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IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF UTAH

CENTRAL DIVISION

In re:		)	
		)	
NOVELL,		)	
		)	
		)	
	Plaintiff,	)	
		)	
vs.		)	Case No.
		)	2:04-CV-01045JFM
MICROSOFT,		)	
		)	
	Defendant.	)	
		)	
		)	

BEFORE THE HONORABLE J. FREDERICK MOTZ

December 1, 2011

Daily Transcript of Jury Trial

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1 Salt Lake City, Utah, December 1, 2011 \* \* \* \* \* 2 THE COURT: Good morning, everybody. 3 MR. HOLLEY: Good morning, Your Honor. 4 5 THE CLERK: Are we ready for the jury, Judge? THE COURT: Yes. 6 (Whereupon, the jury returned to the courtroom.) 7 THE COURT: You all are remarkable. I thought the 8 9 chances of having 12 jurors here was fairly impossible today. And I know that Teresa already told you this, but if 10 11 any of you, I know one of you had to get up at 5:00 this morning and drive through some bad circumstances, but if any 12 13 of you have concern for any reason, convenience or something, danger or health, and you can't get hold of 14 15 Teresa, I'll give you my number. But more importantly, just 16 stay the night and then we can get the approval you need. But thank you all for being so prompt. 17 18 Mr. Holley? MR. HOLLEY: Good morning, Your Honor. Microsoft 19 20 calls Satoshi Nakajima to the stand. Raise your right hand, 21 please. 22 SATOSHI NAKAJIMA, 23 called as a witness at the request of the Defendant, 24 having been first duly sworn, was examined 25 and testified as follows:

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1 THE WITNESS: Yes, I swear. 2 THE CLERK: Please be seated. THE COURT: It is good to see you. We have heard a 3 lot about you. 4 5 THE CLERK: Please state your full name and spell it 6 for the record. THE WITNESS: Yes. My name is Satoshi Nakajima, 7 S-A-T-O-S-H-I N-A-K-A-J-I-M-A. 8 9 DIRECT EXAMINATION BY MR. HOLLEY: 10 11 Q. Good morning, Mr. Nakajima. Did you attend college, sir? 12 13 A. Yes, I attended college in Japan. 14 Q. And what university did you attend? 15 A. It is called Waseda University, a private school 16 over there. Q. And how do you, just for the court reporter, how 17 18 do you spell Waseda? A. W-A-S-E-D-A. 19 Q. Did you major in any particular subject at Waseda 20 University in Tokyo? 21 22 A. Yes. My major was electrical engineering. That was -- okay that was -- I was born in 1960. So at the time 23 24 I attended the college, there was no computer and science 25 major, so I needed to attend but I essentially studied

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1 computer science.

2 Q. And what degrees did you get from Waseda 3 University in electrical engineering? A. I got a bachelor's degree first and then master's 4 5 degree as well. So yeah, additional -- two additional years. 6 7 Ο. What was your first job after you graduated from 8 college with your master's degree? 9 A. I went to a research center of NTT, Nippon Telecom -- sorry, I cannot say it well. But according Bell 10 11 Lab AT&T's Bell Lab. AT&T has a research center called Bell Laboratory, Bell Lab, just like that. So AT&T it is a AT&T 12 13 in Japan, Nippon, Japan, and that was the research center. Q. Mr. Nakajima, when did you first start working 14 15 for the Microsoft Corporation? 16 Α. 1986, that was in the Tokyo Office. 17 And what did you do in the Tokyo Office at Ο. 18 Microsoft starting in 1986? 19 A. I was a software engineer and I was in charge of the localization of windows. The version of Windows at that 20 time was 1.03, so very, very first version of Windows. 21 22 Q. And what was required to localize Windows into 23 Japanese? 24 Two things. One is to deal with the special Α. 25 characters, the Japanese character set is larger than the

1 U.S., you have only 26 here but there are 30,000 characters. 2 So in order to present each character, we need two 3 bytes, I mean 16-bits. And so that is why the software needs to be modified to deal with this double byte 4 5 characters. So that was the one thing. And then another thing is the input mechanism because the Japanese is a 6 7 phonetic language, so instead of spelling the word in the 8 way like English, we type the pronunciation and then the 9 dictionary look up happens and then the appropriate word 10 appears. 11 Now Mr. Nakajima, are you currently an employee Q. of the Microsoft Corporation? 12 13 No, I left in 2000. Α. And what did you do after you left Microsoft in 14 Q. 15 the year 2000? 16 Α. I initially joined a major capital firm called Ignition Partners but stayed only several months and then 17 18 started my own software company called UIEvolution, one word, UIEvolution, targeting the mobile wireless device. 19 20 And the company was called UIEvolution because UI Q. stands for user interface? 21 22 Α. Yes, user interface. 23 Ο. How long did you work at UIEvolution? 24 I am still a board member there, but I was CEO Α. 25 from 2000 to 2004 when the company was acquired, but I

1 served for the acquirer called the Square, Inc. for 2 additional three years until 2007. And then I left. And 3 then after that, the management buyout happens and then I still am helping them on the board member. 4 5 Q. Other than being a director of UIEvolution, have 6 you been engaged in any other business activities since 2007? 7 8 A. Yes, I am right now running a small LLC called 9 Neupen, LLC, N-E-U-P-E-N, LLC, and building software for I-Phone and the I-Pad. 10 11 In connection with developing applications for Ο. the I-Phone and the I-Pad, have you had occasion to use beta 12 13 versions of the Apple operating systems? 14 A. Yes. Yes, always. 15 Q. What changes, if any, does Apple make to beta 16 versions of its operating systems before they're commercially released? 17 18 Α. What changes? Changes? Do those beta versions change in 19 Q. 20 between the time that you foresee them and when the product is commercially released? 21 22 Α. Yes, they do make -- occasionally make some 23 changes, not occasionally they often make changes. 24 Q. Have you ever had an experience where Apple 25 evangelized an API, an application programming interface,

1 that you relied on that was later changed or deleted? 2 A. Yes. The one -- they made many changes and most 3 of those changes are small so it is easy to deal with. But the one -- one change they made was the very first version 4 5 of their operating system had an API called the get device I.D. which returns the unique identifier of the device. 6 And then so we wrote some software to rely on that API 7 8 to essentially identify the user. So one of the social 9 networking applications to share photos we used that I.D. to 10 essentially send it to the server to identify who uploaded 11 that picture, to eliminate the complete log in the process. 12 So in that sense, that service was unique in the sense that 13 nobody needs to remember the username, password or anything, 14 they did it for them. 15 But recently Apple announced that they're going to 16 take out that API for privacy reason. And that product is now in a questionable stage because the whole advantage of 17 18 that product was you don't need to remember user I.D.'s and 19 password. But all of a sudden, once they take out that API,

first of all that application suddenly stops working so we need to come up with a new mechanism which requires a new process and quite likely we're going to lose all of the users in that process.

