

1 THE COURT: Mr. Tulchin, do you have any idea yet?
2 It doesn't matter, but I would just like to tell the jury
3 when tomorrow we think we'll release them, 3:00 or 4:00.
4 You may not know yet.

5 MR. TULCHIN: We do have this deposition
6 transcript, Your Honor, for tomorrow. Those are the issues
7 in dispute. But my guess is -- we only have one live
8 witness. We're going to start with that. My guess is that
9 we'll be done about probably 1:30, and maybe 2:00.

10 THE COURT: As opposed to 4:00?

11 MR. TULCHIN: As opposed to 4:00. That's my best
12 guess, Your Honor. It's hard to tell exactly, of course,
13 because we don't know the extent of cross.

14 (Jury present)

15 THE COURT: Despite the fact the witness has taken
16 off his sweater, I'm going to try to turn up the heat.

17 I'm not promising you this, but to the extent we
18 can project, we think tomorrow we'll probably be finished by
19 the usual time, 1:30 or 2:00, as opposed to 4:00. I can't
20 promise that, but just to let you know. The best estimate
21 we have is that it will be 1:30 or 2:00, as opposed to 4:00.

22 The other thing in terms of scheduling, we've got
23 to start thinking, and we can talk about it more tomorrow,
24 about the week of December 12th, because we hope the
25 testimony will be finished on Monday or Tuesday of that

1 week, and then we have to talk about how long -- arguments
2 are going to be a little longer one day, if you want to
3 deliberate past 1:30 or 2:00. I know that may cause
4 hardship for people. We'll just work -- at least for some
5 people. So we'll just talk about that.

6 I think the goal would be, subject to how long you
7 deliberate, you all take as long as you need, but ideally if
8 we were finished by Thursday or Friday, we would be okay.
9 Please don't take that as an indication from me how long you
10 ought to deliberate. You may have to go into Monday.

11 Excuse me, Mr. Johnson.

12 MR. JOHNSON: May I proceed, Your Honor?

13 THE COURT: Absolutely.

14 MR. JOHNSON: Thank you so much.

15 CROSS-EXAMINATION

16 BY MR. JOHNSON:

17 Q Mr. Nakajima, I just introduced myself to you. My name
18 is Jeff Johnson. So I'm going to be asking some questions
19 of you this morning.

20 A Sure.

21 Q It is an honor and pleasure to meet you, sir. As I
22 told you before, I admire your work.

23 I would like to start actually where you started in the
24 beginning. You were asked some questions about APIs being
25 removed from things. And if you could find -- it should be

1 at the bottom of your stack -- this demonstrative exhibit
2 207.1.

3 Do you have it there?

4 A Yeah.

5 Q And that piece of paper deals with the Google Wave API,
6 right?

7 A Uh-huh. (Affirmative)

8 Q After that it says they're deprecated, correct? Do you
9 see that, sir?

10 A Yes.

11 Q Could you explain to the jury what it means when an API
12 is deprecated?

13 A It means they removed it or they no longer support it.

14 Q But that means that it's an API that's in an existing
15 system, right?

16 A Uh-huh. (Affirmative)

17 Q Something that they sold, right?

18 A Sold -- I mean Google is typically given away.

19 Q You're right. You're absolutely right. It is free,
20 but it's something that was in a system that people were
21 using. In this case it's called the Google Wave?

22 A Yes.

23 Q So this is not a beta, this is actually the wave is
24 something that was out there that you could use at the time,
25 and one of the things you could use in the wave technology

1 was this Google Wave API, right?

2 A Yes, but Google always called everything beta.

3 Q Well, they may call it beta, but it's out in the
4 public, right?

5 A Yes.

6 Q You are using it?

7 A Uh-huh. (Affirmative)

8 Q It's not just being given to ISVs?

9 A Right, it's public.

10 Q It's public?

11 A Uh-huh. (Affirmative)

12 Q So people are using this thing and have been using this
13 thing for some time, correct?

14 A Yes.

15 Q And so what Google was actually announcing here is they
16 have got an API called the Goggle Wave API and they are
17 saying, look, going forward, we don't want to support this
18 API anymore, right?

19 A Uh-huh. (Affirmative)

20 Q In fact, to ensure -- to ensure that no one is hurt by
21 this, they say -- if you look right underneath the Google
22 Wave API where it says important -- do you see that? It's
23 got a paragraph there after the word important.

24 A Oh, yes, important.

25 Q It says, the wave API will remain in service as long as

1 Goggle Wave continues to run, correct?

2 A Yes.

3 Q So this wasn't taking away this API, this was just
4 saying, look, down the road we're not going to be supporting
5 this. But as long as Goggle Wave is out in the public and
6 is being used, that API will continue to run, correct, sir?

7 A It doesn't say as long as it's being used. It simply
8 says as long as Google Wave continues to run, meaning Google
9 may choose to stop running it at any time.

10 Q Sure. They can choose to stop, but they tell you --
11 they are telling you in advance here that this wave API will
12 remain in service as long as Google Wave continues to run.
13 So as long as that is a public beta out there, as you call
14 them, that people were using, the API isn't going to be
15 yanked out until they stop running wave, right?

16 A Right. If Google chooses to stop providing wave
17 service on a certain date, then all the application programs
18 that rely on the wave will stop running at the same time.

19 Q So when you're deprecating an API, you are just giving
20 notice to the public, or to ISVs as well, that, look, we're
21 not going to be supporting this one anymore, get your house
22 in order, right?

23 A Yes.

24 Q And, again, you also talk about another one, which was
25 the Apple one, the Get Device ID, right?

1 A Uh-huh. (Affirmative)

2 Q And that was an existing system that was in the public,
3 right?

4 A Yes.

5 Q And so this was not a beta that was being used by ISVs,
6 this was an existing product?

7 A Yes.

8 Q And so what Apple was saying was we're going to get rid
9 of this particular device idea API, and the reason was there
10 were some privacy issues, right?

11 A Uh-huh. (Affirmative)

12 Q So this is very different -- both of these are very
13 different from yanking APIs from a beta that developers --
14 ISVs are writing to, right?

15 A I don't understand.

16 Q That's all right, sir. Thank you. I think you've been
17 very helpful.

18 MR. HOLLEY: I move to strike the commentary.

19 THE COURT: The commentary is stricken, but the
20 questions and answers stand.

21 BY MR. JOHNSON:

22 Q You had a picture up there of the integrated GPS and
23 your separate one in your own car?

24 A Yeah.

25 Q I just have to ask here, you suggested that if the

1 integrated GPS failed, that the car wouldn't run. Is that
2 really true, sir? Wouldn't it just mean --

3 A The car may still run, but the certain function of the
4 car will not be accessible.

5 Q Yes. In essence, that window, the integrated window,
6 that might break down?

7 A Yes.

8 Q But the car is still going to run?

9 A Hopefully, yes.

10 Q And to draw the analogy a little further, if you have a
11 bad namespace extension in the Windows Explorer and it
12 caused it to -- and it went fizz, that just means the window
13 Explorer would stop working, right? It would go down. It
14 wouldn't necessarily mean that the entire system would go
15 down, correct?

16 A Actually in the Windows 95 case, the entire system goes
17 down.

18 Q So you are saying that more than the Explorer itself
19 would be lost?

20 A Yes, because the Explorer and the desktop and start
21 menu were all running in the same process in the Windows 95.
22 We fixed that in NT. But at the time of the Windows 95,
23 everything was in the same kitchen. So if fire happens,
24 everything stops.

25 Q There was some direct examination where Mr. Holley was

1 talking about the fact, and you agreed with him, that there
2 was no limit on the number of namespaces that application
3 developers could create, right?

4 A Yes.

5 Q And --

6 A No limit.

7 Q No limit?

8 A Yeah. Sometimes there's a problem with a yes and no
9 answer.

10 Q But that's just as true today as it was then, right?

11 A The number of extensions, no. Actually this is one of
12 the reasons why Windows becomes slower once you have it. I
13 think everybody experienced this, and this is actually
14 caused by -- not the namespace extension, but many extension
15 mechanism. It makes the system slower, slower every day --
16 not every day, every time you install the applications.

17 Q My more limited point is that the fact that you can
18 have unlimited namespace extensions is as true today as it
19 was when you first introduced the product in 1995, correct?

20 A I don't know if they still support namespace extensions
21 or not. I really don't.

22 Q I will represent to you that Mr. Muglia said they did?

23 A Today?

24 Q Today.

25 A I think he was still -- he was in Microsoft recently,

1 but I left in 2000. So I don't know what they are doing
2 these days, and actually I no longer use Windows. I'm a Mac
3 user. Sorry. I'm Windows 95 using macro.

4 Q But let me do it this way, then. To the extent that
5 the namespace extensions continued to be present and your
6 invention continued to be present in Windows 95 and later
7 operating systems, there was no limit to the number of
8 namespaces application developers could create, right?

9 A According to you or Bob Muglia, yes.

10 Q And just to be clear, you didn't just use the namespace
11 extensions for e-mail, right? The namespace extensions were
12 used for lots of things that you added to Windows 95, right?

