaces that Cairo will support. In total he has spent about six to eight weeks on this stuff and he is about halfway done now.

Do you recall, sir, that in fact you assigned Mr.

Nakajima to do this work, to make these extensions so that
they would be compatible with Cairo?

A. No, I didn't. Satoshi didn't work for me. He worked in the Chicago group at this time. So I didn't assign Satoshi. Perhaps Brad did. I wouldn't know. This is an e-mail I have never seen before, literally.

I will point out something kind of interesting, which is this so-called plan that Paul Maritz had written to Bill Gates, the strategy, was on October 13th of that year. This mail is dated December 2nd. You know, and if you take a look at the sentence above the one that is highlighted, David is asking -- David Cole, the guy that ran Chicago -- where do we stand in the great shell extension debate, the war I have been talking about, on coming up with APIs that we and Cairo can live with?

Very clearly a month later after Paul sent his mail of the plan, the strategy, there wasn't a set of APIs that the two teams agreed with. Here is the guy who runs Chicago 1

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asking the question where are we in getting these APIs defined? Satoshi is off working on defining a set of APIs, which ultimately we did -- we did use, but not in Cairo. Cairo had to be killed to support those darned APIs. So, I mean, ultimately those APIs went forward, but here we are a month later and this thing is sure not closed. 0. The divergence of approaches between Windows 95 and Cairo certainly didn't effect the users of the lightweight OLE implementation of the shell extensions, correct? No. They totally -- well, again, none of this ever Α. amounted to anything, because in the end the Chicago shell extensions were published, hundreds of thousands of ISVs have used it, and billions and billions -- tens of billions of dollars have been earned by the industry as a whole by writing to Windows applications over a period of time and Cairo was killed. So in that sense, no, it never effected anybody. But ultimately those shell extensions were different in 1993, and the teams were fighting like crazy over it still, and they continued to fight well into 1994, frankly, until Bill made the decision to not move forward with the namespace extensions because my team was advocating so strongly against it. Isn't it a fact, sir, that Windows 95 could have switched to full OLE implementation without ISVs even

knowing the difference with respect to the shell extensions? 1 2 Not exactly. The issue was the memory constraint. Α. 3 When Satoshi did that work to make the interfaces compatible with the mechanism of OLE, what that meant was that if you 4 5 had a machine that was running more memory, that had more memory, let's say eight megabytes, and you were running an 6 7 OLE compatible application in that machine, in fact, that 8 application in the shell could interoperate with each other. 9 That was the clever work that Satoshi did. The actual OLE 10 mechanism could be used. 11 But the reason Satoshi did what he did was so that 12 Windows 95 would run on a four megabyte machine for some 13 class of applications. At the time applications that used 14 OLE probably wouldn't have run well on four meg. In fact, by '96, you know, we saw eight to 16 meg computers, which 15 are still tiny by today's comparison, but we saw computers 16 17 that had a bit more memory. Isn't it more accurate to state, sir, that Mr. Nakajima 18 Q. 19 designed the lighter weight implementation because he had to 20 deal with the memory limitations of the four meg machine? That is correct. That is absolutely correct. 21 Α. 22 Let's go to Plaintiff's Exhibit 176. 23 I would like to direct your attention to the e-mail at 24 the bottom of page 1, which is the first e-mail in this

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chain from Mr. Seres.

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Do you know who Mr. David Seres was?
1
          I don't recall. I was not copied on any of this e-mail
2
     Α.
 3
     and I have not reviewed it. I have never seen it before. I
     don't think I am copied on any of it.
 4
          He was forwarding the latest Chicago/Ole questions and
 5
     answers for a bunch of folks on May 11, 1994. It states,
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7
     please forward as appropriate. And you'll see Mr. Belfiore
8
     forwards this e-mail to Mr. Nakajima and others the next
9
     day.
10
          Do you see that?
11
          And Mr. Nakajima responds a couple hours later,
12
     correct?
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          I see that, yes. Again, this is an e-mail I have never
14
     seen before.
15
          So this is not something that you reviewed in
16
     preparation for your testimony?
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          No, I did not.
     Α.
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          Okay. At the bottom of Mr. Nakajima's e-mail he states
     Q.
19
     that his specific comments are identified by three pound
20
     signs.
21
          Do you see that, sir?
22
          I read it, yes.
     Α.
23
          I would like to turn to some of Mr. Nakajima's comments
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now. If you turn to the second page of this document and

