1   UNITED STATES DISTRICT COURT
            FOR THE DISTRICT OF COLUMBIA
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   _____
3 UNITED STATES OF AMERICA,   :
            PLAINTIFF,   :
4   :
    VS.   :   C. A. NO. 98-1232
5   :
   MICROSOFT CORPORATION, ET AL. :
6   DEFENDANTS   :
   _____:
7 STATE OF NEW YORK, ET AL.   :
            PLAINTIFFS   :
8   :
    VS.   :   C. A. NO. 98-1233
9   :
   MICROSOFT CORPORATION, ET AL. :
10   DEFENDANTS   :
   _____

11   WASHINGTON, D. C.
                                       DECEMBER 14, 1998
12   (A. M. SESSION)

13   TRANSCRIPT OF PROCEEDINGS
       BEFORE THE HONORABLE THOMAS P. JACKSON

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 1   FOR THE UNITED STATES:          PHILLIP MALONE, ESQ.
                                     DAVID BOIES, ESQ.
 2                                   U. S. DEPT. OF JUSTICE
                                     ANTITRUST DIVISION
 3                                   SAN FRANCISCO, CA.

 4   FOR THE DEFENDANT:              JOHN WARDEN, ESQ.
                                     RICHARD J. UROWSKY, ESQ.
 5                                   STEVEN L. HOLLEY, ESQ.
                                     RICHARD PEPPERMAN, ESQ.
 6                                   SULLIVAN & CROMWELL
                                     125 BROAD STREET
 7                                   NEW YORK, NEW YORK

 8   FOR THE STATE OF NEW YORK:      STEPHEN HOUCK, ESQ.
                                     ALAN R. KUSINITZ, ESQ.
 9                                   N. Y. STATE DEPT. OF LAW
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10                                   NEW YORK, NEW YORK

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 1                         I N D E X

 2   WITNESS                    DIRECT     CROSS

 3   PROFESSOR EDWARD W. FELTEN  8         25

 4                   E X H I B I T S

 5   PLAINTIFFS'              IN EVIDENCE

 6   1202                         9

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 8   DEFENDANT'S              IN EVIDENCE

 9   2088                        56

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 1                    P-R-O-C-E-E-D-I-N-G-S

 2          THE DEPUTY CLERK:  CIVIL ACTION 98-1232, UNITED

 3   STATES VERSUS MICROSOFT CORPORATION, AND 98-1233, THE STATE

 4   OF NEW YORK, ET AL., VERSUS MICROSOFT CORPORATION.

 5          PHILLIP MALONE, STEPHEN HOUCK AND DAVID BOIES FOR

 6   THE PLAINTIFFS.

 7          JOHN WARDEN, STEVEN HOLLEY, RICHARD UROWSKY AND

 8   WILLIAM NEUKOM FOR THE DEFENDANT.

 9          THE COURT:  COUNSEL, THE FIRST MATTER I WANTED TO

10   TAKE UP WAS THIS MOTION BY THE PLAINTIFFS FOR AN EARLY

11   PRODUCTION OF THE DIRECT TESTIMONY OF THE MICROSOFT

12   WITNESSES.  I GATHER FROM YOUR OPPOSITION, MR. WARDEN, THAT

13   YOU ARE ANTICIPATING JANUARY 6TH AS THE DATE.

14          MR. WARDEN:  YOUR HONOR, I DON'T THINK WE'RE QUITE

15   IN A POSITION TO MAKE THAT DECISION, BUT, AS I UNDERSTAND

16   IT, THE GOVERNMENT WILL HAVE TWO WITNESSES AFTER THE BREAK

17   NOW, MR. HARRIS AND PROFESSOR FISHER.

18          THE COURT:  I THOUGHT IT WAS JUST PROFESSOR

19   FISHER.  WHO ELSE WAS IT?

20          MR. WARDEN:  NO.  MR. HARRIS, WHO WAS ORIGINALLY

21   SCHEDULED TO APPEAR TODAY, IT'S MY UNDERSTANDING, WILL

22   APPEAR IN JANUARY.  IS THAT RIGHT, DAVID?

23          MR. BOIES:  THAT IS CORRECT, YOUR HONOR.

24   PROFESSOR FELTEN WILL BE OUR WITNESS.

25          MR. WARDEN:  PROFESSOR FELTEN IS UP TODAY, YOUR
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1   HONOR. SO MY GUESS IS THAT THE GOVERNMENT, ASSUMING THAT

2   THEY ARE ABLE TO PLAY ALL THE DEPOSITIONS AND SO FORTH THIS

3   WEEK THAT THEY HAVE LEFT TO DO, WILL FINISH ON ABOUT THE

4   12TH OR 13TH, AND FIVE DAYS EARLIER THAN THAT, WHICH IS A

5   JUDGMENT WE OUGHT TO BE ABLE TO MAKE ON ABOUT THE 5TH OR

6   6TH, WOULD BE THE TIME UNDER THE ORDER FOR THE DELIVERY OF

7   OUR WRITTEN DIRECTS.

8   THE COURT: ALL RIGHT. MR. BOIES, I DON'T SEE ANY

9   REASON TO DEPART FROM PRETRIAL ORDER NUMBER 2.

10   MR. BOIES: YOUR HONOR, I THINK THAT'S ENTIRELY

11 WITHIN THE COURT'S DISCRETION. I THINK THE PROBLEM THAT

12 ARISES IS A PROBLEM BECAUSE THIS CASE HAS NOW ALREADY TAKEN

13 LONGER THAN BOTH COUNSEL --

14   THE COURT: THEY ALWAYS DO.

15   MR. BOIES: -- RECOMMENDED TO THE COURT THAT IT

16 WOULD TAKE.

17   THE COURT: I'VE NEVER HAD ONE TURN OUT SHORTER.

18   MR. BOIES: THAT'S PROBABLY --

19   THE COURT: I AM GOING TO DENY THE MOTION FOR AN

20 EARLY PRODUCTION OF THE DIRECT TESTIMONY.

21   MR. BOIES: YOUR HONOR, ONE OF THE THINGS THAT WAS

22 NOT CLEAR WAS WHETHER -- THE FIVE DAYS ACTUALLY TURNED OUT

23 TO BE LONGER THAN FIVE DAYS BECAUSE WE GAVE IT TO THEM, I

24 THINK, ABOUT SEVEN OR EIGHT DAYS BEFORE THE TRIAL STARTED.

25   THE COURT: SURE.

1   MR. BOIES: AND I TAKE IT WHATEVER THOSE DAYS

2 WORKED OUT, IT WOULD BE --

3   THE COURT: I'M WILLING TO FIX A DATE CERTAIN, BUT

4 IT WOULD BE A DATE CERTAIN WHICH WOULD BE FIVE DAYS IN

5 ADVANCE OF THE BEST ESTIMATE OF THE CONCLUSION OF THE

6 GOVERNMENT'S CASE.

7   MR. BOIES: WE START ON THE 4TH OF JANUARY, WHICH

8 IS MONDAY?

9   THE COURT: YES, SIR.

10   MR. BOIES: I AGREE WITH MR. WARDEN. I DON'T

11 THINK WE'RE GOING TO FINISH BEFORE THE 12TH. I MEAN,

12 REALISTICALLY, YOUR HONOR, GIVEN THE WAY THEY CROSS-EXAMINE,

13 WE'RE NOT GOING TO FINISH TWO WITNESSES IN A WEEK.

14   THE COURT: I AGREE. I THINK THAT'S TRUE.

15   MR. BOIES: SO I THINK I AGREE WITH MR. WARDEN

16 THAT --

17   THE COURT: SO THAT WOULD MAKE IT WHAT? JANUARY

18 7TH?

19   MR. BOIES: YES. NOW, IF IT'S FIVE CALENDAR DAYS

20 AS OPPOSED TO FIVE COURT DAYS -- HOW LONG DID YOU HAVE OURS?

21   MR. WARDEN: WE GOT YOURS FIVE TO SIX CALENDAR

22 DAYS BEFORE THE START. THAT IS, WE GOT -- WE BEGAN GETTING

23 IT BY FAX AT MIDNIGHT ON THE CUSP OF THE FIFTH AND SIXTH

24 DAY. WE ARE HAPPY -- AND YOU KNOW HOW LONG IT TAKES THAT

25 MUCH MATERIAL TO BE FAXED -- WE ARE HAPPY TO DELIVER OURS BY

1 HAND IN MULTIPLE COPIES AT 10:00 A.M., FIVE DAYS BEFORE THE

2 12TH, ON THE ASSUMPTION -- THAT WOULD BE THE 7TH -- ON THE

3 ASSUMPTION THAT I AM CORRECT IN BELIEVING THAT EVERYTHING

4 OTHER THAN HARRIS AND FISHER WILL BE DONE TODAY. I MEAN,

5 THIS WEEK.

6   MR. BOIES: I THINK THAT ENTIRELY DEPENDS ON HOW

7 LONG YOU TAKE IN CROSS-EXAMINING PROFESSOR FELTEN. I MEAN,

8 WE HAVE TALKED ABOUT IT BEING ABOUT A DAY-AND-A-HALF

9 WITNESS.

10   MR. WARDEN: RIGHT.

11   MR. BOIES: IF IT'S A DAY-AND-A-HALF WITNESS, WE

12 WILL FINISH ESSENTIALLY EVERYTHING.

13   MR. WARDEN: ESSENTIALLY EVERYTHING OR EVERYTHING?

14   MR. BOIES: I'M NOT GOING TO COMMIT TO FINISH

15 EVERYTHING, JOHN. YOU KNOW BETTER THAN THAT.

16   THE COURT: JANUARY 7TH.

17   MR. BOIES: THANK YOU.

18   MR. WARDEN: THANK YOU, YOUR HONOR.

19   THE COURT: JANUARY 7TH.

20   MR. MALONE?

21   MR. MALONE: YOUR HONOR, WE'RE READY TO PROCEED

22 WITH OUR NEXT WITNESS. PLAINTIFFS CALL PROFESSOR EDWARD

23 FELTEN TO THE STAND.

24   THE COURT: VERY WELL.

25   MR. WARDEN: YOUR HONOR, MR. HEINER WILL REPRESENT

1   MICROSOFT.

2   THE COURT: MR. HEINER?

3   MR. WARDEN: YES.

4   THE COURT: ALL RIGHT.

5   (EDWARD FELTEN, PLAINTIFF'S WITNESS, SWORN.)

6   MR. MALONE: MAY I APPROACH THE WITNESS, YOUR

7   HONOR?

8   THE COURT: YOU CERTAINLY MAY.

9   DIRECT EXAMINATION

10 BY MR. MALONE:

11 Q. GOOD MORNING, PROFESSOR FELTEN.

12 A. GOOD MORNING.

13 Q. I'VE JUST HANDED YOU A COPY OF YOUR WRITTEN DIRECT

14 TESTIMONY IN THIS CASE THAT YOU SIGNED ON OCTOBER 12TH AND

15 THAT HAS PREVIOUSLY BEEN PROVIDED TO THE COURT AND TO

16 COUNSEL FOR MICROSOFT.

17   AT PARAGRAPHS 4 AND 5 OF YOUR DIRECT TESTIMONY,

18 YOU DESCRIBE A VIDEO DEMONSTRATION THAT YOU HAVE PREPARED TO

19 ILLUSTRATE PART OF YOUR TESTIMONY; IS THAT CORRECT?

20 A. YES.

21 Q. COULD YOU JUST BRIEFLY DESCRIBE FOR THE COURT WHAT THIS

22 VIDEO DEMONSTRATION WILL SHOW?

23 A. SURE. THE VIDEO SHOWS SOME OF THE RESULTS OF MY

24 ANALYSIS. IN PARTICULAR, IT ILLUSTRATES THE REMOVABILITY OF

25 INTERNET EXPLORER FROM VARIOUS VERSIONS OF WINDOWS,

1   INCLUDING WINDOWS 98.

2   AND IT SHOWS WHAT HAPPENS WHEN A USER, AFTER

3   REMOVING INTERNET EXPLORER FROM WINDOWS 98, TRIES TO USE

4   ALTERNATIVE BROWSER, NETSCAPE NAVIGATOR, TO BROWSE THE

5   WEAPON.

6   MR. MALONE: YOUR HONOR, GOVERNMENT EXHIBIT 1202

7   IS A COPY OF THE VIDEOTAPE DEMONSTRATION PROFESSOR FELTEN

8   HAS JUST DESCRIBED. PURSUANT TO PARAGRAPHS 5-B AND C OF

9   PRETRIAL ORDER NUMBER 2, WE PROVIDED COUNSEL FOR MICROSOFT

10   WITH A COPY OF THE VIDEOTAPE LAST FRIDAY MORNING.

11   AND AT THIS TIME, I WOULD MOVE THE ADMISSION OF

12   EXHIBIT 1202 INTO EVIDENCE, AND ALSO PROVIDE A COPY TO THE

13   COURT.

14   MR. HEINER: NO OBJECTION, YOUR HONOR.

15   THE COURT: ALL RIGHT. GOVERNMENT'S 1202 IS

16   ADMITTED.

17   (WHEREUPON, PLAINTIFFS'

18   EXHIBIT NUMBER 1202 WAS

19   RECEIVED IN EVIDENCE.)

20   MR. MALONE: AND, YOUR HONOR, WITH THE COURT'S

21   PERMISSION, AT THIS TIME I WOULD LIKE TO HAVE PLAYED THE

22   ACTUAL VIDEOTAPE DEMONSTRATION THAT PROFESSOR FELTEN HAS

23   PREPARED. IT'S APPROXIMATELY A HALF AN HOUR RUNNING TIME.

24   THE COURT: ALL RIGHT. HAS HE AVOWED HIS DIRECT

25   TESTIMONY?

1   MR. MALONE: HE HAS NOT YET, YOUR HONOR. I PLAN

2 TO DO THAT AFTER THE VIDEOTAPE SO HE CAN DO BOTH AT ONCE,

3 BUT I WOULD BE HAPPY TO DO IT NOW IF THE COURT WOULD PREFER.

4   THE COURT: AS YOU CHOOSE.

5   MR. MALONE: IN THAT CASE, IF WE MAY, YOUR HONOR,

6 I WOULD PLAY THE VIDEOTAPE DEMONSTRATION AT THIS TIME.

7   THE COURT: YES, YOU MAY.

8   (VIDEOTAPE PLAYED AS FOLLOWS:)

9   PROFESSOR FELTEN: MY NAME IS EDWARD FELTEN. I AM

10 A COMPUTER SCIENCE PROFESSOR AT PRINCETON UNIVERSITY. MY

11 PRIMARY FIELDS OF RESEARCH INCLUDE OPERATING SYSTEMS,

12 INTERNET SOFTWARE AND INTERNET SECURITY. I HAVE BEEN

13 RETAINED BY THE DEPARTMENT OF JUSTICE TO STUDY THE STRUCTURE

14 AND FUNCTION OF THE WINDOWS 98 OPERATING SYSTEM, THE

15 WINDOWS 95 OPERATING SYSTEM, THE INTERNET EXPLORER OR IE WEB

16 BROWSER, AND THE RELATIONS AMONG THEM. I HAVE ALSO STUDIED

17 THE ABILITY OF COMPETING BROWSERS, SPECIFICALLY NETSCAPE

18 NAVIGATOR TO REPLACE IE IN WINDOWS 98.

19   IN ORDER TO ASSIST THE COURT IN UNDERSTANDING MY

20 TESTIMONY ON THESE MATTERS, I HAVE DIRECTED THE PREPARATION

21 OF THIS VIDEO. THIS VIDEO DEMONSTRATES THE RESULTS OF MY

22 STUDY OF WINDOWS AND IE AND WINDOWS AND NAVIGATOR. IN THIS

23 VIDEO, I INTEND TO COVER THE FOLLOWING TOPICS AND ANSWER THE

24 FOLLOWING QUESTIONS:

25   FIRST, CAN WEB BROWSING WITH IE 3 BE REMOVED FROM

1 WINDOWS 95?

2   THE ANSWER, AS THIS COURT KNOWS FROM THE PREVIOUS

3 CASE INVOLVING THE CONSENT DECREE BETWEEN THE DEPARTMENT OF

4 JUSTICE AND MICROSOFT, IS YES.

5   SECOND, CAN WEB BROWSING WITH IE 4 BE REMOVED FROM

6 WINDOWS 95? THE ANSWER WILL AGAIN BE YES.

7   THIRD, CAN WEB BROWSING WITH IE 4 BE REMOVED FROM

8 WINDOWS 98? THE ANSWER WILL AGAIN BE YES.

9   FINALLY, CAN YOU REPLACE IE 4 WITH NETSCAPE

10 NAVIGATOR TO BROWSE THE WEB IN WINDOWS 98? THE ANSWER IS

11 YES. AND I WILL COMPARE THE EFFECT ON THE USER OF SUCH A

12 REPLACEMENT IN WINDOWS 98.

13   THE COURT MAY RECALL FROM THE CASE FILED BY THE

14 D.O.J. LAST FALL THAT A VERSION OF WINDOWS 95 SHIPPED TO

15 P.C. MANUFACTURERS OR OEM'S CAME BUNDLED WITH INTERNET

16 EXPLORER 3 ON THE SAME DISK. OEM'S RECEIVED THIS VERSION OF

17 WINDOWS 95, KNOWN AS OEM SERVICE RELEASE 2 OR OSR 2, IN

18 AUGUST 1996.

19   THIS IS A PICTURE OF THE WINDOWS 95 OSR 2 DESKTOP

20 SCREEN. YOU CAN SEE THE IE 3 ICON ON THE LEFT-HAND SIDE,

21 THE GLOBE TITLED "THE INTERNET." DOUBLE-CLICKING ON THIS

22 ICON WILL LAUNCH IE 3 AND THE USER WILL BE BROWSING THE WEB.

23   MICROSOFT PROVIDED OTHER WAYS FOR A USER TO LAUNCH

24 IE 3 TO BROWSE THE WEB. FOR EXAMPLE, YOU CAN ACCESS IE

25 THROUGH THE START MENU HERE IN THE BOTTOM LEFT-HAND CORNER.

1 CHOOSE THE PROGRAMS FOLDER WHICH LISTS PROGRAMS INSTALLED ON

2 THE COMPUTER AND YOU CAN SEE THE ENTRY FOR INTERNET

3 EXPLORER.

4   ANOTHER WAY OF LAUNCHING IE IS THROUGH THE WINDOWS

5 HELP SYSTEM. YOU CAN ACCESS THE HELP SYSTEM BY

6 DOUBLE-CLICKING ON "MY COMPUTER," AS I AM DOING HERE, AND

7 CHOOSING THE HELP MENU AND SELECTING "HELP TOPICS." THE TOP

8 ENTRY I HAVE HIGHLIGHTED IN "HELP TOPICS" IS CALLED

9 "WINDOWS, THE WEB, AND YOU." LET'S MAGNIFY THAT.

