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THE COURT: Before we resume, let me just say
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 2
     that -- I know we talked about it briefly just now, and I
 3
     think one or two of you raised it with Teresa, I don't know
 4
     when we're going to be finished. I'm a little worried that
 5
     we're going to go a week beyond what we've told you, which
 6
     is December 16th, particularly with your deliberations. I
 7
     don't know that yet. Counsel is going to try to rethink it.
 8
     I have to go back for a proceeding on the 16th in Baltimore.
 9
     If it really messes you all up, I will try to reconfigure
10
     that. So we'll talk about that more. I just wanted you to
11
     know. Right now counsel haven't told me that yet. They're
12
     going to do everything they can to get it done on time.
13
               THE CLERK: Judge, juror number one has a bloody
14
     nose.
15
               THE COURT: You all shouldn't be so violent back
16
     there.
17
               It's Mr. Johnson and Mr. Gates that I'm worried
18
     about.
19
               A JUROR: I'm sorry. I just needed attention.
20
               THE COURT: No. no. It's okay.
21
               What did you say?
22
              A JUROR: I just needed attention.
23
              MR. TULCHIN: You've got it now.
24
               THE COURT: If you need anything, let us know.
25
              MR. JOHNSON: Should I proceed, Your Honor?
```

- 1 THE COURT: Absolutely.
- 2 BY MR. JOHNSON:
- 3 | Q Mr. Gates, I'm going to hand you now what has been
- 4 | marked Plaintiff's Exhibit 223. This is a memo you wrote in
- 5 | early October of 1994, correct?
- 6 A Yes.
- 7 Q And this sea change memo is about a number of things
- 8 going on in 1994, correct?
- 9 A Yeah. Let me take a look at it.
- 10 Q Sure.
- Mr. Gates, if it would be any help, we're just going to
- 12 go over a few things you told me during your deposition with
- 13 | respect to this memo. I don't think you have to read the
- 14 whole thing, if that would help.
- 15 A Go ahead and ask your question.
- 16 Q So in this sea change memo is about a number of things
- 17 | going on in 1994. We've established that, right?
- 18 A Well, it's looking forward.
- 19 Q And the change to graphical user interfaces had hardly
- 20 started by this point in time, correct?
- 21 A Yeah. It says starting sometime after 1990, the move
- 22 | to graphical computing has been a sea change.
- 23 Q In fact, the mainstream was still ridiculing the slow
- 24 speed and memory requirements of graphical user interface
- 25 operating systems, right?

- 1 A Where do you see that?
- 2 Q I'm just asking a question, Mr. Gates. Do you agree
- 3 with that?
- 4 A This is a time frame where finally opinion had started
- 5 to shift. Within the industry, it was clear that graphics
- 6 interface was totally going to be the way people wanted to
- 7 use computers. The end user base took a lot longer for
- 8 people to upgrade machines, and on some of those machines,
- 9 | if you tried to put software on the older hardware, graphics
- 10 | had problems. So there was a big shift that at least had
- 11 started. The industry was much further along in getting
- 12 graphics interface.
- 13 Q Let's go -- it may be easier to do it this way -- to
- 14 your deposition at page 244.
- MR. JOHNSON: If we could bring that up,
- 16 Mr. Goldberg, 244, line 2 to line 20.
- 17 BY MR. JOHNSON:
- 18 Q So, Mr. Gates, this is what I would like to go over
- 19 | with you. I asked the question of you, what we're talking
- 20 | about here, sir -- let me finish my question -- was the sea
- 21 change to electronic information sharing; isn't that
- 22 | correct, sir? And you answered no. The sea change memo is
- 23 about a number of things that are going on in 1994.
- We've established that, right, Mr. Gates?
- 25 A That's right.

1 Q The change to graphical user interface had hardly 2 started at that point, correct?

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- A Certainly in terms of the industry, we were fairly far along. As the memo says, it started in 1990.
- Q In fact, you told me that the mainstream was still ridiculing the slow speed and the memory requirements of graphical user interface operating systems at this time, correct?
- 9 A That's right. People who had not seen Windows 95, had
 10 the benefit of seeing that, were still looking at hardware
 11 and software that the performance of graphics was not nearly
 12 as good as character mode.
 - Q And that would have been Windows 3.1, not nearly as good?
 - A Well, the key is the hardware. The 286 processor, the 386 processor, the size of the memory, the size of the disk. So it would be different if you had a new machine than if you had a machine in the install base. Now most people have
- Typically people are keeping machines about three years at this time.

older machines, but every year it would turn over.

- Q And a portion of word processing users that would have been using a graphical interface word processor by this date would have been below five percent, right?
- 25 A I think that's about right. It might have been

- slightly higher than that, but it wouldn't have been the

 dominant way in terms of the install base. You always have

 to look at the run rate of what's selling is very different
- 4 than the overall install base.
- 5 Q So the sea change that you are talking about in this
- 6 October 1994 memo, there is a market shift to buying
- 7 | graphical applications, but what we're seeing at that point
- 8 | in time was just a tiny, tiny edge of it at that point,
- 9 right?
- 10 A That's right. Windows 95 raised it to a much higher
- 11 level. In terms of install bases, you always had this rate
- 12 | factor in terms of what people are using. The run rate is
- 13 sort of a leading indicator, but it takes maybe three or
- 14 | four years to reinstall the run rate.
- 15 \parallel Q So at this point only about five percent, a very small
- 16 percentage, are actually using graphical interface with
- 17 processors, right?
- 18 | A In the install base, which is very different from what
- 19 | they were buying or what they expected to buy, particularly
- 20 \parallel as the hardware got better and they saw Windows 95.
- 21 Q Sure. I understand you are talking about the install
- 22 | base here, right?
- 23 A That's right.
- 24 Q So there was a big opportunity here in 1994 to capture
- 25 this sea change to graphical applications, correct?

```
Well, typically what happens is even at the early
 1
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     stage, if somebody does a very good job, even when it's not
 3
     something in the mainstream, they are usually the one who
 4
     benefits as it moves into the mainstream. So the decision
 5
     about being serious about graphical interface, training
 6
     engineers, doing the many, many releases to get things to be
 7
     mature, all of that had already been decided in terms of
 8
     which industry participants chose to prioritize this work
 9
     and get down the learning curve. But terms of the actual
10
     sales opportunity, that would come post Windows 95 shipping.
11
          But you would agree, sir, there was a big opportunity
12
     here in '94 and '95 to capture this sea change to graphical
13
     applications, correct?
14
          Yes, and the fitness of anyone to capture that
15
     opportunity was determined by what they had done in the
16
     decade previously. There was no opportunity at that point
17
     to wake up and say, okay, in 1994 I finally recognize
18
     graphics interface and maybe I will hire a few engineers to
19
     do something about it.
20
          Mr. Gates, I hand you now Plaintiff's Exhibit 1, which
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     you have testified about extensively on direct. And I only
22
    have a couple of questions on this exhibit. This is the
23
    memo you wrote in early October of 1994, correct?
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Q And among the recipients of this e-mail was Satoshi

The e-mail I wrote, right.

24

- 1 Nakajima, correct?
- 2 A Yes.
- 3 Q And your decision resulted in making the namespace
- 4 extension APIs undocumented APIs, correct?
- 5 A Whether or not they left them in and didn't document
- 6 them or they put them in a special category, that was up to
- 7 | them. The decision I made was that they would not be part
- 8 | of the official API set of Windows.
- 9 Q Yes, Mr. Gates, but my question to you is what they did
- 10 was to make these APIs undocumented APIs, right?
- 11 A I didn't know what they would do. My decision was that
- 12 I wasn't going to impose on the NT team or the Cairo team
- 13 the necessity of implementing and being upwards compatible
- 14 with these APIs.
- 15 \parallel Q Let me see if we can get clarity on this. This is
- 16 Plaintiff's Exhibit 224, and ask you, have you seen,
- 17 ∥ Mr. Gates -- this is an e-mail from Mr. Nakajima, who we've
- 18 | just been talking about, right?
- 19 A That's right. Am I copied on it?
- 20 | Q No, you're not. I don't believe so, sir.
- 21 A Okay.
- 22 \parallel Q It says down in the first paragraph, if we could go to
- 23 | that, based on the recent decision, we are hiding one of the
- 24 | shell extension mechanisms, see below for details.
- 25 You would agree with me, sir, that this October 10,

- 1 | 1994 memo from the inventor of the namespace extensions was 2 | Microsoft's implementation of your decision?
- A I don't know -- Windows didn't ship until August 1995,
 so you would have to go and look -- talk to people about
 what the final implementation approach was. I don't know if
 a week after the decision was made they had made their final

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choice on that or not.

- Q You see Mr. Nakajima goes on to say, I marked all these interfaces and definitions internal so that we don't put them in the SDK header files anymore.
- 11 You understand, sir, that Mr. Nakajima was making these 12 undocumented APIs, correct?
 - A The decision was not to publish them, so he was changing the code in such a way that they were internal APIs.
 - Q Well, sir, he was marking the interfaces and definitions internal so that they would no longer appear in the SDK header files, correct?
 - A Right, because if they're under the SDK header files, people might rely on them being in Windows NT and future shells.
 - Q These new header files, which is the shell object H, which is shown there in this first paragraph, those header files would -- all information regarding the namespace extensions would be removed, correct?