focus on the first full question and answer. As set out by

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1 Mr. Seres, the question stated is does the Chicago shell use 2 OLE2? What about the Explorer? And the answer given there 3 was, no, the new 32 bit implementation of OLE2 was not available early enough in the Chicago development cycle to 4 make it a practical candidate for supporting the Chicago 5 shell extensions. This does not effect users. Future 6 7 versions of the shell will support OLE. The same is true 8 for the explorer. 9 Mr. Nakajima responds to this and says the answer must 10 be yes. To achieve our size goal we decided to put a subset 11 implementation of OLE2, lightweight binder, in the shell so 12 that we can run the shell and old Windows apps without 13 loading OLE2. But it uses the same algorithm when loading 14 inproc server DLLs. When we switch to the real OLE2, nobody 15 will notice the difference. 16 Do you see that, sir? 17 Α. I do. And Mr. Nakajima was telling Mr. Seres that, in fact, 18 Q. 19 nobody is going to notice the difference when we go to OLE2. 20 These shell extensions will run just fine there. Isn't that correct, sir? 21 That is correct. To my knowledge that is technically 22 23 correct. Again, this is an e-mail I have never seen before, 24 but technically to my understanding that sentence -- what

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Satoshi said is correct.

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          Now, the reference to inproc server means in the same
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     process, right?
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          Right. You note here it says that we use the same
     Α.
     algorithm in loading inproc DLL. See, the thing about OLE
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 5
     is OLE allowed these -- it was a mechanism, a general
     purpose mechanism that allowed different applications to
 6
7
     talk to each other, so it was called a cross process. All
8
     of that conversation I had earlier today about the
9
     robustness concerns I had about the Chicago shell extensions
10
     was true, because the implementations Satoshi did ran these
11
     shell extensions in process, which is validated here in his
12
              Technically everything he says is correct. It has
13
     the side effect of having robustness issues, but technically
14
     what he says is right.
15
          So if and when Microsoft wanted to upgrade to a full
16
     implementation of OLE in later versions of its operating
17
     system, such a change would not effect in any way the
18
     applications written to the lightweight OLE implementation
19
     of the namespace extension APIs, correct?
20
          Well, first of all, I will point out that this is
     not -- we are not referring just to the namespace extension
21
22
            I guess we are with the Explorer, but even there it
23
     is not just namespace extensions. This is, again, referring
24
     to more than the namespace extensions. It is all of the
25
     Chicago shell extensions. We are not just talking about the
```

namespace extensions here. We are talking about a broader set of interfaces.

Again, technically Satoshi had this clever mechanism that was a subset of the full OLE, which is what he says here, and he calls it a lightweight binder, which would be an accurate way of describing it, and you can replace that with OLE and everything continues to work. That is to my knowledge technically what would happen.

- Q. Just to be clear here, Mr. Muglia, this is talking about including the namespace extensions, correct? In fact, you reference the fact that Mr. Nakajima talked about the Explorer, and that would be in reference to the namespace extensions, correct?
- A. Yes, it does include -- the reference here would include the namespace extensions, but the Explorer has other shell extensions besides the namespace extensions. The second question -- the answer to the second question is no, it includes the namespace extensions, but there are other shell extensions here.
- Q. If you would turn to the -- well, it actually says page 134 at the bottom, but of this e-mail which has a Bates stamp ending in 1072, if you could turn to that, sir.

And drawing your attention to the question and answer the  $\ensuremath{\mathsf{--}}$ 

MR. JOHNSON: The second full question and answer,