10   THIS PARTICULAR HELP TOPIC POINTS THE BROWSER TO A

11 SPECIFIC WEB SITE ON THE INTERNET THAT HAS BEEN CHOSEN BY

12 MICROSOFT. CLICKING ON IT WILL LAUNCH IE 3.

13   FROM THE START MENU, YOU SELECT THE SETTINGS

14 FOLDER AND THEN CLICK ON "CONTROL PANEL." DOUBLE-CLICKING

15 ON THE "ADD/REMOVE PROGRAMS" ICON GIVES YOU THE ADD/REMOVE

16 CONTROL PANEL. THIS CONTROL PANEL CAN BE USED TO REMOVE ANY

17 APPLICATION INSTALLED ON THE P.C. FOR EXAMPLE, MICROSOFT

18 OFFICE SUITE IS INSTALLED ON THIS P.C. AND COULD BE REMOVED

19 BY CLICKING THAT ENTRY. LET'S MAGNIFY THAT.

20   YOU CAN SEE INTERNET EXPLORER 3 LISTED AS ONE OF

21 THE CHOICES THAT CAN BE REMOVED. I SELECT THAT ENTRY AND

22 THEN CLICK ON THE ADD/REMOVE BUTTON. THIS BRINGS UP A

23 DIALOG BOX. LET'S MAGNIFY. THE TEXT IN THE BOX SAYS "THIS

24 WILL REMOVE MICROSOFT INTERNET EXPLORER. DO YOU WISH TO

25 CONTINUE?" I CONFIRM THAT I DO, INDEED, WANT TO REMOVE

1   IE 3. AND LET'S MAGNIFY THE RESULT. IT READS "INTERNET

2   EXPLORER UNINSTALL HAS SUCCESSFULLY COMPLETED."

3   AFTER REBOOTING THE SYSTEM, YOU CAN SEE THAT THE

4   INTERNET ICON HAS NOW DISAPPEARED. AND, IN FACT, ALL THE

5   OTHER WAYS A USER COULD HAVE LAUNCHED IE 3 TO BROWSE THE WEB

6   ARE NO LONGER AVAILABLE. THE IE ENTRY IS GONE FROM THE

7   START MENU PROGRAMS FOLDER.

8   AND IF WE GO BACK TO "MY COMPUTER," AND FIND THE

9   HELP MENU AND HELP TOPICS, CLICKING ON "WINDOWS, THE WEB,

10   AND YOU" BRINGS UP AN ERROR MESSAGE. LET'S MAGNIFY THAT

11   ERROR MESSAGE. IT SAYS THAT "WINDOWS CANNOT FIND OR RUN THE

12   FILE OR PROGRAM NEEDED TO VIEW THE 'WINDOWS, THE WEB, AND

13   YOU' WEB SITE."

14   WHEN IE 4 WAS RELEASED BY MICROSOFT IN SEPTEMBER

15   1997, MICROSOFT GAVE P.C. MANUFACTURERS THE CHOICE OF TAKING

16   A SEPARATE SUPPLEMENTAL DISK WITH IE 4 ON IT. MICROSOFT

17   LATER PUT IE 4 ON THE SAME DISK AS THE WINDOWS OPERATING

18   SYSTEM PRODUCT AND OFFERED THIS DISK TO P.C. MAKERS AS

19   WINDOWS 95, OEM SERVICE RELEASE 2.5 OR OSR 2.5 IN DECEMBER

20   OF 1997.

21   WE ARE NOW LOOKING AT A P.C. THAT HAS OSR 2.5

22   LOADED ON IT. THIS IS THE DESKTOP SCREEN. WINDOWS 95 AND

23   IE 4 GAVE THE USER THE SAME METHODS OF LAUNCHING IE TO

24   BROWSE THE WEB AS DID WINDOWS 95 AND IE 3. HOWEVER,

25   MICROSOFT ADDED A NUMBER OF NEW WAYS OF INITIATING WEB

1 BROWSING USING IE 4. I WILL BRIEFLY DEMONSTRATE SOME OF

2 THEM FOR YOU.

3   YOU CAN, OF COURSE, LAUNCH IE 4 BY CLICKING ON THE

4 IE ICON. LET'S MAGNIFY THE ICON. AS YOU CAN SEE, IT IS NOW

5 THE LETTER "E" RATHER THAN A GLOBE.

6   A NEW METHOD OF LAUNCHING IE 4 IS THROUGH THE

7 "FAVORITES" FOLDER IN THE START MENU. INSIDE IT, THERE IS A

8 SUBFOLDER TITLED "LINKS," WHICH CONTAINS A LIST OF WEB

9 SITES. CHOOSING ONE OF THESE -- LET'S SELECT "BEST OF THE

10 WEB" -- WILL LAUNCH IE 4 AND TAKE US TO THE "BEST OF THE

11 WEB" WEB SITE MAINTAINED BY MICROSOFT.

12   THIS IS SIMILAR TO WHAT WE SAW BEFORE WHEN WE

13 CHOSE THE TOPIC "WINDOWS, THE WEB, AND YOU," OUT OF THE HELP

14 MENU IN OSR 2, IN THAT CLICKING ON THE TOPIC WILL LAUNCH IE

15 AND TAKE YOU TO A PRE-SPECIFIED WEB SITE.

16   ANOTHER NEW WAY TO LAUNCH IE 4 FROM OSR 2.5, WHICH

17 DOES NOT HAVE AN ANALOG IN OSR 2 AND IE 3, IS USING THE

18 CHANNEL BAR ON THE RIGHT-HAND SIDE OF THE OSR 2.5 DESKTOP.

19 CHANNELS ARE SPECIAL WEB SITES THAT ARE DESIGNED TO MEET A

20 SPECIFICATION SET BY MICROSOFT IN THE IE 4 BROWSER.

21 CLICKING ON "SPORTS," FOR EXAMPLE, LAUNCHES IE 4 IN FULL

22 SCREEN MODE AND GIVES YOU A SELECTION OF SPORTS-RELATED

23 CHANNELS. CLICKING ON "MSNBC SPORTS" WILL TAKE YOU TO THE

24 MSNBC CHANNEL WEB SITE.

25   RELATED TO THE CHANNEL BAR IS THE ACTIVE DESKTOP.

1   THIS IS A FEATURE THAT LETS THE USER DISPLAY WEB DOCUMENTS

2   ON THE BACKGROUND WALLPAPER OF THE DESKTOP. YOU FIRST TURN

3   ON THE ACTIVE DESKTOP BY CLICKING THE RIGHT BUTTON ON YOUR

4   MOUSE. THIS PULLS UP A MENU WITH ACTIVE DESKTOP AS A

5   CHOICE. CHOOSING TO CUSTOMIZE THE DESKTOP WILL GIVE YOU A

6   LIST OF WEB DOCUMENTS YOU CAN PUT ON THE DESKTOP.

7   YOU CAN GO TO THE WEB BY CLICKING ON THE "NEW"

8   BUTTON AND ADD DOCUMENTS TO THE LIST OR SELECT AN EXISTING

9   ONE. I HAVE ALREADY ADDED A DOCUMENT, THE DEPARTMENT OF

10   JUSTICE WEB PAGE. LET'S MAGNIFY THAT. I CHECK THE BOX. I

11   THEN CLICK ON "OKAY" AND I NOW HAVE THE D.O.J. WEB PAGE ON

12   THE DESKTOP.

13   CLICKING ON ANY OF THE LINKS ON THAT WEB PAGE WILL

14   LAUNCH IE 4. THE USER CAN ALSO INITIATE WEB BROWSING OUT OF

15   THE WINDOWS 95 FILE MANAGEMENT SYSTEM KNOWN AS WINDOWS

16   EXPLORER. YOU CAN ACCESS WINDOWS EXPLORER THROUGH THE START

17   MENU BY SELECTING THE PROGRAMS FOLDER AND THEN SELECTING

18   WINDOWS EXPLORER.

19   TYPING A WEB ADDRESS IN THE ADDRESS BAR HERE NEAR

20   THE TOP CAUSES THE WEB PAGE TO APPEAR IN THE EXPLORER

21   WINDOW. IN MY TESTIMONY, I REFER TO THIS LARGE WINDOW AS

22   THE EXPLORER CONTAINER WINDOW AND THIS SUBWINDOW ON THE

23   RIGHT AS AN EMBEDDED SUBWINDOW. YOU CAN THEN USE THE "BACK"

24   AND "FORWARD" BUTTONS TO SWITCH BACK AND FORTH BETWEEN THE

25   WEB PAGE AND YOUR LOCAL FILE DIRECTORIES.

1   VARIOUS MENUS IN WINDOWS EXPLORER ALSO CONTAIN

2   WAYS OF INITIATING WEB BROWSING. FOR EXAMPLE, LET'S MAGNIFY

3   AND SHOW YOU WHAT HAPPENS IF YOU SELECT THE "GO" MENU.

4   THREE OF THE ENTRIES HERE, "HOME PAGE," "CHANNEL GUIDE" AND

5   "SEARCH THE WEB" ARE ALL WEB SITES. CLICKING ON ANY OF THEM

6   WILL LAUNCH IE 4 AND TAKE YOU TO THE SPECIFIED WEB PAGE.

7   THE TASK BAR ON THE LOWER EDGE OF THE DESKTOP ALSO

8   CONTAINS MULTIPLE WAYS OF LAUNCHING IE 4. THE "QUICK

9   LAUNCH" BAR, FOR INSTANCE, CONTAINS AN IE ICON. YOU CAN ADD

10   TOOLBARS TO THE TASK BAR. FOR EXAMPLE, THE ADDRESS TOOLBAR.

11   THIS WILL GIVE YOU AN ADDRESS BAR THAT WORKS SIMILARLY TO

12   THE ADDRESS BAR IN WINDOWS EXPLORER UP HERE. YOU CAN TYPE A

13   WEB ADDRESS IN THAT SPACE AND INITIATE WEB BROWSING.

14   THERE ARE AT LEAST A DOZEN MORE WAYS TO LAUNCH

15   IE 4 FROM WINDOWS 95, WHICH ARE GENERALLY SIMILAR TO THE

16   ONES I HAVE ALREADY SHOWN YOU. RATHER THAN CONTINUING TO

17   SHOW YOU EACH OF THESE, LET ME NOW TURN TO THE QUESTION OF

18   WHETHER YOU CAN REMOVE IE 4 FROM WINDOWS 95.

19   ALTHOUGH MICROSOFT PUT IE 4 ON THE SAME DISK AS

20   WINDOWS 95 IN THE OSR 2.5 RELEASE, MICROSOFT CONTINUED TO

21   PROVIDE A WAY FOR USERS TO REMOVE WEB BROWSING FROM

22   WINDOWS 95 WITH A TWO-STEP PROCESS USING THE "ADD/REMOVE

23   PROGRAMS" CONTROL PANEL.

24   REMEMBER, YOU AGAIN LOCATE THE "ADD/REMOVE

25   PROGRAMS" CONTROL PANEL OUT OF THE START MENU. DOUBLE-CLICK

1 ON THE ICON, AND THE "ADD/REMOVE PROGRAMS" CONTROL PANEL

2 APPEARS. LET'S MAGNIFY THE ENTRIES ON THE PANEL. AS YOU

3 CAN SEE, IE 4 APPEARS IN THE MENU OF REMOVABLE ITEMS. CLICK

4 THE "ADD/REMOVE" BUTTON AND A DIALOG BOX APPEARS AND GIVES

5 YOU THREE OPTIONS. LET'S MAGNIFY THESE. THE FIRST READS

6 "UNINSTALL INTERNET EXPLORER 4.0 AND ALL ITS COMPONENTS."

7 THE SECOND SAYS "ADD A COMPONENT TO INTERNET EXPLORER." AND

8 THE THIRD SAYS "REMOVE THE WINDOWS DESKTOP UPDATE COMPONENT,

9 BUT KEEP THE INTERNET EXPLORER 4.0 WEB BROWSER."

10   WE WANT TO UNINSTALL ALL OF IE 4 AND, THEREFORE,

11 SELECT THE FIRST OPTION. I THEN CLICK "OKAY." A

12 CONFIRMATION BOX APPEARS WITH INSTRUCTIONS. LET'S MAGNIFY

13 THOSE INSTRUCTIONS. THEY READ "CLICK `OKAY' TO REMOVE

14 INTERNET EXPLORER 4.0 AND SHARED COMPONENTS." I CLICK

15 "OKAY" AND GET YET ANOTHER CONFIRMATION SCREEN, WHICH WE CAN

16 MAGNIFY. THIS ONE READS, "ARE YOU SURE YOU WANT TO REMOVE

17 MICROSOFT INTERNET EXPLORER 4.0?" AND WE CONFIRM "YES" YET

18 AGAIN, AND THE P.C. BEGINS UNINSTALLING IE 4. AFTER

19 REBOOTING, THIS TAKES YOU BACK TO THE OSR 2 SCENARIO WITH

20 THE IE 3 ICON ON THE DESKTOP AGAIN.

21   YOU THEN FOLLOW THE PROCEDURE I DESCRIBED EARLIER

22 TO REMOVE IE 3, AND THE END RESULT IS WINDOWS 95 OSR 2.5

23 WITH WEB BROWSING REMOVED.

24   NOW LET'S LOOK AT WINDOWS 98. AS IT TURNS OUT,

25 WEB BROWSING IN WINDOWS 98 DIFFERS FROM WEB BROWSING IN

1 WINDOWS 95 OSR 2.5 ONLY BY THE ADDITION OF TWO NEW WAYS OF

2 LAUNCHING IE 4. THE FIRST WAY IS THROUGH WINDOWS HELP. WE

3 DOUBLE-CLICK ON "MY COMPUTER" AND GO TO THE HELP MENU, FROM

4 WHICH WE SELECT HELP TOPICS. LET'S MAGNIFY THE BUTTONS

5 ALONG THE TOP.

6   THE BUTTON ON THE FAR RIGHT SIDE IS TITLED "WEB

7 HELP." CLICKING ON "WEB HELP" WILL BRING UP A DESCRIPTION

8 IN THE RIGHT-HAND WINDOW OF AVAILABLE HELP ONLINE. AT THE

9 END OF THE DESCRIPTION IS A LINK TO SUPPORT ONLINE.

10 CLICKING ON THIS LINK LAUNCHES IE 4 AND YOU ARE TAKEN TO

11 MICROSOFT'S SUPPORT ONLINE WEB PAGE. THIS IS SIMILAR TO THE

12 "WINDOWS, THE WEB, AND YOU" FEATURE I DESCRIBED IN OSR 2.

13   THE SECOND NEW WAY OF LAUNCHING IE 4 IS CALLED

14 "WINDOWS UPDATE." CLICKING ON "WINDOWS UPDATE" IN THE START

15 MENU TAKES YOU TO A MICROSOFT WEB SITE.

16   THIS WEB SITE HELPS THE USER CONFIGURE AND UPDATE

17 THE SOFTWARE ON THE COMPUTER. YOU CAN THEN NAVIGATE TO

18 ANOTHER WEB SITE BY, FOR EXAMPLE, TYPING THE WEB ADDRESS OF

19 THE DEPARTMENT OF JUSTICE WEB SITE IN THE ADDRESS BAR. WE

20 END UP AT THE DEPARTMENT OF JUSTICE WEB SITE.

21   ALTHOUGH IE 4 WEB BROWSING IN WINDOWS 98 IS

22 FUNCTIONALLY VERY SIMILAR TO IE 4 IN OSR 2.5, MICROSOFT NO

23 LONGER GIVES USERS THE ABILITY TO REMOVE WEB BROWSING FROM

24 WINDOWS.

25   MY ASSISTANTS AND I SET OUT TO DETERMINE WHETHER

1   IT IS POSSIBLE TO REMOVE WEB BROWSING FROM WINDOWS 98. WE

2   HAVE DETERMINED THAT IT IS POSSIBLE AND HAVE CONSTRUCTED A

3   PROTOTYPE THAT SHOWS IT CAN BE DONE.

4   WE ORIGINALLY DEVELOPED OUR PROTOTYPE REMOVAL

5   PROGRAM WITHOUT ACCESS TO MICROSOFT'S SOURCE CODE FOR IE 4

6   AND WINDOWS 98. THE LATEST VERSION OF OUR PROGRAM IS

7   COMPOSED OF ABOUT 600 LINES OF SOFTWARE CODE IN THE FORM OF

8   A NEW SHARED PROGRAM LIBRARY AND MODIFIES TWO OF THE

9   EXISTING SHARED PROGRAM LIBRARIES THAT SHIP WITH WINDOWS 98.

10 IT ALSO REMOVES A NUMBER OF FILES AND DIRECTORIES AND MAKES

11 CHANGES TO THE WINDOWS REGISTRY, WHICH CONTAINS SYSTEM

12 CONFIGURATION INFORMATION.

13   THE END RESULT IS A PROTOTYPE THAT PERFORMS

14 SIMILARLY TO THE MICROSOFT IE 3 REMOVAL PROGRAM. WE HAVE

15 DESIGNED OUR PROTOTYPE SO THAT IT CAN BE ACTIVATED FROM THE

16 "ADD/REMOVE PROGRAMS" CONTROL PANEL, AS YOU CAN SEE HERE.