24 Q. And when you're talking about the product being 25 in a questionable state, is this your product?

1	A. Yes, but it is not it is my product, but
2	between UIEvolution and Neupen, I had another small venture
3	called the Big Canvas which is also an I-Phone application
4	company and then we released that product from and then
5	because I am now dedicated in a Neupen that photo share,
6	that application, the application called the photo share,
7	has been maintained by UIEvolution.
8	Q. And just so it is clear that your company in
9	between UIEvolution and Neupen was called Big Canvas?
10	A. Yeah, Big Canvas.
11	Q. Big Canvas. So Mr. Nakajima, are you aware of
12	any platform vendors other than Apple that have withdrawn
13	APIs after evangelizing them to ISVs or independent software
14	vendors?
15	A. The most famous case is the Google Wave. Google
16	the wave Google came up with the service called the
17	Wave which is which was supposed to compete against
18	Facebook and Twitter. So the platform to be able to
19	software network applications to third parties. And Google
20	made announcement, they always release to the press, to the
21	public, this is the new platform, we're going to fight
22	against Facebook and Twitter, and they promoted really,
23	really heavily among the development communities. But after
24	several months, they decided to stop providing that service.
25	Q. Mr. Nakajima, I would like to show you a web page

1 from the Google website which has been marked for 2 identification as 207.1. Just one moment, Your Honor. THE COURT: I gather this should not go on the screen 3 yet? 4 5 MR. JOHNSON: Yes, please. THE COURT: Go ahead. 6 7 (By Mr. Holley) Mr. Nakajima, looking at this Ο. 8 web page, is this referring to what you were just describing 9 in your testimony which is the Google Wave API? 10 Α. Yes. 11 Ο. And what does it mean at the top to say that the API is deprecated? 12 13 It means that Google changed their mind and they Α. 14 decided not to support it in the future. MR. HOLLEY: Your Honor, I would like to move for the 15 admission of what would be Defendant's Exhibit 645. 16 MR. JOHNSON: Your Honor, this is not 17 18 cross-examination. This document was not on the defendant's witness list. I have certainly never seen it before. 19 20 THE COURT: In any event, I think -- I think you have the testimony. I think the testimony is appropriate. 21 22 MR. HOLLEY: Fair enough, Your Honor. 23 (By Mr. Holley) Mr. Nakajima, can you tell the Q. 24 jury what was -- what it was that this API that Google was 25 promoting would allow software vendors to do in their

1 products?

25

2	A. So, for example, if somebody wanted to create
3	some web based game so that people can play games, but the
4	let's say a very simple game like Tetris or something
5	like that, right, and playing one game by yourself is one
6	thing, but playing the same game with other people on the
7	network over the network is another, is different degree of
8	fun. So so some people want to provide that kind of
9	let's say social network version of Tetris but it is very
10	difficult and it also requires a very sophisticated
11	engineering to provide sort of the kind of network game.
12	So if Google provided a Wave API that those
13	third-party developer can rely on Google to provide this
14	social networking part of the technology so that they can
15	just focus on the game itself. So it is a huge advantage
16	actually if Google provided this mechanism and then, for
17	example, I can take advantage, especially for free, to
18	provide a social networking game.
19	Q. What would happen to an ISV who had built its
20	application on the Google Wave API once it was deprecated by
21	Google?
22	A. Yes, certain degree the so if I am in that
23	position and I'm going to be upset because I need to
24	first of all I whatever the amount of time if I put

myself three months, four months to integrate with Google

1 Wave then that amount of time will be -- is now waste. So 2 that is -- that is the cost, like the lost cost. And then 3 in addition, that service no longer works. So I need to find another solution. Let's say I'm going to use Facebook 4 5 API instead. It is going to take another three to four months to integrate and then the worst case is that if 6 7 we -- if we -- if I manage to acquire -- let's say we have a 8 million users using my service and then Google shut it down, 9 then all those people would be very upset because suddenly 10 they cannot play any more game so that the damage is going 11 to be more than three months because I lose customers. 12 Ο. Now Mr. Nakajima going back in time to where we 13 left off in your career at Microsoft, can you tell me how 14 long you stayed in the Tokyo Office of Microsoft? I was there until '89. So I was there three 15 Α. 16 years. And what did you do in 1989 when you left the 17 Ο. 18 Tokyo Office? A. I joined -- I went -- I came to the headquarters 19 20 in Redmond, Washington, to work on the object oriented shell 21 team. 22 Q. Okay. And what did you do on the object oriented shell team? 23 24 Okay. So the object oriented shell team was sort Α. of the research project to design the new user interface for 25

1 -- of the operating system. At that time, that was like 2 back in '89, Apple was the leader in user interface 3 business. So Microsoft needed to do a lot of catch up. So I was -- it was a small team, I think like six or seven 4 5 engineers, and we were responsible to essentially design and prototype the new user interface. 6 Can you tell us, hopefully not in a level that 7 Ο. requires a master's degree in electrical engineering, what 8 9 it means to have an object oriented shell? 10 Α. Okay. So this is going to be tough. So object 11 oriented is a concept in the computer science. So the whole 12 purpose is to make it easy, to make it friendly to the 13 users. And then before the concept of object oriented came to computer science, most of the operations to the computer 14 15 was based on the characters mostly, and based on English. 16 So if you say you want to print a document, you actually type print space and document, document means my 17 18 document dot doc, print space my document dot doc. So that 19 was the typical command line face to interface, and then 20 when -- when the graphics user interface came, then we 21 simply mapped that command line based to the graphic base. 22 So instead of having print space my document dot doc, you 23 pick -- you type some menu which shows you a list of 24 possible verbs like print or open or play, so you pick 25 print. And then you pick the document. So that was the --

1 before the object orient, the graphics version of this 2 command line, command based or command operate command 3 oriented user so verbally use interface. The problem with the verb based or user interface is the possible verb is 4 5 really large because you're dealing with the document, the spreadsheet, the music file, the printers. So if we present 6 7 a list of possible verbs first, the verb -- the number of 8 verbs is enormous, like 300 or in the thousands, so a user 9 needs to choose a print from those large number of choices 10 and then print, then pick the document. It sounds silly but 11 somebody came up with how about picking an object first, object meaning the document first, because if the user picks 12 13 the document first, then the possible verbs can be applied 14 to that document is really limited because right if you 15 first pick the word processor document, then the only thing 16 you can do is open, print, edit. So the number of verbs are limited. So that is a lot easier to deal with. So that is 17 18 the -- that is the concept of putting the object first. 19 Really it is -- it is sort of too simple to say, but it was 20 a breakthrough in the computer technology. Mr. Nakajima, did the object oriented -- excuse 21 Q. 22 me, object oriented shell group release a product at Microsoft? 23