- 1 A Just the interfaces would be marked internal.
- 2 Q Right. This was to occur before the M7 release,
- 3 according to Mr. Nakajima, right?
- 4 A Does it say that?
 - Q Yes, sir, right at the end of the paragraph.
- 6 A Yeah, it does.

- 7 | Q So we can agree, sir, that Microsoft's implementation
- 8 of your decision was to turn the status of these APIs into
- 9 undocumented APIs, correct?
- 10 \blacksquare A It was to turn them into internal interfaces.
- 11 Q You won't agree with me, sir, that these were now
- 12 undocumented APIs?
- 13 | A No, because I think that's an ambiguous term. Often
- 14 when you use the term undocumented APIs, you're actually
- 15 | saying that there is some third-party product that ships and
- 16 calls the APIs, but then they are not documented.
- 17 | Internally APIs are a very well defined thing. There are
- 18 | literally millions of internal APIs that are used by Windows
- 19 | and things inside Windows itself. So the question of
- 20 whether somebody ended up that shipped separately called
- 21 these or not, there's nothing in this that indicates whether
- 22 that happened or not.
- Q Mr. Gates, you're very familiar with the concept of
- 24 undocumented APIs, correct?
- 25 A I'm familiar with the idea that some APIs are

documented and some are not. The question is are there some 1 2 of those things that shipped separately actually called or 3 not. 4 Isn't it a fact, sir, that companies for years, going 5 back in time, had complained about Microsoft's undocumented 6 APIs? 7 There were -- yeah. There was no requirement for us, 8 in fact, to document APIs. It's not, you know, rule, law, 9 requirement, anything of any kind. But we actually had had 10 a policy to try and document the APIs that are separately 11 shipping applications used, and there was always a question, 12 given that that was our policy, did we make a mistake, was 13 there something that somebody called, and from time to time 14 we would look at that to see whether that was happening. But there was no requirement that we do it or not. 15 16 That wasn't my question either. I said you understood 17 that for years outside developers had complained about 18 Microsoft's practice of having undocumented APIs that their 19 applications were using? 20 We had the right to do whatever we wanted. Given that 21 we had a policy that we tried to document things that our 22 stuff shipping separately used, there was always the 23 question whether we made a mistake and didn't do that. 24 we caught that, we tend to publish for the things that ship

25

separately.

- 1 Q My simple question was, going back in time, there had 2 been such complaints made, correct?
 - A We always told people, hey, if you find something like this, let us know. Please be specific about what it is.
 - Q So you understand the concept when somebody talks to you about undocumented APIs, this means APIs that are in Windows that outside developers are not able to access?
 - A No. You are still -- there is a key distinction.
- 9 There are millions of things inside Windows APIs that aren't
 10 documented. So you can use the term undocumented APIs to
 11 refer to those. The question of whether some separately
 12 shipping thing from Microsoft or somebody else actually
- 13 calls those things, that's a separate question.

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- Q When you made this decision reflected in Plaintiff's
 Exhibit 1, you knew the namespace extensions had already
 been published to independent ISVs like WordPerfect and
 Lotus; isn't that a fact, sir?
 - A I knew they were documented in the M6 beta. And the key question was were these APIs we were committing that would be in Windows NT and other future releases, and the decision was that they would not be.
 - Q And you also knew at the time you made this decision that there was broad uses of these extensions both within Microsoft and by ISVs, correct?
- 25 A Actually I did not know that there was broad use by

ISVs.

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Q Wasn't there -- didn't Microsoft conduct a full survey with respect to the use of the namespace extensions both by Microsoft and by ISVs prior to your decision?

A There was a discussion about that where people said there was modest use. In fact, subsequently there was information gathered because the Windows 95 team continued to argue its case wanting the decision to be reversed. And, you know, Paul Maritz went to an effort to really find out what the truth was in terms of who was using what because various statements were made that, you know, people really hadn't gotten a full set of data. So Paul made sure we went out and got the data.

Q Mr. Gates, my question was a little simpler, and that was wasn't there a full survey conducted of the use of the namespace extensions both by Microsoft and by ISVs prior to your decision?

A I don't know if there was a formal survey. The one I know about by looking at e-mail documents that have been shown to me in this case were ones that were done in response to a request by Paul Maritz subsequent to my decision.

Q Let me show you what has been marked Plaintiff's

Exhibit 215. Do you see, sir, down below Mr. Henson -
MR. JOHNSON: If you go down a little bit further,

- 1 | with Mr. Henson, starting halfway down the page, that's
- 2 | right, and just cover the Microsoft portion of Mr. Henson's
- 3 e-mail.
- 4 BY MR. JOHNSON:
- 5 Q Mr. Henson is reporting here how the shell integration
- 6 APIs affect our software development plans. Do you see
- 7 | that, sir?
- 8 A Yeah. That's not specific to namespace.
- 9 Q Certainly, sir, before you made this decision, you
- 10 informed yourself with respect to what work was going on
- 11 within Microsoft using the namespace extensions?
- 12 A I knew that Capone was using it, and, you know, I can't
- 14 what was going on internally. But people would have
- 15 ∥ expressed -- would have told me what they thought was going
- 16 on internally, yes.
- 17 \parallel Q That would include the use by InfoCenter and Marvel,
- 18 | for instance?
- 19 A What's InfoCenter?
- 20 Am I -- is this a document that I got?
- 21 | Q I don't believe you were copied on this particular
- 22 | e-mail, Mr. Gates. I just assumed that you would have
- 23 informed yourself about the use going on in the namespace
- 24 extensions before you decided to pull them.
- 25 A Yeah, we had discussions. I can't recollect my exact

- 1 understanding at the time, but I would have factored in what
- 2 lots of people were telling me when I made that decision.
- 3 \parallel Q Were you aware at the time that the Office team was, in
- 4 | fact, using IShellFolder?
- 5 A Capone.
- 6 Q No, the Office team, up above a little higher.
- 7 A That just means Capone.
- 8 Q I thought you said you had never seen this before?
- 9 A I am aware that the other Office -- independent of this
- 10 document, I'm aware that the Office applications, Word,
- 11 Excel and PowerPoint, did not use those extensions.
- 12 Q So the Chicago networking team was using namespace
- 13 browser and explorer extensions?
- 14 A I can't tell you that. It seems to say that in this
- 15 document. This is not about namespace extensions, although
- 16 some of those parenthetical things refer to it specifically.
- 17 It's about shell integration.
- 18 Q Yes, and you would agree with me that namespace browser
- 19 would be referring to namespace extensions, right?
- 20 A Yes.
- 21 Q So the Chicago networking team was using namespace
- 22 | browser, correct?
- 23 A That's part of Chicago.
- 24 Q And the Elseware Company, who was providing the Font
- 25 Folder in Chicago, was also using the namespace browser,

- 1 | correct?
- 2 A That's what this document seems to suggest.
- 3 Q And with respect to Marvel, the online service, they
- 4 extend the namespace and the explorer, correct?
- 5 A That's what it says.
- 6 Q Access, wasn't that your database product?
- 7 A Yes.
- 8 Q It says it was using the namespace browser as well,
- 9 correct?
- 10 A Well, I was told Access was not, and I'm quite sure it
- 11 never did.
- 12 | Q And, in fact, Ren, it says, was originally implemented
- 13 | totally as a shell extension, but apparently they are now
- 14 looking at some other way of doing it, correct?
- 15 | A Yeah. We merged, as you know, the Cairo and Ren teams
- 16 together. So the whole separation of what part was Cairo
- 17 | code, what part was Ren code, things were pretty confused at
- 18 this time.
- 19 Q So is it fair to say to the jury that you became
- 20 | familiar with all this work within Microsoft using the
- 21 | namespace extensions before you made your decision?
- 22 | A I know at the time I made the decision that the only
- 23 Office component that I was told was using the namespace API
- 24 was Capone, and that's the only one that really would have
- 25 made any sense for it to be used in.

- Q So all the other information listed on this memo from Mr. Henson, you were not aware of, apart from Capone?
 - A This is about shell integration in general, and I've never seen this memo. So if you want to ask me about any particular thing, I would love to answer it.
 - Q I think I already have.

Let's go on to the work that the independent ISVs were doing. Were you aware at the time, prior to making your decision, that several substantial ISVs had actually started work on the extensions? You see that down at the bottom, Oracle, Symantec, Stac Electronics, and DCA?

- A Why don't you read the part up above. It's not specific to namespace. It's shell extensibility in general.
- 14 Q Doesn't it say namespace extensions?
- 15 A Where?

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- Q The following companies have voiced an interest in namespace extensions and shell extensibility in general.
- 18 But then it goes on to say, have they started work.
- 19 A That's about shell extensibility in general.
- 20 Q You think these companies weren't using namespace 21 extensions? Is that your testimony, sir?
 - A You cannot tell from reading this which of these were using shell extensibility in general and which were using namespace extensions. You would have to go back and actually ask the people involved. But certainly there is no

implication that anyone specific is using namespace
extensions that I see here.