17 LET'S MAGNIFY THAT.

18   HIGHLIGHTING THIS ENTRY AND CLICKING "ADD/REMOVE"

19 WILL INITIATE THE PROGRAM. THE PROGRAM REMOVES ALL THE

20 METHODS BY WHICH THE USER CAN BROWSE THE WEB USING IE. AT

21 THIS POINT, THE USER CAN OPERATE WINDOWS 98 AND RUN

22 APPLICATIONS, BUT THE USER CAN NO LONGER INITIATE WEB

23 BROWSING.

24   NOW LET'S LOOK AT SOME EXAMPLES OF WHAT HAPPENS

25 WHEN THE USER TRIES TO BROWSE THE WEB AFTER OUR PROGRAM HAS

1   BEEN RUN. FIRST OF ALL, WHEN YOU SEE THE WINDOWS 98

2   DESKTOP, THE IE ICONS AND THE CHANNEL BAR ARE GONE. A USER

3   WHO OPENS THE "FAVORITES" FOLDER IN THE START MENU WILL FIND

4   NO WEB SITE LISTING IN THE "LINKS" SUBFOLDER.

5   FOCUSING ON THE DESKTOP, IF YOU RIGHT-CLICK ON THE

6   DESKTOP, THERE IS NO LONGER THE OPTION OF TURNING ON "ACTIVE

7   DESKTOP," THE FEATURE THAT LETS YOU PUT WEB PAGES ON THE

8   DESKTOP.

9   IF YOU OPEN WINDOWS EXPLORER THROUGH THE START

10 MENU AND TYPE A WEB SITE ADDRESS IN THE ADDRESS BAR, YOU

11 WILL NOT BE ABLE TO GO TO THAT WEB SITE. INSTEAD, AN ERROR

12 MESSAGE WILL COME UP. LET'S MAGNIFY THE MESSAGE. IT READS

13 "UNABLE TO OPEN THIS INTERNET SHORTCUT. THE PROTOCOL HTTP

14 DOES NOT HAVE A REGISTERED PROGRAM." THAT BASICALLY MEANS

15 THAT THE SYSTEM DOES NOT KNOW HOW TO OPEN UP WEB SITES.

16   SIMILARLY, UNDER THE "GO" MENU, CHOOSING "HOME

17 PAGE," "SEARCH THE WEB" OR "CHANNEL GUIDE" WILL RESULT IN

18 THE SAME ERROR MESSAGE.

19   FINALLY, FOCUSING ON THE NEW FEATURES IN

20 WINDOWS 98, WINDOWS HELP NO LONGER INCLUDES THE ABILITY TO

21 BROWSE THE WEB USING THE WEB HELP BUTTON. CLICKING ON THE

22 WEB HELP BUTTON, FOLLOWED BY THE SUPPORT ONLINE LINK, GIVES

23 THE SAME ERROR MESSAGE AS BEFORE.

24   WINDOWS UPDATE, THE SYSTEM MAINTENANCE FEATURE,

25 CONTINUES TO LET USERS UPDATE THEIR SYSTEM SOFTWARE.

1   HOWEVER, THE USER CANNOT BROWSE THE WEB, BUT MUST REMAIN ON

2   THE WINDOWS UPDATE WEB SITE. AS YOU CAN SEE, TYPING IN

3   ANOTHER WEB ADDRESS BRINGS UP THE SAME ERROR MESSAGE.

4   THE PROTOTYPE REMOVAL PROGRAM WE DEVELOPED DOES

5   NOT PREVENT WINDOWS 98 FROM BOOTING UP PROPERLY, NOR DOES IT

6   APPEAR TO AFFECT THE STABILITY OF WINDOWS 98 UNDER NORMAL

7   USE. ALTHOUGH WE DID NOT TEST OUR PROTOTYPE ON EVERY

8   CONCEIVABLE HARDWARE AND SOFTWARE CONFIGURATION, THE

9   PROTOTYPE DOES SHOW THAT MICROSOFT SHOULD BE CAPABLE OF

10   DEVELOPING A PROCEDURE FOR REMOVING WEB BROWSING FROM

11   WINDOWS 98 WITHOUT ENDANGERING THE NON-WEB BROWSING

12   FUNCTIONALITY OF THE OPERATING SYSTEM.

13   A USER WHO IS GIVEN A COPY OF WINDOWS 98, FROM

14   WHICH WEB BROWSING HAS BEEN REMOVED USING OUR PROTOTYPE

15   REMOVAL PROGRAM, MAY WANT TO ADD A WEB BROWSER TO THE

16   SYSTEM. THE USER COULD, OF COURSE, SELECT IE AND REINSTALL

17   IT. WE HAVE DEVELOPED A PROTOTYPE IE INSTALLER FOR

18   WINDOWS 98 THAT ACCOMPLISHES THIS. OR THE USER MAY CHOOSE

19   TO INSTALL THE LATEST VERSION OF IE; THAT IS CURRENTLY IE 5

20   BETA 1. ALTERNATIVELY, THE USER MAY WANT TO CHOOSE THE

21   NETSCAPE NAVIGATOR WEB BROWSER.

22   THE LAST TOPIC I WISH TO DISCUSS IS WHAT HAPPENS

23   TO THE WINDOWS 98 USER WHO CHOOSES NAVIGATOR. PRESENTLY,

24   NETSCAPE NAVIGATOR CAN BE INSTALLED ON WINDOWS 98 ALONG WITH

25   IE. BUT WINDOWS 98 PERMITS NAVIGATOR TO REPLACE IE FOR ONLY

1   SOME OF THE WEB BROWSING SITUATIONS DESCRIBED EARLIER. EVEN

2   IF THE USER MAKES NAVIGATOR THE DEFAULT BROWSER -- THAT IS,

3   THE BROWSER THAT THE SYSTEM IS CONFIGURED TO LAUNCH WHENEVER

4   THE USER WANTS TO BROWSE THE WEB -- WINDOWS 98 STILL

5   LAUNCHES IE RATHER THAN NAVIGATOR IN SOME WEB BROWSING

6   SITUATIONS.

7   HOWEVER, AFTER OUR PROTOTYPE REMOVAL PROGRAM HAS

8   BEEN RUN, THE USER CAN INSTALL NAVIGATOR AND MAKE IT THE

9   DEFAULT BROWSER SO THAT WINDOWS 98 LAUNCHES NAVIGATOR

10 WHENEVER THE USER WANTS TO BROWSE THE WEB. THE RESULT IS

11 THAT THE WINDOWS 98 USER EXPERIENCES WEB BROWSING WITH

12 NAVIGATOR IN A SUBSTANTIALLY SIMILAR MANNER TO WEB BROWSING

13 WITH IE.

14   LET ME SHOW YOU SOME EXAMPLES OF THIS. WE NOW SEE

15 THE WINDOWS 98 DESKTOP AFTER NAVIGATOR HAS BEEN INSTALLED.

16 A NAVIGATOR ICON APPEARS WHERE THE IE ICON USED TO BE.

17 LET'S MAGNIFY THAT. CLICKING ON THIS ICON WILL LAUNCH

18 NAVIGATOR. WE CAN ALSO GO TO THE FAVORITES FOLDER IN THE

19 START MENU TO LOOK AT THE LIST OF WEB SITES STORED IN THE

20 "LINKS" SUBFOLDER. THAT SUBFOLDER NOW PROVIDES NAVIGATOR'S

21 LIST OF FAVORITE WEB SITES. CLICKING ON ONE OF THESE --

22 LET'S CHOOSE THE WEATHER CHANNEL -- WILL AGAIN LAUNCH

23 NAVIGATOR.

24   WE CAN ALSO LOOK AT THE WINDOWS EXPLORER FILE

25 MANAGEMENT PROGRAM. PREVIOUSLY, IF YOU TYPED IN A WEB

1 ADDRESS IN THE ADDRESS BAR, IE WOULD LAUNCH TO DISPLAY THE

2 WEB PAGE. THE SYSTEM NOW LAUNCHES NAVIGATOR TO DISPLAY THE

3 WEB PAGE. YOU CAN CLICK BACK AND FORTH BETWEEN THE TWO

4 WINDOWS TO LOOK AT YOUR LOCAL FILES AND FOLDERS OR WEB

5 PAGES.

6   WE CAN ALSO BRING BACK THE ADDRESS TOOLBAR LOCATED

7 ON THE TASK BAR ALONG THE BOTTOM EDGE OF THE DESKTOP.

8 TYPING A WEB ADDRESS IN THIS ADDRESS BAR ALSO LAUNCHES

9 NAVIGATOR.

10   WINDOWS HELP ALSO WORKS WITH NAVIGATOR. WE ACCESS

11 HELP BY DOUBLE-CLICKING ON "MY COMPUTER," SELECTING THE HELP

12 MENU AND CHOOSING HELP TOPICS. CLICKING ON THE "WEB HELP"

13 BUTTON AGAIN DISPLAYS THE DISCUSSION OF ONLINE HELP. AND

14 CLICKING THE "SUPPORT ONLINE" LINK AT THE BOTTOM NOW

15 LAUNCHES NAVIGATOR INSTEAD OF IE.

16   WINDOWS UPDATE CONTINUES TO OPERATE BY USING

17 CERTAIN SHARED PROGRAM LIBRARIES SHIPPED WITH WINDOWS 98

18 THAT ARE LEFT INTACT BY OUR PROTOTYPE REMOVAL PROGRAM. WE

19 COULD HAVE DESIGNED OUR PROGRAM TO ALLOW NAVIGATOR TO LAUNCH

20 WHEN THE USER CLICKS ON "WINDOWS UPDATE." HOWEVER,

21 MICROSOFT HAS STRUCTURED THE WINDOWS UPDATE WEB SITE TO

22 REFUSE ACCESS TO ANY NON-MICROSOFT WEB BROWSER, SUCH AS

23 NAVIGATOR.

24   MICROSOFT COULD HAVE DESIGNED THE WINDOWS UPDATE

25 WEB SITE SO THAT IT WOULD FUNCTION EQUIVALENTLY, WHETHER

1   VISITED BY A MICROSOFT OR A NON-MICROSOFT BROWSER. AS YOU

2   WILL RECALL, PREVIOUSLY IN WINDOWS 98 WITH WEB BROWSING

3   REMOVED, ATTEMPTING TO LEAVE THE WINDOWS UPDATE WEB SITE

4   WOULD RESULT IN AN ERROR MESSAGE. NOW, IN WINDOWS 98 WITH

5   NAVIGATOR INSTALLED, ATTEMPTING TO LEAVE THE WINDOWS UPDATE

6   WEB SITE WILL LAUNCH NAVIGATOR TO VIEW THE NEW SITE.

7   AS YOU CAN SEE, IE IS NOT THE ONLY WAY TO SUPPORT

8   WEB BROWSING IN WINDOWS 98. NAVIGATOR CAN SUCCESSFULLY

9   REPLACE IE IN A MANNER THAT SUBSTANTIALLY DUPLICATES IE'S

10 WEB BROWSING BEHAVIOR IN WINDOWS 98.

11   IN THIS VIDEO, I HAVE ADDRESSED FOUR ISSUES.

12 FIRST, CAN YOU REMOVE IE 3 WEB BROWSING FROM WINDOWS 95?

13 THE ANSWER IS YES, AND MICROSOFT HAS PROVIDED THE MECHANISM

14 FOR DOING SO OUT OF THE "ADD/REMOVE PROGRAMS" CONTROL PANEL.

15   SECOND, CAN IE 4 WEB BROWSING BE REMOVED FROM

16 WINDOWS 95? THE ANSWER IS YES, AND, AGAIN, MICROSOFT HAS

17 PROVIDED THE MECHANISM FOR DOING SO OUT OF THE "ADD/REMOVE

18 PROGRAMS" CONTROL PANEL.

19   THIRD, CAN YOU REMOVE IE WEB BROWSING FROM

20 WINDOWS 98? THE ANSWER, AGAIN, IS YES. ALTHOUGH MICROSOFT

21 HAS NOT PROVIDED A MECHANISM FOR DOING SO, OUR PROTOTYPE

22 REMOVAL PROGRAM DEMONSTRATES THAT IT IS POSSIBLE.

23   FINALLY, CAN NAVIGATOR REPLACE IE FOR WEB BROWSING

24 FROM WINDOWS 98? THE ANSWER, AGAIN, IS YES, ALTHOUGH

25 MICROSOFT HAS NOT PROVIDED A MECHANISM THAT ENABLES COMPLETE

1 SUBSTITUTION OF NAVIGATOR FOR IE IN WINDOWS 98. INSTALLING

2 NAVIGATOR, AFTER RUNNING OUR PROTOTYPE REMOVAL PROGRAM,

3 DEMONSTRATES THAT THIS IS POSSIBLE.

4   FURTHERMORE, THE USER'S WEB BROWSING EXPERIENCE

5 AFTER DOING THIS SUBSTANTIALLY DUPLICATES WHAT THE USER

6 EXPERIENCES WITH WINDOWS 98 AND IE.

7   (END OF PLAYING OF VIDEOTAPE.)

8 BY MR. MALONE:

9 Q. PROFESSOR FELTEN, DO YOU AFFIRM UNDER OATH THE TRUTH OF

10 THE TESTIMONY IN YOUR WRITTEN STATEMENT AND IN THE VIDEOTAPE

11 DEMONSTRATION THAT WE JUST SAW?

12 A. YES. THERE ARE TWO MINOR EVENTS THAT HAVE OCCURRED

13 SINCE I SUBMITTED MY TESTIMONY, WHICH I WOULD HAVE INCLUDED

14 IN MY TESTIMONY HAD THEY OCCURRED BEFORE IT WAS SUBMITTED,

15 BUT NEITHER OF THESE AFFECTS MY TESTIMONY IN ANY SIGNIFICANT

16 WAY.

17 Q. THANK YOU.

18   MR. MALONE: YOUR HONOR, I TENDER THE WITNESS FOR

19 CROSS-EXAMINATION.

20   THE COURT: ALL RIGHT.

21   MR. HEINER: GOOD MORNING, YOUR HONOR.

22   THE COURT: GOOD MORNING.

23   CROSS-EXAMINATION

24 BY MR. HEINER:

25 Q. GOOD MORNING, DR. FELTEN.

1 A. GOOD MORNING.

2 Q. MY NAME IS DAVE HEINER, AS YOU KNOW, AND I WILL BE

3 QUESTIONING YOU TODAY ON BEHALF OF MICROSOFT.

4 Q. ON THE VIDEOTAPE WE JUST SAW, YOU DEMONSTRATED THE

5 EFFECTS OF RUNNING YOUR SO-CALLED PROTOTYPE REMOVAL PROGRAM

6 ON WINDOWS 98, RIGHT?

7 A. YES.

8 Q. AND ONE OF THE EFFECTS WAS THAT IF A USER WOULD TYPE THE

9 ADDRESS FOR A WEB SITE INTO ANY ADDRESS BAR IN WINDOWS 98,

10 AFTER THE PROTOTYPE REMOVAL PROGRAM IS RUN, WINDOWS WOULD

11 DISPLAY AN ERROR MESSAGE; IS THAT RIGHT?

12 A. THAT'S CORRECT.

13 Q. NOW, IN WINDOWS 98, THE WAY MICROSOFT DESIGNED THE

14 PRODUCT, WINDOWS WOULD ORDINARILY DISPLAY THE WEB PAGE,

15 RIGHT?

16 A. THAT'S CORRECT.

17 Q. AND MR. WEADOCK TESTIFIED PREVIOUSLY ABOUT WHY IT IS

18 THAT USERS -- OR AT LEAST SOME USERS -- WOULD WANT TO HAVE

19 NO WEB BROWSING ON THEIR SYSTEMS.

20   YOU WOULD AGREE WITH ME, WOULD YOU NOT, THAT MANY

21 USERS, WHEN THEY TYPE THE ADDRESS FOR A WEB SITE INTO AN

22 ADDRESS BAR, WOULD PREFER TO SEE THE WEB SITE RATHER THAN AN

23 ERROR MESSAGE?

24 A. ABSOLUTELY. AND THE PROTOTYPE REMOVAL PROGRAM GIVES THE

25 USER THE CHOICE TO USE WHICHEVER WEB BROWSER THEY WANT,

1   INCLUDING IE 4. IF THEY WANT TO USE IE 4, THEY CAN SIMPLY

2   NOT RUN THE PROTOTYPE OR, HAVING RUN IT, THEY COULD SIMPLY

3   DOUBLE-CLICK THE PROTOTYPE INSTALLATION PROGRAM THAT WE

4   PROVIDE.

5   THE IDEA HERE IS NOT TO TAKE AWAY THE USER'S

6   CHOICE TO USE IE 4. IT'S TO RESTORE THE CHOICE TO HAVE NO

7   WEB BROWSER OR TO USE AN ALTERNATIVE BROWSER.

8   Q.   NOW, DR. FELTEN, EVEN WITHOUT RUNNING ANY PROTOTYPE

9   REMOVAL PROGRAM, THERE IS NO PROBLEM INSTALLING NETSCAPE

10 NAVIGATOR AND RUNNING IT ON WINDOWS 98; ISN'T THAT RIGHT?

11 A.   THERE'S NO PROBLEM INSTALLING IT, BUT THERE IS A PROBLEM

12 USING IT. AND PROFESSOR FARBER DESCRIBED THIS THE OTHER

13 DAY. HE TALKED ABOUT WHAT HAPPENED WHEN HE TRIED TO INSTALL

14 NAVIGATOR ON HIS WINDOWS 98 P.C. AND IE KEPT POPPING UP IN

15 HIS FACE, AS HE PUT IT. THAT'S THE SORT OF PHENOMENON THAT

16 I REFER TO IN MY TESTIMONY AS HARDCODING ACCESS TO IE 4.

17 AND SO THAT HARDCODING DOES PREVENT THE USER FROM USING

18 NETSCAPE NAVIGATOR IN ALL THE CASES WHERE THEY WOULD LIKE

19 TO.

20 Q.   DR. FELTEN, ISN'T IT THE CASE THAT MILLIONS OF PEOPLE

21 ARE RUNNING NETSCAPE NAVIGATOR ON WINDOWS 98 TODAY WITHOUT

22 INCIDENT?

23 A.   I HAVE NO BASIS FOR EVALUATING THAT ONE WAY OR THE

24 OTHER.

25 Q.   AND YOU TESTIFIED IN THE VIDEOTAPE THAT THERE ARE -- I

1 THINK YOU SAID PERHAPS TWO DOZEN WAYS, OR MORE, TO INITIATE

2 WEB BROWSING IN WINDOWS 98; ISN'T THAT RIGHT?

3 A. YES.

4 Q. AND ISN'T IT TRUE, DR. FELTEN, THAT IF A USER INSTALLS

5 NETSCAPE NAVIGATOR AS THE DEFAULT BROWSER ON WINDOWS 98, ALL

6 BUT TWO OF THOSE WAYS TURN INTO WAYS IN WHICH, WHEN A USER

7 CLICKS ON THAT METHOD, NAVIGATOR WILL BE LAUNCHED?

8 A. NO, I BELIEVE THERE ARE FOUR CASES IN WHICH NAVIGATOR IS

9 NOT LAUNCHED, AS DESCRIBED IN MY TESTIMONY. THERE'S A LIST

10 IN MY DIRECT TESTIMONY.

11 Q. FOUR OUT OF MORE THAN TWO DOZEN; IS THAT RIGHT?

12 A. THAT'S RIGHT. AND THOSE FOUR CAN BE QUITE SIGNIFICANT

13 TO A USER, AS PROFESSOR FARBER TESTIFIED.

14 Q. AND THERE MAY BE IMPORTANT DESIGN CONSIDERATIONS, MIGHT

15 THERE NOT, WHY IN THOSE FOUR CASES IE WOULD BE LAUNCHED

16 RATHER THAN NAVIGATOR?

17 A. HAVING STUDIED IE AND STUDIED WINDOWS 98, INCLUDING

18 STUDYING THE SOURCE CODE, AND HAVING EXPERIENCE WITH USING

19 THE PROTOTYPE REMOVAL PROGRAM WHICH CHANGES THE BEHAVIOR IN

20 THOSE CASES, I KNOW OF NO REASON WHY MICROSOFT WAS

21 TECHNOLOGICALLY COMPELLED TO DESIGN THINGS THAT WAY.

22 Q. IN THOSE FOUR CASES?

23 A. IN ANY CASE. I KNOW OF NO REASON WHY MICROSOFT SHOULD

24 TAKE AWAY THE USER'S CHOICE OF BROWSER IN ANY CASE.

25 Q. WE'LL COME BACK TO THIS SUBJECT LATER ON IN THE

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 1   EXAMINATION.  YOU WILL AGREE WITH ME, THOUGH, THAT ANY USER

 2   CAN INSTALL NETSCAPE AND RUN IT ON WINDOWS 98?  THERE IS NO

 3   LACK OF CHOICE IN THAT REGARD.

 4   A.  THEY CAN INSTALL IT, BUT, AS I SAID, THEY CANNOT RUN IT

 5   IN ALL CASES IN WHICH THEY WOULD LIKE TO.

 6   Q.  NOW, DR. FELTEN, THIS IS BECOMING CONFUSING.  INSTALL

 7   NETSCAPE ON A WINDOWS 98 MACHINE WITHOUT ANY PROTOTYPE

 8   REMOVAL PROGRAM, MAKE A DECISION, I WOULD LIKE TO BROWSE THE

 9   WEB -- THEY CAN DO THAT USING NETSCAPE; ISN'T THAT RIGHT?

10   THERE'S TWO DOZEN WAYS TO DO THAT USING NETSCAPE.

11   A.  THERE ARE WAYS TO DO IT, BUT THERE ARE ALSO SITUATIONS

12   WHERE IE POPS UP WHEN A USER DOES NOT WANT IT.  THAT'S WHAT

13   PROFESSOR FARBER EXPERIENCED.  AND IF SOMEONE WHO KNOWS AS

14   MUCH ABOUT SOFTWARE AS HE DOES WAS STILL CONFUSED AND, IN

15   FACT, WENT BACK TO USING IE BECAUSE HE FOUND THIS TOO

16   DIFFICULT, THAT SHOWS THAT THE AVERAGE USER IS NOT IN A GOOD

17   SITUATION HERE.

18   Q.  YOU HAVE BEEN RETAINED BY THE DEPARTMENT OF JUSTICE TO

19   TESTIFY AS AN EXPERT IN THIS MATTER; IS THAT RIGHT?

20   A.  YES.

21   Q.  WHEN DID YOU BEGIN WORKING WITH THE DEPARTMENT OF

22   JUSTICE ON THIS CASE?

23   A.  I BELIEVE THE CONTRACT WAS SIGNED IN LATE JANUARY OR

24   EARLY FEBRUARY.

25   Q.  AND SINCE THAT TIME, YOU HAVE STUDIED WINDOWS AND ITS
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1 WEB BROWSING FUNCTIONALITY; IS THAT RIGHT?