A. No. We simply built a prototype. And that wasalmost like a research project.

1 Ο. And what did you do when you finished your work 2 on the object oriented shell team? A. So then that team was sort of a good team, good 3 engineers, good ideas and sort of -- we had been looking for 4 5 a real product group to launch the idea. And I think we migrated a couple of times but eventually joined a bigger 6 7 team called the Cairo. Cairo was the project name. Cairo like the city in Egypt? 8 Q. 9 Α. Yeah. Okay. And can you describe in general terms what 10 Q. 11 the Cairo project was about? So Cairo was the -- sort of the very strategic 12 Α. 13 effort by Microsoft to compete against Apple mostly, to 14 provide this object oriented user interface, but also object 15 oriented file system. The file system today or that day is 16 mostly based on a list of files and then you have to open the document to see the orders or to open the music file to 17 18 see the artist or list of albums, list of music in the albums. But the concept of object oriented file system is 19 20 this system, the operating system, is aware of those 21 additional properties like author of a document or musicians 22 of the music so that the user can search based on authors or 23 titles or some other additional problems. 24 Q. Did Microsoft release an operating system called 25 Cairo?

1 Α. No. 2 Ο. Why was that? 3 First of all Cairo was a project name. So even Α. though they shipped something, they won't call it Cairo. 4 5 But another reason was the Cairo project was eventually 6 canceled. 7 Ο. How long did you spend working on the Cairo 8 project on the Cairo team? 9 Α. I don't remember the exact length, but I think somewhere between 12 to 18 months. 10 11 Ο. And why did you decide to stop working on the Cairo team? 12 13 Α. Because I felt like the Cairo team is yet another 14 research project and never released a product. 15 Q. Why did you come to believe that the Cairo team 16 would never release a product? 17 Because I found myself attending meetings every Α. 18 day and not producing any software. What did you do when you left the Cairo team? 19 Q. I joined another team called the Chicago which 20 Α. eventually released the Windows 95 operating system. 21 22 Q. Now, at the time that you joined the Windows 95 23 team, were there any other teams at Microsoft working on 24 other operating system products other than Chicago? 25 A. So Cairo was another, so yes. So Microsoft had

the two product teams working on operating system. One is
 called the Cairo, and one is called the Chicago. And I left
 the Cairo team to join the Chicago team.

4 Q. What were your responsibilities when you joined5 the Chicago team?

A. I was in charge of turning Chicago, the operating 6 7 system, we called it the shell. The shell is the sort of 8 look and feel of the operating system. So everything that 9 you see on the screen is called the shell, right. The operating system had a lot of underlying mechanisms in it 10 11 but the user interface is called the shell. So I was in charge of the shell of the Chicago. And yes, and in one 12 13 sense I -- I wanted to apply what I have learned and 14 developed in both the object oriented shell team and the 15 Cairo team and apply that concept to Chicago. So that was 16 my job.

Q. To what extent did you borrow extensibility
concepts from the Cairo shell in your work on the Chicago
shell?

A. Not necessarily extensible mechanism, but the -a lot of concept like a drag and drop, the context menus,
and property sheet, they all came from Cairo.

Q. Were they implemented the same way that the Cairo
team was seeking to implement those same things like
dragging and dropping, and context menus?

A. No. First of all, Cairo was still in the stage of designing or the meetings. So there was no -- no implementation there when I was there. And so I needed to come up with how they -- so implementation was all done inside of Chicago team.

6 Q. What was the nature of the relationship between 7 the Cairo team and the Chicago team after you left the Cairo 8 team to join the Chicago team?

9 A. It was not great. It actually changed over time 10 a little bit. So when I left the Cairo team to join the 11 Chicago, I think that was either '92 or '93, I think the end 12 of '92, the Cairo was the product of the Microsoft and the 13 higher management was making a lot of bet on the Cairo. And Chicago team was almost like a backup plan because after 14 shipping the Windows 3.1, Microsoft was supposed to bet on 15 16 OS/2, which was the partnership with IBM, but the partnership with IBM broke up so Microsoft needed something 17 interim between Windows 3.1 and Cairo. So they kept -- they 18 19 asked the Windows 3.1 team to release something between. 20 So -- so Windows 95 was supposed to be some kind of a small 21 minor upgrade from 3.1 originally, but not necessarily just 22 myself but the partially because I brought a lot of ideas 23 from Cairo to Chicago, the Chicago product started looking 24 more -- looking and behaving more like a Cairo even though 25 that was not the intent from the higher management's point

of view. But it started happening. And the Cairo team was
 upset because in one sense they were -- we were stealing
 their ideas. It was inside the company. So the competition
 started between the two groups.

Q. Now, I would like you to take a look at a
demonstrative which is number 204, Mr. Nakajima. This is
just basically to set the stage for what we're going to be
talking about. Can you explain to the jury what the various
elements are here of the Windows 95 user interface that we
see in this picture?

11 A. Yes. So the Window 95 user interface or shell 12 consists of essentially three components. One is the 13 desktop, which is the background of this picture, so this 14 blue area with the icons, that is called the desktop. And 15 then the start menu which is the menu so that the bar at the 16 bottom plus whatever that pops up from that bottom, so this. This, including this menu (indicating), this is called the 17 start menu. So desktop and then the start menu. 18

And then the third component, which is not in this picture, is the explorer, which is sort of the application which allows the user to browse into the system resources like files and music files and pictures and printers and those.

Q. Let's look at a picture of the explorer. This is
demonstrative 202. Mr. Nakajima, can you tell the jury

1 which of these pictures we're looking at is the Windows 2 Explorer and Windows 95? Oh, this -- the left side is Windows Explorer. 3 Α. Okay. And how did that relate to the different 4 Ο. 5 viewers that had existed in Windows 3.1? So the system, meaning the machine, has different 6 Α. 7 types of resources. Some are the files like the documents, 8 like the word documents, spreadsheet, those are called the 9 files. But also there are other system resources like 10 connected printers or -- or what else, some various 11 application programs installed. So the Windows 3.1 had a different application for different types of system 12 13 resources. So for files, the Windows 3.1 had a file manager to browse files. And then to see the -- the programs that 14 15 install applications that they had, a program manager to see 16 all of the applications, and then also had a control panel to see the list of printers and those. So Windows 3.1 had a 17 18 different multiple application to access different types of 19 resources. But the Windows Explorer we managed to unify 20 into one application. So from the one single window you can 21 browse file systems and printers and programs, yeah. 22 Q. Looking at the Windows Explorer which is on the

23 left hand side of the picture that is up on the screen, can 24 you explain to the jury, they have heard this before, but I 25 just want to go over it one more time, what are the two

1 different panels in Windows Explorer called and what do they 2 do?

