

1 (Recess)

2 (WHEREUPON, the jury enters the proceedings.)

3 THE COURT: Mr. Gates, if you will resume the  
4 stand, and, Mr. Holley, you may resume the questions.

5 MR. HOLLEY: Thank you, Your Honor.

6 BY MR. HOLLEY

7 Q. Mr. Gates, I now would like to turn to the topic of  
8 Windows 95. When did Microsoft start developing the product  
9 that became known as Windows 95?

10 A. Well, the previous means of release of Windows was  
11 Windows 3.0 and that was in 1990, and we did some  
12 intermediate work, Win 3.1, Windows for WorkGroups, but  
13 starting in '91 a lot of our focus was on the major release  
14 that would become Windows 95 that was code named Chicago.

15 Q. Did Microsoft seek to make Windows 95 backwardly  
16 compatible with any of its other products?

17 A. Yeah. We wanted to run as much of MS DOS and Windows  
18 software as possible, so that people could upgrade to the  
19 new operating system without having to change their  
20 applications.

21 Q. When you say they wouldn't have to change their  
22 applications, how would they use the ones they already had  
23 on the new operating system?

24 A. Well, if you achieve full compatibility then they  
25 simply were able to take the actual application, the binary

1 of the application they have and it runs automatically on  
2 the new system.

3 Likewise, you can use the same hardware and the same  
4 peripherals, and so you would just upgrade to Windows 95 --  
5 upgrade your Windows to Windows 95 and then keep using those  
6 applications. In some areas you might decide to get an  
7 updated Windows 95 application, but that is your choice.  
8 You could keep using the ones you had before.

9 Q. How, if at all, was Microsoft's effort to develop  
10 Windows 95 effected by the desire to maintain the backward  
11 compatibility with MS DOS and 16 bit Windows applications?

12 A. I would say that it is the major constraint on the  
13 entire project, and we had lots of engineers and lots of  
14 testers who were constantly running the old applications  
15 trying to see if they worked the same way, that is, they  
16 worked correctly on Windows 95, worked the same as they had  
17 worked on DOS and Win 31.

18 Q. In developing Windows 95, what was the relevant  
19 allocation of resources to development versus testing?

20 A. Well, you would say testing is the majority because in  
21 terms of the headcount there were about as many testers as  
22 there were engineers, but the engineers would spend part of  
23 their time developing and part of their time helping to fix  
24 things, or helping with testing, and the testers would spend  
25 all of their time on test related activities. So making

1 sure that it worked well, including backwards compatibility,  
2 was the biggest part of the entire project.

3 Q. Now, the jury has heard references to something called  
4 a bug in software development.

5 Can you explain what that is?

6 A. Well, if you have something that is wrong, you don't  
7 like -- in an extreme case that it just does not work at  
8 all, that is a software bug. When you have a large  
9 development process like the Chicago project, Windows 95,  
10 there would be a lot of different bugs that you would  
11 identify and you would keep a bug database and you would  
12 keep track of how many you closed and what new ones were  
13 coming in.

14 Q. Did Microsoft do any testing of Windows 95 with new  
15 applications being written for the new operating system?

16 A. Well, yes. We had our own applications development for  
17 Windows 95 going on, and we had other third parties who were  
18 doing Windows 95 application development, so we would test  
19 that, but the bulk of the stuff, software-wise that we had  
20 to test was the install base of DOS applications and Windows  
21 applications.

22 Q. In the course of developing Windows 95, did Microsoft  
23 distribute any prerelease versions of the new operating  
24 system to independent software vendors or ISVs?

25 A. Yes. It is very typical at various points in time to

1 send out early copies of the software, sometimes called beta  
2 copies of the software, because that helps you get feedback  
3 and gives people a sense of how it is coming along. You  
4 know, based on what people tell you you decide what you're  
5 going to keep and what you're not going to keep, what you're  
6 going to improve. It is an important feedback loop to have  
7 them try it out as well as the internal groups.

8 Q. When Microsoft distributed these beta test versions of  
9 Windows 95 that you referred to, was Microsoft committing  
10 that everything in the beta version would be in the final  
11 product?

12 A. No. We were always very explicit that, hey, this is  
13 software. It is engineering development. We want your  
14 feedback. We don't know when it is going to get done or  
15 which of these features will be in the final product, but we  
16 would like to hear from you.

17 Q. Did Microsoft tell ISVs about planned features of  
18 Windows 95 even before there was code running for the new  
19 operating system?

20 A. Yes, we did. We were very open about what we were  
21 planning to do. It was very helpful to us to get people's  
22 feedback. It shaped how we prioritized the work. The  
23 number of things we could have done was so large that there  
24 was no way that we could do them all, and that marketplace  
25 input shaped what eventually went into the Windows 95

1 product.

2 Q. When Microsoft gave ISVs an advanced look at the  
3 features that Microsoft was thinking about adding to Windows  
4 95, did Microsoft commit that those features would be in the  
5 final product?

6 MR. JOHNSON: Objection, leading.

7 THE COURT: Overruled.

8 THE WITNESS: No.

9 BY MR. HOLLEY

10 Q. Can you tell me what Longhorn was, Mr. Gates?

11 A. That was another Windows development project, and one  
12 where we were doing some very ambitious work about  
13 essentially putting a database approach at the center of the  
14 operating system, and something that I was quite enthused  
15 about. We got beta versions of that software done, we had  
16 people doing work with it. Unfortunately, in that case the  
17 challenge of getting all the pieces working together and  
18 getting the right performance and such, that we ended up  
19 deciding not to ship any of those database oriented  
20 features.

21 Q. Those database oriented features, had they been already  
22 disclosed to independent software vendors at the time you  
23 decided to take them out of the product?

24 A. That is right. There were many cases during the  
25 development of the operating system, whether it was game

1 APIs, media APIs, communication APIs, where you would have a  
2 rich set of things that you were aiming for, but then in  
3 order to get the thing shipped or because you realized that  
4 there were some problems, you know, and whether you wanted  
5 to commit to that thing long-term you would change, and  
6 Longhorn is a great example of that.

7 Q. Now, going back to Windows 95 relative to its  
8 predecessors, did you have any view about the relative  
9 quality of Windows 95 versus the Windows 3.X products?

10 A. Well, it was definitely a project where we put more  
11 testing head count on it. We were effectively integrating  
12 DOS and Windows. They had been two separate products, and  
13 so the clunkiness of how you would have to start up DOS and  
14 then run Windows, we were getting rid of that.

15 So it meant that, you know, we had the MS DOS team and  
16 the Windows team, and we had all of the time more and more  
17 hardware out there, more printers, more communications  
18 cards, more disks, and so by 1995 the number -- getting  
19 towards 1995 the variety of hardware that we're having to  
20 support is just dramatically larger than it was back in  
21 1990.

22 So it was a bigger challenge, more applications, more  
23 hardware, and we put a lot of resources against it, but it  
24 meant we were not certain exactly when we would get done.

25 Q. What difference did it make to Microsoft that there was

1 a greater and greater profusion of hardware devices in the  
2 world?

3 A. Well, it is a good thing in the sense that it is giving  
4 people choices of all of those different printers and  
5 network cards and disk drives and tape backups and screens,  
6 graphics cards, it just means that the PC is getting  
7 ubiquitous and being used for far more demanding things than  
8 ever before.

9 But it also meant from our point of view that the  
10 engineering complexity of releasing a new operating system  
11 became one of the toughest engineering tasks ever done, and  
12 so it cost us a lot more money and a lot more people and a  
13 lot of time to get it done right. We put a lot of energy  
14 into the performance and the backwards compatibility.

15 Q. How, if at all, did the user interface of Windows 95  
16 relate to the user interface in Windows 3.1 in terms of  
17 features?

18 A. The basic interface in terms of windowing, graphics  
19 interface was carried over from Win 31 to Windows 95. There  
20 were some areas that we made improvements that we thought  
21 would be important to people, particularly this thing where  
22 it was an integrated product, and so it would start up right  
23 away into Windows.

24 Also, the way we added long file names, the way we  
25 changed some of the color schemes, the look of things, we

1 felt we updated the visual look and came up with some nice  
2 improvement. Then, again, we did it in a way that if you  
3 ran existing Windows applications they looked just fine  
4 running in the new environment.

5 Q. I would like to show you what has been marked as  
6 Demonstrative Exhibit Number 180.

7 Can you explain to the jury with reference to this  
8 demonstrative what the start button is?

9 A. Yes. The start button had not existed in previous  
10 version of Windows, and it became almost the identity of the  
11 product, partly because when you're using a Windows PC you  
12 spend most of your time in the application. So you turn it  
13 on and there it is. You use the start menu and you pick  
14 what you want to run, and then most your time you're inside  
15 that application or other applications.

16 To start here, what we're seeing on this display, is  
17 somebody has depressed the start button so a menu jumps up.  
18 Often you'll see menus that come from the top of the screen  
19 and they drop down. It is called drop down menus. This  
20 happens to be a drop up menu, because from the bottom you  
21 can't go down, you have to go up. So this menu drops up and  
22 you're seeing there are even these side menus. If you look  
23 at those arrows on the right, that means there are subitems  
24 there.

25 Here there are hovering, they are holding the mouse

1 pointer at that kind of arrow thing over the top of this  
2 menu so it is unfolding that submenu. Here you have the  
3 Corel Office, which is the company that ended up owning  
4 QuattroPro and WordPerfect. You see those suite products on  
5 top of Windows 95.