2 A.   YES.   AMONG OTHER THINGS.

3 Q.   AND ONE OF THE THINGS YOU DID WAS TO STUDY THE SOURCE

4 CODE FOR WINDOWS 98, RIGHT?

5 A.   YES.   I RECEIVED THE SOURCE CODE ON THE 9TH OF AUGUST.

6 Q.   AS FAR AS YOU KNOW, YOU ARE THE ONLY GOVERNMENT WITNESS

7 WHO HAS STUDIED THE SOURCE CODE FOR WINDOWS 98, CORRECT?

8 A.   AS FAR AS I KNOW, YES.

9 Q.   AND YOU HAVE BEEN ASKED BY THE DEPARTMENT OF JUSTICE TO

10 PROVIDE YOUR EXPERT OPINION ON THE RELATIONS BETWEEN WINDOWS

11 AND INTERNET EXPLORER, AS YOU PUT IT IN YOUR WRITTEN

12 TESTIMONY, CORRECT?

13 A.   YES.

14 Q.   YOU UNDERSTAND, SIR, DO YOU NOT, THAT IN THIS CASE, THE

15 DEPARTMENT OF JUSTICE IS ALLEGING THAT WINDOWS AND INTERNET

16 EXPLORER ARE SEPARATE PRODUCTS?

17 A.   YES.

18 Q.   IN YOUR EXPERT OPINION, HOWEVER, INTERNET EXPLORER 4 IS

19 PART OF THE PRODUCT THAT MICROSOFT CALLS WINDOWS 98; ISN'T

20 THAT RIGHT?

21 A.   INTERNET EXPLORER IS PART OF THE DISTRIBUTION WHICH

22 MICROSOFT SELLS UNDER THE NAME WINDOWS 98.   HOWEVER, THEIR

23 INTERNET EXPLORER IS AN APPLICATION WHICH CAN BE SEPARATED

24 FROM WINDOWS 98.

25 Q.   MY QUESTION FOR THE MOMENT DOESN'T RELATE TO

1   REMOVABILITY, OR SEPARATION, OR ANYTHING OF THAT SORT. I'M

2   SIMPLY ASKING, THERE IS A PRODUCT CALLED WINDOWS 98 AND YOUR

3   EXPERT OPINION IS THAT INTERNET EXPLORER 4 IS PART OF THAT

4   PRODUCT; ISN'T THAT RIGHT?

5   A.   YOU HAVE TO BE CAREFUL HERE TO DISTINGUISH BETWEEN

6   QUESTIONS OF DESIGN AND QUESTIONS OF PACKAGING. MICROSOFT

7   SELLS A SINGLE PACKAGE WHICH CONTAINS WINDOWS 98 AND

8   INTERNET EXPLORER TOGETHER, AND IT SELLS IT UNDER THE NAME

9   "WINDOWS 98." BUT THERE'S NO REASON, BASED ON THE STRUCTURE

10   OF THE SOFTWARE -- THERE'S NO REASON BASED ON THE WAY USERS

11   EXPERIENCE IT TO THINK THAT USERS THINK OF THEM AS THE SAME

12   PRODUCT. THE USERS THINK OF OPERATING SYSTEM PRODUCTS AND

13   WEB BROWSERS AS BEING THE SAME THING.

14   Q.   I WASN'T ASKING YOU ABOUT WHAT USERS THINK OF, AND

15   YOU'RE NOT AN EXPERT IN MARKETING OR HOW USERS INTERACT WITH

16   P.C.'S; IS THAT RIGHT?

17   A.   IT'S NOT A TOPIC I'VE STUDIED, ALTHOUGH I CERTAINLY AM A

18   USER. AND AS A COMPUTER SCIENTIST, A LOT OF PEOPLE TALK TO

19   ME ABOUT THEIR EXPERIENCES IN USING P.C.'S. I ALSO TALK TO

20   PEOPLE IN THE INDUSTRY ABOUT WHAT THEY THINK AND WHAT

21   THEY'RE TRYING TO DO, INCLUDING PEOPLE AT MICROSOFT.

22   Q.   YOU DO AGREE WITH ME THAT INTERNET EXPLORER 4 IS PART OF

23   THE PRODUCT THAT MICROSOFT CALLS WINDOWS 98; IS THAT RIGHT?

24   A.   THERE'S NO QUESTION THAT IF YOU GO TO THE STORE AND BUY

25   THE BOX THAT CALLS ITSELF WINDOWS 98, IT WILL HAVE INTERNET

1   EXPLORER IN IT.

2   Q.   OKAY.   AND YOU DO NOT STATE ANYPLACE IN YOUR WRITTEN

3   TESTIMONY THAT YOU HAVE FOUND ANY WAY TO REMOVE INTERNET

4   EXPLORER 4 FROM WINDOWS 98; ISN'T THAT RIGHT?

5   A.   NO.   I THINK THAT'S WHAT THE PROTOTYPE REMOVAL PROGRAM

6   DEMONSTRATES THAT MICROSOFT CAN DO.

7   Q.   DO YOU HAVE YOUR TESTIMONY IN FRONT OF YOU?

8   A.   YES, I DO.

9   Q.   CAN YOU SHOW ME WHERE IN YOUR TESTIMONY YOU EXPLAIN HOW

10   TO REMOVE INTERNET EXPLORER 4 FROM WINDOWS 98?

11   A.   I BELIEVE THAT'S WHAT APPENDIX B IS.   IT EXPLAINS WHAT

12   THE PROTOTYPE REMOVAL PROGRAM DOES.

13   Q.   SHOW ME IN THE SUBSTANCE OF YOUR TESTIMONY WHERE YOU SAY

14   YOU CAN REMOVE INTERNET EXPLORER 4 FROM WINDOWS 98?

15   A.   PARAGRAPH 4 SAYS THAT IE WEB BROWSING CAN BE REMOVED

16   FROM WINDOWS 98.

17   Q.   WEB BROWSING?

18   A.   CORRECT.

19   Q.   I'M ASKING YOU ABOUT THE SOFTWARE CALLED INTERNET

20   EXPLORER 4, NOT A FUNCTION.   WEB BROWSING IS A FUNCTION; IS

21   THAT RIGHT?

22   A.   WEB BROWSING IS A FUNCTION.   IT'S AN ACTIVITY, YES.

23   Q.   OKAY.   AND THE PROTOTYPE REMOVAL PROGRAM IS A METHOD TO

24   HIDE ACCESS TO THAT ACTIVITY, RIGHT?

25   A.   YES.   AND THE IE 4 WEB BROWSER IS A PRODUCT THAT GIVES

1 THE USER THE ABILITY TO ENGAGE IN THAT ACTIVITY OF WEB

2 BROWSING. THAT'S WHAT USERS ARE BUYING WHEN THEY BUY A WEB

3 BROWSER. THEY ARE BUYING SOMETHING THAT WILL LET THEM

4 BROWSE THE WEB.

5 Q. OKAY. AND WHAT YOU'RE SAYING IN YOUR TESTIMONY IS THAT

6 YOU FOUND A WAY TO REMOVE THE ABILITY OF USERS TO PERFORM

7 THAT FUNCTION IN WINDOWS 98, BUT YOU'RE NOT CLAIMING IN YOUR

8 TESTIMONY THAT YOU HAVE FOUND ANY WAY TO REMOVE THE INTERNET

9 EXPLORER 4 SOFTWARE ITSELF FROM WINDOWS 98; ISN'T THAT

10 RIGHT?

11 A. I DON'T SEE THERE AS BEING MUCH OF A DISTINCTION THERE.

12 IF YOU HAVE REMOVED THE ABILITY TO BROWSE THE WEB, AS FAR AS

13 THE USER IS CONCERNED, WEB BROWSING -- THE WEB BROWSER IS

14 GONE.

15 Q. WELL, DR. FELTEN, YOU WERE VERY CAREFUL TO BE VERY

16 PRECISE IN YOUR USE OF LANGUAGE IN YOUR WRITTEN TESTIMONY;

17 ISN'T THAT RIGHT?

18 A. GENERALLY, YES.

19 Q. I WOULD LIKE TO DIRECT YOUR ATTENTION TO PAGE 6,

20 PARAGRAPH 21 OF YOUR TESTIMONY.

21 A. OKAY.

22 Q. AND THERE YOU SAY IN THE SECOND SENTENCE, "I HAVE

23 DETERMINED THAT REMOVING INTERNET EXPLORER 1 FROM THIS

24 VERSION OF WINDOWS IS EASILY ACCOMPLISHED," CORRECT?

25 A. YES, THAT'S WHAT I SAID AND IT'S TRUE.

1 Q. AND I DIRECT YOUR ATTENTION, IF YOU WOULD, TO PARAGRAPH

2 22. AND THERE YOU SAY IN THE SECOND SENTENCE, "I HAVE

3 DETERMINED THAT REMOVING IE 2 FROM THIS VERSION OF WINDOWS

4 CAN BE EASILY ACCOMPLISHED"; IS THAT RIGHT?

5 A. YES.

6 Q. AND TURNING YOUR ATTENTION TO PARAGRAPH 23, IN THE

7 SECOND SENTENCE, YOU SAY, "THIS VERSION OF IE IS REMOVABLE

8 FROM OSR 2 THROUGH A SIMPLE PROCEDURE"; IS THAT CORRECT?

9 A. YES.

10 Q. NO PLACE IN YOUR TESTIMONY, HOWEVER, DO YOU GO TO THE

11 NEXT STEP AND SAY, "THERE IS A WAY TO REMOVE INTERNET

12 EXPLORER 4 FROM WINDOWS 98"; ISN'T THAT RIGHT?

13 A. AS I EXPLAINED -- I STATED IN THE SUMMARY IN PARAGRAPH 4

14 AND LATER IN THE MAIN BODY OF THE TESTIMONY THAT THE

15 PROTOTYPE REMOVES WEB BROWSING FROM THE SYSTEM, WHICH IS THE

16 SAME THING.

17 Q. AS YOU EXPLAIN IN YOUR WRITTEN TESTIMONY, THE WORLD WIDE

18 WEB IS CHARACTERIZED BY A SET OF STANDARD DATA FORMATS,

19 INCLUDING HTML, AND A SET OF STANDARD COMMUNICATIONS

20 PROTOCOLS, SUCH AS HTTP. DO YOU RECALL THAT TESTIMONY? IT

21 HAPPENS TO BE AT PARAGRAPH 13.

22 A. OKAY. LET ME TAKE A LOOK. YES. IT'S CHARACTERIZED BY

23 THOSE FORMATS AND PROTOCOLS THAT ALLOW COMPUTERS TO SHARE

24 WEB PAGES, AND HENCE, ALLOW USERS TO BROWSE THE WEB.

25 Q. AND THE HTML AND HTTP TECHNICAL STANDARDS ARE SUPPORTED

1   TO A LARGE EXTENT IN SOFTWARE; IS THAT RIGHT?

2   A.   YES.

3   Q.   AN EARLY EXAMPLE OF SUCH SOFTWARE, OF COURSE, WAS THE

4   MOSAIC WEB BROWSER, CORRECT?

5   A.   YES.   MOSAIC WAS A WEB BROWSING PROGRAM THAT DID CONTAIN

6   THOSE FUNCTIONS.

7   Q.   AND ANOTHER EARLY WEB BROWSER THAT CONTAINED THOSE

8   FUNCTIONS WAS NETSCAPE NAVIGATOR 1.0, CORRECT?

9   A.   THAT'S CORRECT.

10   Q.   AND YET ANOTHER ONE WAS INTERNET EXPLORER 1.0, RIGHT?

11   A.   ACTUALLY, I'M NOT FAMILIAR WITH IE 1.

12   Q.   YOU'RE NOT FAMILIAR WITH IE 1?

13   A.   NO.

14   Q.   OKAY.   DO YOU BELIEVE, BASED ON YOUR EXPERIENCE AS A

15   COMPUTER SCIENTIST, THAT IE 1 LIKELY INCLUDED THE ABILITY TO

16   DISPLAY HTML AND ACCESS DATA VIA HTTP?

17   A.   YES, IT LIKELY DID.

18   Q.   NOW, IN FACT, ALL THREE OF THE BROWSERS WE JUST TALKED

19   ABOUT INCLUDED THAT CAPABILITY, ISN'T THAT RIGHT, TO ACCESS

20   DATA VIA HTTP AND DISPLAY IT VIA HTML?

21   A.   RIGHT.   THEY PROVIDED TO THE USER THE ABILITY TO BROWSE

22   THE WEB BY USING THAT CODE.

23   Q.   IN FACT, THE CORE FUNCTION OF A WEB BROWSER IS PRECISELY

24   THAT, TO ALLOW PEOPLE TO ACCESS DATA VIA HTTP AND DISPLAY IT

25   VIA HTML; ISN'T THAT RIGHT?

1   A.   THE PRIMARY FUNCTION IS TO LET THE USER BROWSE THE WEB.

2   IN OTHER WORDS, THE PRIMARY FUNCTION IS DEFINED BY HOW THE

3   USER EXPERIENCES THE PRODUCT.

4   Q.   AND THE WEB IS DEFINED BY HTML PAGES, IF YOU WILL, AND

5   THE HTTP PROTOCOL; ISN'T THAT RIGHT? YOU JUST TESTIFIED TO

6   THAT A FEW MOMENTS AGO.

7   A.   I CHARACTERIZED -- I TESTIFIED THAT THOSE WERE TWO

8   THINGS THAT CHARACTERIZED THE WEB. BUT WEB BROWSING IS

9   CHARACTERIZED BY THE ACTIVITY THAT THE USER ENGAGES IN:

10   LOOKING AT WEB BROWSER WINDOWS, TYPING IN A WEB ADDRESS

11   ANYWHERE ON THE WEB AND GOING THERE, OR CLICKING ON A LINK

12   AND BEING TAKEN TO THE PAGE THAT THE LINK POINTS TO. THOSE

13   ARE THINGS THAT I TESTIFIED CHARACTERIZE WEB BROWSING.

14   Q.   OKAY.

15   MR. HEINER: I WOULD LIKE TO PLACE BEFORE THE

16   WITNESS A COPY OF HIS DEPOSITION TAKEN IN THIS MATTER, IF I

17   MAY.

18   BY MR. HEINER:

19   Q.   DR. FELTEN, DO YOU RECALL GIVING A DEPOSITION IN THIS

20   CASE?

21   A.   YES.

22   Q.   I WOULD DIRECT YOUR ATTENTION, SIR, TO PAGE 146 OF THE

23   TRANSCRIPT OF THE DEPOSITION. AND I AM GOING TO READ TO YOU

24   LINES 11 TO 17.

25   A.   OKAY.

1 Q. "QUESTION: IS IT FAIR TO SAY, SIR, THAT THE ABILITY TO

2 PARSE AND RENDER HTML IS A CORE FUNCTION OF A WEB BROWSER?

3   "OBJECTION.