13 A Right. It's up to ISVs, not me. I simply provide a
14 mechanism.

15 Q You provided the mechanism and, for instance, Capone,
16 the e-mail client, was one of the things that was being
17 added using the namespace extensions, right?

18 A Right. Just like Toyota, right, provides a mechanism
19 for GPS system to plug in, if Toyota -- somebody could
20 create some game machine so you can play a game while you're
21 driving. It's possible.

22 Q And you also added -- you didn't add, but you provided
23 the mechanism, the namespace extensions that Marvel used and
24 integrated into the system, right?

25 A Yes. I was helping Marvel to use the namespace

1 extension.

2 Q And later you helped -- with your namespace extensions,
3 you helped Athena integrate into Windows 95, right?

4 A Right. So this is the place where my memory becomes
5 blurred. So I was helping -- actually I was promoting a lot
6 of people inside Microsoft to use namespace extensions
7 because that was my baby. So the Capone, the e-mail, the
8 Marvel, it's like the AOL client, Microsoft's version, and
9 also Athena, the e-mail client, I was promoting and helping
10 them to integrate. But I don't remember which one was
11 actually shipped because of this decision and because I was
12 simply technically helping them. So I knew that it was
13 running on the machine, but I don't really remember which
14 one was really shipped with Windows 95, or even after that.

15 Q But at least you do remember that all of those
16 applications were running on Windows 95 integrated with
17 Windows 95 using your namespace extensions, right?

18 A Right. I was helping them, but the finish of Windows
19 95, that could just be a development machine. I really
20 don't know which one was shipped.

21 Q So it wasn't just the e-mail, right? We can agree on
22 that?

23 A Right. I guess.

24 Q In fact, the namespace extensions were also used within
25 Windows 95 to provide objects like Recycle Bin, Network

1 Neighborhood, and My Briefcase, right?

2 A Yes. You are smart. I am surprised. True. True.

3 Yes, I was amazed. Nobody actually mentioned that because I
4 came up with the namespace extension first because I was in
5 charge of both integrating multiple views, like a file
6 manager, program manager, control manager. So I needed to
7 create this kind of mechanism for myself to integrate. So,
8 as I said, Recycle Bin and everything was using that
9 mechanism. Yes, you are absolutely right.

10 Q That certainly didn't change in Windows 95. We know
11 that that stuff is all using the namespace extensions,
12 right?

13 A Yes. Yes.

14 Q Now there was some direct testimony about whether there
15 were maybe too many cooks in the kitchen. So I want to talk
16 about that a little bit. And just to be clear, the only
17 custom containers that would be added to the Explorer by
18 third-party ISVs would be applications that the user chose
19 to put on his machine, right?

20 A Yes.

21 Q So if there were too many cooks in the kitchen, you
22 could ask some to leave, right?

23 A Right.

24 Q So --

25 THE COURT: The diner could, the person who runs

1 the restaurant.

2 THE WITNESS: But the issue is, right, you need to
3 remove the entire application from a system. You cannot
4 just remove the cook from the kitchen but still have a
5 dessert. You don't have that option.

6 BY MR. JOHNSON:

7 Q Yes, I understand. The pastry chef has to go
8 completely?

9 A Right.

10 Q He can no longer be there. But if you don't like him
11 and you don't like what he offers, the user can kick him out
12 of the kitchen, right?

13 A Yes. Right. Yes.

14 Q So the user doesn't have to put up with any custom
15 containers it doesn't like?

16 A Right. You're right.

17 Q If that chef does a bad job and, in fact, makes you
18 sick, you are certainly going to remove that chef from the
19 kitchen, right?

20 A Yes, but sometimes you cannot tell who caused that
21 problem because the E.coli virus that the chef brought in by
22 actually contaminating the steak. You can get sick eating
23 the steak, but what are you going to do, remove the steak
24 from the steakhouse?

25 Q Well, you can certainly remove whatever it is you think

1 is causing the problem?

2 A But the problem is it's very hard to tell which caused
3 the problem.

4 Q If it's the operating system, I guess you could call
5 Microsoft about it. But, in fact, what people actually do
6 is they call the computer company, right?

7 A Yeah. So again, as I said, right, typically after
8 owning a Windows machine for six months, eight months, it
9 becomes slower and slower. And this is typically caused by
10 some application that was installed. But it's hard to tell
11 which application caused the problem. Even I cannot tell.

12 So if you bring in some consulting company, then they
13 need to spend a lot of time sometimes on one application and
14 test it for four months and install. So it's a hard
15 problem.

16 Q But let's go back to that Cairo team. And you chose to
17 leave the Cairo team, right?

18 A Yes.

19 Q You were very frustrated with that group, right?

20 A Yeah.

21 Q Is that a yes?

22 A Yes. Yes.

23 Q I'm sorry. Thank you.

24 You felt -- you were frustrated because the Cairo folks
25 were just meeting after meeting?

1 A Yes.

2 Q You were the type of engineer who likes to solve
3 problems and write code, correct?

4 A Right. I call it the practical engineer.

5 Q And I think -- I mean you gave a great analogy to us at
6 your deposition. I just wanted to state it and see if you
7 still agree with it. If someone had a leak in their roof, I
8 would rather go up and fix it right away. But the Cairo
9 people just discuss, and then months later they would say,
10 okay, you need to rebuild the house.

11 Was that a good analogy of what the Cairo people were
12 all about?

13 A Yeah. I'm talking about the mentality, yes, their
14 approach was always -- and that they debate what kind of
15 house you want to have.

16 Q So you had had enough of that and you moved over to the
17 Chicago team, right?

18 A Yes.

19 Q And you were responsible for all the shell extensions,
20 not just the namespace extensions, right?

21 A All the extensions, yes.

22 Q Let me show you what has been marked Plaintiff's
23 Exhibit 364.

24 Mr. Nakajima, this is Plaintiff's Exhibit 364. I feel
25 fairly certain you recognize this document. This is your

1 patent, right?

2 A Yes.

3 Q And this is your patent on the shell extensions, right?

4 A Yes.

5 Q And you are listed as the first named inventor on this
6 patent, right?

7 A Yes.

8 Q And this patent, the application, the application was
9 actually filed December 13th, 1994. Do you see that, sir?

10 A File date, I don't see that. I see the '98, but --

11 Q If you just turn around and look at the screen in front
12 of you.

13 A Oh, okay. Yes, filed December 13th. Yes. Okay, I see
14 that.

15 Q So that was long before Windows 95 came out, right?

16 A Uh-huh. Yes.

17 Q Now if you turn to the abstract, which is on the first
18 page there.

19 MR. JOHNSON: If you could just bring that up,
20 Mr. Goldberg.

21 BY MR. JOHNSON:

22 Q And it states at the top, an operating system provides
23 extensions through which application developers may extend
24 the capabilities of a shell of the operating system.

25 And that's what the shell extensions were all about,

1 right?

2 A Yes.

3 Q And if we look down a little further in the abstract,
4 it's actually the next to the last sentence, because the
5 first part talks about some of your other extensions, if we
6 go down to where it says, developers may also extend the
7 functionality provided by the shell of the operating system
8 by adding their own custom namespaces to the integrated
9 system namespace.

10 That's a pretty simple characterization of what the
11 namespaces do, right?

12 A Yes.

13 Q Then the last sentence states, the mechanism provided
14 by the operating system to add such a namespace is
15 polymorphic and transparent to users.

16 Can you explain to the jury what is meant by the fact
17 that these custom namespaces are polymorphic and transparent
18 to users?

19 A So let's say in the example of this steak restaurant,
20 right, we added a creme brulee to the menu by third-party
21 extension, but from the user's -- the customer's point of
22 view, it's simply an item in the menu. So it looks like
23 it's fully integrated. It's not a separate menu it came
24 from, just the one menu.

25 So, right, I think it's -- if we are talking to the

1 user, it's more -- integrated is a better term than
2 polymorphic or transparent.

3 Q But in terms of -- and I appreciate the analogies
4 because I think that helps us a lot. But in terms of the
5 actual user interface, the basic point, is regardless of the
6 data type, the user interface is consistent for the user,
7 right?

8 A Yes. I mean in a true sense more this sentence is
9 talking about the left pane of the tree, not the right pane.

10 Q If you go, then, to the background of the invention --
11 and I'm sorry to say that the pages aren't numbered, but if
12 you go back to and you go through the figures, pass by the
13 figures there, and go to the first page of the text, which
14 is -- actually patents have columns. This is column one.
15 If you can get there.

16 A Yeah.

17 MR. JOHNSON: Can you bring that you up,
18 Mr. Goldberg. There you go.

19 BY MR. JOHNSON:

20 Q Background of the invention. Do you see that, sir?

21 A Yes.

22 Q It starts off, conventional operating systems include
23 shells that provide user interfaces. Unfortunately, such
24 shells are often limited in their capabilities and in the
25 flexibility of options that they provide to an applications

1 developer.

2 So this is part of the background of why you did what
3 you did, right?

4 A Uh-huh, yes.

5 Q And if we go down again a couple of paragraphs later
6 where it says, the shells -- go to the last sentence of that
7 paragraph, it states, the shells of the conventional
8 operating systems are further limited in that they only
9 provide access to objects in the file system namespaces and
10 provide no easy mechanism for integrating additional
11 namespaces into the system.