6 Q. How were users able to launch applications like word  
7 processors in the Windows 95 user interface?

8 A. Well, there were at least four different ways you could  
9 start up an application. First, and the one that ended up  
10 being used the most by the far is the start menu, which was  
11 a new thing. We were excited about that.

12 The second was that this desktop, this kind of green,  
13 blue area you're seeing here, you could have icons sitting  
14 there and point to those and double click, click twice.

15 The third way was you could have things down on this  
16 bar. This bar at the bottom, you can actually take  
17 applications and put them there. Then, finally, there is a  
18 tree view called the Explorer view. If you go down into  
19 that and find either a document or application you could run  
20 from there. So four different ways, and sort of actually in  
21 that case in the order of how much they got used.

22 Q. Just to be clear, the order in which those mechanisms  
23 to launch applications got used, what was that order?

24 A. The start bar was by far the most popular. Then  
25 clicking icons in the desktop was the next most. Then

1 shortcut icons was the third most. Then, finally, using a  
2 tree view in the Explorer was the fourth.

3 Q. Now, you referred there to the Explorer. Can you tell  
4 us what that was?

5 A. Well, you're not seeing it in this screen shot, but  
6 there was a way of looking at the resources on the system,  
7 in particular the files, but a few other things as well, and  
8 seeing them in a tree. When I say a tree I mean like an  
9 outline with multiple levels or a hierarchy with multiple  
10 levels where the machine itself is sort of at the highest  
11 level, then you might have a disk and then you might have a  
12 folder that contains another folder, and then you might have  
13 the file in that folder. Anyway, there is a way to look at  
14 things in a tree oriented fashion.

15 Q. Mr. Gates, I would like you to look at what has been  
16 marked as Demonstrative Exhibit 182.

17 Is that what you were just describing as the Windows  
18 Explorer?

19 A. Right. In this screen shot they have brought up the  
20 Explorer. It actually says Exploreen. The title bar of  
21 this Windows is here in the center. So that funny looking  
22 thing on the left there, that is a tree or a hierarchy where  
23 a desktop is actually the highest level, you know, and then  
24 my computer is the next level. As you move and as things  
25 are more intended, those are different levels down, so you

1 see that my computer has a drive called C which has folders,  
2 in this case five folders, My Documents, Program Files,  
3 QuattroPro, Windows, WordPerfect, so these five folders.  
4 Right now the C drive is selected so it is actual shown in  
5 the right pane there just the list of names, the set of  
6 things that are on that C drive.

7 Q. Did Microsoft determine what folders would appear in  
8 the Windows Explorer in the tree view?

9 A. Well, as you install more things on your system or move  
10 things around that would change. If you took a machine that  
11 had never been used and just installed Windows on it, then  
12 the structure that you see came from Windows. But then when  
13 you put applications in or you create documents or move  
14 things around yourself, the place things are in your file  
15 system and, therefore, that tree where you find things,  
16 would change according to what activities you had done.

17 Q. Did Microsoft do anything to prevent ISVs from adding  
18 folders to the tree view when their products were installed  
19 on Windows 95?

20 A. No. In fact, when people installed products on Windows  
21 95 they would use the extensibility of the shell to have  
22 their applications show up in a number of places. They  
23 could put it on the start menu, the desktop, the short bar,  
24 and into the file system where it would show up in this tree  
25 or namespace or hierarchy. There are many synonyms for it,

1 but it would show up in this thing.

2 Q. Now, looking at this demonstrative there is something  
3 there called control panel.

4 Did that contain files?

5 A. Actually, no. So this tree, as I said, it is mostly  
6 files, but for the convenience of accessing things we put  
7 other things in there that you might want to get at. So  
8 under my computer you not only have the disk drives, the  
9 floppy disks, the C and D drives, which those are storage  
10 drives, hard disk drives that are sort of part of the  
11 hardware of the machine, but you have two things that are  
12 not files or drives at all. You have control panel and  
13 printers, and those, you know, we just stuck into the  
14 namespace so you would have a way of accessing them.

15 So if you clicked on control panel there could be  
16 various control panels, control panel options, things like  
17 your sound card, your graphics, set up, and so we did more  
18 than files in here. We did some additional capabilities.

19 Q. Did you view the Windows Explorer in Windows 95 as any  
20 sort of improvement over Windows 3.1?

21 A. Yes. The whole shell, not just the Explorer was  
22 improved. I would say it was a good improvement. The thing  
23 that ended up being noticed the most was that start menu and  
24 that is what people uses, but we also supported long file  
25 names, and this Explorer capability got some new features

1 and got some additional extensibility.

2 Q. Now, I think the jury has heard about this before, but  
3 I just want to make sure that we talk about some technical  
4 terms that you're familiar with.

5 What do you mean by long file names?

6 A. Okay. Strangely, MS DOS and early version of Windows  
7 would only allow a file name to have eight characters in the  
8 name and then three characters in the extension. That was  
9 kind of the type of the file. So a word processing file, if  
10 it was a Microsoft Word file, the extension would be dot  
11 d-o-c, dot doc, and then the name could only be eight  
12 characters. So if you wanted to save my math homework for  
13 Friday, you would have to kind of go f-r-i m-t-h h-m or some  
14 kind of crypto thing. You could only have short names.

15 So when we looked at -- as you got more and more files,  
16 yeah, you could organize them by putting them in folders,  
17 but the names got pretty cryptic. In fact, some people  
18 would just start putting numbers. They would put math 001,  
19 math 002. It is kind of common sense today that, of course,  
20 I can type as long a name as I want. So if I want to say my  
21 math for Friday, you know, even though that is way more than  
22 the eight characters, Windows 95 added this amazing feature  
23 of letting you have those long file names.

24 So it kind of freed people up to make -- if they wanted  
25 to have a lot of files it was going to be a lot easier to

1 know what they were. We were just starting to get to the  
2 point where people were doing photos with digital cameras  
3 and putting them on their computers and putting on music and  
4 videos and those things. Most of it still at this stage  
5 were documents, spreadsheets and word processing documents  
6 and, indeed, within the mail program the folders that you  
7 would create there.

8 Q. Now, you used the term extensible in an answer a couple  
9 of minutes ago. Can you tell us what you mean when you talk  
10 about the shell being extensible?

11 A. Mostly what people do when they write applications for  
12 Windows is they write their own application code. And when  
13 your own application is running you can do anything you  
14 want. It is your code. You control the whole screen, every  
15 pixel, every dot and the window you can make the way you  
16 want, every click, every user interaction, you can do what  
17 you want.

18 We also let people when they installed applications  
19 have things about their applications show up in the shell.  
20 So that was called extensibility. That is the shell. It  
21 was not hard coded, it was not fixed what it would display,  
22 and so the start menu is extensible. That is, the start  
23 menu you can add not only an entry to it, but actually the  
24 subentries which you saw an example of that earlier. So the  
25 start menu was extensible, or this desktop with these icons,

1 and you can add your icons. That is extensible. You can  
2 add folders.

3 There we are back in that start menu.

4 If you first bought Windows and you clicked on the  
5 start menu, you would see everything here except that very  
6 top item. So everything in the first eight items were there  
7 before you extended the start menu. Here on this machine  
8 somebody has installed Corel Office, and so it has put  
9 WordPerfect, QuatroPro, it has put these various  
10 applications in under the Corel Office folder here. That is  
11 an example of the extensibility of the shell.

12 Q. I would like to change topics again and talk about  
13 something called executive retreats.

14 Did Microsoft have executive retreats in the early to  
15 mid 1990s?

16 A. Yes. We typically take a lot of the top people, 20 or  
17 so, and go off somewhere and spend a couple of days  
18 brainstorming about different strategy possibilities. We do  
19 breakout groups. We did that often, twice a year.

20 Q. What was the point of these executive retreats?

21 A. Well, partly it is just to build camaraderie, get on a  
22 common page. It was also a time when people had different  
23 ideas about they wanted to suggest, and that is why we did  
24 these breakout groups. We would usually have six go off and  
25 then come out and talk about different possibilities. So it

1 brought the staff together. I would usually give a speech  
2 and update people at the beginning of the event.

3 You know, some companies would do kind of goof off  
4 things, we not much for that, it was pretty business  
5 oriented.

6 Q. You referred to breakout groups.

7 What did you mean by that?

8 A. Oh, we would take -- you know it got -- we would have  
9 like, at least in this time period, more than 20 people at  
10 these things. We would get groups of three or four that  
11 would go off and looked at different aspects. You know,  
12 like they would say, well, what do you think IBM is going to  
13 do? A group would go off and say here is what we think IBM  
14 might do. Here is what we might do in response to that.

15 Or what should we do in the database market? Or what  
16 should we do in the video game market? What should we do in  
17 terms of our sales in Japan aren't very good? So we would  
18 pick a set of topics and we would always assign executives  
19 who didn't work in that area to be in the brainstorming  
20 group. It meant that sometimes you would get some ideas  
21 that didn't make any sense, but it also meant -- it gave  
22 people sort or an exposure to the part of the business that  
23 wasn't their normal day-to-day job.

24 Q. Did any of this executive retreats take place at Hood  
25 Canal?

1 A. Yes. I had a house out at Hood Canal, and there was  
2 a -- not a very good hotel, but a hotel nearby, and so that  
3 was the location that a number of these things were done at.

4 Q. Was the purpose of these executive retreats to  
5 formulate business plans for Microsoft?

6 A. Well, that was not actually where we made the key  
7 decisions. It was to update people on things and to  
8 brainstorm about things. So it served a role, but it was  
9 not the meeting where the key product decisions were made.