4   "ANSWER: IF BY `CORE FUNCTION,' YOU MEAN A

5 FUNCTION WHICH NECESSARILY MUST BE SUPPORTED IF WEB BROWSING

6 FUNCTIONS ARE TO BE PROVIDED, THEN, YES."

7   DO YOU RECALL BEING ASKED THAT QUESTION AND GIVING

8 THAT ANSWER?

9 A. YES.

10 Q. NOW, ANOTHER FUNCTION OF A WEB BROWSER IS TO SERVE AS A

11 PLATFORM; IS THAT RIGHT?

12 A. THAT'S ONE THING A WEB BROWSER DOES. PLENTY OF OTHER

13 SOFTWARE PRODUCTS SERVE AS PLATFORMS. FOR EXAMPLE,

14 MICROSOFT OFFICE SERVES AS A PLATFORM. APPLE'S QUICKTIME

15 SERVES AS A PLATFORM, AS DR. TEVANIAN TESTIFIED. AND LOTS

16 OF OTHER SOFTWARE ALSO SERVES AS A PLATFORM.

17 Q. AND BY THE TERM "PLATFORM," YOU MEAN SOFTWARE THAT

18 PROVIDES SERVICES TO PROGRAMMERS WHO WRITE OTHER SOFTWARE

19 PROGRAMS, RIGHT?

20 A. YES, THAT'S WHAT THE TERM "PLATFORM" MEANS.

21 Q. SO A WEB BROWSER CAN BE A PLATFORM AND AN OPERATING

22 SYSTEM CAN BE A PLATFORM; IS THAT RIGHT?

23 A. YES, AND AN OFFICE SUITE CAN BE A PLATFORM, AND A

24 MULTIMEDIA PLAYER CAN BE A PLATFORM, AND A FINANCIAL

25 MANAGEMENT PROGRAM CAN BE A PLATFORM. I CAN WRITE A

1   PLATFORM.

2   Q.   ONE EXAMPLE OF A WEB BROWSER THAT IS A PLATFORM IS

3   NETSCAPE NAVIGATOR, CORRECT?

4   A.   YES, THAT'S ONE OF THE THINGS THAT NAVIGATOR PROVIDES.

5   Q.   NOW, JUST SO WE ARE COMPLETELY CLEAR IN OUR USE OF

6   LANGUAGE HERE THIS MORNING, YOU AGREE, DO YOU NOT, THAT THE

7   TERM "WEB BROWSER," "INTERNET BROWSER" AND "INTERNET BROWSER

8   SOFTWARE" ARE GENERALLY INTERCHANGEABLE?

9   A.   I PREFER TO USE THE TERM "WEB BROWSER." OTHER PEOPLE

10   HAVE USED THOSE OTHER TERMS. AND MY UNDERSTANDING OF HOW

11   OTHER PEOPLE USE THOSE TERMS IS THAT THEY ARE GENERALLY

12   SIMILAR IN MEANING.

13   Q.   AND MICROSOFT'S WEB BROWSER IS INTERNET EXPLORER, RIGHT?

14   A.   THAT'S THE NAME THAT MICROSOFT USES TO SELL THEIR WEB

15   BROWSER, YES.

16   Q.   NOW, IN YOUR WORDS, THE PROTOTYPE REMOVAL PROGRAM THAT

17   YOU DEMONSTRATED ON THE VIDEOTAPE IS A MECHANISM FOR

18   REMOVING WEB BROWSING FROM WINDOWS 98, RIGHT?

19   A.   YES.

20   Q.   AND WHEN IT IS ACTIVATED, THE PROTOTYPE REMOVAL PROGRAM

21   MAKES A NUMBER OF CHANGES TO WINDOWS 98, RIGHT?

22   A.   YES.

23   Q.   THOSE CHANGES INCLUDE MODIFYING THE SOURCE CODE FOR

24   WINDOWS 98, CORRECT?

25   A.   NO, THAT'S NOT CORRECT.

```
 1   Q.   WELL, DIDN'T YOU IMPLEMENT A NEW FILE THAT YOU CALL

 2   URL.DLL?

 3   A.   WE DID IMPLEMENT A NEW FILE.  THAT'S NOT THE NAME,

 4   HOWEVER.

 5   Q.   OKAY.  WELL, YOU REWROTE SOME OF THE CODE IN WINDOWS 98;

 6   ISN'T THAT RIGHT?

 7   A.   WE ADDED SOME CODE, YES.

 8   Q.   AND YOU MODIFIED SOME CODE?

 9   A.   WE MODIFIED SOME CODE, BUT NOT BY MODIFYING THE SOURCE

10   CODE.  BY ATTACHING THE BINARY.

11   Q.   OKAY.  FROM TIME TO TIME AS WE CONTINUE WITH THE

12   QUESTIONING, I MAY REFER TO THE VERSION OF WINDOWS 98 THAT

13   RESULTS FROM RUNNING THE PROTOTYPE REMOVAL PROGRAM AS THE

14   D.O.J. VERSION OF WINDOWS 98.  IF I USE THAT TERMINOLOGY,

15   WILL YOU UNDERSTAND WHAT I MEAN?

16   A.   SURE, IF YOU USE IT.  IT'S NOT THE TERMINOLOGY I WOULD

17   CHOOSE.

18   Q.   NOW, FOR THE MOST PART, THE INTERNET EXPLORER 4 WEB

19   BROWSING SOFTWARE REMAINS IN WINDOWS 98 AFTER THE PROTOTYPE

20   REMOVAL PROGRAM IS RUN; ISN'T THAT RIGHT?

21   A.   NO.

22   Q.   WELL, LET'S TAKE A LOOK AT YOUR TESTIMONY, PARAGRAPH 54,

23   SIR, PAGE 18.  NOW, THIS PARAGRAPH IS A SUMMARY OF THE SET

24   OF CHANGES THAT THE PROTOTYPE REMOVAL PROGRAM MAKES TO

25   WINDOWS 98; ISN'T THAT RIGHT?
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1   A.   THAT'S RIGHT, AND IT SAYS THAT APPENDIX B CONTAINS THE

2   COMPLETE LIST.

3   Q.   AND YOU EXPLAIN, STARTING FROM THE TOP, FIRST, THE

4   PROTOTYPE REMOVAL PROGRAM REMOVES AN ICON, AND A PROGRAM

5   FILE, AND SOME OTHER FILES AND ICONS, RIGHT?

6   A.   YES.

7   Q.   SECOND, THE PROTOTYPE REMOVAL PROGRAM -- I'M

8   PARAPHRASING -- MAKES CHANGES TO THE WINDOWS REGISTRY TO

9   PREVENT WINDOWS 98 FROM ATTEMPTING TO USE THE IE 4 WEB

10 BROWSING SOFTWARE; ISN'T THAT RIGHT?

11 A.   THAT'S CORRECT. THAT'S WHAT IT SAYS.

12 Q.   OKAY. SO THE IE 4 WEB BROWSING SOFTWARE IS STILL ON THE

13 SYSTEM, BUT YOU HAVE MADE SOME CHANGES TO PREVENT ITS USE;

14 ISN'T THAT RIGHT?

15 A.   NO, THAT'S NOT WHAT I'M SAYING HERE. WHAT I'M SAYING

16 HERE IS THAT THERE IS NO POINT IN TRYING TO USE SOFTWARE

17 WHICH IS NOT THERE. AND SO IN ORDER TO GET AN APPROPRIATE

18 ERROR MESSAGE, IT DOESN'T MAKE SENSE TO LOOK FOR THE

19 SOFTWARE WHICH IS NOT PRESENT.

20   FOR EXAMPLE, I AM REFERRING HERE TO THE

21 IEXPLORE.EXE PROGRAM FILE, WHICH IS REMOVED BY THE PROTOTYPE

22 REMOVAL PROGRAM. TRYING TO EXECUTE THAT FILE WOULD GIVE THE

23 USER A CONFUSING ERROR MESSAGE. AND SO BY MODIFYING THE

24 REGISTRY, WE CAN CAUSE THE USER TO GET A MORE SENSIBLE ERROR

25 MESSAGE.

1 Q. NOW, DR. FELTEN, IF IT WAS A SIMPLE MATTER OF REMOVING

2 ONE PROGRAM FILE FROM WINDOWS 98 AND THAT WOULD TAKE AWAY

3 THE ABILITY TO ACCESS WEB BROWSING, YOU WOULD HAVE DONE

4 THAT, RIGHT?

5 A. CORRECT, BUT THAT -- I DON'T SEE THE CONNECTION BETWEEN

6 THAT AND ANYTHING I'VE SAID SO FAR.

7 Q. WELL, YOU HAD TO GO TO THE NEXT STEP, BECAUSE IT'S NOT

8 ENOUGH TO SIMPLY REMOVE THE IEXPLORE.EXE FILE. YOU NEEDED

9 AS WELL TO GO INTO THE REGISTRY AND ESSENTIALLY HARDCODE

10 THINGS SO THAT IF A WEB ADDRESS WAS TYPED INTO WINDOWS

11 EXPLORER, FOR EXAMPLE, IT WOULD RETURN AN ERROR MESSAGE?

12 A. THE REGISTRY IS NOT HARDCODING. THE REGISTRY CAN BE

13 CHANGED BY THE USER. IF THE USER WANTS TO USE IE 4, AFTER

14 THE PROTOTYPE REMOVAL PROGRAM HAS BEEN RUN, THE USER IS

15 PERFECTLY FREE TO DO THAT. THEY CAN INSTALL IE 4 BY

16 DOUBLE-CLICKING THE PROTOTYPE INSTALLATION PROGRAM. THE

17 USER CAN USE WHATEVER WEB BROWSING SOFTWARE THEY LIKE OR NO

18 WEB BROWSING SOFTWARE AT ALL.

19 Q. NOW, FOCUSING ON THE SENTENCE THAT BEGINS "SECOND" IN

20 PARAGRAPH 54, ARE YOU DENYING HERE THIS MORNING THAT THE

21 IE 4 WEB BROWSING SOFTWARE REMAINS IN WINDOWS 98 AFTER THE

22 PROTOTYPE REMOVAL PROGRAM IS RUN?

23 A. WHEN THE PROTOTYPE REMOVAL PROGRAM HAS BEEN RUN, THE

24 USER IS NO LONGER ABLE TO BROWSE THE WEB. THE WEB BROWSING

25 IS GONE. THE WEB BROWSING FUNCTION OR THE WEB BROWSING

1   APPLICATION, WHICH ARE DIFFERENT WAYS OF SAYING THE SAME

2   THING, ARE GONE.

3   Q. RIGHT. THE SOFTWARE IS DISABLED?

4   A. GONE.

5   Q. WELL, LET ME ASK YOU THIS, DR. FELTEN. ISN'T IT TRUE

6   THAT THE D.O.J. VERSION OF WINDOWS 98 IS MORE THAN 99.9

7   PERCENT AS LARGE AS THE MICROSOFT VERSION OF WINDOWS 98?

8   A. THAT MAY BE THE CASE. AS I SAY IN MY TESTIMONY, THOUGH,

9   THE GOAL OF THE PROTOTYPE REMOVAL PROGRAM IS TO DEMONSTRATE

10 THAT MICROSOFT COULD HAVE OFFERED A VERSION OF WINDOWS 98

11 THAT DID NOT CONTAIN IE WEB BROWSING.

12   AND THE CHANGES THAT THE PROTOTYPE REMOVAL PROGRAM

13 MAKES ARE THOSE THAT ARE SUFFICIENT TO DEMONSTRATE THAT

14 PROPOSITION.

15 Q. THAT PROPOSITION IS NOT A STARTLING PROPOSITION, IS IT,

16 DR. FELTEN?

17 A. IT WASN'T STARTLING TO ME.

18 Q. WELL, MICROSOFT HAS DEVELOPED MANY OPERATING SYSTEMS

19 WITHOUT WEB BROWSING SOFTWARE; ISN'T THAT RIGHT?

20 A. YES, IN THE PAST.

21 Q. THERE'S MS-DOS 1 AND 2 AND 3 AND THERE'S WINDOWS 3.1,

22 RIGHT?

23 A. THAT'S CORRECT. AND MICROSOFT HAS DEVELOPED WEB

24 BROWSING -- OPERATING SYSTEM PRODUCTS THAT THEY DELIVER

25 SEPARATELY FROM THEIR WEB BROWSING PRODUCTS SO THAT THE USER

1   HAS THE CHOICE OF WHICH WEB BROWSING PRODUCT TO USE ON THOSE

2   OPERATING SYSTEM PRODUCTS.

3   Q.   SO WHAT YOU'RE SAYING IS THAT WHEN A SOFTWARE DEVELOPER

4   SITS DOWN TO DESIGN A NEW PRODUCT, THE DEVELOPER HAS A LOT

5   OF FLEXIBILITY IN HOW HE DESIGNS THAT PRODUCT, RIGHT?

6   A.   THAT'S CORRECT. AND THE DEVELOPER, IF HE'S DOING HIS

7   JOB, IS TRYING TO PASS ON AS MANY OF THOSE CHOICES TO HIS

8   CUSTOMERS AS HE CAN.

9   Q.   THE SOFTWARE DEVELOPER CAN PUT MORE FUNCTIONALITY IN A

10   PRODUCT OR LESS FUNCTIONALITY?

11   A.   OR THE SOFTWARE DEVELOPER CAN GIVE THE CONSUMER THE

12   CHOICE OF EXACTLY WHICH FUNCTIONS THEY WANT OR WHICH VENDOR

13   THEY'D LIKE TO GET VARIOUS FUNCTIONS FROM. I THINK THAT'S

14   REALLY THE ISSUE THAT THE PROTOTYPE REMOVAL PROGRAM IS

15   ADDRESSING.

16   Q.   AND AFTER A SOFTWARE PRODUCT IS CREATED, WITH EITHER

17   MORE FUNCTIONS OR LESS FUNCTIONS, IT CAN BE CHANGED OVER

18   TIME, RIGHT?

19   A.   CERTAINLY SOFTWARE PRODUCTS CAN BE CHANGED, YES.

20   Q.   WITH ENOUGH ENGINEERING WORK, IT CAN BE DONE.

21   ONE POSSIBLE CHANGE IS THAT A DEVELOPER COULD TRY

22   TO REMOVE SOME FUNCTIONALITY FROM A PRODUCT, RIGHT?

23   A.   IF WE'RE TALKING IN A GENERAL CONTEXT, YES, A DEVELOPER

24   COULD TRY TO DO THAT.

25   Q.   YOU COULD HIDE OR REMOVE FUNCTIONALITY IN ALMOST ANY

1 PRODUCT WITH ENOUGH EFFORT; ISN'T THAT TRUE?

2 A. ABSOLUTELY. AND IF YOUR USERS WANTED IT, THAT WOULD BE

3 A GOOD THING FOR YOU TO DO.

4 Q. IN YOUR WRITTEN TESTIMONY, YOU DO NOT SAY THAT THE MERE

5 FACT THAT SOME FUNCTIONALITY CAN BE REMOVED FROM A PRODUCT

6 NECESSARILY MEANS THAT THAT FUNCTIONALITY IS A SEPARATE

7 PRODUCT, RIGHT?

8 A. THAT'S CORRECT. AND THE MERE FACT THAT SOME

9 FUNCTIONALITY IS DELIVERED ALONG WITH A PRODUCT DOES NOT

10 MAKE IT AN INTEGRAL PART OF THAT PRODUCT EITHER. THAT'S

11 JUST A QUESTION OF PACKAGING.

12 Q. BY THE WAY, NEW VERSIONS OF SOFTWARE PRODUCTS OFTEN HAVE

13 MORE FUNCTIONALITY THAN OLDER VERSIONS; ISN'T THAT RIGHT?

14 A. YES, AND THEY OFTEN GIVE USERS MORE CHOICES THAN

15 PREVIOUS VERSIONS. FOR EXAMPLE, WINDOWS 98 GIVES THE USER

16 MORE CHOICES THAN WINDOWS 95 DID, BUT THERE'S ONE AREA IN

17 WHICH IT GIVES THE USER LESS CHOICE, WHICH IS WEB BROWSING.

18 Q. AND JUST COMING BACK TO THE TOP OF THE TESTIMONY FOR A

19 MINUTE, THERE'S MORE THAN TWO DOZEN WAYS TO INITIATE WEB

20 BROWSING. AND YOUR TESTIMONY IS THAT IN ALL BUT FOUR OF

21 THOSE, WHEN NETSCAPE NAVIGATOR IS INSTALLED AS THE DEFAULT

22 BROWSER, NAVIGATOR WILL BE LAUNCHED; ISN'T THAT RIGHT?

23 A. THAT'S CORRECT, BUT IT'S FURTHER MY TESTIMONY THAT THERE

24 IS NO TECHNOLOGICAL REASON NOT TO RESPECT THE USER'S CHOICE

25 IN THOSE OTHER CASES.

1   AND IF YOU RECALL PROFESSOR FARBER'S TESTIMONY, HE

2   EXPLAINED AND ILLUSTRATED WHY IT'S UNHELPFUL TO USERS TO

3   TAKE AWAY THAT CHOICE AND TO MAKE IE POP UP WHEN THE USER

4   DOESN'T WANT IT.

5   Q. I'D WOULD LIKE TO ASK YOU A FEW QUESTIONS NOW ABOUT

6   REMOVING WEB BROWSING, AS YOU PUT IT, FROM WINDOWS 98.

7   THE COURT: BEFORE YOU DO THAT, LET'S TAKE A

8   TEN-MINUTE BREAK.

9   MR. HEINER: YES. THANK YOU.

10   (RECESS WAS TAKEN.)

11   (AFTER RECESS.)

12   Q. SOMETIMES, DR. FELTEN, YOU TALK ABOUT INTERNET EXPLORER

13   BEING ON THE SAME DISK AS WINDOWS, SUGGESTING THAT MICROSOFT

14   MADE SOME KIND OF A PACKAGING DECISION.

15   I WOULD LIKE TO ASK YOU, IS IT POSSIBLE TO REMOVE

16   WEB BROWSING, AS YOU PUT IT, FROM WINDOWS 98 MERELY BY

17   INSTALLING SOME OF THE FILES THAT ARE ASSOCIATED WITH

18   WINDOWS 98 AND NOT OTHERS?

19   A. IF YOU'RE TALKING -- IF YOU'RE RESTRICTING ME TO

20   POSSIBILITIES WHERE I INSTALL EACH FILE EITHER COMPLETELY OR

21   NOT AT ALL, THEN, NO. BUT WHAT THAT REALLY REFLECTS IS THE

22   WAY MICROSOFT HAS PACKAGED THEIR LINES OF CODE INTO FILES.

23   Q. SO YOU'RE SAYING THAT TO REMOVE THE WEB-BROWSING

24   FUNCTIONALITY FROM WINDOWS, ONE MUST GO BEYOND THE LEVEL OF

25   FILES AND GO DEEPER -- SORT OF INTO THE NEXT LEVEL OF

1   GRANULARITY, IF YOU WILL, INTO PROCEDURES, OR ROUTINES, OR

2   EVEN INDIVIDUAL LINES OF CODE, IS THAT RIGHT?

3   A.   THAT'S RIGHT.   AND LET ME EXPLAIN WHY.   MICROSOFT

4   DEVELOPED THIS CODE, AS EVERY SOFTWARE DEVELOPER DOES, IN

5   TERMS OF FUNCTIONS OR IN TERMS OF LINES OF CODE.   AND THEY

6   THEN, AS PROFESSOR FARBER DESCRIBED, TOOK THE VARIOUS

7   FUNCTIONS AND LINES OF CODE AND PACKAGED THEM TOGETHER INTO

8   THESE FILES.

9   AND PROFESSOR FARBER USED THE ANALOGY OF PUTTING

10   GROCERIES INTO A BAG.   AND IT'S THE SAME SORT OF PROCESS.

11   THERE ARE MANY WAYS IN WHICH THE GROCERIES COULD BE PUT INTO

12   BAGS, AND THE PACKING OF GROCERIES INTO BAGS DOESN'T

13   NECESSARILY REFLECT ANYTHING DEEP ABOUT THE STRUCTURE OR

14   RELATIONSHIP BETWEEN THE DIFFERENT GROCERIES.   IT'S JUST A

15   DECISION ABOUT PACKAGING.

16   Q.   WELL, LET ME ASK YOU THIS, DR. FELTEN.   ISN'T IT TRUE

17   THAT THE REASON THAT YOU CAN'T DELETE WEB BROWSING FROM

18   WINDOWS 98 MERELY BY NOT INSTALLING SOME FILES OR BY

19   DELETING SOME FILES IS BECAUSE THE RELEVANT FILES PERFORM

20   MULTIPLE FUNCTIONS?

21   A.   THE FILES CONTAIN SEPARATE FUNCTIONS WHICH HAPPEN TO BE

22   PACKAGED TOGETHER.

23   Q.   WELL, ISN'T IT TRUE THAT THE FILES ARE IMPORTANT TO THE