12 That's talking about the namespace extensions, right?

13 A Yes.

14 Q So what you are saying here, in conventional operating
15 systems, you could only get to Recycle Bin, Briefcase and
16 Network Neighborhood, an application developer couldn't come
17 in and create their own custom namespace, right?

18 A Right.

19 Q Then if we turn over to column four, which is on the
20 next page, which provides a detailed description of the
21 invention.

22 MR. JOHNSON: If you can bring that up,
23 Mr. Goldberg.

24 BY MR. JOHNSON:

25 Q Specifically to the last sentence of the first

1 paragraph, it states, in addition, the preferred embodiment
2 of the present invention facilitates the addition of new
3 namespaces to a namespace that is visible through a browsing
4 system-provided tool, known as the explorer. These shell
5 extensions allow developers to customize to better suit the
6 needs of their users.

7 So the purpose of this invention was to allow
8 developers to customize their applications to better suit
9 the needs of their users, right?

10 A Not exactly. It's not customizing the application.
11 It's more about customizing the Explorer, or actually more
12 precisely speaking, they are providing the custom folder to
13 the extension so that those objects -- or items provided by
14 the application are more -- looks and behaves like they're
15 integrated.

16 Q Perhaps my question was poorly worded, but let me try
17 it this way. What you wanted was was for developers to be
18 able to customize -- provide custom extensions to better
19 suit the needs of their users, right?

20 A Okay, yes. It's a bit ambiguous in a sense, but yes.

21 Q Now you also provided a documentation in this patent
22 application that explained in detail how these shell
23 extensions would work, right?

24 A The documentation meaning the SDK?

25 Q Well, it's kind of like what's in the SDK. If you

1 would turn forward in the patent, and at some point when you
2 get into the stuff that was added as support for your
3 patent, the pages actually start being numbered, and this is
4 page 54.

5 MR. JOHNSON: There you go.

6 BY MR. JOHNSON:

7 Q Fifty-four. Do you see that there?

8 A Yeah.

9 Q And if you look forward, from 54 forward, you see many,
10 many pages of a lot of computer speak that I certainly don't
11 understand, but this is the documentation, is it not, for
12 the use of the shell extensions?

13 A Right. This is the -- yeah, this is the documentation
14 of the shell extension and especially this portion of the
15 namespace extension.

16 Q This portion is entirely about the namespace
17 extensions, right?

18 A Yes.

19 Q And can you tell me, is this documentation provided in
20 your patent application more extensive than the
21 documentation provided to ISVs in June of 1994 M6 beta
22 release? Again, you may not know.

23 A Yeah, I don't know. I wasn't -- I was not in charge of
24 either writing the patent or either writing the
25 documentation. I simply provided header files. And

1 somebody else who is more proficient in writing the API in
2 plain English, they did that job.

3 Q But you did review the patent application before it was
4 filed, right?

5 A Not word by word.

6 Q Just to be clear, if we go back to that page 54, then,
7 the English language stuff that explains these namespace
8 extensions would have been written by someone else, not you?

9 A Yeah. So word by word, right. I mean the process of
10 building this kind of a document either as SDK document or
11 patent document, I am the developer, so I write software.
12 So software consists of header files. I put some comments
13 there. Then somebody in charge of the documentation looked
14 at the header files and started creating these kinds of
15 documents, that person asked me some questions. So I
16 answered. Sometimes that person cut and paste my answer
17 directly to this kind of document. Sometimes he edit. So
18 it's really up to that person how to write it.

19 So if my question -- if your question is this your
20 statement, then it's no, but maybe based on my works.

21 Q Okay. And just -- I guess my probably inarticulate
22 question was this documentation provided in the patent
23 application is more than just the machine header file that
24 was provided in the M6 beta, right?

25 A Yeah. No, I'm sorry. More than the header file?

1 Q Yes.

2 A But I'm not sure if this is more than the entire
3 documentation, the SDK.

4 Q Understood. I'm talking only about it's more than the
5 header files, right?

6 A More than the header files.

7 Q So it would be fair to say that at some point prior to
8 December 13th, 1994, someone with your help had prepared
9 documentation about how to use the namespace extensions,
10 right?

11 A Yes.

12 Q I think I understood from your testimony that at least
13 initially your job was to kind of bridge the gap between
14 Chicago and Cairo, right?

15 A My job?

16 THE COURT: You mean when he worked for Cairo?

17 MR. JOHNSON: Actually when he went to Chicago and
18 left Cairo.

19 THE COURT: Okay.

20 BY MR. JOHNSON:

21 Q Your job was to do what the Cairo guys were just
22 thinking about and having meetings?

23 A More precisely speaking, the Chicago team was in charge
24 of bridging the gap between Windows 3.1 and Cairo, right.
25 The Cairo's future, Windows 3.1, was already in the market.

1 So they were in charge of bridging. But management didn't
2 specify exactly what. And because it was such an underdog,
3 sort of -- it was sort of out of the radar screen of Bill
4 Gates. Sort of we had freedom to do whatever we wanted to
5 do. Then I moved from the Cairo team to the Chicago team
6 and discovered that instead of spending time in the
7 meetings, they write code, and they have a completely
8 freedom because it's such a small product.

9 So there was no order from management to say Chicago
10 should look and behave more like a Cairo. Nobody asked
11 them. That was my decision.

12 Q But that's what you did?

13 A Yes, that's what I did. But I don't call that that was
14 a job. My job is typically coming from the boss.

15 Q At some point your team started to believe that Cairo
16 was never going to ship, right?

17 A I believed it from the beginning.

18 Q The Cairo team was never going to rebuild the house,
19 right?

20 A Right. Right. Yeah.

21 THE COURT: Whichever house it might have been.

22 BY MR. JOHNSON:

23 Q Now just to segue a little bit, after Windows 95
24 shipped, you started working on Microsoft's web browser,
25 Internet Explorer, right?

1 A Yes.

2 Q And you worked on Internet Explorer for about two
3 years, 1995 through 1997?

4 A Yes.

5 Q And as part of your responsibilities, you integrated
6 Internet Explorer into Windows using the namespace
7 extensions, right?

8 A Yes. Yes. You're right, yes.

9 Q So that's still another way that we can use the
10 namespace extensions, right?

11 A Yes. Because that was my baby, so I wanted to use it,
12 yes.

13 Q Let's go back to your work on Chicago. Did you
14 understand that there was a decision made to document the
15 shell extensions, including the namespace extensions, to
16 ISVs in the fall of 1993?

17 A Right. I don't remember the timing, but I do remember
18 that at some point we decided to publish APIs to ISVs in a
19 certain version of beta. That's the only thing I remember.
20 But, unfortunately, somebody already told me that was in M6.
21 So even though that wasn't in my memory, I know that fact.

22 Q Do you happen to know who made that decision?

23 A Who made that decision? No, not exactly, but I wanted
24 to publish because -- so my intent is I develop something
25 and I want to publish. I want to make a lot of people using

1 it, the users, ISVs. So I always pushed to that direction.
2 And somebody in the higher management make a decision to say
3 we're going to publish this or we're going to not publish
4 this.

5 Q Do you understand what it means when they say -- or
6 someone says we're going to A-list these APIs? Do you
7 understand the term A-list?

8 A Yeah. They didn't use the A-list, but that term came
9 later in time to distinguish between sort of the public
10 official API, which is A-list, versus sort of the
11 unofficial, not supported, if you use it and we may not
12 support it in the future version, which is the B-list.

13 Q But A-list means fully published, fully supported,
14 right?

15 A Right, and implies that -- because Microsoft had a
16 policy to say once we publish some APIs, we keep that in the
17 future version of Windows. That was not a contract, but it
18 was more like a company policy.

19 Q Sure. That's important so that applications built to
20 use those APIs will continue to run on future versions of
21 Windows, right?

22 A Right. That was really beneficial not only to ISVs but
23 to Microsoft as well because once the user started in
24 Windows machines, it's harder and harder to switch to other
25 operating systems because the application runs continuously.

1 Q Do you recall that there came a time when you were
2 essentially tasked with making sure that the shell extension
3 APIs were going to be compatible with potential future
4 operating systems that used OLE?

5 A Yes. Yeah, I paid attention to OLE. So there -- so
6 the OLE was about to become a part of our system. It was in
7 the transition time. So I needed to make sure that it's
8 compatible. Unlike Cairo was still a story on the board.

9 Q Sir, in order to achieve compatibility with whatever
10 direction they were going to go in the future and to meet
11 that four megabyte limit of memory in Windows 95, you
12 created a lightweight OLE implementation for the namespace
13 extensions, right?

14 A Not only for the namespace extensions, but all
15 extensions.

16 Q All extensions?

17 A Yes.

18 Q That was your creation, that lightweight
19 implementation, right?

20 A Yes.

21 Q Because a full OLE implementation of those shell
22 extensions would have been really, really slow and require a
23 lot of memory, right?

24 A Yes.

25 Q And part of that limitation meant that you needed to

1 make the shell extensions run in process, right?

