```
THE COURT: Okay. Let's get the jury.
1
                  (Jury brought into the courtroom.)
 2
              THE COURT: Mr. Johnson.
 3
 4
              MR. JOHNSON: Thank you, Your Honor.
 5
           BY MR. JOHNSON: Mr. Muglia, during the break, one of
    Ο.
 6
    my colleagues informed me that you may have misspoken about
    your deposition. You said something about 1999. If you look
 7
    at that --
 8
 9
    Α.
           2009. I'm sorry.
10
          It was the 2009. Correct?
    Q.
11
    Α.
          Yes.
12
           So it was a couple years ago, right?
    0.
13
           Yeah. Just a couple years ago for this case, right.
    Α.
           Thank you. Let's talk about Cairo a little bit.
14
15
    You've already testified, of course, that the Cairo?
    shell never shipped, right?
16
17
    Α.
           Yes. That's correct.
18
           If fact, the Cairo-based shell technology for Windows
19
    NT was canceled in the fall of 1994, correct?
           Yes. I mean, the team -- some of the folks in the team
20
    Α.
21
    wanted to move over to the Office group, but, yes, it was
22
    canceled.
           And, in fact, at that time, in the fall of 1994, it was
23
    0.
24
    decided that the Chicago shell would be used on Windows NT,
25
    correct?
```

- 1 A. That's correct. I don't recall the exact dates, but it
- 2 was the fall of '94.
- 3 | O. Let me show you what has been marked as PX --
- 4 | Plaintiff's Exhibit 216. Now, this is an email from
- 5 Mr. Alepin to the Windows NT group. And my first question to
- 6 | you is, would you have been part of the Windows NT group?
- 7 A. Yes, I would have.
- 8 Q. So, you've seen this email before, right?
- 9 A. Yeah. I don't recall reviewing it in preparation for
- 10 | this testimony, so -- I certainly would have received it in
- 11 1994.
- 12 Q. Now let's turn to the second page, second full
- 13 paragraph. Mr. Alepin states here that Bill Gates recently
- 14 | made the decision to move the Cairo shell effort to Office
- 15 because Mr. Gates wanted Office to take on Lotus Notes and to
- 16 | take advantage of any new shell features first. Right, sir?
- 17 A. That's what it says.
- 18 | Q. You don't have any reason to disagree with that, do
- 19 | you, sir?
- 20 A. Nope.
- 21 | Q. And Office -- he goes on to say, Office was now
- 22 | explicitly planning on building shell features such as their
- 23 own explorer in their '96 product, correct, sir?
- 24 A. That's what Jim said, although they never -- they never
- 25 | did their own explorer. They did their own -- their own file

- 1 open dialogue, but they never did the explorer.
- 2 Q. And at least as of September 27 of 1994, Mr. Alepin
- 3 | states that Mr. Gates' plan was to pull some of those
- 4 | features and code back from the Office team into post-1996
- 5 | versions of NT and Chicago, correct?
- 6 A. That's what Jim said in the mail. Like I say, I don't
- 7 | recall anything that ever was pulled back, but, yes, that's
- 8 | what Jim said.
- 9 0. That was certainly the plan at the time, correct, sir?
- 10 A. You know, the plan at the time was to -- was basically
- 11 | that Cairo was not successful, and the team moved over to
- 12 Office, and there certainly was some hope on some executive's
- 13 | part, Jim, perhaps, and Bill, that wanted to see the Cairo
- 14 | vision move forward of having Office bring these things to
- 15 more fruition. Like I say, it never really happened, but
- 16 | that was what I think Jim and Bill wanted to happen.
- 17 | Q. Well, you certainly agree that, among executives,
- 18 | Mr. Alepin and Mr. Gates would be pretty high up in the
- 19 | pecking order, right?
- 20 A. Yes. But just because they wanted something doesn't
- 21 | mean it happened.
- 22 | Q. Yes, sir, but that was their plan at the time, correct?
- 23 A. Yes. They wanted that to happen, but they didn't --
- 24 | clearly, they didn't -- they didn't really do the steps that
- 25 were necessary in order to make that plan a real reality.

- 1 It's not like there was a team that was actively driving this
- 2 | forward and all of these features were being built, etc. It
- 3 | just sort of fizzled away and died.
- 4 | Q. And do I understand correctly that the Cairo team was
- 5 | moving over to the Office team led by Mr. Chris Peters?
- 6 A. The shell team. The shell team was supposed to move
- 7 over. Not all of the Cairo teams. There were people working
- 8 on other things besides the Cairo shell. The shell team was
- 9 moved over. I don't recall how many people actually did
- 10 move. I know everybody didn't move, but certainly some of
- 11 | them almost certainly did.
- 12 Q. And if we could go down to the next paragraph please.
- "Given Mr. Gates' decision, the Windows NT group has
- 14 decided to use the Chicago shell code base on Windows NT."
- 15 Right?
- 16 A. For NT Work Station, yes.
- 17 | Q. And you recall this decision was made to use the
- 18 | Chicago shell code base on NT, right?
- 19 A. Well, yeah. Now, there is -- there is some open
- 20 | question as to how we would work it. You see the following
- 21 | sentence. From those efforts, his team will decide whether
- 22 to fork the code; in other words, create their own code base
- 23 from Chicago or work in a single tree. I'm pretty sure that
- 24 | they ultimately forked the code.
- 25 Q. This is really good, right? This gives ISV's one set

- 1 of API's to target, right?
- 2 A. It did provide -- yes, it did provide a consistent way
- 3 | for ISV's to target -- I mean, it was really good. I didn't
- 4 | think it was great at the time because I had been working on
- 5 | Cairo, and Cairo had obviously not been successful, but, yes,
- 6 for ISV's it was good news.
- 7 | Q. And, in fact, your group was responsible for building
- 8 | the Windows 32 SDK, which was common between Chicago and
- 9 Windows NT, correct?
- 10 A. That's correct.
- 11 | Q. And the Chicago shell code base, of course, included
- 12 | the shell extensions, correct?
- 13 A. It included -- let's sort of be clear. The Chicago
- 14 | code base included the shell extensions. I don't believe, at
- 15 the time the SDK was initially published, that it included
- 16 | the NameSpace extensions, but it did include a broader set of
- 17 | shell extensions.
- 18 | Q. Well, whether it was in the SDK or not, sir, the fact
- 19 of the matter is, the NameSpace extension API's were part of
- 20 the Chicago shell code base, correct?
- 21 A. That's a -- that's a complicated question to answer.
- 22 | It was -- it is true that the -- that the implementation of
- 23 | the -- of the Chicago shell had those extensions, the
- 24 | NameSpace extensions in it, but we did not publish the header
- 25 | files for a period of time that -- that that's how ISV's used

- 1 it. That's my current understanding, yes.
- 2 Q. Yes. And I understood that distinction, sir. In other
- 3 words, they weren't documented?
- 4 A. Right.
- 5 | Q. But they were still there, right?
- 6 A. That's correct.
- 7 | Q. And so those NameSpace extension API's were being
- 8 | ported from Chicago to Windows NT, right?
- 9 A. Ported is a funny word, but they were -- they were
- 10 | moved -- they were moved -- made to run under Windows NT.
- 11 And, again, that was the different implementation. That was
- 12 | now running out of process and thus had less robustness
- 13 issues.
- 14 Q. Now, less than a month after Mr. Gates decided to
- 15 | cancel Cairo and to move the Chicago code base into Windows
- 16 NT, he decided to withdraw support for the NameSpace
- 17 extension API's; isn't that correct, sir?
- 18 A. I don't remember the dates. They are not in front of
- 19 | me. This was September 27, but I think it was shortly
- 20 thereafter, yes.
- 21 | Q. This is Plaintiff's Exhibit 1. I'm sure you've seen
- 22 | that one?
- 23 A. Yes, I have.
- 24 | Q. Now, Mr. Gates' decision resulted in making the
- 25 | NameSpace extensions undocumented API's, correct?

- 1 A. That's correct.
- 2 | Q. And, as I believe you testified earlier, IShellBrowser
- 3 | refers to the NameSpace extension API's?
- 4 A. The explorer NameSpace extensions, yes.
- 5 | Q. And there are more than one of them, right?
- 6 A. Yeah. I think there are a couple of interfaces. I
- 7 don't know the specifics, but, yes, you could say the
- 8 | NameSpace extensions in IShellBrowser are roughly meaning --
- 9 they are meant to mean the same thing.
- 10 Q. And what this decision meant was that Microsoft would
- 11 no longer support these API's, and they might be broken or
- 12 | changed at any point in time, correct?
- 13 A. That is correct. This was recognized. This was almost
- 14 | a year before Windows 95 shipped, and, you know, as I said,
- in the process of developing the product, we finally
- 16 | ultimately came to the decision not to publish these
- 17 extensions.
- 18 | Q. Actually, it was ten months before Windows 95 shipped;
- 19 | isn't that correct, sir?
- 20 A. That would be -- that would be roughly correct, yes.
- 21 | Q. And, in fact, the ship date for Chicago during this
- 22 | period of time, the planned ship date was much earlier,
- 23 | correct?
- 24 | A. In general, Chicago shipped out, so I'm sure that's
- 25 true.