10 Q. Was a decision made at any executive retreat to remove  
11 the extensibility from the Windows 95 shell?

12 A. No.

13 Q. Are you sure about that?

14 A. Absolutely. We saw on the screen an example of shell  
15 extensibility just now.

16 Q. Was a plan ever formulated at an executive retreat to  
17 create a shell for Microsoft Office?

18 A. No. We did not ever decide to create a shell, an  
19 Office shell separate from the operating system.

20 Q. Are you confident of that answer, sir?

21 A. That is correct. You can look in any Office we ever  
22 shipped and you won't find any even shell like thing. The  
23 shells are part of the Windows product and they have been  
24 enhanced as we have released new versions of Windows.

25 Q. I would like to show you, Mr. Gates, what has been

1 marked as Plaintiff's Exhibit 57.

2 Mr. Gates, you're not either the recipient or copied on  
3 this e-mail, but I would like to ask you, sir, there is a  
4 reference in the first sentence to an updated draft of the  
5 Office shell plan.

6 Does that change your testimony, sir, that there was no  
7 plan to put a shell in Office in lieu of a shell in Windows?

8 A. Well, you know, I had not seen this document and I am  
9 not copied on it and I don't remember seeing it  
10 contemporaneously but, absolutely, there was no Office shell  
11 ever shipped. All the shell stuff was shipped with Windows.  
12 You know, it looks like somebody here is brainstorming about  
13 taking some Office work and shipping it some different way,  
14 but that is not anything that we ever did.

15 Q. Let's take a look at the second page of this document,  
16 which is headed Office shell ideas and issues under the  
17 heading plan. It says bundle a Windows shell with Chicago  
18 Office.

19 Did that ever happen, Mr. Gates?

20 A. No. No, we didn't even do any work related to that,  
21 not to mention not shipping any such thing.

22 Q. And then it says schedule Q-2 '94.

23 Now, just as a preface, was Microsoft on a calendar  
24 fiscal year?

25 A. When we refer to quarters they actually do correspond

1 to calendar quarters. You have to be careful. Sometimes  
2 people use fiscal year quarters. Anyway, most references in  
3 Microsoft documents are to calendar quarters, but if they  
4 say like FY, fiscal year -- you have to be careful.  
5 Sometimes they are not. But in this period somebody from  
6 the development group wouldn't be using fiscal year calendar  
7 terminology hardly at all.

8 Q. Well, is my understanding of this document correct,  
9 that as of June of 1993 there was contemplation that  
10 Chicago, the code name for Windows 95, would ship in the  
11 period between March and June of 1994?

12 A. Well, as I say, I was not copied on this document and I  
13 don't have a recollection of it. Windows 95 ended up  
14 shipping in August of '95. So if you go back into '93, we  
15 were hoping to ship it earlier but, you know, I don't think  
16 we thought we could ship it by Q-2 '94. The actual ship  
17 date ended up being in August of 1995.

18 Q. Why didn't it come out earlier, Mr. Gates?

19 A. Well, we were certainly working hard and doing our  
20 best, but as we got feedback about various bugs that we had,  
21 features that people wanted to make better, things people  
22 thought, you know, were kind of half done and we had to  
23 decide whether we go all the way with them or just drop work  
24 in that area.

25 We decided that we wanted to keep it and keep working

1 on it. We had every reason to want to get it out to the  
2 marketplace. It was sort of a big shipment for us and that  
3 is why -- if you go and look at the hours worked by the  
4 people on the team, the effort that was being made it was  
5 really quite phenomenal, and so when we finally did get it  
6 shipped it was fantastic. We did our best and got it out as  
7 quickly as we could.

8 Q. Now, Mr. Gates, there is a reference here under the  
9 heading -- I'm still under schedule. It says Chicago plus  
10 six months.

11 I'm sorry. I was on the same line I was on.

12 It says Chicago ships with a non-extensible shell.

13 Did that happen?

14 A. No.

15 Q. How do you know that, sir?

16 A. Because we shipped -- Chicago is the code name for the  
17 Windows 95 effort, and when we shipped Windows 95 we shipped  
18 it with a shell with quite a bit of extensibility.

19 Q. Now, down under the heading Chicago plus six months,  
20 the last item of the four items there says the Office shell  
21 should be conceptually a superset of Chicago shell, although  
22 may be based on Cairo code base.

23 What does that mean?

24 A. Okay. There was a project called Cairo that I was  
25 quite enthused about, which would have taken the whole

1 concept of the shell and made it more like a database. Kind  
2 of richer but also more complex, where you could kind of  
3 query to find things, and you didn't have this tree type  
4 approach, you had just a set of things, all of which could  
5 be called up based on a query. That Cairo work was an  
6 attempt to reconceptualize the shell, to have it be quite  
7 different, quite rich, and Cairo and that work, and we had a  
8 lot of people on it -- eventually -- actually in '93 it was  
9 still a separate team working along.

10 Eventually we merged it with another team, and that  
11 database concept of the shell, which I was personally quite  
12 excited about, never came to fruition. But at this time we  
13 had a Cairo team doing some work that, you know, we hoped  
14 would be part of a future extremely rich shell environment.

15 Q. And down under the heading any time after Office ships,  
16 this document says Cairo ships with a shell that is a  
17 superset of the Office shell, but excluding any components  
18 or extensions that we choose to keep only for Microsoft  
19 apps.

20 Did that happen, sir?

21 A. No. The only shells we ever shipped were as part of  
22 the Windows product releases. Office did not ship with a  
23 shell of its own. And also Cairo, unfortunately, that piece  
24 of work never came to fruition, and so even that concept of  
25 this very rich kind of database shell, still to this day we

1 don't have that.

2 Q. Mr. Gates, I would like to show you what has been  
3 marked as Plaintiff's Exhibit 51.

4 Mr. Gates, you were asked about this document in your  
5 deposition. Do you recall seeing this document other than  
6 in preparation for your testimony or your deposition?

7 A. No.

8 Q. Now, I would like to take you -- well, let's look at  
9 the first page. Just looking at the format of this document  
10 and the names of the team members down there, Mike Maples,  
11 Jon Ludwig, Tandy Trower, Steve Madigan, David Cole, Chris  
12 Graham, Ed Freeze and Nathan Myhrvold, are those people part  
13 of some group at Microsoft?

14 A. No. It is kind of a disparate group, and so I think it  
15 is likely this is a one of those breakout topics that I  
16 talked about, because you have people from very different  
17 parts of the company that normally wouldn't be working on a  
18 topic together.

19 Q. Were any of these people responsible for Windows 95,  
20 the overall Windows 95 product?

21 A. No.

22 Q. Were any of these people responsible for the shell of  
23 Windows 95?

24 A. No.

25 Q. Now, there is no internal pagination to this document,

1 but it does have a Bates number, Mr. Gates, MS-PCA-2535292.  
2 It is roughly halfway back in the document. It is headed  
3 the radical extreme: The Office shell.

4 A. I see that.

5 Q. Okay. Did Microsoft ever formulate a plan in which it  
6 held the extensible shell of Windows 95 for Office?

7 A. No, we did not.

8 Q. How do you know that, sir?

9 A. We never shipped a shell with Office. We shipped an  
10 extensible shell including OLE capabilities with Windows 95.

11 Q. The second bullet down under the heading basic approach  
12 says Chicago's shell is non-extensible, and then the first  
13 bullet heading is we couldn't get it done in time, ellipses,  
14 close quote.

15 Did Microsoft ever formulate a plan to take all of the  
16 extensibility out of the Chicago shell and tell ISVs that  
17 the reason that was done was that it couldn't get the work  
18 done in time?

19 A. No.

20 Q. You're familiar, are you not, Mr. Gates, with some APIs  
21 in Windows 95 called the namespace extension APIs?

22 A. Yes.

23 Q. Can you tell us what they did?

24 A. Well, the idea was that in that tree view, that  
25 hierarchy that I talked about, there was a question of

1 whether a very narrow set of software products would want to  
2 actually take and add a bottom level to the tree. So, for  
3 example, if you had a mail client, an electronic mail  
4 client, when you got to your mail folder it would just --  
5 the normal Explorer would just stop because that was the  
6 file and it didn't see anything inside of the file.

7 The idea of namespace extensions was that if you  
8 clicked on that you could call third-party code and it  
9 would, for example, put the list of your e-mail folders  
10 there and so that tree could be extended. That is why it  
11 was called the namespace extension. You could put some  
12 additional names at the bottom there.

13 At one time we thought that e-mail clients and system  
14 utilities might want to take advantage of that kind of  
15 capability.

16 Q. As the CEO of Microsoft, in June of 1993 did you ever  
17 formulate a plan to tell ISVs that there would be name  
18 special extension mechanisms in Windows 95 knowing full well  
19 that you intended to pull them at some later time?

20 THE WITNESS: No.

21 MR. JOHNSON: Objection, leading.

22 THE COURT: Overruled. Go ahead.

23 The answer is no. Go ahead.

24 BY MR. HOLLEY

25 Q. Mr. Gates, you said in your earlier answer that the

1 namespace extension APIs were for a narrow set of  
2 applications.