2 A Yes.

3 Q You didn't have enough memory to separate the processes
4 in Windows 95, right?

5 A Right.

6 Q And it's true, is it not, that all the shell
7 extensions, including the namespace extensions, run in
8 process?

9 A Yes.

10 Q Do you recall, sir, that Mr. Silverberg, who was the
11 head of the Chicago development -- you remember
12 Mr. Silverberg, don't you?

13 A Yes. Yeah.

14 Q Do you recall that he was very proud of your work, of
15 the lightweight OLE implementation for these extensions?

16 A Yeah, I remember that. That was a good memory. I got
17 a bonus.

18 THE COURT: What did you say?

19 THE WITNESS: I got a bonus.

20 MR. JOHNSON: Could I have Plaintiff's Exhibit
21 129, please.

22 BY MR. JOHNSON:

23 Q I'm going to show you a couple of documents here more
24 than anything else just to give time frames to some of the
25 things we're talking about here.

1 This is Plaintiff's Exhibit 129. We see at the top of
2 the page, this is an e-mail from Mr. Silverberg to you and a
3 number of other people, including somebody by the alias
4 Kurte?

5 A Uh-huh. (Affirmative)

6 Q Can you tell us who Kurte was?

7 A Kurt Eckhardt. I don't remember how to spell his last
8 name. He was my boss. He was the department manager of the
9 shell team.

10 Q If you look down in the first paragraph, Mr. Silverberg
11 says how very proud he is of the way the team has
12 architected the extension mechanism to use OLE interfaces
13 but have a lightweight implementation underneath.

14 Do you see that, sir?

15 A Uh-huh, yes.

16 Q That was your proud moment and your bonus?

17 A Yes.

18 Q I would like to direct your attention a little further
19 down in the e-mail from your boss, Mr. Echardt, to you dated
20 January 20th, 1994, and there's some questions being asked
21 of Mr. Echardt about what points ISVs will be able to learn
22 about what the shell extensions can do and how. And
23 Mr. Silverberg was apparently interested in when can we show
24 them a prototype, when can we tell them, and finally when
25 will they actually be able to do the coding.

1 Mr. Echardt says that the Windows 95 team -- if you
2 look down at number two there --

3 MR. JOHNSON: Could we highlight that,
4 Mr. Goldberg? Down near the bottom. There we go.

5 BY MR. JOHNSON:

6 Q It states, we basically have it done now, although we
7 will probably tweak some of the interfaces to make them work
8 better for us in our current extensions.

9 So is that consistent with your recollection that by
10 early 1994 these extensions were basically done?

11 A The definition of done meaning, right, the mechanism is
12 in place, it is working, but it's in the beta, so it may
13 change. I mean that tweak meaning we may still need to
14 adjust, make some changes before we release the final
15 product.

16 Q But, of course, the extensions never did change, did
17 they?

18 A I don't remember. But the things change. This is
19 January of '94. So it is quite possible that we made some
20 changes. But, again, I don't remember that.

21 Q You don't remember any, right?

22 A No. No, I don't remember. I mean it's 17 years ago,
23 or 16.

24 Q Longer than that, sir.

25 A Oh, okay.

1 Q Mr. Echardt talks about the fact that we are trying to
2 minimize how much time was spent now on documenting these so
3 as to make our M6 milestone.

4 Do you see that, sir? It's highlighted there in front
5 of you.

6 A Yes.

7 Q And you don't really like to write a lot of detailed
8 documentation, right?

9 A Right. Yes, I really remember that. Some developers,
10 when they develop something, some mechanism, they at least
11 make a header file. Some developers are willing to spend
12 extra time to document in the way so that the third party
13 can develop. So the only thing sort of the publishing
14 division needs to do is just spell checking, but I was not
15 interested in that work.

16 THE COURT: Spending a lot of time writing keeps
17 you from going to meetings and documenting.

18 THE WITNESS: Documenting was not my favorite.

19 BY MR. JOHNSON:

20 Q You preferred to write code, right?

21 A Yes. I preferred, yes. Being here is not bad, but not
22 every day.

23 Q Mr. Nakajima --

24 THE COURT: That's a sound point actually, being
25 here as long as we have.

1 BY MR. JOHNSON:

2 Q Mr. Nakajima, let me show you what's been marked
3 Plaintiff's Exhibit 128. This e-mail chain, Mr. Nakajima,
4 is Mr. Belifiore's response to the e-mail sent by
5 Mr. Silverberg that we just reviewed a moment ago. Do you
6 recall who Mr. Belfiore was?

7 A Uh-huh. (Affirmative) He was a program manager, head
8 of program management.

9 Q In fact, I notice that he was actually listed as one of
10 the inventors on the shell extensions?

11 A Uh-huh. (Affirmative)

12 Q I was wondering if you could tell me what his
13 involvement was, if any, on the shell extensions.

14 A So the building of the software like Windows 95 is a
15 team effort, right. I mean I write code, and Joe was more
16 in charge of the user interface designs and everything. So
17 whenever you file a patent, you get special cubes as a prize
18 from the company to say you got a cube. So I end up having
19 20 cubes in my office I was so proud of. So I could
20 actually -- could have filed a patent just by myself because
21 I developed it. But do you want to work with that kind of
22 person? It's a team effort. So it is more appropriate to
23 bring in Joe to the name.

24 THE COURT: Actually I think there was somebody
25 else, too, wasn't there?

1 MR. JOHNSON: There is, Your Honor. There are
2 several people.

3 THE COURT: All of the State of Washington.

4 MR. JOHNSON: Yes.

5 THE WITNESS: Right. So they helped in some
6 degree, right. Joe's involvement in the code itself is
7 minimum, but, again, he was in charge of the user interface,
8 the user experience, so there is no reason to eliminate him
9 from the patent application. So he got a cube.

10 BY MR. JOHNSON:

11 Q Thank you, Mr. Nakajima.

12 If you look at the top paragraph of Mr. Belfiore's
13 e-mail, he talks about you, he's talking about you, and he
14 says, you are currently maintaining a slim document, and a
15 bunch of sample code. And it says, this minimal
16 documentation is needed by the mail team, Elseware for fonts
17 folders, et cetera. It's enough doc for people to
18 understand what we're doing and write some code.

19 Now this slim doc that we're talking about here, that
20 is not a document that is self-explanatory, right?

21 A It depends. So it's not nicely written.

22 Q Let's put it this way, it doesn't describe the APIs in
23 detail using the English language, right?

24 A Okay, so simply put this way, the minimum documentation
25 is actually just a header file, not documentation, just a

1 header file. And if the API was designed well, I hope the
2 idea is they did a good job, then a smart developer can
3 actually write extensions with no document, just a header
4 file.

5 But sometimes to write API itself, the API defined in
6 the header file is not clear, like the API's name is not
7 great, then we need to add some documentation to describe
8 some details. So the degree of details expand the
9 reachabilities. So if it's a well documented API, then the
10 developer can just write extensions without asking any
11 questions. If this is the only header file, it's harder,
12 they need to investigate, they need to ask a lot of
13 questions.

14 The slim document, again, maybe it's enough for most of
15 the people, but they may need to ask some questions.

16 Q That's what I'm getting at. If someone reads the
17 header file, for example, an ISV, they are going to need to
18 ask some questions, right?

19 A If it's only from the header file, yes, they need to
20 ask some questions. So, for example, this mail team was
21 able to ask some questions to me directly.

22 Q They could speak to you directly, right?

23 A Uh-huh. (Affirmative)

24 Q And the mail team being talked about there was Capone,
25 right?

1 A Yes.

2 Q And do you recall who Elseware was?

3 A I don't remember, but according to this it seems like
4 we had some third party helping building a fonts folder
5 extension.

6 Q So the Elseware company was also using the namespace
7 extensions to integrate into Windows 95, right?

8 A Seems like, yes.

9 Q So we've just found another way that you can use your
10 namespace extensions, right?

11 A Another way, yeah. Yes.

12 Q Of course, you can't respond to all the developers out
13 there that would have questions about these namespace
14 extensions. So like the Capone team could come talk to you,
15 but all these other ISVs, they can't come talk to, right?

16 A Yeah, it was -- yes, it was -- again, I don't like to
17 respond to e-mail either. So the number of people I can
18 support is limited. This is why we have a developer
19 relationship group who document and also answer questions
20 from ISVs.

21 Q Do you recall that there was also a Premier Support
22 group where you could call in to Microsoft and get
23 developers support with respect to APIs and Windows
24 operating systems?

25 A No, I don't remember that name, but I remember that

1 there were a group of people who are in charge of helping
2 ISVs to build applications, including extensions.

3 Q I think as we've discussed earlier, Capone was an
4 e-mail application, right?

5 A Yes.

6 Q And Microsoft had a strict rule that if its internal
7 applications were using certain APIs, then those APIs must
8 be published to ISVs as well, correct?

9 A Was a strict rule? I don't remember, but I think that
10 was a policy. Again, it's a -- I don't remember who said
11 that, but I think it was -- I think -- I don't remember the
12 timing, but once we started reading the market, ISVs started
13 complaining that Office team had some unfair advantage. So
14 this kind of policy became a standard at some point. I
15 don't remember exactly when.

