

DAVID R. KARGER

UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD

- - - - -X
MICROSOFT CORPORATION, :
Petitioner, : Patent Number
vs. : 6,724,403
SURFCAST, INC., : CASE IPR2013-00292
Patent Owner. :
- - - - -X

DEPOSITION OF DAVID R. KARGER

Washington, D.C.

Thursday, April 24, 2014

REPORTED BY: CARMEN SMITH

JOB NO: 73494

1 DAVID R. KARGER

2 Deposition of DAVID R. KARGER, called for
3 examination pursuant to notice of deposition, on
4 Thursday, April 24, 2014, in Washington, D.C., at
5 the law offices of Sidley Austin, LLP, 1501 K Street
6 Northwest, at 10:17 a.m., before CARMEN SMITH, a
7 Notary Public within and for the District of
8 Columbia, when were present on behalf of the
9 respective parties:

10
11 JOSEPH MICALLEF, ESQ.

12 WOOJOO SUH, ESQ.

13 Sidley Austin

14 1501 K Street, Northwest

15 Washington, D.C. 20005

16 On behalf of Petitioner
17
18
19
20
21
22
23
24
25

-- continued --

DAVID R. KARGER

APPEARANCES (Continued):

JAMES HEINTZ, ESQ.

DLA Piper

500 Eighth Street, Northwest

Washington, D.C. 20004

On behalf of Patent Owner

1 DAVID R. KARGER

2 P R O C E E D I N G S

3 Whereupon,

4 DAVID R. KARGER

5 was called as a witness and, having first been duly
6 affirmed, was examined and testified as follows:

7 EXAMINATION

8 BY MR. HEINTZ:

9 Q Good morning, Dr. Karger.

10 A Good morning.

11 Q Thank you for coming today.

12 Sir, I know I've deposed you before, but
13 I'll just go over a few ground rules to refresh your
14 recollection. So the first and probably most
15 important ground rule is that we not talk over each
16 other to allow the court reporter to record our
17 testimony.

18 A Uh-huh.

19 Q Will that be okay with you?

20 A Yes.

21 Q Second rule is that we have -- you have to
22 give verbal answers to my questions, and preferably
23 in words rather than sounds such as uh-huh and
24 huh-uh because those are hard to record. So can you
25 do that?

1 DAVID R. KARGER

2 A Yes.

3 Q Thank you.

4 Sir, is there any reason that you wouldn't
5 be able to give truthful testimony here today?

6 A No.

7 Q Okay. Are you on any medication or is
8 there any medical condition that might affect your
9 memory?

10 A No.

11 Q Okay. Sir, I'm going to ask the reporter
12 to hand you what's been marked as Exhibit 1110,
13 which is the reply declaration of David R. Karger
14 regarding U.S. Patent Number 6,724,403.

15 Sir, I'll ask you to take a look at that
16 document and let me know if you recognize it.

17 A Yes, I do.

18 Q This is your report, is it not, sir?

19 A That's correct.

20 Q And I'm also going to ask the reporter to
21 pass to you what's -- what constitutes paper number
22 28 in the IPR proceeding, which is patent owner's
23 motion for conditional amendment under 37 CFR
24 42.121.

25 Okay, sir, I'll ask you if you recognize

1 DAVID R. KARGER

2 that document.

3 A Yes, I do.

4 Q Is this one of the documents you reviewed
5 in preparing your report, Exhibit 110 -- I'm sorry,
6 1110?

7 A Yes, it is.

8 Q Okay. Now, sir, I'll ask you to turn to
9 the third page, which is page number 2 in the --
10 sorry, I'll ask you to turn to page 1, which is the
11 second page of the document, under the heading
12 "CLAIMS LISTING."

13 Do you see that?

14 A Yes, I do.

15 Q Okay. And beneath that heading "CLAIMS
16 LISTING," there's a claim 53.

17 Do you see that?

18 A Yes.

19 Q Okay. And when you prepared your report,
20 you opined as to various aspects of claim 53; is
21 that correct?

22 A Yes, it is.

23 Q Okay. And this is the content of claim 53
24 that you opined on, what's shown here in paper
25 number 28; correct?

1 DAVID R. KARGER

2 A Yes.

3 Q All right. Now, sir, I'll ask you to
4 direct your attention to the limitation of claim 53
5 that begins "arrange" of -- sorry, "arrange a
6 display into a grid of tiles that are not permitted
7 to overlap, said grid of tiles being persistent from
8 session to session."

9 Do you see that?

10 A Yes, I do.

11 Q Okay. Now, sir, is it your opinion that
12 that limitation includes a negative limitation?

13 MR. MICALLEF: Object to form.

14 THE WITNESS: That is my understanding of
15 a definition of a negative limitation, yes.

16 BY MR. HEINTZ:

17 Q Okay. And why do you say that that
18 includes a negative limitation?

19 A I'm going to quickly look through my
20 expert report.

21 Q Yes, feel free to refer to your report.

22 A So as you can see in paragraph 16 of my
23 report, my understanding of the negative limitation
24 is that it is one that defines a claimed subject
25 matter by what it is not rather than by what it is.

1 DAVID R. KARGER

2 Q Okay. And how do you apply that
3 understanding to the limitation that begins "arrange
4 a display"?

5 MR. MICALLEF: Object to form.

6 THE WITNESS: So my understanding of the
7 way in which this amended claim describes a negative
8 limitation is that it describes a set of tiles that
9 may not overlap. So the possibility of overlap is
10 excluded. It is something that is not part of
11 the -- it is something that it is not.

12 BY MR. HEINTZ:

13 Q When you say "may not overlap," do you
14 mean they could overlap or they could not, or do you
15 understand that to mean that they're not permitted
16 to overlap?

17 A I understand --

18 MR. MICALLEF: Object to form.

19 THE WITNESS: I understand that to mean
20 that they are not permitted to overlap.

21 BY MR. HEINTZ:

22 Q Okay. And let me direct your attention to
23 paragraph 284 of your report. And that's Exhibit
24 1110 again. Sir, there you say that overlapping
25 window -- I'm sorry, "overlapping windowing required

1 DAVID R. KARGER

2 additional functionality not required for
3 nonoverlapping windowing."

4 Do you see that?

5 A Yes, I do.

6 Q Does nonoverlapping windowing include
7 functionality that is not present in overlapping
8 windowing systems?

9 MR. MICALLEF: Object to form.

10 THE WITNESS: Functionality that is not
11 present in overlapping windowing systems -- there's
12 a certain hypothetical nature to that question so
13 I'm taking my time to consider the possibilities.
14 Can you restate the question, please?

15 BY MR. HEINTZ:

16 Q Sure. Let me try it this way. Let me
17 hand you or ask the reporter to hand you what's been
18 marked as Exhibit 1067, which is the "Window
19 Interfaces" document by Brad Myers.

20 Okay. Sir, and I'll ask you to direct
21 your attention to page -- native page 67, which is
22 page 3 of Exhibit 1067.

23 A Yes.

24 Q And I'll ask you to direct your attention
25 in particular to the second column and the second

1 DAVID R. KARGER

2 full paragraph in the second column.

3 A Yes.

4 Q All right. And the second-to-last
5 sentence reads, "Obviously, a window manager that
6 supports covered windows can also allow them to be
7 side by side, but not vice versa."

8 Do you see that?

9 A Yes.

10 Q And that's what's referred to in paragraph
11 284 of your report, Exhibit 1110; correct?

12 A Correct.

13 Q Now, in your report, you cite that
14 sentence --

15 A Yes, I do.

16 Q -- in 1067 as support for the notion that
17 overlapping windowing required additional
18 functionality not required for nonoverlapping
19 windowing; correct?

20 A Correct.

21 Q Okay. Where in either that paragraph or
22 anywhere else in Exhibit 1067 is there any mention
23 of additional functionality required for non --
24 sorry -- additional functionality required for
25 overlapping windowing?

1 DAVID R. KARGER

2 MR. MICALLEF: Object to form.

3 THE WITNESS: So to be clear, the kind of
4 functionality, the kind of additional functionality
5 that is required, is, for example, functionality
6 that determines what should be done when one window
7 is placed overlapping another window, what should be
8 obscured and what should be revealed in the two
9 windows that are now overlapping each other.

10 And conversely, what to do when a window
11 is moved to uncover a window that it was previously
12 covering, you need additional functionality to
13 reconstruct what was previously obscured in the
14 overlapping window.

15 So this is the type of functionality that
16 is necessary in an overlapping window system, but is
17 not necessary in a tiled window system because this
18 kind of overlap does not arise.

19 BY MR. HEINTZ:

20 Q Okay. In the paragraph in which the
21 sentence that begins "Obviously, a windows manager"
22 appears, there is a definition of a nonoverlapping
23 window system; correct? In particular, let me call
24 your attention a couple sentences above that,
25 there's a sentence that reads, "The other

1 DAVID R. KARGER

2 alternative is called tiled windows, which means
3 that windows are not allowed to cover each other."

4 Do you see that?

5 A Yes, I do.

6 Q Isn't the sentence that you cited simply a
7 reflection of that definition, in that if, by
8 definition, tiled windows are windows that are not
9 allowed to cover each other, then would it
10 necessarily be true that a window manager that
11 supports tiled windows wouldn't be -- wouldn't have
12 the functionality to allow windows to cover each
13 other?

14 In other words, isn't that sentence
15 nothing more than a reflection of the definition
16 that says the tiled windows means windows are not
17 allowed to cover each other?

18 MR. MICALLEF: Object to form; relevance.

19 THE WITNESS: I'm afraid I kind of lost
20 the thread of the question. Which sentence are you
21 talking about, then?

22 BY MR. HEINTZ:

23 Q We'll start with the sentence that says
24 "The other alternative is called tiled windows,
25 which means that windows are not allowed to cover

1 DAVID R. KARGER

2 each other."

3 A Yes.

4 Q Now, two sentences down, we see the
5 sentence that you cited in your report, "Obviously,
6 a windows manager that supports covered windows can
7 also allow them to be side by side, but not vice
8 versa"; right?

9 MR. MICALLEF: Object to form.

10 BY MR. HEINTZ:

11 Q Do you see that sentence?

12 A Yes, I do.

13 Q What does the "vice versa" mean to you?

14 A It means that a tiled window manager,
15 i.e., as in the previous sentence, where windows are
16 not allowed to cover each other, cannot support
17 covered windows.

18 Q Right. So if by definition a tiled window
19 manager doesn't allow tiles to overlap, isn't the
20 vice versa nothing more than a reflection of that
21 definition? All that this sentence is saying, in
22 other words, is that because tiled windows are not
23 allowed to overlap, it necessarily follows that a
24 tiled window manager won't allow windows to overlap?
25 It's not an indication that any function is missing,

1 DAVID R. KARGER

2 is it?

3 MR. MICALLEF: Object to form.

4 THE WITNESS: So you're asking about this
5 specific sentence, which kind of requires me to get
6 into the state of the mind of the author when they
7 were writing it.

8 The fact is that it is I would say obvious
9 to anyone who understands this material that you
10 have to implement certain functionality for covering
11 and uncovering windows that would simply not be
12 necessary if you were dealing with windows that
13 never covered one another.

14 There's actually a lot of work in computer
15 graphics to address this specific problem of dealing
16 with covering and uncovering.

17 Now, whether the author was referring to
18 that explicitly in this sentence or not, it's a
19 little harder to judge.

20 BY MR. HEINTZ:

21 Q Well, I don't want you to get into the
22 head of the author.

23 A Okay.

24 Q I just want to get your understanding of
25 what's going on here. Because in paragraph 284 of

1 DAVID R. KARGER

2 your report --

3 A Yes.

4 Q -- you cited that sentence in particular.

5 A Good. So if you want --

6 MR. MICALLEF: Wait for a question.

7 THE WITNESS: I'm sorry.

8 BY MR. HEINTZ:

9 Q So you cited that sentence in particular
10 as support for the notion that there's got to be
11 some missing functionality in a tiled window system.

12 My question to you is doesn't the "but not
13 vice versa" portion of the sentence you cited flow
14 simply from the definition that in a tiled windows
15 system, windows are not allowed to cover each other?

16 MR. MICALLEF: Object to form.

17 THE WITNESS: So now you're asking about
18 what was in my mind.

19 BY MR. HEINTZ:

20 Q Yes.

21 A What was in my mind when I read that was
22 it certainly came into my mind of course there are
23 things you have to do in a covered windows system
24 that you do not have to do in a tiled windows system
25 because the fact that windows are covering each

1 DAVID R. KARGER

2 other creates issues that do not arise in a tiled
3 windows system.

4 Q Now, is the converse true? If you have a
5 tiled windows system, are there going to be things
6 you have to do that you don't have to do in a system
7 that allows windows to overlap?

8 MR. MICALLEF: Object to form.

9 THE WITNESS: So I believe that there are
10 things that you could do in a tiled windows system
11 that you would not do in a covered windows system,
12 but I don't think there are things that you would
13 have to do in the tiled windows system that you
14 would do in a covered windows system.

15 BY MR. HEINTZ:

16 Q So in a tiled windows system -- sorry.
17 When you say "tiled windows system," we're talking
18 about a system in which tiles are not permitted to
19 overlap; correct?

20 MR. MICALLEF: Object to form.

21 THE WITNESS: Correct.

22 BY MR. HEINTZ:

23 Q All right. If you don't do anything
24 additional in a tiled windows system that is found
25 in a tiled --

1 DAVID R. KARGER

2 A Covered --

3 Q Let me restate it.

4 If there is nothing additional -- if there
5 is nothing additionally done in a tiled windows
6 system as compared to a system that permits windows
7 to overlap, then how does the tiled windows system
8 accomplish not permitting the tiles to overlap?

9 MR. MICALLEF: Object to form; relevance,
10 incomplete hypothetical.

11 THE WITNESS: So, again, we're moving into
12 hypothetical territory here. There are several ways
13 one could implement a tiled windows system that
14 could feel quite different.

15 But, for example, in many tiled windows
16 systems, the way that you manage your windowing is
17 you don't -- is, for example, you have boundaries
18 that you can drag, sort of separators, between
19 different windows, and you can drag them from side
20 to side or up and down. And this has the effect of
21 resizing one window and not another window.

22 Just by the way you're doing that, you're
23 never going to cause windows to overlap. You're
24 just moving a boundary and no overlap ever occurs.
25 So you're not explicitly preventing -- you're not

1 DAVID R. KARGER

2 adding functionality that explicitly prevents the
3 windows from overlapping, but simply the
4 functionality that you have never creates a
5 situation in which those windows are overlapping.

6 BY MR. HEINTZ:

7 Q Okay. So it -- I'm sorry, is that your
8 complete answer?

9 A Yes.

10 Q Okay. So in that tiled windows system
11 that includes this boundary function you're talking
12 about, would the same boundary function be filed --
13 sorry. Would the same boundary function be found in
14 a system that allows windows to overlap?

15 MR. MICALLEF: Same objections.

16 THE WITNESS: Well, it may be. And as a
17 concrete example, and as Brad mentions in his
18 article, a covered windows system can also do
19 tiling, right. That is tiling is sort of a subset
20 of covered windowing.

21 And it is indeed the case that in, for
22 example, Microsoft Tools, you can take what is a
23 covered window system, it certainly allows windows
24 to overlap, and at certain times say "tile." When
25 you say "tile," it will switch some of those windows

1 DAVID R. KARGER

2 into a tiled configuration, where they do not
3 overlap, and will, I think, give you these
4 boundaries for moving things between -- for changing
5 the sizes of the tiles without introducing overlap.

6 So it's clear that we're working within a
7 covered window system, but we have moved into a
8 moment of tiling. And so all of that -- all of that
9 kind of behavior that I was just describing for a
10 tiled window system is now occurring within the
11 context of a covered window system.

12 BY MR. HEINTZ:

13 Q And in the example you just gave, would
14 the windows that are tiled be prevented from
15 overlapping? Or sorry. Would they be permitted not
16 to overlap or were they just arranged in a
17 nonoverlapping arrangement at that moment?

18 MR. MICALLEF: Object to form.

19 THE WITNESS: It's a definitional problem
20 because of course you can at any time choose to
21 disable the tiling mode and start overlapping those
22 windows again.

23 BY MR. HEINTZ:

24 Q All right. So in the -- I'm sorry, I
25 don't mean to cut you off.

DAVID R. KARGER

A That's my answer, that's the answer.

Q So when you're in the tiling mode in your example, are the windows not permitted to overlap?

MR. MICALLEF: Object to form.

THE WITNESS: It's more accurate to say that they are not overlapping.

BY MR. HEINTZ:

Q Does that mean they are permitted to overlap if the user chooses to resize one or move one?

A No, as I just said, the user can choose to overlap these windows by -- we'd have to go poke at the system to see exactly how they do it.

But they can perform certain operations which lead to those windows overlapping.

Q Okay. And this functionality you described to get to a tiling mode, that would be additional functionality as compared to a covered windows system that did not support a tiling mode; wouldn't that be correct?

MR. MICALLEF: Object to form.

THE WITNESS: In the particular example I described of Microsoft Windows, yes, I think that they have added functionality to support tiling,

1 DAVID R. KARGER

2 namely that tile selection, which did not have to be
3 present.

4 BY MR. HEINTZ:

5 Q Okay. Let me direct your attention to
6 native page 71 of the Myers reference, which is page
7 7 of Exhibit 1067. Sir, do you see the "Tiled
8 versus overlapped" subheading there?

9 A Yes.

10 Q The second paragraph under that subheading
11 reads, "Implementation in human factors issues guide
12 the choice between tiling and overlapping. In
13 tiling systems, the computer is typically in charge
14 of managing the window placement and size, limiting
15 the user's freedom. In covered window managers, the
16 user must usually manage the windows."

17 Do you see that?

18 A Yes, I do.

19 Q Okay. So isn't there some functionality
20 associated with the computer managing the window
21 placement and size in the tiling systems that's not
22 present in the covered window manager systems?

23 MR. MICALLEF: Object to form.

24 THE WITNESS: So I will note -- I'm sorry.
25 I will note the use of the word "usually" in the

1 DAVID R. KARGER

2 description of covered window managers, right.

3 So the kind of functionality that -- the
4 management of window placement and size, which is
5 referred to in tiling window managers, is sometimes
6 available in covered window managers as well.

7 BY MR. HEINTZ:

8 Q Doesn't have to be, though; correct?

9 A It does not have to be.

10 Q So that would be additional functionality,
11 correct?

12 MR. MICALLEF: Object to form.

13 THE WITNESS: I'll reiterate that this
14 functionality can be present in covered window
15 managers as well. So I'm not sure that it fulfills
16 the characterization of being additional.

17 BY MR. HEINTZ:

18 Q Okay. Let's talk about a covered window
19 system that does not prevent tiles from -- I'm
20 sorry, prevent windows from overlapping, okay? Or
21 in other words, a covered window system in which
22 windows are permitted to overlap.

23 A Uh-huh.

24 Q Okay. If I take such a system as my
25 starting point, how would I implement or modify that

1 DAVID R. KARGER

2 system to make it so that the tiles are not -- or
3 sorry, the windows are not permitted to overlap?