So the left side is called the tree pane which 3 Α. shows the sort of the hierarchical view of the system 4 5 resources. And then so which essentially allows the user to pick which resource group they want to see. And then the 6 right side is the view pain. This is the view of those 7 8 resources. And typically the user picks, let's say, 9 printers on the left, then on the right side you see a list 10 of the installed printers. 11 Now, going back to a more general level, Q. Mr. Nakajima, how, if at all, were independent software 12 13 vendors permitted to add things or to extend the user interface of Windows 95 at a high level? 14 15 Α. So high level. So okay. So when -- when you are 16 talking about the third-party application install on the 17 machine? 18 Ο. Yes. 19 So there -- there were two ways to sort of add Α. 20 system resources to the operating system. The one, the 21 simpler way is application can simply create a folder in the 22 file system. Let's say somebody come up with a nice photo 23 editing managing application. Then they can simply create 24 my photos folder in the file system and then simply put the 25 pictures in there. Then that becomes my photo folder is a

part of the file system it will automatically appear on the left side -- left side pane of the Explorer and then it is going to be called my photos. So when the user picks the select my photo folders, then those photos will show up on the right side. So that was a simpler way for applications and many applications chose that way because that is very simple.

But that approach was a little bit limited in the 8 9 sense that every item like a photo needs to be an 10 independent file. And then using that approach was fine for 11 some big items like photos or music or a document, but it is a little bit sort of inefficient to store, let's say, each 12 13 e-mail messages as a file. So typical the mail program has 14 their own database, I don't know if the word database makes 15 sense or not, but essentially the mail program created one 16 big file which looks like one blob from the systems point of view, and then they store each mail message in their own 17 18 format so that the system cannot see those items but more 19 efficient because they manage that database. And then --20 but the -- if they take that approach, then because it just 21 a blob, a big file, and the file system those individual 22 e-mail messages will not appear in Explorer as individual 23 items or individual files or folders. So therefore we came 24 up with the mechanism called NameSpace extension which 25 essentially allows the application like e-mail program to

1 export the view of this private database to the system so 2 that the user will actually see a list of e-mail messages inside of Explorer. 3 Q. Now Mr. Nakajima if you were developing a word 4 5 processing application or a spreadsheet application, which of the two mechanisms that you just described would you use? 6 7 The first approach because that is simpler and Α. 8 also the -- for user, for the user who used that application 9 then having an independent file, the being of independent file, has a huge benefit. So I would choose more file 10 11 system based approach for word processors and spreadsheet 12 type applications. 13 Q. When you designed the NameSpace extension mechanism for Windows 95, did you anticipate that ISVs 14 15 creating word processors, spreadsheets, presentation 16 graphics products would use the NameSpace extension mechanism? 17 18 Α. No, no. 19 Why not? Q. 20 Because it was not necessary and also it is not Α. 21 efficient. I mean as I said, there is an advantage to use 22 independent file in the file system because they can use 23 other tools, too. For example a word document can be opened 24 in -- by different types of application. For example, when 25 there is of course same word document was with the format

1 was designed by Microsoft, but the third-party can create a 2 converter to convert word document to be their file. But 3 that kind of a third-party tool would work only if the word document resided in the file system as an independent file. 4 5 If the word document is stored in some hidden private database, then it is going to be harder for the third-party 6 7 application to take that out and convert to PDF as an 8 example. 9 Mr. Nakajima, is the NameSpace extension Ο. 10 mechanism that you have just described and the addition of 11 folders to the file system that contained independent documents, are those the only two ways that independent 12 13 software vendors were able to add things to the Windows user 14 interface? 15 Α. Yeah, essentially yes. Yes. 16 Ο. Okay. Were there any other shell extension mechanisms that you designed for Chicago or Windows 95? 17 18 Α. Yes, there are many. 19 Okay. And can you give us a couple of examples Q. 20 of the other shell extension mechanisms that you designed? 21 Α. Yes. So, for example, I created the context menu 22 extension mechanism. So context menu is the menu, the 23 system pops up when a user selects the word document or any 24 file, for example, the word document. So when the user 25 picks a word document and actually uses a left mouse button,

1 then a menu, a small menu pops up which shows the list of 2 possible verbs to that word document. And then system 3 actually doesn't know what can be done besides open. So by default, system only provides the verb open in the context 4 5 menu. But the application program offered through -through install this word document knows that the word 6 7 document can be printed. So they want to add a verb print to that context menu. So essentially the third-party is 8 9 extending the context menu provided by the system. That is 10 why we call it context menu extension mechanism. So that is 11 one example. Another example was a drag and drop extension. 12 So, for example, if you drag a word document to a printer 13 document, that printer object, then the user expects that okay I am dragging this word document to printer, it should 14 15 print. And it is -- it is easy to say from the user's point 16 of view, but in order to achieve especially between two independent applications, right, interacting with each 17 18 other, we needed to come up with some kind of a protocol 19 between two applications to talk to each other to figure 20 out, okay, this type of object was dropped on this object, 21 then what kind of verbs we need to provide. So that is 22 called a context menu extension mechanism. So I just 23 mentioned it, the two examples.

Q. Now, Mr. Nakajima, did you prepare anydemonstratives to help explain to the jury the integration

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1 benefits of the NameSpace extension APIs? 2 Yes, I made some pictures. Α All right. I would like to show you what has 3 Ο. been marked as 205.1 and 206.1. Mr. Nakajima, looking first 4 5 at 205.1 is this one of the pictures that you created in anticipation of your testimony here today? 6 7 Α. Yes. And can you explain to the jury what it was that 8 Q. 9 you were trying to achieve by putting these two pictures together like this? 10 11 Α. Okay. So because I wanted to explain what 12 NameSpace extension is and also the benefit and the risk, 13 and it is a computer technology so it is -- it is a bit 14 difficult explaining exactly what is happening in the computer, inside of a computer, but I think that this will 15 demonstrate that well. 16 So that first picture is actually my car, a Prius. 17 18 And then so I added this GPS system. I got it very cheap at Costco. So it is just attached to actually one of the fan 19 20 belt like. So it is not -- it is not authorized by Toyota, I just added it. So -- and it is doing a great job. But 21 22 this is called an aftermarket GPS in the industry and it is 23 typically cheap, but it is not integrated and I ended up 24 seeing the two screens.