- Q Let me ask it this way. Did you do anything to familiarize yourself prior to your decision as to what independent ISVs were intending upon relying upon these extensions?
- A Yeah. I know that I in general had been told there wasn't much being done, and I know that subsequently Paul Maritz had a formal survey done specific to the namespace extensions.
 - Q So you were aware prior to your decision -- can you tell me which companies you were aware of, prior to your decision, that were planning on using the namespace extensions in their products?
 - A Well, people who were doing system utilities or mail clients would have been candidates for using those namespace extensions. But I can't recall for you who specifically I was told or not told. I know there was no major issue raised about that. The issues were much more about, okay, why does the Windows 95 team like these APIs and why do the NT and Cairo teams not want to take on the responsibility for dealing with these APIs.
- Q Yesterday, Mr. Gates, you testified that, allegedly, these extensions, they were poorly written, a code written to these extensions, that it could crash the shell. Do you

- 1 recall that testimony?
- 2 A I said there were robustness issues raised by the NT
- 3 | team about this work.
- 4 Q I'm looking at your decision on the IShellBrowser. Can
- 5 you point me anywhere in this e-mail where you say that
- 6 these extensions presented a robustness problem?
- 7 A Everybody knew that the NT team did not want us to
- 8 publish these extensions and that I was faced with what had
- 9 been escalated to me was the NT issues, the Cairo issues,
- 10 whereas the Windows 95 people were saying, come on, we want
- 11 to go ahead with this, and they were making a case for that.
- 12 And weighing those things, I decided not to publish them.
- 13 | There was no reason to reiterate the discussions that had
- 14 been taking place. You know, I made the decision.
- 15 \parallel Q So the answer to my question is no robustness concerns
- 16 appearing nowhere in PX1, correct?
- 17 A They appear nowhere in PX1.
- 18 Q In fact, to the contrary, you said that the shell group
- 19 did a good job defining these extensibility interfaces,
- 20 correct?
- 21 A I was being nice to that group, absolutely.
- 22 | Q You went on further to say that this was not to say
- 23 | that there was anything wrong with the extensions. On the
- 24 | contrary, they are a very nice piece of work. That's what
- 25 you said in this decision e-mail, correct, sir?

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Well, there was certainly one thing wrong with them,
     which is they didn't work on NT and the NT group didn't like
     them. And, no, that's not here in this particular document.
     Here I'm deciding against them in terms of publishing the
     APIs. And everybody who is the recipient of this e-mail had
     been in long discussions about this particular dispute
     between Jim Allchin's group and Brad Silverberg's group.
          Let's look at the names and double-check to make sure
     all these people would have been aware of that problem.
10
          Certainly, Mr. Gates, before making this decision,
11
     which you characterize yourself as being very late in the
12
     day for making changes to Chicago, you talked with Brad
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     Silverberg about this decision, correct?
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          I don't know that I met with him face-to-face.
15
     his opinion. His opinion was that we should publish them.
16
     He was strongly in favor of publishing them.
17
          So are you telling the jury that you did not talk to
    Mr. Silverberg before making this decision?
19
          Well, the amount of face-to-face discussion with Brad
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     was always fairly limited. Brad was an e-mail person. Brad
21
     loved to send fairly strident e-mails on a regular basis,
     and he was a very effective executive. But face-to-face,
22
23
     no, he didn't like to do face-to-face meetings much. So I
24
     don't know specifically, but, in general, Brad did come meet
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     with me face-to-face more than, say, once every few months.
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- 1 Q I didn't see any e-mails just prior to your decision
- 2 with Mr. Silverberg on this issue. That's why I'm asking.
 - A What do you mean you didn't see any e-mails?
- 4 | Q Just prior to your decision, I didn't see any e-mails
- 5 from Mr. Silverberg with respect to this decision?
- 6 A What do you mean you didn't see any e-mails?
- 7 | Q They weren't produced in this case.
- 8 A Okay, well --

- 9 Q Mr. Gates, so my question to you is did you --
- 10 A You have shown me lots of e-mails, so I'm a little
- 11 confused now about what assumption there is in this
- 12 question. You've shown me lots of e-mails from Brad
- 13 | Silverberg related to this topic.
- 14 Q Let me ask it this way. Do you recall talking to
- 15 \parallel Mr. Silverberg about this decision to undocument the
- 16 | namespace extension APIs?
- 17 A No. It was not to not publish them.
- 18 Q I'm sorry, sir. Your e-mail says, I have decided that
- 19 we should not publish these extensions?
- 20 A That's right. It's a decision not to publish them.
- 21 Q I thought you just told me there was not a decision to
- 22 publish them?
- 23 A No. You're using the term undocumented again. As I
- 24 | say, that gets into an implication about them being used in
- 25 other products, and I'm not aware of that. I'm not aware

that we shipped products separately that use these APIs. So what I'm trying to be careful here is to say the decision here is that these would become internal interfaces or disappear.

And in terms of your substance with Brad, I had lots of communications with Brad on e-mail. You know, his opinion was known before I made this decision, yes.

- Q I think you stated that Mr. Silverberg was not happy with your decision, right?
- A That's right.

- 11 Q In fact, you started getting pushback immediately from 12 other Microsoft executives; isn't that correct, sir?
- 13 A I don't know if it's immediately, but Brad definitely
 14 didn't immediately just accept my decision.
- 15 Q Let me show you what has been marked Plaintiff's

 16 Exhibit 219. This e-mail is from Mr. Evslin. If we could

 17 bring up the middle one there. It came within less than two

 18 hours of your decision.

So you would agree with me that that is getting pushback immediately, wouldn't you, sir?

A I don't consider this pushback. The question was when you have internal APIs, the question about documenting them relates to things that ship separately from the operating system. What Mr. Evslin has raised here, and I hope I've explained it because I want to make it clear, is that it

still left this ambiguous case that if something only shipped with the operating system itself but it was application—like, that our policy of publishing APIs that were used in separate products, did that apply. And so Capone, which is the e-mail thing which was going to be shipped with Chicago and Marvel, which was another information browser that was going to be shipped with Chicago, Mr. Evslin is asking the question that if — can these be called by things that don't ship separately. Can they be called by things that ship with Chicago or not.

So he says -- so clearly he's trying not to argue. He says, I understand the decision not to publish the interfaces, so won't argue with that. Then he's asking about this specific case that, you know, I hadn't made clear -- hadn't weighed in, that when they ship with Chicago, do they need to be published.

Now Brad Silverberg also had a strong opinion about this topic, and his opinion was that the fact that they shipped with Chicago, with Windows 95, that didn't absolve us from him feeling that we should, not because there's any law or rule or ban, just because he thought it was good practice, he thought we should go ahead and publish the APIs.

Now he in no way dealt with the problem that Windows NT didn't want to take on the burden of implementing them,

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Cairo didn't want to take on the burden of implementing
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     them. So he tried to use the existence of these
 3
     applications and issue about publishing to say, hey, come
 4
     on, you know, we should publish these and Windows NT should
 5
     just suck it up and do all that work.
 6
          In fact, he thought that would be fair, correct, sir?
 7
          He had -- that was his point of view about applications
 8
     that shipped with the operating system, that even those we
 9
     should publish the APIs. I did not share that view.
10
          In fact, Mr. Silverberg jumps in at the top here.
11
     we can go up to the top e-mail. He said, Mr. Evslin's idea
12
     was an impossible sale, correct?
13
                 This is exactly the issue I'm trying to
          Right.
14
     explain, which is if you have a policy that is just our
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     choice, voluntary, something we chose to do, that when
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     things ship separately, that you document the APIs they
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     call. How does that deal with this special case, which
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     doesn't come up that much. There's not that many things in
19
     an operating system that are application-like, but there are
20
     a few of which Capone and Marvel are examples. In that
21
     case, should you publish the APIs if they are calling them.
          Now in the case of Capone, this all ended up being
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23
     moot. We got Capone not to call any of these things, so it
     didn't. Marvel, later they were saying, no, they can't
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change it, they can't change it. So Maritz was faced with

- how do you deal with that particular case. 1
- 2 Did you ever respond to Mr. Evslin? I didn't see any 3 response from you.
- 4 There is certainly a later e-mail about this whole 5 topic, but whether it comes as a response to this e-mail,
- 6 I'm not sure. I don't recollect a particular e-mail.
- 7 Did you ever respond to Mr. Silverberg?
- 8 Mr. Maritz was delegated to make sure this whole 9 thing got taken care of, and subsequently I asked Paul what 10
- 11 I show you now what has been marked Plaintiff's Exhibit 12 220. Two days after your decision, you also learned that 1.3 Marvel wouldn't make Chicago if it was forced to abandon use
- 14 of the namespace extensions, correct?

had happened in this area.

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That's what Russ Siegelman -- yeah. So we had Yeah. two cases where there was internal use of these APIs, not Word, Excel, Office, Access, any of those things. had two. They were both cases of things that were shipping completely in the operating system. One was Capone, that later took the APIs out and didn't make a big deal about it. That's the e-mail client. Then there was Marvel.

And so what you have is on October 5th, Russ Siegelman sends an e-mail to me, geez, it's going to be very hard for him to take these things out, and so he gives me a number of options about overturning it or not shipping Marvel, or what

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should I do. This is Russ Siegelman asking me a question of
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     what they should do. And Brad Silverberg is copied. Of
 3
     course, Brad misses no opportunity to repeat his point of
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     view, which, amazingly, was I think we should make the
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     extensions public, again, not addressing the problems that
 6
     would cause in terms of the consistency with Windows NT and
 7
     Cairo.
 8
          Perhaps he didn't think there was any problem, sir.
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     Did you ever think of that?
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          He knew perfectly well there were problems.
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          Let's turn up to Mr. Silverberg's response. He does
     ask you again to make the extensions public, correct?
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          That's right. He uses the Marvel case, which was the
14
     last of the two internal things, to make his case again,
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     stating that very broadly. So subsequently to this I asked
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    Mr. Maritz, who was also copied on this, to dig into this
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     whole thing and see what the truth was. I certainly knew
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     what Brad's point of view was, but I wanted Paul to go out
19
     and make sure we gathered facts about what was going on.
20
          Mr. Silverberg told you that WordPerfect, Lotus,
21
     Symantec and Oracle were using the extensions, correct?
22
          Yeah, and Paul actually had a survey done that showed
23
     that, in fact, Brad Silverberg was exaggerating in this
24
     e-mail.
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Q You say there were some surveys done, sir?