4 MR. MICALLEF: Object to form; relevance,
5 incomplete hypothetical.

6 THE WITNESS: That's a quite broad
7 question. Can you -- sorry, I don't know if I can
8 ask you to narrow it at all or if you want me to try
9 to answer it in that full breadth.

10 BY MR. HEINTZ:

11 Q Let's talk about the Windows operating
12 system. Let's use Windows 95. Are you familiar
13 with that operating system?

14 A I have -- I am familiar with it. It's
15 been quite a long time since I've used it.

16 Q Okay. Do you have an understanding as to
17 how that system implements a window manager that
18 allows covered windows?

19 A How it does it?

20 Q Yes.

21 A I certainly have an understanding that it
22 does it. I haven't examined the source code in
23 order to understand exactly how it does it.

24 Q So when you opined in paragraph 284 that
25 there must be some functionality missing in a tiled

1 DAVID R. KARGER

2 Windows system as compared to a covered Windows
3 system, what system did you have in mind? What did
4 you base that on?

5 MR. MICALLEF: Object to form.

6 THE WITNESS: Sir, I'll reiterate what I
7 said before, that these issues that arise when
8 windows cover one another are pervasive. The
9 covering and uncovering is a common phenomenon in
10 any graphical system, and you have to address what's
11 going to happen. There are techniques, frame
12 buffering and sort of storing the covered material
13 for dealing with the fact that sometimes the
14 application is going to be updating that information
15 that is not actually on the screen, then you have to
16 receive those updates so that when that material is
17 uncovered, the updated version of the material is
18 visible.

19 That is well understood by anybody with
20 ordinary skill in the art to be a necessary aspect
21 of implementation of windows systems that have
22 covering.

23 BY MR. HEINTZ:

24 Q Okay. And then with respect to a tiled
25 windows system, you said one way in which that

1 DAVID R. KARGER

2 system could be implemented would be to include some
3 boundaries that are enforced by the software; is
4 that correct?

5 A Yes.

6 Q And these boundaries would prohibit the
7 windows from overlapping; correct?

8 MR. MICALLEF: Object to form.

9 THE WITNESS: So if I step out of this
10 window, am I prohibited from staying in the air or
11 is it just a fact that I fall? So I'm trying to
12 understand exactly what you mean about prohibited in
13 this context. So the fact that I drag these
14 boundaries in order to resize the windows means that
15 they never end up covering one another.

16 The same way as the fact that when I walk
17 out onto empty space, I fall, means that I do not
18 stay up in the air.

19 Is that a prohibition that I am not
20 allowed to stay up in the air? Or is it just a fact
21 that I don't stay up in the air? Because I think
22 that's what's going on with these -- with this sort
23 of boundary dragging, because I'm dragging these
24 boundaries, the windows just never end up covering
25 each other.

1 DAVID R. KARGER

2 BY MR. HEINTZ:

3 Q I may have misunderstood your answer
4 before. When you said dragging the boundaries, what
5 are you referring to?

6 A So, again, this is just one example of an
7 interface mechanism for resizing windows in a tiled
8 windows system is that you will actually place your
9 mouse cursor onto the boundary, click down on the
10 mouse and then move the mouse, which the metaphor is
11 that you're now dragging the boundary that you're on
12 top of in the direction that you're moving the
13 mouse.

14 Q What boundary? Are you talking about a
15 boundary of a window or some other type of boundary?

16 A In a tiled window system, I'm talking
17 about the boundary between two windows.

18 Q Okay. And that boundary functionality,
19 and particularly the software that implements that
20 boundary functionality, that's not necessarily
21 present in a covered window system, is it?

22 MR. MICALLEF: Object to form.

23 THE WITNESS: It is not necessarily
24 present, but it can be present.

25 BY MR. HEINTZ:

1 DAVID R. KARGER

2 Q I understand. But it's an additional
3 requirement? You would agree with that?

4 MR. MICALLEF: Object to form.

5 THE WITNESS: It's not a requirement in a
6 covered window system, but it's an additional
7 option. If you want to permit that functionality to
8 provide that function to the user, it can be
9 provided.

10 BY MR. HEINTZ:

11 Q You would have to add it to a covered
12 window system?

13 MR. MICALLEF: Object to form.

14 THE WITNESS: Yes.

15 BY MR. HEINTZ:

16 Q You've given us one example so far of a
17 tiled windows system. Are there any other examples
18 that you can think of?

19 A Examples of tiled window systems.

20 Q Uh-huh.

21 A So are you looking for names of tiled
22 window systems?

23 Q Sure.

24 A Let's see. I'm afraid the names are
25 escaping me at present. I can go through my report

1 DAVID R. KARGER

2 to see if I mentioned any of them. I don't recall.

3 There are a number of research systems and
4 patents that describe tiled window systems, but I
5 can't give you the names that have been associated
6 with them.

7 Q Okay. In the systems you have in mind, do
8 they all include this boundary functionality that
9 you've discussed?

10 A I know that some of them do. I don't know
11 if all of them do.

12 Q Okay. For the ones that don't include the
13 boundary functionality, how generally do those
14 systems accomplish windows not being permitted to
15 overlap?

16 MR. MICALLEF: Object to form.

17 THE WITNESS: So another approach is it's
18 a more restrictive approach, but you can certainly
19 design a system where a user can add and remove
20 windows, but not -- not have this kind of boundary
21 dragging capability. And when the user does
22 something which introduces another window, the
23 system itself just takes care of re-laying out the
24 windows to make room for this additional window.

25 Conversely, if the user does something to

1 DAVID R. KARGER

2 remove a window, the system can re-lay out the
3 windows to make room for -- to take away the space
4 that was previously allocated to that window.

5 If I can look at the du Perrouzel or
6 Duhault, I can try to tell you whether those systems
7 satisfy that characterization. I won't assert it
8 without taking a look, though.

9 BY MR. HEINTZ:

10 Q Okay. We'll be talking about those later.
11 But I'm not specifically concerned about those
12 references now. But that description you gave of a
13 system that I'll say re-lays out or changes the
14 layout when a window is added and then restores or
15 rechanges the layout when a window is deleted, that
16 functionality would not necessarily be present in a
17 covered window system, would it?

18 MR. MICALLEF: Object to form.

19 THE WITNESS: So, again, it would not
20 necessarily be present, but it often is. I think
21 it's quite common again in Microsoft, many of the
22 tools provide "arrange all" command, which
23 essentially takes the windows that currently exist
24 and lays them out in an uncovered layout.

25 BY MR. HEINTZ:

1 DAVID R. KARGER

2 Q Okay. So again referring to paper 28,
3 that's the motion.

4 A Yes.

5 Q So in the limitation that reads "arrange a
6 display into a grid of tiles that are not permitted
7 to overlap," as compared to a covered window system,
8 that limitation would add a requirement for
9 functionality that is not necessarily present in a
10 covered windows system; isn't that correct?

11 MR. MICALLEF: Object to form, incomplete
12 hypothetical. I also object because the question is
13 irrelevant.

14 THE WITNESS: I may have misunderstood the
15 question, because I've already said that this is a
16 functionality that can be present in a covered
17 windowing system.

18 BY MR. HEINTZ:

19 Q Right. And you've also said that it's not
20 necessarily present in a covered windows system;
21 correct?

22 A Yes.

23 Q Okay. What I'm asking you is if you look
24 at this limitation, okay, and particularly the part
25 that reads "tiles that are not permitted that

1 DAVID R. KARGER

2 overlap," that adds a requirement for functionality
3 that is not necessarily present in a covered windows
4 system?

5 MR. MICALLEF: Same objection. Is.

6 THE WITNESS: It's not clear to me.
7 Again, certainly in a covered windows system, it's
8 possible to arrange those windows so that they are
9 not overlapping, right.

10 Without any -- the user can do -- there
11 are many ways one can take a covered windows system
12 and arrange those windows so that they are not
13 overlapping. It would be very strange to have a
14 covered windows system which requires the windows to
15 be overlapping at all times.

16 So to say that you are going to execute
17 instructions that put the tiles into a
18 nonoverlapping configuration, that's something that
19 a covered windowing system has to be able to do
20 also.

21 BY MR. HEINTZ:

22 Q Right. But we're not just saying that
23 we're putting them into a nonoverlapping
24 configuration. We're saying we're going to arrange
25 them into a grid of tiles that are not permitted to

1 DAVID R. KARGER

2 overlap. That means they cannot overlap.

3 And don't you have to add something to a
4 covered windows system beyond what is required in
5 the simplest sense to implement such a system to
6 prevent the tiles from overlapping?

7 MR. MICALLEF: Object to form; relevance,
8 incomplete hypothetical.

9 THE WITNESS: And if I build a covered
10 windows system and every time I try to put one tile
11 on top of another one, it crashes, wouldn't that be
12 a covered windows system in which the tiles are not
13 permitted to overlap?

14 BY MR. HEINTZ:

15 Q I'm sorry, is that your answer?

16 A If I simply failed to implement the
17 functionality to handle the case of overlapping
18 tiles so that when it happened, the system just
19 died, that would seem to me to be a system within
20 which the tiles are not permitted to overlap, but
21 one where I have certainly not added any
22 functionality, I've made a mistake of failing to
23 implement some necessary functionality.

24 Q Let me understand -- I'm sorry, was that
25 your answer?

1 DAVID R. KARGER

2 A Yes.

3 Q Okay. So you are saying that if I build a
4 system in which if a user tries to drag one window
5 or one tile on top of another and the system reaches
6 a program execution fault such that the processor
7 stops working and the system crashes, that would be
8 your example of how you wouldn't have to add any
9 functionality; is that correct?

10 MR. MICALLEF: Object -- let him finish
11 his question.

12 THE WITNESS: Sorry.

13 BY MR. HEINTZ:

14 Q Is that correct?

15 MR. MICALLEF: Object to form.

16 THE WITNESS: So to be more concrete, if I
17 took a covered windows system and then removed the
18 code that dealt with window overlaps, depending how
19 I did it, I would quite likely end up with a system
20 that worked fine until I tried to overlap a pair of
21 windows.

22 When I did try to overlap a pair of
23 windows, it would try to invoke some code which no
24 longer existed in the system and would therefore
25 stop operating.

1 DAVID R. KARGER

2 So by removing the code that handles the
3 window overlaps, I have now created a system which
4 does not permit overlapping windows anymore.

5 BY MR. HEINTZ:

6 Q Can you think of any other way in which
7 you could accomplish a system that has tiles that
8 are not permitted to overlap where you are not
9 adding something to a covered windows system that
10 doesn't prevent tiles from overlapping?

11 MR. MICALLEF: Object to form; relevance.

12 THE WITNESS: So if I designed a windowing
13 system which did not have any functionality for the
14 end user to move windows, then as long as my system
15 never created any overlapping tiles, it would not be
16 possible for the user to move these tiles into an
17 overlapping configuration.

18 BY MR. HEINTZ:

19 Q In that example, is that because the
20 system could only open one or two windows at a time,
21 or is there -- are you saying it's just because the
22 user hasn't asked for enough windows to be opened
23 where they would overlap?

24 MR. MICALLEF: Object to form.

25 THE WITNESS: We're very far into

1 DAVID R. KARGER

2 hypothetical territory now, but I could design a
3 system which creates windows in available space on
4 the screen. This is not unusual. And as long as
5 there is more space available, it might create them
6 without overlapping them.

7 Again, if the user did not have the
8 ability to move these windows around, then there
9 would be no way to move them into an overlapping
10 configuration.

11 Now, this entirely hypothetical system
12 might have the ability to create windows that
13 overlapped as well. It's kind of up to the system
14 to decide whether to put the window here where there
15 aren't currently any windows or to put the window
16 here where there are.

17 BY MR. HEINTZ:

18 Q In that hypothetical, though, you would
19 have to have code in that system that detected where
20 the existing windows were and that selected an area
21 for the new window that was outside the boundaries
22 of those existing windows, wouldn't you?

23 MR. MICALLEF: Object to form, incomplete
24 hypothetical, relevance.

25 THE WITNESS: I think if you had a system

1 DAVID R. KARGER

2 which placed windows randomly and happened to get
3 into a state where there were no overlapping windows
4 and the user was then not able to move them, then
5 you would be in a system where the user could not --
6 was not able to make the windows overlap.

7 BY MR. HEINTZ:

8 Q Right. But the claim doesn't say the user
9 is not permitted to make them overlap; right? This
10 claim limitation says the tiles are not permitted to
11 overlap. And if you're going to make the windows
12 come up randomly, then there's also a chance that
13 the tiles are going to be permitted to overlap.
14 Isn't that the case?

15 MR. MICALLEF: Object to form; relevance,
16 incomplete hypothetical.

17 THE WITNESS: I'm sorry, I need that
18 question again.

19 BY MR. HEINTZ:

20 Q Sure. You gave an example where the
21 system would randomly place the windows. First
22 question, if the windows are being randomly placed,
23 are they even in a grid?

24 MR. MICALLEF: Object to form, incomplete
25 hypothetical, relevance.

1 DAVID R. KARGER

2 THE WITNESS: Again, we're certainly in
3 hypothetical world right now. But they could end up
4 in a grid.

5 BY MR. HEINTZ:

6 Q But not necessarily so?

7 A They could end up not in a grid, yes.

8 Q And if these windows are being placed
9 randomly on the screen, isn't it true that they
10 could overlap, they would be permitted to overlap,
11 depending on the results of the random number
12 generator you happen to use?

13 MR. MICALLEF: Object to form; relevance,
14 incomplete hypothetical.

15 THE WITNESS: So there's some ambiguity in
16 the text of the amended claim. This is just in
17 response to your question. Because the claim says
18 that you are going to arrange the display into a
19 grid of tiles that are not permitted to overlap, so
20 you have to have those sorts of instructions, but it
21 doesn't say that you are not permitted to also have
22 instructions that arrange the display into a grid of
23 tiles that do overlap.

24 BY MR. HEINTZ:

25 Q Okay. But the claim clearly, as you just

1 DAVID R. KARGER

2 said, requires instructions that will not permit the
3 tiles to overlap.

4 A Yes. But the example that I just gave you
5 of this random placement of tiles, if it places
6 those tiles in a nonoverlapping configuration and
7 then does not give the user any functionality for
8 moving them, then it has fulfilled this description
9 of executing some instructions that arrange the
10 tiles into a grid of things that are not overlapping
11 and are not permitted to overlap.

12 Q When the next random window gets placed,
13 if it overlaps an existing window, then what?

14 MR. MICALLEF: Then what, okay. Object to
15 form; incomplete hypothetical and irrelevant.

16 THE WITNESS: So that is performing some
17 functionality that is not covered by this claim.

18 BY MR. HEINTZ:

19 Q Because the claim requires the windows not
20 be permitted to overlap; correct?

21 MR. MICALLEF: Same objections.

22 THE WITNESS: Again, what we've just
23 described is a case where it first -- first executes
24 instructions fulfilling the claim, and so it has
25 fulfilled the claim.

1 DAVID R. KARGER

2 Later on it may go and do something that
3 does not fulfill the claim, but it has nonetheless
4 first fulfilled the claim.

5 BY MR. HEINTZ:

6 Q There is a difference between not
7 overlapping and not permitted to overlap; is that
8 correct?

9 A Yes.

10 Q In your hypothetical example where the
11 windows are placed at random locations or randomly
12 chosen locations, is that a covered windows system?

13 MR. MICALLEF: Object to form; relevance,
14 incomplete hypothetical.

15 THE WITNESS: So are you asking about
16 covered windows systems as defined by Myers?

17 BY MR. HEINTZ:

18 Q Yes.

19 A So as we saw in the paragraph that we
20 began discussing, page 67, column 2, Myers asserts
21 that "a window manager is classified as covered if
22 it allows windows to overlap."

23 In the context of that paragraph, I would
24 understand that to be that if it is possible to have
25 a circumstance in which the windows overlap in the

1 DAVID R. KARGER

2 system, then that is a covered windows system.

3 Tiled windows system is one in which there is never
4 any possibility of having overlapping windows.

5 And so -- and again, in this hypothetical
6 randomly placed window situation, since there is a
7 possibility that the windows -- since under some
8 random choices those windows can end up overlapping,
9 that would make it a covered windows system.

10 Q Okay. Sir, I'm going to direct your
11 attention back to your expert report, Exhibit 1110.
12 In particular, paragraph 53. The third sentence in
13 paragraph 53 states that "the '403 Patent describes
14 several embodiments that permit tiles to overlap,
15 including when a tile is enlarged to cover the
16 entire screen or a" "portion of it." Then there's a
17 citation to Exhibit 1001 at column 9, 43 to 56.

18 Do you see that?

19 A Yes, I do.

20 Q Let me hand you Exhibit 1001.

21 (Exhibit 1001 previously
22 identified.)

23 BY MR. HEINTZ:

24 Q And I'll ask you to direct your attention
25 to column 9, lines 43 to 56. Do you have that, sir?

1 DAVID R. KARGER

2 A Yes, I do.

3 Q So the first sentence in that section
4 reads, "In a preferred embodiment, double-clicking a
5 tile causes that tile to occupy a substantial
6 fraction of the whole display area"; correct?

7 A Yes.

8 Q Okay. Is it necessarily true that if a
9 tile occupies a substantial fraction of the whole
10 display area, it necessarily overlaps other tiles?

11 (Witness reviewed document.)

12 A All right. Can you restate your question?
13 I needed to check a few references.

14 Q Sure. We're referring to the first
15 sentence, and I asked you if it was necessarily true
16 that because a tile occupied a substantial fraction
17 of the whole display, it would necessarily overlap
18 other tiles.

19 A So the reason I read it that way is if you
20 look in column 8, line 15, you'll see exactly the
21 same text, right. Or sorry, very close match in the
22 text, where it describes -- in column 9, it says
23 that "double-clicking a tile causes that tile to
24 occupy a substantial fraction of the whole display
25 area."

1 DAVID R. KARGER

2 Similarly here in column 8, line 15, it's
3 asserted that a "window may occupy a substantial
4 percentage of available screen space."

5 So almost identical text. And so reading
6 this text of column 9, the implication is that when
7 you double-click in this way, the tile is going to
8 act in the way that you've sort of articulated
9 windows act, which is where they cover each other up
10 and this is claimed to be one of the benefits of
11 this tiling approach.

12 So the way this reads to me is that this
13 double clicking causes the tile to behave in the way
14 that you've described windows as behaving before and
15 covering each other up.

16 BY MR. HEINTZ:

17 Q Well, the patent takes pains to
18 distinguish tiles from windows, does it not?

19 A Yes, it does.

20 Q So why would you assume that the behavior
21 of the tile is going to mimic a behavior of the
22 window, when that particular behavior of the window
23 is criticized in the patent?

24 A Because of this matched text. And, again,
25 this is describing sort of an exceptional aspect,

1 DAVID R. KARGER

2 right. This is when you double-click the tile, it
3 causes the tile to occupy a substantial fraction of
4 the whole display area, right.

5 And so, again, a natural way -- the most
6 obvious way to read that is that it is blowing up
7 and now presenting much more detail, and in order to
8 do so, it is overlapping the rest of what's on the
9 screen.