24   OPERATION OF WINDOWS 98 ITSELF FOR REASONS OTHER THAN WEB

25   BROWSING?

1   A. THE FILES CONTAIN CODE WHICH IS IMPORTANT FOR THOSE

2   REASONS, BUT THE FILE -- A FILE CONTAINS A BUNCH OF THINGS

3   AND TO SAY THAT THERE IS SOME CODE THAT IS IMPORTANT TO

4   FUNCTION "A" AND SOME CODE IMPORTANT TO FUNCTION "B," THAT

5   HAPPEN TO BE PACKAGED IN THE SAME FILE, SAYS NOTHING ABOUT

6   THE RELATION BETWEEN FUNCTION "A" AND FUNCTION "B."

7   Q. AND THE FILES THAT WE'RE TALKING ABOUT THAT ARE RELEVANT

8   TO WEB BROWSING ALSO PROVIDE FUNCTIONS THAT THIRD-PARTY

9   SOFTWARE DEVELOPERS RELY UPON, IS THAT RIGHT?

10 A. AGAIN, THERE IS SOME CODE IN THOSE FILES THAT

11 THIRD-PARTY DEVELOPERS RELY ON. AND, AS I SAID, THE FACT

12 THAT THOSE THINGS ARE TOGETHER IN THE SAME FILE SAYS NOTHING

13 ABOUT THEIR LOGICAL RELATIONSHIP.

14 Q. NOW, YOU SOMETIMES REFER TO SUCH FILES AS "SHARED CODE"

15 OR "SHARED PROGRAM LIBRARIES," RIGHT?

16 A. YES.

17 Q. AND ANOTHER TERM FOR THAT IS DYNAMICALLY LINKED

18 LIBRARIES OR DLL'S?

19 A. RIGHT. AND THOSE NAMES REFER TO THE MECHANISM THAT IS

20 USED TO LOAD THOSE FILES INTO MEMORY RATHER THAN ANYTHING

21 ELSE.

22 Q. NOW, THE USE OF SUCH SHARED PROGRAM LIBRARIES, TO ADOPT

23 YOUR TERMINOLOGY, TO SUPPORT WEB BROWSING WAS SOMETHING

24 FIRST INTRODUCED WITH INTERNET EXPLORER 3, RIGHT?

25 A. I AM NOT AWARE OF ANY EARLIER USE OF IT.

1   Q.   OKAY.   SO IN VERSIONS 1 AND 2 OF INTERNET EXPLORER,

2   THERE WAS A SINGLE FILE -- A SINGLE PROGRAM FILE THAT

3   PERFORMED MOST OF THE CORE WEB BROWSING FUNCTIONS, SUCH AS

4   HTML DISPLAY, RIGHT?

5   A.   IT'S MY UNDERSTANDING THAT MICROSOFT SHIPPED THEIR

6   INTERNET BROWSING SOFTWARE IN IE 1 AND IN IE 2 PACKAGED INTO

7   A SINGLE FILE, YES.

8   Q.   AND YOU HAVE ALREADY TESTIFIED THAT YOU CAN REMOVE THE

9   WEB BROWSER FROM WINDOWS SIMPLY BY REMOVING THAT FILE,

10 RIGHT?

11 A.   IN THOSE CASES, RIGHT, THAT REFLECTS THE WAY MICROSOFT

12 PACKAGED THAT SOFTWARE AND WHAT THAT SOFTWARE DOES.

13 Q.   THEN MICROSOFT SUBSTANTIALLY REDESIGNED INTERNET

14 EXPLORER FOR THE INTERNET EXPLORER 3 RELEASE SO THAT IT WAS

15 NOW COMPONENTIZED, CORRECT?

16 A.   THAT'S CORRECT.   AND WHAT THAT MEANS IS A CHANGE IN THE

17 DESIGN AND ALSO A CHANGE IN THE PACKAGING.

18 Q.   I WAS JUST GOING TO ASK YOU WHAT THAT MEANS.   WHAT THAT

19 MEANS IS THEY BROKE UP INTERNET EXPLORER 3 INTO PIECES AND

20 THE FUNCTIONALITY PROVIDED BY THOSE PIECES WAS THEN MADE

21 AVAILABLE TO OTHER PARTS OF WINDOWS AND TO THIRD-PARTY

22 SOFTWARE DEVELOPERS IN THE FORM OF SHARED PROGRAM LIBRARIES,

23 RIGHT?

24 A.   THAT'S CLOSE, BUT I THINK IT'S MORE ACCURATE TO SAY THAT

25 THOSE SHARED PROGRAM LIBRARIES, OR DLL'S, EACH IS A PACKAGE

1 CONTAINING A BUNCH OF SEPARATE FUNCTIONS. SOME OF THE

2 FUNCTIONS INSIDE THOSE DLL'S ARE AVAILABLE FOR INDEPENDENT

3 SOFTWARE VENDORS TO USE AND SOME HAVE OTHER FUNCTIONS.

4 Q. NOW, YOU KEEP TALKING ABOUT SEPARATE FUNCTIONS IN THESE

5 DLL'S. LET'S FOCUS IN ON THAT FOR A MINUTE AND TAKE AN

6 EXAMPLE. WINDOWS 98 INCLUDES SOFTWARE THAT ALLOWS

7 INFORMATION FORMATED IN HTML TO BE DISPLAYED, RIGHT?

8 A. CODE THAT DOES THAT IS SHIPPED IN THE BOX WITH

9 WINDOWS 98, YES.

10 Q. IT'S PART OF WINDOWS 98, ISN'T IT?

11 A. IF YOU MEAN WINDOWS 98 AS DEFINED BY MICROSOFT

12 MARKETING, YES.

13 Q. MICROSOFT IS THE COMPANY THAT DEFINES WINDOWS 98, RIGHT?

14 A. CERTAINLY MICROSOFT IS FREE TO USE THAT TERM IN THEIR

15 MARKETING HOWEVER THEY LIKE.

16 Q. NOW, THE FUNCTION OF DISPLAYING HTML IS AN IMPORTANT

17 FUNCTION THAT MUST BE SUPPORTED FOR WEB BROWSING, CORRECT?

18 A. THAT'S CORRECT, BUT IT'S NOT NECESSARY THAT THE

19 MICROSOFT IMPLEMENTATION OF THAT FUNCTION BE PRESENT IN

20 ORDER FOR WEB BROWSING TO OCCUR.

21 Q. AND OTHER PARTS OF WINDOWS 98 USE HTML DISPLAY AS WELL,

22 ISN'T THAT RIGHT?

23 A. OTHER CODE THAT SHIPS WITH WINDOWS 98 DOES USE HTML

24 DISPLAY, YES.

25 Q. SO, FOR EXAMPLE, THE USER INTERFACE IN WINDOWS 98 RELIES

1   UPON THE HTML DISPLAY SOFTWARE IN WINDOWS 98, ISN'T THAT

2   RIGHT?

3   A.   YES, THERE IS SOME RELIANCE THERE.

4   Q.   AND THE HELP SYSTEM -- THE NEW AND IMPROVED HELP SYSTEM

5   IN WINDOWS 98 USES THE HTML SOFTWARE?

6   A.   YES, IT DOES. AND IF YOU RECALL, MR. WEADOCK TESTIFIED

7   ABOUT SOME OF THE DRAWBACKS OF DOING THINGS THAT WAY, AND,

8   IN PARTICULAR, THE VERY LARGE AMOUNT OF MEMORY THAT IS

9   REQUIRED TO DO THINGS THAT WAY.

10 Q.   NOW, MICROSOFT DESIGNED WINDOWS 98 SO THAT THIRD-PARTY

11 SOFTWARE DEVELOPERS CAN ALSO MAKE USE OF THAT HTML SOFTWARE,

12 ISN'T THAT RIGHT?

13 A.   THAT'S CORRECT. THIRD-PARTY DEVELOPERS CAN USE WHATEVER

14 HTML SOFTWARE THEY LIKE.

15 Q.   SO WE'RE NOT TALKING ABOUT SEPARATE FUNCTIONS. WE'RE

16 TALKING ABOUT ONE SET OF FUNCTIONS THAT PROVIDES A VERY

17 BASIC SERVICE, WHICH IS ALLOWING WINDOWS ITSELF, OR THE

18 WEB-BROWSING FUNCTIONALITY IN WINDOWS, OR THIRD-PARTY

19 SOFTWARE DEVELOPERS, LIKE AOL, OR QUICKEN, OR LOTUS NOTES,

20 OR ANY OF THE HUNDREDS OF OTHERS TO DISPLAY DOCUMENTS IN

21 HTML, RIGHT?

22 A.   IF WE'RE TALKING ABOUT THE HTML RENDERING ENGINE THAT

23 MICROSOFT SHIPS WITH WINDOWS 98, THEN, YES. BUT IF WE'RE

24 TALKING ABOUT THE IE WEB BROWSING PRODUCT, THEN WE'RE

25 TALKING ABOUT SOMETHING ENTIRELY DIFFERENT.

1   Q. WELL, THE IE WEB BROWSING PRODUCT, AS YOU PUT IT, USES

2   THE HTML RENDERING ENGINE THAT WE HAVE BEEN TALKING ABOUT,

3   RIGHT?

4   A. CORRECT, ALONG WITH A LOT OF OTHER SOFTWARE. ISV

5   SOFTWARE USES THAT HTML LIBRARY, BUT THAT DOES NOT MEAN THAT

6   THE HTML LIBRARY IS PART OF THAT ISV SOFTWARE.

7   Q. OKAY. SO THE HTML LIBRARY IS SHARED AMONG MULTIPLE

8   USERS, RIGHT?

9   A. THAT'S CORRECT, YES. THERE IS AN HTML RENDERING --

10 THERE IS AN HTML RENDERING MODEL, WHICH IS SHARED IN THAT

11 WAY, YES.

12 Q. THAT'S THE DESIGN THAT MICROSOFT IMPLEMENTED, CORRECT?

13 A. YES.

14 Q. AND, IN GENERAL, AS A MATTER OF SOFTWARE DESIGN, SUCH

15 CODE SHARING CAN BE EFFICIENT, ISN'T THAT TRUE?

16 A. YES, IT CAN BE EFFICIENT. PROVIDING CODE THAT PEOPLE

17 ACTUALLY USE IS EFFICIENT, BUT PROVIDING CODE THAT IS NOT

18 BEING USED, OR PACKAGING CODE THAT IS NOT BEING USED, OR

19 CODE THAT THE USER DOES NOT WANT ALONG WITH CODE THE USER

20 DOES WANT, AS MICROSOFT HAS DONE IN THIS CASE, IS NOT

21 EFFICIENT AND MAKES THINGS WORSE FOR THE USERS.

22 Q. LET ME ASK YOU THIS QUESTION, DR. FELTEN. IF IT TURNS

23 OUT THAT THERE'S A HUNDRED APPLICATIONS IN THE WORLD ALREADY

24 THAT USE THE HTML RENDERING ENGINE IN WINDOWS, DON'T YOU

25 THINK THAT SOFTWARE OUGHT TO REMAIN IN WINDOWS?

1   AND DR. FARBER, WHOSE TESTIMONY YOU INVOKE

2   FREQUENTLY, SAID OVER AND OVER AND OVER AGAIN, "I'M NOT

3   TALKING ABOUT REMOVING ANYTHING FROM WINDOWS AND DON'T

4   REMOVE ANY API'S. THAT IS A BAD IDEA."

5   MR. MALONE: OBJECTION, YOUR HONOR. A COMPOUND

6   QUESTION.

7   THE COURT: SUSTAINED. BREAK YOUR QUESTION UP.

8   THERE IS NO QUESTION PENDING.

9   BY MR. HEINER:

10 Q. DR. FELTEN, SHARING CODE CAN LEAD TO BETTER PERFORMANCE,

11 ISN'T THAT RIGHT?

12 A. IN SOME CASES, YES.

13 Q. AND THE AVAILABILITY OF CODE THAT CAN BE SHARED, SUCH AS

14 THE HTML SOFTWARE IN WINDOWS, IS OFTEN PART OF WHAT IS MEANT

15 BY SAYING THAT A PARTICULAR SOFTWARE PROGRAM IS A PLATFORM,

16 RIGHT?

17 A. WHEN I USE THE WORD "PLATFORM," AT LEAST ALL I MEAN IS

18 THAT THIS IS SOFTWARE THAT OFFERS API'S -- SOFTWARE THAT

19 OFFERS SERVICES TO OTHER SOFTWARE. AND WHETHER SOMETHING IS

20 A PLATFORM OR NOT SAYS NOTHING ABOUT WHETHER IT'S PART OF

21 THE OPERATING SYSTEM, WHETHER IT HAS TO BE SHIPPED WITH THE

22 OPERATING SYSTEM, OR ANYTHING LIKE THAT. I DESCRIBED BEFORE

23 ALL THE THIRD-PARTY PRODUCTS WOULD SERVE AS PLATFORMS ON

24 WINDOWS.

25 Q. NOW, WHEN A SOFTWARE DEVELOPER USES A PLATFORM SERVICE,

1 THAT CAN ENABLE THE SOFTWARE DEVELOPER TO SAVE WORK, IS THAT

2 RIGHT?

3 A. CORRECT, REGARDLESS OF WHO OFFERS THAT PLATFORM SERVICE

4 AND REGARDLESS OF WHETHER ITS PACKAGED WITH THE OPERATING

5 SYSTEM.

6 Q. BECAUSE THEY CAN SIMPLY REUSE A CODE THAT SOMEBODY ELSE

7 ALREADY WROTE?

8 A. YES, AGAIN REGARDLESS OF WHO WROTE THAT PLATFORM

9 SOFTWARE AND REGARDLESS OF WHETHER IT'S PACKAGED WITH THE

10 OPERATING SYSTEM.

11 Q. AND IF SOFTWARE DEVELOPERS CAN AVOID REINVENTING THE

12 WHEEL REPEATEDLY, THEY MIGHT BE ABLE TO DEVELOP PRODUCTS

13 MORE RAPIDLY AND MAYBE EVEN MORE CHEAPLY, ISN'T THAT RIGHT?

14 A. THAT'S CORRECT.

15 Q. AND USING A COMMON SET OF PLATFORM SERVICES ALSO

16 PROMOTES COMPATIBILITY AMONG PRODUCTS, ISN'T THAT RIGHT?

17 A. I DON'T THINK THAT CONNECTION IS SO STRONG.

18 Q. WELL, LET'S LOOK AT YOUR DEPOSITION TESTIMONY ON THAT

19 POINT, WHICH IS AT PAGE 35. AND I WILL READ TO YOU ON PAGE

20 35, BEGINNING AT LINE 20 AND GOING TO PAGE 36, LINE 4.

21   "QUESTION: CAN THERE BE ANY BENEFITS FROM WRITING

22 TO A PARTICULAR PLATFORM RELATING TO COMPATIBILITY?

23   "ANSWER: COMPATIBILITY WITH WHAT?

24   "QUESTION: COMPATIBILITY AMONG SOFTWARE PROGRAMS.

25   "OBJECTION.

1   "ANSWER: I THINK THERE CAN BE.

2   "QUESTION: AND WHAT CAN THOSE BENEFITS BE?

3   "ANSWER: A PLATFORM CAN SERVE AS A KIND OF

4   STANDARD THAT -- AND STANDARDS OFTEN HAVE THE EFFECT OF

5   INCREASING COMPATIBILITY ALONG WITH ALL OF THEIR OTHER

6   EFFECTS."

7   DO YOU RECALL BEING ASKED THOSE QUESTIONS AND

8   GIVING THOSE ANSWERS?

9   A.   YES.

10   Q.   NOW, COMPONENTIZING SOFTWARE, LIKE MICROSOFT DID WITH

11   INTERNET EXPLORER 3, AND THEN CONTINUING WITH IE 4, OF

12   COURSE, CAN BE USEFUL, BECAUSE IT CAN INCREASE THE SHARING

13   OF CODE, RIGHT?

14   A.   YES, REGARDLESS OF WHETHER THE COMPONENTIZED SOFTWARE IS

15   SHIPPED WITH THE OPERATING SYSTEM OR NOT.

16   Q.   NOW, IN THIS CASE, YOU HAVE ALREADY TESTIFIED TO ME THAT

17   SOME OF THE SHARED CODE -- FOR EXAMPLE THE HTML CODE -- IS

18   ACTUALLY USED BY THE OPERATING SYSTEM ITSELF FOR THE USER

19   INTERFACE, RIGHT?

20   A.   NO, I DID NOT SAY THAT. WHAT I SAID WAS THAT IT WAS USED

21   BY OTHER CODE SHIPPED WITH WINDOWS 98. THERE IS A BIG

22   DIFFERENCE.

23   Q.   I THINK YOU DID TESTIFY, BUT LET ME JUST RE-ASK THE

24   QUESTION. ISN'T IT TRUE THAT THE HTML RENDERING ENGINE IN

25   WINDOWS 98 IS USED IN SUPPORT OF THE WEB BROWSING FUNCTION,

1   AS YOU PUT IT, IS USED IN SUPPORT OF THE USER INTERFACE

2   ITSELF FOR WINDOWS 98, AND IS USED BY THIRD-PARTY SOFTWARE

3   PROGRAMS?

4   A.   YES. I THINK THAT STATEMENT IS CORRECT. BUT THAT DOES

5   NOT MEAN THAT IT'S USED BY THE OPERATING SYSTEM THAT

6   MICROSOFT SHIPS INSIDE OF WINDOWS 98.

7   Q.   OKAY. NOW, YOU'RE JUST GOING DOWN A PATH OF TELLING ME

8   THAT WINDOWS 98 IS MUCH MORE THAN AN OPERATING SYSTEM,

9   RIGHT?

10   A.   IT'S A PACKAGE OF THINGS THAT INCLUDES AN OPERATING

11   SYSTEM, ALONG WITH A LOT OF OTHER STUFF, INCLUDING A

12   SOLITAIRE PROGRAM AND WHO KNOWS WHAT ALL.

13   Q.   WE SPENT A LOT OF TIME IN YOUR DEPOSITION TALKING ABOUT

14   THE DEFINITION OF AN OPERATING SYSTEM. PROFESSOR FARBER

15   SPENT A FAIR BIT OF TIME WITH MY COLLEAGUE, MR. HOLLEY,

16   DISCUSSING THE SAME SUBJECT. I THINK WE CAN AVOID THAT

17   DISCUSSION TODAY FOR THE BENEFIT OF ALL CONCERNED AND JUST

18   TALK ABOUT WINDOWS 98, THE PRODUCT, AND NOT GET INTO YOUR

19   DEFINITION OF OPERATING SYSTEM OR APPLICATION.

20   A.   OKAY. IF YOU WON'T USE THE TERM "OPERATING SYSTEM" TO

21   REFER TO WINDOWS 98, THEN I WON'T OBJECT.

22   Q.   I WILL TRY NOT TO. AND IF I DO, YOU WILL KNOW I MEAN

23   WINDOWS 98 AS DEFINED BY MICROSOFT.

24   MR. HEINER: I WOULD NOW LIKE TO PLACE BEFORE THE

25   WITNESS A DOCUMENT THAT HAS BEEN MARKED AS DEFENDANT'S

1   EXHIBIT 2088.

2   DEFENDANT'S EXHIBIT 2088 IS A BLOCK DIAGRAM

3   SHOWING CERTAIN FILES IN WINDOWS 98 THAT RELATES TO WEB

4   BROWSING. IT DOES NOT SHOW ALL OF THE FILES IN WINDOWS 98

5   THAT RELATE TO WEB BROWSING.

6   I WOULD LIKE TO OFFER EXHIBIT 2088 AS AN

7   ILLUSTRATIVE EXHIBIT.

8   MR. MALONE: WE HAVE NO OBJECTION FOR THAT LIMITED

9   PURPOSE, YOUR HONOR.

10   THE COURT: DEFENDANT'S 2088 IS ADMITTED.

11   (WHEREUPON, DEFENDANT'S

12   EXHIBIT NUMBER 2088 WAS

13   RECEIVED IN EVIDENCE.)

14   THE WITNESS: I'D WOULD LIKE TO POINT OUT HERE

15   THOUGH THAT EXPLORER.EXE HAS NO CONNECTION TO WEB BROWSING,

16   AS FAR AS I CAN TELL, OTHER THAN THAT IT CAN BE USED TO

17   LAUNCH A WEB BROWSER.

18   BY MR. HEINER:

19   Q. WE'RE GOING TO GO THROUGH THIS SORT OF STEP-BY-STEP --

20   A. OKAY.

21   Q. -- AND TRY TO DRILL INTO THAT.

22   NOW, DR. FELTEN, ISN'T IT TRUE THAT WHEN A

23   CUSTOMER DOWNLOADS INTERNET EXPLORER 4 FROM THE WEB,

24   TYPICALLY ALL OF THE FILES IN EXHIBIT 2088 ARE DOWNLOADED TO

25   THE CUSTOMER?

1   A. THAT'S CORRECT. THEY MAY OR MAY NOT BE INSTALLED,

2   DEPENDING ON WHAT THE CUSTOMER HAS PREVIOUSLY ON THEIR