- 1 Q. So, in fact, Mr. Gates' decision, according to the
- 2 | planned ship time, was within a matter of months of the
- 3 | planned shipment date for Chicago. Isn't that correct,
- 4 sir?
- 5 A. I believe so, yes.
- 6 Q. Now, I'm sure that you've read this email in detail.
- 7 Mr. Gates states in this email there was nothing wrong with
- 8 | the extensions and that they were a fine piece of work.
- 9 Correct, sir?
- 10 A. That's what his words say, yes. I would obviously
- 11 disagree with that, but that's what Bill said.
- 12 | Q. Well, the fact of the matter is, sir, you would agree
- 13 that, at the time of Mr. Gates' decision, the NameSpace
- 14 extension API's were functioning fine. Isn't that a fact,
- 15 | sir?
- 16 A. No. It's not a fact. At this time, they were still in
- 17 process. They still had major robustness issues, and I
- 18 | thought they would have been a disaster to ship, and I was
- 19 arguing vociferously to make sure they weren't shipped
- 20 | because I was worried about robustness on Windows NT.
- 21 Q. Let's turn to your deposition, page 220, lines 1
- through 7.
- 23 Could you bring that up, Mr. Goldberg.
- So, Mr. Muglia, we're here discussing in your
- 25 deposition -- I wasn't there, actually. Somebody else was

asking the questions -- but discussing Mr. Gates' email in 1 which he made the decision to de-document the NameSpace 2. extensions. And the question is asked: 3 4 "You don't see Mr. Gates in this email discussing 5 any such problems, do you? Answer: I don't see him discussing that here. 6 And, in fact, to your knowledge, those IShell 7 browsers were functioning fine. Isn't that right. 8 9 I believe they were, yes." Answer: Mr. Muglia, did you give those answers to those 10 11 questions at your deposition in 2009? Yes, I did. And, as I said -- as I testified earlier 12 Α. 13 today, my -- my recollection of the specific details of when 14 something happened was not clear to me when I was deposed in 15 2009 because the focus wasn't as much on these browser extensions. And what I was confused about during my 16 17 deposition was at what point these interfaces were changed so 18 that they ran out of process; in other words, that they --19 the robustness was improved. You know, I now understand the 20 sequence of timing to be such that those changes were not 21 made until -- made until after this time. 22 So, as I've learned more and recalled on the specifics of timing -- you know, remember, I was deposed in 23 24 2009, and we were talking about 1994, so roughly 15 years 25 earlier. Okay? And the first time I had really been talking

- 1 about these browser extensions in many, many years was in
- 2 | this deposition, so I was not as clear on the sequence of
- 3 details as I am right now.
- 4 | Q. Mr. Muglia, you understand that when you take a
- 5 deposition -- and you have taken many, have you not, sir?
- 6 A. Yes, I have.
- 7 | Q. -- that you are sworn to tell the truth, the whole
- 8 | truth and nothing but the truth. Correct, sir?
- 9 A. To the best of my knowledge, yes.
- 10 | Q. And, in fact, sir, that's what you did here, correct
- 11 sir?
- 12 A. Yes, I did. Yes, I did. And, as I said, it was 15 --
- 13 | you know, we're talking about a relatively obscure -- no --
- 14 | extremely obscure set of interfaces that, honestly, I hadn't
- 15 | paid any attention to in, you know, almost 15 years, and so,
- 16 | yes, I did not remember all of the details of timing. In
- 17 preparation for this testimony, I now have a better
- 18 understanding of what happened when, and I am testifying to
- 19 | the best of my knowledge right now.
- 20 | O. Well, Mr. Muglia, do you recall being asked about
- 21 Mr. Gates' email in your deposition taken in the class action
- 22 case against Microsoft in California in 2001?
- 23 A. As I sit here now, no. I mean, I certainly may have,
- 24 | but as I sit here now, I don't recall something ten years
- 25 ago.

- 1 Q. Do you recall, sir, that you testified in that case
- 2 | that almost immediately after Mr. Gates sent his email
- 3 | deciding that these extensions should not be published, that
- 4 | they were in fact published?
- 5 A. If I did testify to that, I was incorrect. And that
- 6 | would be consistent with my testimony in 2009, but, as we
- 7 know from what we have seen in this trial, that they were not
- 8 published for a number of months, and I don't believe they
- 9 | were published until 19 -- until 1996, if I understand
- 10 correctly, in the Windows Systems Journal magazine.
- 11 Q. Let's turn to that 2001 deposition.
- 12 THE COURT: Turn to it if it's different. Don't
- 13 turn to it if it's the same as his testimony here. If it's
- 14 inconsistent, turn to it. If it's not inconsistent, don't
- 15 turn to it.
- 16 MR. JOHNSON: I understand.
- 17 | O. BY MR. JOHNSON: Mr. Muglia, a couple preliminary
- 18 | questions. You were represented by Microsoft's counsel in
- 19 the 2001 deposition that is in front of you now, right?
- 20 A. Yes, I was.
- 21 Q. And you took time to prepare for that deposition as
- 22 | well, didn't you, sir?
- 23 A. Yes, I did.
- 24 | Q. And, once again, you understood that you were sworn to
- 25 | tell the truth in that deposition as well?

- 1 A. Yes, I did.
- 2 Q. Now, you testified in 2001 -- and this would have been
- 3 | nine years closer to the events in question, right?
- 4 A. Seven years after they happened, but yes.
- 5 Q. You testified that Mr. Gates made his decision based on
- 6 conversations that you had had with others regarding the
- 7 | difficulty of transitioning into the more sophisticated Cairo
- 8 | shell if the NameSpace extension API's were published,
- 9 correct?
- 10 A. I have no idea because I don't know what you're
- 11 referring to in the deposition. I haven't seen this document
- 12 | since -- in over ten years, and I did not review it in
- 13 | preparation for today's testimony. So, if you want to refer
- 14 to my deposition specifically, I'm glad to look at that.
- 15 | Q. Sure.
- 16 Let's bring up page 165. And first let's go to
- 17 lines 2 through 9.
- 18 And, again, in this portion of the deposition,
- 19 Mr. Muglia, you were discussing Mr. Gates' decision in the
- 20 | email that we've all been talking about, just to put this in
- 21 | context. And you see here, on the screen in front of you,
- 22 | that you stated that very shortly after Bill sent the mail
- 23 | saying they shouldn't be published, they were in fact
- 24 published almost immediately.
- 25 THE COURT: And that's just what he said before.

It's absolutely consistent. 1 2 MR. JOHNSON: Yes. And I'm going to bring it back. THE COURT: Keep going. 3 4 MR. JOHNSON: Yes. 5 THE WITNESS: Yeah. I mean, I will point out that if you go earlier in this deposition, it was actually 6 referring to a different email and then there was an oblique 7 reference to it, so it was not -- it was not -- it was an 8 9 email that had something to do with Tom Evslin, and so I don't know -- I have to go back and look at all the things 10 11 that I said leading up to that paragraph, but I do -- you 12 know, obviously that is consistent with the testimony that I 13 gave in 2009. Well, actually, Mr. Muglia, the Evslin email was a 14 15 response to Mr. Gates' email de-documenting the NameSpace 16 extensions. Do you recall that, sir? 17 No, I don't. I don't have that document in front of Α. 18 It could be. I just don't know. And the same email included Mr. Gates' email. Do you 19 Ο. 20 recall that, sir? 21 No, but I'll take your word for it. Α. 22 Thank you. Now, the question I posed, which you said you had difficulty answering without seeing, if we could 23 24 turn down to page 165, lines 12, to 166, lines 24. And 25 you'll see that this is right after the little bit of

- 1 testimony we just looked at. And the plaintiff's lawyer,
 2 Mr. Bishop, asked you:
 3 "I'm wondering why they would go against Bill
 4 Gates's instructions?"
- If you would just read that paragraph and the next paragraph to yourself, I think you will be in a position to answer the question I pose.

And you go on, "It wouldn't be the first time."

9 A. Okay.

5

- Q. So, my question was -- and I attempted to summarize

 your longer answer -- that you testified that Mr. Gates made

 his decision based on conversations that he had had with you

 and others regarding the difficulty of transitioning the more

 sophisticated Cairo shell if the NameSpace extension API's

 were published, right?
- 16 A. Yes. That's right. That's what this says.
- Q. You went on to testify, however, that two things
 happened in parallel with Mr. Gates' decision that made it
 clear that Microsoft had no reason not to publish the API's,
- 20 correct?
- 21 A. No, not in those two paragraphs that you asked me to 22 read.
- 23 Q. If you keep reading your answer in the next paragraph,
- 24 Mr. Muglia, I think it will clear it up for you.
- 25 A. I finished that second paragraph up to line 10, and I

- 1 don't see anything that would be -- that would be consistent
- 2 | with what you just said.
- 3 Q. Okay. Keep going down in your answer.
- 4 A. Okay.
- 5 Q. And move past line 24.
- 6 A. Okay. I'm going to have to go further. Okay. Great.
- 7 I'll keep reading. Yeah. I've now gone through line 24, and
- 8 | I still don't think I see anything that would be
- 9 inconsistent.
- 10 Q. I'm sorry, Mr. Muglia. Line 25 it starts, "In fact,
- 11 | shortly after this thread of mail we went through, basically
- 12 | two things happened in parallel."
- Do you see that paragraph, sir?
- 14 A. I do now.
- 15 Q. Okay. Just read that to yourself.
- 16 A. Okay. I've read it.
- 17 | O. All right. So, now that you have refreshed yourself
- 18 | with your testimony, you testified in that case that two
- 19 things happened in parallel with Mr. Gates' decision that
- 20 | made it clear that Microsoft had no reason not to publish
- 21 | these API's, correct?
- 22 A. That's what I said.
- 23 Q. First, you testified that the developer relations group
- 24 | was talking to ISV's, and it became clear that third parties
- 25 | wanted to take advantage of these sorts of capabilities.

1 Correct?

- 2 A. That's what I said.
- 3 | Q. In fact, you testified that ISV's started calling you,
- 4 | interfaces actually started getting used by third parties
- 5 | because people explained how to use it, and it got out, and
- 6 third parties started building applications that took
- 7 advantage of it, correct?
- 8 A. That's what I said in 1991 -- in 2001.
- 9 Q. And, in fact, the second thing that happened was that
- 10 the decision that was made not to move to the Cairo-based
- 11 | shell technology -- and that's what we just talked about,
- 12 right, Bill's decision to move the Chicago code base into
- 13 | Windows NT, correct?
- 14 A. Right. But we now know that my timing was confused
- 15 when I testified in 2001, that the decision to cancel Cairo
- 16 | happened before Bill sent the email, and -- and, in fact, the
- 17 | interfaces weren't published for a period of time, and
- 18 | they -- although I testified to the opposite in the previous
- 19 | paragraph -- and -- and -- and ultimately they were published
- 20 a year or so later in 1996.
- 21 So, look, I -- you know, when I did this deposition,
- 22 again, seven years after all of this happened, I had not
- 23 reviewed the specific details of what happened when in this
- 24 | highly obscure set of API's that ultimately was used by
- 25 almost nobody and has not amounted to anything significant

commercially in the industry. 1 Mr. Muglia, I don't think you got it wrong at all, sir. 2 Let's go up to the first paragraph. One of the things that 3 4 happened is, you testified that the developer relations group 5 was talking to ISV's. That was clearly happening, wasn't it, sir? 6 That was happening. 7 Α. That was happening in this time frame, in 19 -- late 8 1993, well into 1994, right? The DRG was out there 9 evangelizing these extensions, correct? 10 11 Α. No, that's not -- you have to be careful here. The developer relations group was talking to ISV's. 12 13 That's correct. When the decision was made to not publish those extensions, in whatever it was, October of 1994, when 14 15 the Bill G decision -- the Bill Gates' decision got made and he sent his email, the developer relations group would have 16 17 stopped evangelizing. However we had still published the darn things previously. The header files still existed in 18 19 previous versions and, you know, perhaps other ISV's were --20 were calling it, but they were not documented at that time. 21 In fact, it became clear that third parties wanted to take advantage of these sorts of capabilities like you saw 22 with WordPerfect, who was very happy about Microsoft's 23 24 decision to document the shell extensions, correct, sir? 25 THE COURT: Do you want to establish a time frame