10 Q That's your assumption, but the patent
11 doesn't actually say that, does it?

12 MR. MICALLEF: Object to form.

13 THE WITNESS: It does not.

14 BY MR. HEINTZ:

15 Q Okay. And let's go back to column 9, and
16 I'll direct your attention to the second sentence,
17 starting at line 45, that reads, "In this
18 embodiment, double clicking tile 402 or 412 causes
19 the image to be expanded to fit the whole display
20 area."

21 Do you see that?

22 A Yes, I do.

23 Q That sentence says the image is expanded
24 to fit the whole display area and not the tile; is
25 that correct?

1 DAVID R. KARGER

2 A That is what it says.

3 Q So this sentence also does not disclose a
4 situation where a tile is overlapping with another
5 tile; isn't that correct?

6 MR. MICALLEF: Object to form.

7 THE WITNESS: If you look at line 50, it
8 refers to an enlarged tile. And that kind of
9 provides the indication of what's going on in the
10 other examples, right.

11 There's an enlarged tile which is going to
12 contain a document. It seems obvious that in the
13 other cases, you will have enlarged tiles containing
14 the image or the e-mail mailbox window.

15 BY MR. HEINTZ:

16 Q So the sentence you referred to at line 50
17 reads, "If tile 404 were double-clicked"; correct?

18 A Yes.

19 Q That's not one of the tiles in the prior
20 sentence that, when double clicked, "file 402 or 412
21 causes the image to be expanded to fit the whole
22 display area"; correct?

23 A Yes, it is referring to a different tile.

24 Q Okay. And that's an enlarged tile, but
25 not one that covers the entire screen; correct?

1 DAVID R. KARGER

2 MR. MICALLEF: Object to form.

3 THE WITNESS: I am not sure -- this
4 sentence doesn't really say exactly how enlarged the
5 tile is. It may be enlarged as was described in the
6 first sentence to occupy a substantial portion, or
7 it may be enlarged to occupy the whole display.
8 It's just silent on that.

9 BY MR. HEINTZ:

10 Q Right. So if it's the former, that it's
11 occupying a substantial portion, as with the first
12 sentence, starting at line 43, the sentence starting
13 at line 50 also does not say that the tile 404 would
14 overlap any other tile; isn't that correct?

15 MR. MICALLEF: Object to form.

16 THE WITNESS: Sorry, restate the question,
17 please.

18 BY MR. HEINTZ:

19 Q That sentence that starts at line 50 that
20 reads "If tile 404 were double-clicked," et cetera,
21 that sentence doesn't explicitly say that tile 404
22 would overlap any other tile, does it?

23 MR. MICALLEF: Object to form.

24 THE WITNESS: It does not explicitly say
25 so.

DAVID R. KARGER

BY MR. HEINTZ:

Q And, in fact, if tile 404 were enlarged to occupy, let's say, 80 percent of the screen, what could happen is the other tiles in the grid could be displayed in the remaining 20 percent. Wouldn't that be possible?

MR. MICALLEF: Object to form; incomplete hypothetical, relevance.

THE WITNESS: The patent says nothing about that.

BY MR. HEINTZ:

Q Just like it says nothing about tiles overlapping; correct?

A Correct.

Q Okay. So in paragraph 53 of your report, Exhibit 1110, you say that the patent gives several embodiments that permit tiles to overlap.

We've talked about the ones you've cited at column 9, lines 43 to 56. Is there anywhere else in the '403 patent you say there's an embodiment that permits tiles to overlap?

A Would you like me to reread the whole '403 patent in order to answer that question?

Q If that's what you need to do, please do

1 DAVID R. KARGER

2 so.

3 A Okay. Then I'll at least take a skim.

4 (Witness reviewed document.)

5 Okay. Do you want to restate the
6 question?

7 Q Sure. Did you find any other examples
8 where the '403 patent describes tiles being
9 permitted to overlap?

10 A No.

11 Q Thank you.
12 We've been going for more than an hour, so
13 would you like to take a break?

14 A Sure.

15 (Recess.)

16 BY MR. HEINTZ:

17 Q Back on the record. Dr. Karger, I'll ask
18 you to direct your attention back to paragraph 49 of
19 your report, which is Exhibit 1110 again.

20 A Yes.

21 Q You say in paragraph 49 that "'tiles' were
22 known in the prior art and that none of the prior
23 art examples" that you "have been able to identify
24 state that they must be persistent." "They" means
25 tiles; correct?

1 DAVID R. KARGER

2 A Correct.

3 Q And you cite to Exhibit 1020, which is the
4 '750 patent; correct?

5 A Yes.

6 Q So I'll hand you Exhibit 1020.

7 (Exhibit 1020 previously
8 identified.)

9 BY MR. HEINTZ:

10 Q Now, Dr. Karger, I'd ask you whether this
11 Exhibit 1020 matches the definition of tiles found
12 in Exhibit 1088 that you cite in the same paragraph
13 49. So let me hand you Exhibit 1088 as well.

14 (Exhibit 1088 previously
15 identified.)

16 MR. MICALLEF: Object to form.

17 BY MR. HEINTZ:

18 Q So the exhibit number is down in the lower
19 right-hand corner on the first page.

20 A 1088.

21 Q So again, Dr. Karger, the question is
22 you've cited to both Exhibit 1088 and Exhibit 1020
23 in paragraph 49. And I'm asking you whether either
24 the definition or the description of tiles in those
25 two references are consistent.

1 DAVID R. KARGER

2 MR. MICALLEF: Object to form.

3 THE WITNESS: What do you mean by
4 "consistent"?

5 BY MR. HEINTZ:

6 Q Well, are the definitions identical?

7 A No, they're not.

8 Q How are they different?

9 MR. MICALLEF: Object to form.

10 THE WITNESS: So the use of tile in the
11 Nadan patent, Exhibit 1020, is somewhat similar to
12 the way we've been using it in this general
13 discussion. It's a region of the screen which is
14 fed information, which is used to display
15 information which is semantically distinct from
16 other parts of the screen.

17 Whereas in Weadock's Exhibit 1088, tile
18 there is, again, a visual element, but this is used
19 to kind of populate a background of a desktop.

20 BY MR. HEINTZ:

21 Q Okay. Can I ask you where in Exhibit 1088
22 you're referring?

23 A It's in the glossary on page -- well, it's
24 native page 340. It's labeled as page 41 of the
25 exhibit. There's just a glossary definition of

1 DAVID R. KARGER

2 tile.

3 Q Does Exhibit 1088 describe the tile as
4 being something that's updated?

5 A No.

6 Q Do you have any understanding or any
7 reason to believe that the tile in 1088 is something
8 that's going to be updated?

9 A No.

10 Q How about in Exhibit 1020? What's the
11 definition of tile you're relying on in that
12 exhibit?

13 MR. MICALLEF: Object to form.

14 THE WITNESS: So if you look at column 3,
15 line 58, "It is another object to provide for
16 distributing information in a tile format whereby
17 each user can assign a location on that user's video
18 screen for display of the tile, and the same display
19 information may be displayed on different locations
20 on different video screens and simultaneously
21 updated."

22 That's the introduction of the concept of
23 the tile as sort of a small display element which
24 can be updated.

25 BY MR. HEINTZ:

1 DAVID R. KARGER

2 Q So again, that's different than 1088;
3 correct?

4 A Correct.

5 Q And the third reference you cite in that
6 paragraph is Exhibit 1040. So I'll hand you a copy
7 of Exhibit 1040.

8 (Exhibit 1040 previously
9 identified.)

10 BY MR. HEINTZ:

11 Q And the first question is, what portion of
12 1040 are you relying on for your understanding of
13 what tile means as used in that document?

14 MR. MICALLEF: Object to form.

15 THE WITNESS: So if you look at page --
16 I'm sorry, at column 2, line 53, there's a paragraph
17 that describes the information being displayed here
18 "the programming guide system, presents scheduling
19 information for programs via a schedule display
20 having three display elements, a category display, a
21 subcategory display and a program display.

22 "The category display displays an array of
23 category tiles representing categories of
24 programming information. The subcategory display
25 displays an area of subcategory tiles representing

1 DAVID R. KARGER

2 subcategories that are associated." And the
3 "program display displays an array of program
4 tiles."

5 And we can see these presented in many of
6 the figures. I think it was 2 and 3, for example.

7 BY MR. HEINTZ:

8 Q Is it fair to say that the meaning of
9 tiles in Exhibit 1040 is different from the meaning
10 of tiles in Exhibit 1088?

11 MR. MICALLEF: Object to form.

12 THE WITNESS: It depends what you mean by
13 "meaning." It depends what "meaning" means.

14 All three of these are using tiles in
15 terms of sort of a small display element, right. In
16 1088, that display element is static, is used to
17 render repeatedly in the background. In the other
18 two it's a dynamic element which is updated and
19 displays information -- different information in
20 different tiles, instead of repeating the same tile
21 over and over again.

22 But I would have to read a lot more of
23 these patents to answer firmly whether that's
24 part -- whether part of that -- whether each of
25 these patents intends for the meaning of tile to

1 DAVID R. KARGER

2 cover all of these different aspects, or are just
3 referring to tile as a small display element within
4 the larger display.

5 BY MR. HEINTZ:

6 Q Let's start with Exhibit 1088. How is the
7 use of tile -- of the term "tile" in Exhibit 1088
8 relevant to the '403 patent?

9 MR. MICALLEF: Object to form.

10 THE WITNESS: How is it relevant to the
11 patent?

12 BY MR. HEINTZ:

13 Q Let me withdraw that and start from a
14 different direction. The tiles of the '403 patent
15 are updatable; correct?

16 A The '403 patent certainly describes
17 updating the tiles that are being displayed, yes.

18 Q And in Exhibit 1088, there is no
19 description of updating of tiles as that term is
20 used; correct?

21 A Correct.

22 Q Okay. So the meaning of tiles in the
23 Exhibit 1088 is not the same as the meaning of tiles
24 in the '403 patent; isn't that correct?

25 MR. MICALLEF: Object to form.

1 DAVID R. KARGER

2 THE WITNESS: Can you restate your
3 question?

4 BY MR. HEINTZ:

5 Q Restate it or repeat it?

6 A Sorry, repeat.

7 MR. HEINTZ: I'd ask the reporter to read
8 the question back.

9 (Record read by the court reporter as
10 follows: "Q: So the meaning of tiles in
11 the Exhibit 1088 is not the same as the
12 meaning of tiles in the '403 patent;
13 isn't that correct?")

14 MR. MICALLEF: Same objection.

15 THE WITNESS: So, again, this comes down
16 to what does -- what "meaning" means. I will of
17 course note that the board has decided what tile
18 means, and that's the construction under which I'm
19 generally operating.

20 The '403 patent certainly talks about the
21 tiles being updated, but it's not clear if that
22 becomes part of the meaning of tiles or whether it
23 is something you're doing with the tile.

24 But the meaning of tile is more about the
25 fact that it is just a region of the screen, for

1 DAVID R. KARGER

2 example. Do you see the distinction I'm trying to
3 draw?

4 BY MR. HEINTZ:

5 Q I do somewhat. It would be correct, then,
6 that one of the properties of a tile in the '403
7 patent is that it's at least capable of being
8 updated; correct?

9 MR. MICALLEF: Object to form.

10 THE WITNESS: That is, I believe, part of
11 the construction of the board, yes, that a tile
12 is -- that has content -- whose content may be
13 refreshed.

14 BY MR. HEINTZ:

15 Q And there is no ability to update the
16 content of the tiles as described in Exhibit 1088,
17 is there?

18 A That's correct.

19 Q Okay. So it's clear to you, then, that
20 those two terms -- I'm sorry, the way those terms
21 are being used in those two references are
22 different, is it not?

23 MR. MICALLEF: Object to form.

24 BY MR. HEINTZ:

25 Q At least on the basis of the ability to

1 DAVID R. KARGER

2 update the tile?

3 MR. MICALLEF: Object to form.

4 THE WITNESS: It is -- it is clear to me
5 that the tiles in the glossary of Exhibit 1088 are
6 not described as being updatable tiles, yes.

7 BY MR. HEINTZ:

8 Q So then why is it relevant to
9 understanding the meaning of tiles in the '403
10 patent -- sorry, let me refresh that.

11 Why is the meaning of tiles in Exhibit
12 1088 relevant to ascertaining the meaning of tiles
13 in the '403 patent?

14 MR. MICALLEF: Object to form.

15 THE WITNESS: It's relevant, I guess, in
16 the sense of being comprehensive. So I've brought
17 forth several examples of tiles which are used quite
18 closely to the usage in '403 and pointed out that
19 neither of those examples requires persistence.

20 Here in the Exhibit 1088, I have a usage
21 of tile which is more -- I have a -- which is less
22 similar to what's used in the '403 patent, but there
23 too there is no requirement of persistence.

24 BY MR. HEINTZ:

25 Q But Exhibit 1088 is using the term

1 DAVID R. KARGER

2 differently than the term is being used in the '403
3 patent; correct?

4 MR. MICALLEF: Object to form.

5 BY MR. HEINTZ:

6 Q Let me ask an even simpler question for
7 you. When the '403 patent refers to tiles, it is
8 not referring to a small graphic that a browser can
9 use as a Web page background by repeating it to fill
10 a page space, as it's used in Exhibit 1088. That
11 would be correct, wouldn't it?

12 A Yes, I agree with that.

13 Q Thank you, Doctor.

14 Are you familiar with the term "tiles" as
15 it's used in the context of the Windows 8 operating
16 system?

17 A No, I don't have a great deal of
18 familiarity with that.

19 Q Okay. Am I to understand from paragraph
20 49 of your report, Exhibit 1110, that you don't
21 believe that tiles as used in the '403 patent should
22 be persistent?

23 MR. MICALLEF: Object to form.

24 THE WITNESS: Can I get that repeated?

25 BY MR. HEINTZ:

1 DAVID R. KARGER

2 Q Let me restate it. In paragraph 49 you
3 point to the use of the word "tile" in different
4 references, you note that as used in those
5 references, the term "tile" is not persistent. And
6 then my question is, am I to understand from that
7 that you conclude from that that "tile," as used in
8 the '403 patent, should not be understood to mean
9 something that's persistent?

10 MR. MICALLEF: Object to form; irrelevant.

11 (Witness reviewed document.)

12 THE WITNESS: I'm seeking the single usage
13 of the word "persistent" in the '403 patent. It's
14 escaping me.

15 BY MR. HEINTZ:

16 Q Column 15. I don't know where exactly you
17 want to look, but the sentence starts around line
18 59. I'm sorry, 62.

19 A There we go. Good. I wanted to have that
20 in front of me when I answered your question.

21 (Record read by the court reporter as
22 follows: "Q: In paragraph 49 you point
23 to the use of the word "tile" in
24 different references, you note that as
25 used in those references, the term "tile"

1 DAVID R. KARGER

2 is not persistent. And then my question
3 is, am I to understand from that that you
4 conclude from that that "tile," as used
5 in

6 the '403 patent, should not be understood
7 to mean something that's persistent?")

8 MR. MICALLEF: Same objections.

9 THE WITNESS: That's correct.

10 BY MR. HEINTZ:

11 Q In reaching your conclusion, did you
12 examine the specification of the '403 patent?

13 A Yes, I did.

14 Q Let me direct your attention to column 8,
15 lines 29 through 34. I will read that passage to
16 you.

17 "In the present invention, a third
18 graphical representation of programs and files,
19 herein called a tile, is introduced."

20 Sir, what do you think the -- what's your
21 understanding of what the word "introduced" means as
22 used in that sentence of the '403 patent?

23 A That they are introducing a -- that they
24 are introducing this term of tile to talk about what
25 they're going to be making claims about in the

1 DAVID R. KARGER

2 patent.

3 Q And does "introduced" signify to you that
4 they intend this to be a new term?

5 MR. MICALLEF: Object to form.

6 THE WITNESS: A new term. Do you mean a
7 term that has never been used before?

8 BY MR. HEINTZ:

9 Q Well, a term that is not familiar to the
10 reader in the context of the subject matter to which
11 the '403 patent is directed.

12 A That's not clear. What is introduced is
13 this third graphical representation of programs and
14 files.

15 They're not saying that they're
16 introducing the term "tile." They are introducing
17 this -- or claiming to introduce this third
18 graphical representation of programs and files.

19 Q Okay. So there's a new kind of graphical
20 representation that this patent is going to be
21 referring to as the tile --

22 A Yes.

23 Q -- that's being introduced; correct?

24 A Yes.

25 Q Okay. And "introduced" means this is

1 DAVID R. KARGER

2 some -- at least in the mind of the writer, this is
3 something new, this is intended to be a new thing
4 that's going to be introduced, a new graphical
5 representation of programs and files; correct?

6 MR. MICALLEF: Object to form; relevance.

7 THE WITNESS: That is my understanding of
8 the -- that the authors of this patent believe that
9 there is something new here.

10 BY MR. HEINTZ:

11 Q Okay. And in particular, the "something
12 new" is this graphical representation of programs
13 and files that they are going to call a tile;
14 correct?

15 A Yes.

16 Q Okay. Doesn't that signify to you that
17 the authors intended this representation to be
18 something different from what's described, for
19 example, in 1088?

20 MR. MICALLEF: Object to form.

21 BY MR. HEINTZ:

22 Q Exhibit 1088.

23 A Intended it to be something different. So
24 what I can infer from this paragraph is that they
25 are describing something which they do not think is

1 DAVID R. KARGER

2 an icon or a window.

3 That's what this "third" refers to. The
4 use of "third" in this sentence is referring to
5 their belief that they are describing something that
6 is not an icon and is not a window.

7 Q Well, it means more than that, doesn't it?
8 I mean, a toaster is not a window or icon yet it's
9 not being introduced. The authors don't say I'm
10 going to introduce you to a toaster; correct?

11 MR. MICALLEF: Object to form.

12 THE WITNESS: That is correct. But they
13 are saying they are going to introduce me to
14 something which is not an icon and is not a window.

15 BY MR. HEINTZ:

16 Q And doesn't the word "introduced" connote
17 that it's going to be something you haven't seen
18 before, at least in their interpretation?

19 MR. MICALLEF: Object to form; relevance.

20 THE WITNESS: I will agree that they
21 believe that there is something new here, and that's
22 what they're asserting through this sentence.

23 BY MR. HEINTZ:

24 Q Okay. Now, the next sentence of that
25 passage at column 8 reads, "tiles permit dynamic

1 DAVID R. KARGER

2 bookmarking of information in that each tile is a
3 viewer of a single information source, including
4 streaming data sources, and can be customized with
5 the user's choice of content."

6 Do you see that sentence?

7 A Yes, I do.

8 Q Do you have an understanding of the
9 concept of bookmarking?

10 A Yes, I do.

11 Q What's your understanding of the concept
12 of bookmarking?

13 A The concept of bookmarking is to hold
14 something -- is to provide rapid access to
15 something, often something that you have seen before
16 and would like to return to.

17 Q In your experience, are bookmarks
18 persistent?

19 MR. MICALLEF: Object to form.

20 THE WITNESS: In my experience, they can
21 be.

22 BY MR. HEINTZ:

23 Q Do you have experience with bookmarks that
24 are not persistent?

25 A So in preparing this work, I did a lot of

1 DAVID R. KARGER

2 work with Adobe Acrobat, and I would often mark
3 certain spots in the document that I was reading
4 using a highlighting functionality in order to allow
5 me to return to that spot in the document at
6 previous -- at a later time.