The bottom one, the second one, I took it from

25

1 actually the Toyota's website because they as a dealer 2 option the user can choose to install a -- pre-install a GPS system in the dashboard. So unlike my car, there is going 3 to be just the one screen which shows the map as well as 4 5 other systems like air conditionings and how the hydro system is working. So it is fully integrated. So obviously 6 7 from the user's point of view there is a huge benefit of 8 this integrated one because it is simpler, less bulky, and 9 as I say, difficult to steal versus the first one. So when I park, I need to put it in the dashboard. So but the --10 11 this dealer option has some complexities, right. Specifically, Toyota offers multiple options and then the 12 13 Toyota -- actually Toyota has their own GPS system but also 14 they allow third-party to be pre-installed. So Toyota 15 actually -- but the pre-installed has a meaning by all those 16 shapes and size and interface need to be well-defined, so Toyota actually publishes this mechanism, we can call it the 17 18 extension mechanism, so that the third-party can plug in the GPS system in it and then the dealer can install and deliver 19 20 the car.

21 So the benefit of this extension mechanism is this 22 dashboard or this system is extensible so the third-party 23 can integrate. So NameSpace extension is very much like 24 this, right. Very much the same that in the way that the 25 Toyota sort of defined the size and metrics and interface,

how to install the third-party GPS system, we define how to install the NameSpace interior so that instead of having two separate windows, one is explorer, one is an e-mail program, the user will deal with just the one window which allows the user to browse the file system and also e-mail messages. That was the idea.

So having said that so that is the benefit. The risk 7 8 is this is fully integrated. So in my fix, right, the 9 upper, if this GPS system somehow breaks, I can still 10 operate the car because it is independent, right. I can 11 control the air conditioning system, I can see my mileages and everything. But if it is fully integrated, if the GPS 12 13 system crashes, I cannot do anything. So that is the risk. 14 So the NameSpace extension has benefit and a risk. And I 15 think that is sort of the important aspect of this approach.

Q. Now Mr. Nakajima let's look at the second picture that you created for me, the 206.1. Can you explain now looking at Windows Explorer and the e-mail client how this relates to what you just said about the GPS in the car?

A. Right. So this is very much like the upper picture is the explorer, Windows Explorer, showing the file system, the system resources, and then e-mail client, the third-party other end, you can call it the aftermarket or the e-mail system which is not integrated. So that user will deal with the two different windows, two different

applications versus using the NameSpace extension just like 1 2 the dealer installed the GPS system. Now e-mail program 3 runs inside of Explorer so that the user can just deal with the one window to see a list of e-mail messages and files 4 5 and printers. So that is the -- that is how NameSpace extension works. 6 Q. How, if at all, does the risk that you discussed 7 8 with regard to the integrated GPS apply to the integrated 9 e-mail program? A. Well, very much the same. If the -- if the 10 11 e-mail program which comes from the third-party crashes with a bug or virus or whatever the reason, then the whole system 12 13 will crash. 14 Q. Now, why did you choose an e-mail client as your 15 example of something that might take advantage of the 16 NameSpace extension mechanism? I will tell you that was a primary reason that I 17 Α. 18 came up with the NameSpace extension. It does fit really 19 well because the typically like e-mail message is too small 20 to store as an independent file in the file system. So as 21 far as I know, every single e-mail client come up with their 22 own database to store their own e-mail messages. So it does 23 fit really well into this paradigm.

Q. Was it necessary to use the NameSpace extensionmechanism in order to create an e-mail client that would run

1 on Windows 95?

2	A. No, it is not required. If the application
3	program can deal with these two different windows above,
4	they can just do it just like my GPS system on my Prius. A
5	third-party can do it without talking to Toyota.
6	Q. Was it necessary to use the NameSpace extension
7	mechanism in order to enable users to launch applications?
8	A. No.
9	Q. How else could they do it? How else could users
10	launch applications without using the NameSpace extension
11	mechanism?
12	A. Typically what they would do is they the
13	application associates okay, so each file has a type like
14	word document is a word document, right, the name has a dot
15	doc. Excel has dot XLS. So that file name, right, sort of
16	the suffix of the file name indicates the type of the file
17	and then application can register itself as okay, if the
18	user is trying to open any file ending with doc, launch my
19	application. So that way when a user double clicks the dot
20	doc file, then the word processor will be opened.
21	Q. Now, in designing the NameSpace extension
22	mechanism for Windows 95, were there any particular
23	technical constraints that you had to deal with?
24	A. Yes. The biggest constraint was the memory. At
25	that time I think we were targeting four megabytes of memory

1 a typical machine, sort of the low end machine. So in order 2 to achieve what we needed to do, in order to make Windows 3 run well on this under this constraint, four megabyte of 4 memory, I needed to do a lot of shortcut and optimizations 5 and that is typical engineering. I call myself a software 6 engineer, not a software scientist, because I like to do 7 that kind of engineering.

8 Q. How, if at all, did the shortcuts that you had to 9 take in order to deal with the four megabyte memory 10 constraint effect the reliability of the system that you 11 created?

So the reliability and the efficiencies are 12 Α. 13 typically a tradeoff, right. If you want to have a safer 14 car and you have to drive Volvo, but the Volvo is heavy, if 15 you care about the mileage then you drive a Prius, but you 16 sacrifice some -- some risk because the Prius can be easily crashed by a bigger car. So for the same reason, some of 17 18 the architecture decision I made during the development of Windows 95, I choose efficiency over reliability. 19

20 Q. The jury has heard a bit at this trial about 21 things running in the same process. Can you, in as 22 nontechnical level as possible, explain what it means when 23 two different software products are running in the same 24 process?

A. Okay. Yet another hard one, but I thought about

25

this a lot. So let's assume, again I like to use this analogy, that you are running a steakhouse, a steak restaurant. And as the chef, you have full control in the kitchen, right. The kitchen you hire everybody. You know exactly what is going on. You buy all of the materials and tools so you can keep it clean and safe everything.

But you only know how to cook steak, but your customer wants to have some dessert. So you have two options, right. You can -- you can buy some desserts somewhere nearby, a nice bakery, and just buy those nice desserts and then serve it on the menu. At that time right there is no risk. I simply buy a good one and then serve it.

13 Another option is I can ask the cook of that bakery to 14 come into our kitchen and cook the dessert for us at night 15 which is more efficient but it bring in some risks. Because 16 right now that person is not necessarily under my control so he can bring in something which I don't know, right, that 17 18 can be contaminated. The approach he use might have some 19 risk where he might cause a fire. And because I bring in 20 somebody in my kitchen, all of a sudden my kitchen became risky, right? And then because that person brought in the 21 22 E.Coli virus, then my steak is contaminated. So that is the 23 risk.