16 Q Let me refer to -- you recall having your deposition
17 taken, right?

18 A Uh-huh. (Affirmative)

19 Q In this case?

20 A Okay. Yeah.

21 Q And Mr. Jacobs came and asked you questions. Do you
22 recall that?

23 A Not in detail, but I remember that meeting.

24 Q Let me just turn briefly to your deposition in this
25 case taken in February of 2009. I would like to refer your

1 attention to page 52, line 19, through 53, line 3.

2 MR. JOHNSON: Mr. Goldberg, if you could bring
3 that up.

4 BY MR. JOHNSON:

5 Q And the question was asked of you at that deposition,
6 do you recall what some of those political issues were that
7 you referred to? Your answer was, that the one thing I
8 clearly remember was the Capone was e-mail -- the exchange
9 team was the application work, not the part of the operating
10 system. Therefore, if we offer API like a namespace
11 extension to internal application team, we are supposed to
12 publish that API to a third party to be fair, right? That
13 was a strict rule inside Microsoft.

14 So does that refresh your recollection that, in fact,
15 you understood that in order to be fair, it was a strict
16 rule within Microsoft that if Microsoft's applications were
17 using these APIs, they had to be published, right?

18 A Yes. It seems like I used that word strict rule, yeah.
19 I would use more general term policy, but it seems like that
20 was my word.

21 Q Yes. That's what you believed, right?

22 A Right. I mean it's fair.

23 Q Yes, it is fair. I agree with you, sir, very much.

24 THE COURT: Yes, it's struck.

25 The roll of the eyes if you have an objection.

1 MR. JOHNSON: I want to get to that point, Your
2 Honor, where you will issue a ruling by me just rolling my
3 eyes.

4 BY MR. JOHNSON:

5 Q If you go back to Mr. Belfiore's --

6 THE COURT: I was looking down looking for an
7 objection.

8 BY MR. JOHNSON:

9 Q -- e-mail in the middle of the page --

10 MR. JOHNSON: Can we bring that back up?

11 BY MR. JOHNSON:

12 Q -- and there is an answer there with the three
13 asterisks, and it says -- from Mr. Belifiore, and it says,
14 we have sample code now and I think the API is pretty
15 settled. And then Kurt -- which I assume is Mr. Echardt --
16 question mark.

17 Do you see that there?

18 A Uh-huh. (Affirmative)

19 Q You would agree with me that settled means that the
20 chance of changing the API is small before the release,
21 correct?

22 A Uh-huh, yes.

23 Q Is that a yes, sir?

24 A Yes, or that the change might still come, but the
25 change will be small.

1 Q All these e-mails talk about the release that's coming
2 out with the M6 milestone, which is the beta release that
3 we've talked about. Do you happen to remember at all how
4 many thousands of sites the M6 beta was released to?

5 A No, I don't remember.

6 Q Let me show you what has been marked Plaintiff's
7 Exhibit 142.

8 MR. JOHNSON: Do you want these, Your Honor?

9 THE COURT: No. No. I can read them. Thank you,
10 though.

11 Do you want a copy?

12 BY MR. JOHNSON:

13 Q This is an e-mail string involving you and a Mr. John
14 Kallen. I may be pronouncing that wrong. It looks like he
15 may be from Norway or Finland, or one of those Scandinavian
16 countries given how his name is spelled.

17 Do you know Mr. Kallen?

18 A I vaguely remember, because I remember that somebody in
19 the Capone team was sort of the primary contact for me. But
20 I don't remember the name, but according to this e-mail was
21 that person. I'm really not good at remembering people's
22 name.

23 Q Mr. Kallen writes to you that he believes someone is
24 interested in writing extensions to Capone's mail client to
25 view Lotus's server would want to use the IShellView

1 interface. That's one of the namespace extension
2 interfaces, right?

3 A Right.

4 Q Not only is Chicago Explorer ready for this kind of
5 action, but the Capone Explorer shell that I've written
6 expects IShellView and presents an IShellBrowser interface
7 to those IShellViews.

8 So that makes sense to you, right? I'm sure it doesn't
9 make sense to a lot of people in this room, but to you that
10 makes sense. This was another way you could use the
11 namespace extensions to create a viewer in order to view
12 client e-mail from Lotus servers?

13 A Okay, yes. So, yes, it's all talking about the
14 namespace extension and possible creation of namespace
15 extension which can browse into Lotus Notes database, yes.

16 Q So that's another way we can use your namespace
17 extensions, right?

18 A Right. So whenever somebody has a database like this,
19 which is not using the file system, yeah, these are a good
20 application of the namespace extension mechanism.

21 Q Lotus Notes is just like that, isn't it?

22 A Yes.

23 Q So this would be another great use of the namespace
24 extensions for the Lotus Notes product?

25 A Yes.

1 Q Now Mr. Kallen goes on to say -- asks if he can give
2 the external contracting company the header file, which I
3 call this shell object H. I don't know how you would say
4 it, but that's the header file for the extensions, right?

5 A Yes.

6 Q And he says appropriately stripped of internal stuff,
7 and asked whether there was a plan to make these interfaces
8 public either in M6 or when Chicago ships. And, of course,
9 you state up in your e-mail that you told him yes, it was
10 going to be published, right?

11 A Okay. So again, I don't remember any of those, but
12 according to this e-mail, it seems like the shell object --
13 the header file had some comments indicating a certain
14 portion internal. So as long as John removes those internal
15 pieces from the shell object, they can give it to third
16 party. And that was a question from him, and my answer was
17 yes. Okay.

18 Q I would like you to focus at the end of Mr. Kallen's
19 e-mail, he states, down at the bottom, these interfaces are
20 nice as they're the result of many months of tuning. It
21 would be good to reuse them.

22 Can you provide us with any insight as to what
23 Mr. Kallen means when he says that these interfaces are nice
24 as they're the result of many months of tuning?

25 A So whenever this kind of extension mechanism -- when we

1 build, it's very difficult to design everything on the paper
2 or the meeting room. So you actually need a real customer
3 to work with. So I remember that the Capone team, the
4 e-mail team was one of the very few -- the client, from my
5 point of view, to refine the namespace extension mechanism.

6 So way before this kind of discussion, I created
7 something and delivered to them, and they started testing.
8 They gave me feedback and improve, improve. That kind of a
9 process, we call it tuning. So according to him, right,
10 because we put a lot of effort into it, the namespace
11 extension mechanism was very good. So he -- yeah, so he
12 thinks that makes sense to use it.

13 Q You would agree, wouldn't you?

14 A I agree. That was my work.

15 Q Mr. Nakajima, I would like to show you what's been
16 marked Plaintiff's Exhibit 176. The top e-mail here is
17 actually from you. And do you remember this one? You were
18 basically trying to straighten out the folks about what the
19 shell extensions did and how they did them?

20 A Uh-huh. (Affirmative) I remember this discussion.

21 Q What you did was to insert within the question and
22 answers provided by Mr. Dave Seres with explanations of
23 where he was right or where he was wrong with respect to his
24 description of how the shell extensions worked, right?

25 A Uh-huh. (Affirmative)

1 Q Is that a yes, sir? I'm sorry.

2 A Yes.

3 Q I'm sorry to ask you that, but uh-huh sometimes is
4 misinterpreted on the record.

5 Okay. If you turn for a moment to the second page of
6 that document, and focusing on the first full question and
7 answer. And the jury has already seen this. We've talked
8 about this with Mr. Muglia, so I'm not going to spend a lot
9 of time on this. But if you would just look at your
10 response to this question and answer, which has the three
11 pound signs on it.

12 You can just read that to yourself.

13 A The answer must be yes. To achieve our size goal, we
14 decided to put a subset implementation of our OLE2,
15 lightweight binder, in the shell, so that we can run the
16 shell and old Windows apps without loading OLE2, but it uses
17 the same algorithm when loading in In-Proc server DLLs.
18 When we switch to the real OLE2, nobody will notice the
19 difference.

20 Q So what you were saying here is this wonderful
21 mechanism you created was going to work even when we got
22 machines that could handle full OLE, right?

23 A Right.

24 Q And nobody would notice the difference, right?

25 A Right, yes.

1 MR. JOHNSON: Excuse me for the delay. I'm
2 actually eliminating questions because he's already answered
3 them.

4 THE COURT: You are doing fine.

5 MR. JOHNSON: Thank you.

6 BY MR. JOHNSON:

7 Q Turning to the last page of this exhibit and looking at
8 the second full question and answer there -- again, you
9 really don't need to read this out loud, but if you would
10 just look at your answer starting with this message is wrong
11 again. Just read it to yourself for a moment.

12 A Okay. Yes, I read it.

13 Q So what you are saying here to Mr. Seres is not only
14 will this work on future operating systems that are OLE
15 based, but the ISVs are not going to have to rewrite their
16 extensions, correct?