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1
     for that? I think that was 1993.
              MR. JOHNSON: It was, sir.
 2
              THE COURT: And this is 1994?
 3
 4
              MR. JOHNSON: Correct, sir.
 5
              THE COURT: Okay. Clarify your question.
 6
              MR. JOHNSON:
                            Yes.
 7
           BY MR. JOHNSON: Mr. Muglia, do you recall seeing the
    Ο.
    email in November of 1993, Microsoft came to WordPerfect, and
 8
    WordPerfect was very happy about them deciding to document
 9
    the shell extensions?
10
11
    Α.
           All of the shell extensions, yes.
          And, in fact, in June of 1994, the shell extensions
12
    0.
13
    were, in fact, partially documented, right?
           I think they were -- in June of 1994, I think they were
14
15
    fully documented.
16
           Well, I won't argue with you about that, but I think
    Ο.
17
    you're wrong, Mr. Muglia --
18
           I don't -- Again --
19
    Ο.
          -- but let's move on.
20
           -- the specific dates get confusing, but my
    understanding was in M6 we fully documented all the shell
21
22
    extensions, and then in the latter part of that year, in
    October, November, we dedocumented the NameSpace extensions.
23
24
    That's my understanding.
25
         And after documenting -- and let's leave aside the
    Ο.
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question of whether it was a partial documentation or full 1 2 documentation. There has been a lot of testimony on that. 3 Α. Okay. After the documentation in June of 1994, it became 4 5 clear that third parties wanted to take advantage of these 6 sorts of capabilities, correct? THE COURT: Now wait a second. But I thought the 7 context of this question was October of '94. Maybe I'm 8 wrong. I thought this was parallel with Bill Gates' 9 decision. Maybe I -- maybe I misread your question. But 10 11 I -- you're now -- you're saying that in June -- okay, well, 12 go ahead. But that's not this question, I don't think, but 13 I could -- maybe I -go ahead. BY MR. JOHNSON: All I'm asking, Mr. Muglia, is, isn't 14 15 it a fact that, during this late 1994 period, up through the point of Mr. Gates' decision, that ISV's wanted to take 16 17 advantage of these sorts of capabilities? Correct, sir? 18 There were a lot of capabilities in the Chicago 19 product. ISV's were just trying to decide -- remember, this was all ten months or so before Chicago shipped. ISV's were 20 21 trying to decide what would be important. We were trying to decide what would be important, and these interfaces were, as 22 I pointed out all morning, highly contentious. We published 23 these interfaces with a broad set of shell extensions in June 24 25 of 1994. In October, November, we de-published them.

then a number of months, I believe in '96, they were 1 2 republished. That's what happened, to my knowledge. And ISV's were calling thousands and thousands of 3 4 Chicago API's, building products that mattered in the 5 marketplace, and nobody -- and the simple fact of the matter is, nobody has -- has ever -- no product has been successful 6 or not successful in the history of time because of these 7 silly NameSpace interfaces. 8 Mr. Muglia, the second thing that happened -- and 9 actually this happened prior to Mr. Gates' decision. Prior 10 to Mr. Gates' decision on the IShellBrowser, Mr. Gates had 11 12 already decided that the Cairo-based shell technology would 13 no longer be used and that the Chicago shell code base 14 would be moved to Windows NT, right? 15 Α. That's consistent with the sequence of emails that I just reviewed. It looked like Jim's email to the Windows NT 16 17 team was several days prior to -- that was dated September 18 27, where the Bill Gates' email was Monday, October 3. So, 19 that's correct, actually, although it's different than what I 20 said in this testimony in 2001, but that is what appears to 21 have happened based on the sequence of emails. And you stated that, under the circumstances as you 22 described them in your sworn testimony in 2001, the idea of 23 24 not publishing these interfaces made no sense, correct, sir? 25 In 2001, I did not recall the specific sequence of Α.

It had not gone through the minute details of what 1 2 happened day-per-day seven years earlier, and I was confused in 2001, just like I was confused in 2009. I thought the 3 4 interfaces had been published the entire time. In fact, I was wrong. I didn't understand that simple detail. 5 And, remember, there were hundreds of thousands of 6 Windows interfaces, tens of thousands of people at Microsoft 7 8 writing code. The specific details of what happened seven years earlier, I didn't remember everything. 9 10 MR. JOHNSON: A moment's indulgence, Your Honor. 11 THE COURT: Sure. Mr. Muglia, you would agree with me that, once the 12 Ο. 13 Cairo shell was canceled in September of 1994, there was no 14 remaining concern over the compatibility of the NameSpace 15 extensions with Windows NT? There was no remaining concern about compatibility. 16 Α. 17 There remained active concerns about the robustness, which 18 was a problem. 19 Thank you, sir. In fact, the Chicago team had always Ο. 20 kept Windows NT in mind when designing the Chicago shell, 21 which is why the Chicago shell ported so easily to Windows 22 NT; isn't that correct, sir? Absolutely, not. Satoshi didn't give it a thought from 23 Α. 24 what I can tell. Had he actually taken into account Windows 25 NT, he would never have built the interfaces the way he did,

in processes that were so fundamentally unrobust. 1 Let me show you what has been marked PX-324. 2. Well, take that down. 3 I'm sorry. I apologize, Your Honor. 4 5 THE COURT: No problem. I don't know how you all 6 handle the documents as well as you do. 7 Thank you, Your Honor. Believe me, MR. JOHNSON: without people like Ms. Burns here, I would be totally 8 9 lost. 10 BY MR. JOHNSON: Turning your attention to 324, 11 Plaintiff's Exhibit 324, this is an August 11, 1995 email 12 from Brad Silverberg to Brad Struss and Paul Maritz, Cameron 13 Myhrvold and Doug Henrich. Subject. Shell Extensibility and ISV's. Now, have you seen -- did you review this email in 14 15 preparation for your testimony? 16 No. I don't believe that I was ever copied on this Α. 17 email, it doesn't appear, and I don't remember reviewing it 18 at all. I certainly didn't review it over the last couple of 19 days. Okay. Drawing your attention to the third paragraph of 20 Ο. Mr. Silverberg's email there, he states. 21 22 "The Win 95 team did make darn sure NT is kept in mind from the beginning of the shell, which is why it ported 23 24 so easily. We have the X platform responsibility, and we 25 deliver on it. We have one shell team, the PSD shell team,

- 1 | which dropped off the code to BSD to do the NT adaptation.
- 2 | They are not to be enhancing it, just a straight adaptation.
- 3 Unicode tweaks supportability, etc. Their changes will be
- 4 | merged back into the code base."
- I have a couple questions about what Mr. Silverberg
- 6 said here, just so we can get some technical points straight.
- 7 | The shell team, the PSD, that would have been the Chicago
- 8 | shell team, right?
- 9 A. That's correct.
- 10 Q. Personal Systems Division?
- 11 A. Yep.
- 12 Q. And the BSD would be the Business Systems Division, and
- 13 | that's what you were in, right?
- 14 A. That's correct. That was windows NT.
- 15 | Q. And what Mr. Silverberg is saying here is that, when
- 16 | you -- when the decision was made to port the Chicago shell
- 17 code base into Windows NT, it ported quite easily. Isn't
- 18 | that correct, sir?
- 19 A. That's what Brad said, but, boy, with all due respect
- 20 | to Brad, I very strongly disagree with what this sentence
- 21 | says. Of course, I have never seen this email before just
- 22 | this moment, but I would not agree with what Brad said
- 23 here.
- 24 | Q. Mr. Muglia, you're not a coder, are you?
- 25 A. I do write code, although I was not employed writing

- 1 | code at that time, and I am not now. Okay?
- 2 | Q. So you weren't involved, actually physically involved
- 3 | in the people that were doing the porting, right?
- 4 | A. No, but there's -- no. And there -- I did not do the
- 5 porting myself, but that's very different, also, than saying
- 6 NT was kept in mind. As I said, the design of the Chicago
- 7 | shell explicitly, certainly from my perspective, did not keep
- 8 NT in mind. It violated the basic principles of NT,
- 9 particularly the robustness principle.
- 10 Q. Yes. You've brought up robustness a number of times.
- 11 Now, Mr. Gates did not cite any robustness concerns in his
- 12 October 3, 1994 email as a reason for his decision not to
- 13 | publish the NameSpace extension API's, correct?
- 14 A. He did not, but I did in my response to that.
- 15 Q. In fact, when Mr. Gates was here, he agreed with me
- 16 | that, nowhere in his October 3, 1994 email, are robustness
- 17 concerns mentioned. You have no reason to disagree with that
- 18 testimony of Mr. Gates, do you, sir?
- 19 A. I don't know what Bill did or didn't say, as I didn't
- 20 review his testimony in preparation for mine.
- 21 Q. Well, in fact, you do know that what Mr. Gates actually
- 22 said was that there was not anything wrong with the
- 23 extensions; on the contrary, they are a very nice piece of
- 24 | work. Correct?
- 25 | A. What I -- again, I don't know what Bill said during his

testimony, but I will tell you that the teams were fighting. 1 2 Bill was basically telling the Chicago team that they were not going to move forward with these extensions, which they 3 4 wanted to do, and he was letting them down gracefully. That 5 was the way I interpreted it at the time. I very 6 specifically did talk about robustness as a problem in my 7 response that I sent subsequent to Bill's mail back in 1994. 8 Mr. Muglia, I actually had shifted, and I'm sorry if 9 you didn't understand that. I wasn't talking now about what 10 11 Mr. Gates testified to in this case, I was talking about what 12 he actually said in October of 1994 in his email. So we will 13 put that back up there for you, so you can see what Mr. Gates actually said. 14 15 "This is not to say that there was anything wrong with the extensions. On the contrary, they are a very nice 16 17 piece of work." 18 So, you wouldn't have any reason to disagree with 19 Mr. Gates with respect to the quality of these extensions, correct, sir? 20 Oh, yes, I would, and I did -- and I was very clear 21 22 that these things were problematic in a lot of ways. And Bill said that -- I think he was being nice to the Chicago 23 24 team in trying to let them down gracefully, but I would not 25 agree with the words that Bill wrote back in 1994, that there