3 Can you tell me why, sir?

4 A. Well, the basic idea is not that dramatic, it is just  
5 that on the tree you could have your names show up as  
6 another level within that tree. And so inside Microsoft we  
7 talked about mail clients or system utilities taking  
8 advantage of that capability. It is not something that we  
9 talked about or had our horizontal application like word  
10 processing or spreadsheets thinking about. Because,  
11 remember, this only has an effect when somebody is in that  
12 tree view and using that tree view. It does not effect at  
13 all once you're running your application and doing stuff  
14 inside your application, or if you're in the shell using the  
15 start menu or the icons. That does not effect you at all.  
16 It is only when you're expending that tree down to the  
17 bottom level that some additional names can show up.

18 Q. Well, aren't these namespace extension APIs critical to  
19 the creation of file open dialogues?

20 A. Not at all.

21 Q. Can you explain why not?

22 A. When you do a file open dialogue you're inside your own  
23 application, and so there have been very good file open  
24 dialogues done by many people on Windows before Windows 95,  
25 you know, and in no way, shape or form did they require, use

1 or relate to the namespace extensions. Those file open  
2 dialogues did a very good job and they have total  
3 flexibility. Whatever sort of searching, presentation,  
4 document management, any features that you wanted to put in  
5 your file open dialogue you had the full capability of doing  
6 that, and people did that even before Windows 95.

7 Q. But once Microsoft had introduced the concept of  
8 namespaces like Network Neighborhood and My Computer, isn't  
9 it a fact, Mr. Gates, that they needed the namespace  
10 extension APIs to include those namespaces in their file  
11 open dialogue?

12 A. Not at all. The namespace extension only effects you  
13 when you're using the Explorer. If you're running your own  
14 file open dialogue code, you're in control so you can take  
15 any name space and add anything you want, have it appear  
16 anyway you want. You have total flexibility. So namespace  
17 extensions effected this Explorer functionality.

18 Q. Did Microsoft's word processing, spreadsheet, database  
19 and presentation graphics software ever use any of the  
20 namespace extension APIs?

21 A. No. We didn't -- we didn't see this feature as  
22 relating to those applications so we did not.

23 Q. Are you sure of that, Mr. Gates?

24 A. Yes.

25 Q. Now, let's turn to a slightly different topic.

1 In 1994 how many different operating systems, Windows  
2 operating systems were under development at Microsoft?

3 THE COURT: What year? 1994?

4 MR. HOLLEY: Yes, Your Honor.

5 THE COURT: I'm sorry.

6 THE WITNESS: Yeah. We had the Windows 95 work  
7 which had not been shipped and so it was code named Chicago,  
8 and then we had a high end version of Windows that was  
9 called Windows NT. NT originally stood for new technology,  
10 but then it became just the name, Windows NT. It was a more  
11 powerful version that shipped particularly to business  
12 customers or scientific workstation type customers.

13 And then we also had this thing I mentioned where  
14 we had this Cairo team that was building kind of a database  
15 oriented shell that would have kind of changed the boundary  
16 between where the shell stopped and where applications  
17 started in an interesting way. We had all three of those  
18 efforts underway at that time.

19 We also had some work with IBM on OS2, and we had  
20 some MS DOS work, we had the existing version of Windows,  
21 but those were the three main development projects.

22 Q. How, if at all, did the target customer base for  
23 Windows NT effect concerns about stability and reliability?

24 A. Well, in general with Windows we were -- particularly  
25 as the memory size of the computers got bigger, we were

1 making the systems have higher levels of security and  
2 capability. We wanted to do that for all versions of  
3 Windows, but Windows NT was distinguished and it required a  
4 lot more memory than other versions of Windows. It was  
5 distinguished in terms of the depths of those features.

6 In that high end market there was the Unix operating  
7 system, and we had made sure that we were coming up with  
8 features that were as good or better in our view than the  
9 Unix operating system. And so robustness, which just means  
10 reliability basically, and anything -- the Windows NT people  
11 were very keen that there never be crashes, because their  
12 system was being used for things like stock exchange  
13 trading, or other things where you just wouldn't want the  
14 software to stop working at any time.

15 Q. What impact, if any, did the namespace extension APIs  
16 in Windows 95 have on reliability or robustness as you have  
17 used the term?

18 A. The Windows NT people, when they looked at this work,  
19 that they had not been aware of when it was being done, but  
20 then later they saw it, they came with some very serious  
21 concerns which were quite legitimate, that because when the  
22 Explorer would call these other applications to give names,  
23 like a mail client, give those additional names, if there  
24 was a problem in that piece of software, if it didn't come  
25 back, if it crashed or anything, it would crash the whole

1 system because you were running in the shell. So that  
2 really went against the way that they had architected things  
3 so that you didn't have third party extensions capable of  
4 crashing the shell.

5 Q. Now, you talked a bit earlier about the three teams,  
6 the Windows NT team, the Windows 95 team and the Cairo team.  
7 Did you as the CEO of Microsoft make any organizational  
8 changes relative to those teams in 1994?

9 A. Yeah. The Cairo project, which I was a big fan of and  
10 I thought it was important work, unfortunately, it was not  
11 going well. They just couldn't get the prototype right, the  
12 performance wasn't right, choosing how much database stuff  
13 to do, not do, how to do replication, what did the product  
14 look like, they had a hard time pinning that down.

15 So we actually took Cairo and transferred those people  
16 into a group which was called the REN group, another code  
17 name, R-E-N, over to Office to see if this general idea,  
18 sort of database way of looking at the shell, see if the  
19 managers there could do a better job making progress on it.

20 Q. Why would you take shell technology for a future  
21 operating system and move it to the applications group?

22 A. Well, we had a very limited number of good managers who  
23 could take a project that was in trouble and try and figure  
24 out what to cut, how to keep the moral high, how to change  
25 some of the architecture and figure out why the size and

1 speed were not coming together, why the group itself wasn't  
2 figuring out things. I thought that the people over in the  
3 REN team could help us out with that because Cairo was in  
4 trouble.

5 Now, you know, we had good people over in the operating  
6 system world but, as I have said, they were working on a lot  
7 of different things. They were stretched pretty heavily.  
8 In the case of the Win 95 group getting Chicago done, and in  
9 the case of the NT group they also had new releases, and  
10 work they were doing in the networking world, and so I just  
11 thought in terms of load balancing and expertise that moving  
12 Cairo to REN gave it a chance to get on track.

13 Q. Did you move the Cairo shell work to the applications  
14 group because you wanted the Cairo shell to become part of  
15 Microsoft Office?

16 A. No. Organizationally it was under the same management  
17 as the Office team, but that didn't change the idea that if  
18 Cairo had been successful we were going to ship it as an  
19 operating system shell.

20 Now, it turns out it is a moot thing, because  
21 subsequently the Cairo team did not stabilize, and so that  
22 whole vision of this database oriented shell that I was  
23 quite enthused about, you know, it never got shipped  
24 anywhere. So it is unfortunate that even with those new  
25 managers getting involved, and I thought they had the time

1 to get it right, we still felt the project just didn't get  
2 on track and eventually was ended. That is after 1994. We  
3 let it run for awhile in '95 and even into '96 to see if it  
4 could succeed.

5 Q. What changes, if any, Mr. Gates, did you make in 1994  
6 that effected the Windows NT shell team?

7 A. Well, the NT shell team -- we had had three different  
8 shell efforts, the Windows 95 shell, the Cairo shell and the  
9 Windows NT shell. And, you know, each of them felt that  
10 they had something they were doing better than the others.  
11 And, unfortunately, there were some things like this  
12 robustness issue where Windows 95 had done something that,  
13 you know, for the Windows 95 customer set might or might not  
14 have been okay, but for the Windows NT customer set was  
15 clearly not going to be okay. You know, it was not well  
16 designed for their needs.

17 So what we really wanted to do was not have three  
18 different shell efforts. We wanted to share more code and  
19 have more commonality and get more alignment. That was a  
20 challenge because each team kind of had their own pride  
21 about their work, and particularly given the personalities  
22 of the people involved, there was some tension, mostly  
23 constructive, but some tension between the Windows NT group,  
24 who wanted to do their own shell, with the Windows 95 group  
25 who had done a shell that was more fitting for Windows 95

1 efforts. I wanted to use a common shell across Windows 95  
2 and Windows NT.

3 Q. Once you decided to have a common shell across Windows  
4 95 and Windows NT, didn't that make the robustness issues  
5 you have discussed disappear?

6 A. No. Well, it meant that we needed to solve the  
7 problem. We needed to take whatever had been done in  
8 Chicago and the Windows 95 effort and figure out could you  
9 make that stuff robust? How do you have to change it? You  
10 know, how would it work in terms of the requirements of the  
11 Windows NT group? It was a bit tricky because, of course,  
12 the Windows 95 people loved all their work, and the Windows  
13 NT people were disappointed that they were having to take on  
14 this new shell.

15 So we looked hard at the objections that the NT people  
16 had and what was going on, and we looked at the objections  
17 that the Cairo people had and what was going on, and we had  
18 to reconcile this in order to get the synergy, both from our  
19 point of view engineering wise and from a customer point of  
20 view we thought would be a good thing.

21 Q. Now, I would like you to look at what has been marked  
22 as Plaintiff's Exhibit 134.

23 First of all, Mr. Gates, can you tell us what  
24 Plaintiff's Exhibit 134 is?

25 A. It appears to be a mail from Brad Silverberg, who was

1 the head of the Chicago team, the Windows 95 development  
2 team, a strong personality person but that did a great job,  
3 a mail from him to me talking about these different shell  
4 views.

5 Q. Now, looking at the e-mail which is first in time,  
6 which is the one at the bottom of the page from you to Brad  
7 SI, is that Mr. Silverberg?