- 1 A Yes, sir.
- 2 Q I haven't seen any survey documents in this case at
- 3 | all. Have you seen any in preparing for your testimony
- 4 here?
- 5 MR. HOLLEY: Your Honor, I object to this
- 6 question. It's false. I'm about to show Mr. Gates the
- 7 survey.
- 8 THE COURT: Show it to Mr. Johnson right now.
- 9 Solve the problem. My guess is it's a definitional question
- 10 of what a survey is, but I don't know.
- 11 MR. JOHNSON: This survey is before his decision.
- 12 MR. HOLLEY: Then why don't you read him the
- 13 | relevant part.
- 14 BY MR. JOHNSON:
- 15 \parallel Q Mr. Gates, what I'm trying to figure out here is Mr.
- 16 Silverberg told you that the ISVs using the extensions were
- 17 WordPerfect, Lotus, Symantec and Oracle, right?
- 18 A Yeah. If we're really interested in the truth on this,
- 19 we should look at the survey and see the results from the
- 20 | survey that was done. I may be confused about the date of
- 21 the survey, but, in fact, Brad Silverberg is an advocate
- 22 here for anything about, hey, please publish this thing.
- 23 Fortunately, there was a survey that gathered more specific
- 24 | facts than him just listing these names in the e-mail. So
- 25 | if you're curious about who was using it, we should look at

- 1 the survey.
- 2 Q Did you ever call up any of the executives at
- 3 WordPerfect or Lotus or Symantec or Oracle to see if your
- 4 decision was causing any problems?
- 5 A I'll tell you several things about that. First of all,
- 6 | I got Paul Maritz to dig into this issue in some depth, that
- 7 included looking at internal and external uses and gathering
- 8 information about that and making the decision.
- 9 Also, I was regularly with the executives of all of
- 10 | those companies at industry events, and at no such event did
- 11 anyone come up to me and say this was an issue, a problem,
- 12 something they thought we should do differently.
- 13 Q Mr. Gates, Mr. Silverberg goes on in his e-mail to you
- 14 | to say, quote, we have not yet figured out how to really
- 15 \parallel take them out, as the shell needs them itself, close quote.
- 16 Can you explain what that means?
- 17 | A That means they are being used as internal interfaces
- 18 where the shell is calling into itself at least in one
- 19 place.
- 20 Q And, in fact, the Windows Explorer on Windows 95 used
- 21 the namespace extensions internally to create new namespaces
- 22 within the Explorer, correct?
- 23 A Yeah. The exact way that's implemented, I'm not sure,
- 24 | but they definitely were saying they were calling these APIs
- 25 themselves somewhere inside their code.

- 1 | Q Let's bring up demonstrative number eight.
- 2 Do you recognize this as the Windows Explorer in
- 3 Windows 95?
- 4 \blacksquare A Yeah. It appears to be a screen shot of the Explorer
- 5 running.
- 6 Q And, in fact, the tree view shown on the left includes
- 7 some new namespace extensions -- sorry. Some new namespaces
- 8 | that were created especially for Windows 95, right?
- 9 A The way that display worked added new things in in
- 10 Windows 95. Just looking at this, though, it doesn't tell
- 11 you which APIs they used to achieve this capability.
- 12 Q Let's talk about what you can talk about. Network
- 13 neighborhood, recycle bin, and my briefcase are namespaces,
- 14 right?
- 15 \parallel A No, they are not namespaces. They are appearing in the
- 16 display of the namespace.
- 17 | Q Aren't they eventually each a namespace?
- 18 A No. A namespace is the overall tree.
- 19 Q These are new places to go, new objects within the
- 20 Windows Explorer, right?
- 21 A They are showing up. The recycle bin and my briefcase,
- 22 | those are not new places -- Network Neighborhood. These are
- 23 things that -- these concepts in some form had existed in
- 24 Windows before. What's new is their name is showing up here
- 25 | in this tree thing.

- Q And to do that, the Windows, the operating system, is using the namespace extensions, correct, sir?
- A No. No. Once you are inside the operating system code
 itself, there's particularly different ways you can get
 internal functionality. So the only way to know whether
 they are actually recursively using their own API would be
 to actually look at the code. There would be plenty of
- 8 other ways for them to do this.
 9 Q It would be correct to refer to all three of these,
- network neighborhood, recycle bin and my briefcase, as
 pseudofolders, right?
- 12 A You could do that, you know, by that terminology sort
 13 of saying anything that appears in here is a folder. They
 14 are not actually folders. So we better look at the context
 15 to see if it's technically correct.
- 16 Q Right, and that's why I called it a pseudofolder, 17 right?

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- A No. The term pseudofolder can mean a lot of things.

 So show me where that term is being used and we can talk about if it's correct or not.
 - Q Mr. Gates, these three folders, or pseudofolders, whichever you prefer, enabled the user to collect information that could exist in many different places either locally or on some server far, far away, correct?
- 25 A No. Your briefcase is local only. The recycle bin is

- 1 local only. No, that's not correct.
- 2 | Q If I pull something into recycle bin that was on a
- 3 server somewhere, it would appear there as though it was on
- 4 your desktop even though it resides on a server, correct?
- 5 A No. The recycle bin is a local concept. The recycle
- 6 bin is just in Windows.
- 7 | Q Network neighborhood, that would enable you to open a
- 8 | folder that had access to servers that could be anywhere,
- 9 correct?
- 10 A Networking software in general does that. That's not a
- 11 result of anything what you are seeing here. The ability to
- 12 move files around the network, that has nothing to do with
- 13 | this. This is a UI.
- 14 Q Mr. Gates, isn't it a fact, sir, that Mr. Frankenberg,
- 15 the CEO of Novell, contacted you several times on the issue
- 16 of undocumented APIs?
- 17 A There were some letters he wrote where that was one of
- 18 the topics in some of those letters.
- 20 Exhibit 215-D.
- MR. HOLLEY: Your Honor, just to be clear, we have
- 22 | a pending objection to the admission of this document into
- 23 evidence. If he's asking Mr. Gates about it and not
- 24 displaying it to the jury and not moving it into evidence, I
- 25 have no objection to this.

MR. JOHNSON: Your Honor, this is a defendant's 1 2 exhibit. How can they have an objection? 3 MR. HOLLEY: We do, Your Honor, have an objection. 4 The fact that it has a label on it doesn't mean I don't have 5 an objection. 6 THE COURT: The objection has been lodged. Ask 7 him about it and I'll find out about it as we go along. BY MR. JOHNSON: 8 9 Do you recall, sir, Mr. Gates, receiving this letter 10 from Mr. Frankenberg dated June 23rd, 1995? 11 Not specifically, but I'm sure I did. 12 If you will turn to the second page, sir, second full 13 paragraph, Mr. Frankenberg writes to you, we believe 14 Microsoft has leveraged its dominant position -- its 15 dominant operating system position in the applications 16 market. It is our view that Microsoft's operating systems 17 contain undocumented calls, features, and other interfaces 18 that are made available to its own application developers to 19 give competitive advantages to its applications products. 20 Do you see that, sir? 21 I do. Α 22 Mr. Gates, do you recall refusing to address this issue 23 with Mr. Frankenberg? 24 Well, first of all, there was no requirement to us that 25 we not do that. In fact, it was our policy, our choice

voluntarily not to do that. So we always welcomed -- we said to people, hey, we could do this if we wanted to.

We've chosen not to. If you can point out to us a specific case where any one of our separately shipped applications is calling some API in the operating system that we haven't published, please let us know that. That was our policy.

So whenever somebody would bring up this topic, we had those two answers: A, we could do that if we wanted; B, if you think we're not and contrary to what we're trying to do here, please give us specifics. It's actually very easy to do. You can take a tool and look at the EXEs, the program files, and actually see which APIs are being called. Yes, there were times, not anything to do with Novell, but there were third parties who found a few cases where we had been sloppy. Nothing of any importance. But then we remedied that by publishing that API or taking out that call.

And so here in a document that doesn't sound like

Frankenberg at all, it sounds like his lawyers, he is saying
that. And the question back to him always was, A, we have a
right to so why is it a big deal; B, give us an example
where that's the case, any example and we'll look into it.