- 1 was nothing wrong with it, that this is not to say there is
- 2 anything wrong with these extensions. I thought there was
- 3 | plenty wrong.
- 4 Q. And Mr. Gates also noted in the October, 1994 email
- 5 | that the shell group did a good job of defining extensibility
- 6 interfaces, correct, sir?
- 7 A. I don't know what you're referring to explicitly. I'd
- 8 have to go back and look at the email. Where does it say
- 9 that?
- 10 Q. There we go. First paragraph.
- 11 A. Yep. I see what he wrote.
- 12 | Q. And you wouldn't have any reason to disagree with
- 13 Mr. Gates with respect to that, would you, sir?
- 14 A. Yes, I would. I argued, you know, vociferously for
- 15 months, as I've testified all morning, that I did not think
- 16 | that they were building the right extensibility interfaces.
- 17 | Q. Well then, you would have to agree with me that
- 18 | Mr. Gates didn't buy your argument. Correct, sir?
- 19 A. Not necessarily. Bill made the decision that I wanted
- 20 | him to make, which was to not publish the interfaces. Like I
- 21 | said, what you've got, what you've talked about all morning,
- 22 is you've got two teams that were warring for a long time,
- 23 many months, over a year.
- Bill made a decision. He made one decision that
- 25 | ultimately caused the Cairo shell to -- to cancel the Cairo

- 1 shell. He subsequently made another decision, four or five
- 2 days later, to not publish the set of interfaces that the
- 3 Chicago team wanted to publish. So he was simply letting the
- 4 | Chicago team -- it appears to me, my understanding of the
- 5 | email when I received it is that he was letting the Chicago
- 6 | team down gracefully when he sent this email.
- 7 | Q. Well, let's turn to your email that I think you were
- 8 just talking about, this -- before we get to that. I think
- 9 | you testified that Mr. Gates really liked the explorer and
- 10 the heirarchy, right?
- 11 A. He loved hierarchy.
- 12 Q. In fact, that was a big thing with him, right?
- 13 A. Yes, it was.
- 14 Q. And so he was really enamored with the Windows Explorer
- 15 and its ability to browse information from any source, no
- 16 | matter where it was, correct?
- 17 A. Yes.
- 18 Q. And that was something he had been pushing for a long
- 19 time. That goes back to Information At Your Fingertips from
- 20 his 1990 speech, correct?
- 21 A. Absolutely.
- 22 | Q. I show you now Defendant's Exhibit 21, which you were
- 23 | shown on direct.
- 24 If we could bring up that first paragraph.
- 25 We already looked at it this morning, but just to

- remind everybody of where we are. 1 2 Bring up the next paragraph down, too, as well, 3 please. 4 And so this was -- this was good news for BSD, right? 5 6 Α. Yep. 7 Mr. Gates' decision. And you didn't have to spend any Ο. time dealing with them, right? 8 That's right. 9 Α. But, in fact, sir, isn't it true that the only change 10 11 that was made for Windows NT was to have the NameSpace extensions run in a separate window, correct? 12 13 I mean -- No. What -- at the time, the decision Α. No. was made -- this is -- again, this is October 4, 1994. At 14 15 the time Bill decided to not publish the interfaces, he -the interfaces, to the best of my knowledge, were moved from 16 17 the header file and made internal, so they were not documented. Satoshi, at some point, made a change, and I 18 19 don't know when, to change the implementation of these to 20 something that was more robust. I don't recall the specifics of when that change was made. But the decision, and as I 21 22 understood it when I wrote this email, was that they would be undocumented, and we would not need to support them. 23 24 Do you know who Mr. Belfiore is? Ο. 25 Oh, yes. Α.
 - 3520

- 1 Q. Who is he?
- 2 A. Joe Belfiore is -- he is currently the vice-president
- 3 | that works on Windows Phone. I actually hired Joe many years
- 4 ago to the company, into the Windows NT and Cairo group, and
- 5 then he ultimately became the person who designed the Windows
- 6 | 95 shell. Joe has actually done tremendous UI work for
- 7 | Microsoft over the years. He did the Windows 95 shell. He
- 8 | did XP. He did work on -- on Zoom and some other products,
- 9 and he's now working with the Windows Phone.
- 10 | Q. So, as the designer of the Windows 95 shell, he would
- 11 certainly be in a position to know whether the shell
- 12 extensions would run just fine on Windows NT, right?
- 13 A. No, not necessarily. Joe was a UI guy, and he -- and
- 14 | his focus was on the user experience, not on the internal
- 15 | technical implementation details
- 16 | Q. I'm handing you now what has been parked as Plaintiff's
- 17 Exhibit 279. So, at this time period, Mr. Belfiore would
- 18 | have been the program manager for the Chicago shell, right?
- 19 A. For the user interface design of the Chicago shell,
- 20 yes. Not the interfaces. I'll point out, not the
- 21 interfaces. He was really focused much more on the UI. He
- 22 may have been involved with the interfaces, but, again, Joe
- 23 is the guy that understands how users think and lays things
- 24 | out, and he does graphical design, and he is much more of a
- 25 user interfaces person.

- 1 Q. And this email which is -- the one on the bottom there,
- 2 | which is to Mr. Maritz, who, again, as we stated earlier,
- 3 | would have been your boss' boss, right?
- 4 A. That's right.
- 5 Q. He reflects on the notes from the meeting today. And
- 6 | you see the first full paragraph there?
- 7 A. Right. I see it. I'll also just point out, this is an
- 8 | email I don't believe I ever received and I didn't review in
- 9 preparation for today. So I think this is the first time I
- 10 have seen it.
- 11 | Q. Okay. Well, you see where Mr. Belfiore writes:
- 12 There shouldn't be any issues with shell extensions
- 13 being run robustly on NT. The big ones, the NameSpace
- 14 | extensions, end up in a separate process, and the little
- 15 ones, icon handler, prop sheet handler, etc., are okay in the
- 16 | shell's process."
- 17 So we can agree that, at least some time prior to
- 18 | March 6, 1995, the NameSpace extensions were running robustly
- 19 on NT. Isn't that a fact, sir?
- 20 A. No. I mean, Joe said he felt these were okay. I still
- 21 think they are not okay. I mean, after all these years,
- 22 | these interfaces are problematic. They cause failures on
- 23 | Windows -- on Windows 7 today. They are not -- they were not
- 24 designed originally with the robustness ideas in mind. The
- 25 | implementation was a design which did not result in the

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robustness characteristics that users want in systems. So, Joe, who loves his work and the Chicago team -- that was his baby -- was saying, Hey, everything is fine here." I don't agree with Joe. I don't agree with him in '95, and I don't agree with him in -- sitting here in 2011. It's not with this line, the little ones are okay in the shell's process. It's just wrong. That is the wrong design way, the wrong design way to do things. Unfortunately it is the way it works because we had to be compatible with that work Satoshi did way back when in 1993. Ο. I'm sorry, Mr. Muglia, I thought you just told the jury that the way you solved the robustness problem was to put it in a separate process, just like Mr. Belfiore is saying, right? Α. The putting it in a separate process helps robustness significantly, but you still wind up with writing code, small amounts of code in the shells process, and you can't solve that. You can mitigate it. You can make it less likely to be a problem, which we did all sorts of things in Windows NT to try and make it better, but I don't believe that it's -- I don't agree that it is robust. It is not a robust design. Well, it certainly was sufficient enough for Microsoft to leave the NameSpace extension API's in every version of Windows from then until today, correct, sir? That's right, because they were mitigated to the point, Α.

after that change was made, of running in a separate process, 1 as it says in this email. They were no worse than anything 2 else. Before that change was made, they were significantly 3 4 worse, but, at this point, they were, like the rest of them, 5 not great, but, you know, okay. All right. But then we can agree that, at some time 6 prior to March 6, 1995, the change had been made which, to 7 this day, is the change which solved whatever robustness 8 issues the people at Microsoft thought there were, correct? 9 No. No. What I -- to be clear, sometime between 10 October of '94 and March of '96, the design of the NameSpace 11 12 extension API's were changed to put it in a separate process. 13 That mitigated the robustness issues. It did not solve them. It made them much less problematic, and we decided in the --14 15 you know, in the goodness of trying to be consistent, to live 16 with it. 17 Isn't it a fact, sir, that this fix of running in a 18 separate process in fact occurred much earlier? I don't know. I really don't know when it happened. 19 Α. Indeed, sir, wasn't it within a month of Mr. Gates' 20 21 decision to de-document the NameSpace extensions that this 22 fix was put in place? 23 THE COURT: You're too good a lawyer not to listen to the answer. He said he didn't know. 24

BY MR. JOHNSON: Let's take a look at Defendant's

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Ο.

- 1 Exhibit 84. Mr. Muglia, this is an email from Mr. Struss to
- 2 | Bill Gates dated Saturday, November 12, 1994, and concerns a
- 3 | certain CEO dinner talking points. Do you see that sir?
- 4 A. I do. This is an email I don't believe I ever received
- 5 and I certainly did not review in preparation for this
- 6 case.
- 7 | Q. And if you'll turn to the second page, Mr. Struss
- 8 provides a section of question and answers that Mr. Gates
- 9 | needs to be prepared to address at this dinner that he's
- 10 apparently going to. Do you see that, sir?
- 11 A. Yes, I do.
- 12 | Q. And with respect to the issues to be prepared to
- address, one of those is the NameSpace extensions, right?
- 14 A. Yes. I see that.
- 15 | Q. And if you look down in the bottom portion of that
- 16 paragraph, Mr. Struss states:
- 17 "The semantics of these API's has also changed
- 18 | slightly. Apps that use these will come up in a new explorer
- 19 | window, and the left-hand pane will only represent the
- 20 heirarchy that the applications presents. Previous semantics
- 21 | allowed apps to show their heirarchy along with the file
- 22 | system and run in the same window."
- Do you see that, sir?
- 24 A. I do.
- 25 Q. So, you will agree with me that the change to run in a