could we bring that up? 1 BY MR. JOHNSON 2 3 The question as originally written was why does the shell extension model look exactly like OLE? It uses the 4 registry database, GUIDS, whatever that is, has things 5 called inproc handlers and even uses identical interfaces to 6 7 those found in OLE. The answer given to Mr. Seres was the 8 Chicago shell team is clearly influenced by the OLE design, 9 and new pieces of code like a new Windows registry. 10 However, due to scheduling problems, basically the lack of 11 32 bit OLE they had to proceed down their own path. We plan 12 to re-converge these technologies in the future. 13 Mr. Nakajima responds this message is wrong again. We 14 followed the OLE programming model so that we can switch to 15 the real implementation without asking ISVs to rewrite the 16 extensions. This is very important information to be sent to the ISVs. Even if the shell started using the 17 implementation in the OLE 32 DLL, the Chicago shell 18 19 extensions will continue to work. 20 That is also technically correct, isn't it, sir? It is definitely technically correct, and I definitely 21 22 prefer Satoshi's answer as the answer to this question for 23 ISVs. 24 You certainly have no basis to disagree with Mr. 25 Nakajima with respect to the compatibility of the shell

extensions with future versions of Windows? 1 That is not what this -- let me be clear here. You're 2 Α. 3 reading things into this. So, no, that is not what this says. What it simply says is that in the future when 4 Windows 95 -- when future versions of Windows 95 ship the 5 full OLE, applications will continue to work. 6 7 Remember, all this e-mail trail -- which, like I say, 8 I'm seeing for the first time as I sit here, was dated May 9 12, 1994. In that time frame my team was still building the 10 Cairo shell and we were still working on that and we still 11 had compatibility issues we were working through. Now, in 12 the subsequent months that project was canned, but you can't 13 take this and then take it to those next steps you just did. Let's turn to the first page then. 14 15 MR. JOHNSON: If you can bring up the second half 16 of that first paragraph, please. 17 That is fine. I think we can read that. BY MR. JOHNSON 18 19 Mr. Nakajima states, starting about halfway through the 20 paragraph, this is very important to tell ISVs that their shell extension DLLs are OLE inproc servers, and those shell 21 22 extension DLLs are OLE compatible not only in future versions of Windows but also in this version. 23 24 Once again, Mr. Nakajima is technically correct.

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that a fact, sir?

A. He is technically correct about the shell extensions being OLE compatible and those will continue to work as the real version of OLE was put in Windows. But when he says not only in future Windows versions but also in this version, he was not referring to Cairo. He does not specifically say that these things are going to work with Cairo.

As it turns out, the sentence turns out to be technically correct, because, again, Cairo was killed at a later point and we adopted the Chicago shell in Windows NT. So technically everything that he said there is correct, but at this time in May of 1994 that raging debate between the Cairo and the Chicago shell teams was still going on.

- Q. If we can sum up here, Mr. Muglia, it is fair to say that sometime prior to May of 1994 any problems with the namespace extensions being compatible with OLE was solved because the interfaces, Mr. Nakajima had made them consistent with OLE, correct, sir?
- A. Sometime before May of 1994 the issues with the broad set of Chicago shell extensions, which as we have determined does include the namespace extensions, and the compatibility with OLE was resolved.

However -- however, the issues of those extensions, of those APIs still remained. They were not compatible with Cairo and they had the robustness issues I have described,

so there was still an active problem going on between the teams.

- Q. Let's switch subjects for awhile. Let's talk about evangelism. Microsoft's system group wants all of the
- 5 developers to support their platform in the best possible
- 6 way, even if those developers are competing against
- 7 Microsoft's applications, correct, sir?
- 8 A. Yes. That is correct.
- 9 Q. And you would agree that that statement was true with 10 regard to Windows 95 and during the entirety of the 1990s,
- 11 correct?

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- 12 A. Yes, it was.
- Q. And Microsoft's systems group would evangelize the
- sure external developers knew everything they needed to know

capabilities and features of the operating system and make

- to build great applications on Windows, even if they were
- competing with Microsoft's applications, correct?
- 18 A. Yeah. I mean, your words everything they needed to
- 19 know is not exactly true. I mean, we didn't teach people
- 20 how to program. What we did do was make sure they had as