Q Mr. Gates, my question was a lot simpler. My question

- was do you recall refusing to address this issue with

 Mr. Frankenberg?
- A I answered quite responsibly by telling you how we

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would address these allegations no matter who they came
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     from.
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          Mr. Frankenberg goes on in the next paragraph to say,
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    Microsoft's operating system interfaces constitute a
 5
     resource, access to which is required in order to be able to
     compete in the market. Novell cannot duplicate those
 6
 7
     interfaces. Microsoft has denied them to Novell when it
 8
     would be a simple -- when it would be simple to reveal them.
 9
          Do you recall that correspondence from Mr. Frankenberg?
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               MR. HOLLEY: Your Honor, Mr. Johnson is reading a
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     letter written by Novell's lawyers into the record.
12
               MR. JOHNSON: Objection, Your Honor.
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               MR. HOLLEY: Excuse me, Your Honor, in violation
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     of the Court's prior orders.
15
               THE COURT: Approach the bench.
16
               (Side-bar conference held.)
17
               MR. HOLLEY: Your Honor, this is not an
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     appropriate examination. That letter reeks of something
19
     written by a lawyer.
20
               THE COURT: Well, I'm not sure I've ruled on this.
21
               MR. JOHNSON: You did not.
22
               THE COURT: In fact, I think the plaintiff made
     the decision not to put the letter in.
23
24
               MR. HOLLEY: Why is he doing it now? And the
25
    reason why, of course, is because they could never get this
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2.2

letter into evidence. It's a lawyer's letter. It reads like a legal brief. It's full of concepts about Microsoft's monopoly leveraging. Mr. Johnson himself admitted yesterday afternoon in response to the Court's question there is no legal obligation of Microsoft to disclose APIs.

It is very misleading, frankly, under Rule 403 of the Federal Rules of Evidence. It's highly prejudicial for this letter asserting a legal theory, which has now been completely rejected by the Supreme Court of the United States, i.e., monopoly leveraging, to be read to this jury. There is no basis for monopoly leveraging claims in this country anymore. They are gone. You either fall within the confines of Aspen Skiing or Colgate. United States against Colgate stands for the proposition all the way back to 1909 that people have no obligation to do business with their rivals.

MR. JOHNSON: Your Honor, Microsoft has used as a sword in this case before this jury that no one from Novell contacted anyone from Microsoft with respect to the issue of these undocumented APIs. As I told you yesterday, I had refrained from putting these letters in because they are, in fact, letters between executives dealing with a number of issues, including some of these antitrust issues. But I cannot abide by the fact that I cannot show to this jury that Mr. Frankenberg did not remain silent. He told

Mr. Gates repeatedly that this was an issue between them.

And he asked repeatedly to discuss those issues with

Mr. Gates. And, unfortunately, Mr. Gates, as the

examination will develop, refused to discuss these issues --
simply refused.

So to say that Microsoft can now use this as a sword, as Mr. Tulchin has done, and to say, standing up and gesturing as he does, that no one at Novell ever complained about this issue to Microsoft or to Mr. Gates, for me not to be able to use this I think is unconscionable. I'm frankly okay with not putting them into evidence. I'm okay with that. I think that is a reasonable compromise here. But what the jury should not be left with is the impression that this was something we were okay with.

Frankly, Your Honor, this also goes to the motion that was before you with respect to those DOJ inquiries. As you can see from those documents, Novell was not okay with this.

THE COURT: I'm ready to rule on both of those.

I'm denying the motion, number one. I haven't ruled upon whether you can ask questions. The problem with this monopoly leverage, the closest this comes is you were using APIs in your applications and not ours, which is not the claim in this case. And the problem with the other thing is your executives may have been thinking about bringing a

suit -- DOJ bringing suit. There is no evidence in the 1 2 context of trying to find a business solution to this 3 problem, anybody ever discussed that with Mr. Frankenberg. 4 What they were doing is having a secret file -- secret 5 communications with the DOJ and FTC. There is no evidence 6 they have had any communication with Microsoft. 7 MR. JOHNSON: But that was --THE COURT: That's what these letters are. That's 8 9 exactly what you're trying to address here. 10 MR. HOLLEY: I will explore this on redirect. 11 can search in every one of these letters for the term 12 namespace extensions. It doesn't appear anywhere. 13 people are not stupid at Novell. If they had a concern 14 about namespace extension APIs, they should have raised it. 15 There is not a single communication, none, not one. 16 THE COURT: My recollection this is not until 17 June. 18 MR. HOLLEY: It's not until June. 19 MR. JOHNSON: Mr. Frankenberg testified he did not 20 learn of this problem until 1995. And he further testified 21 in his testimony in the record, Your Honor, that he 22 understood that what Microsoft had done was it turned the 23 status of these extensions into undocumented APIs.

testified to that. And here he is in repeated letters to

Mr. Gates saying, hey, you have got these undocumented APIs.

24

That is an issue with us. We want to talk about that. Please discuss that with us. And Mr. Gates refused to discuss the issue.

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MR. HOLLEY: Your Honor, it cannot be the namespace extensions APIs because Mr. Frankenberg's complaint is that, as Your Honor just pointed out, Microsoft's applications using APIs that we don't have. We now have an unbroken chain of testimony that Microsoft Office, Word, Excel, PowerPoint and Access never used the namespace extensions APIs. So the complete complaint Mr. Frankenberg is raising by definition does not involve the namespace extensions APIs.

MR. JOHNSON: That is totally wrong. If you look at the second paragraph there, that says nothing about whether or not Microsoft's applications are using them.

But, yes, that was an issue as well. But the fact of the matter is Mr. Frankenberg in later letters, which you will see, complains about these undocumented APIs in Microsoft's operating system. It is a further file, of course, if Microsoft's applications were using them, in Mr.

Frankenberg's view, but it does not end the debate about having undocumented APIs in your system that you have taken away from us.

THE COURT: The second paragraph has to be read in context of the first paragraph, which says, it is our view

that Microsoft's operating systems contain undocumented 1 2 calls, features, and other interfaces that are made 3 available to its own applications developers to give competitive advantages to its applications products. 4 5 it goes on to talk about that monopoly leveraging. 6 second paragraph talks about Microsoft's operating system interfaces. That's the only fair reading of that. 7 8 MR. JOHNSON: Your Honor, you will see the other 9 letters. 10 THE COURT: I have seen the letters. 11 MR. JOHNSON: There will be more general statements only about undocumented APIs. 12 13 THE COURT: If I were getting this letter, I would 14 think it would be pertaining to operating systems that are 15 used for purposes of, quote, monopoly leveraging, which I 16 don't know whether it existed as a theory or not, 17 essentially is a claim that you were using our applications, 18 which the objection is sustained. 19 (Side-bar conference concluded.) 20 BY MR. JOHNSON: 21 Mr. Gates, yesterday during your direct examination, 22 Mr. Holley told you that Novell wanted to add an Internet 23 browser as a custom folder into the Windows Explorer using 24 the namespace extensions. Do you recall that question, sir? 25 Α No.

- 1 Q Mr. Holley asked you if integrating a Web browser into
- 2 the Windows Explorer made sense to you. Do you recall that?
- 3 A I'm sure I should.
- 4 Q Well, do you recall testifying that a browser was an
- 5 application that ran separately?
- 6 A Now I do.
- 7 Q That you just write the application and ask the user to
- 8 | install and run it. You testified that a browser is not the
- 9 kind of work that would fit into the namespace hierarchy
- 10 | that the tree view would display, correct?
- 11 A That's right.
- 12 Q Mr. Gates, would you agree with me that Mr. Nakajima
- 13 was the inventor of the namespace extensions? Do we have
- 14 | that agreement?
- 15 A You testified to that, yes.
- 16 Q Were you aware that Mr. Nakajima testified that he
- 17 | integrated Internet Explorer, Microsoft's Web browser, into
- 18 | the Windows using namespace extensions?
- 19 A That's strange. I don't know what he's saying he did.
- 20 | I would have to see it. I don't understand where in the UI
- 21 he would have connected them up.
- 22 | Q All right, sir. Let me show you what has been marked
- 23 | Plaintiff's Exhibit 344. This document is entitled Web-like
- 24 | Shell Architecture. It was written November 8th -- or
- 25 published November 8th, 1995 by Mr. Nakajima.

- 1 Do you see that, sir?
- 2 A Yes.
- Q I would like to direct your attention to the second page of this document under the heading Windows 95 Shell Namespace Extension.
- 6 Are you with me, sir?
- 7 A Yeah. I don't know the document, so which page are you 8 on?
- 9 Q Second page. You see the heading Windows 95 Shell 10 Namespace Extension?
- 11 A I'm trying to make sense of this thing. Just a second.
- 12 0 Sure.
- 13 A This is about where he's going to change some of the
 14 existing code, but he's going to minimize it to create a new
 15 version of the shell. It's not about using exactly the
 16 Win95 shell as was shipped. It's about taking that shell
 17 and changing the existing code path to, in some minimal way,
- 18 create some new features.
- 19 Q Mr. Gates, do you see the paragraph entitled Windows 95 20 Shell Namespace Extension?
- 21 A Right, but this document is not about taking the Win95
 22 shell as it existed and using some namespace extension APIs.
 23 This is about changing the shell code, making some changes
- 24 to the existing code paths in order to do something that
 25 goes way beyond just name enumeration. He's creating a