3   SYSTEM.

4   Q. NOW, THE PROTOTYPE REMOVAL PROGRAM THAT YOU DEVELOPED

5   LEAVES ALL BUT ONE OF THE FILES ON DEFENDANT'S EXHIBIT 2088

6   IN WINDOWS 98, ISN'T THAT RIGHT?

7   A. THAT'S CORRECT, ALTHOUGH IT DOES MODIFY URLMON.DLL.

8   Q. WELL, LET'S TAKE A LOOK AT EACH ONE OF THESE FILES JUST

9   BRIEFLY, STARTING FROM THE BOTTOM AND WORKING OUR WAY UP TO

10 THE TOP.

11   THE BOTTOM FILE WININET, WINDOWS INTERNET.DLL.

12 THAT IS A FILE THAT SUPPORTS INTERNET PROTOCOLS, RIGHT?

13 A. YES. THAT IS A GOOD GENERAL DESCRIPTION OF WHAT IT

14 DOES. THAT IS, IT CONTAINS CODE THAT SUPPORTS A VARIETY OF

15 INTERNET PROTOCOLS.

16 Q. IN PARTICULAR, THIS FILE SUPPORTS THE HTTP PROTOCOL,

17 AMONG OTHERS?

18 A. ONE OF THE THINGS IT DOES -- ONE OF THE THINGS IT

19 CONTAINS IS CODE THAT DOES THAT.

20 Q. SO WHEN A USER TYPES A WEB ADDRESS INTO AN ADDRESS BAR

21 IN INTERNET EXPLORER, HTTP:\\ AND AN ADDRESS, THIS FILE,

22 WININET, IS INVOKED? ISN'T THAT RIGHT?

23 A. THAT IS ONE OF MANY CASES IN WHICH CODE IN THIS FILE IS

24 USED. IN FACT, WHEN A USER TYPES IN THAT TEXT, THERE IS

25 LOTS OF CODE THAT HAS NOTHING TO DO WITH WEB BROWSING THAT'S

1   INVOKED.

2   FOR EXAMPLE, WHEN THE USER TYPES THE CHARACTER

3   "H," THERE IS SOME CODE WHICH DETECTS THE FACT THAT "H" HAS

4   BEEN TYPED AND REPORTS THAT TO OTHER SOFTWARE. THAT CODE IS

5   IN THE OPERATING SYSTEM AND IT'S ACTIVATED IN THAT CASE, BUT

6   THAT SAYS NOTHING ABOUT WHETHER THAT CODE IS PART OF THE WEB

7   BROWSER OR WHETHER THAT CODE HAS A PRIMARY PURPOSE OF

8   SUPPORTING WEB BROWSING.

9   Q. SOME FILES ARE MORE CLOSELY ASSOCIATED WITH WEB BROWSING

10 THAN OTHERS, ISN'T THAT FAIR TO SAY?

11 A. WELL, IT WOULD DEPEND ON WHAT FUNCTIONS ARE CONTAINED IN

12 THOSE FILES.

13 Q. WHAT YOU'RE TELLING THE COURT IS THAT THERE IS A LONG

14 CODE PATH TO PERFORM ALMOST ANY FUNCTION IN A MODERN P.C.

15 ARCHITECTURE, AND THE WHOLE CODE PATH HAS TO BE EXECUTED FOR

16 THE FUNCTION TO WORK, CORRECT?

17 A. THAT'S CORRECT. SO IT WOULD BE A MISTAKE TO SAY THAT

18 BECAUSE SOMETHING IS ON THAT CODE PATH, IT'S NECESSARILY

19 PART OF THE APPLICATION THAT THE USER IS USING.

20 Q. YOU COULD LOOK AT IT AS STARTING IN THE PERSON'S BRAIN

21 WITH SOME BRAIN ACTIVITY AND IT SENDS A NEUROLOGICAL IMPULSE

22 DOWN THROUGH THEIR HAND, AND THEY TYPE SOMETHING, AND THEN

23 THERE IS SOME USER INTERFACE SOFTWARE, AND THEN IT GOES

24 THROUGH MAYBE SOME WEB BROWSING SOFTWARE, AND THEN IT ENDS

25 UP GOING THROUGH SOME DRIVERS, AND IT GOES DOWN TO A

1   HARDWARE ABSTRACTION LAYER AND THEN THE CHIP EXECUTES SOME

2   CODE? THAT'S WHAT YOU'RE TELLING THE JUDGE, RIGHT?

3   A.   WELL, THAT IS WHAT HAPPENS. I WOULD LIKE TO STICK WITH

4   THE PART THAT HAPPENS INSIDE THE COMPUTER. AND THE POINT I

5   AM TRYING TO --

6   Q.   AND I WOULD LIKE TO DRILL DOWN INTO THE PART THAT

7   RELATES CLOSELY TO WEB BROWSING?

8   A.   THE POINT I AM TRYING TO MAKE HERE IS THAT IT'S A

9   MISTAKE TO SAY THAT BECAUSE CODE IS INVOKED IN SOME CASE,

10 THAT CODE IS SPECIFICS TO WHAT'S HAPPENING IN THAT CASE.

11 THE CODE THAT DETECTS KEY PRESSES, FOR EXAMPLE, IS USED BY

12 ALMOST EVERY APPLICATION. AND SO IF ONE WANTED TO CONCLUDE

13 THAT THAT CODE WAS PART OF THE WEB BROWSER, I SUPPOSE YOU

14 COULD, BUT YOU WOULD ALSO HAVE TO CONCLUDE THAT IT'S PART OF

15 THE PERSONAL FINANCE PACKAGE, IT'S PART OF THE MULTIMEDIA

16 PLAYER, IT'S PART OF THE WORD PROCESSOR AND EVERYTHING ELSE.

17 YOU HAVE TO LOOK A LITTLE BIT MORE CAREFULLY THAN DOES THIS

18 CODE GET USED IN EXECUTING THIS FUNCTION OR NOT.

19 Q.   LET'S GO ON TO THE NEXT FILE THEN, WORKING OUR WAY UP

20 FROM THE BOTTOM. AND THAT URLMON.DLL, WHICH STANDS FOR

21 URL MONIKER.DLL. NOW, THAT IS A FILE THAT PROVIDES

22 FUNCTIONS RELATING TO PROCESSING WEB ADDRESSES -- SO-CALLED

23 URL'S, RIGHT?

24 A.   THAT'S A FILE THAT CONTAINS CODE THAT PROCESSES URL'S,

25 AMONG OTHER THINGS.

1   Q.   ALL THESE FILES CONTAIN CODE, RIGHT?

2   A.   CORRECT.

3   Q.   CODE IS USED THE PERFORM FUNCTIONS?

4   A.   THAT'S RIGHT, BUT THE POINT I AM TRYING TO MAKE IS THAT

5   IF YOU TALK ABOUT THE FILE AS A SINGLE UNIT THAT DOES ONE

6   THING, THEN YOU'RE REALLY GREATLY OVERSIMPLIFYING. THE FILE

7   IS A PACKAGE OF DIFFERENT CODE FUNCTIONS, AND YOU HAVE TO

8   LOOK AT THE INDIVIDUAL FUNCTIONS RATHER THAN FOCUSING ON THE

9   FILES IF YOU REALLY WANT TO UNDERSTAND WHAT'S HAPPENING.

10 Q.   MSHTML.DLL STANDS FOR MICROSOFT HTML. AND THAT IS THE

11 SOFTWARE WE HAVE BEEN DISCUSSING A LITTLE BIT THIS MORNING

12 THAT PROVIDES THE DISPLAY OF HTML PAGES, ISN'T THAT RIGHT?

13 A.   THAT FILE CONTAINS THE SOFTWARE THAT RENDERS AND PARSES

14 HTML, AMONG OTHER THINGS.

15 Q.   AND THE NEXT FILE UP, CALLED SHDOCVW.DLL, IS A FILE THAT

16 PROVIDES FUNCTIONS RELATED TO THE DISPLAY OF FILES AND

17 DOCUMENTS, RIGHT?

18 A.   AMONG OTHER THINGS. THIS FILE ACTUALLY IS A GREAT

19 EXAMPLE OF THE POINT I'M TRYING TO MAKE ABOUT PACKAGING OF

20 FUNCTIONS INTO FILES. THIS SHDOCVW FILE IS REALLY A BUNDLE

21 OF SEPARATE FUNCTIONS. IT CONTAINS SOME FUNCTIONS HAVING TO

22 DO WITH DISPLAYING THE START MENU. IT CONTAINS SOME

23 FUNCTIONS THAT HAVE TO DO SPECIFICALLY WITH WEB BROWSING.

24 AND IT CONTAINS SOME GENERAL USER INTERFACE FUNCTIONS AS

25 WELL.

1   AND TO TALK ABOUT THIS FILE AS DOING ONE THING OR

2   BEING PART OF ONE PRODUCT IS REALLY INCORRECT.

3   Q.   IT'S A HIGHLY FUNCTIONAL FILE?

4   A.   IT CONTAINS MANY FUNCTIONS WITHIN IT, YES.

5   Q.   NOW, IT'S TRUE, ISN'T IT, THAT THE FOUR FILES WE JUST

6   DISCUSSED, WININET, URLMON, MSHTML, AND SHDOCVW.DLL, WORKING

7   TOGETHER AND WITH SOME OTHER FILES, PERFORM THE CORE

8   FUNCTIONS OF A WEB BROWSER?

9   A.   YOU CAN USE CODE IN THOSE FILES IN YOUR WEB BROWSER IF

10   YOU LIKE.

11   Q.   IN FACT, THOSE FOUR FILES --

12   A.   I'M SORRY. AND MICROSOFT IS NOT THE ONLY COMPANY THAT

13   HAS DONE THAT. OTHER VENDORS HAVE PRODUCED WEB BROWSERS

14   THAT MAKE USE OF SOME CODE IN THOSE FILES. AND OTHER

15   COMPANIES HAVE PRODUCED OTHER APPLICATIONS THAT MAKE USE OF

16   SOME CODE IN THOSE FILES.

17   Q.   THAT'S RIGHT. SO WHAT YOU'RE SAYING IS MICROSOFT TOOK

18   ITS ORIGINAL BROWSER, INTERNET EXPLORER 1.02, BROKE IT UP

19   INTO PIECES, AND THEN EXPOSED THE FUNCTIONALITY OF THOSE

20   PIECES THROUGH API'S SO THAT ANY SOFTWARE DEVELOPER CAN MAKE

21   USE OF THAT, RIGHT?

22   A.   THAT'S NOT QUITE RIGHT. THERE'S PLENTY OF STUFF IN

23   THERE WHICH HAS NO RELATION AT ALL TO WEB BROWSING. FOR

24   EXAMPLE, THE CODE THAT IS INVOLVED IN DRAWING THE START

25   MENU. THAT'S NOT WEB A BROWSING FUNCTION. AND YET IT'S IN

1   THIS FILE, SHDOCVW.DLL.

2   SO AS I SAID, THESE FILES ARE PACKAGES OF STUFF.

3   AND SOME OF THE STUFF IS WEB BROWSING STUFF AND SOME IS NOT.

4   Q. WHERE IN YOUR TESTIMONY DO YOU IDENTIFY FOR THE COURT

5   WHAT IT IS THAT'S IN THESE FILES THAT YOU SAY DOESN'T RELATE

6   TO WEB BROWSING?

7   A. THERE'S A DISCUSSION -- IF YOU GIVE ME A MINUTE, I CAN

8   FIND IT.

9   Q. SURE.

10 A. OKAY. IT'S IN PARAGRAPH 31. IT'S -- IF YOU BEGIN WITH

11 THE SECOND SENTENCE. THE SECOND SENTENCE IN PARAGRAPH 31

12 AND GOING ON FROM THERE, IT SAYS, "IN SOME CASES IN

13 WINDOWS 95 AND IE 4, FUNCTIONS USED IN WEB BROWSING AND

14 FUNCTIONS UNRELATED TO WEB BROWSING ARE IMPLEMENTED IN THE

15 SAME PROGRAM FILE. THAT THESE FUNCTIONS ARE IMPLEMENTED IN

16 THE SAME FILE DOES NOT MEAN THE FUNCTIONS ARE INEVITABLY

17 INTERTWINED. THE SHDOCVW.DLL FILE IN OSR 2.5, FOR EXAMPLE,

18 CONTAINS A VARIETY OF FUNCTIONS, ONLY SOME OF WHICH ARE

19 RELATED TO WEB BROWSING." AND THEN IT GOES ON TO SAY

20 SPECIFICALLY WHICH FUNCTIONS I'M TALKING ABOUT.

21 Q. SO YOU HAVE GIVEN THE EXAMPLE OF THE START MENU FOR

22 EXAMPLE, RIGHT?

23 A. CORRECT. THAT'S ONE EXAMPLE.

24 Q. ISN'T IT THE CASE, DR. FELTEN, THAT THE VERY SAME

25 SOFTWARE IN THIS FILE, SHDOCVW, THAT PROVIDES SOME NEW

63

1 CAPABILITIES TO THE START MENU IS ALSO USED TO MAKE THE

2 TOOLBAR IN INTERNET EXPLORER WORK BETTER?

3 A. NOT THE VERY SAME SOFTWARE.

4 Q. NOW, THESE FOUR FILES TAKEN TOGETHER ARE SO CENTRAL TO

5 WEB BROWSING THAT MICROSOFT'S DOCUMENTATION FOR SOFTWARE

6 DEVELOPERS REFERS TO THEM AS THE WEB BROWSER CONTROL; ISN'T

7 THAT RIGHT?

8 A. MICROSOFT USES THAT TERM "WEB BROWSER CONTROL," AND I

9 SUPPOSE THEY CAN USE IT HOWEVER THEY LIKE.

10 Q. NOW, THE PROTOTYPE REMOVAL PROGRAM THAT YOU DEVELOPED

11 DOES NOT REMOVE ANY OF THOSE FOUR FILES FROM WINDOWS 98,

12 CORRECT?

13 A. CORRECT, ALTHOUGH IT MODIFIES URLMON.DLL. BUT I WILL

14 REMIND YOU THAT THE PROTOTYPE REMOVAL PROGRAM IS DESIGNED TO

15 DEMONSTRATE THAT MICROSOFT CAN ISSUE -- MICROSOFT CAN MAKE A

16 VERSION OF WINDOWS 98 THAT DOESN'T CONTAIN WEB BROWSING.

17 AND THE GOAL OF THE PROTOTYPE REMOVAL PROGRAM WAS NOT TO SEE

18 WHETHER WE COULD REMOVE CODE FROM THESE FILES.

19 Q. IN FACT, WINDOWS 98 IS SO DEPENDENT ON THOSE FOUR FILES

20 THAT IT WOULDN'T EVEN BOOT UP IF YOU REMOVED THEM; ISN'T

21 THAT RIGHT?

22 A. FIRST OF ALL, THAT'S NOT CORRECT. IF YOU REMOVE MSHTML,

23 IT DOES BOOT. BUT THAT ASIDE, AGAIN, YOU HAVE TO RECOGNIZE

24 THAT THESE FILES ARE PACKAGES. AND, YES, THERE IS SOME CODE

25 IN EACH OF THESE FILES WHICH HAS TO BE THERE IN ORDER FOR

1 WINDOWS TO BOOT, WITH THE EXCEPTION OF MSHTML.

2   BUT THAT DOESN'T SAY THAT EVERYTHING IN THOSE

3 FILES HAS TO BE THERE OR THAT EVERYTHING IN THOSE FILES IS

4 PART OF THE OPERATING SYSTEM.

5 Q. IT SEEMS TO BE VERY CENTRAL TO YOUR TESTIMONY HERE THIS

6 MORNING LIVE IN COURT THAT THERE'S SOME LINE OF CODE, OR

7 SOME PROCEDURE, OR SOME ROUTINE, OR SOMETHING IN THESE FILES

8 THAT YOU SAY COULD BE REMOVED. WHERE DO YOU TELL THE COURT

9 IN YOUR WRITTEN TESTIMONY WHAT THOSE LINES OF CODE ARE?

10 A. I DISAGREE WITH THE PREMISE OF THE QUESTION THAT I'M

11 TRYING TO SAY THAT THERE MUST BE CODE IN THERE THAT CAN BE

12 REMOVED. IT SIMPLY DOESN'T MATTER. WHAT I'M HERE TO TALK

13 ABOUT AND WHAT THE PROTOTYPE REMOVAL PROGRAM SHOWS IS THAT

14 MICROSOFT CAN GIVE USERS THE CHOICE OF WEB BROWSING

15 SOFTWARE.

16   AND WE CAN TALK, IF YOU LIKE, ABOUT WHAT SPECIFIC

17 THINGS HAD TO HAPPEN IN ORDER TO MAKE THAT OCCUR, BUT

18 WHETHER YOU CAN REMOVE CODE FROM THESE FILES OR NOT IS

19 SIMPLY NOT RELEVANT TO THAT QUESTION.

20 Q. YOU SEEM TO BE TALKING ABOUT IT QUITE A BIT.

21 A. YOU'RE ASKING THE QUESTIONS.

22 Q. ISN'T IT THE CASE THAT YOU HAVE NO IDEA WHAT CODE IS IN

23 THOSE FILES THAT COULD POSSIBLY BE REMOVED WITHOUT IMPAIRING

24 THE FUNCTION OF WINDOWS OR THIRD-PARTY SOFTWARE PROGRAMS?

25 A. IT'S NOT CORRECT THAT I HAVE NO IDEA, BUT THE POINT IS

1 THAT I HAVE NOT DONE A DETAILED STUDY OF WHAT CODE MIGHT BE

2 REMOVABLE OR NOT REMOVABLE IN THOSE FILES, BECAUSE, AS I

3 EXPLAINED, IT'S JUST NOT RELEVANT TO THE QUESTIONS THAT I

4 WAS ADDRESSING.

5 IF THERE'S CODE THAT'S IN THERE THAT CAN BE

6 REMOVED, THEN CERTAINLY MICROSOFT IS ABLE TO REMOVE IT.

7 Q. NOW, SIR, DO YOU SEE THE TOP TWO FILES ON THE TOP OF

8 EXHIBIT 2088, THE FILES IEXPLORE.EXE AND EXPLORER.EXE?

9 A. YES, I SEE THAT.

10 Q. EITHER OF THOSE TWO FILES CAN BE USED TO ACTIVATE THE

11 WEB BROWSING SOFTWARE IN WINDOWS, RIGHT?

12 A. YES. THE PRIMARY FUNCTION OF IEXPLORE.EXE IS TO BROWSE

13 THE WEB. IF YOU DOUBLE-CLICK THAT INTERNET EXPLORER ICON ON

14 THE DESKTOP, WHAT HAPPENS IS THAT IEXPLORE.EXE GETS RUN AND

15 A WEB BROWSING WINDOW POPS UP.

16 IF YOU ACTIVATE EXPLORER.EXE, WHAT YOU GET IS

17 WINDOWS EXPLORER, WHICH IS AN ENTIRELY DIFFERENT THING. AND

18 AS I SAID BEFORE, I DON'T BELIEVE THAT EXPLORER.EXE HAS

19 ANYTHING TO DO WITH WEB BROWSING, EXCEPT THAT YOU CAN USE IT

20 TO START THE WEB BROWSER.

21 Q. OKAY. AND TO BE COMPLETELY CLEAR, THE WEB BROWSING

22 SOFTWARE THAT IS ACTIVATED WHEN A USER CLICKS ON

23 IEXPLORE.EXE IS THE FOUR FILES BELOW IEXPLORE.EXE, PLUS

24 OTHER CODE, RIGHT?

25 A. NO, THAT'S NOT THE RIGHT CHARACTERIZATION. WHEN

1 IEXPLORE.EXE GETS RUN, THERE IS SOME CODE WHICH IS ACTIVATED

2 OR WHICH GETS USED, AND SOME OF THAT CODE RESIDES IN THESE

3 FILES. IT'S NOT CORRECT TO SAY THAT ALL THE CODE IN THESE

4 FILES GETS ACTIVATED OR GETS USED.

5   AND, ALSO, AS I SAID BEFORE, THE FACT THAT A PIECE

6 OF CODE GETS USED WHEN A FUNCTION IS EXECUTED SAYS NOTHING

7 ABOUT WHETHER THAT PIECE OF CODE IS PART OF THE APPLICATION

8 THAT YOU'RE USING. IF YOU RECALL, THE CODE THAT DETECTS

9 KEYSTROKES, THAT'S NOT -- IT DOESN'T MAKE SENSE TO SAY

10 THAT'S PART OF IE, BECAUSE IT GETS USED WHEN THE USER TYPES

11 AN "H" INTO THE ADDRESS BAR.

12 Q. NOW, THE PROTOTYPE REMOVAL PROGRAM REMOVES THE FILE

13 CALLED "IEXPLORE.EXE," RIGHT?

14 A. YES, IT DOES.

15 Q. AND, INDEED, THAT IS THE ONLY PROGRAM FILE THAT IS

16 REMOVED BY THE PROTOTYPE REMOVAL PROGRAM, RIGHT?