- 21 much information as we could reasonably provide them to do a
- 22 good job running on Windows. And so we provided, as we
- 23 | learned about what we were going to do with Windows, we
- 24 | would talk to ISVs both in large conferences as well as in
- 25 more one-on-one sessions to tell them what our plans were on

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     Windows.
     Q. Do you recall having your deposition taken in this
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 3
     case, sir?
 4
     Α.
          Yes.
 5
               MR. JOHNSON: Let's bring up page 53, lines 5
 6
     through 21.
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               Do we have a copy of the depo I can give him so
8
     that he does not have to just read it on the screen?
9
               Do you need one?
10
               MR. HOLLEY: I have one, Jeff.
11
     BY MR. JOHNSON
12
         Mr. Muglia, I don't want to spend a lot of time on
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     this, but I just want to just show you that you quibbled
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     about knowing everything, and I just want to make sure that
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     you did in fact agree with that statement in its entirety
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     during your deposition, right?
17
          Well, I answered the question yes to that. I also -- I
     Α.
     mean, with the question to follow, again, I will ask do you
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19
     recall testifying before -- I say I don't recall the
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     specifics of the testimony. And you agree that is a true
     statement and I said yes.
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22
          Like I say it is true and it is consistent with what I
23
     said, it is just that when you say everything it is pretty
24
     broad. That is all -- I was further refining my testimony.
25
          So you didn't quibble with that at your deposition, did
     Q.
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- 1 you, sir?
- 2 A. No. And I think I just did a little further
- 3 refinement. The basic idea that Microsoft focuses on,
- 4 telling developers what we could realistically tell them so
- 5 that they could build great Windows applications, that has
- 6 been correct and continues to be correct.
- 7 Q. Now, Microsoft actually started evangelizing Windows 95
- 8 to ISVs even before it officially decided to document the
- 9 shell extensions, right?
- 10 A. Yes. Sure.
- 11 Q. Let me show you what has been marked Plaintiff's
- 12 Exhibit 68.
- 13 The second e-mail here is from Glen Thompson and it is
- 14 to you, right?
- 15 A. No, it is not to me. It is to WinPro which is the
- 16 | program management group that Dennis ran, so that mail that
- 17 he sent with that little sentence did not go to me. But the
- 18 mail underneath from Glen Thompson certainly looks like it
- 19 went to me.
- 20 Q. Yes, that is the one I'm talking about.
- 21 A. Yeah. Well, Glen Thompson and to me, Brad Silverberg,
- 22 David Cole, et cetera, that is correct.
- 23 | Q. Mr. Thompson indicates that by July of 1993 that ISV
- 24 | interests for Windows 95 was very high, and that one of
- 25 | those ISVs was WordPerfect, correct?

- 1 A. That is what the mail says, yes.
- 2 Q. He goes on to say that interest and excitement for
- 3 Chicago was very high at this point in time, correct?
- 4 A. That is right.
- 5 | Q. And you would agree that it was in Microsoft's own
- 6 business interest to have WordPerfect deliver its products
- 7 | timely and in a quality form for Windows 95, correct?
- 8 A. Oh, yeah, it was in our interest. That does not mean
- 9 they did it, but it is in our interest to do it, have them
- 10 do it.
- 11 Q. In fact, during this time period in 1993 WordPerfect
- 12 was considered one of the top ISVs that Microsoft was
- 13 | targeting for evangelizing Windows 95, correct?
- 14 A. Absolutely.
- 15 Q. And Lotus was also considered one of those top ISVs to
- 16 | evangelize, correct?
- 17 A. That is right.
- 18 You know, there is the old saying that you can lead a
- 19 horse to water, but you can't always make them drink.
- MR. JOHNSON: I would move to have that struck,
- 21 Your Honor.
- THE COURT: Okay.
- MR. JOHNSON: Thank you.
- 24 BY MR. JOHNSON
- 25 Q. PX-98. I would like to direct your attention to the