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browsing feature, which is not this namespace extension.
It's browsers. He's putting that into the shell in an
integrated way.
     You see, sir, in that paragraph, which I'm trying to
draw your attention to, he states, it is quite natural to
use the namespace extension mechanism, see picture below, to
plug the URL namespace into the explorer's namespace?
     What is being talked about here is not a case where you
just took the Win95 shell as is and used namespace extension
or anything of the kind. This is a case where he's taking
shell and browser and he's doing development work on both,
including changing existing code to create something that's
kind of a hybrid shell browser thing.
                                       That's the proposal
here. It is not related to taking the Win95 shell as is.
This is a new thing that's done by changing the shell code.
     If we draw your attention down -- can we bring up the
picture there. He, in fact, shows the use of the shell
namespace extension functionality to bring up other
ShellViews like Athena and MSN, correct, sir?
            This is post Windows 95 shipping where he's
talking about making changes to the shell to do some more
advanced things that the Windows 95 existing code base as is
is unable to do. Now he's talking cleverly about how he can
make minimal changes to that code shell base, and he's
talking about the benefits he would get if he changed the
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code shell base to be able to create a product that's kind
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     of a shell browser combination. And, you know, so this is a
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    proposal for changing the shell. This is not about using
 4
     namespace extensions in the Windows 95 shell as it was
 5
     shipped.
 6
          Isn't it a fact, sir, that Mr. Nakajima, the inventor
 7
     of the namespace extensions, used those extensions to
 8
     integrate Internet Explorer into Windows?
          He had to change the shell code in order to achieve
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10
     what's in this document, as it says. So this is not about a
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     third party publishing something for Windows 95 that took
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     the shell that was shipped then and doing something with it.
13
     This is about taking the shell code base, the browser code
14
     base, making some changes in both of them to create this
15
     kind of hybrid sort of shell browser type thing.
16
          Let's try this, Mr. Gates. Maybe this will help.
17
     going to show you what has been marked Plaintiff's Exhibit
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     355.
19
          Mr. Gates, this is a publication by Microsoft. It's
20
     called the MSDN. I think you spoke about it earlier.
21
    was MSDN?
22
          Actually this is a Microsoft Journal publication.
23
          Okay. Microsoft Journal. So it's published by
24
    Microsoft, right?
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25 A Yes.

- 1 Q And the title of this article is Extending the Windows
- 2 Explorer with the Namespace Extensions, correct?
 - A Yeah. Do you want me to look at it?
- 4 | Q I just want to know, we're talking about the Internet
- 5 Explorer, correct?

- 6 A No. We're talking about Windows Explorer.
- 7 They are both called Explorer, which I admit is very
- 8 confusing. Believe me, we didn't come with our product
- 9 names expecting, you know, people to easily be
- 10 distinguishing these things. So it's quite natural to
- 11 confuse Windows Explorer with Internet Explorer. But this
- 12 is about Windows Explorer.
- 13 Q I'm sorry. My mistake. You're right. This is when
- 14 you finally decided to republish the namespace extensions,
- 15 | correct?
- 16 A Well, that's a mischaracterization of what happened.
- 17 \parallel Q Tell me how it's a mischaracterization. Isn't it, in
- 18 \parallel fact, that until sometime in 1996, the documentation for the
- 19 | namespace extensions was unavailable?
- 20 A Actually the documentation, as you said, was in the M6
- 21 beta. What happened was --
- 22 | Q I'm talking about full documentation, Mr. Gates. The
- 23 I full documentation for the namespace extensions is shown
- 24 here in this July 1996 MSDN publication, right?
- 25 A I don't understand what you're saying. First of all, I

haven't had a chance to look at this thing. This is not -
this is an article in Microsoft Systems Journal, which I

would be glad to read.

What happened with the namespace extensions is that there is a category of things where you tell people that are there, but you don't guarantee upwards compatibility.

Usually that's a very small set. But Maritz actually decided to put the namespace extensions into that special category.

- Q Mr. Gates, do you recall that you told the jury yesterday that no commercially released version of Microsoft Office from 1994 to present used the namespace extension APIs?
- 14 A That's right.

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- Q Do you recall that Microsoft released Office 2000?
- 16 A We did, yes.
- 17 Q I would like to show you what has been marked PX583.
 - MR. HOLLEY: Your Honor, I will just object to this as beyond even the Court's 1999 cutoff for relevant time period.
- 21 THE COURT: Overruled. This is cross-examination.
 22 It's based upon the testimony.
- 23 BY MR. JOHNSON:
- Q This is a Web page from Microsoft's Web site titled
 Client Components of Office Server Extensions.

Have you seen this document before, sir?

A No, sir.

publishing feature, correct?

- Q You will see Microsoft Web page states that Microsoft
 Office 2000 client computers include Microsoft's Office
 Server Extensions, client components as part of its Web
 - A Yeah. Let me actually look at this because I've not seen it before.

Yeah. This is about -- not about the systems namespace extensions. It's about a piece of work called DAV that was done in the open file dialogs.

We had a problem with the Internet, it didn't support file systems protocols. So we created this thing called DAV. So actually in the Office dialogs, we did support the idea that you could go out to Web-based targets and load files. But this is not — this is not the Windows namespace extensions. This is a piece of work that was done in Office specific code not calling those APIs.

- Q If you refer your attention to namespace extensions down a little further in the document.
- A That's right. The Office dialog did its own extension of the namespace of files you see while you're using Office. So this is not something that affected non-Office usage. It did not call the APIs that we have been spending all this time on. This is not a case of that. This is namespace

- extensions within the Office open dialog. 1
 - Mr. Gates, you see it states the namespace extension adds the Web folders object to the Windows environment.
- 4 Do you see that, sir?

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discussing.

- That's right. So when you use the open dialog in the Office products, when you look there in that open dialog, you will actually see this Web Folder object. And this is the DAV protocol, not used at the Windows level. This is used at the Office level. So this is taking the names you 10 see in the Office open dialog and extending those names. It 11 is not -- this is not related to the stuff we've been
 - I've heard that, Mr. Gates. Going on in the same paragraph it says, the Web Folders object is a container for shortcuts to your Web sites, and it appears immediately below My Computer in the Windows Explorer hierarchical structure, right, sir?
 - Yes, in the open and save as dialog as it says in the next sentence.
 - So the Windows Explorer would be what is in Windows 95 which has the tree view that we've been talking about, right?
 - Well, by this time Office 2000 actually did not run on Windows 95. It required another version of the operating system that you probably haven't talked about much. There

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were changes by then in the APIs in terms of what's
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 2
    published. Office 2000 was a Windows XP product, so it kind
 3
     of takes us outside of the realm of Windows 95.
 4
          If we go down to that picture -- can we bring the
 5
    picture up -- it shows the Office 2000 applications
 6
     communicating with the namespace extensions in order to
    perform this functionality, correct?
 7
          Right, but those are not the same namespace extensions
 8
     we've been talking about in Windows 95.
10
          I would like to go back with you -- if I could go back
11
     with you with the discussion we were having about
12
    Mr. Nakajima actually using the namespace extensions to
13
     integrate Internet Explorer into the Windows Explorer, and I
14
     would draw your attention to Mr. Nakajima's testimony in
     this case at 92, lines 1 through 17.
15
16
               MR. JOHNSON: Can we put that up, sir?
17
               THE COURT: Excuse me. You all can stay a little
18
     longer; is that correct?
19
               THE WITNESS: I can.
20
    BY MR. JOHNSON:
21
          Mr. Nakajima testified, quote, I also, at the same
     time, did the integration of the Internet Explorer into
22
23
     Windows, and I used the namespace extension mechanism to
24
     integrate Internet Explorer into Windows so that, as I said,
```

the namespace and extension mechanism, I would use it to --

this is browsing to any information outside the file system. So Internet was another space you could browse into. So I created a special shell extension to plug into Windows so that the user can browse the Web inside Explorer, but because the HTML rendering engine was the interface of the DOC objects which I did in Explorer and then I accessed both Windows Explorer and Internet Explorer, so I needed to create the bridge between the DOC objects and the namespace extensions.

And then he goes on to say at page 93, 1 through 13, now the -- question: Now the namespace extensions that you used, are those the same extensions that we have been talking about -- Answer: Yes. Question -- here? Answer: Yes. Question: Were those changed in any significant way between what they were in, say, June of 1994 and when you were using them? Answer: No, no change. Question: Would that still have been running in the same process as Explorer? Answer: Uh-huh. (Affirmative)

Mr. Gates, does that refresh your recollection at all that Mr. Nakajima used the namespace extensions to integrate Internet Explorer into the Windows Explorer and that those namespace extensions had not changed one iota from when Mr. Nakajima invented them in 1994?

A Right. But when he says in this document Web-like shell architecture, is he had to change the shell code in

order for it to be rich enough for him to be able to integrate the browser in. So it wasn't the case that what he was doing here was simply based on exactly the shell as it shipped in Windows 95.

I also don't know, we would have to ask him, the project he's talking about here, did it ever ship? Did he ever think the user wouldn't want to use it? I never saw it, so he would be the best person to ask.

MR. JOHNSON: Can we bring up the portion of the testimony where he actually says he did this in a complete product for Internet Explorer? I think it's the same page we were just looking at. Go back one.

Have we got it there? I'm sorry, Your Honor, a moment's indulgence.

Do you have it, Mr. Goldberg?

BY MR. JOHNSON:

1.3

Q There we have it, sir. The question was asked to Mr. Nakajima, and this was for Internet Explorer 3.0? And he said, no, the 3.0 was simply using the DOC objects. The namespace extension integration came in Internet Explorer 4 and Windows 98.

Does this refresh your recollection, Mr. Gates, that the namespace extensions were used in Windows 98 to integrate Internet Explorer 4?

A That's completely different than any question you've

asked me. No question you've asked me related to Windows 1 2 98. 3 Can you answer that question, sir? 4 I don't recall what happened in Windows 98 in Internet 5 Explorer. 6 You would have no reason to disagree with the inventor 7 of the namespace extensions on how he used them, would you, 8 sir? 9 If he -- whatever he says about what was done to the 10 Internet Explorer in Windows 98, he would know better than I 11 would. 12 Thank you. 1.3 MR. JOHNSON: Nothing further, Your Honor. 14 THE COURT: Mr. Holley. 15 REDIRECT EXAMINATION 16 BY MR. HOLLEY: 17 Mr. Gates, yesterday afternoon Mr. Johnson asked you 18 about some form 10-Ks that Microsoft filed with the 19 Securities and Exchange Commission in Washington, D.C., 20 which listed various operating systems competitors. I would 21 like to show you a demonstrative Exhibit 187. 22 Now the heading on this chart on reflection should say 23 Operating Systems Competitors Referred to in Microsoft Form

10-Ks for 1995 and 1996. Taking them from the bottom up,

Hewlett Packard had a version of Unix called HP/UX. Was

24