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separate window was, in fact, accomplished within about a month of Mr. Gates' decision to de-document the NameSpace extensions, correct, sir? Α. Yeah. It appears that it happened between October -the beginning of October and November 12. I mean, it's a fascinating -- again, I never saw this, and to me it's just facinating sitting her looking at it after all of this. First of all, it says -- I'll note in that same paragraph it says, you know, the NameSpace extensions were initially pulled from Windows 95, and ISV's were informed of this change. In general, they have been okay with this. Because of this one internal app, Marvel, which was MSN, couldn't stop using them or chose not to stop using them for whatever reason, they have been made into some bizarre semi-zombie state where we are going to document them but tell people that it's going to change in the future. It's just an odd -- very odd answer to the question. shows that, even after we decided to de-document it, there was still discussion internally about whether to document them or not. It was an ongoing debate, having to do with more -having to do with whether or not, you know, other Microsoft products, particularly a -- a -- an online service called Marvel, or actually MSN, were going to use it. Mr. Muglia, my question was a more limited point. Ο. Ι

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just want to make sure that we're on the same page. And that is, within a month, a couple days of Mr. Gates' decision, he had already figured out the fix that would make this robust enough to use the NameSpace extension API's on this version of Windows and every version subsequent thereto. Correct, sir? I will point out that the semantics are Α. different. It's very important to note that it also says clearly that, by doing this fix, the API's didn't do what they were previously going to do. I mean, in fact, this idea that you could be browsing in the explorer and using it as your way of opening emails and having them open in the pane of the explorer, that was no longer functional given this change. So, that whole thing Bill Gates was in love with, since -- since the COMDEX speech in 1990, this change that was made changed the semantics, which really made it no longer really usable the way Bill had envisioned it. Well, Mr. Muglia, you would have to agree with me that the NameSpace extension API's did not change between 1994 and 1996, when they were republished, correct, sir? I would not agree. An API has to be -- there's No. two things about an API. There is the syntax in the definition of the API, and there is the semantics of what they do. The API syntax stayed the same when Satoshi made this change, but the semantics were changed considerably. In

- 1 | fact, the functionality of the API was changed so
- 2 | significantly that -- that most of its intended purpose that
- 3 | was debated and hotly -- hotly argued about for months and
- 4 | months just went away when Satoshi made this semantic change.
- 5 So the API's -- the syntax may have been the same,
- 6 | but the API's were very, very different in terms of the
- 7 behavior of what they did.
- 8 Q. Mr. Muglia, you certainly wouldn't be in a position to
- 9 disagree with Mr. Nakajima if he said there had been no
- 10 change to the API's between 1994 and 1998?
- 11 A. Well, I don't know what you're referring to. Satoshi
- 12 may have answered the question precisely. The syntax did not
- 13 change. The semantics changed significantly.
- 14 Q. Let me show you what Mr. Nakajima said.
- Can we turn to page 92 of Mr. Nakajima's testimony.
- 16 | Page 92, lines 21, through 93, line 10.
- 17 A. Can I see a hard copy of this, since I've obviously
- 18 | never seen it?
- 19 Q. We'll bring it up for you so you can see it.
- 20 A. I don't know the context.
- 21 Q. Okay. I'll get you that, if you'd like. Here's the
- 22 | full transcript of Mr. Nakajima's deposition, taken on
- 23 February 24, 2009.
- 24 A. And what page is this on, please?
- 25 Q. Just a moment and I'll get it for you. Page 92, line

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21, to 93, line 10. And you'll see that what Mr. Nakajima
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 2
    was talking about, he was actually talking about using the
    NameSpace extensions to integrate Internet Explorer into
 3
 4
    Windows 98. So the question was asked:
              "Question: And this was for Internet Explorer 3.0?
 5
                            The 3.0 was simply using the dock
 6
              Answer: No.
     objects. The NameSpace extension integration came in
 7
     Internet Explorer 4 and Windows 98."
 8
              And you would agree with that, wouldn't you, sir,
 9
     that the explorer used the NameSpace extensions to integrate
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11
     into Windows 98. Correct, sir?
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          It would appear so. It's a very obscure use of it,
    Α.
13
    but, yes, I believe that's correct. I don't know
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    specifically.
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    O.
          Okay. And then the following question occurred:
              "Now, the NameSpace extensions that you used, are
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     those the same extensions that we have been talking about --
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              Answer: Yes.
19
              Question: -- here?
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              Answer: Yes.
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              Question: Were those changed in any significant way
    between what they were in, say, June of 1994, and when you
22
23
    were using them?
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                      No. No change."
              Answer:
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              Now, Mr. Muglia, you certainly don't have any basis
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to disagree with the inventor of the NameSpace extension
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    API's, that there was no change in those API's between 1994
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    and 1998?
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           I absolutely do have reason to disagree, and we have
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    gone through this. The API's are the same.
                                                  The semantics
 6
    are different. It's very clear, and we all agree the
     semantics have changed after Bill wrote his mail in October,
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 8
     and it was emphasized specifically in the Brad Struss mail,
     that email that he sent that you put in front of me ten
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    minutes ago, where he very clearly says, in reference to the
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11
    NameSpace extensions, the semantics of these API's has also
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     changed slightly. So Brad is referring to this change. They
13
    changed.
              How -- what Satoshi was answering specifically, I
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15
     can't speak to. You'd have to ask him. But clearly they did
     change, not in the API, but in the semantics.
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17
              MR. JOHNSON: A moment's indulgence.
18
              THE COURT: Sure.
19
              MR. JOHNSON: Pass the witness, Your Honor.
20
              THE COURT: Thank you very much, Mr. Johnson.
21
              Mr. Holley.
                         REDIRECT EXAMINATION
22
     BY MR. HOLLEY:
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24
           Mr. Muglia, do you still have Plaintiff's Exhibit 61 up
25
     there that Mr. Johnson asked you about on cross examination?
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- 1 It's entitled Office Shell Ideas and Issues.
- 2 A. This is the one that was sent -- Chris Graham -- that
- 3 | Chris Graham sent?
- 4 Q. Yes.
- 5 A. I'm sure I have it. I'm sure I could get to it
- 6 eventually.
- 7 | Q. If I had another one handy, I'd bring it to you.
- 8 THE COURT: You can turn around and look at it on
- 9 the board.
- 10 THE WITNESS: I can see it up here. If you want to
- 11 show me something, I can look at it on the screen.
- 12 | Q. BY MR. HOLLEY: Sure. I'm interested in looking under
- 13 | the section of the document --
- 14 THE COURT: Actually, Mr. Holley, you have one.
- MR. HOLLEY: Thank you.
- 16 Q. BY MR. HOLLEY: Here you go.
- 17 A. Thanks.
- 18 | Q. Okay. Now, looking down under the heading Schedule, it
- 19 says Q-294. Chicago ships. Shell has limited extensibility.
- 20 Is that an accurate statement of what happened?
- 21 A. No, not in any way. First of all, Chicago didn't ship
- 22 until the summer of '95. And, as we've discussed, it had
- 23 | boatloads of extensibility when it shipped.
- 24 Q. Now, you were asked a series of questions by
- 25 Mr. Johnson on cross examination about the shell

- 1 extensibility mechanisms in Windows 95 being OLE compatible.
- 2 | Did the fact that the Windows 95 shell extensibility
- 3 | Mechanisms became, at some point, OLE compatible mean that
- 4 | those interfaces were compatible with the shell extensibility
- 5 mechanisms in Cairo?
- 6 A. No. As I said, the fact that they used OLE, OLE was a
- 7 | mechanism, but the specific signatures of the API's, the
- 8 | specific API calling sequence that Chicago was using was
- 9 completely different from what we were building in Cairo --
- 10 in the Cairo shell.
- 11 | Q. And how, if at all, did that affect your attitude
- 12 toward the Chicago shell extensibility mechanisms?
- 13 A. I was still equally troubled by them. I did think that
- 14 | the work that Satoshi did to make the shell interfaces OLE
- 15 | compatible was a clever piece of work, and I liked that work,
- $16 \mid \text{but I } -- \text{ I } -- \text{ the fact that they were different than Cairo, I}$
- 17 | was still troubled by, and, of course, they were not robust
- 18 | in their implementation.
- 19 Q. Now, you were asked a question by Mr. Johnson on cross
- 20 examination about Mr. Gates' interest in the hierarchical
- 21 view presented by Windows Explorer. Is that the same thing
- 22 as saying that Mr. Gates thought that the NameSpace extension
- 23 API mechanism was important?
- 24 | A. He did think that having a mechanism that would do that
- 25 was important, yes, which was why -- one of reasons why this

was debated so endlessly. 1 And did it turn out to be, based on your experience 2 working with different versions of Windows, that the 3 hierarchical view provided by Windows Explorer was the 4 5 principal means that users use to find information and launch applications? 6 No. In general, people go to the start menu to launch 7 applications. You know, if you find that there is a document 8 in your documents folder, you might double click on that 9 10 document and then Word will come up, so people do use the 11 explorer to find documents, and they use it to open, but, you 12 know, again, these NameSpace extensions weren't designed for word processors or spreadsheets. They had nothing to do with 13 They had to do with programs that -- that -- which 14 15 didn't have files in the file system, like emails, email 16 packages. And, you know, nobody wants to go to the Windows 17 Explorer to look at their email, and nobody does. Mr. Muglia, I'd just like to pursue that -- that point 18 19 a little further. Wasn't it necessary for ISV's like Lotus 20 and WordPerfect to use the NameSpace extensions to add folders to the file system where they could store their 21 spreadsheets and word processing documents? 22 No. The NameSpace extensions aren't used for that 23 Α. 24 There are other API's that are used to create 25 folders and to create documents, and those were never in

- 1 | contention.
- 2 | Q. Now, I'd like you to take a look again, if you would,
- 3 | sir, at Defendant's Exhibit 21, which is your email of
- 4 | October 4, 1994. Do you have that with you there, sir?
- 5 A. I have it up on the screen, and I'm familiar with
- 6 that.
- 7 | Q. Now, when you wrote this email, the day after you got
- 8 Mr. Gates' email back in October of 1994, were you genuinely
- 9 concerned about robustness issues presented by the NameSpace
- 10 extension API's?
- 11 | A. Well, I was very concerned until Bill made the
- 12 decision. Once Bill made the decision that they wouldn't be
- 13 published, my concern, you know, lessened considerably.
- 14 | Q. Why was that?
- 15 A. Because if -- by not -- the concern was that ISV's
- 16 | would take advantage of this -- of these extensions and do
- 17 | things that, by definition, were not robust. Once we decided
- 18 | that we weren't publishing it, then ISV's weren't supposed to
- 19 | take advantage of it at that point.
- 20 I actually thought the API's -- when I wrote this
- 21 | email, I thought the API's would go away. They never
- 22 actually went away, in retrospect, but I thought they would
- 23 go away, that the whole problem would go away. Apparently
- 24 not.
- 25 | Q. Now, at the time that you wrote this email, did you