7 But if the -- I had several cases where
8 the laptop crashed before I had saved that document,
9 and then those markings vanished.

10 Q When the system worked correctly and
11 didn't crash, were those mark --

12 A If I explicitly saved the document, then
13 yes, those bookmarks would be there later.

14 Q Are you familiar with icons as used in the
15 desktop of the Windows 95 system?

16 A Yes.

17 Q Were those icons persistent?

18 A Yes, I think that they were.

19 Q And, again, I'm not talking about
20 instances where the system crashes before it gets
21 saved. In the normal operation, desktop icons were
22 persistent, were they not?

23 A I would grant that they fulfill the sort
24 of standard notion of persistence.

25 Q And what is that standard notion?

1 DAVID R. KARGER

2 A That they continue to exist for some
3 length of time.

4 Q Would they continue to exist -- sorry.

5 In your understanding of the standard
6 notion of persistence, would they continue to exist
7 from session to session?

8 MR. MICALLEF: Object to form.

9 THE WITNESS: So "session" is one of the
10 terms that has not really been carefully defined in
11 these proceedings. But they certainly can be seen
12 as persisting from session to session for certain
13 natural understandings of "session."

14 BY MR. HEINTZ:

15 Q What's your natural understanding of
16 session?

17 A Well, one kind of session might be where I
18 leave the computer to go get some coffee then I come
19 back to the computer and start a new session of
20 work.

21 Another one might be where I turn off the
22 computer and I start it again later to do some
23 additional work.

24 Q Any others?

25 A There is this notion of a session layer in

1 DAVID R. KARGER

2 the sort of seven-layer link protocol, which has to
3 do with sort of a -- an interaction with a certain
4 application, some period of interaction which is all
5 related in some way. I'd have to go back, digging
6 through my networking books, to get a precise
7 definition of a session layer.

8 Q But we're talking about a PC communicating
9 with some remote device?

10 A Yes.

11 Q And just so we're clear, under that
12 natural understanding of what session means, would
13 it be true that icons -- desktop icons in the
14 Windows 95 system were persistent?

15 MR. MICALLEF: Object to form.

16 THE WITNESS: Yes, it would.

17 BY MR. HEINTZ:

18 Q Referring to those same icons in the
19 win -- desktop icons in the Windows 95 system, what
20 would happen if a user double-clicked on one of
21 those icons?

22 MR. MICALLEF: Object to form.

23 THE WITNESS: The common behavior with
24 icons is to launch either the program indicated by
25 that icon or the program responsible for the file

1 DAVID R. KARGER

2 indicated by that icon.

3 BY MR. HEINTZ:

4 Q What do you mean by the word "launch"?

5 A I mean transfer execution to.

6 Q Would that be the same as calling an
7 application?

8 MR. MICALLEF: Object to form.

9 THE WITNESS: That would be an example of
10 calling an application, yes.

11 BY MR. HEINTZ:

12 Q Is it fair to say, then, that a user of
13 the Windows 95 system could use the icons to call an
14 application and again, for clarity, the desktop
15 icons we've been talking about on the Windows 95
16 system?

17 MR. MICALLEF: Object to form; relevance.

18 THE WITNESS: Repeat of question, please?

19 (Record read by the court reporter as
20 follows: "Q: Is it fair to say, then,
21 that a user of the Windows 95 system
22 could use the icons to call an
23 application and again, for clarity, the
24 desktop icons we've been talking about on
25 the Windows 95 system?")

1 DAVID R. KARGER

2 THE WITNESS: Yes.

3 BY MR. HEINTZ:

4 Q Earlier we discussed that those Windows 95
5 desktop icons were persistent from session to
6 session; correct?

7 A Yes.

8 Q Was it important for a user that they be
9 persistent from session to session?

10 MR. MICALLEF: Object to form; relevance,
11 incomplete hypothetical.

12 THE WITNESS: Important -- it is useful.
13 Is that what you mean by "important"?

14 BY MR. HEINTZ:

15 Q That's one meaning, for sure.

16 In your experience, did users rely on
17 those applications to launch application programs?

18 MR. MICALLEF: Object to form; relevance.

19 THE WITNESS: I think you need to restate
20 that question.

21 BY MR. HEINTZ:

22 Q In your experience, did users of the
23 Windows 95 operating system rely on those desktop
24 icons to call application programs?

25 MR. MICALLEF: Object to form; relevance,

1 DAVID R. KARGER

2 lack of personal knowledge.

3 THE WITNESS: I assume that some did.

4 BY MR. HEINTZ:

5 Q Did you ever use the Windows 95 system?

6 A Yes, I did.

7 Q Did you rely on those desktop icons to
8 call application programs?

9 A At times.

10 Q In that Windows 95 system we discussed
11 with those desktop icons, those icons weren't the
12 only way to call application programs, were they?

13 MR. MICALLEF: Object to form; incomplete
14 hypothetical, irrelevant.

15 THE WITNESS: We are talking about a
16 20-year-old operating system, so my memory is not
17 perfect. But I do believe that there were other
18 ways to call application programs.

19 BY MR. HEINTZ:

20 Q For example, one could press the start
21 button and then look under programs and select from
22 a menu?

23 A Yes --

24 MR. MICALLEF: Same objections.

25 THE WITNESS: Yes.

1 DAVID R. KARGER

2 BY MR. HEINTZ:

3 Q And an application that can be called from
4 that program menu could also be called by an icon
5 from the desktop, if the system was so configured;
6 correct?

7 MR. MICALLEF: Object to form; relevance,
8 incomplete hypothetical.

9 THE WITNESS: Correct.

10 BY MR. HEINTZ:

11 Q Sir, I'll ask you to direct your attention
12 to column 11 of the '403 patent. It's Exhibit 1001.
13 In particular, I'll direct your attention to line
14 I'll call it 32. It begins "in a preferred
15 embodiment, a grid of tiles replaces the
16 functionality of the computer desktop utilized by
17 many modern computer operating systems."

18 Do you see that?

19 A Yes, I do.

20 Q Do you have an understanding of what that
21 sentence means?

22 MR. MICALLEF: Object to form.

23 THE WITNESS: I infer an understanding
24 from the elaboration provided in the rest of this
25 paragraph.

1 DAVID R. KARGER

2 BY MR. HEINTZ:

3 Q Okay. What is that understanding?

4 A My understanding is that the grid of tiles
5 is replacing the static icons and tool bars that are
6 traditionally found on a desktop.

7 Q And one of the functions of the icons is
8 to call application programs, is it not?

9 MR. MICALLEF: Object to form, incomplete
10 hypothetical, irrelevant.

11 THE WITNESS: That is a function of icons,
12 yes. But it is not the focus issue of this
13 paragraph.

14 BY MR. HEINTZ:

15 Q And those icons that are being replaced by
16 the grid of tiles were persistent, as we discussed
17 earlier; correct?

18 MR. MICALLEF: Object to form; irrelevant,
19 incomplete hypothetical.

20 THE WITNESS: Yes, correct.

21 BY MR. HEINTZ:

22 Q And just so we're clear, the Windows 95
23 system would have been a modern computer operating
24 system at the time of the '403 patent; is that
25 correct?

1 DAVID R. KARGER

2 A Yes.

3 Q Dr. Karger, in 1999, time of the '403 --
4 I'm sorry, time that the provisional for the '403
5 patent was filed, do you have a sense for what a --
6 how much ram a typical PC had?

7 A Not something I can recall off the top of
8 my head.

9 BY MR. HEINTZ:

10 Q Do you recall whether a typical PC in that
11 timeframe had enough RAM to store the entire Windows
12 95 operating system?

13 A No, I do not.

14 Q Sir, I'll direct your attention to column
15 8, line 57 to 58 of the '403 patent. Those lines
16 read, "a tile is associated with a program, file or
17 data stream in the same way that an icon and a
18 window are."

19 Do you see that?

20 A Yes, I do.

21 Q Do you have an understanding as to how an
22 icon is associated with a program, a file or a data
23 stream?

24 MR. MICALLEF: Object to form.

25 THE WITNESS: Yes, I do.

1 DAVID R. KARGER

2 BY MR. HEINTZ:

3 Q What's that understanding?

4 A So an icon, as we discussed earlier, can
5 be associated with a program that is launched when
6 you double-click on that icon or can be associated
7 with a particular file that that icon represents.

8 Q In light of that disclosure in the '403
9 patent, would one of ordinary skill in the art
10 understand that clicking on a tile will call a
11 program in the same way that clicking on an icon
12 calls a program?

13 MR. MICALLEF: Object to form.

14 THE WITNESS: It's not clear to me that
15 that would follow from this sentence. Sort of the
16 way I read this sentence is that icons and windows
17 are associated with programs, file or data streams.
18 Tiles are also associated with programs, files or
19 data streams.

20 This sentence in isolation does not say
21 that exactly the same behavior should emerge with a
22 tile as you would typically see with an icon. It
23 just says that there is an association.

24 BY MR. HEINTZ:

25 Q Okay. How about that sentence in

1 DAVID R. KARGER

2 combination with the sentence at column 11, line 32
3 that says that a "grid of tiles replaces the
4 functionality of the computer 'desktop'?"

5 MR. MICALLEF: Object to form.

6 THE WITNESS: Again, I think that it
7 doesn't -- it's not clear from this sentence what --
8 one can interpret the functionality of the computer
9 desktop to mean many different possible things,
10 right. The computer desktop is also just the thing
11 that you see when you're not doing anything, right,
12 and in a sense, the description, what's discussed in
13 this paragraph, really focuses on that issue, that
14 this grid of tiles provides something more
15 interesting for you to see when you're not doing
16 anything than the traditional desktop does.

17 It really doesn't get into any of the
18 question of calling application programs, launching
19 and so forth.

20 BY MR. HEINTZ:

21 Q Earlier, we discussed that the typical
22 computer desktop in a modern computer operating
23 system, as used in that sentence in column 11,
24 includes icons; correct?

25 A Typically, but not necessarily.

1 DAVID R. KARGER

2 Q Right. In the '403 patent, it's
3 discussing that those desktops include icons?

4 A Yes.

5 Q And those icons don't give any updating
6 information -- updatable information for the user to
7 view; isn't that correct? Those were static?

8 MR. MICALLEF: Object to form.

9 THE WITNESS: Correct.

10 BY MR. HEINTZ:

11 Q Okay. So when that sentence at column 11
12 talks about replacing the functionality of the
13 desktop, it's not talking about giving the user
14 something new to look at; it's talking about
15 performing the function performed by, among other
16 things, the icons on the desktop, isn't it?

17 A Not necessarily. I mean, I can replace
18 something with something else and lose some
19 functionality by doing so.

20 Q So it's your opinion, then, that one of
21 ordinary skill in the art would understand that the
22 icons that are being replaced by tiles -- sorry,
23 that the replacement of the icons by the tiles, one
24 of ordinary skill in the art -- let me rephrase that
25 question, sorry. It's getting late in the day.

1 DAVID R. KARGER

2 Would a person of ordinary skill in the
3 art understand from reading the '403 patent that the
4 tiles are replacing icons on the desktop of a modern
5 computer operating system?

6 MR. MICALLEF: Object to form; incomplete
7 hypothetical.

8 (Witness reviewed document.)

9 THE WITNESS: Can you repeat the question?

10 (Record read by the court reporter as
11 follows: "Q: Would a person of ordinary
12 skill in the art understand from reading
13 the '403 patent that the tiles are
14 replacing icons on the desktop of a
15 modern computer operating system?")

16 MR. MICALLEF: Same objection.

17 THE WITNESS: Not necessarily. The patent
18 describes a number of embodiments of tiles. I
19 believe that one of them is on a page of a Web
20 browser. And it's quite possible that you could
21 have a system that had a mixture of icons and tiles
22 and windows, so there would be no replacement in the
23 normal sense of the word.

24 MR. HEINTZ: All right. It's about 12:50,
25 it's probably a good point to take a break for

1 DAVID R. KARGER

2 lunch, if that's acceptable.

3 (Whereupon, at 12:50 p.m., the
4 deposition was recessed, to be reconvened at
5 1:45 p.m. this same day.)

1 DAVID R. KARGER

2 AFTERNOON SESSION (1:54 p.m.)

3 Whereupon,

4 DAVID R. KARGER

5 resumed the stand and, having been previously duly
6 sworn, was examined and testified further as
7 follows:

8 EXAMINATION (Continued)

9 BY MR. HEINTZ:

10 Q Back on the record. Dr. Karger, before
11 the break, we were discussing the '403 patent, and I
12 wanted to direct your attention to column 11, lines
13 23 through 26 -- 23 through 25, excuse me, of the
14 '403 patent.

15 So on those lines, there's a sentence that
16 reads, "Therefore, the application resides over
17 existing applications without replacing any of them;
18 rather it enables them to be called from the grid
19 itself."

20 So before we get too far into this, I want
21 to clarify what some of these pronouns are referring
22 to.

23 So in the part of the sentence that talks
24 about "the application resides over existing
25 applications," do you have an understanding that the

1 DAVID R. KARGER

2 application in that part of the sentence refers to
3 the grid and tiles application?

4 A Yes.

5 Q Okay. And the "existing applications"
6 would refer to things like existing applications on
7 a computer such as a word processing program or
8 browser or something like that?

9 A Yes.

10 Q Okay. All right. And then in the part of
11 the sentence after the semicolon, "rather it enables
12 them," does the "it" refer to the grid and tiles
13 application?

14 A Yes.

15 Q All right. And the "them" refers to the
16 existing applications?

17 A That's my understanding.

18 Q Okay. All right. With that understanding
19 as to the meaning of application and some of these
20 pronouns, what is your understanding of what that
21 sentence would mean to one of ordinary skill in the
22 art?

23 MR. MICALLEF: Object to form.

24 THE WITNESS: Yeah, so my understanding of
25 that is -- I mean, it's pretty much taking it

1 DAVID R. KARGER

2 literally, right, that the application does not
3 itself provide the functionality, so the grid
4 application does not provide the functionality that
5 has been previously provided by these various
6 applications, e-mail program, word processor, so on
7 and so forth, but instead, continues to make use of
8 those applications to provide those types of
9 functionality.

10 BY MR. HEINTZ:

11 Q You say that the application, meaning the
12 grid and tiles application --

13 A Yes.

14 Q -- makes use of those applications. But
15 the sentence says that the grid and tiles
16 applications enables the existing applications to be
17 called from the grid itself; correct?

18 A Yes.

19 Q Okay. Doesn't that mean that the user is
20 enabled by the grid and tiles applications to call
21 the existing applications?

22 MR. MICALLEF: Object to form.

23 THE WITNESS: That's a possible
24 interpretation. I don't think it's the only one.

25 BY MR. HEINTZ:

1 DAVID R. KARGER

2 Q Okay. Sir, if I say to you that a grid of
3 tiles is persistent, doesn't that mean that each of
4 the tiles in the grid is persistent?

5 MR. MICALLEF: Object to form; incomplete
6 hypothetical.

7 THE WITNESS: So I'd like to begin by
8 pointing out that the '403 patent doesn't say that
9 the grid of tiles is persistent. What it says in
10 its specification is that items in the metabase are
11 persistent.

12 BY MR. HEINTZ:

13 Q I understand.

14 A But you're asking me about something
15 different?

16 Q Yes. I'm asking you if I say the words to
17 you that a grid of tiles are persistent -- I'm
18 sorry, a grid of tiles is persistent, doesn't that
19 mean that each of the tiles in the grid is also
20 persistent?

21 MR. MICALLEF: Same objection.

22 THE WITNESS: I --

23 BY MR. HEINTZ:

24 Q Would it help if I define -- I'm sorry, go
25 ahead.

1 DAVID R. KARGER

2 A I don't think that it necessarily follows.
3 One could talk about the grid, that is if one had a
4 grid of tiles, one could talk about that grid being
5 persistent as the individual tiles within the grid
6 changed.

7 Q I'm sorry, was that your entire answer?

8 A Yes. I mean, if you want to ask me to
9 elaborate, I can, but --

10 Q I would like you to do so, yes.

11 A So if we say that the grid is persistent,
12 right, it's possible for tiles to come and go within
13 that grid without changing the fact that the grid
14 itself is persistent. One tile might be replaced by
15 another or one tile might change, showing other
16 content. Is that making the -- and it seems
17 arguable that unless the grid itself is persistent,
18 even as those tiles are coming and going.

19 Q Can't you consider the grid of tiles to be
20 a unified construct?

21 MR. MICALLEF: Object to form. Incomplete
22 hypothetical.

23 THE WITNESS: I could consider the grid of
24 tiles as a unified construct. But, for example, if
25 I tell you that a tree -- things can change while

1 DAVID R. KARGER

2 they are being persistent, right. So the tree is
3 persistent, the leaves on the trees are not
4 persistent.

5 In a similar way, one could talk about the
6 grid of tiles being persistent while the tiles
7 themselves are not persistent.

8 BY MR. HEINTZ:

9 Q So in your example there, the tree would
10 be the grid and the leaves would be the tiles; is
11 that right?

12 A Yeah.

13 Q But there's a difference; right? You said
14 the tree is persistent, the leaves are not. You
15 didn't say that the tree of leaves is persistent?

16 A True. If you want, I can look for another
17 metaphor if you like that would use that language.

18 Q Let me try --

19 A This crowd of people is persistent. Some
20 people come and go from the crowd, but the crowd of
21 people remains persistent.

22 Q If I define a grid to be an arrangement of
23 tiles -- sorry.

24 If I define a grid to be a plurality of
25 tiles arranged in a column and row format and I tell

1 DAVID R. KARGER

2 you that the tiles are persistent, doesn't that mean
3 that the grid is persistent as well?

4 MR. MICALLEF: Object to form; incomplete
5 hypothetical.

6 THE WITNESS: Again, I think there's some
7 ambiguity there which also -- I mean, it's connected
8 to the ambiguity in the '403 patent itself when it
9 talks about the items in the metabase being
10 persistent, but not about tiles being persistent.

11 Sometimes when this patent talks about
12 tiles, it's talking about the thing that you see.
13 And other times it's talking about the data
14 structures, the information about those tiles.

15 And you could certainly imagine persisting
16 certain information about the tiles, while the tile
17 itself on the display might not be persistent, it
18 might show up somewhere else at some other time.

19 So you certainly can define -- I mean, you
20 can use language to say that these tiles are
21 persistent, these tiles are displayed in a
22 persistent fashion, so on and so forth. I'm just
23 saying that that language has not been used.

24 BY MR. HEINTZ:

25 Q I'm not asking -- all right. If a grid is

1 DAVID R. KARGER

2 just nothing more than a plurality of tiles arranged
3 in a row and column format and I tell you that each
4 of the tiles on the grid are persistent, wouldn't it
5 also be true that the grid is persistent?

6 MR. MICALLEF: Object to form; incomplete
7 hypothetical.

8 THE WITNESS: I don't think so, right. I
9 mean, we can ascribe some persistence to each of
10 these documents that are in front of me, but I can
11 move them around. I can take them out of a grid
12 shape. I can -- right. They're still persisting
13 individually.