8 A. Yes, that is mail from me to him, so from myself to  
9 Brad Silverberg. Sometimes the mail clients use these short  
10 names, but Brad SI is Brad Silverberg.

11 Q. And you say in the first paragraph, coming out from my  
12 REN meeting I am disappointed at the lack of integration in  
13 our strategy. I have said in many meetings that the  
14 hierarchal view, scope pane, view is critical.

15 What did you mean by that, sir?

16 A. In my view I thought users would use that tree view and  
17 that, you know, so we should make it rich. REN is a mail  
18 client effort that we had, and so I had been looking at that  
19 strategy and thinking, okay, there is not enough going on  
20 where these people are connecting up to that tree view, and  
21 so I'm giving that input to Brad Silverberg.

22 Q. Now, further down in that paragraph you say the tree  
23 view is central to our whole strategy, e-mail, doclib,  
24 applications, files system.

25 What did that mean, sir?

1 A. That meant that I thought that people would be using  
2 that tree view to go in and find their set of applications  
3 and files, and then have an e-mail folder and system  
4 utilities called document libraries, I thought enabling that  
5 was a good thing. You know, Brad in his message back to me  
6 says, you know, he thinks I'm wrong, that this hierarchy --  
7 that people are not going to be using that way of working  
8 with the system that, in fact, they'll work from the folder  
9 views and the start menu.

10 Q. Am I correct, Mr. Gates, that what you're saying in  
11 this e-mail is that the namespace extension APIs are  
12 critical to Microsoft's whole strategy?

13 A. Not at all. What I'm saying is that if we can take  
14 this broad view of getting the tree to be like a database,  
15 which is what the Cairo effort was doing, then it is  
16 actually going to change the boundary between how the shell  
17 works and how applications work. I was pretty enthused  
18 about that, you know, and I wanted to understand what would  
19 a mail client look like under a Cairo shell? And the fact  
20 that that was not coming together was completely vague.

21 I wanted this rich new view, and I was pretty  
22 frustrated that it was not happening. Brad thought that  
23 whole direction, and particularly in the limited version of  
24 it that we had at that point, was not that important.

25 Q. I would like to explore what you just said. What did

1 you mean when you said the limited version of it we had at  
2 that point?

3 A. Well, we didn't have this Cairo capability, which would  
4 have meant that you could find anything and that you didn't  
5 even have to go to the tree. I was like a database. And so  
6 although you could use the hierarchy, you could also use  
7 queries to navigate around, you would have links between  
8 things and, you know, and what the Cairo people were trying  
9 to do is take and extend that kind of scope view and make it  
10 into something very rich and flexible.

11 This is one of those things where if the applications  
12 people, in this case a mail client, sees that that is  
13 important then they will be able to see what their  
14 requirements are, and then it might get good enough.  
15 Unfortunately, it never did.

16 Q. Now, you have made reference to it, but I would like to  
17 look at it, Mr. Silverberg's response back to you. In the  
18 first paragraph he says if you're a hierarchy kind of person  
19 who wants a tree view front and center, no problem. You can  
20 use the Explorer all the time.

21 Is that what users of Windows 95 did?

22 A. Yeah. He is clearly saying that he does not think  
23 people are going to use the tree. He thought people would  
24 use start menu, folder view, you know, just go and use that.  
25 He didn't think that that was important, and he kind of

1 blows me off by saying that we'll get feedback and we'll  
2 adjust the UI based on the feedback. That is how he  
3 concluded it.

4 Q. Well, based on Microsoft's experience with Windows 95,  
5 who was right, you or Mr. Silverberg, about the importance  
6 of the Windows Explorer to users?

7 A. He was certainly right and I was wrong relative to  
8 Windows 95. If we had ever shipped Chicago -- I am sorry --  
9 Cairo, which had this richer capability that went beyond  
10 just only having the tree, so you could navigate around, you  
11 know, maybe people would have used that. I certainly  
12 thought so and was enthused about it, but on this one Brad  
13 had the better of the arguments.

14 Q. You referred earlier to different groups at Microsoft  
15 having different views about the namespace extension APIs.  
16 What if any controversy was there at Microsoft about them in  
17 1994?

18 A. Well, there was a lot of things that the Windows 95  
19 group just did on its own, which in many cases was fine, and  
20 in some cases they needed to be coordinated with Windows NT,  
21 because Windows NT was always a superset and, as we  
22 discussed, a more robust superset. In the case of shell  
23 related things, Cairo was supposed to be a superset and a  
24 very rich superset. And so there was a little bit of  
25 tension between the product groups. Maybe I should say a

1 medium amount of tension, where Chicago was kind of going  
2 off and doing things even that would effect these other  
3 product groups, because of these superset constraints,  
4 without kind of telling them and getting their input on the  
5 way they were doing that.

6 It came up a number of times including in the case of  
7 these namespace extension, where when Windows NT looked at  
8 them they pointed out the robustness problems. When the  
9 Cairo people looked at them they said, no, we don't want to  
10 superset that. That would just be a lot of trouble and it  
11 is not going in the direction that we want to go.

12 Q. In October of 1994 what pressures, if any, was  
13 Microsoft facing in terms of getting Windows 95 released to  
14 the market?

15 A. Well, we wanted to get it out. The sooner we got it  
16 out the sooner both we would have the sales from that and  
17 the sales from the applications. We were working super  
18 hard. It was the most important and most challenging  
19 project that we had ever done. We were getting primarily  
20 positive feedback. People who had looked at the thing  
21 thought, wow, this is very good, and that what was going on  
22 with the hardware and the speed of the hardware, the types  
23 of hardware coming out, the size of the memory,  
24 everything was a fit. We had bet that the hardware would  
25 get better and, in fact, that was happening and so, you

1 know, people wanted to have hardware that went together with  
2 Windows 95.

3 The hardware people thought and companies thought that  
4 that would help them sell more personal computers, and since  
5 they were partners we wanted help with that, so we had every  
6 reason to be working hard and doing our best to get it out  
7 into the marketplace.

8 Q. Mr. Gates, based on the 32 years that you have spent as  
9 the C.E.O. of Microsoft Corporation, what tradeoff, if any,  
10 is there between time to market for a new product and  
11 features included in that product?

12 A. Well, it is a constant tension. You know, there are  
13 sayings like, you know, good programmers ship as opposed to  
14 programmers who just keep missing around with the stuff  
15 forever and don't actually get the stuff done. And  
16 particularly when you get into something of the complexity  
17 of Windows, with the compatibility requirements and the  
18 breadth of the features, this issue of what things do you  
19 not do and which things do you do is very difficult.

20 In multimedia we had wanted to do more in Windows 95  
21 and we did not. In terms of how you connect up to the T.V.,  
22 we wanted to do more and we did not. In the browser we  
23 wanted to do more and we got a fair bit done, but we didn't  
24 get everything that we wanted to get done. We got enough  
25 done that that became a feature of Windows 95, but coming in

1 actually fairly late in the schedule. So we were making  
2 tradeoffs. You know, of course, you had Brad Silverberg,  
3 who worked for me, and he would make some of those  
4 tradeoffs, and if they related to different product groups  
5 then they would often get escalated to me.

6 Q. Mr. Gates, I would like to show you what has been  
7 marked as Plaintiff's Exhibit 1.

8 Mr. Gates, is this an e-mail that you wrote on October  
9 3rd, 1994?

10 A. Yes. That is exactly what it looks like.

11 Q. You say in the first paragraph -- well, first of all,  
12 it is headed shell plans, iShellBrowser.

13 What is that a reference to, sir?

14 A. That is a shorthand for the APIs that we have been  
15 calling namespace extensions.

16 Q. Now, in the first paragraph you say it is time for a  
17 decision on iShellBrowser.

18 Why were you making that decision, sir?

19 A. Well, it was a decision about what the Windows 95 --  
20 Chicago people would do, but it had a huge impact if we went  
21 ahead with those things and put it in the shipping product.

22 It had an impact on Windows NT and Cairo. Windows NT and  
23 Cairo were saying, no, you know, either redesign these  
24 things to be right or don't do them. That is what NT was  
25 saying.

1 Cairo was just saying don't do them. They take things  
2 in the wrong direction and it is just going to be a mess.  
3 Whereas Chicago and Win 95 was saying, gee, we kind of like  
4 this stuff, and why don't you just let us go ahead and ship  
5 it.

6 Q. Why did you care what the Cairo team thought if you had  
7 already decided to transfer them over to the Office group  
8 because they were not performing?

9 A. Well, it was particularly important -- whenever a team  
10 gets in trouble, trying to help them out by making their  
11 task simpler is a key issue of engineering management. You  
12 want to think, okay, they are not succeeding because they  
13 are trying to do too much. And so with Cairo the idea of  
14 taking on upward comparability with lots of things -- we had  
15 relieved them from that.

16 This is one that they were complaining about and, you  
17 know, so in particular we are trying, we put a lot of money  
18 into that effort and I was a big believer in that effort.  
19 So anything that would simplify their life, that was a big  
20 plus and it had to be weighed in in terms of this decision.

21 Q. Now, Mr. Gates, just so that it is clear, who was  
22 running the Windows 95 team in October of 1994?

23 A. I was the CEO, but the person directly in charge was  
24 Brad Silverberg and he worked for me.

25 Q. Did he have a counterpart in charge of Windows NT and

1 Cairo?

2 A. Yes, Jim Allchin was a peer of Brad Silverberg, and  
3 Paul Maritz -- so the way it worked was Brad Silverberg had  
4 Windows 95, which, of course, was Chicago, and Jim had  
5 Windows NT, which is both the high end version for PCs but  
6 also used on the server, and he had all our file sharing  
7 work as well. Then those two worked for Paul Maritz who  
8 worked for me.