e-mail from David Cole to you and Jim Allchin CC'g Brad 1 2 Silverberg entitled The Chicago Big Bang. It is dated 3 October 20, 1993. Are you with me? 4 I see the mail, yes. This is the first time I have 5 reviewed it. I have not seen it in a long time. Yeah. 6 7 Mr. Cole writes to you, I think everyone agrees that it 8 is in our best interest to move the market to Chicago as 9 quickly as possible. Getting apps and users over to the 10 knew UI, over to the 32 bit, over to OLE, helps our overall 11 systems product line. 12 You would agree with that, would you not, sir? 13 Absolutely. Α. 14 Part of the big bang we would like to generate is 15 getting the ISVs to do Chicago exploitative releases at the 16 time Chicago ships. It goes on to say in the coming weeks 17 the Chicago team will be talking with the top ten ISVs 18 directly to make this pitch to them, and find out what their 19 barriers are to doing this. 20 Do you recall, sir, that that was all part of the Chicago big bang to approach these top ten ISVs directly to 21 22 get them on board for the Chicago release?

Well, I didn't have anything to do with these programs.

David was sending this to Jim and myself, so I did see this

and I do recall the work that was done to evangelize ISVs,

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1 but, again, I didn't do anything specifically, personally.

- Q. Certainly you would agree that Mr. Cole was keeping you
- 3 in the loop about what was happening with Chicago?
- 4 A. He was keeping us in the loop at the high level with
- 5 Chicago. There were areas where, again, we continued to
- 6 disagree, particularly these shell extensions.
- 7 Q. Do you recall that shortly after this e-mail Microsoft
- 8 in fact visited WordPerfect, one of those top ten ISVs to
- 9 pitch Windows 95 to WordPerfect?
- 10 A. I believe I reviewed that as part of my preparation for
- 11 this testimony. I think there might have been some e-mails
- 12 | talking about that, but I didn't personally do that. I did
- 13 | not travel shortly after that to visit WordPerfect. My trip
- 14 to WordPerfect was in '94, the spring of '94.
- 15 Q. Let me show you that e-mail again, Plaintiff's Exhibit
- 16 105.
- 17 This trip to WordPerfect that we looked at earlier took
- 18 place about a month after the decision was made to document
- 19 the shell extensions and to make them A list, correct, sir?
- 20 A. Well, the trip happened on or around November, middle
- of November of 1993, and clearly it indicates that
- 22 | WordPerfect was disclosed -- the fact that they would be
- 23 | publishing the shell extensions. Again, I will point out
- 24 | that in a mail from Jim Allchin at the beginning of
- November, Jim is very angry about this. So perhaps the

- 1 decision was made -- certainly the decision was made to talk
- 2 about it, but I think it was still an open discussion that
- 3 continued.
- 4 Q. And Mr. Cole reports that WordPerfect was very happy
- 5 about Microsoft deciding to document the shell extensions,
- 6 right?
- 7 A. That is what David seems to be saying.
- 8 Q. And you would agree, sir, that this e-mail indicates to
- 9 you that Microsoft had made the decision to commit long-term
- 10 to fully supporting these extensions in future versions of
- 11 Windows, correct, sir?
- 12 A. No. I mean, don't put words in my mouth, please.
- 13 First of all, this e-mail was not sent to me. I first
- 14 reviewed it yesterday in preparation for my testimony, so my
- 15 knowledge of this e-mail is about 24 hours old. And, you
- 16 | know, what this clearly says is that Brad and David were
- deciding to document those interfaces and they went out
- 18 | talking to ISVs about it. Whether Jim and I agreed with
- 19 that it does not say, and it is very clear that in the
- 20 | preceding weeks Jim was very angry about those guys going
- 21 out, and there continued to be ongoing debates about these
- 22 APIs in the months that ensued.
- 23 | Q. I am sorry. Mr. Muglia, did you just suggest to the
- 24 | jury that you had not seen this document prior to your
- 25 | preparation for your testimony?

- 1 A. I don't recall seeing it. I was not copied on it.
- 2 I'm sorry. I was copied. I am sorry. I was copied on
- 3 it. I see at the top I was copied on it. I appear to have
- 4 been copied on it. I'm sorry. I stand corrected. I was
- 5 copied on it, because it appears Brad forwarded it to me.
- 6 Although, it is a funny forward. It says MSTP Bob Mu, so I
- 7 don't know whether I had seen it or not.
- I did, however, definitely review it in preparation for
- 9 my testimony yesterday.
- 10 Q. Well, not only that, sir, you also saw it at your
- 11 deposition?
- 12 A. That could be.
- 13 Q. In fact, sir, let's turn to what you said about Mr.
- 14 | Cole's comment at your deposition.
- MR. JOHNSON: Can we turn to page 172, line 24,
- 16 | through 173, line 15.
- 17 BY MR. JOHNSON
- 18 Q. Question, now Mr. Cole reports at the top of this