14 BY MR. HEINTZ:

15 Q If the tile includes a location and the
16 location of the tile is persistent, then wouldn't
17 the grid of tiles, each of which having a persistent
18 location, wouldn't the grid also be persistent?

19 MR. MICALLEF: Object to form; incomplete
20 hypothetical, irrelevant.

21 THE WITNESS: So if by "grid" you mean the
22 sort of visual grid, the positioning of tiles on the
23 screen, and you tell me that the tiles are
24 persistent and their positions are persistent, then
25 I would infer that the grid is persistent.

1 DAVID R. KARGER

2 If you're, as the patent does, talking
3 about the grid as a data structure with --
4 containing information about the tile, then telling
5 me that the positions are persistent is not
6 necessarily telling me that the data structure in
7 its entirety is persistent.

8 BY MR. HEINTZ:

9 Q If I tell you that the data structure
10 includes the position and that the entire data
11 structure for each tile is persistent, then wouldn't
12 the grid formed by those persistent tiles also be
13 persistent?

14 MR. MICALLEF: Object to form; incomplete
15 hypothetical, irrelevant.

16 THE WITNESS: No. Again, this is a
17 consequence of there being not a lot of detail about
18 exactly what this patent wants to mean by
19 persistence and so forth.

20 I could persistently maintain information
21 about the tiles, the grid, the layout and so on and
22 so forth, without having the visual presentation
23 itself be persistent.

24 BY MR. HEINTZ:

25 Q Sir, I'm going to ask you to turn your

1 DAVID R. KARGER

2 attention back to the paper 28, which is the patent
3 owner's motion for conditional amendments.

4 A All right.

5 Q Again I'll ask you to direct your
6 attention to page 2.

7 A Yes.

8 Q Near the bottom of the page, there is a
9 claim limitation, which reads "wherein the tiles are
10 selectable, and wherein selecting a tile calls an
11 assigned application program to provide access to
12 information, the assigned application program being
13 different from a program that arranges the display
14 into the grid of tiles that are not permitted to
15 overlap."

16 Do you see that?

17 A Yes, I do.

18 Q Do you have an understanding of what the
19 words "the assigned application program being
20 different from a program that arranges the display
21 into the grid of tiles that are not permitted to
22 overlap" means?

23 A Not entirely. There's ambiguity there.

24 Q What's the ambiguity?

25 A Well, at the end of the day, we have a

1 DAVID R. KARGER

2 bunch of software, which is -- a bunch of machine
3 code, which is all being executed on a computer.
4 What does it mean for some of this machine code to
5 be different from some of the other machine code?
6 Does it mean that it is in a different -- it's
7 compiled from a different source code file? Does it
8 mean that it is a different function within the same
9 file? Does it mean that somebody else wrote it?
10 Does it mean it was bundled separately?

11 There are sort of many, many possible
12 notions of difference, right. There was a great
13 deal of -- sorry, never mind that.

14 If you bundle a lot of software together,
15 is it now -- is it different pieces of software or
16 is it one piece of software?

17 So I'm just sort of bringing all these out
18 as different possible interpretations of
19 different -- to explain why I can't say that I have
20 a complete understanding of what the meaning is.

21 Q Let me direct your attention to paragraph
22 221 of your expert declaration, that's Exhibit 1110.
23 In paragraph 221, second sentence reads, "MSIE Kit
24 also shows the Outlook Express electronic mail
25 application was an 'application program being

1 DAVID R. KARGER

2 different from' the portion of the Active Desktop
3 that arranges the display into the grid of tiles,
4 and also different from" the "Active Desktop
5 generally."

6 Do you see that?

7 A Uh-huh.

8 Q Is that a correct statement?

9 A Yes.

10 Q How were you able to determine that the
11 Outlook Express electronic mail application was an
12 application program that was different from Active
13 Desktop?

14 A So what I did was determine that it was
15 different under a plausible reading -- under one
16 plausible reading of being different.

17 Q And what was that plausible meaning?

18 A So the difference that I was attending to
19 here was drawn from the fact that you don't
20 necessarily have to have Outlook Express installed
21 on a computer. And so from that sense, it has its
22 own identity, right. It's not something that comes
23 with every Active Desktop system that you
24 automatically must have Outlook Express available
25 with that code.

1 DAVID R. KARGER

2 So there is a difference that can be
3 pointed to.

4 Q Was Active Desktop distributed with some
5 version of the Microsoft Windows operating system?

6 A Was it distributed with? I'm not sure,
7 off the top of my head, whether it was distributed
8 or whether you had to download it separately or get
9 hold of it in some other way.

10 Q Was Active Desktop a part of Internet
11 Explorer?

12 MR. MICALLEF: Object to form; relevance.

13 THE WITNESS: Was Active Desktop a part of
14 Internet Explorer? That goes to what is the
15 definition of Internet Explorer.

16 So my knowledge of Active Desktop comes
17 from the Active Desktop documentation, which is in
18 one of these exhibits and not from the software
19 which was distributed. Are you asking about it
20 as -- in terms of its documentation or in terms of
21 the software artifacts, which went through various
22 releases and which I haven't really examined?

23 BY MR. HEINTZ:

24 Q Let's go with the documentation. The
25 reference you're talking about is MSIE kit; correct?

1 DAVID R. KARGER

2 A Yes.

3 Q What does MSIE stand for?

4 A Microsoft Internet Explorer.

5 Q So does that tell you that Active Desktop
6 was a part of Internet Explorer?

7 A No.

8 Q Okay. Why not?

9 A Because it's just a name. It's a
10 marketing device. I also -- I mean, I remember some
11 tool called Windows Tune-Up, right, which cleaned
12 up -- it got useless applications and things out of
13 your Windows environment. It wasn't a part of
14 Windows; it was just something that you used with
15 Windows.

16 Q Well, that tune-up program you're talking
17 about wasn't described in documents coming from
18 Microsoft, was it?

19 A No. This is just my own experience,
20 recollection of this tool, as an example of how you
21 can use the word without meaning it's a part of.

22 Q Right. But the MSIE kit, the Microsoft
23 Internet Explorer resource kit, was a book written
24 by Microsoft about Internet Explorer, was it not?

25 MR. MICALLEF: Object to form.

1 DAVID R. KARGER

2 THE WITNESS: It was a book written about
3 the MSIE kit, right. So if you want to give me that
4 exhibit, I can look through it in order to respond
5 more precisely.

6 But from the title itself, I don't think
7 you can infer one way or the other whether Active
8 Desktop was a part of Internet Explorer.

9 BY MR. HEINTZ:

10 Q Do you need to see the entire document or
11 if I give you a section of it with the cover page,
12 will that be enough?

13 A I'm afraid I don't know.

14 MR. HEINTZ: I only brought one copy of
15 the entire kit. I hope you guys won't object,
16 Mr. Micallef.

17 MR. MICALLEF: No. I don't want another
18 copy.

19 MR. HEINTZ: Let the record reflect that
20 I'm handing Dr. Karger a printout, and I'll
21 represent that that's the entirety of the MSIE
22 resource kit that is, let's see, Exhibit 1007 in
23 this proceeding.

24 (Exhibit 1007 previously
25 identified.)

1 DAVID R. KARGER

2 BY MR. HEINTZ:

3 Q So the question I'm asking you again, just
4 so you're clear while you're looking through this,
5 is whether or not Active Desktop is a part of
6 Internet Explorer, as those terms are used in that
7 documentation?

8 MR. MICALLEF: Object to form. It's
9 irrelevant.

10 THE WITNESS: It will take a little while
11 to navigate.

12 BY MR. HEINTZ:

13 Q I understand.

14 A So if you look at chapter 14, which
15 discusses Active Desktop, what it says here is that
16 -- it actually sort of articulates Internet Explorer
17 4 as part of Active Desktop, as opposed to Active
18 Desktop as part of Internet Explorer. It observes
19 that they're taking pieces of Internet Explorer in
20 order to provide more Web browser-like functionality
21 on the Windows desktop itself. So it incorporates a
22 lot more than just Internet Explorer, so from that
23 perspective, you can't really call Active Desktop a
24 part of Internet Explorer.

25 BY MR. HEINTZ:

1 DAVID R. KARGER

2 Q Does that mean that Internet Explorer is a
3 part of Active Desktop?

4 A Well, what they say here is, to be
5 precise, "the Active Desktop doesn't include all of
6 the browser's interface elements, but as you will
7 see, you can do quite a bit of HTML," this is the
8 last three lines of 174.

9 What it is saying is that parts of
10 Internet Explorer 4 are part of Active Desktop.

11 Q Are you familiar with the Microsoft
12 Outlook program?

13 A I have some familiarity with it.

14 Q Are you familiar with the Microsoft Word
15 program?

16 A Yes.

17 Q Are those programs different?

18 MR. MICALLEF: Object to form.

19 THE WITNESS: Different from?

20 BY MR. HEINTZ:

21 Q Each other.

22 A It sort of shows the ambiguity of
23 "different" in that they both got released
24 eventually as Microsoft Office, and it is reasonable
25 to talk about Microsoft Office as a program. It's

1 DAVID R. KARGER

2 also reasonable to talk about Outlook and Word as
3 different programs.

4 Q So you couldn't say whether Outlook was
5 different from Word, was a different program from
6 Word?

7 A I would probably in common speaking say
8 that they are different, yes.

9 Q Let me ask you to turn your attention to
10 paragraph 235 of Exhibit 1110 again. So paragraph
11 235 reads, "A person of ordinary skill in the art
12 would understand these disclosures as showing that
13 the Active Desktop gridding functionality is a
14 different set of software instructions from those
15 that are called when the web browser is launched
16 when a Desktop item is selected."

17 Do you see that?

18 A Yes, I do.

19 Q What is the Web browser you're referring
20 to in this paragraph that is launched when a desktop
21 item is selected?

22 A I'm sorry, I glitched for a minute. Can
23 you repeat the question?

24 Q Sure. You referred to a Web browser on
25 the third line of paragraph 235.

1 DAVID R. KARGER

2 A Yes.

3 Q Which Web browser are you referring to on
4 that line?

5 A So at this particular moment, I'm
6 referring to the discussion in the previous
7 paragraph, which is quoting material from the MSIE
8 kit documentation that talks about certain
9 dynamically loadable libraries, DLLs, that are used
10 to provide some of the layout -- some of the Active
11 Desktop layout functionality, and others which are
12 used to provide various parts of the -- of Web
13 browser functionality, in particular IE in this
14 case, and arguing that they're talking about
15 different dynamically loaded libraries and these are
16 different and have different bits of code in them,
17 and that is the sense in which the Active Desktop
18 layout functionality is different from the
19 Explorer -- from the Web browser functionality.

20 But if you turn to the next page, you will
21 see that I could also in a sense have been talking
22 about the Netscape browser, because the Active
23 Desktop is not restricted to making use of Internet
24 Explorer as the browser that's launched to handle
25 Web content, but instead you can configure to launch

1 DAVID R. KARGER

2 the Netscape browser in order to display Web
3 content.

4 Q But in -- I think I understood your answer
5 to mean that in paragraph 235, when you refer to the
6 Web browser, you're referring to Internet Explorer;
7 is that correct?

8 A Yes.

9 Q Okay. And, in fact, in paragraph 236, the
10 next line reads, the "Internet Explorer 4 is a
11 program that is 'different from' the program that
12 implements the grid functionality of Active Desktop,
13 or indeed from Active Desktop generally, because
14 they are not the same."

15 A Correct.

16 Q And you had no problem making that
17 conclusion with your understanding of what
18 "different from" means; is that correct?

19 A Again, this is a kind of difference and,
20 therefore, it fulfills the notion of being different
21 from.

22 Q And you didn't qualify paragraph 236 in
23 any way, did you?

24 MR. MICALLEF: Object to form.

25 THE WITNESS: No.

1 DAVID R. KARGER

2 BY MR. HEINTZ:

3 Q Thank you.

4 A Actually, I did qualify it in the sense
5 that I said there may be some overlap, they may
6 share certain instructions, but nonetheless, they
7 are not the same and, therefore, they are different.

8 Q Okay. Thank you.

9 All right. I'd like you to refer now,
10 Dr. Karger, to paragraph 170 of your report. Have
11 you got it, sir?

12 A Yes, I do.

13 Q Okay. All right. On the first sentence
14 in paragraph 170, you quote from the motion to
15 amend, which is paper 28, a file system of the
16 system's main memory.

17 Do you see that?

18 A Yes, I do.

19 Q Then you say, one of skill "in the art
20 would recognize that the term 'main memory' refers
21 to non-persistent memory."

22 Do you see that?

23 A Yes, I do.

24 Q Okay. And you include a citation in that
25 paragraph 170 that reads, "The main memory 22 is

1 DAVID R. KARGER

2 typically random access memory (RAM)."

3 Do you see that?

4 A Yes, I do.

5 Q And where does that citation come from?

6 Is that from the 1107?

7 A Yeah. I mean, unless there's a typo here,
8 it should be coming from the EP patent 1107 at 22.

9 Q Okay. Did you have an understanding as to
10 whether that EP patent was attempting to provide a
11 definition of what main memory is in a general
12 sense?

13 A No.

14 Q Okay. And it's your understanding, is it
15 not, that patents can redefine the plain and
16 ordinary meaning of a term?

17 MR. MICALLEF: Object to form.

18 THE WITNESS: My understanding is that
19 they can do so, if they do so explicitly.

20 BY MR. HEINTZ:

21 Q Now, the quote you cite here says, "The
22 main memory 22 is typically random access memory."

23 Do you see that?

24 A Yes, I do.

25 Q Does that mean that main memory can

1 DAVID R. KARGER

2 include things other than random access memory?

3 A So in my own experience, main memory has
4 always referred to random access memory. Clearly,
5 this particular citation is asserting that it is
6 possible for main memory to mean something else, or
7 imply it.

8 I've never seen that happen, and I suspect
9 it's just an attempt to not unnecessarily narrow
10 this EP patent. But again, my point is that my
11 understanding of main memory, every time that I've
12 seen it used, it's referring to a RAM.

13 Q And upon what do you base the assumption
14 that the word "typically" is there to not
15 unnecessarily restrict the meaning?

16 A You're right, I should not assume because
17 I am not a lawyer. So why don't I sort of focus on
18 my understanding is that main memory refers to RAM,
19 and this is a quote that is consistent with that.

20 Q And also inconsistent with the fact that
21 it might mean something other than RAM?

22 A Yes.

23 Q So, sir, I'd like you to turn back to the
24 '403 patent, Exhibit 1001. Sorry, there's quite a
25 few pieces of paper in front of you, I realize.

1 DAVID R. KARGER

2 Actually, I'm sorry. Before we do that,
3 do you have an understanding for what the system
4 requirements for Windows 95 were?

5 A As in amount of RAM and CPU power and
6 things like that?

7 Q Yes, precisely.

8 A No, I do not.

9 MR. HEINTZ: I'm going to ask the reporter
10 to mark as Exhibit 2078 a single-page document
11 entitled "Windows 95 Installation Requirements."

12 (Exhibit 2078 identified.)

13 BY MR. HEINTZ:

14 Q Dr. Karger, I'm going to refer your
15 attention on Exhibit 2078 to the heading "MORE
16 INFORMATION."

17 Do you see that?

18 A Yes.

19 Q Underneath that we see "System
20 requirements for installing Windows 95."

21 A Yes.

22 MR. MICALLEF: Excuse me, I'm going to
23 object to the exhibit on relevance and authenticity
24 grounds.

25 MR. HEINTZ: Okay. And I'll just state

1 DAVID R. KARGER

2 for the record that this was downloaded from the
3 Microsoft.com Web site as of yesterday, or on the
4 23rd. But your objection is noted.

5 BY MR. HEINTZ:

6 Q All right. So under the "MORE
7 INFORMATION" and "System requirements for installing
8 Windows 95," the second bullet point reads "4
9 megabytes of memory (8 megabytes recommended)."

10 Do you see that?

11 A Yes, I do.

12 Q Do you have an understanding as to what
13 that refers to?

14 A Yes.

15 Q What does that refer to?

16 A That refers to the amount of RAM that
17 should be available in the computer.

18 Q Okay. And there's a second bullet point
19 that reads, "typical hard disk space required to
20 upgrade to Windows 95: 35 to 40 megabytes."

21 Do you see that?

22 A Yes.

23 Q Then it reads, "the actual requirement
24 varies depending on the features you choose to
25 install."

1 DAVID R. KARGER

2 Do you see that?

3 A Yes.

4 Q Okay. Do you have an understanding of
5 what a hard disk is?

6 A Yes.

7 Q Is that nonvolatile memory?

8 A It's nonvolatile. I would probably refer
9 to it as storage rather than memory in most common
10 discussions.

11 Q Okay. In any event, a hard disk is
12 nonvolatile?

13 A Yes.

14 Q And then the next bullet point beneath
15 that reads, "typical hard disk space required to
16 install Windows 95 on a clean system: 50 to 55
17 megabytes."

18 Do you see that?

19 A Yes, I do.

20 Q Do you have an understanding for what the
21 -- for what a clean system means?

22 A Yes.

23 Q What does that mean?

24 A That would be a system that does not have
25 some previous software installation that you wish to

1 DAVID R. KARGER

2 preserve or a system with a previous software
3 installation that includes some content that you
4 might wish to preserve.

5 Q Is it your understanding, then, that some
6 amount of hard disk space is required to install the
7 Windows 95 operating system?

8 MR. MICALLEF: Object to form; relevance,
9 incomplete hypothetical.

10 THE WITNESS: It's my understanding that
11 those are the stated requirements. I can't infer
12 from this whether they are accurate or not.

13 BY MR. HEINTZ:

14 Q Are you aware of any installation of
15 Windows 95 in only RAM on any computer system?

16 A Am I aware of -- do you mean do I think
17 that it is at all possible or do you mean have I
18 actually encountered one?

19 Q I mean the latter.

20 MR. MICALLEF: Object to form; relevance.

21 THE WITNESS: I've seen a variety of
22 installations of various operating systems on
23 virtual machines, and it's quite plausible for some
24 of these virtual machines to be operating entirely
25 in RAM. I can spawn a virtual machine, install

1 DAVID R. KARGER

2 software, install an operating system on that
3 virtual machine, do all of this entirely in RAM if I
4 choose.

5 I don't know if that ever was done with
6 any of the virtual machines that I've encountered.
7 It certainly could have been.

8 BY MR. HEINTZ:

9 Q At the time of the '403 patent in 1995 --
10 sorry, 1999, would it have been possible to run --
11 sorry, to install the entire Windows 95 operating
12 system in RAM?

13 MR. MICALLEF: Object to form; relevance.

14 THE WITNESS: So I can't from my own
15 volatile memory tell you what the state of virtual
16 machine technology was in 1999. The notion of a
17 virtual machine certainly predates 1999. The notion
18 of a RAM disk that is creating this simulation of a
19 disk in RAM certainly existed prior to 1999.

20 Whether the way they were particularly
21 implemented at that time would have allowed you to
22 install Windows on them, I can't say without more
23 research.

24 MR. HEINTZ: I'm going to ask the reporter
25 to mark as Exhibit 2079 a single-page document

1 DAVID R. KARGER

2 entitled "Minimum Hardware Requirements for a
3 Windows 98 Installation."