17 A Yes, right.

18 Q And they will continue to work in future versions of
19 Windows, right?

20 A Yes.

21 Q Finally, if we turn back briefly to the first page of
22 this exhibit, looking at the top of your e-mail to Mr. Chase
23 and Mr. Seres and others, it looks like a whole bunch of
24 people there, if you look down in that first paragraph
25 there, starting with the sentence we took this approach

1 because --

2 MR. JOHNSON: If we could highlight that,
3 Mr. Goldberg. From that point halfway down the paragraph.

4 Just all the way down to that full paragraph.
5 There, that's great.

6 BY MR. JOHNSON:

7 Q If you could just read that again to yourself,
8 Mr. Nakajima. I don't think it's necessary to you read it
9 out loud.

10 A Yes, I did. Okay.

11 Q So, again, what you are saying here is that the
12 namespace extension APIs would be compatible with future
13 versions of Windows both today and tomorrow, right?

14 A No. This is not talking about the shell extension
15 itself. The shell extension mechanism uses the OLE
16 compatible mechanism to load third-party applications. So
17 even though we replace this lightweight version to a full
18 version, the shell extension will be loaded in the same
19 manner.

20 Q My question was a bad one. This discussion here is
21 about all the shell extensions, right?

22 A No. This discussion is about the lightweight OLE
23 binder, not about shell extension.

24 Q Right, but the lightweight OLE binder is what you used
25 to implement the shell extensions?

1 A Yes.

2 Q And when you say in the last sentence there that's
3 highlighted, this compatibility is the key of this
4 technology, and we should emphasize it, what do you mean by
5 that?

6 A So, first of all, this technology means lightweight
7 OLE, not the shell extension. So the lightweight OLE is
8 really the bridge from -- between the current version of
9 Windows, Windows 95, and the future version of Windows which
10 comes with OLE. And so that was the key because I remember
11 that there was a lot of confusion because I chose not to use
12 OLE, even though OLE was to become a standard. But in order
13 to make it compatible, I made it compatible. It's a subset
14 of OLE. So that was a trick. I mean it was a trick. It's
15 a typical engineering compromise, which I was really, really
16 good at, but created some confusion even inside. So I
17 needed to explain again and again to everybody to say this
18 is good for us and ISVs.

19 Q And it's good not only today but tomorrow?

20 A Right, tomorrow, yeah. For tomorrow, right.

21 Q I would like to hand you what has been marked
22 Plaintiff's Exhibit 181.

23 Now, Mr. Nakajima, is this the header file that we were
24 talking about for the shell extensions that you created?

25 A Yes.

1 Q And is this the slim document you were maintaining or
2 did the slim document contain more than this, if you know?

3 A I don't remember. But it has some comments, so it's
4 more than just a header file.

5 Q But generally when Microsoft offers an SDK, software
6 developer kit, to ISVs, they generally come with more
7 documentation than just the header file, right?

8 A Yes.

9 Q That kind of documentation is more complete and easier
10 to use, right?

11 A Yes.

12 Q I think you actually testified on direct, and I want to
13 get the timing down here. I believe you stated that the
14 Cairo shell was canceled?

15 A Uh-huh, yes.

16 Q And do you recall that that happened in the fall of
17 1994?

18 A Again, this is not based on my memory, but because
19 somebody showed me the e-mail from Bill indicating that the
20 decision was made, that was October '94, so that's why I
21 believe that meeting happened in either October or September
22 of '94.

23 Q And at the time Cairo was canceled, about the same time
24 or maybe just a little before that, a decision had been made
25 to use the Chicago shell on Windows NT, right?

1 A I don't remember the order, but at some point, yes, the
2 company made a decision to use Chicago shell for Windows NT
3 as well.

4 Q And one implication of that decision was that the
5 namespace extension APIs started working on Windows NT,
6 right?

7 A Yes.

8 Q Just so we can get the timing down here because I think
9 it's important, let me show you Plaintiff's Exhibit 216.

10 Mr. Nakajima, this is an e-mail from Mr. Allchin to the
11 Windows NT group. Do you recall seeing this e-mail before?

12 A No. No.

13 Q If you could turn to the second page, the second full
14 paragraph, and just drawing your attention to that paragraph
15 there, it says, Bill recently made a decision to move the
16 Cairo shell effort to Office.

17 So that would be effectively when Cairo was canceled,
18 right?

19 A Uh-huh, yes.

20 Q And Mr. Gates made that decision because he wanted the
21 Office group chartered with taking on Lotus Notes user
22 interface and because he felt it was very important that
23 Office take advantage of any new shell features first,
24 right?

25 A Uh-huh. (Affirmative) I can read it, yes.

1 Q At this point in time Office was now explicitly
2 planning on building shell features such as their own
3 Explorer in their 1996 product, right?

4 A Yeah, the e-mail said so. Actually I didn't know that.

5 Q Let's go to the next paragraph there just briefly. It
6 starts out, given the above decision, we have decided to use
7 the Chicago shell code base for the NT workstation.

8 That's the decision we were just talking about, right,
9 the decision to move the Chicago shell code base onto
10 Windows NT?

11 A Yes.

12 Q So that decision was made at the same time as the
13 decision to cancel Cairo, right?

14 A According to this e-mail, yes.

15 Q That time period, if we look at the date of
16 Mr. Allchin's e-mail, going to the front again, would have
17 been at some point prior to September 27th, 1994, right?

18 A Uh-huh, yes.

19 Q Mr. Nakajima, do you understand that once a beta goes
20 out, ISVs start developing their products using the
21 documented APIs?

22 A Yes, I understand.

23 Q And one of the purposes of widely distributing a beta
24 release is to provide feedback to Microsoft about the
25 features being offered by the new operating system, right?

1 A Yes.

2 Q And do you recall whether there was any feedback from
3 ISVs regarding the shell extensions?

4 A Yeah, I do remember some. I actually went to some
5 supporting site I think. I don't remember, it was like a
6 discussion group that ISVs can post comments and questions,
7 and I read some of those, yes.

8 Q And was that feedback good? Did they like your
9 extensions?

10 A Uh-huh, yeah. Yeah.

11 Q These were ISVs that you were talking to, right?

12 A Third-party ISVs.

13 Q You certainly don't recall them giving you any reason
14 to alter the design of your shell extensions, do you?

15 A I don't remember, but it's quite typical they make some
16 requests, additional features, something like that.

17 Q But what I'm talking about, none of the ISVs said to
18 you, these extensions are terrible, you need to change them
19 completely?

20 A No, I don't remember. Actually I tend to forget that
21 kind of feedback.

22 Q So what you do remember is that they liked them, right?

23 A Right. I feel like every ISV in the world loves them.

24 THE COURT: You have failed memories about bad
25 memories. But you don't recall anything like that?

1 THE WITNESS: No.

2 BY MR. JOHNSON:

3 Q Mr. Nakajima, does Microsoft have people who are
4 responsible for testing the beta versions of the software
5 before it is released to ISVs?

6 A Uh-huh. (Affirmative) We do have a testing group.

7 Q And would they be known has a quality assurance group?

8 A Yes.

9 Q So before any beta is released out to the public, the
10 software has to go -- undergo extensive testing, right?

11 A Yes.

12 Q To make sure it's all functioning and working well?

13 A Yes.

14 Q You don't just spring this code on ISVs without making
15 sure that it's fully functional and working well, right?

16 A Yes.

17 Q We may have covered this, but just to make sure, apart
18 from anything that might have been said to you by the Cairo
19 people, did you get any feedback from any source after the
20 release of the M6 beta about any problems with the shell
21 extensions, including the namespace extensions?

22 A Somebody -- so -- so I do remember that the Cairo team
23 didn't like it.

24 Q Yes, I know that, and I was trying to exclude them from
25 your answer. Apart from the Cairo team, anybody else?

1 A I don't remember.

2 Q Do you recall whether you made any changes at all to
3 the shell extensions, including the namespace extensions,
4 between the release of the M6 beta and Mr. Gates' decision
5 to de-document the namespace extensions?

6 A I think I made some changes to the header file so that
7 those hidden APIs are not part of the SDK.

8 Q That was after Mr. Gates' decision?

9 A After Mr. Gates' decision, yes.

10 Q What I'm talking about is the time period between the
11 release of the M6 beta to the ISVs up to the point of
12 Mr. Gates' decision, not after. So between the M6 beta and
13 up to the point before Mr. Gates made his decision, let's
14 say October 2nd, 1994, do you recall even making any changes
15 to the shell extensions?

16 A So how long was that period from M6 to the decision?

17 Q From June of 1994 to the very first couple days of
18 October 1994.

19 A So four or five months? Yeah, so it is possible that I
20 made some changes, but I don't recall any of those.

21 Q One of the things you said in your direct testimony was
22 that at some point you were given this -- I think you said
23 hundreds of pages of document by the Cairo people setting
24 forth what they thought of your shell extensions; is that
25 right?

1 A Right.

2 Q This document was a big thick one, right?

3 A Yes.

4 Q Do you still have that document?

5 A No. Actually I discarded all the documents and e-mail
6 when I left Microsoft. It's confidential documents, so I'm
7 not supposed to keep it.