- 19 fourth paragraph that they were very happy about us deciding
- 20 to document the shell extensions, close quote.
- 21 Do you see that?
- 22 A. I do. Could you please tell me what page this is on.
- 23 I would like to review my testimony more fully, please.
- 24 Q. Sure. Pages 172 and 173.
- 25 A. Okay.

- And you answer I do. Question, does that indicate to 1 Q. 2 you that as of this time Microsoft was planning to document 3 shell extensions? Answer, it would appear so. Question, okay. Answer, what I would say is, I mean, given what I 4 5 know right now, is that what that meant is that we would take the shell extensions off of the B list, essentially 6 7 eliminating the concept of B lists, and commit long-term to 8 fully supporting those extensions in future versions of 9 Windows.
- Were those questions asked and those answers given at your deposition?
- 12 A. Yes. That is correct.
- Q. So is it in fact true, sir, that this e-mail indicates
  to you that Microsoft had made the decision to commit
  long-term to fully supporting those extensions in future
  versions of Windows.
- 17 Isn't that correct, sir?
- 18 A. Yes. I think -- that was a question, right?
- 19 Q. Yes, that was a question, sir.
- 20 A. No, that was the question that was asked, wasn't it?
- 21 Q. Yes, and that was your answer. I am just making sure
- 22 you're not changing your testimony here today before this
- 23 jury.
- 24 | A. Well, let me tell you what I -- I reviewed this
- 25 | testimony yesterday, and one of the things I realized when I

testified -- excuse me, when I was deposed, was that the sequence of what happened with the shell extensions was something that I did not fully recall when I did my deposition in 1999.

If you continue through my deposition I believed that we had always published the shell extensions. In fact, I say that in this deposition that they were always published. Let me find that section here. Question, do you understand that as of this time, November of 1993, which is eight months after the e-mails between yourself and Mr. Cole that were Exhibit 12, that these shell extensions are going to be published? Answer, my answer, right. And to be clear, the documentation for those extensions was available during the whole time and it, in fact, was used broadly by a number of developers, perhaps by WordPerfect during that period given what Mr. Cole said here. But at this point it seems apparent that we had made the decision that we would fully publish them in future versions.

Now, what I said in my deposition, based on what I know actually to be true today was just wrong because, I mean, I think it is an issue that is being debated in this case, because I said here that the documentation for these — the documentation for those extensions was available during the whole time, and that apparently was not correct at the time.

When I did this deposition I didn't simply remember the

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sequence of what was done on which day, you know, to whom. And the details have been refreshed since then and I have had a chance to understand more about the timeline and what actually happened during that period since I was deposed in 1999. In 1999 when I was deposed there were a lot of things that were being discussed, and these namespace extensions were just one of many, so the specific details of it I didn't recall at the time. Clearly in preparation for this testimony I became more educated on the sequence of events. Just to be clear, Mr. Muglia, when you stated that Microsoft was committed long-term to support them, you were talking about iShellBrowser and the other shell extensions as well. Isn't that correct, sir? Well, yes, and, in fact, we do support them today. I mean, to this day they are supported in Windows. I'm not talking about today, Mr. Muglia. I'm talking Q. about at the time Microsoft came to WordPerfect and told them that they were going to document these shell extensions, and you told us in your deposition that that meant to you that Microsoft was committed long-term to fully

Isn't that a fact, sir?

A. What I said in my deposition was that based on an

supporting those extensions in future versions of Windows.

- 1 e-mail that I had seen that it appeared that that is what we
- 2 | were doing. Again, during my deposition the specifics of
- 3 | the events were confused. I also said that they were fully
- 4 documented during the entire time, and that issue is
- 5 apparently -- that statement was also incorrect back then.
- 6 Q. Mr. Muglia --
- 7 A. Could I finish, please?
- 8 Q. Sure.
- 9 A. My specific recollection of the events was not fully
- 10 understood when I did my deposition in 1999. I now