4 (Exhibit 2079 identified.)

5 MR. MICALLEF: Excuse me. I'm going to
6 object to this exhibit as irrelevant and lack of
7 authenticity.

8 BY MR. HEINTZ:

9 Q Dr. Karger, have you ever seen this
10 document before?

11 A No.

12 Q Do you have an understanding of what the
13 minimum hardware requirements refers to in this
14 document?

15 A Yes.

16 Q What's your understanding?

17 A Well, this is an assertion about the
18 hardware that Microsoft believes would be required
19 in order to successfully perform this installation.

20 Q All right. Under "MORE INFORMATION,"
21 there is a series of bullet points.

22 A Uh-huh.

23 Q The third bullet point reads, "a typical
24 upgrade from Windows 95 requires approximately 195
25 megabytes of free hard disk space."

DAVID R. KARGER

A Yes.

Q Okay. The next part of the sentence reads, "but the hard disk space may range" "between 120 megabytes and 295 megabytes, depending" upon "your computer configuration and the options" "you choose to install."

Do you see that?

A Yes.

Q Okay. In 1998 or 1999, are you aware of any personal computers with 120 megabytes of RAM?

MR. MICALLEF: Object to form; relevance.

THE WITNESS: I simply don't know.

MR. HEINTZ: Nonetheless, Microsoft asserts that you need a hard disk with at least 120 megabytes of hard disk space in order to install the Windows 98 operating system; correct?

MR. MICALLEF: Object to form; relevance, incomplete hypothetical.

THE WITNESS: This document does assert that claim.

BY MR. HEINTZ:

Q Do you have any reason to believe this isn't a Microsoft document?

MR. MICALLEF: Object to form; relevance.

1 DAVID R. KARGER

2 THE WITNESS: Do I have a reason to
3 believe? I have no strong evidence one way or
4 another.

5 BY MR. HEINTZ:

6 Q The URL across the bottom of the page is
7 not sufficient for you?

8 MR. MICALLEF: Same objections.

9 THE WITNESS: I can type a URL on any page
10 that I want. I'm not asserting that it's a forgery.
11 I'm just saying I don't really have any strong
12 indication one way or the other.

13 MR. HEINTZ: I see. I'll ask the reporter
14 to mark as Exhibit 2080 a two-page document entitled
15 "System requirements for Windows XP operating
16 systems."

17 (Exhibit 2080 identified.)

18 THE WITNESS: This is only going to get
19 really interesting if you can give me Windows 9.

20 MR. MICALLEF: If I may just object on
21 relevance and lack of authenticity grounds to
22 Exhibit 2080. Thank you.

23 BY MR. HEINTZ:

24 Q Okay. So, Dr. Karger, I again presume
25 you've never seen this document before?

1 DAVID R. KARGER

2 A Correct.

3 Q All right. The document reads "System
4 requirements for Windows XP operating systems";
5 correct?

6 A Yes.

7 Q And it's your understanding this defines
8 at least the hardware requirements to install the
9 Windows XP operating system on a PC; is that
10 correct?

11 A We need to be careful what you mean by
12 "defines." It asserts some hardware requirements.
13 In this case I can be pretty sure that it's
14 incorrect.

15 Q Okay. Why is that, sir?

16 A Well, I really doubt -- I'm pretty
17 confident that I would be able to accomplish the
18 installation even if I didn't have speakers and
19 headphones.

20 Q I see, all right. Do you think you'd be
21 able to accomplish the installation if you did not
22 have at least 1.5 gigabytes of available space on
23 the hard disk, as indicated by the third bullet
24 point under the "MORE INFORMATION" subheading?

25 MR. MICALLEF: Objection; relevance, form

1 DAVID R. KARGER

2 and incomplete hypothetical.

3 THE WITNESS: Indeed, this is quite
4 hypothetical. But I'm betting there's some wiggle
5 room on these requirements.

6 If I have, you know, 1.5 gigabytes minus 1
7 byte, it would probably still work. I can't be
8 sure, but I can speculate.

9 BY MR. HEINTZ:

10 Q Would you say 1.4 would also work?

11 MR. MICALLEF: Same objection.

12 THE WITNESS: Sorry, she can't transcribe
13 that. I don't know.

14 BY MR. HEINTZ:

15 Q Your previous answer mentioned something
16 being hypothetical. What was hypothetical?

17 A The hypotheticalness of trying to install
18 XP on a 1.4 gigabyte hard disk.

19 Q Okay. But this document, Exhibit 2080,
20 that's not hypothetical, is it? This is, at least
21 appears to be, documentation coming from Microsoft?

22 MR. MICALLEF: Object to form; relevance.

23 THE WITNESS: Yes, it does.

24 BY MR. HEINTZ:

25 Q And you would agree that a hard disk is

1 DAVID R. KARGER

2 required, at least as stated by Microsoft in this
3 document; correct?

4 MR. MICALLEF: Object to form; relevance.

5 THE WITNESS: As I mentioned before, you
6 can simulate a hard disk. And I can't say for sure
7 whether that would work or not in these -- in these
8 installations.

9 I know of other installations that do make
10 use of RAM disks in part of their installation
11 process or that you can install onto a RAM disk.

12 BY MR. HEINTZ:

13 Q Do you have an understanding as to whether
14 the entire operating system would fit in 64
15 megabytes of RAM?

16 MR. MICALLEF: Object to form; irrelevant,
17 improper hypothetical and outside the scope.

18 THE WITNESS: Let's be clear what you mean
19 by "entire operating system." Do you mean all of
20 the code that is considered part of the operating
21 system, or do you mean the operating system as it is
22 executing a particular --

23 BY MR. HEINTZ:

24 Q I mean all of the code that is considered
25 part of the operating system.

1 DAVID R. KARGER

2 MR. MICALLEF: Same objection.

3 THE WITNESS: So I would be pretty
4 confident that Windows XP is larger than 64
5 megabytes.

6 BY MR. HEINTZ:

7 Q So if I were to say to you that I
8 installed XP on the memory of a personal computer,
9 you would understand memory to mean both hard disk
10 and RAM; correct?

11 MR. MICALLEF: Object to form; irrelevant,
12 outside the scope.

13 THE WITNESS: I'm not sure what I would
14 understand from that, because it's not the sort of
15 thing I would expect somebody to say.

16 If I heard somebody say that they
17 installed the operating system on the memory of a
18 computer, I might actually be led to infer that they
19 were doing some simulated hard drive in memory.
20 Because again, I don't generally think of the disk
21 as memory.

22 So if you're going to go to the -- if
23 you're going to specially call out that you
24 installed in memory, I might -- that might actually
25 lead me to specifically infer that you were doing

1 DAVID R. KARGER

2 something unusual.

3 BY MR. HEINTZ:

4 Q You say it might lead you to infer that.
5 Would it?

6 A Well, that's the problem. It's a
7 hypothetical, so I can't really say, especially
8 since we've been discussing this for an hour and my
9 thought processes have been biased by what we've
10 been discussing.

11 Q I see.

12 A But as far as I can judge, I would sort of
13 pay -- I would take note of your saying that
14 specifically you installed it in memory, and I would
15 try to assign some meaning to that, that it's not
16 the typical scenario.

17 Q Sir, I'll direct your attention to figure
18 2 of the '403 patent, which again is Exhibit 1001.
19 Are you familiar with that figure?

20 A Yes, I am.

21 Q Do you have an understanding as to what
22 the referenced numeral 112 refers to?

23 A Cache. It's a little ambiguous, actually.
24 If we can find it in the text itself, that would be
25 useful, because it could be referring to the cache

DAVID R. KARGER

or it could be referring to the whole box.

Q So if you turn to column 6 of the '403 patent --

A Yes.

Q -- and starting at line 60, there's a description of figure 2. And I think you will see that reference numeral 112 refers to the main memory.

A Yes.

Q That's at about line 63.

A Yes.

Q And so figure 2 indicates that the operating system is installed in the main memory 112; correct?

MR. MICALLEF: Object to form; irrelevant.

THE WITNESS: Yes, the text asserts that the operating system -- well, it doesn't say "installed," but the text asserts that the operating system resides in the memory.

BY MR. HEINTZ:

Q Okay. And then also something called the file system resides in the memory, too. That's 122.

Do you see that?

A Yes.

1 DAVID R. KARGER

2 Q What's a file system?

3 A A file system is a data structure. It is
4 an arrangement of blobs of content along with some
5 directory -- often some file names, some directory
6 structure that indicates which files are within
7 which directories and so forth.

8 Q Beneath file system figure 2 we see the
9 word "cache" as reference numeral 124.

10 Do you see that?

11 A Yes.

12 Q What's cache?

13 A A cache is a tool for providing less
14 expensive access to content which is accessed
15 frequently.

16 Q And Beneath "Cache" we see the letters
17 "GUI" as reference numeral 126?

18 Do you see that?

19 A Yes.

20 Q Do you have an understanding of what that
21 refers to?

22 A Yes, GUI, a graphical user interface.

23 Q Is it your understanding that the GUI
24 refers to the grid and tiles, at least in part, as
25 those grid and tiles are described in the patent?

1 DAVID R. KARGER

2 The grid and tiles application.

3 MR. MICALLEF: Object to form.

4 BY MR. HEINTZ:

5 Q Let me restate that, I'm sorry. So do you
6 have an understanding as to what GUI refers to in
7 figure 2?

8 A Again, a GUI is a graphical user
9 interface. This is the thing that manages the
10 presentation of graphical elements to the user.

11 Q Okay. Do you have an understanding as to
12 whether that GUI includes what we referred to
13 earlier as the grid and tiles application? And that
14 was in the context of the passage at column 11
15 starting at line 15.

16 MR. MICALLEF: Object to form.

17 THE WITNESS: So this kind of depends. As
18 I mentioned, it will take me some time to find in
19 the patent itself, but there is one potential
20 implementation of this application as a Web page, so
21 to speak.

22 And if I were presenting those tiles as a
23 Web page, it might be more appropriate for me to put
24 it in one of the application program boxes, because
25 it's being presented through a Web browser

1 DAVID R. KARGER

2 application program, as opposed to putting it into
3 this GUI box.

4 BY MR. HEINTZ:

5 Q Okay. And do you have an understanding as
6 to what the application programs 128-1 and 128-N in
7 figure 2 refer to?

8 A I mean, not which specific applications
9 they refer to. But yes, this notion that you may
10 have several application programs resident executing
11 within your system, that's what those -- that's what
12 those boxes are referring to.

13 Q One example could be Word?

14 A Yes.

15 Q Another example could be Internet
16 Explorer?

17 A Yes.

18 Q And earlier, we discussed that the '403
19 patent referred to modern operating systems. Do you
20 recall that?

21 MR. MICALLEF: Object to form.

22 THE WITNESS: I do recall that phrase, not
23 exactly where it appeared.

24 BY MR. HEINTZ:

25 Q Okay. Wouldn't one of ordinary skill in

1 DAVID R. KARGER

2 the art understand that if the operating system
3 isn't stored in the main memory, that main memory
4 must refer to something more than RAM?

5 A If the operating system is stored? Isn't
6 stored?

7 Q I'm sorry. Would one of ordinary skill in
8 the art understand that if the operating system is
9 stored in the main memory, that the main memory must
10 be more than just RAM?

11 MR. MICALLEF: Object to form.

12 THE WITNESS: No, I don't -- not
13 necessarily. Again, given this predisposition to
14 understand memory as RAM, I'll often talk about, you
15 know, an operating system being resident in memory,
16 right. So there's a boot process for a computer,
17 where you pull the operating system off -- the
18 operating system code off of disk, you bring it into
19 memory, and now it is resident in memory, and it can
20 now execute without further access to the disk.

21 BY MR. HEINTZ:

22 Q What you're referring to, though, is
23 loading a portion of the operating system into the
24 memory, not the entire operating system into the
25 memory?

1 DAVID R. KARGER

2 A That depends. Some operating systems are
3 small and can fit entirely into main memory. In --
4 even if you have a large operating system, you may
5 only need part of it for your everyday use.

6 Q Again, for -- if we're talking about
7 modern operating systems that run on personal
8 computers, such as Microsoft Windows 95, wouldn't
9 that signify to one of ordinary skill in the art
10 under the normal understanding of operating
11 system -- sorry, under the normal understanding of
12 this figure, that the main memory includes more than
13 just RAM?

14 MR. MICALLEF: Object to form.

15 THE WITNESS: Certainly it can, right.
16 But it doesn't have to. You know, I think around
17 1995, I was installing Linux, which was a nice
18 modern operating system. And from what I recall,
19 there were some nice versions of Linux which had
20 very small -- very small kernels that did fit into
21 main memory, and this was considered kind of a nice
22 feature of them.

23 BY MR. HEINTZ:

24 Q Did you only install just the kernel of
25 the Linux system?

1 DAVID R. KARGER

2 A No, no, I would install more. But again,
3 if I'm talking about part of the operating system
4 being resident in memory, that was quite feasible.

5 Q What more beyond the kernel would you
6 install?

7 MR. MICALLEF: Object to form; improper
8 hypothetical, irrelevant.

9 THE WITNESS: Sorry, this goes back to the
10 ambiguity of some of the terms that we're using. In
11 general, if I want to use a computer well, in
12 addition to the kernel of the operating system,
13 which manages scheduling and probably has the file
14 system code as well, I'll probably want a graphical
15 user interface.

16 I think there would be some debate about
17 whether that really is part of the operating system
18 or whether that is some other code that you execute
19 in addition to the operating system.

20 So what exactly -- sorry. So I'll come
21 back to you to restate the question, if you like.

22 BY MR. HEINTZ:

23 Q No, I think that answers just fine.

24 A Okay.

25 Q So when you installed the GUI, did you

1 DAVID R. KARGER

2 install it in RAM or did you install it on a disk?

3 A When I --

4 MR. MICALLEF: Object to form. Excuse me.
5 Irrelevant, improper hypothetical.

6 THE WITNESS: So in general, when I
7 install things, I install -- I would install them
8 onto a disk.

9 BY MR. HEINTZ:

10 Q Why would you do that?

11 A Well, for persistence, actually.

12 Q It would be sort of silly to install an
13 operating system just in RAM, wouldn't it?

14 A No, it wouldn't be silly. There are cases
15 where it would be useful. But --

16 Q I'm sorry.

17 A But for the particular purposes that I was
18 going to use that operating system, there were
19 benefits to my installing it on persistent storage.

20 Q If the operating system were only present
21 in RAM, what would happen when the computer got shut
22 off?

23 A It would disappear.

24 Q And if that were the only operating system
25 on the computer, would you then be forced to

1 DAVID R. KARGER

2 reinstall an operating system the next time you
3 turned it on?

4 A There's a timing problem again. I don't
5 know exactly when these things happened, but you
6 can -- certainly now you can boot off of a network,
7 right. You can -- you can fetch your operating
8 system when you turn on the computer.

9 Q How does the computer download
10 instructions from the network?

11 MR. MICALLEF: Object to form; improper
12 hypothetical, irrelevant.

13 THE WITNESS: In general, these computers
14 come with some sort of small boot loader that
15 executes instructions, that tell it how to get the
16 operating system that it's going to be using.

17 BY MR. HEINTZ:

18 Q In 1999, was it customary to install an
19 operating system into RAM?

20 A Customary?

21 Q Yes.

22 A Probably not.

23 Q Let me ask you to turn your attention to
24 column 4 of the '403 patent. In particular, I'll
25 ask you to direct your attention to line 37, which

1 DAVID R. KARGER

2 reads, "The present invention comprises a grid of
3 tiles that resides on the user's computer desktop."

4 Do you see that?

5 A Yes, I do.

6 Q Is a computer desktop persistent?

7 MR. MICALLEF: Object to form; irrelevant.

8 THE WITNESS: Is a computer desktop
9 persistent? So I would say that in customary usage,
10 parts of a user desktop are persistent and parts are
11 not.

12 BY MR. HEINTZ:

13 Q Which parts are not?

14 A So often, if I restart a computer, many of
15 the applications that were running and had Windows
16 situated on the desktop will not be there when I
17 restart the computer.

18 You can design applications that do
19 persist so that the next time you start up that
20 computer, those applications are again present where
21 they were before.

22 Q So you're defining the desktop to include
23 Windows, let's say Windows 95 system; is that
24 correct?

25 A Well, I'm not -- am I defining desktop?

1 DAVID R. KARGER

2 I'm -- I guess I'm defining -- the state of the
3 desktop? So again, "desktop" can mean a few
4 different things.

5 It can mean the desktop application. It
6 can mean the persistent part of the desktop, or it
7 could mean sort of present state of the desktop with
8 whatever the user has launched and rearranged.

9 I think any of those could be -- sort of
10 fit -- you can use the phrase "desktop" to refer to
11 any of those.

12 MR. MICALLEF: Jim, we've been going for
13 over an hour, so when you get to a good point.

14 MR. HEINTZ: Let's take a break.

15 (Recess.)

16 BY MR. HEINTZ:

17 Q Back on the record. So, Dr. Karger, again
18 referring to figure 2 of the '403 patent, the file
19 system that's referenced by numeral 122, is that
20 something that typically resides in RAM, in a hard
21 disk or in both places?

22 MR. MICALLEF: Object to form; incomplete
23 hypothetical.

24 THE WITNESS: So again, I would say that
25 it is typically on a hard disk, but that it is well

1 DAVID R. KARGER

2 understood that it can be in a RAM.

3 BY MR. HEINTZ:

4 Q And does the file system refer to files
5 that are on a hard disk or in a RAM or both?

6 MR. MICALLEF: Same objections.

7 THE WITNESS: I couldn't quite parse that.
8 I mean, I just said that some file system -- that
9 typically, file systems are on a hard disk. It is
10 possible to use RAM file systems where the files and
11 the file system are all in RAM.

12 BY MR. HEINTZ:

13 Q Okay. Let me make sure we're speaking
14 about the same issue. So a file system, I think as
15 you explained it earlier, was something that, among
16 other things, identifies the locations of files;
17 correct?

18 A Locations of. Do you mean the sort of
19 user notion of the directories and so forth, or -- I
20 guess it's fair either way. So yes, the file system
21 identifies the locations of files.

22 Q Okay. So the file system itself, does
23 that reside in RAM, in a hard disk or both in a
24 typical personal computer?

25 MR. MICALLEF: Object to form; irrelevant.

1 DAVID R. KARGER

2 THE WITNESS: So in a typical computer, in
3 the common case, but not the only case, most of the
4 file system information is likely to be on secondary
5 storage, and some of it may well be in main memory,
6 because it was used for some purpose, because of it
7 being cached and so forth.

8 BY MR. HEINTZ:

9 Q And in the part that you just referred to
10 that's in main memory, would that be a copy of
11 what's on the hard disk, or would that be separate
12 from -- or in addition to what's on the hard disk?

13 MR. MICALLEF: Object to form; incomplete
14 hypothetical.

15 THE WITNESS: What distinction are you
16 trying to draw between "copy" and "in addition to"?

17 BY MR. HEINTZ:

18 Q Well, is the information that you referred
19 to as being stored in the RAM duplicative of what's
20 stored on the hard disk?