24 So running the third-party application inside of a 25 process is very much like bringing in somebody in my own

1 kitchen to cook some dessert. So the NameSpace extension 2 mechanism I chose was sort of a very open approach meaning 3 efficient. So anybody can come into my kitchen and cook dessert, appetizers, very efficient. But again, there is a 4 5 risk that goes with those additional people in my kitchen. 6 My steak could be contaminated. 7 Was there any limit on the number of different Ο. 8 NameSpace extensions that could be running on Windows 95 at 9 any one time? 10 Α. No, there is no limit. 11 And assume for me -- assume with me for the Ο. moment that there were five of them running at the same 12 13 time. Were they each in their own process? 14 Α. No. They're all in our process, they're all in 15 our kitchen cooking different types of food. 16 Ο. Now, let's go back to the picture which is 202 17 and look at the Windows Explorer on the left. Was there any 18 limit that you imposed on the view that would show up on the right hand pane of the Windows Explorer if an ISV added a 19 20 custom container to the left hand pain? The limit on the right side? 21 Α. 22 Ο. Yeah. 23 There is no limit. They can do anything they Α. 24 want to do. 25 Okay. Can you explain -- we have heard a little 0.

bit about views. Can you tell the jury what it means to provide a view of objects?

A. Okay. So that the left side, the tree view 3 control, is the hierarchal view of the folders. By folders 4 5 typically contain something like printers, musics. So the user chooses a folder to see the list of items inside that 6 7 folder. So the left pane is simply -- the left pane is 8 fully controlled by system. Because once they add some 9 function, it can be display, an icon. But when the user 10 chooses a folder which is added by the third-party using the 11 NameSpace extension, let's say e-mail program, we don't know how to present the item inside because it is a private 12 13 database built by this third-party application. So we don't know how to present. Therefore, we ask this third-party 14 NameSpace extension to display. So if you display a list of 15 16 e-mail messages and go ahead and display, we don't care what is in it, simply directly interactive with the user. 17

Q. Was there any limit, under the design that you created, to how complicate -- to how complicated and large the program was that was calling the NameSpace extensions and running in the same process as the user interface of the operating system?

A. There is no limit. They can -- they can add
anything. They can add a megabyte of software application.
Q. So the baker could bring his or her own ovens and

whatever else they want?

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2 They could bring in like 10 supporters and yeah. Α 3 Ο. Did the Cairo team have any views that they expressed to you about your design of the NameSpace 4 5 extension mechanism in Chicago? A. Yes, they -- they mentioned a couple of things. 6 7 So the first that they said that the -- that this mechanism, essentially this open kitchen mechanism, is risky. So they 8 9 -- they thought that was a bad idea too. So my choice of choosing the efficiency over reliability was a bad decision 10 11 according to them. 12 The Cairo team thought that the robustness is more 13 important than efficiency because they didn't care about the four megabyte limitation. And then another thing was 14 15 allowing the third-party to create any view is, from their point of view, it is confusing. Because they said that if 16 -- if typically whatever the custom container contains a 17 18 list of items, they said it is better to use the standard views we have, like list of items or icon views, so that the 19 user will deal with the same interface all of the time. 20 Which is beneficial to the user from their point of view, 21 22 and also reusability. Because essentially the third-party, 23 my mechanism, the third-party needs to come up with their 24 own limitation of the view. But the Cairo approach was they 25 can simply use one of the standard system views to show the

1 list of items.

2	Q. Why did the Cairo team think that robustness was
3	more important than you did?
4	A. I mean the robustness is important. It is just
5	simply a tradeoff. And also limitation, because the the
6	Windows 95 team was in charge of releasing the product. And
7	then we we were responsible to make sure that Windows 95
8	runs efficiently on a four megabyte machine. So we have to
9	necessarily sacrifice some of the reliabilities versus the
10	Cairo team's mentality was more like a research project.
11	Even though their intent was developing a product, so they
12	didn't they didn't pay attention to the detail which is
13	running on a four megabyte machine. So they ignored that
14	hard restriction.
15	Q. Now, Mr. Nakajima, if 20 different ISVs each
16	wanted to add five custom containers to the Windows Explorer
17	was there any limit in your design that would prevent that
18	from happening?
19	A. No.
20	Q. Was there any mechanism in your design that would
21	have allowed the user to get rid of any of those 100 custom
22	containers that got added to the Windows Explorer?
23	A. Not no, unless the user chooses to unlist the
24	entire application.
25	Q. If this happened and there were 100 additional

1 containers added to the Windows Explorer, would that same 2 tree also show up in the Windows 95 common file open 3 dialogue? Α. 4 Yes. 5 Ο. And was there any mechanism in your design for allowing software vendors who chose to use the Windows 95 6 common file open dialogue, did it allow them to delete the 7 8 100 containers or whichever portion that they didn't want 9 inside their application? No, we didn't provide such a mechanism. 10 Α. 11 Now, you talked a little bit earlier about other Ο. shell extension mechanisms like the context menus and the 12 13 drag and drop handlers. Did those run in the same process as the shell or in a different process? 14 15 Α. Same process. 16 Ο. Did they share the same robustness issues to the same degree that the NameSpace extension APIs did? 17 18 Α. There was a risk. I wouldn't say same degree because what a third-party can do was actually typically do 19 20 is limited. Actually I should say that the -- for example, 21 context menu extension is only thing they do is add a verb. 22 So the risk was limited. But if they have an intention to 23 do something wrong, then they could. And am I explaining well? 24 25 So like I said, okay, you can come into the kitchen,

1 but the only thing you can do is adding some spices when we 2 deliver the spaghetti. And so that all they did. But the 3 fact is they're already in the kitchen so if they want to do something else, they could. 4 5 Q. In your view were the NameSpace extensions mechanisms more or less risky in terms of robustness than 6 7 the other shell extension mechanisms? It is more risky. 8 Α. 9 Q. Why? 10 Α. Because we run more -- more code, more -- so 11 their involvement is larger. 12 Now, the NameSpace extension mechanisms that you Ο. 13 created for Chicago, were they compatible with the Microsoft technology called OLE or object linking and embedding? 14 15 A. Yes. Yes and no. It is a complex issue a little 16 bit again. So the OLE mechanism was -- was there, but it was really -- so the OLE mechanism was sort of the general 17 18 basic mechanism to extend the system. And it is a really 19 low level product, almost like okay when you come into the 20 kitchen you have to wear white clothes, that kind of a low 21 level protocol. It doesn't define how to cook what is more 22 additional higher level protocol. But the -- the real OLE 23 mechanism was really heavyweight, requires additional 24 processes, again for the robust reasons. And it was not 25 practical to use the OLE mechanism on forming a part of the