9 Q. So Mr. Maritz was in charge of all of those operating  
10 systems, reporting directly to you, correct?

11 A. Yea. That was called the systems division, I believe.  
12 It had different names at different times, but variants on  
13 the term systems division.

14 Q. Now, going back to Plaintiff's Exhibit 1, sir, in the  
15 second paragraph you say this is a tough decision.

16 Why did you say that, sir?

17 A. Well, I knew whichever way I decided it there would be  
18 somebody who would be disappointed. If I decided that, hey,  
19 this stuff that, you know, they didn't talk to you about in  
20 advance, that they just did, they didn't think about your  
21 needs, if I said, yeah, let them go ahead and you guys have  
22 to do the upward compatibility and, you know, somehow deal  
23 with the robustness challenge or deal with the complexities,  
24 I knew that would make the NT people unhappy and make it  
25 harder for them to do what they wanted to do on behalf of

1 the company.

2 Likewise for Cairo, but I knew if I said, no, we're not  
3 going to have these as part of the official API set that  
4 people who had worked on this effort, that they would be  
5 disappointed that I was basically saying no to them.

6 Q. Now, you say in the second sentence of the second  
7 paragraph, Mr. Gates, that the Chicago team has done some  
8 great work in developing a user interface that will be a big  
9 step forward for millions of people.

10 What did you mean by that, sir?

11 A. Well, you can say that it presages that I'm about to  
12 decide against the Chicago team, because here I am saying  
13 something nice to them, which was very well deserved,  
14 absolutely. They had done the Windows 95 shell, the stuff  
15 they had done was a great work and, of course, subsequently  
16 that would prove to absolutely be the case that Windows 95  
17 was a very successful product.

18 Q. In the next sentence, sir, you say the Explorer, and by  
19 that, just to make sure that we have the same terminology,  
20 are you referring there to the Windows Explorer?

21 A. Yes.

22 Q. You say the Explorer is an important part of this,  
23 because it provides a needed paradigm for finding  
24 interesting information.

25 Were you talking there, sir, about the namespace

1 extension mechanism?

2 A. Not in particular, but just the general idea that once  
3 you have that tree view there are things like system  
4 utilities that are part of Windows that can be exposed  
5 there. Things like in the control panel that we saw.

6 Q. The next sentence says the shell group did a good job  
7 defining extensibility interfaces.

8 What does that mean?

9 A. That means broadly this shell gives, even well beyond  
10 the namespace extensions, it gives more extensibility  
11 chances to software developers.

12 Q. And then the last sentence in this paragraph says it is  
13 also very late in the day to -- it probably means to be  
14 making changes to Chicago and Capone.

15 Why did you say that, Mr. Gates?

16 A. Well, both of those groups were hoping to ship in the  
17 next year or so and, you know, any change you make you have  
18 to keep in mind -- actually the change -- it is a pretty  
19 simple change compared to other types of changes, but when  
20 you're hoping to ship in a year you try to minimize the  
21 changes that you make.

22 Q. Now, let's move on to the next paragraph of Plaintiff's  
23 Exhibit 1. You write it is hard to know how much actual  
24 market benefit iShellBrowser integration would bring. I  
25 believe Chicago will be very successful either way.

1           Why did you say that, sir?

2           A.    It was just my opinion that this in some ways was not  
3           that big of a deal.  It had kind of been blown out of  
4           proportion and that it was not going to effect, you know,  
5           taking the two products of most interest, the e-mail client  
6           we were doing, and I talk about that later, and Chicago  
7           itself, and it wasn't going to have a big effect on either  
8           of them and so, you know, I was saying, you know, not that  
9           dramatic.

10          Q.    Well, you knew it was a big deal for people making word  
11          processors and spread sheets, didn't you?

12          A.    Absolutely not.

13          Q.    Why do you say that?

14          A.    Because these features were something that you would  
15          use with an e-mail client or some type of system utility,  
16          not in a word processor spreadsheet, as far as I knew.  All  
17          they did was for e-mail or system utilities give you in that  
18          tree view a way of looking at one level down to what was  
19          inside the files.

20          Q.    You say in the next sentence, unfortunately, I don't  
21          think the integration will have a marked effect in terms of  
22          Capone competing with CC Mail, so that battle will have to  
23          be won on other grounds.

24                Just in terms of the terms in this sentence, what was  
25          Capone?  What was Capone?

1 A. This is about other than system utilities the main  
2 category you would expect to use these extensions was an  
3 e-mail client. And so the most popular e-mail client on  
4 Windows at the time was a product called CC Mail which was  
5 from Lotus, which was our largest applications competitor.  
6 And Capone was the code name for an e-mail client we were  
7 developing, and they were one of the groups that had been  
8 planning to use these extensions. And so what I'm saying  
9 here is that I don't think them having these extensions is a  
10 big deal in terms of the competition in the one market where  
11 I could see it being used, which is e-mail clients.

12 And so I'm saying that Capone will have to compete with  
13 CC Mail based on its other characteristics of, you know,  
14 speed, features, richness, and this is not going to make any  
15 meaningful difference in terms of that competition.

16 Q. What if any difference exists between an e-mail client  
17 on the one hand and a word processing application on the  
18 other that would make them more or less likely to use the  
19 namespace extension APIs?

20 A. Well, with an e-mail client there is kind of a  
21 namespace, that is, if you're a user who uses folders you  
22 name those folders. And so you think of my e-mail and then  
23 kind of like a tree your set of folders, and then under  
24 those folders you can have other folders and e-mail. And so  
25 the idea that you could take a hierarchy of files and then

1 let it go down into the e-mail, you know, makes sense  
2 because there is a tree oriented outline or a hierarchical  
3 set of names inside there. That is exactly what some system  
4 utilities and the Capone e-mail client had planned to do, if  
5 you're using the tree view in Explorer.

6 Obviously, when you're running the Capone application  
7 itself they can do whatever they want there as well, but  
8 what we're talking about here is only effecting when you're  
9 in that tree view.

10 On the other hand, with the word processor there is no  
11 equivalent to folders. That is, when you get into a  
12 document it is a bunch of text and there is no set of names  
13 there. It is like you write a letter. What is that? It is  
14 just a set of text, and so we didn't see the word processor  
15 sticking anything into that kind of hierarchy of names. You  
16 know, it was not something that would make a meaningful  
17 experience.

18 Q. Didn't you know, Mr. Gates, on October 3rd of 1994 that  
19 the namespace extension APIs were absolutely crucial to the  
20 development of WordPerfect and QuatroPro for Windows 95?

21 A. Absolutely not.

22 Q. Now, you go on to say in this next sentence that this  
23 is not to say there is anything wrong with the extensions.  
24 On the contrary, they are a very nice piece of work.

25 Why did you say that, Mr. Gates?

1 A. It is a friendly thing to say to someone who you're  
2 telling that their APIs are not going to be part of the  
3 official API set. I felt that way. The shell team that was  
4 involved in this overall had done good work. I didn't want  
5 somebody to quit or be super demoralized because of this  
6 decision and yet, you know, I was making a decision and I  
7 thought it was the right decision.

8 Q. Now, in the next paragraph you say, on the other hand,  
9 we are in -- we are in a real struggle versus Notes, and the  
10 Office REN team needs to have as quickly as they can to  
11 deliver really rich unified views of information, and to  
12 provide and exploit storage unifications as systems make  
13 that possible, and we need as clear a path as possible to  
14 allow them to get to that.

15 Are you saying here, Mr. Gates, that by withdrawing  
16 support for the namespace extension APIs, that you hope to  
17 give the Office REN team a leg up in competing with third  
18 parties?

19 A. No. What this is about is that the REN team -- maybe  
20 we should look at the next sentence here -- the REN team,  
21 and that was a fancy e-mail client which was required to be  
22 a superset of Capone. They were saying that it would take  
23 them five man years to do all of that superset type  
24 capability. They didn't want to be -- you know, they didn't  
25 want that imposed on them.

1 Notes is a fancy form of e-mail. It was called  
2 Collaboration or WorkGroup or things like that. It was a  
3 product from Lotus that kind of took e-mail in a more  
4 powerful direction. The Capone client or simple e-mail  
5 clients didn't really get out to that kind of collaborative  
6 WorkGroup stuff.

7 Our REN client, which was a fancy e-mail client with  
8 lots of rich work capabilities, did. When I talked about  
9 storage unification, and that is referring to the Cairo work  
10 that eventually -- if the operating system had this general  
11 view of rich storage, then you could have applications that  
12 took advantage of that. My view was that when we got the  
13 richness in the operating system, real richness, we would  
14 have a chance to do something pretty interesting, but that  
15 what I was making the decision on at this point was not  
16 significant for e-mail competition.

17 Q. Well, was it significant for competition among suites  
18 of office applications?

19 A. Well, even less so, since we didn't anticipate or see  
20 any reason why those would be using these particular APIs.

21 Q. Now, in the next sentence you say if we felt we could  
22 expand this team easily to help Office beat Notes, be a  
23 source of future shell technology and be compatible, then I  
24 would say the extensions are okay. However, the REN team  
25 will find it tough to deliver on all of these even without

1 compatibility.