21 A So much of it probably is. If you think
22 about the way file systems will -- file systems
23 generally work or can work.

24 Consider an application that updates a
25 file. What may well happen is that that file --

1 DAVID R. KARGER

2 that results in the update of some information in
3 the -- in memory portion of the file system. You
4 may have a block, a file block, that has been
5 updated, but which has not yet been written to disk.

6 So in that sense, you could have some
7 content in main memory which is not yet on disk.
8 But the majority of what's in memory will be what
9 has been brought in from the disk.

10 BY MR. HEINTZ:

11 Q And under normal operation, that recently
12 modified portion of RAM that includes the new
13 information is going to be copied onto the disk,
14 correct, so that the disk will have the entire file
15 system in relatively short order; correct?

16 MR. MICALLEF: Object to form; incomplete
17 hypothetical.

18 THE WITNESS: That is the general
19 objective, yes.

20 BY MR. HEINTZ:

21 Q Okay. Now, the other question I asked you
22 was the files that are pointed to by the file
23 system, or the files for whose locations are
24 included in the file system, are they files on the
25 hard disk or in a RAM or both?

1 DAVID R. KARGER

2 MR. MICALLEF: Same objection.

3 THE WITNESS: The answer is roughly the
4 same. It's quite possible for these files to --
5 again, there's the less typical case of a RAM disk,
6 where everything is in memory, but there are also
7 the circumstances where the file contents have been
8 updated in RAM, that has not yet been committed to
9 secondary storage, so you can have differences.

10 But the ultimate goal is to put all of
11 those files onto secondary storage.

12 BY MR. HEINTZ:

13 Q And, in fact, if the file system were only
14 in RAM and were not stored on a hard disk, then the
15 file system would be lost when you turned off the
16 computer; isn't that correct?

17 A Yes.

18 Q And what would be the result if the file
19 system were lost?

20 MR. MICALLEF: Object to form.

21 THE WITNESS: Sorry, I'm not sure what
22 you're looking for. I mean, the result would be
23 that the file system would be lost.

24 BY MR. HEINTZ:

25 Q Would you be able to access any files on

1 DAVID R. KARGER

2 the hard disk without the file system?

3 MR. MICALLEF: Object to form; incomplete
4 hypothetical.

5 THE WITNESS: Are you now referring to
6 file system as the sort of -- you know, the data
7 structure about where different files are?

8 BY MR. HEINTZ:

9 Q Yes.

10 A Well, if the files are on the disk, but
11 the information about where they are is not on the
12 disk, there are various recovery programs that you
13 can use to reconstruct the information of the files
14 themselves on the disk.

15 Q But in the absence of such a recovery
16 program, the operating system would not be able to
17 access the files on the disk the next time the
18 operating system were turned on; correct?

19 MR. MICALLEF: Object to form; incomplete
20 hypothetical.

21 THE WITNESS: Correct.

22 BY MR. HEINTZ:

23 Q All right. Isn't it true, Doctor, that in
24 the vast majority of cases in 1999, the operating
25 system was installed on a hard disk?

1 DAVID R. KARGER

2 A That is my impression, but I have -- I
3 mean, I certainly believe that to be the case. I
4 haven't seen studies or data that prove it.

5 Q Okay. So doesn't that, then, indicate
6 that when the '403 patent says that the operating
7 system is stored in main memory, that that main
8 memory includes a hard disk?

9 A Where in the '403 patent are you referring
10 to that it says that the operating system is stored
11 in main memory?

12 Q Well, I'm referring to figure 2
13 pictorially, where reference numeral 112 includes
14 the operating system 120, the file system 122, the
15 cache 124, the GUI 126 and those application
16 programs 128-1 through 128-N.

17 If all those things are in the main
18 memory, then doesn't that indicate to one of
19 ordinary skill in the art that typically, that main
20 memory must include a hard disk?

21 MR. MICALLEF: Object to form; incomplete
22 hypothetical.

23 THE WITNESS: I think not. Because if we
24 look, for example, where we were looking before,
25 column 6, rows 60 and on, it talks about the main

1 DAVID R. KARGER

2 memory 112, and it says that "Residing in the memory
3 112 is an operating system." Okay.

4 The most frequent use of the word
5 "residing" that I can recall from my own work is
6 when you talk about things being memory resident,
7 and that means in the RAM resident.

8 So it's quite plausible to read this and
9 say that this is talking about the sort of
10 operate -- the working part of the system, and it
11 is -- it has done what we just discussed before,
12 that it has sort of brought into main memory the
13 portion of the operating system that needs to
14 execute at this time, or that is needed to execute.

15 And the -- you know, yes, you know, it is
16 quite -- it is generally the case that one attaches
17 some sort of secondary storage device to your
18 computer, but it might not be in this picture at
19 all.

20 BY MR. HEINTZ:

21 Q Now, you mentioned residing in the memory,
22 and you talked about memory resident programs. But
23 isn't it true that if memory were intended by the
24 inventors of the '403 patent to refer to both RAM
25 and a hard disk or other nonvolatile storage, that

1 DAVID R. KARGER

2 the operating system on the hard disk would be
3 resident in the memory?

4 MR. MICALLEF: Object to form; improper
5 hypothetical.

6 THE WITNESS: Can you repeat that?

7 BY MR. HEINTZ:

8 Q Sure. If memory in the sentence "Residing
9 in the memory" "is an operating system 120" refers
10 to both hard disk storage and RAM storage, then
11 wouldn't it be true that a operating system
12 installed on the hard disk would be residing in
13 memory?

14 MR. MICALLEF: Same objections.

15 THE WITNESS: So if you -- if you tell me
16 to operate under the definition that memory means
17 RAM and disk and you then tell me that the operating
18 system has been installed on the disk and you then
19 ask me whether the operating system is in memory,
20 then logic requires that based on your own
21 definition, that I say yes, the operating system is
22 in memory.

23 But it's predicated on your telling me
24 that memory means RAM plus disk.

25 BY MR. HEINTZ:

1 DAVID R. KARGER

2 Q Right. And you answered previously that
3 in the majority of cases, the operating system isn't
4 stored on -- installed on a hard disk?

5 MR. MICALLEF: Object to form.

6 THE WITNESS: Yes, but I have also said
7 several times that memory generally refers to RAM.
8 So it's that part of your hypothetical that I would
9 consider less likely.

10 BY MR. HEINTZ:

11 Q And would you say that the operating
12 system is installed in a -- withdraw the question.

13 Let me hand you or ask the reporter to
14 hand you what's been marked as Exhibit 1051.

15 (Exhibit 1051 previously
16 identified.)

17 BY MR. HEINTZ:

18 Q Sir, I'll ask you if you recognize Exhibit
19 1051.

20 A Yes, I do.

21 Q And I'll ask you to turn to figure 5 of
22 Exhibit 1051. That's near the back of the document.

23 A Thank you. Yes.

24 Q Okay. And in answering any of the
25 following series of questions, feel free to refer to

1 DAVID R. KARGER

2 your expert report.

3 So figure 5 includes a portion labeled
4 "MAIN VIEW."

5 Do you see that?

6 A Yes.

7 Q And also includes a portion labeled
8 "MONTAGE VIEW."

9 Do you see that?

10 A Yes.

11 Q Okay. So in your expert report at
12 paragraph 269, you refer to panes or subwindows.

13 Do you see that?

14 A Yes.

15 Q Can you identify for me what in figure 5
16 corresponds to the panes or subwindows referenced in
17 paragraph 269 of your report?

18 (Witness reviewed document.)

19 A Now that I've got some context back, can
20 we repeat the question?

21 Q Sure. What in figure 5 is referred to by
22 panes or subwindows in paragraph 269 of your report?

23 A Good. So at the very least, we have, as
24 is discussed on page 13 of Kostas, that users can --
25 that -- this is a discussion of the montage view,

1 DAVID R. KARGER

2 which is the bottom portion of the presented figure.
3 And Kostas explains how you can divide these into
4 rectangular sizes or panes of sizes appropriate to
5 their particular needs.

6 Q Okay. Is there any other portion of
7 figure 5 that's included under the reference to
8 panes or subwindows in paragraph 269?

9 A Well, Kostas uses the term "panes." But
10 in fact, if you look at the top part of figure 5,
11 there are these two things which he calls net
12 channels, which are elements 504A and 504B of the
13 figure.

14 And these are also nonoverlapping
15 rectangular regions. But those are not -- those are
16 not what Kostas calls panes.

17 Q All right. Well, I want to understand
18 what you're referring to in paragraph 269 of your
19 report when you use the words "panes or subwindows."

20 Are you referring to both the things in
21 the montage view represented by elements 508 and the
22 net channels, 504?

23 A No, in --

24 MR. MICALLEF: Let him finish his
25 question, Doctor.

1 DAVID R. KARGER

2 THE WITNESS: Sorry.

3 BY MR. HEINTZ:

4 Q Or only one of those two things?

5 MR. MICALLEF: Object to form. Go ahead.

6 THE WITNESS: In paragraph 269, I'm
7 referring to Kostas' use of the term "panes." Which
8 are the ones in the montage view.

9 BY MR. HEINTZ:

10 Q Okay. And in your report, do you use the
11 term "panes" or "subwindows" to refer to anything
12 other than the portions of the montage view
13 represented as reference numerals 508?

14 A So it's risky for me to assert
15 categorically about all 130 pages of my report
16 without skimming it. But I don't recall using those
17 terms to talk about something else.

18 Q Okay. So I'll direct your attention to
19 paragraph 270 of your report. The sentence in
20 paragraph 270 includes a portion that reads, "and
21 each such information from" "information" sources
22 "refreshes at a specified interval."

23 Do you see that?

24 A Yes, I do.

25 Q Now, actually, let me read the entire

1 DAVID R. KARGER

2 sentence. 270 reads, "Each rectangular region can
3 display content from a different information
4 source."

5 In that part of the sentence, what does
6 rectangular region refer to?

7 (Witness reviewed document.)

8 A All right, I'm sorry. I've got more
9 context. Can we repeat the question?

10 Q Sure. In paragraph 270 of your report,
11 where you say "Each rectangular region can display
12 content from a different information source," what
13 are the rectangular regions you are referring to?

14 A This is referring to the panes of the
15 montage view.

16 Q So those are what's indicated by reference
17 numerals 508 in figure 5?

18 A Correct.

19 Q Then you say, "each such information from
20 such information source refreshes at a specified
21 interval."

22 Do you see that?

23 A Yes, I do.

24 Q And you cite to Exhibit 1051, Kostas, at
25 16 and 20.

DAVID R. KARGER

Do you see that?

A Yes.

Q Can you tell me what in Kostas at 16 indicates that the information from the information source refreshes at a specified interval?

A So in both cases, I'm referring to the sort of channel model that Kostas is describing in their -- is this a patent application, I should call it, or --

Q You can call it that.

A So in both cases, Kostas describes a channel model, which is something that uses a variety of certain push or pull techniques for accessing data from a remote source and updating it periodically.

Q So when you say "in both cases," what do you mean?

A Both on page 16 and 20.

Q I see, okay.

So where does Kostas tell you that the information from the information source refreshes at a specified interval for the rectangular regions denoted by 508?

A And I knew you were going to ask me, and I

1 DAVID R. KARGER

2 found the spot and I went and put it away, so I have
3 to find it again.

4 What Kostas describes is how the montage
5 view is used to display a variety of applications in
6 nonoverlapping tiles. And he explains that these --
7 his intention is that these applications are
8 preferably created as JavaBeans, which are a
9 particular software component, and the montage is
10 intended to be a JavaBean container, so things that
11 are Java beans can be put into the montage view.

12 And one of the types of JavaBeans that he
13 talks about are these channel beans, which are these
14 things that have a periodic updating functionality.

15 As a particular example, he talks about a
16 market minder JavaBean, which I am currently hunting
17 for.

18 (Witness reviewed document.)

19 Good. So on page 30, it talks about a
20 market minder application, which is a table-based
21 display of securities in a user's portfolio, which
22 are updated continuously for each item in the
23 portfolio.

24 And this is an example of the type of
25 application that you would place into the montage

1 DAVID R. KARGER

2 view and would then be refreshed at intervals.

3 Q I'm a little confused. You just pointed
4 me to something that says that they're updated
5 continuously.

6 A But nothing is truly continuous; right?
7 There is -- this system describes how it uses pull
8 and push, right.

9 You don't continuously pull -- or sorry.
10 You are continuously in the process of pulling, but
11 the way you do that is to make a query every once in
12 a while in order to update the information that you
13 have.

14 Q So is it your assertion that the market
15 minder -- well, you're saying that this market
16 minder application runs in one of the montage view
17 panes 508; is that correct?

18 A That it can, yes.

19 Q Okay. And how does this relate to the
20 discussion of the channels on page 16 of Kostas?

21 A How does it relate? On 16, or actually
22 more precisely, on 20, Kostas talks about pull-type
23 channels, right, which retrieve resource on a
24 regular basis ranging from every few minutes for a
25 rapidly changing data, such as stock quotes, to once

1 DAVID R. KARGER

2 every few hours for less dynamic data.

3 So the market minder is presenting
4 information that has been pulled, or that's one way
5 to do it, into using one of these pull channels.

6 Q So let me ask a question this way. If you
7 turn to page 15 of Kostas --

8 MR. MICALLEF: I'm sorry, did you say 15?

9 MR. HEINTZ: 15 of Kostas, yes.

10 BY MR. HEINTZ:

11 Q Under the heading "Implementation of the
12 Preferred Embodiment," five lines down, it says,
13 "For this purpose, the netchannels are architected
14 in software according to a Model/View paradigm."

15 Do you see that?

16 A Yes.

17 Q All right. Now, with respect to figure 5
18 of Kostas, which is also reproduced in your report
19 at page 104, the net channels refer to the
20 rectangular areas called 504; correct?

21 A So those are the -- I believe they're
22 actually called the net channel views, right. So
23 there's sort of an ambiguity and actually a great
24 potential for typos in this Kostas application,
25 because he talks about channels, the data -- the

1 DAVID R. KARGER

2 data object, which is the model in this model view
3 controller architecture.

4 And he also talks about these two net
5 channels, which are things that appear on the top
6 portion of figure 5.

7 (Mr. Bone left deposition.)

8 Q Right. And then on page 15, we see that
9 the net channels are architected in software
10 according to a model view paradigm?

11 A That's correct. So the net channel has a
12 model and a view, or a -- that it uses the model
13 view.

14 Q Is there a disclosure in Kostas that says
15 that the applications running in the 508 rectangular
16 areas also use these model view services or the
17 model services referred to on page 20?

18 (Witness reviewed document.)

19 A So the sort of line of reasoning that I
20 follow in reading this patent application is that
21 there's a substantial amount of energy devoted to
22 this sort of notion of a uniform architecture based
23 on net beans, on the use of these model view and
24 channel classes to appropriately modularize the
25 system.

1 DAVID R. KARGER

2 And on page 30, the patent discusses how
3 the applications are preferably developed as
4 JavaBeans, right, which -- and that the montage view
5 can display arbitrary JavaBeans. And then it sort
6 of dives into this notion of a market minder
7 application, which talks about continuously updating
8 information for items in the portfolio.

9 Now, after reading the 30 pages of this
10 patent application, what is the natural inference
11 for how this JavaBean, which is how everything is
12 implemented here, is going to update its
13 information?

14 Well, we've just read pages and pages
15 about these channels that provide pull or push
16 updating of information. So the obvious inference
17 to me is that the way you built one of these market
18 minders is that you use the channel architecture to
19 pull and then present the information that is coming
20 through the channel.

21 Q There's no explicit disclosure of that
22 anywhere in the Kostas application, though, is
23 there?

24 MR. MICALLEF: Object to form.

25 THE WITNESS: That's correct.

1 DAVID R. KARGER

2 BY MR. HEINTZ:

3 Q Now, with respect to the net channel view
4 504A and 504B, are those applications running in
5 there?

6 A Are the net channels applications?

7 (Witness reviewed document.)

8 Q You know what, Doctor, that's okay. I'll
9 withdraw it. Oh, I'm sorry, go ahead.

10 A Formally what they assert in this
11 application is a net channel is a JavaBean, okay.
12 Now, elsewhere in the application, they say that
13 applications -- elsewhere in the patent application,
14 they assert that applications are preferably
15 JavaBeans.

16 All right. Now, is every JavaBean an
17 application? It's blurry, right.

18 A Java bean is not something, I don't
19 think, that you can run by itself. It needs a
20 container.

21 But in the context of this application,
22 what we've said is that well, what I'm talking about
23 is applications should be JavaBeans, and when I tell
24 you that the net channel is a JavaBean, that -- and
25 this is how I read it, that seems to be one of the

1 DAVID R. KARGER

2 applications that you could plausibly run in the
3 montage view.

4 Q Okay. So I've got to try to keep the
5 record straight. So we're using the word
6 "application" quite a bit.

7 A Yes.

8 Q And I think the use of the word
9 "application" to refer to Exhibit 1051 or Kostas
10 might be confusing.

11 A It is confusing.

12 Q So I'm going to ask you if we can refer to
13 either Exhibit 1051 or Kostas, rather than
14 "application."

15 A Sure.

16 Q Now, let me sort of reset this discussion
17 we've been having. I'm going to refer you back to
18 paragraph 270 of your report. And in that
19 paragraph, you say that each rectangular region can
20 display content from a different information source
21 and each such information source -- I'm sorry, "each
22 such information from such information source
23 refreshes at a specified interval."

24 And your support was page 16 and page 20
25 of Kostas. Now, I think you earlier said page 20 is

1 DAVID R. KARGER

2 really where this report comes from, so I want to
3 make sure we understand where it is that page 20 of
4 Kostas discusses a specified interval.

5 MR. MICALLEF: Object to form.

6 THE WITNESS: So on the final paragraph of
7 page 20, Kostas describes model services -- sorry,
8 channels using "Model Services to retrieve a web
9 resource on a regular basis, ranging from every few
10 minutes for rapidly changing data such as stock
11 quotes, to only once every few hours for less
12 dynamic data."

13 BY MR. HEINTZ:

14 Q Thank you.

15 And that retrieval of information at those
16 rates is through the model services; correct?

17 A Yes.

18 Q Okay. Now, going back to page 30 of
19 Kostas. As you pointed out, there is an application
20 discussed therein called market minder, and that
21 application, is that an application that runs in the
22 montage view; is that correct?

23 A Yes.

24 Q Okay. And in the description on page 30,
25 it says that the "Prices, bid/ask values, volume and

1 DAVID R. KARGER

2 other data are updated continuously for each item in
3 the portfolio."

4 A Yes, it does.

5 Q Okay. Now, "continuously" is quite a bit
6 different from the description on page 20, which
7 says somewhere between "every few minutes for
8 rapidly changing data such as stock quotes, to only
9 once every few hours for less dynamic data";
10 correct?

11 A So it seems to me that "continuously"
12 matches that notion of every few minutes in much the
13 way that in the claims constructions, simultaneously
14 updating information from multiple information
15 sources is being described.

16 That is, it's the process that is ongoing,
17 and the way that process is ongoing is that every
18 few minutes, you make a pull. Just as in the
19 Board's construction of simultaneous updates, the
20 Board did not construe this as you have to actually
21 get the information from both places at exactly the
22 same time, but there is this continuous process of
23 getting information, which -- and both of those
24 continuous processes are ongoing at the same time.