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believe that the fact that these interfaces were going away
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    would harm Novell WordPerfect or Lotus?
                I -- I would have had no reason to think that they
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    Α.
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    cared at all about it, and they certainly never said anything
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     to me when I met with them that they cared about it. And, as
     I said, all of the reasons why we were discussing whether
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     they should be there or not was all about -- the internal of
    whether it was Cairo or Chicago or robust or whatever, had
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 9
    nothing to do with harming any other company.
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              MR. HOLLEY: Your Honor, I have no further
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    questions.
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              MR. JOHNSON: Nothing Your Honor.
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              THE COURT: Thank you, Mr. Muglia.
14
              THE WITNESS:
                            Thank you, Your Honor.
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              THE COURT: Do we have time for another witness, to
    begin another witness? We have time. The question is -- we
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    have a half an hour.
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              MR. TULCHIN: Your Honor, we have some video
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    depositions.
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                          That's terrific.
              THE COURT:
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              MR. TULCHIN: We have one that takes 34 minutes.
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              THE COURT: Is that okay, everybody?
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              MR. TULCHIN: Which will take us to five after two.
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              THE COURT: Five after two.
25
              MR. TULCHIN: And this is the deposition of Cameron
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Myhrvold, taken on February 12, 2009. It runs 34 minutes and
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 2.
     17 seconds, or at least that's what I've been told.
              MR. HOLLEY: Your Honor, may I be excused for a
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 4
    moment?
 5
              THE COURT: Of course you may.
 6
              MR. HOLLEY: Thank you.
              THE COURT: My guess is it will be 2:07.
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 8
              MR. JOHNSON: And, Your Honor, may I excuse
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    Ms. Burns? She has some other things to do.
10
              THE COURT: Of course. Of course.
              MR. JOHNSON: Thank you very much.
11
12
              THE COURT: Anybody can be excused, except these 12.
13
              MR. TULCHIN: Shall we proceed, Your Honor?
14
              THE COURT: Of course.
15
             MR. TULCHIN: This is Cameron Myhrvold. Thank
16
    you.
17
      DESIGNATED PORTIONS OF THE DEPOSITION OF CAMERON MYHRVOLD
18
19
                          PLAYED AS FOLLOWS:
20
           Am I correct that in the spring of 1988, you joined
    Ο.
    what was called the developer relations group at Microsoft?
21
           The spring of '88. So, I joined Microsoft first in
22
23
     1986. Microsoft bought a startup company that my brother and
    I had started. Then I left Microsoft, went back to Cal and
24
25
     finished my degree and rejoined -- I would have rejoined in
```

- 1 | the fall of '87. In the spring of '88 took over the
- 2 developer relations group, yes. That's right.
- 3 Q. Okay. I may sometimes use DRG to refer to the
- 4 developer relations group today.
- 5 A. That's what I did, too, so that's fine.
- 6 Q. I understand you had two different affiliations over
- 7 | time with that group, and we'll talk about each.
- 8 A. Okay.
- 9 Q. Was -- at that time, was WordPerfect one of the top
- 10 | independent software vendors?
- 11 A. Yes. Absolutely.
- 12 Q. Were they one of the most important independent
- 13 | software vendors on Microsoft platforms.
- MS. WHEELER: In October of '88?
- 15 | Q. In spring of '88, when you took on responsibilities at
- 16 | the DRG?
- 17 A. They were a very important, you know, potential
- 18 customer for us, yes. They had, of course, the world's
- 19 | leading word processor on MS DOS. We didn't really -- you
- 20 know, that was not our responsibility, to go and help
- 21 | companies on MS DOS. It was to get them to try and write
- 22 | Windows. So, from a potential ISV perspective, absolutely,
- 23 they were one of the top ISV's we spent time with.
- 24 | Q. You referred to them as a potential customer. Why did
- 25 you refer to them that way?

```
Well, I would -- in my role in DRG, which was to go out
1
    Α.
 2
     and support third-party software vendors to help their
    efforts in writing products for Microsoft platforms,
 3
     specifically Windows and then later NT, and then later a few
 4
     other things -- I would think of them as my customers.
 5
    was no money that necessarily changed hands. I'm sure they
 6
    bought some development tools from Microsoft, but my -- my
 7
    role was not a sales role. It was a technical support role
 8
 9
    primarily.
10
           And it was part of Microsoft's normal business to
11
    provide that technical support?
12
           Yes, which you could do -- which you could purchase if
    Α.
13
    you were, you know, anybody, or on occasion was given away
     in -- in hopes of encouraging companies to -- to develop
14
15
    products on top of Microsoft platforms. WordPerfect
16
    certainly would have been the one that got -- would have been
17
    one that got access to free support from time to time.
18
     sure there's probably times when they paid for it as well and
19
    had access to the development team at Microsoft, which you
20
     can't do -- you can't purchase.
21
           Why were you encouraging WordPerfect to develop a
    product for the Windows platform?
22
23
    Α.
           Because that's the way you sell operating systems.
    you want a popular operating system, it is pretty much wholly
24
25
    dependent on what applications run for it and how compelling
```

- 1 those applications are.
- 2 | Q. Did you have personal interaction with WordPerfect
- 3 employees during this period?
- 4 A. Absolutely.
- 5 Q. Do you recall the names?
- 6 A. Well, see I would arrange meetings with their senior
- 7 | management, so Alan Ashton, Pete Peterson. On a day-to-day
- 8 basis, I would work with some of their development managers.
- 9 There's a couple guys in particular. I can only remember one
- 10 name, and that's Eric Meyers, but, yeah, I had a lot of
- 11 contact with -- with WordPerfect. I would visit them, you
- 12 know, probably two, three times a year. They would come out
- 13 to Redmond, you know. Alan would see Bill Gates probably
- 14 every 18 months or so, and -- and then their technical folk
- 15 were on site, you know, at least a half a dozen times a
- 16 year.
- 17 Q. And that was all part of the effort to encourage
- 18 | WordPerfect to write products for the Windows platform?
- 19 A. Correct. Well, you know, to be -- to be strictly
- 20 accurate, it was Windows, OS/2, and Windows NT.
- 21 | Q. You were encouraging them to write for all three
- 22 platforms?
- 23 A. It depends upon the period of time. In 1988, our real
- 24 | focus was OS/2. I know, you know, '89 and the early '90's,
- 25 | it was definitely on Windows. In the mid-'90's, it was more

- 1 Windows NT.
- 2 Q. Now, during the period when you were focused on OS/2,
- 3 | did you interact with WordPerfect in the way you just
- 4 described?
- 5 A. Yes. Absolutely.
- 6 Q. You were encouraging them to write product for the OS/2
- 7 | platform?
- 8 A. Along with IBM.
- 9 Q. IBM was also encouraging them to write for OS/2?
- 10 A. They had their only ISV group that called on -- called
- 11 on ISV's.
- 12 Q. Did your ISV group, your DRG group coordinate with
- 13 IBM's group?
- 14 A. Loosely, from time to time. We didn't go and call on
- 15 customers directly. Once a year we'd have joint meetings at
- 16 | COMDEX with major ISV's in conjunction with IBM.
- 17 | Q. Who, if anyone, for Microsoft was encouraging
- 18 | WordPerfect to develop programs for the Windows platform at
- 19 this time?
- 20 MS. WHEELER: At this time is when?
- 21 | Q. What he's defined as the period of time when
- 22 Mr. Myhrvold was -- was evangelizing OS/2, spring '80 through
- 23 | sometime in 1989.
- 24 A. Well, in '88 we would have been talking to them both
- 25 | for sure. So, in spring of 1988, I ran the -- sort of a

- 1 joint DRG group. In '89 I focused exclusively on OS/2, and
- 2 | there was another lady who focused on -- on Windows working
- 3 | directly out of the Windows group. In 1990, we merged them
- 4 both back together.
- 5 | Q. Do you recall there being a question of priority as
- 6 between the two platforms, Windows and OS/2, even as You were
- 7 | encouraging ISV's to write for both?
- 8 A. Well, okay, so -- so, it's kind of open-ended. I would
- 9 say certainly software vendors wrestled with that all the
- 10 | time because IBM was telling them to write for OS/2. We were
- 11 | telling them to write for OS/2 and also telling them write
- 12 | for Windows. So, I think they had decisions and questions in
- 13 | their mind as to what platform to support. Does that answer
- 14 your question?
- 15 O. Yes.
- 16 A. Okay.
- 17 | Q. Did you, yourself, advise ISV's as to which of the two
- 18 | platforms to prioritize?
- 19 A. Well, certainly in the period of 1989, my job was OS/2.
- 20 My job was not Windows. So, when I went out to talk to them,
- 21 | I talked to them about OS/2. That said, I was always very
- 22 | clear about what Microsoft's own applications group was doing
- 23 because that was always a question that would come up with
- 24 | ISV's, and I would explain that they were on a Windows
- 25 strategy first and then supporting OS/2, which is what they

- 1 did.
- 2 Q. Do you recall discussing that with anyone from
- 3 | WordPerfect?
- 4 A. I'm sure that came up. Specific conversations, no, but
- 5 | I'm sure that would have come up with Alan Ashton and Pete
- 6 Peterson, and certainly with Eric Meyers, and I'm sure other
- 7 | folks whose names I can't recall.
- 8 Q. When did you first become aware that Windows 3.0 was
- 9 becoming a commercial success?
- 10 A. Well, I guess it would have been in -- you know, a
- 11 | month after it shipped. I believe it shipped in May, so I
- 12 | think it was pretty evident that, you know -- that, you
- 13 know -- it would have been pretty evident by the end of June
- 14 | for sure that this thing was taking off really well. I think
- 15 | probably there would have been OEM commitments that were
- 16 | announced, you know, before -- before the OS shipped. So I
- 17 | think in early 1990, certainly second quarter of 1990, you
- 18 | know, it would have been evident that this thing was going to
- 19 be a force to reckon with.
- 20 | Q. This increase in popularity of Windows, did you
- 21 understand that that hurt certain ISV's who had previously
- 22 been writing for OS/2 instead of Windows?
- 23 A. Well, for people who wrote for OS/2 and didn't write
- 24 | for Windows, they were -- they would have been -- they would
- 25 | not have been able to sell into the Windows base, so they

- 1 | would have had to, you know, change and write for Windows.
- 2 | So I think there probably are some ISV's that made the OS/2
- 3 | bet and, in retrospect, may have felt they were -- they were
- 4 penalized by that.
- 5 Q. Would one of the -- you used the term "penalized," so
- 6 I'll use the term "penalties." Would one of the penalties of
- 7 | having bet on OS/2 for these ISV's have been getting to
- 8 | market late on the new Windows 3 platform?
- 9 A. Depending upon their development strategy, yes. Some
- 10 people supported both and had products in market relatively
- 11 quickly. Some people, I think, were developing for OS/2 in
- 12 | 1989 and made, you know, quick about-faces and developed for
- 13 | Windows. Companies like Lotus Development went out and
- 14 | bought at least two ISV's that had Windows products so they
- 15 could have Windows products in market when Windows --
- 16 | Windows' 3.0 launched. So there's a number of responses to
- 17 | that. I'm sure some people were late because they focused on
- 18 OS/2.
- 19 Q. Staying with this period of time when you were
- 20 | evangelizing OS/2, was it difficult to write programs for
- 21 | both platforms simultaneously?
- 22 A. Um, it -- was it difficult? It certainly wasn't easy.
- 23 Some companies did do it, but there were some things that
- 24 were just almost arbitrarily different between OS/2 and --
- 25 and Windows. So, I would not call it easy, no.

- 1 Q. Can you recall any of those differences?
- 2 A. Sure. The graphics engines were entirely different.
- 3 And, if I recall correctly, where you had the origin point on
- 4 | Windows was directly opposite what it was on OS/2, so just
- 5 doing coordinates for vectors and things was completely
- 6 opposite, just, you know, maddeningly different.
- 7 I'm sure there were other issues, too. Those are
- 8 | the -- that's -- that was the one that -- well, the graphics
- 9 | systems were -- were different, too. One was vector
- 10 graphics, and one was raster. So, yeah, they were pretty
- 11 different. Certainly the graphics subsystem would have been
- 12 an area where they were quite different.
- 13 Q. Let's mark this, please, as Exhibit 54. Do you
- 14 recognize this document?
- 15 A. No -- I mean, I recognize the people on it.
- 16 Q. Can you tell, from your review, that it's a piece of an
- 17 email string, including email from yourself to others at
- 18 | Microsoft?
- 19 A. Yeah.
- 20 | Q. Do you believe that you wrote and you have sent the
- 21 email that appears about the middle of the page from yourself
- 22 to -- looks like Brian Y, Doug E and a string of others?
- 23 A. Brian V.
- 24 Q. Brian v.
- 25 A. Brian Valentine. Yeah. It looks that way.