8 Q Understood, sir. Was that document sent to you, do you
9 recall, electronically?

10 A I don't remember, but I don't remember printing it.

11 Q Do you recall who authored that document?

12 A The Cairo team. I don't remember any single author.

13 Q Prior to your deposition in this case in 2009, did you
14 get a chance to review that document?

15 A No.

16 Do you have it?

17 Q I'm not allowed to make comments, so I've just got to
18 ask you another question.

19 Prior to your testimony in this case today, did you get
20 a chance to see that document?

21 A No. I mean the -- after I left Microsoft?

22 Q Yeah.

23 A Of course, I looked at it at that time. But after I
24 left Microsoft, no.

25 Q You haven't seen it since?

1 A No. It is quite possible that is in my memory, because
2 I tend to remember something good. That was after a 30-page
3 document became a 200-page document. Quite possible.
4 Because that's a good story to tell to my kids, to say,
5 yeah, I defended against a 200-page document on one CD.
6 It's like a war memory. I fight against a hundred people,
7 and actually it was only ten.

8 Q Mr. Nakajima, you already have this exhibit up there,
9 but rather than you going through the pile, this is
10 Plaintiff's Exhibit 1 --

11 A Thank you.

12 Q -- the e-mail from Mr. Gates of his decision.

13 If you look at Mr. Gates's e-mail, in the first
14 paragraph there, the last sentence -- next to last sentence,
15 Mr. Gates says, the shell group did a good job of defining
16 extensibility interfaces.

17 So that would be your group, right?

18 A Yes.

19 Q And Mr. Gates was expressing that you did a good job,
20 right?

21 A Yes.

22 Q And if you look in the next paragraph, in the last
23 sentence again, Mr. Gates says, this is not to say that
24 there is anything wrong with the extensions, on the
25 contrary, they are a very nice piece of work.

1 This is again Mr. Gates reflecting that you had done a
2 really nice piece of work, correct?

3 A Yes. Yeah.

4 Q And do you recall that Mr. Gates loved the namespace
5 extensions?

6 A I don't remember that detail, but obviously I was
7 treated really well in the company, so I feel like Bill
8 liked what I did.

9 Q You would agree with me, sir, as of October 1994, when
10 Mr. Gates made this decision to de-document the namespace
11 extension APIs, there was nothing wrong with the namespace
12 extensions, right?

13 A Yes and no. So, right, as we have been discussing, we
14 made some compromise, like the robustness, or some
15 flexibilities. So from my point of view, nothing is
16 perfect. You make some decisions, but if you are trying to
17 make everything perfect, then you never ship the product.
18 So you have to make some sacrifice, some decisions. I call
19 it the engineering compromise to release the product.

20 But in that sense, it's a good piece of work. But if
21 you say is this perfect, then the answer is no. I think
22 Bill knew that really well, but in this kind of e-mail, it's
23 a very important decision, he needs to be nice to everybody,
24 not only to the Chicago team, but the Cairo team as well.
25 So this is -- in my sense, this is the sort of the

1 politically correct statement.

2 Q I think you said that this decision was really more a
3 matter of politics than anything else, right?

4 A Right, that was my interpretation.

5 Q I would like to show what you has been marked
6 Plaintiff's Exhibit 224.

7 Mr. Nakajima, do you recognize this e-mail from
8 yourself --

9 A Yes.

10 Q -- dated October 10th, 1994?

11 A Yes. Yeah, I see that.

12 Q What were you doing here?

13 A This e-mail is a follow-up e-mail regarding that
14 decision to pull namespace extension out of the SDK.

15 Q Do you understand correctly that essentially you got
16 the job of hiding one of the shell extension mechanisms as
17 you state in the first paragraph there?

18 A Yes. I needed to make some changes to the header file
19 to hide those interfaces.

20 Q If we look below, there's the details with respect to
21 exactly what you were doing, right?

22 A Yes.

23 Q And it says with respect to -- I think I'm reading this
24 right, IShellFolder and IEnumIDList, they became a read
25 only; is that right?

1 A No. No. I think IShellFolder -- oh, became read only,
2 yes. Okay.

3 Q And that meant that ISVs could no longer customize
4 their implementation, right?

5 A Uh-huh. (Affirmative)

6 Q Is that a yes?

7 A Yes. Yes.

8 Q And above these APIs are namespace extension APIs,
9 right?

10 A Yes.

11 Q And then down a little further it says -- it's got
12 IShellBrowser, IShellView, IPersistFolder, and
13 ICommDigBrowser, and all of those became private?

14 A Yes.

15 Q And all four of those APIs are also namespace extension
16 APIs, right?

17 A Yes.

18 Q And what does it mean for an API to become private?

19 A Probably meaning the third party cannot use them
20 anymore.

21 Q Mr. Nakajima, I think you testified earlier today that
22 when you were creating these namespace extension APIs, you
23 chose to have them open up in the same process because you
24 had to deal with that four megabyte size limitation, right?

25 A Yes.

1 Q And having the shell extension running in a separate
2 process would have required more memory?

3 A Yes.

4 Q But it would be perfectly reasonable to change the
5 mechanism of those APIs if you had enough memory so that the
6 namespace extension would open up in a separate process,
7 right?

8 A It's possible, yes.

9 Q Did you ever change the namespace extension APIs so
10 that they would open up in a separate process?

11 A I don't remember the detail, but, again, I think I've
12 read too many e-mails during this process that seems like we
13 made a decision to open some of the namespace extensions in
14 a separate process. I think we called it the rooted
15 explorer. So that instead of e-mail folders show up in the
16 left pane, it will open a separate window but still uses the
17 same interface mechanism.

18 Q So when it opens up in a separate window, that means
19 it's running in a separate process?

20 A In this case, yes. But it's not integrated anymore.
21 It's more like a separate window.

22 Q Understood. You called that rooted extension as
23 opposed to non-rooted extension, right?

24 A Right, because the extension now up here is of the root
25 of the tree, right, e-mail folder is a root now instead of a

1 branch inside of the tree.

2 Q So do you recall, sir, that that fix that you are
3 talking about of having the -- of having a separate window
4 open, doing a rooted extension occurred right after
5 Mr. Gates' decision?

6 A Yeah. That is such a detail I don't recall. But,
7 again, some of the e-mail I saw during this process
8 indicated that we made that decision.

9 Q Let me show you Plaintiff's Exhibit 279.

10 Just very quickly, if you refer down to Mr. Belfiore's
11 e-mail, down at the bottom of the page there, I just want to
12 refer you to this first paragraph there.

13 MR. JOHNSON: If we could bring that up.

14 BY MR. JOHNSON:

15 Q It says, there shouldn't be any issues with shell
16 extensions being run robustly on NT. The big ones,
17 namespace extensions, end up in a separate process.

18 So my question to you is what Mr. Belfiore is talking
19 about is using this rooted extension, right?

20 A Yes. I can interpret it that way, yes.

21 Q And, in fact, this e-mail is dated in March of 1995.
22 You started doing that with the namespace extensions way
23 back in November of 1994, correct?

24 A Again, I don't remember any of those details. So if
25 you asked me a question do I remember that, then the answer

1 is no.

2 Q Let me see if I can refresh your recollection. This is
3 Defendant's Exhibit 84.

4 Mr. Nakajima, if you could turn to the second page
5 where it says number six, questions and answers. And this
6 is an e-mail that was actually sent to Mr. Gates dated
7 November 12th, 1994 from a Mr. Struss.

8 I just want to draw your attention to the paragraph one
9 there and the second half of it starting with, the semantics
10 of these APIs, it states, the semantics of these APIs also
11 changed slightly. Apps that use these will come up in a new
12 explorer window and the left-hand pane will only represent
13 the hierarchy that the applications present, previous
14 semantics allowed apps to show their hierarchy along with
15 file systems and run in the same window.

16 So my question to you, sir, is this is exactly what you
17 were talking about using a rooted extension instead of a
18 non-rooted one, right?

19 A Yes.

20 Q So we can tell that as early as November 12th, or
21 sometime before November 12th, 1994, this change had already
22 been implemented?

23 A November -- uh-huh, yes. It seems like that was
24 November. Yes. Okay, yeah, I agree.

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

1 Exhibit 355. This is a July 1996 article that appeared in
2 the Microsoft Systems Journal written by David Campbell.

3 Do you know Mr. Campbell?

4 A I don't remember, but I probably do.

5 Q Turning to the last page of this exhibit just briefly,
6 you will see at the very end Mr. Campbell says he would like
7 to thank -- and he lists a number of people --

8 MR. JOHNSON: Can we bring that up?

9 BY MR. JOHNSON:

10 Q -- including you?

11 A Uh-huh. (Affirmative)

12 Q So do you recall helping Mr. Campbell with this
13 article?

14 A I do remember I helped somebody to write this article.
15 I just don't remember his name.

16 Q This article is when the namespace extension APIs were
17 re-documented, right?

18 A Uh-huh. (Affirmative) It seems like because the date
19 is '96, right?

20 Q July of 1996, right?

21 A Yes.

22 Q And just going back to the first page, then --

23 MR. JOHNSON: Just the first paragraph there after
24 Mr. Campbell's name, highlight that for a minute.

25 //

1 BY MR. JOHNSON:

2 Q Mr. Campbell states he's a support engineer on the
3 Microsoft Premier Developer Support team, who specializes in
4 Windows shell extensions as well as Microsoft visual C++.
5 Apparently he also likes cheese.