1 four megabyte machine. But I needed to provide some kind of 2 extension mechanism. But if I completely invent something 3 new, then that is going to be confusing from my point of view and also going to be a nightmare for Microsoft to 4 5 support in the future. So I came up with the lightweight version of OLE which uses the same protocol but doesn't 6 7 support other processing integration. So again, the OLE 8 mechanism allowed third-party to create extension either in 9 process or out of process, but my lightweight version 10 supported only in process. 11 Now, can you, using your steakhouse kitchen Q. 12 analogy, can you explain what you mean when you say that 13 something supports both in process and out of process extensions? 14 15 A. So OLE defined a way that -- okay, so the 16 third-party can add something to the menu, but this protocol defines that the third-party can either come into the 17 18 kitchen and add something or can simply cook in their own --19 in their own kitchen and just deliver the food. So they 20 define the two approaches in process and out of kitchen, 21 separate kitchen. 22 Ο. Does the fact that two products are both 23 compatible with OLE mean that those products are compatible 24 with one another? 25 Just the one way. So if -- if somebody created Α.

an extension using the in process, in my lightweight version of OLE that will run under the real OLE, because the real OLE support in process and out of process. But if somebody created the extension mechanism out of process mechanism then it will not run using my lightweight version.

6 Q. You talked a little bit earlier about the Cairo 7 team's objection to the ability to provide whatever views 8 the ISV wanted. Is there a computer science concept at 9 issue in that debate?

10 A. Yeah, they call it the view data separation. So 11 essentially the concept of a NameSpace extension actually consists of two -- two different extensions. The one is you 12 13 can add any custom container, right, the custom container is 14 the data, right, simply said okay I have a list of e-mail 15 messages, right, that is a data. So -- so NameSpace 16 extension can add the container to the system so that it will appear on the left side, but I also added the mechanism 17 18 that they can provide a custom view of that folder, e-mail 19 folder, so that they can extend the view as well.

The Cairo team's argument was that the view and data should be separated so that any view can be applied to any data and this was of some benefit as well because then the e-mail program can choose to say okay I'm going to simply add data, an e-mail folder in the file system, but I don't provide any view, therefore the system views one of the

1 standard view to show the list of e-mail messages. 2 Q. How, if at all, was the Cairo team concerned 3 about applications being developed that called upon the NameSpace extension mechanism that you had designed? 4 5 A. Okay. So they complained in the --THE COURT: Your question is fine, it is not objected 6 7 to, but obviously it is what they communicated to him. 8 MR. HOLLEY: Absolutely, Your Honor. 9 THE COURT: He can't -- he doesn't know what is in 10 their mind. But to the extent I wanted to make that clear, 11 that is the question. The question was appropriately not objected to, that is clearly what everybody understands. 12 13 MR. HOLLEY: Fair enough. I should have asked a 14 better question. THE COURT: No, no, no, you're doing fine. You're 15 16 doing fine not to object. 17 MR. JOHNSON: You know --18 THE COURT: I appreciate the fact that you're not objecting but it sort of occurred to me that I have been --19 MR. JOHNSON: I'm aware of the problems with the 20 question, I think it is more important to hear from the 21 22 witness. 23 THE COURT: I'm sorry to get us off track but we all 24 understand. 25 THE WITNESS: Okay, what was it?

Q. (By Mr. Holley) What was your understanding of
 the Cairo team's objections to having ISVs write
 applications that called upon your NameSpace extension
 mechanism?

5 A. Okay. So my view -- actually there was a public way to say something versus the real reason. I think there 6 7 were two reasons there. So on the surface, on those e-mails 8 and documents, they said that the NameSpace extension 9 mechanism of Windows 95 is not robust, it is not safe, the 10 system could crash, and also the view data separation is a 11 better approach, computer science word and more pure. Those are true. If we have enough memory then -- then I agree 12 13 that it is better to choose the more robustness approach 14 supporting the other product. And also the view data 15 separation we had a great idea if we can use, but different people have a different appeal, right. If this -- if the 16 e-mail message is okay, but what if e-mail has some 17 18 additional properties like an important flag, right, the ISV might want to do some kind of an additional like view -- so 19 20 I call it eye candy to differentiate. But if everybody used the standard view, then it is harder for them to 21 22 differentiate. So there is pros and cons on both approaches 23 but they attacked in a certain way, which is fine. But that 24 is the official approach. But I think that my 25 interpretation is the real reason was they are really deeply

1 upset about the fact that especially me, who was in the 2 Cairo team, left the group to join another team, and 3 according to them not just borrow but stole the idea from them and then shipping something before them. So they were 4 5 really, really upset. But that was my interpretation. Q. Now, Mr. Nakajima, did there come a time when you 6 7 were called upon to defend the NameSpace extension 8 mechanisms before senior management of Microsoft 9 Corporation? A. Yes. I was called to -- I think it was a board 10 11 room with Bill, it was a scary, meeting. Bill Gates and senior executives, and I needed to essentially defend. 12 13 Actually I was much more scared than today. THE COURT: That is really being called into the 14 15 kitchen. 16 Ο. (By Mr. Holley) Mr. Nakajima, what did the Cairo team members who were present at this meeting in the board 17 18 room with Mr. Gates say about your NameSpace extension mechanism? 19 MR. JOHNSON: Your Honor, I will object to that one. 20 At least he could put it into terms of his understanding. 21 22 THE COURT: He was there. I mean the question at the 23 meeting what did he hear. 24 MR. HOLLEY: What did he hear him say? 25 THE COURT: Overruled.

1 MR. JOHNSON: Okay and --2 THE COURT: And when was this, can we have a time? (By Mr. Holley) Mr. Nakajima, what is your best 3 Q. recollection of when this meeting in the board room in 4 5 Building 8 occur? A. Okay, I'm sorry but I -- so the only thing that I 6 7 really remember was that was before shipping Windows 95. It 8 was the middle of '95. So my memory was probably talking 9 about some where either earlier '95 or end of '94. But 10 unfortunately, somebody showed me an e-mail from Bill saying 11 we made a decision at the meeting. That was at the end of '94. So I -- I know that, but it is not in my memory based 12 13 on that information that I got. 14 Q. What do you remember about what happened in this 15 meeting in late 1994? 16 Α. About the decisions or --No, about what -- what actually -- what can you 17 Ο. 18 tell us about what occurred at this meeting? A. Um --19 20 THE COURT: What did Cairo said and what did you say? THE WITNESS: Okay. 21 22 THE COURT: I guess it was moving probably. 23 THE WITNESS: So -- so essentially even before the 24 meeting, the Cairo team send me some documents. It was a 25 thick document like 100 pages of document to prove that why

Cairo's approach was better. And then so I flipped a few
 pages and they were right, robustness and view data
 separations and all those others. And I was supposed to
 defend every single item. That was the expectation from the
 management team. But I -- I choose not to. The one is in
 one sense they are right, they're smart people, lots of PhDs
 I have only master degree.