17 A. THAT'S THE ONLY FILE THAT'S ENTIRELY REMOVED -- THE ONLY

18 PROGRAM FILE THAT'S ENTIRELY REMOVED. THERE ARE PLENTY OF

19 OTHER FILES THAT ARE ENTIRELY REMOVED.

20 Q. NOW, IN THE PARLANCE OF SOFTWARE DEVELOPERS, THE FILE

21 IEXPLORE.EXE IS JUST A STUB LOADER, RIGHT?

22 A. I'M NOT SURE I WOULD USE THAT TERMINOLOGY.

23 Q. YOU'RE AWARE THAT GLENN WEADOCK TESTIFIED HERE AND HE

24 USED THAT TERMINOLOGY "STUB LOADER." DO YOU DISAGREE WITH

25 THE CHARACTERIZATION OF THE FILE IEXPLORE.EXE AS BEING A

1   STUB LOADER?

2   A.   ARE YOU REFERRING TO A PARTICULAR PLACE IN HIS

3   TESTIMONY.

4   Q.   WELL, I AM.   I'M REFERRING TO -- AND WE CAN PLACE IT

5   BEFORE YOU IF WE HAVE IT -- TRIAL TRANSCRIPT VOLUME 15 ON

6   OCTOBER 16, 1998, THE P.M. SESSION, AT PAGE 69, LINES 6 TO

7   14.

8   A.   I'M SORRY.

9   Q.   ON PAGE 69.

10   A.   PAGE 69.

11   Q.   LINE 6 TO 14.

12   A.   OKAY.

13   Q.   AND I'LL READ IT WITH YOU AND THEN THE QUESTION WILL BE

14   DO YOU DISAGREE WITH HIS CHARACTERIZATION.

15   "QUESTION: "NOW, IEXPLORE.EXE, I THINK WE CAN

16   AGREE, IS JUST A STUB LOADER, CORRECT?

17   "ANSWER: IT'S A SMALL PROGRAM THAT CALLS OTHER

18   SOFTWARE INTO MEMORY.

19   "QUESTION: BUT YOU WOULD DESCRIBE THAT PROGRAM AS

20   A STUB LOADER, WOULD YOU NOT, SIR?

21   "ANSWER: YES. FROM A TECHNICAL STANDPOINT, IT'S

22   A STUB LOADER. FROM THE USERS' STANDPOINT, IT'S WHAT ALLOWS

23   THEM TO RUN THE PROGRAM."

24   DO YOU AGREE THAT IEXPLORE.EXE IS JUST A

25   STUB LOADER?

1   A.   NO, I DON'T AGREE WITH THAT TERMINOLOGY. I SHOULD POINT

2   OUT TO YOU THAT MR. WEADOCK WAS NOT APPEARING AS AN EXPERT

3   IN SOFTWARE DESIGN.

4   Q.   THAT'S RIGHT. YOU'RE THE EXPERT FOR THE DEPARTMENT OF

5   JUSTICE ON THE DESIGN OF WINDOWS 98, RIGHT?

6   A.   WELL, I SAY IN MY TESTIMONY WHAT I AM HERE TO TALK

7   ABOUT, BUT WHAT I'M SAYING IS THAT MR. WEADOCK DID NOT

8   REPRESENT HIMSELF AS AN EXPERT IN SOFTWARE DESIGN.

9   Q.   AND DR. FARBER DID NOT REPRESENT HIMSELF AS AN EXPERT IN

10   THE DESIGN OF WINDOWS 98 EITHER, DID HE?

11   A.   WE'D HAVE TO LOOK AT HIS TESTIMONY TO KNOW EXACTLY HOW

12   HE REPRESENTED HIMSELF.

13   Q.   NOW, THE FILE IEXPLORE.EXE IS A VERY SMALL FILE, ISN'T

14   IT?

15   A.   I DON'T RECALL THE EXACT SIZE.

16   Q.   WELL, WOULD IT SURPRISE YOU TO LEARN THAT IT'S JUST 64

17   KILOBYTES?

18   A.   THAT MIGHT BE ABOUT RIGHT.

19   Q.   AND ALL OF WINDOWS 98 AT RETAIL IS 134 MEGABYTES, RIGHT?

20   A.   I DON'T KNOW.

21   Q.   NOW, DR. FELTEN, YOU SAID THAT THE PROTOTYPE REMOVAL

22   PROGRAM REMOVES IEXPLORE.EXE. AFTER THAT OCCURS, USERS

23   COULD STILL BROWSE THE WEB WITH WINDOWS 98 RUNNING THROUGH

24   THE OTHER FILE AT THE TOP OF THE EXHIBIT, EXPLORER.EXE;

25   ISN'T THAT RIGHT?

1   A. AFTER THE PROTOTYPE REMOVAL PROGRAM HAS BEEN RUN, NO.

2   Q. I'M TALKING IT ONE STEP AT A TIME NOW, JUST AS YOU DID

3   IN YOUR TESTIMONY IN THE PARAGRAPH WE LOOKED AT, WHICH I

4   THINK MIGHT HAVE BEEN PARAGRAPH 54. THE FIRST STEP WAS YOU

5   REMOVED THE FILE CALLED IEXPLORE.EXE.

6   MY QUESTION IS, STOPPING JUST AT THAT STEP, IT IS

7   TRUE, ISN'T IT, THAT CUSTOMERS COULD STILL BROWSE THE WEB IN

8   WINDOWS 98 COMING THROUGH THE CODE PATH THAT BEGINS WITH

9   EXPLORER.EXE?

10 A. I DON'T THINK I SUGGESTED THAT THERE WAS A LIST OF STEPS

11 AND THAT THE USER MIGHT STOP AFTER ONE STEP. I LISTED WHAT

12 THE PROTOTYPE REMOVAL PROGRAM DOES. AND YOU NECESSARILY

13 HAVE TO LIST THE THINGS ONE AT A TIME. YOU CAN'T LIST THEM

14 ALL AT THE SAME TIME.

15 Q. IT'S A SIMPLE ENOUGH QUESTION, DR. FELTEN. TAKING THE

16 FILE IEXPLORE.EXE AND REMOVING IT FROM WINDOWS 98 STILL

17 LEAVES IN WINDOWS 98 WEB-BROWSING FUNCTIONALITY, RIGHT?

18 A. THAT'S CORRECT. IF YOU DO SOME OF THE STEPS IN THE

19 PROTOTYPE REMOVAL PROGRAM, YOU'LL GET SOME OF THE RESULTS.

20 THERE'S NOTHING UNIQUE ABOUT THE PROTOTYPE REMOVAL PROGRAM

21 IN THAT RESPECT. IF YOU DO ONLY SOME OF THE STEPS OF

22 INSTALLING MICROSOFT WORD, YOU'LL GET ONLY SOME OF THE

23 FUNCTIONS OF MICROSOFT WORD.

24 Q. DOES THE PROTOTYPE REMOVAL PROGRAM REMOVE THE FILE

25 EXPLORER.EXE THE WAY IT DOES WITH IEXPLORE.EXE?

1   A.   NO.   THE PRIMARY FUNCTION OF THAT FILE IS TO SUPPORT

2   WINDOWS EXPLORER, WHICH, AS I'VE EXPLAINED, IS NOT A WEB

3   BROWSING FUNCTION.

4   Q.   OKAY.   SO ONCE AGAIN, THE FILE EXPLORER.EXE PERFORMS

5   MULTIPLE FUNCTIONS, AND SO IT MAKES SENSE TO LEAVE IT IN THE

6   SYSTEM, RIGHT?

7   A.   THE REASON THAT IT'S LEFT IN THE -- WELL, THERE ARE TWO

8   REASONS WHY IT'S LEFT IN THE SYSTEM.   FIRST OF ALL, IF YOU

9   RECALL, THE GOAL OF THE PROTOTYPE REMOVAL PROGRAM WAS TO

10   DEMONSTRATE THAT MICROSOFT COULD OFFER A VERSION OF

11   WINDOWS 98 THAT RESPECTED THE USER'S CHOICE OF BROWSER.   AND

12   THE PROTOTYPE REMOVAL PROGRAM ACHIEVED THAT GOAL WITHOUT

13   REMOVING THAT FILE.

14   SECOND, AS I SAID, THAT FILE -- THE PRIMARY

15   PURPOSE OF THAT FILE IS NOT WEB BROWSING.   IT IS USED TO

16   LAUNCH THE WINDOWS EXPLORER FUNCTION AND THAT'S NOT A WEB

17   BROWSING FUNCTION.   THERE'S NO REASON TO TAKE THAT FILE

18   AWAY.   NOT ONLY WAS IT NOT NECESSARY, THERE IS NO MOTIVATION

19   FOR EVEN WANTING TO.

20   Q.   WELL, A CUSTOMER CAN GO INTO WINDOWS EXPLORER, WHICH IS

21   SUPPORTED BY EXPLORER.EXE, RIGHT --

22   A.   CORRECT.

23   Q.   -- AND TYPE A WEB ADDRESS INTO THE ADDRESS BAR, AS YOU

24   SHOWED IN THE VIDEOTAPE; ISN'T THAT RIGHT?

25   A.   YES, AND AS I DESCRIBED IN THE VIDEOTAPE, THAT LAUNCHES

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1   THE WEB BROWSER.  THERE'S NOTHING SO SPECIAL ABOUT WINDOWS

2   EXPLORER IN THIS RESPECT.  THERE ARE PLENTY OF THINGS YOU

3   CAN DO TO LAUNCH THE WEB BROWSER, LIKE DOUBLE-CLICKING THE

4   ICON ON THE DESKTOP.

5   Q.  SO INSTEAD OF REMOVING EXPLORER.EXE, WHAT YOU DID WAS TO

6   CHANGE SOME OF THE CODE ELSEWHERE IN WINDOWS TO PREVENT

7   CUSTOMERS FROM BEING ABLE TO USE THAT FILE TO BROWSE THE

8   WEB, RIGHT?

9   A.  NO.  THAT'S, I THINK, INACCURATE IN TWO WAYS.  FIRST OF

10  ALL, THAT FUNCTION IS -- THAT PROGRAM IS A LOCAL FILE

11  MANAGER PROGRAM; IT'S NOT A WEB BROWSER PROGRAM.

12          AND, SECOND, THE GOAL WAS NOT TO PREVENT USERS

13  FROM DOING ANYTHING.  THE GOAL WAS TO GIVE THE USERS THE

14  CHOICE TO HAVE IE, TO HAVE NAVIGATOR OR TO HAVE NO WEB

15  BROWSING AT ALL ON THEIR SYSTEM.

16  Q.  WELL, YOU DID TESTIFY EARLIER THAT THE EFFECT OF THE

17  PROTOTYPE REMOVAL PROGRAM WAS TO REMOVE WEB BROWSING FROM

18  WINDOWS, RIGHT?

19  A.  CORRECT.  AND USERS WHO WANT TO REMOVE WEB BROWSING

20  COULD USE THE PROTOTYPE REMOVAL PROGRAM, OR USERS WHO WANT

21  TO USE AN ALTERNATIVE WEB BROWSER COULD USE IT.  BUT THE

22  POINT REALLY IS TO DEMONSTRATE THAT -- IS THAT IT'S A

23  DEMONSTRATION THAT MICROSOFT COULD OFFER WINDOWS 98 IN A WAY

24  THAT SUPPORTED THE USER'S CHOICE IN THIS WAY.

25  Q.  NOW, AFTER THE PROTOTYPE REMOVAL PROGRAM IS RUN, NEARLY
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1 ALL OF THE WINDOWS 98 SOFTWARE THAT SUPPORTS WEB BROWSING

2 REMAINS ON THE SYSTEM, RIGHT?

3 A. NEARLY ALL OF THE WINDOWS 98 SOFTWARE THAT SUPPORTS ANY

4 FUNCTION IS STILL ON THE SYSTEM.

5 Q. INCLUDING ALL THE WEB BROWSING SUPPORT, RIGHT?

6 A. NOT INCLUDING ALL THE WEB BROWSING SUPPORT. WE TALKED

7 BEFORE ABOUT THIS DISTINCTION BETWEEN CODE THAT'S USED WHEN

8 A FUNCTION IS EXECUTED, LIKE THE CODE THAT DETECTS THE

9 LETTER "H" WHEN IT'S TYPED, AND CODE THAT'S PART OF AN

10 APPLICATION, AND THERE'S AN IMPORTANT DISTINCTION THERE.

11 Q. OKAY.

12 A. THE APPLICATION IS GONE, AS I DESCRIBED BEFORE.

13 Q. ALL THOSE FOUR FILES THAT WE DISCUSSED -- THE FOUR

14 BOTTOM FILES ON THE EXHIBIT -- REMAIN IN WINDOWS 98, RIGHT?

15 A. THEY DO REMAIN, ALTHOUGH, AS I SAID -- ALTHOUGH URLMON

16 IS MODIFIED. AS I SAID, THAT'S NOT THE SAME THING AS SAYING

17 THAT THOSE FILES CONTAIN WEB BROWSING CODE. AND IT'S NOT

18 THE SAME THING AS SAYING THAT THOSE FILES CONTAIN ENTIRELY

19 WEB BROWSING CODE OR THAT THEY ARE PART OF THE WEB BROWSER.

20 Q. IN FACT, AS YOU HAVE REDESIGNED THINGS IN WINDOWS 98,

21 YOU CAN STILL USE WINDOWS 98 TO BROWSE ONE SITE ON THE WEB,

22 RIGHT?

23 A. CAN YOU REPEAT THE QUESTION?

24 Q. AS YOU REDESIGNED WINDOWS 98, THE EFFECT OF RUNNING THE

25 PROTOTYPE REMOVAL PROGRAM, WINDOWS 98 CAN STILL BE USED TO

1   BROWSE ONE SITE ON THE WEB; ISN'T THAT RIGHT?

2   A. WELL, I DON'T AGREE WITH THE IMPLICATION THAT I

3   REDESIGNED WINDOWS 98.

4   Q. WELL, LET ME REPHRASE IT. AFTER THE PROTOTYPE REMOVAL

5   PROGRAM IS RUN, WINDOWS 98 CAN STILL BE USED TO BROWSE ONE

6   SITE ON THE WEB; ISN'T THAT RIGHT?

7   A. I DON'T THINK THAT'S A SENSIBLE THING TO SAY TO BROWSE

8   ONE SITE. EITHER YOU'RE BROWSING THE WEB OR YOU'RE NOT.

9   Q. WELL, WINDOWS 98 CAN BE USED TO ACCESS ONE SITE ON THE

10   WEB AND VIEW THE CONTENT OF THAT SITE; ISN'T THAT RIGHT?

11   A. NO, I DON'T THINK THAT'S ACCURATE.

12   Q. THE WINDOWS UPDATE SITE, SIR? I THINK YOU SHOWED IT TO

13   US ON THE VIDEOTAPE.

14   A. AFTER THE PROTOTYPE HAS BEEN RUN, THE WINDOWS UPDATE

15   FEATURE, THE WINDOWS UPDATE FUNCTION, THE ABILITY TO UPDATE

16   THE FILES ON THE USER'S SYSTEM IS STILL THERE. AND I'LL

17   NOTE THAT MICROSOFT ITSELF IN ONE OF THE PLEADINGS IN THIS

18   CASE CLASSIFIED WINDOWS UPDATE AS A NON-INTERNET FUNCTION.

19   THERE WAS A PLEADING WHICH WAS -- I'M NOT A LAWYER HERE, SO

20   I MAY GET THE LINGO WRONG -- SOMETHING LIKE A PROPOSED SET

21   OF FACTS THAT MICROSOFT SAYS THERE IS NO DISAGREEMENT ABOUT.

22   AND IN THAT SET OF FACTS, MICROSOFT GAVE THREE

23   LISTS OF FUNCTIONS WHICH, AS MICROSOFT PUT IT, ARE

24   IMPLEMENTED BY INTERNET EXPLORER TECHNOLOGY. I BELIEVE THAT

25   WAS THE TERM THEY USED. AND THERE WAS ONE LIST WHICH WAS

 1   "USER INTERFACE" OR "SHELL FUNCTIONS." THERE WAS ONE LIST

 2   THAT WAS "INTERNET FUNCTIONS," AND THERE WAS ONE LIST THAT

 3   WAS "OTHER." AND WINDOWS UPDATE WAS ON THE "OTHER" LIST,

 4   NOT THE "INTERNET" LIST.

 5   Q.   YOU CALL WINDOWS UPDATE A WEB SITE IN YOUR TESTIMONY,

 6   RIGHT?

 7   A.   I DID USE THOSE WORDS. I DON'T THINK IT'S THE MOST

 8   ACCURATE CHARACTERIZATION.

 9   Q.   BUT ALL I'M ASKING, SIR, IS ISN'T IT TRUE THAT AFTER THE

10   PROTOTYPE REMOVAL PROGRAM IS RUN, WINDOWS 98 INCLUDES ALL

11   THE SOFTWARE IT NEEDS TO ALLOW A CUSTOMER TO ACCESS AND VIEW

12   THAT PARTICULAR WEB SITE? I THINK YOU MADE A POINT OF

13   TESTIFYING TO THAT IN WRITING.

14   A.   IT MAKES -- WINDOWS 98 HAS EVERYTHING IT NEEDS TO HAVE

15   TO LET THE USER DO THE WINDOWS UPDATE FUNCTION, TO LET THE

16   USER DOWNLOAD THE NEW SOFTWARE AND SO ON. AS I EXPLAINED IN

17   MY TESTIMONY, IT WOULD BE -- WE COULD HAVE -- THE PROTOTYPE

18   REMOVAL PROGRAM COULD HAVE BEEN IMPLEMENTED SO AS TO REMOVE

19   THAT FUNCTION, BUT THERE SEEMED NO REASON TO DO IT.

20   Q.   WE HAVEN'T TALKED ABOUT THE OSR 2 VERSION OF WINDOWS 95.

21   LET'S JUST TAKE A MINUTE ON THAT NOW. YOU TESTIFIED THAT

22   INTERNET EXPLORER 3 IS REMOVABLE FROM OSR 2, RIGHT?

23   A.   CORRECT, AND MICROSOFT PROVIDES IN THEIR KNOWLEDGE BASE

24   A NUMBER OF ARTICLES THAT EXPLAIN HOW TO DO THAT. AND

25   THAT'S THE TERM THAT MICROSOFT'S OWN UNINSTALLATION UTILITY

1 USES TO DESCRIBE WHAT'S HAPPENING, AS YOU SAW IN THE

2 VIDEOTAPE.

3 Q. BUT IT'S TRUE, ISN'T IT, THAT REMOVING INTERNET

4 EXPLORER 3, THE WAY YOU SHOWED ON THE VIDEOTAPE, LEAVES ALL

5 OF THE SHARED PROGRAM LIBRARIES THAT SUPPORT WEB BROWSING IN

6 OSR 2, RIGHT?

7 A. REMOVING IE 3, LIKE REMOVING ANY APPLICATION, WHEN A

8 USER CLICKS THAT "ADD/REMOVE PROGRAMS" ITEM TO SAY "I WANT

9 TO REMOVE THIS THING," WHAT HAPPENS IS WHATEVER THE

10 MANUFACTURER OF THAT APPLICATION WANTS TO HAVE HAPPEN. THAT

11 IS, WHAT HAPPENS WHEN THE USER CLICKS THAT BUTTON IS EXACTLY

12 WHAT MICROSOFT PROGRAMMED THE IE 3 UNINSTALLER TO DO.

13 Q. MY QUESTION IS SIMPLY ISN'T IT TRUE THAT THE SHARED

14 PROGRAM LIBRARIES ARE LEFT IN OSR 2 UNDER THE DEINSTALLATION

15 PROCEDURE THAT YOU DEMONSTRATED ON THE VIDEOTAPE?

16 A. I DON'T RECALL PRECISELY.

17   THE COURT: WOULD THIS BE AN APPROPRIATE TIME TO

18 BREAK FOR THE NOONTIME RECESS?

19   MR. HEINER: IT WOULD BE, YOUR HONOR. YES, IT

20 WOULD. THANK YOU.

21   THE COURT: WE WILL RECONVENE AT 2:00 O'CLOCK.

22   (WHEREUPON, THE ABOVE-ENTITLED MATTER WAS RECESSED

23 FOR LUNCH.)

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1                    CERTIFICATE OF REPORTER

2          THIS RECORD IS CERTIFIED BY THE UNDERSIGNED REPORTER TO

3     BE THE OFFICIAL TRANSCRIPT OF THE PROCEEDINGS INDICATED.

4                                 _____

5                                      PHYLLIS MERANA

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