

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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