And then but also I was so busy because I was in the 8 9 Windows 95 team, ready to ship and writing code and debugging and so busy so I didn't have time to deal with 10 11 this. And also the whole reason I left the Cairo team was I didn't like that kind of politics and meetings. So I 12 13 refused to spend any time and instead I -- this might be 14 sort of the story, I was talking to so many people so -- so 15 it is sort of a little bit beautified in my mind, but 16 essentially what I did instead of defending those items one by one, I brought the beta version of the CD to Bill and 17 18 said hey Bill, I'm so busy I do not have time to respond to 19 this, but I'm ready to ship the product. Do you want to 20 ship the product or me spending time to deal with this 21 document? So that was my defense and it actually worked. 22 Q. (By Mr. Holley) Was there any discussion at this

23 meeting that you recall having with Mr. Gates and the 24 members of the Cairo team about the impact of withdrawing 25 support for the NameSpace extension APIs on Office

productivity applications like word processors or 1 2 spreadsheets? 3 Α. No. Q. Do you recall that there was no such discussion? 4 5 Α. The impact? Q. The impact to --6 To the Microsoft Office product by pulling the 7 Α. 8 NameSpace extension? No. THE COURT: I'm sorry, I didn't understand your 9 question. Was it the Microsoft Office or any office 10 11 product? MR. HOLLEY: I meant to be broader, Your Honor, so 12 13 I'll ask a different -- another question. 14 Q. (By Mr. Holley) Was there discussion about the 15 impact of the decision to withdrawing the NameSpace extension APIs on anybody's word processing or spreadsheet 16 17 applications? 18 A. Not word processing or spreadsheet application, but there were some e-mail program inside of Microsoft. And 19 20 also I think, I don't remember the third party, but we have -- at that time we had already published the SDK barely, so 21 22 the pulling that API out of the product had some impact. So I think there was -- there was a discussion, not discussion 23 24 but we -- I think we mentioned it, okay, we need to deal 25 with this kind of thing.

1 Ο. Other than e-mail clients, do you recall any 2 discussion at the meeting or after the meeting about the 3 impact of withdrawing support for the NameSpace extension APIs on any word processors, spreadsheet or presentation 4 5 graphics software products? No. No, I don't remember. 6 Α. 7 Ο. Now, I would like to show you what has been marked in this case as Plaintiffs Exhibit 1. 8 9 Mr. Nakajima, this is a document that the jury has seen several times, it is an e-mail from Mr. Gates to 10 11 various people dated October 3rd, 1994. Did you receive a copy of this e-mail at the time? 12 13 Um, yes, I mean it seems like I did. I don't Α. 14 remember exactly, but I mean I'm in the line so I did. 15 Q. What was your understanding at the time that 16 Mr. Gates made his decision to withdraw support for the NameSpace extension APIs as to the reason for that decision? 17 18 Α. Again, there was sort of the surface reason 19 versus the real reason. My interpretation was so Bill made 20 a decision to say we're going to ship Windows 95, a very 21 important product, and we are going to cancel the Cairo 22 project. That was a big decision because they had been 23 pumping money into the Cairo product, but they were not 24 making progress. And this -- so the underdog Chicago team 25 was ready to ship Windows 95.

1 So as management, he made a decision to say okay 2 we're going to ship Windows 95 and cancel the Cairo. So 3 that was a very simple decision from my point of view, but there was a lot of emotions in it by those people, the 4 5 people's occupation. And so -- and then so Bill needed to do some kind of compromise to make it smooth. 6 That is -- that is my interpretation. Maybe a little 7 8 bit advantage to me, myself, but so I-Shell Browser, this 9 NameSpace mechanism, was sort of the sacrifice, small 10 sacrifice from my point of view, to keep their face because 11 they've been complaining a lot about NameSpace extension to justify the existing of Cairo, but the Cairo actually 12 13 getting canceled. So they lose face completely. But Bill 14 says okay, but even though that Cairo product itself will be 15 canceled, we're going to come up with something like Cairo 16 in the future. And in order to allow us to make that innovation, then this current shape of NameSpace extension 17 18 is not operated, therefore we're going to yank it from the 19 system. 20 You said Mr. Nakajima that it was a small Q. sacrifice in your view. Why did you regard it as a small 21 22 sacrifice?

A. Because from my point of view I am really a
practical engineer who is passionate about shipping a
product. It is not about technology, it is about shipping a

1 product, having millions of users using it. So it wasn't my number one goal to ship Windows 95 as soon as possible and 2 3 so everything else was detail. And sometimes we add some features to make that product more attractive. Sometimes I 4 5 need to take some features out to -- to deal with this politics inside of the company. That is a small sacrifice. 6 7 Did you not think that the NameSpace extension Ο. API mechanism was hugely important to Windows 95? 8 9 MR. JOHNSON: That, Your Honor, is a little too far. 10 THE COURT: Yeah, I agree. 11 (By Mr. Holley) What importance, if any, in the Ο. 12 scheme of shell extensions, did you attribute to the 13 NameSpace extension API? 14 Α. I mean it was -- it was -- so it was -- it was my 15 baby, right? The whole shell was my baby. I created it --16 I mean with a team. But especially those various names, not just the NameSpace extension but the entire extension 17 18 mechanism was my product. So I was proud of it and I loved 19 it, I put a lot of time in it. 20 So in that sense, taking out a piece of it, the 21 NameSpace extension, was a little bit of a sacrifice, a 22 little bit of a pain. But in the grand scheme, where it is 23 our product and we are cancelling this Cairo, this was a big 24 win from my point of view. Am I answering right? Or are 25 you talking about me or --

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               Q. You're the only one who can give the right
 2
         answer, Mr. Nakajima.
 3
              MR. HOLLEY: Your Honor, I pass the witness.
               THE COURT: Mr. Johnson?
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               MR. JOHNSON: Thank you very much, Your Honor. If you
 5
 6
         will give me just a moment, please.
 7
               THE COURT: Do you want a couple of minutes? Let's
 8
         take a break. 15 minutes. We'll break early. I'm ready
 9
         when everybody else is ready.
10
               (Whereupon, the jury left the courtroom.)
               (Recess.)
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