```
Do you see here that you're discussing the revelation
1
    Ο.
 2
    of some API's that were at least allegedly previously unknown
    to the developing public? Does that reviewing the document
 3
    refresh your recollection at all of what's being discussed
 4
    here?
 5
           It does. I don't understand what the other mail is
 6
    down below here from -- looks like that there was mail from
 7
    Rick and Jerry P. I don't remember who Jerry P is, but Rick
 8
     Segal worked for me, so there must have been some issue they
 9
    were addressing about -- about mail API's, I guess.
10
11
    Ο.
           Does the concern seem to be that certain Microsoft
    applications are using some API's that were not published?
12
13
           Well, I clearly bring that up in my reference to
    Α.
     Schulman. Schulman wrote a book called the -- well, he and
14
15
    four other guys wrote a book called The Undocumented Windows,
     I think it was called. So, yeah, that's what I seem to be
16
17
    referring to, but I don't -- I don't completely understand
     the issue from this.
18
19
    Ο.
           You respond to the issue under the statement.
20
              "Now, this may sound horrible, but 1, you say we
    will docu -- we'll document but we will not encourage and, in
21
22
     fact, we'll agressively discourage any use of these
     interfaces by ISV's and won't be talking about them."
23
24
              What did you mean by that?
25
           So, this is a period of time in which, you know, the
    Α.
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press picked up this Undocumented Windows, and I was in cons -- I was in a lot of PR meetings where people thought that the applications group was -- you know, had some unfair evangelizing because they could take advantage of undocumented API's. That wasn't true, but I was very sensitive at this period of time to the -- to the insinuation and to having ISV's believe that we weren't being, you know, open and forthcoming with them, so I'm sure that's what motivated this piece of email. Well, do you recall why you wrote that you would document these API's but would discourage use of them? So, in an operating system, you know, you document the Α. API's that you essentially are committing to support over time. The compatibility issue becomes a huge issue over time and, you know, that's why, for later operating systems, you know, you would have 18-month Beta programs primarily to try and get compatibility right. So, limiting the number of API's where you have that technical liability is just a smart thing to do if you want to produce quality operating systems and a good user experience down the road. So, because of that, you don't document stuff you don't have to document. And here I'm clearly making an argument that we should document this stuff, and I am trying to, in an email, minimize whether people will take advantage of them.

- Q. Do you believe, at this time, it would have been better
- 2 | for ISV's not to use these API's that were being discussed
- 3 here?
- 4 A. I -- okay. The problem is, I don't really know what
- 5 | they're talking about here. They're talking about 500 to 800
- 6 API's. But, in general, you know, I would never want an ISV
- 7 to take advantage of an API that I knew was going to break
- 8 | because that's just -- that's causing them problems, and
- 9 that's causing, you know, the next operating system problems,
- 10 so I -- I wouldn't want to do that.
- 11 | Q. What do you mean by "break," as you just used the term?
- 12 A. Well, that's the issue of compatibility that I talked
- 13 | about. Ideally, what will happen is you'll write your
- 14 application for a platform and there can be successive
- 15 versions of that platform. That application continues to run
- 16 | completely unmodified, right? That -- that gives you that
- 17 compatibility. If that application relies on an API, the API
- 18 changes in a future OS, your application breaks. Now, it may
- 19 do so in a minor way. It may do so in an insignificant way,
- 20 or it could in a catastrophic way.
- 21 Q. And Microsoft was trying to avoid ISV's suffering
- 22 | injury through such a breaking by relying on these API's; is
- 23 that correct?
- 24 A. Well, it's not just the ISV, you know, it's also the
- 25 | operating system. I mean, if you force ISV's to rewrite

- 1 | their application every time you produce an operating system,
- 2 | well, that's just going to limit the number of applications
- 3 | that are available, and you're not going to do as well, and
- 4 | customers aren't going to be happy.
- 5 Q. Down near the bottom of your email, you write about how
- 6 | these API's should be published, and you conclude with a
- 7 sentence that uses the term "air cover." Could you review
- 8 | that language, and I'll ask you a question -- some questions
- 9 about the term "air cover."
- 10 A. Sure.
- 11 | Q. What did -- how were you using the term "air cover"
- 12 there?
- 13 A. Okay. Well, as I explained in my earlier answer, there
- 14 | was a period of time when we're taking a lot of heat in the
- 15 press over these undocumented API's. I am trying to avoid
- 16 | that situation here for Windows For Work Groups evidently,
- 17 | and so I'm trying to get the development group to actually
- 18 document this stuff. I don't think I understood the scale of
- 19 it, because it doesn't really make sense to document 500 to
- 20 | 800 API's that you're not going to support in the future.
- 21 | That's a disaster waiting to happen.
- 22 | O. Why is it you believe that Microsoft would not be
- 23 supporting these 500 to 800 API's in the future?
- 24 A. Well, generally, you know, because they're -- because
- 25 | they are not documented. I mean, you document what you're

making a commitment to support in the future, and the stuff 1 2 that you don't document is stuff that, by definition, is subject to change. 3 4 What more issues in the press are you looking to avoid Ο. here? 5 6 Articles saying that -- that -- that, you know, we don't document some API's and that our applications group 7 takes advantage of those API's and has an unfair advantage. 8 That was the tenor of the articles that came out after the 9 10 Undocumented Windows book was published. 11 Ο. Mr. Myhrvold, I want to go back to Exhibit 54 for just a moment. In point 2 of the email that you wrote, which is 12 13 in the middle of the page, you wrote, "Remember. We are not going to stick this doc into a book or even an SDK box." 14 15 And you go on to explain how it will be documented. Why were you going document these API's that way? 16 17 So, as I think I've explained a couple times, I appear 18 to be responding solely to the threat of bad PR, and so I'm 19 suggesting that we document the API's so we can tell people 20 of the world that we documented them, yet -- yet bury the API's in the middle of a CD ROM so that they may not be taken 21 22 advantage of. 23 Reading it now, I think it's a fairly fallacious 24 argument, but that's what I'm saying.

Why do you think it's a fallacious argument?

25

Ο.

- 1 A. Because you shouldn't document API's you don't want
- 2 | people to take advantage of, period.
- 3 Q. Not even in this --
- 4 A. Correct.
- 5 | Q. -- way you're describing here?
- 6 A. Correct.
- 7 Q. Was it easier for Microsoft to keep is own applications
- 8 | focused primarily on the Windows platform, as compared to
- 9 keeping ISV's focused on the Windows platform?
- 10 A. Well, sure, because, you know, you've got a common
- 11 | management chain there, and Bill could tell them this is what
- 12 | I want you to do. You know, I'm not trying to characterize
- 13 | that that's what happened. I don't know that this was a Bill
- 14 | Gates'-driven thing, but sure, it was of tremendous advantage
- 15 to have, you know, hundreds of developers in the applications
- 16 | group beating their brains out trying to develop the best
- 17 | Windows application. That's a huge advantage, just as, you
- 18 | know, Apple benefitted greatly from Claris and having their
- 19 own captive application development.
- 20 | IBM, I think, failed largely with OS/2 because they
- 21 | canceled a bunch of their early application efforts to
- 22 | support -- to support OS/2 with their own applications.
- 23 | Q. We'll move on. Let's mark this, please, as 106. What
- 24 | was Tammy Steele's role at this time, if you recall?
- 25 A. Tammy Steele worked in DRG.