6 Does that refresh your recollection at all that
7 Microsoft has this Premier Developer Support team and they
8 have developers who specialize in particular things, that
9 ISVs can call in and get information about these APIs?

10 A Again, I don't remember. But I do believe so, yeah.

11 Q Now if you look down at the next paragraph, this
12 article about namespace extension APIs says, that this
13 mechanism, the namespace extension APIs, is in both Windows
14 95 and Windows NT, right?

15 A Uh-huh. (Affirmative) It says so, yes.

16 Q That would be true, you know that for a fact, right?

17 A Right, because the Windows NT -- yeah. The Chicago
18 shell become the shell of Windows NT, yes.

19 Q And if we go to the bottom of the first page, then,
20 under the heading types of namespace extensions --

21 MR. JOHNSON: If we could highlight the first
22 couple sentences of the second paragraph there. Could we
23 bring that up?

24 BY MR. JOHNSON:

25 Q It states, the difference between rooted extensions and

1 the non-rooted extensions is how they are used. There is no
2 code difference between the two.

3 And you would agree with that, right, Mr. Nakajima,
4 there is no code difference between the two extensions,
5 between rooted and non-rooted, right?

6 A I agree.

7 Q And a rooted extension just means it stands alone, as
8 they say here, right?

9 A Yes.

10 Q If we stay on this first page just a moment. Go up
11 towards the top.

12 MR. JOHNSON: If we could highlight the third
13 paragraph which begins, okay, but why do I care.

14 BY MR. JOHNSON:

15 Q It goes on to say, this namespace mechanism can be
16 extended to include new items. You can write a namespace
17 extension to add your own custom data, and custom views on
18 that data, into the Explorer's internal namespace.

19 That's exactly how you intended the namespace
20 extensions to operate, right, Mr. Nakajima?

21 A Yes.

22 Q So basically the only difference between a rooted
23 extension and a non-rooted extension is that a rooted
24 extension opens up in its own window?

25 A Uh-huh, yes. It doesn't talk about the process, but I

1 don't remember that detail.

2 Q Well, if we look at the second page of this exhibit,
3 actually got some pictures. Pictures are always good.

4 MR. JOHNSON: If we could highlight that top
5 explorer there. Just the top one, not the CAB file.

6 BY MR. JOHNSON:

7 Q This shows an example of a rooted namespace, right?

8 A Yes. The start menu is the root of the tree on the
9 left side.

10 Q That's right. So only that namespace comes up in this
11 particular Windows Explorer?

12 A Yes.

13 Q Then if we look down a little further and highlight
14 that other Explorer window, this is an example of a
15 non-rooted namespace where the start -- the same start menu
16 comes up in the Windows Explorer with all the other
17 namespaces, right?

18 A Yes.

19 Q So the namespace extensions as originally implemented
20 in the M6 beta were these non-rooted extensions, correct?

21 A Again, it seems like -- I believe so. Again, I don't
22 recall that detail. But according to this document,
23 indicates that idea of rooted extensions came after that
24 issue.

25 Q If we go down to just under that Windows Explorer there

1 for the non-rooted extension, it states --

2 MR. JOHNSON: You lost a little bit of the end
3 there, Mr. Goldberg. If we could get that up.

4 There we go. Just highlight it.

5 BY MR. JOHNSON:

6 Q It states, the implementation of the namespace
7 extension is basically the same for both kinds. Which
8 method you use depends on your extension and is a matter of
9 style and common sense as much as anything else.

10 You agree with that, right, sir?

11 A Yeah, it's a very ambiguous statement.

12 Q But you would agree that this publication in July of
13 1996 was telling developers, telling ISVs that they could
14 use rooted extensions or non-rooted extensions, and the
15 method which you used just depends on your extension and is
16 a matter of style and common sense, right?

17 A Right, I agree. Yeah.

18 Q If you look down at the bottom of that page --

19 MR. JOHNSON: If you can highlight the another
20 difference and the paragraph after it.

21 Bring that up and make it a little bigger,
22 Mr. Goldberg, so people can actually read it. Thank you.

23 BY MR. JOHNSON:

24 Q Mr. Nakajima, if you could read that to yourself first.

25 A Okay. Yeah, I read it.

1 Q This is talking about the entry point from the user's
2 point of view, right?

3 A Yes. Yeah, it talks about where in the regular
4 namespace, the non-rooted -- the custom folder appears, yes.

5 Q So the custom folder can actually appear right on the
6 desktop, right?

7 A Yes.

8 Q And the custom folder could fit into or go into the My
9 Computer folder, for example, right?

10 A Yes.

11 Q And so we're not relegated, or we don't have to limit
12 ourselves to just appearing in the Windows Explorer, right?

13 A I lost it.

14 Q I say, if we create one of these custom namespace
15 extensions, we could put it on the desktop?

16 A Oh, yes. Yes. Yeah, you can put it on the desktop.

17 Q So we don't have to be limited to just having it come
18 up in the Windows Explorer, right?

19 A Okay. So more precisely speaking, the desktop has no
20 tree pane or view pane, so only can -- only thing you see is
21 a list of icons. So one of the extension can chose to put
22 the icon there on desktop. But when the user double clicks
23 that icon, Explorer opens up.

24 Q Understood. But what I'm saying is the user could
25 actually put that right on his desktop and by clicking it go

1 right to that particular namespace, and whatever was in
2 there would show up in the viewer on the right side, right?

3 A The user cannot chose to put it on the desktop. The
4 ISV choses to put it on the desktop, and then the user can
5 open it up.

6 Q Good point. But what I'm saying is we're not simply --
7 the developer is not limited to where he can put this
8 functionality, right?

9 A But limited in the sense that it should be somewhere in
10 the namespace extension, either at the desktop or somewhere
11 underneath the desktop.

12 Q So, for instance, in that demonstrative that you were
13 looking at you talked about the blue in the background.
14 That was the desktop, right?

15 A Yes.

16 Q So you could take one of these custom folders and
17 actually have it appear as an icon right on the desktop?

18 A Yeah, only icon, but not the view.

19 Q When you press on it, it would open up the Windows
20 Explorer and would show you your custom folder?

21 A Right, but one of the important detail is -- that we
22 have been talking about is this third-party code running
23 In-Proc, inside a process versus outside a process. But
24 putting the icon on the desktop is simply putting the icon.
25 So at that time when the user sees the custom folder icon on

1 the desktop, the third-party code is not running yet. The
2 third-party code runs only when user opens the Explorer
3 window. So the very important distinction is the
4 third-party code will never run inside the desktop process,
5 but only in the Explorer process.

6 Q Understood. And these namespace extensions use these
7 In-Proc DLLs, which means in process DLLs?

8 A Yes.

9 Q And they use those in process DLLs whether it's a
10 rooted extension or a non-rooted extension, right?

11 A You're right.

12 Q So they therefore continue to run in process, it's just
13 a question of whether they are in their own window or in the
14 Windows Explorer, the full window, right?

15 A So this is the detail I don't remember, but it is
16 possible that we chose to create another process, separate
17 process from the usual Explorer when we open a rooted
18 Explorer. Again, I don't remember exactly, but all those
19 documents I read indicate that that was the decision somehow
20 we made. We made the system more robust.

21 Q But with respect to the namespace extension APIs, they
22 had not changed at all from the time they were published in
23 June of 1994 to the time that they were republished in July
24 of 1996, correct?

25 A Again, it is possible that some minor change has been

1 made. But overall, the architect was the same, yes.

2 Q I would like you to turn briefly to page 4 of this
3 exhibit. Looking down at the section at the bottom, anatomy
4 of a namespace extension, it provides the reader with a
5 number of things that can be done with namespace extensions
6 in the first paragraph there. If you would look at the
7 sentence beginning, this new object can be used for any
8 number of things.

9 A Right, indicating their many use.

10 Q Including displaying the contents of your e-mail inbox
11 or Internet newsgroups, the contents of a zip file or a
12 database of some sort, document management system, or
13 whatever?

14 A Yes.

15 Q So certainly it's fair to say it's not even limited to
16 the items listed here?

17 A Right.

18 Q It's only limited by the imagination of the developer?

19 A Right. You're right. It's up to ISVs.

20 Q So it's fair to say that the namespace extensions are
21 not at all about opening applications through the Windows
22 Explorer, but rather creating virtual folders of information
23 from many different sources, correct?

24 A Yes.

25 Q So, for instance, if a word processing application

1 wanted to include a document management system within their
2 application, you could use these namespace extensions to
3 have that document management system show up in the
4 Explorer, right?

5 A Yes, especially if they have their own database, it
6 does make sense to do that.

7 MR. JOHNSON: Your Honor, do you want to take
8 lunch?

9 THE COURT: I was hoping to finish with
10 Mr. Nakajima before lunch, but if that's not possible,
11 then --

12 MR. JOHNSON: I don't think I'm going to be long,
13 but I don't think it's fair to keep us from lunch.

14 THE COURT: Let's take lunch, and we'll be back in
15 20 minutes.

16 (Recess)

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