2 What did you mean there, sir?

3 A. Well, the idea is that what REN was doing was hard  
4 enough without trying to take on all of these other things,  
5 including this upward compatibility, you know, where e-mail  
6 had gone before REN got shipped, but then they would have to  
7 take and do the superset for that. I'm trying to make the  
8 job of the REN team somewhat easier.

9 I said it could be done, that you get this what I call  
10 storage unification, which was the Cairo vision, if that  
11 could be done, and it was a superset, an upwards compatible  
12 thing, fine, but what I was being told by the REN team was  
13 that that was not achievable by that team.

14 Q. Now, Mr. Gates, in advance of October 3rd of 1994, you  
15 had been in attendance at a conference where Mr. Frankenberg  
16 from Novell demonstrated a project called Corsair; is that  
17 right?

18 A. That is correct.

19 Q. And among the things that Corsair said it was going to  
20 do was provide unified views of information; is that  
21 correct?

22 A. Yeah. That's one of the things they talked about.

23 Q. And the reason that you decided to withdraw support for  
24 the namespace extension APIs is because you were afraid that  
25 Novell was going to use those namespace extension APIs to

1 get the jump on Microsoft in providing unified views of  
2 information. Isn't that right, sir?

3 A. No.

4 Q. What connection, if any, did you see between Corsair  
5 and the namespace extension APIs?

6 A. Well, the namespace extension APIs are not rich enough  
7 to give you the ability to do this kind of information  
8 browser shell. And so ISVs, including WordPerfect, and  
9 including if Corsair had become a real product, they could  
10 have either built that stuff themselves or wait until we  
11 provided them some systems layers that supported that kind  
12 of rich stuff, which we were trying to do in Cairo.

13 They could have done it on their own, but the namespace  
14 extensions alone were so limited that it wouldn't have been  
15 a meaningful part of such a rich information viewer.

16 Q. When you saw Corsair demonstrated, did you believe that  
17 it was using the namespace extension APIs?

18 A. No.

19 Q. Now, in the next paragraph you say I have decided that  
20 we should not publish these extensions. We should wait  
21 until we have a way to do a high level of integration that  
22 will be harder for the likes of Notes, WordPerfect to  
23 achieve and will give Office a real advantage.

24 Can you explain to us what you meant when you wrote  
25 that, Mr. Gates?

1 A. Yeah. I thought that as we got the Cairo level of  
2 integration that we would be able to reconceptualize how  
3 e-mail and WorkGroup was done, and that it was likely we  
4 would -- although anybody could use that, because the shell  
5 would be a system feature, that we probably would do a  
6 better job of taking advantage of that new viewing  
7 architecture. And so Notes is just a collaboration product,  
8 and WordPerfect also had GroupWise, which I'm referring to  
9 here, which is their mail groupware type product.

10 And so in this whole notes area, e-mail type area, I  
11 decided that until we got to the Cairo capability it really  
12 didn't change things enough to be worth the trouble to cause  
13 the problems for the NT and Cairo teams, if I had gone the  
14 other way, would have caused.

15 Q. Mr. Gates, aren't you saying in the second paragraph,  
16 sir, that we should wait until we have a way to do a high  
17 level of integration that will be harder for the likes of  
18 WordPerfect and the word processor software to achieve?

19 A. No.

20 Q. Why do you know that, sir?

21 A. Well, Notes is only a collaboration feature, and when  
22 we're talking about this idea of a set of objects -- e-mail  
23 clients and WorkGroup collaboration deal with a set of  
24 objects. The whole Cairo idea was to take the way that you  
25 look at a set of files and trees and queries and stuff like

1 that, and make it rich enough that it would change how you  
2 thought about an e-mail client or any type of WorkGroup  
3 thing where you're dealing with a rich set of information.

4 When you're doing word processing you're not in the  
5 shell, you're mostly in your document sitting there editing  
6 the document. So when you read and talk to somebody who  
7 uses a word processor or look at a review, like a review of  
8 a word processor, they are not sitting there talking to you  
9 about something about what happens in a shell. They are  
10 talking about what happens when you want to do footnotes and  
11 long documents and indexes and tables and things that relate  
12 to word processors, that none of this shell related stuff  
13 bears in any meaningful way on word processing itself.

14 Q. Now, you say we should wait until we have a way to do a  
15 high level of integration. Was that level of integration  
16 that you're referring to there ever achieved?

17 A. No. That was the Cairo project which, unfortunately,  
18 never got shipped.

19 Q. Now, in the next sentence, Mr. Gates, you say this  
20 means that Capone and Marvel -- let's just pause there.

21 What was Marvel?

22 A. Marvel was a system utility for the Microsoft network.  
23 It didn't end up being used very much, but it was an online  
24 information browsing utility, that this idea of a hierarchy  
25 of names was something that would have fit with that.

1 Q. You say this means that Capone and Marvel can still  
2 live in the top level of the Explorer namespace but will run  
3 separately.

4 What does that mean, sir?

5 A. Yeah. That means that they'll just be like any  
6 application -- the name of the application is there, but  
7 they don't have some unique way that they are taking the  
8 tree and extending it with their own set of folders, in the  
9 case of Capone, that is an e-mail client, or information  
10 hierarchy for Marvel because it is an online system browser.

11 Q. In the next sentence you say we can continue to use the  
12 iShellBrowser APIs for Microsoft provided views such as  
13 Control Panel, and can use them for other Microsoft provided  
14 views that don't create a large compatibility or ISV issue.

15 What difference, if any, in your mind, was there  
16 between having third party code called the namespace  
17 extension APIs and code written by Microsoft itself calling  
18 the namespace extension APIs?

19 A. Well, the key distinction is not so much who writes the  
20 code, but where the code ships. And so if code is shipping  
21 with the operating system, then you always when you update  
22 the operating system you can also update that code at the  
23 same time.

24 So, for example, take the Control Panel. The Control  
25 Panel is a part of Windows. It kind of runs almost like an

1 application, but it always ships with Windows, and so it can  
2 have a design connection with Windows that is not -- there  
3 is no upwards compatibility problem, because that version of  
4 Control Panel only has to run with that one version of  
5 Windows. If you have a future version of Windows you're  
6 going to have a future version of Control Panel.

7 And so the care about which APIs you are publishing and  
8 guaranteeing in the future, that is not an issue for  
9 components that ship with Windows itself. It is an issue  
10 for things that ship separately from Windows.

11 Q. Now, in the next paragraph, which begins I would also  
12 like to add a few words about the recent shell  
13 reorganization, is this paragraph talking about exactly the  
14 same thing as the prior paragraph?

15 A. No. Now I am talking about the decision that was made  
16 to move Cairo over to REN, and ask the Windows NT team to  
17 take a look at the Chicago shell and see what needs to be  
18 done to it to make that their shell code base. And that  
19 although there was a lot of tension about that, because I  
20 was forcing these groups to work together, it was moving us  
21 from having three groups doing user interface innovation to  
22 having the two, which was the shell that was now going to be  
23 common across Windows 95, Chicago and NT, and this Cairo  
24 thing that was very innovative. Unfortunately, so  
25 innovative that it never got done. That was now the second

1 center -- user interface, UI is just an acronym for user  
2 interface, user interface innovation.

3 Q. Now, I think you have talked about the first three  
4 sentences. What did you mean when you say having the Office  
5 team really think through the information intensive  
6 scenarios, and be a demanding client of systems is  
7 absolutely critical to our future success? We can't compete  
8 with Lotus and WordPerfect Novell without this.

9 A. People -- customers were using and moving to deal with  
10 information in a more complex way. The PC was moving from  
11 just being something that an individual would use and create  
12 documents and print them out, to something where the  
13 corporate information was exposed and you would actually  
14 browse it on the screen of the machine. And thinking, okay,  
15 what did that mean about project teams and electronic  
16 documents and how you organize documents and coordinate  
17 teams?

18 There are a lot of rich scenarios that were now very  
19 relevant, and Lotus particularly with their Notes, WorkGroup  
20 work, WordPerfect Novell, because of their history of having  
21 done file sharing type things, all of us were looking at  
22 these information intensive scenarios and thinking, okay,  
23 how can we both at a platform level and an application level  
24 do a great job on those things.

25 In fact, the next round of releases that we were

1 planning, the next round of Office, the next round of  
2 Windows after Windows 95, dealing with those kinds of  
3 scenarios I wanted to be a key theme of the new work that we  
4 did, and I thought that was key to our competitive position.

5 Q. Mr. Gates, aren't you saying in that second sentence in  
6 yellow that Microsoft Word and Microsoft Excel and Microsoft  
7 Office cannot compete with Lotus Smart Suite and  
8 WordPerfect, Novell Perfect Office unless you withdrew  
9 support for the namespace extension APIs?

10 A. Absolutely not. This is a discussion about what we  
11 need to do going forward, and that as a company we need to  
12 understand information intensive scenarios. You know, here  
13 we have gone in part where I'm talking about why I did the  
14 shell reorganization, and sharing with people what is going  
15 to be the theme of these next products, and why I think that  
16 is interesting and how I think it is important from a  
17 competitive point of view.

18 I close the paragraph talking about the next round of  
19 Office and the next round of Windows and what is going to  
20 happen there, at the time assuming that the Cairo work would  
21 be a key element of those releases.

22 Q. Well, the next sentence says our goal is to have Office  
23 96 sell better because of the shell integration work.

24 What that is saying, is it not, sir, is that Microsoft  
25 planned to use the namespace extension APIs to sell more

1 versions of Office 96?