- 11 understand the sequence of events much better.
- 12 Q. Who were you represented by at your deposition?
- 13 A. I was represented by Microsoft counsel.
- 14 Q. Which counsel, sitting here?
- 15 A. Yeah. I believe Steve Holley and Steve Aeshbacher.
- 16 Q. Okay. And you prepared for that deposition, didn't
- 17 you?
- 18 A. Sure. Yes, I did.
- 19 Q. Now, you would agree with me, Mr. Muglia, that it is a
- 20 | goal of Microsoft to make sure that all of the developers in
- 21 Windows have early access to Microsoft's plans to add new
- 22 interfaces, right?
- 23 A. That is right. Of course.
- 24 Q. And that it is important to share plans for the
- operating system because it helps Microsoft's ISV community

- to know where Microsoft is going so that ISVs can plan their applications accordingly and move forward, right?
- 3 A. To the best of our ability. I will point out that as
- 4 | we -- you know, these are early versions of the operating
- 5 system that we're providing and early information, and early
- 6 information is subject to change and it frequently does
- 7 change, frankly, before the operating system is released.
- 8 Q. Mr. Muglia, I am not sure, but I think you agreed with
- 9 me. Was that a yes to my question?
- 10 A. Yes, inasmuch as what we know at the time, but our
- 11 plans change.
- 12 Q. Well, sir, this was just a general statement with
- respect to what you're doing when you're evangelizing. I
- 14 | want to make sure that we are on the same page on this. It
- is important to share plans for the operating system because
- 16 | that helps Microsoft's ISV community know where Microsoft is
- going, and then the ISVs can plan their applications
- 18 | accordingly and move forward, right, sir?
- 19 A. Yes, that is correct.
- 20 Q. Thank you, sir.
- 21 A. Can I finish, please?
- The only thing I would add is that if it is early in
- 23 the process sometimes things change.
- 24 | Q. And Microsoft shares its plans for Windows 95 to help
- 25 | ISVs come to market at essentially the same time Windows 95

- 1 releases, correct, sir?
- 2 A. Absolutely.
- 3 Q. And it was in Microsoft's business interests to have a
- 4 | wide variety of applications available at the time Windows
- 5 95 released, right?
- 6 A. Yes.
- 7 Q. And it was in Microsoft's own interest to give
- 8 WordPerfect early access to its plans to add new interfaces
- 9 in order to help WordPerfect come to market with a product
- 10 at roughly the same time Windows 95 released, correct, sir?
- 11 A. Yes.
- 12 Q. And these Chicago shell extensions were in fact
- evangelized almost continuously to ISVs during this entire
- 14 | period in 1993 and 1994 when Chicago was being evangelized.
- 15 Isn't that correct, sir?
- 16 A. It appears -- I don't know the exact dates when they
- 17 | were evangelized. It appears that they were first discussed
- 18 with WordPerfect in November of 1993. That was when the
- 19 David Cole mail went out. I don't believe that the APIs
- 20 were even available until well into 1994. It was really at
- 21 | the tail end of the pre 95 days, but certainly we did
- 22 discuss them during that period.
- 23 | Q. Well, you recognize, sir, that Microsoft held many
- 24 design reviews and similar ISV events where Microsoft
- 25 | evangelized the features that were going to be coming in

- 1 Windows 95, including the namespace extensions, right?
- 2 A. Microsoft certainly held many design reviews, but the
- 3 shell extensions in general were not discussed until very
- 4 late in the process, late '93, '94, and I do not believe
- 5 they were made broadly available to any ISVs until sometime
- 6 in '94. And even during that period I believe the namespace
- 7 extensions were held out as a set of APIs that should be
- 8 used for only special purposes and that might change.
- 9 Q. And the purpose of these design reviews is to explain
- 10 to the leaders of the ISVs what Microsoft was doing in their
- operating system so ISVs could take advantage of the
- 12 features, right?
- 13 A. Right.
- 14 Q. In fact, as you just stated, Microsoft did provide
- 15 | partial documentation of the namespace extension APIs in the
- 16 | June 1994 M6 beta, correct?
- 17 A. Yes, and that may have been the first time we ever made
- 18 | it available, but they definitely were made available is my
- 19 understanding at that time frame.
- 20 Q. And approximately 20,000 copies of the M6 beta were
- 21 distributed, correct?
- 22 A. I don't know what the number is.
- 23 | Q. Does that sound about right to you?
- 24 A. Could be. It certainly could be.
- 25 THE COURT: Let's break for lunch. We'll come

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      back at around 12:15.
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