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Under Executive Summary and the subheading Windows 95 Ο. Evangelism Goals, she wrote: "Obtain a critical mass of market-leading designed-for-Windows applications " -- "Windows 95 applications within 90 days of Windows 95 shipping covering all the key application categories." And do you have any understanding of the importance of the 90-day period that's referenced there? Well, like I said, you know, it -- people aren't going Α. to use an operating system for which there's no applications, so the sooner you get the applications -- and the higher quality, popularity of the application all helps. So, this is clearly designed to get a first wave of -- of Windows application support for Windows 95. Did you understand that it was important for ISV's to deliver their product to market relatively close in time to the delivery of a new operating system such as Windows 95? Was it important? It was important to me. Whether it Α. was important to them, I -- I don't know. I mean, obviously if the operating system is successful, I assume it's good for them. If the operating system is a flop, I quess it's bad for them. They wasted a bunch of time. During your tenure in the DRG or your time running the DRG or having it report to you, I should say, do you recall Microsoft ever increasing its level of support to ISV's in order to move them along and get --

Sure. Sure. I -- I mentioned that earlier. 1 Α. That was certainly one of the things that we did. WordPerfect, I 2 think, is actually a great example of that. I sent somebody 3 4 from my group, a guy named Kraig Brockschmidt who wrote -literally wrote the book on OLE, and he spent two weeks 5 onsite with WordPerfect. 6 7 When was that? 0. Uh --8 Α. And if you can't give me a date, if you could give me 9 maybe a platform reference? 10 11 Α. Well, when did we introduce OLE? We introduced OLE in '91, '92, '93 -- I'm guessing '91 or '92. I don't remember 12 13 when he wrote the book. I'm quessing '92 or '93; is that right? I don't remember, but that -- that's -- that's my 14 15 quess. 16 Under the heading Benefits of Participation, the Ο. subheading Technical Assistance, the second bullet says: 17 18 "Worked with developer support, PSD program 19 management/development and DRG SDE's to host porting labs 20 covering OLE2, Windows 95, UI/Shell support, preparation for 21 launch and preparation for shipment." 22 It's really just the shell support I want to ask you a couple questions about. And my first question is, do you 23 24 recall what, if anything, about the Windows 95 user

interface/shell Microsoft was evangelizing at this time?

25

- 1 A. I'm sorry, I don't.
- 2 Q. Do you recall whether there were to be new unique
- 3 | features to the shell in Windows 95?
- 4 A. Yeah. I think there were, and clearly it's one of
- 5 | the -- you know, there's only three things they're talking
- 6 about, porting labs for OLE, Windows 95. So, I mean -- so it
- 7 | must have been a big deal, whatever it was. It's one of two
- 8 things called out.
- 9 Q. Okay. That's all we'll have on that document. Let's
- 10 mark this as 108.
- 11 The first line says Recruiting Developers for
- 12 Office.
- 13 A. Yep.
- 14 Q. Do you know what it means to recruit developers for
- 15 Office?
- 16 A. Sure. Office -- components of Office, Excel, Word, had
- 17 | had a macro language in them since very early versions that
- 18 | would allow people to essentially program the applications
- 19 and write add-ins or programs or specific -- specific
- 20 | functions into the applications.
- 21 | Q. Did you evangelize Office as a technology that allowed
- 22 that?
- 23 A. So, through my work in the developer division managing
- 24 | marketing for Visual Basic, I believe that was one of the
- 25 | messages -- yes, I'm sure that was one of the messages we

- 1 used for Visual Basic as a development tool was the ability
- 2 to use Visual Basic to drive some of the applications.
- 3 Q. We earlier talked about basically recruiting developers
- 4 | to the Windows platform and the many advantages of it that
- 5 | you described. Why would you recruit developers to Office?
- 6 A. For the same reason essentially. Applications for an
- 7 operating system help sell the operating system.
- 8 | Applications written on top of an application might help sell
- 9 more copies of that application.
- 10 | Q. And just so we get a clear sense of the term, what do
- 11 | you -- what, to your understanding, is middleware?
- 12 A. It is infrastructure software that an application
- 13 developer leverages to, you know, write their application to
- 14 get specific functionality.
- 15 | Q. At this time, was Microsoft considering developing
- 16 | Office into middleware?
- 17 A. I don't think anybody at -- I certainly don't ever
- 18 | recall anybody talking about Office as middleware. As I
- 19 | previously testified, there certainly were macro languages in
- 20 | Excel and Word. There was -- obviously programability was
- 21 one of the early things that helped with Lotus 123 on DOS.
- 22 | So, there was some rudimentary programability in the -- in
- 23 Office. I think, from-time-to-time, the Office group did get
- 24 | excited about going after developers. I don't think they
- 25 | ever did a very good job of it.

- 1 Q. You note at the bottom of the second slide here in
- 2 Exhibit 108 that our application competitors are striving for
- 3 | this same potential. What did you mean by that?
- 4 A. Well, I'm not sure. Obviously I believe -- now, Lotus
- 5 did have real developer work going on, mainly with a product
- 6 | called Lotus Notes, and they certainly did go after
- 7 developers, whether they were internal corporate developers
- 8 or kind of ours, to build solutions on top of notes, and they
- 9 | were reasonably successful with it. Novell and WordPerfect,
- 10 | I don't recall what those guys were doing. I mention
- 11 something later in the presentation about something called
- 12 PerfectFit, but I don't remember what that was.
- Does that answer your question?
- 14 | Q. Yes, but it also suggests a couple follow ups,
- 15 unfortunately. But, do you recall whether Novell WordPerfect
- 16 | was exposing API's in this time period?
- 17 A. I don't recall that. I mean, I must have a reason for
- 18 | having that bullet, and let me take a minute, and I'll find
- 19 where it is.
- 20 | Q. Actually, page 10, slide 19 might be what you are
- 21 thinking of.
- 22 A. Yeah. There you go. PerfectFit technology and
- 23 WordPerfect SDK's -- SDK's is in quotes -- Windows open API.
- 24 | I don't know what those things are, but that must be what I'm
- 25 referring to.

- 1 Q. Are you familiar with a technology known as OpenDoc?
- 2 A. Yes, I am.
- 3 Q. And what was OpenDoc?
- 4 | A. OpenDoc was a competitor to object linking and
- 5 | embedding, to OLE I believe. It was championed by Lotus
- 6 Development. I remember that. And Apple -- it was
- 7 | Apple-derived technology, I believe. And I don't know who
- 8 | else supported it. I would guess -- well, the typical sub --
- 9 suspects in that would be Borland and -- Borland and
- 10 | WordPerfect. That's my recollection.
- 11 Q. Was OpenDoc middleware?
- 12 A. Yeah. I'd say OpenDoc was middleware.
- 13 Q. Why do you believe OpenDoc was middleware?
- 14 A. I believe it was something that you wrote for with an
- 15 app -- from your application to perform certain functions,
- 16 | and I believe that it was pitched -- well, it was developed
- 17 by, you know, a platform company, Apple, and it was promoted
- 18 by some of the leading applications developers.
- 19 Q. Do you recall whether OpenDoc was cross-platform?
- 20 A. Well, coming from Apple, I've got to believe it was. I
- 21 don't remember. It must have been.
- 22 | Q. Again, just so we have a common understanding on the
- 23 record, could you just give me a lay person's definition of
- 24 | cross-platform?
- 25 A. Well, it's an API technology that is supported across

- 1 | more than one operating system. So, in this case, it would
- 2 | have supported the Macintosh and -- and Windows and perhaps
- 3 more than that.
- 4 Q. Was OLE cross-platform?
- 5 A. No.
- 6 | Q. It was available only on Windows platforms?
- 7 A. Correct.
- 8 Q. Do you know why that was the case?
- 9 A. Well, sure. It was a Microsoft technology developed to
- 10 extend the functionality of Microsoft platforms. Why would
- 11 | it support anybody else?
- 12 | Q. It gave an advantage, in that sense, to the Windows
- 13 platforms?
- 14 A. To the degree that it was successful, yes. Obviously
- 15 | if, you know, you produce an API and nobody writes for it, it
- 16 doesn't do you any good.
- 17 | Q. If you produce an API and make it available to multiple
- 18 | operating systems, then it doesn't uniquely advantage any one
- 19 operating system; is that right?
- 20 A. Not necessarily. I think that depends upon the market
- 21 environment. You know, in things like networking, well, you
- 22 | got to have networks that support multiple platforms or
- 23 | they're fundamentally not very useful because you're not
- 24 | connecting a diverse enough audience, so I think that
- 25 depends. Take a look at ODBC, open database conductivity. I

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think it was very important to Microsoft to get other
1
2
    database vendors, other than Microsoft, to support that, or
    it wouldn't be very useful to a software vendor.
3
4
          Mr. Myhrvold, did you ever view WordPerfect as a
    Ο.
5
    competitor to the Windows operating systems?
6
    Α.
          No.
7
     (Whereupon the playing of the deposition was concluded.)
8
              THE COURT: Thank you. See you all at 8:00 o'clock
    tomorow, and you will go until 2:00 o'clock again tomorrow.
9
    And I will stay here with counsel for just a second and go
10
11
    over a list of loose ends, to find out when we can take them
    up. I think Judge Benson wants to use the courtroom.
12
13
                     (Jury leaves the courtroom.)
              THE COURT: Okay, a couple quick things. I just got
14
15
    the letter from Microsoft about the documents received
    from -- particularly one document from Mr. Bush. I assume
16
17
    that Novell wants time to respond, so we won't address that
18
    now.
19
              MR. JOHNSON:
                            Thank you, Your Honor.
20
              THE COURT: Mr. Tulchin, just let me know as soon as
    you can about the witness on Friday. I understand if you
21
    can't adjust, you can't adjust.
22
23
              MR. TULCHIN: We do have a witness for Friday, Your
24
    Honor, but the question was whether we could fill all the
25
    time.
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1
              THE COURT: Right.
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              MR. TULCHIN: And we're doing our best.
              THE COURT: Fine. Fine.
 3
 4
              MR. TULCHIN: I don't know if you really want to go
     to four. If so, I think we may fill some of that time with
 5
    more videotape, although we don't have nearly as many
 6
    videotapes as Novell did.
 7
              THE COURT: Well, we'll see. I mean, I can -- I've
 8
    got a 5:15 flight, and I figure this is on the way to the
 9
10
     airport, so what I'll do is get a cab down here, but we can
     see. The things we have -- we do have to talk about at some
11
12
     time are the outstanding exhibits, and have I have been
13
     inundated by paper, so if it's there, I apologize.
                                                         Is there
14
    a Microsoft written response? I'm not saying there should
15
    be. I'm just -- is there on the exhibits that Novell wants
     to introduce? I'm not saying there should be. I'm just
16
    worried that I've lost it if there is one.
17
18
              MR. TULCHIN: I don't think there is, Your Honor.
19
              THE COURT: That's good.
              MR. TULCHIN: I think we would like to be heard --
20
21
              the COURT: That's fine.
22
              MR. TULCHIN: -- orally on that whenever it's
     convenient.
23
24
              THE COURT: And, as I said, maybe -- I think I
25
    better quit because I think Judge Benson wants the courtroom.
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1
     Thank you.
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              MR. TULCHIN: Thank you, Your Honor. See you
 3
     tomorrow.
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