2 A. No. As I have said, the namespace extensions are  
3 pretty irrelevant when it comes to mainstream word  
4 processing, spread sheets, those types of things.

5 Now, as you look at e-mail and where that was going,  
6 and if you could get the shell up to this very rich level,  
7 it would have a significant impact on how you thought about  
8 information work. But Office 96 was a version that was  
9 going to ship with the next round of Windows and, you know,  
10 we had high hopes that we would get our platform level up so  
11 that the two could innovate together.

12 Q. Looking at this paragraph as a whole, what effect, if  
13 any, do the things you're saying in this paragraph have to  
14 do with the decision to withdraw support for the namespace  
15 extension APIs?

16 A. It is not directly related. It is about the shell and,  
17 of course, the name space extensions were part of the shell.  
18 Here I am sending e-mails to all of these different Windows  
19 teams about shell type things, and so I decide to talk about  
20 why did I move the REN team, the Cairo team over to REN,  
21 which was controversial, and why did I decide that once NT  
22 lost the Cairo team that I still was not going to let them  
23 go off and do their own separate shell, but I wanted them to  
24 use the Chicago shell as much as possible and look at what  
25 would be hard about that?

1 I was trying to explain to people why I had made those  
2 design decisions, and how I saw this general area, how we  
3 managed information, how both the platform and applications  
4 had innovated with that, and how I saw that as important to  
5 our competitive future.

6 Q. Isn't it true, Mr. Gates, that the reason that you  
7 withdrew support for the namespace extension APIs was  
8 because you were afraid that the Office team was behind  
9 other developers of business applications in taking  
10 advantage of the new features of Windows 95?

11 A. Absolutely not. To the contrary we were, and everybody  
12 knew it, we were doing the best job of taking advantage of  
13 Windows 95.

14 Q. What knowledge, if any, did you have on October 3rd of  
15 1994 about what Novell was planning to do vis-a-vis the  
16 namespace extension APIs?

17 A. I don't think I had any awareness at all about the  
18 specifics of whether they were using them or not.

19 Q. Now, when you decided to withdraw support for the  
20 namespace extension APIs, did that mean that the software  
21 code that implemented those APIs was ripped from the system?

22 A. Well, it was up to the Windows team how they  
23 implemented my decision. As you see in this e-mail, I did  
24 say to them that they were not going to publish them. Now,  
25 exactly whether they had internal code that like, as I say,

1 the control panel that uses it so that they would still be  
2 there for internal use, that was up to them. But the idea  
3 that we wouldn't burden Windows NT or Cairo with upwards  
4 compatibility with these things, that was the key to this  
5 decision.

6 Q. Did you come to learn at a later time that the code  
7 stayed in the system?

8 A. Yeah. I have seen documents that say that in fact they  
9 did keep the code in, but they were clear to people that  
10 these APIs were not like normal APIs where we were  
11 guaranteeing that they would be there in the future.

12 Q. I would like to show you what has been marked as  
13 Defendant's Exhibit 82.

14 THE COURT: I am assuming that you are probably  
15 getting near the end of your direct.

16 MR. HOLLEY: I think that is fair, Your Honor. I  
17 always hesitate to predict.

18 THE COURT: No. No. Finish up what you think you  
19 want to do and then we'll break for lunch.

20 MR. HOLLEY: Okay.

21 THE COURT: Finish up what you want and then you  
22 can look over your notes.

23 MR. HOLLEY: Fair enough, Your Honor.

24 If I could just find DX-82, I would be in good  
25 shape.

1 BY MR. HOLLEY

2 Q. Mr. Gates, starting at the e-mail at the bottom, this  
3 is an e-mail from you to Mr. Maritz dated November 8, 1994.  
4 It is entitled shell extensions. You write I am a little  
5 confused by what is going on in this whole area.

6 Why did you write that, sir?

7 A. Well, I'm sure that I was confused. I mean, curious.  
8 Mr. Maritz updated me, you know, where people -- you know, I  
9 had made the decision but, you know, it is interesting to  
10 know what was going on, and so he sent me back e-mails  
11 giving me an update on that.

12 Q. Let's look at the e-mail that Mr. Maritz sent back to  
13 you in response to your e-mail. We have decided you must  
14 have been in a different time zone, but he says in the first  
15 paragraph I met on Friday with DRG.

16 That is what, sir?

17 A. Our group that reached out to the large ISVs and did  
18 big software developer -- independent software developer  
19 events was called the Developer Relationship Group. And so  
20 because we have an acronym for everything it is called DRG.

21 Q. And then he refers to somebody with an e-mail alias Joe

22 B.

23 Who was that?

24 A. That is Joe Belfiore.

25 Q. What was Mr. Belfiore's role in the development of

1 Windows 95?

2 A. I think he was a program manager on Windows 95.

3 Q. In the first paragraph Mr. Maritz reports to you on  
4 November 7, 1994, approximately one month after your PX-1  
5 e-mail, and he says in M7 -- what is M7? What does that  
6 stand for?

7 A. The various releases, the various builds of the Chicago  
8 operating system, Windows 95 that we did were called -- we  
9 used this milestone terminology. So M1 was milestone one,  
10 M2 was milestone two, and so M7 refers to the milestone  
11 seventh build. It was a recent build that was being worked  
12 on.

13 Q. In the second -- well, in that sentence it goes on to  
14 say in M7 the Chicago shell has been changed to force  
15 apps -- and that is short for applications, right?

16 A. Right.

17 Q. -- force apps that use the iShellFolder interfaces to  
18 open into a separate window, i.e., appear to be separate  
19 apps.

20 The iShellFolder interfaces are what, Mr. Gates?

21 A. Those are these things that are sometimes called the  
22 namespace extensions.

23 Q. Okay. Then in the second paragraph, number two, Mr.  
24 Maritz reports to you there were four groups using these  
25 interfaces, Capone, Marvel, Stac and Symantec.

1           We have talked about Capone and Marvel. Can you tell  
2 us what Stac and Symantec were?

3           A. Symantic. Yeah. Capone is the code name for the  
4 internal e-mail client. The other three things are all  
5 system utilities. Marvel is an online browser system  
6 utilities we did that was internal. Stac was a third-party  
7 software company that does system utilities, likewise  
8 Symantic, so these are the types of people that you would  
9 expect to be using those APIs, system utilities companies.

10          Q. Were you told at any time either by Mr. Maritz or  
11 anyone in the developer relations group that there were more  
12 than these four groups using the namespace extension APIs at  
13 the time that you decided to withdraw support for them?

14          A. Well, at the time I made the decision, you know, the  
15 view was we knew who was likely to be using the thing.  
16 Later, you know, Mr. Maritz clearly made an effort with DRG  
17 to go out and find out who was using these things, and so  
18 now we have a clearer view.

19          Q. And my question to you, Mr. Gates, at any time did it  
20 come to your attention that this list that Mr. Maritz gave  
21 to you from the developer relationship group was incomplete,  
22 because there were more people who had been using the  
23 namespace extension APIs in ways that were important to  
24 their product?

25          A. No. There were no -- I had lots of meetings with ISVs

1 in late 94, early 95, and at none of those meetings did  
2 anyone come forward and say either that they were using them  
3 or that they had any issues related to them whatsoever.

4 Q. Now, you say in the next sentence of paragraph number  
5 two, Capone, Stac and Symantec have found ways not to use  
6 them. However, the Marvel guys have said there is no way  
7 they can move off the current interfaces and still have  
8 chance of shipping with Windows 95.

9 How could a company like Stac or Symantec find ways not  
10 to use the namespace extension APIs?

11 A. Well --

12 MR. JOHNSON: Objection.

13 THE COURT: Rephrase the question.

14 BY MR. HOLLEY

15 Q. Based on your knowledge, Mr. Gates, as the CEO of  
16 Microsoft, about what the namespace extension APIs did, how  
17 could a utility vendor like Stac or Symantec find ways not  
18 to use them?

19 A. Well, there are several things they could do. They  
20 can --

21 MR. JOHNSON: Objection.

22 THE COURT: Overruled.

23 You can answer.

24 THE WITNESS: They can have their own application  
25 present whatever tree view they want, or they can simply

1 give up on the fact that, you know, as you click through  
2 that namespace you're just going to see the files. It is  
3 not that critical. Stac -- the main value of Stac is that  
4 it compresses disks. It is a system utility to do that and  
5 all of that works just great.

6 Symantic had to do with various security type  
7 functions, and they had their own application, and all of  
8 that could work just great. It is not a critical thing to  
9 just be able to show more names, so they chose one of those  
10 two ways.

11 BY MR. HOLLEY

12 Q. Now, in paragraph number three, Mr. Maritz reports to  
13 you based on this stance by Marvel we will not disable the  
14 interfaces, but will not document the iShellFolder in  
15 regular documentation, but we will have them documented in a  
16 resource kit, so that if someone really, really does want to  
17 use them they can.

18 Did any ISV ever tell you, Mr. Gates, that they really,  
19 really wanted to use the namespace extension APIs after  
20 October of 1994?

21 A. No. Other than Marvel, which was only shipping with  
22 Windows 95, so it would never be an issue for Windows NT,  
23 and it would never be an issue with Cairo, so it avoided the  
24 problems that we talked about. I never heard anything more  
25 about any issues related to ISV usage.

1 MR. HOLLEY: Your Honor, I think I'm about to move  
2 to a new topic.

3 THE COURT: Let's break for lunch. Come back in  
4 in 20 minutes or so.

5 MR. HOLLEY: Thank you, Your Honor.

6 (Recess)

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