```
that a competitor to Windows 95 in terms of running on Intel
 1
 2
     processors and having a graphical user interface?
 3
     Α
          No.
 4
          The next one up is Santa Cruz Operation's version of
 5
     Unix called SCO Unix. Was that a competitor to Windows 95
 6
     in terms of running on Intel processors and having a
 7
     graphical user interface?
 8
          No.
          The next one up is a version of Unix called Solaris
 9
10
     from Sun Microsystems. Was that a competitor to Windows 95
11
     in terms of running on x86 processors and having a graphical
12
     user interface?
1.3
          No.
14
          The next two are from Digital Equipment Corporation.
15
     One is the VMS operating system for VAX mini computers and
16
     the other one a version of Unix either called DGUX, or
17
     Digital Unix. Were any of those digital operating systems
18
     competitors to Windows 95 in terms of running on x86
19
     processors and having a graphical user interface?
20
          No.
21
          The Macintosh is not at this time an operating system
22
     that runs on Intel x86 processors, correct?
               THE COURT: At this time, at the time of the --
23
24
     you mean at the time of the --
25
     //
```

```
MR. HOLLEY: I'm sorry, Your Honor.
 1
 2
     thank you for that clarification.
 3
     BY MR. HOLLEY:
 4
          In 1995 and 1996, was the Macintosh operating system
 5
     capable of running on Intel x86 processors?
 6
          No.
 7
          The version of Unix from Apple called A/UX, was that a
 8
     competitor to Windows 95 in terms of running on Intel x86
 9
     processors or having a graphical user interface?
10
          No.
11
          Going up to IBM, the mainframe operating systems called
12
     S/390 and MVS, were those competitors in 1995 and 1996 with
13
     Windows 95 in terms of running on x86 processors and having
14
     a graphical user interface?
15
     Α
          No.
          The mini computer operating system called OS/400 from
16
17
     IBM, did that compete with Windows 95 in terms of having a
18
     graphical user interface and running on x86 processors?
19
     Α
          No.
20
          And PC-DOS, the version of MS DOS that IBM licensed,
21
     did that compete with Windows 95 in terms of having a
22
     graphical user interface?
23
     Α
          No.
24
          OS/2, did it compete or not compete with Windows 95 in
```

the years 1995 and 1996?

```
Not in a significant way, but it did run on Intel
 1
 2
    processors and eventually it did ship to what was called the
 3
    present case manager with a graphics interface. It's a kind
 4
     of complicated thing because we were a joint developer of
 5
     OS/2 with IBM. But eventually they took it and used it
 6
     themselves and tried to position it as a competitor.
 7
          Mr. Gates, can you think of any other operating systems
 8
     from these six vendors, circa 1995 and 1996, that are not on
 9
     this chart that competed with Windows 95 in terms of both
10
     running on Intel x86 processors and having a graphical user
11
     interface?
12
               THE COURT: Do you want to expand that to include
13
     or any other company? No, you ask your own question.
14
               MR. HOLLEY: Well, no, Your Honor, I'm happy to
15
     take the Court's amendment.
16
    BY MR. HOLLEY:
17
          Mr. Gates, can you think of any operating system other
18
     than OS/2, to the extent it was competitive, from any vendor
19
     in 1995 and 1996 that competed with Windows 95 in terms of
20
     running on x86 processors and having a graphical user
21
     interface?
22
          Nothing of any significance. We sometimes thought as
23
    piracy as a competitor, but that was people using our own
24
    product and not paying us.
```

Q Now, Mr. Gates, I would like to turn to a different

```
subject, which was the tools that Microsoft created for
 1
 2
     Sun's Java technology. Did Microsoft's addition of keywords
 3
     and compiler directives like At Windows and At Com make it
 4
    more or less likely that ISVs could write full-featured
 5
     personal productivity applications that would run at least
 6
    partially in a Java virtual machine?
 7
               MR. JOHNSON: Your Honor, objection, these are
 8
     collaterally estopped acts. We can't relitigate these
 9
     issues.
10
               MR. HOLLEY: Your Honor, it was purely within the
11
     scope of direct.
12
               THE COURT: Overruled. You may answer.
13
               THE WITNESS: They were enhancements that would
14
    have made Java slightly more attractive.
15
    BY MR. HOLLEY:
16
          Why, sir?
17
          Because they just added new capabilities, including the
18
     capability to get at rich native functionality.
19
          Can you explain what it means to say that there are
20
     Windows specific keywords and compiler directives?
21
          Well, when you're writing code in Java or any
22
    high-level language, C, Cobalt, BASIC, most of what you
23
     write isn't specific to the operating system you're going to
24
    run on. It's only when you get to things like when you want
```

to talk to the file system or when you want to draw on the

screen, then you say to yourself, okay, am I going to just use very limited capabilities that are on all operating systems or am I going to specifically find out what the features of a particular operating system are. And so when you do that, you decide to call Windows directly, then your application may be faster and richer, but you're intentionally, when you do that, giving up the fact that that code without any change would automatically run on lots and lots of systems.

So developers always have this question should I write it to be more cross-platform and have lower performance, lower capabilities, or shall I take some part and make it specific to the platform. And so what all that weird terminology meant was that as you programmed in this high-level language, if you chose to call a specific Windows thing, you had to label it with a thing called a keyword. It's just a word in the text. So that was the portion of your program where you've chosen to call Windows.

- Q The more that you called Windows specific features as opposed to the Java class libraries, did that have any impact on the portability of the application that you created?
- A Yes, that is a trade-off you're making, that if you just write a version that calls the Windows APIs, then your application is not going to run on other platforms. And so

```
you just have a decision how much you want to do that.
 1
 2
     does help you make a better Windows application if you do it
 3
     that way.
 4
          Just to be clear, what makes a better Windows
 5
     application?
 6
          Well, the general APIs that are available on all
 7
    platforms are not as rich as the specific APIs that are on a
 8
    particular platform. So in the case of Windows, if you
 9
     wanted to make the graphics really fast, you could do that
10
    much better if you called Windows specific graphics APIs.
11
     And to do that you use this keyword thing in your program,
12
     in the program you type, the source code of the program, you
13
     use that keyword, and that's what let's you, if you choose
14
     to call Windows specific functionality.
15
          Now, Mr. Gates, I would like to change topics here and
16
     show you what has been marked as Defendant's Exhibit 594.
17
     This is a February 19 --
18
               MR. JOHNSON: I have an objection to that. Can we
19
     remove it from the screen, please?
20
               THE COURT: Approach the bench.
21
               MR. JOHNSON: Your Honor, we might be able to deal
22
     with it.
23
               THE COURT: I'm sorry. I misunderstood you.
24
    BY MR. HOLLEY:
```

Mr. Gates, without reference to Defendant's Exhibit

```
594, in the years 1989 and 1990, were you telling ISVs that
 1
 2
    Microsoft intended to create a whole family of applications,
 3
     including ones to run on Macintosh, OS/2 and Windows, and
 4
     that anybody that wasn't doing what you were doing was
 5
     crazy?
 6
          That's right. We were very public in saying that
 7
    people -- all ISVs should move to graphic user interface,
 8
     and that we ourselves were writing graphical applications
     for Windows, Macintosh and OS/2.
 9
10
          As I'm quoted here in this article, we were pretty
11
     vehement about it. In this case the way I stated it is
12
     anybody who's not doing what we're doing is crazy.
13
          Now, Mr. Gates, I would like to move on to the topic of
14
     the namespace extensions APIs, which occupied much of the
15
     last two days. Is it correct or not correct to say that
16
     when we're talking about the namespace extensions APIs,
17
     we're talking about the same thing as when we're talking
18
     about shell extensions?
19
          Absolutely not. Namespace APIs were an example of
20
     shell extensibility, but they are actually nowhere near --
21
     not even that high of percentage. There were quite a
```

Q Now Mr. Johnson showed you during his cross-examination something which is marked Plaintiff's Exhibit 215. Do you still have that up there with you, sir?

ways -- a number of ways to extend the shell.

22

23

24

- 1 A I bet I do. How deeply buried is it?
- 2 | Q I'm happy to give you another one. I think I'm happy
- 3 to give you another one. Let me find yours.
- 4 A How long ago was it?
- 5 Q Here you go.
- 6 A Thank you.
- 7 Q Now I believe you testified earlier that Mr. Maritz
- 8 told you in November that Symantec and Stac --
- 9 THE COURT: November of what year?
- 10 MR. HOLLEY: Fair enough, Your Honor.
- 11 BY MR. HOLLEY:
- 12 | Q In November of 1994, Mr. Gates testified that
- 13 Mr. Maritz had told him that Symantec and Stac were relying
- 14 on the namespace extension APIs. Do you recall that
- 15 | testimony, sir?
- 16 A That's right. We were looking at a early November
- 17 piece of e-mail from Paul Maritz where he said there were
- 18 | two internal products, Marvel and Capone, that used the
- 19 | namespace APIs -- had used. There were two external, Stac
- 20 and Symantec, that had used them. That was the extent of
- 21 use that he was aware of.
- 22 | Q Maybe just so it's clear and maybe I should have done
- 23 this first, let's look at Defendant's Exhibit D-2. Is that
- 24 | the e-mail that you were referring to.
- 25 A Yes, that's what I'm referring to.

```
And just so it's clear, we're talking about you were
 1
 2
     referring to the paragraph number two, which says there were
 3
     four groups using these interfaces, Capone, Marvel, Stac,
 4
     Symantec?
 5
          Exactly.
 6
          Let's flip back to Plaintiff's Exhibit 215 that
 7
     Mr. Johnson showed you on your cross-examination, directing
 8
     your attention to the second page where it says Symantec.
     And then there is a heading Shell Extension Technology.
 9
10
     There is a list, it carries on to the next page, but it
11
     says, tray extensibility, file viewers, briefcase
12
     reconcilers, copy hook handlers, context menu handlers,
13
     property page handlers, icon handlers, namespace/explorer
14
     extensibility.
15
          What are those things, Mr. Gates?
16
          Those are all categories of shell extensibility APIs.
17
     So in each case there are multiple APIs, but they were
18
     grouped into those different groups -- let me count them,
19
     one, two, three, four, five, six, seven, eight groups of
20
     which namespace explorer extensibility is one of them.
21
          Just for context, this list -- this survey that was
22
     done about who was using these different shell extension
23
     APIs, what is the date of this document, sir?
24
          It says September 22nd. So I misspoke when I said
```

Mr. Maritz made sure a survey was done after the decision.

1 This survey clearly was done before the decision.

Q Now the comment section here says they, being Symantec, made the comment that this was not a big surprise, that they simply expected to break from release to release.

Was that expectation, in your experience, common from ISVs in dealing with beta software?

A Absolutely. We're going to break various things and, you know, that -- if you don't want to put up with that, then you wait until the product is final. But then you are going to give up the ability to get down the learning curve and get your work done. So it's always a trade-off. There is -- you know, things change, things go away, things get faster, slower, and, you know, that's made very clear to people that are using beta copies.

Q Now let's look down at the very next entry which relates to Stac Electronics, which was the other external ISV referred to in Mr. Maritz's e-mail to you, correct? That was Symantec and Stac?

A Exactly.

Q Here there is the same list of extensibility mechanisms, and under the heading namespace/explorer extensibility, it says that their entire user interface is based on the Explorer extensibility, correct?

A That's right.

Q Then under the comment section it says they realized

2.2

that the core of their product is not the UI, but they would really like to see the APIs stay compatible as long as possible.

Now what did Mr. Maritz tell you about what Stac was able to do by November 7 of 1994 despite the fact that their entire user interface had been based on the namespace extensibility mechanism?

- A He told me they had found a way around it that they were satisfied with.
- Q Now I would like to turn back, sir, to the first page of this document from Mr. Struss that Mr. Johnson showed you on cross-examination. The very first paragraph says, below is a summary Scotthe -- and I think the testimony shows that that's Scott Henson -- pulled together from a couple of weeks ago of what ISVs current thoughts are. Only three ISVs have begun actual work, two of them utility ISVs who expect to break, the rest are in the plan to do so stage.

And then further down it says, here's summary of more specific feedback we've gotten from Lotus and WordPerfect since Scott compiled his data.

Can you read, Mr. Gates, what Mr. Struss says about WordPerfect? That's the last paragraph in Mr. Struss's e-mail.

A It says, WordPerfect, they have not begun any work on IShellFolder, IShellView, et cetera. If Capone integrates

```
into the Explorer, then they will also, parentheses, we'll
 1
 2
     figure it out if it's not documented, parentheses.
 3
     Capone does not, they will just create a standalone e-mail
 4
     application. For common dialogs, current plan is to use the
 5
     MS dialogs, but I don't believe they've investigated this
 6
     enough to know for sure.
 7
          I think this is clear, Mr. Gates, but did Capone use
 8
     the namespace extension APIs in the shipping version of
 9
     Windows 95 or not?
10
               They thought that they would, but then when they
          No.
11
```

- were told that we weren't publishing them, they changed and the shipping product did not use them.
- Now I don't know if you still have it up there, sir, but Mr. Johnson showed you Plaintiff's Exhibit 388, which you said was the Chicago Reviewer's Guide. Do you still have that?
- Yes, I do.

13

14

15

16

17

18

19

20

- Now directing your attention, sir, to the statement that appears under the heading Beta-1. Is that consistent or inconsistent with your understanding of industry practice with regard to beta releases of software products?
- 22 No. What it's saying here, which you'd call a 23 disclaimer where it says that it doesn't -- represents a 24 commitment for providing or shipping these features in the 25 final product, that is very standard. You will see that in

basically everybody's beta software that I'm aware of, and 1 2 it was standard practice at Microsoft. Here you see that 3 that practice was part of what we've followed in the case of 4 Chicago. 5 And was that just Microsoft's practice? 6 No, I think everyone followed that practice. 7 you're doing software, there's enough uncertainties that you 8 know you might have to make changes. You want to get the 9 thing done, you want to get users for it. So you've got to 10 retain flexibility that if something doesn't work well, if 11 you get a lot of feedback about something, if you realize 12 that there is going to be some problem in the future with 13 something, then you need the flexibility to make changes. 14 Mr. Gates, one last topic, Mr. Johnson showed you 15 Plaintiff's Exhibit 216, which was an e-mail from 16 Mr. Allchin to a group alias called Windows NT Group 17 Microsoft Employees Only. Do you have a copy of that with 18 you up there, sir? I think it's about -- it was kind of 19 early in the cross. 20 I've got it. 21 You have it. Okay.

Mr. Johnson directed your attention to the second full paragraph on the second page of this document, which says, Bill recently made a decision to move the Cairo shell effort to Office. I want to skip down a little further. It says,

22

23

24

Office is now explicitly planning on building shell features such as their own Explorer and targeting NT server capabilities in their 96 product.

Was it your understanding that the work that you had

Was it your understanding that the work that you had transferred from the Cairo team to the Office team was based on the namespace extension APIs?

A No, it wasn't. That was the Cairo development project and they had taken a far more general approach and they didn't want to support namespace extensions in their work.

Q Why not?

A Because when you take a general database approach, this idea that everything only can be accessed through the tree -- you actually want things to be accessed by their properties, their types. You want to do more queries. So what they wanted to do was to have things exposed in a more database way, and that meant that having this more limited special purpose way didn't fit in with the Cairo approach.

Now they could have done it, but it would have been kind of weird and it would have been a lot of extra work for them.

 $$\operatorname{MR.}$$ HOLLEY: Your Honor, I have no further questions.

THE COURT: Mr. Johnson, anything further?

MR. JOHNSON: Nothing further, Your Honor.

THE COURT: Thank you all. Thank you for staying

late. You have a wonderful Thanksgiving. Thank you, Mr. Gates.

See you all at eight o'clock on Monday morning. I will stay here with counsel for just a second.

(Jury excused)

THE COURT: I just wanted to recount what I think the loose ends are, find out if there is something else I should be thinking about. There are still some exhibits I have to review. There are some motions to reopen that I have to decide. In terms of the documents that I was wanting to raise during the course of the Rule 50 argument that were going to be followed up by an appropriate letter from Mr. Johnson. I think I have ruled upon one set of those documents, which is an exchange of letters beginning in June of '95 between counsel. I'm not letting those in. I reviewed them. I think they are, A, sufficiently late. It is not clear at all, and I would not read them as relating to the namespace extensions in this case, over the objection of Mr. Johnson.

The other -- frankly, I will read them again. My instinct is that the -- I don't remember this, I think they are e-mails, the second set referring to the knowledge of senior management at Novell, I don't think they should come in, frankly, because I think they may reflect that senior management was interested in pursuing the antitrust claim

through DOJ or the Federal Trade Commission. I don't think they really relate to whether Mr. Frankenberg and Novell — anybody was trying seek a business solution with Microsoft.

That said, to the extent that Mr. Tulchin or anybody on the Microsoft side would make a blanket statement that senior management were not aware of -- I know the statement has been made so far, but we're simply not aware of what happened. I'd rather have those not made in the future because in a different context we find they are, even though the exhibits you mentioned. So, Mr. Tulchin, this becomes important, I'm not going to let them in, but it's with the request there not be a blanket statement that no senior management at Novell was entirely unaware of the problem.

MR. JOHNSON: Thank you, Your Honor.

MR. HOLLEY: Thank you, Your Honor. Hope you have a nice Thanksgiving.

THE COURT: Thank you. Happy Thanksgiving to you all. See you all at eight o'clock Monday morning.

(Whereupon, the trial was continued to Monday, November 28, 2011 at 8:00 a.m.)