25 Here, too, there is a continuous process

1 DAVID R. KARGER

2 of updating, which is reflected -- which is
3 reflected by periodic pulls of information.

4 I'll need to break at some point soon, but
5 it doesn't have to be right this point.

6 MR. HEINTZ: Now is fine.

7 (Recess.)

8 BY MR. HEINTZ:

9 Q Dr. Karger, I'd ask you to turn to
10 paragraph 286 of your declaration, Exhibit 1110.
11 Please feel free to read the paragraph or anything
12 around it that you need to, but I'm going to ask you
13 in particular about the last sentence of that
14 paragraph that reads, "One of ordinary skill in the
15 art would understand that in order to interact with
16 email a user must have selected the graphical user
17 interface element that displays the email."

18 And my question is, why is that statement
19 true?

20 A Well, simple example would be the
21 following. Most e-mail programs, most applications,
22 have menu accelerators. You can press keys instead
23 of using the mouse to open a menu and select an
24 operation.

25 So I start typing on the keyboard. How

1 DAVID R. KARGER

2 does the system know which applications menu I am
3 trying to accelerate? Where do those keystrokes go?

4 So there has to be a selected application
5 that is going to receive those keystrokes.

6 Q Is there anything in Kostas that talks
7 about those accelerators that you're referring to?

8 MR. MICALLEF: Object to form; incomplete
9 hypothetical.

10 THE WITNESS: So I brought that up as an
11 example. All right. Do you want me to bring up
12 some -- to bring up some more that -- so --

13 BY MR. HEINTZ:

14 Q First I'd like an answer to my question,
15 which is, is there any discussion of any accelerator
16 accessible by a keyboard in the Kostas application?

17 A Not to my knowledge.

18 Q Do all e-mail programs have accelerators?

19 A I have never seen one -- I have not
20 recently seen one that does not.

21 Q How about in 1999?

22 A I'm pretty sure that I -- that that
23 concept was pervasive in 1999 as well.

24 Q So is it your testimony, then, that all
25 e-mail programs utilized accelerators in 1999?

1 DAVID R. KARGER

2 A No, my testimony was that I was not aware
3 of one that does not.

4 Q There's nothing in Kostas that says that
5 the e-mail program has an accelerator?

6 A Not to my knowledge.

7 Q Okay. Now, I think you wanted to tell me
8 some other reason why it would be true that a user
9 must have selected the graphical user interface,
10 i.e., the pane of Kostas that displays the e-mail;
11 is that right?

12 A Yes.

13 Q What is it? What's your other reason?

14 A Again, selection -- let's take the mouse,
15 right. If we're not going to use the keyboard,
16 we're going to use the mouse in order to interact
17 with an application.

18 When I click the mouse, which application
19 receives the click of the mouse that I am -- that I
20 am performing; right? In order for one application
21 to be told the mouse has clicked, you have to decide
22 which application should receive that mouse click.
23 That is the selected application.

24 Q Well, selecting the application is one way
25 to make that decision, but there are other ways, are

1 DAVID R. KARGER

2 there not?

3 A What do you mean by "make that decision"?
4 Make the decision about which application receives
5 the mouse click?

6 Q Correct.

7 A I can't really think of any others at the
8 moment. I mean, to sort of say that your
9 application is going to receive the mouse click, but
10 not be selected is quite counterintuitive.

11 Q Well, let's take a look at figure 5 of
12 Kostas. Again, that's Exhibit 1051. So what we're
13 saying is -- what you're saying in paragraph 286 is
14 that in one of these rectangular areas 508, we're
15 going to have an e-mail application running; is that
16 correct?

17 A Yes.

18 Q Okay. And you state in your report that
19 no rectangular area 508 can overlap any other area
20 508; correct?

21 A Correct.

22 Q Okay. Now, something is drawing the
23 rectangular areas on the screen; is that correct?

24 A Yes.

25 Q What is the thing that's drawing the

1 DAVID R. KARGER

2 rectangular areas on the screen?

3 MR. MICALLEF: Object to form; incomplete
4 hypothetical.

5 THE WITNESS: It's a slightly complicated
6 question. So this is a type of windowing system or
7 tiled windowing system that is managing the
8 presentation of information from the various
9 applications.

10 In general, one talks about applications
11 drawing themselves, right. That is, the e-mail
12 application is going to be responsible for drawing
13 the contents of its pane within Kostas.

14 Now, in order to do that drawing, it's
15 going to invoke some sort of application programming
16 interface, some sort of API, for saying draw this,
17 draw that. That might be a part of the general
18 desktop GUI. It might be the Kostas application
19 itself that has to take care of, say, cropping, what
20 the application wants to draw into the region that
21 is being displayed in the montage.

22 BY MR. HEINTZ:

23 Q Well, there's some entity, if you will,
24 some piece of code somewhere in the Kostas system,
25 that understands where each of these rectangular

1 DAVID R. KARGER

2 areas 508 are located on the screen; correct?

3 A Yes.

4 Q And that same or some entity is preventing
5 those things from overlapping; correct?

6 MR. MICALLEF: Object to form.

7 THE WITNESS: This returns to something we
8 discussed in the beginning. It's not clear you
9 would say it is preventing them from overlapping or
10 just that the operations that the user is able to
11 perform can never lead to an overlap occurring.

12 BY MR. HEINTZ:

13 Q Well, the user is able to resize these
14 windows, is he not?

15 A Yes.

16 Q So let's say, for instance, that the user
17 decided to resize window 508E.

18 A Yes.

19 Q Okay. Now, if he tried to make it bigger
20 by taking the left hand vertical line that forms the
21 box of 508E and moving it to the left, he could not
22 do so without overlapping rectangular area 508D in
23 figure 5; correct?

24 A Well, again, common semantics for these
25 tiled interfaces is if I grab that border and try

1 DAVID R. KARGER

2 and move it to the left, then I am simultaneously
3 shrinking 508D, while I am growing 508E.

4 Q Okay. Some code in Kostas, then, is
5 simultaneously moving the boundary of 508E and 508D
6 in the discussion we just had; right?

7 A Yes.

8 Q All right. Now, if the entity -- if there
9 is an entity that knows where each of the windows
10 is, is there not also an entity that knows the
11 location of the cursor on the screen?

12 MR. MICALLEF: Object to form; incomplete
13 hypothetical.

14 THE WITNESS: I would assume that is the
15 case, yes.

16 BY MR. HEINTZ:

17 Q All right. So if I've got -- if an entity
18 in the system knows where the cursor on the screen
19 is and an entity in the system knows where the
20 boundaries of the panes 508 are, that either by
21 having those two entities talk to each other or by
22 the fact that those two entities might be the same
23 entity, you can determine unambiguously which pane
24 the cursor is in, can you not?

25 A Certainly.

1 DAVID R. KARGER

2 Q And if you know what pane the cursor is
3 in, you can also determine if the cursor is over a
4 link in 508E; correct?

5 MR. MICALLEF: Object to form; incomplete
6 hypothetical.

7 THE WITNESS: Are we now shifting to
8 talking about sort of a Web browser context as
9 opposed to an e-mail program?

10 BY MR. HEINTZ:

11 Q All right. Let's talk about an e-mail
12 program. When you talk about interacting with an
13 e-mail program, what do you mean?

14 A Interacting with an e-mail program would
15 be selecting a message within that e-mail program.

16 Q Fine. If -- I'm sorry, go ahead.

17 A Clicking on an icon to say I want to begin
18 composing a new e-mail message, scrolling through a
19 list of available messages.

20 Q Anything else?

21 A There would be a lot of examples. I think
22 that's enough.

23 Q Okay. Let's use the icon example. If I
24 want to interact with the e-mail program by clicking
25 on an icon, right, the system -- some entity in the

1 DAVID R. KARGER

2 system knows where the cursor is, some entity in the
3 system knows where the e-mail program pane 508 is,
4 and so, again, if those entities are the same
5 entity, or whether they talk to each other, it's
6 possible for the system to figure out that the
7 cursor is over the icon I'm intending to interact
8 with, regardless of whether the e-mail program is
9 selected; isn't that true?

10 MR. MICALLEF: Object to form; incomplete
11 hypothetical.

12 THE WITNESS: So I'd be careful, because
13 it's quite conceivable that the system has no idea
14 of there being an icon there, right. So the way
15 these sorts of windowing systems work, the windowing
16 system is responsible for managing boundaries and
17 cropping, but it may have no knowledge at all of
18 what is inside of that area. That is, it leaves
19 that entirely up to the application to decide how to
20 manage the pixels inside of that area.

21 So it may not know that the cursor is over
22 an icon.

23 BY MR. HEINTZ:

24 Q One possibility is that it does know;
25 correct?

1 DAVID R. KARGER

2 A One possibility.

3 Q Let's take your other possibility now.

4 You say the windowing system doesn't know that
5 there's an icon, but the windowing system knows
6 where the window is; correct?

7 A Correct.

8 Q And it knows where the cursor is; correct?

9 A Yes.

10 Q Okay. So the windowing system is going to
11 know the location of the cursor, if it's -- if it's
12 located in, for instance, an e-mail program running
13 in 508E; correct?

14 A Yes.

15 MR. MICALLEF: Object to form; incomplete
16 hypothetical.

17 BY MR. HEINTZ:

18 Q And then the windowing system can tell the
19 application where the cursor was when the user
20 pressed a button, could it not?

21 MR. MICALLEF: Object to form; incomplete
22 hypothetical, irrelevant.

23 THE WITNESS: Sorry, can you repeat the
24 question?

25 BY MR. HEINTZ:

1 DAVID R. KARGER

2 Q Sure. The windowing system is going to be
3 able to tell the application that's running in box
4 508E the location of the cursor in box 508E when the
5 user presses a button on the mouse; correct?

6 A Correct.

7 Q Okay. And then the application program
8 could decide that given the location provided to it
9 by the windowing system, that the cursor was, in
10 fact, over an icon; correct?

11 MR. MICALLEF: Object to form; incomplete
12 hypothetical.

13 THE WITNESS: Correct.

14 BY MR. HEINTZ:

15 Q And in that case, the application having
16 that knowledge could do whatever action is
17 associated with clicking that icon, could it not?

18 MR. MICALLEF: Same objections.

19 THE WITNESS: Yes, it could.

20 BY MR. HEINTZ:

21 Q And in that example, we didn't have to
22 select any -- we didn't have to select the e-mail
23 program to do that, did we?

24 MR. MICALLEF: Same objections.

25 THE WITNESS: In fact, we did have to

1 DAVID R. KARGER

2 select the e-mail program in order to do that.

3 BY MR. HEINTZ:

4 Q Well --

5 A Because we -- because there had to be a
6 decision by the windowing system to inform that
7 e-mail program of the mouse click that just
8 happened.

9 Q We already discussed, though, that the
10 e-mail program knows -- sorry, the windowing system
11 knows where the cursor is, right, the mouse cursor
12 is pointing?

13 A Yes, it does.

14 Q And it would know that the mouse cursor is
15 pointing to a box 508E, regardless of whether 508E
16 was selected, would it not?

17 MR. MICALLEF: Object to form; incomplete
18 hypothetical.

19 THE WITNESS: So, again, my point is that
20 the decision to notify the application in 508E of
21 the mouse click and to allow the application in 508E
22 to deal with that mouse click is a kind of selection
23 of that application to receive the information about
24 that mouse click.

25 BY MR. HEINTZ:

1 DAVID R. KARGER

2 Q So just having the cursor in the box 508E
3 is a selection regardless of whether I clicked on
4 it, right-clicked on it, left-clicked on it,
5 nothing. Just moving the cursor across into the box
6 means I've selected the box. Is that what you're
7 saying?

8 MR. MICALLEF: Object to form; incomplete
9 hypothetical.

10 THE WITNESS: That's less clear because --
11 I mean, there are -- there are systems, there are
12 configurations of windowing systems where that is
13 actually true, that is, this is actually how I
14 configure my own desktop, is that you select on
15 hover. So when I move the mouse over a particular
16 window on my desktop, that window becomes selected.

17 However, it's not necessarily the case
18 that a hover will select a window. You may wait
19 until an action takes place which requires that you
20 select that window. A mouse click would be such an
21 event.

22 BY MR. HEINTZ:

23 Q And, for instance, if I look again at
24 figure 5, assuming that these various rectangular
25 panes 508 were selectable, I could, in fact, have

1 DAVID R. KARGER

2 selected pane 508D, in which a first application was
3 running, by clicking on that pane, and then move my
4 cursor over to 508E while 508D is still selected,
5 click on the icon, and the windowing system could,
6 if it wanted to, inform the e-mail application of
7 the mouse click, could it not?

8 MR. MICALLEF: Object to form; incomplete
9 hypothetical.

10 THE WITNESS: Inform which application,
11 508E application?

12 BY MR. HEINTZ:

13 Q The e-mail -- correct.

14 A Again, I would say that that decision to
15 inform the application in a 508E of the mouse click
16 reflects a selection of that application in 508E.
17 Whether or not 508D was previously selected.

18 Q Okay. So I'm clicking on 508D, so 508D is
19 selected. But by moving my mouse cursor over to
20 508E, I've now also selected 508E?

21 MR. MICALLEF: Object to form; incomplete
22 hypothetical, misstates his testimony.

23 THE WITNESS: That is not what I said.

24 BY MR. HEINTZ:

25 Q Okay. One step further. I realize my

1 DAVID R. KARGER

2 mistake, I think. So by sliding my mouse over to
3 508E and then clicking on the link in 508E, then
4 I've selected 508E?

5 MR. MICALLEF: Object to form; incomplete
6 hypothetical.

7 THE WITNESS: I want to make clear what
8 you have changed is you're no longer saying I've
9 also selected 508E. So yes, by moving over and then
10 clicking on 508E, I have now selected that
11 application in 508E.

12 BY MR. HEINTZ:

13 Q And the word "also" was a problem for you.
14 Does that mean that 508D is no longer selected?

15 A That would be the common case. There
16 are -- there are mechanisms for using multiple
17 selection. But in general, a single click leads to
18 a single selection.

19 Q Okay. Bottom line, Dr. Karger, it's not
20 absolutely necessary that I select 508E in order to
21 tell the e-mail application that the mouse is
22 clicked, unless you define the fact that I tell the
23 e-mail program that as being a selection?

24 MR. MICALLEF: Object to form; incomplete
25 hypothetical, irrelevant.

1 DAVID R. KARGER

2 THE WITNESS: So by my -- or by my
3 understanding of the notion of selection, you have
4 to select the graphical user interface element in
5 order to interact with it. So it is necessary.

6 MR. HEINTZ: I'm going to ask the reporter
7 to hand Dr. Karger what's been marked as Exhibit
8 1066.

9 (Exhibit 1066 previously
10 identified.)

11 THE WITNESS: Didn't you already give me
12 this one?

13 BY MR. HEINTZ:

14 Q I don't think so. I gave you 1067.

15 Dr. Karger, I'd like you to direct your
16 attention to 1066, at page 7 of the exhibit, and in
17 particular, column 2.

18 A Uh-huh.

19 Q So in the paragraph above the "User
20 interface" heading, there was a second sentence that
21 reads, then "when a window is deleted, its icon is
22 deleted, but the hole is not filled until another
23 window is created."

24 Do you see that?

25 A Yes.

1 DAVID R. KARGER

2 Q Are the icons in Myers persistent?

3 A So in order to answer that question you
4 have to qualify or clarify what you mean by
5 persistence.

6 So the icon window is a window. I can
7 close the icon window, I think, and I can then
8 reopen that icon window. And the same icons that
9 were there before will be there again.

10 So in that sense, you could say that the
11 icons are persistent.

12 If those icons -- in Sapphire, each of
13 these icons corresponds to a window, and if those
14 windows are associated with applications that do not
15 relaunch when I restart the computer, then the next
16 time I restart the computer, I won't see the icons
17 that were associated with those applications because
18 those applications will not have relaunched.

19 And so in that -- in that embodiment, in
20 that implementation, those icons would not be
21 persistent. Or sorry, under that interpretation,
22 under that aspect of persistence, those icons would
23 not be persistent.

24 Q Let me direct your attention to Exhibit
25 1066 at page 4. Okay. On the right-hand column

1 DAVID R. KARGER

2 under the heading "Icons."

3 A Yes.

4 Q Third line from the bottom, there is a
5 sentence that reads, "In Sapphire the icon and the
6 window exist at the same time, as will be explained
7 later."

8 Do you see that?

9 A Yes.

10 Q So how is it, then, in Sapphire that the
11 icons come to be displayed on the screen?

12 MR. MICALLEF: Object to form.

13 THE WITNESS: How is it that they come to
14 be displayed on the screen. So as we saw in the
15 previous discussion, the icons in Sapphire are
16 presented in an icon window, in order to help users
17 quickly access various windows that are created by
18 executing programs.

19 BY MR. HEINTZ:

20 Q I understand that when the icon is
21 present, they are displayed in this icon window.
22 But I'm asking you what -- what makes the window --
23 what makes the icon appear on the display? How does
24 the user decide -- or influence the system to
25 display the icon?

1 DAVID R. KARGER

2 MR. MICALLEF: Object to form.

3 (Witness reviewed document.)

4 THE WITNESS: I'm trying to make sure --
5 I'm trying to provide the information you're
6 seeking. I'm not sure what you're seeking.

7 So icons are created in Sapphire in
8 correspondence with windows, so an icon is created
9 when a window is created.

10 BY MR. HEINTZ:

11 Q All right. So let's say that I've -- I'm
12 working on my Sapphire system, I have three
13 applications open, three application windows open,
14 that means I'm going to have three of these icons;
15 correct?

16 A Yes.

17 Q I close application 1, I close application
18 2, I close application 3. Now all the three icons
19 are gone; right?

20 A Yes.

21 Q Okay. Will I ever see an icon again? And
22 if so, what do I need to do to see one again?

23 MR. MICALLEF: Object to form; incomplete
24 hypothetical.

25 THE WITNESS: I need to launch an

1 DAVID R. KARGER

2 application.

3 BY MR. HEINTZ:

4 Q How do you do that?

5 A I'm not certain that this document says --
6 let me --

7 (Witness reviewed document.)

8 So you'll notice this document is titled
9 "The User Interface for Sapphire," so it is
10 describing only one portion of the Sapphire system.

11 It's also worth mentioning, given the
12 discussion that we had before, that it has quite an
13 extensive discussion of this notion of a listener
14 window, that -- just for supporting the point that I
15 made before, that these systems have to know which
16 application you're addressing if you start typing or
17 something like that.

18 And so this discusses extensively the fact
19 that you need to be able to specify and in
20 particular change the listening -- change the
21 listener window so it can properly receive input.

22 That's exactly the point that I was making
23 before about the need to select a particular element
24 in order for it to receive input.

25 Now, as far as I can tell, the document

1 DAVID R. KARGER

2 does not describe in general how applications will
3 be launched. And in the question that you asked, if
4 I close all of my icons -- I'm sorry, if I close all
5 of my applications, it's not clear whether Sapphire
6 comes with any kind of launcher interface, anything
7 that I can use to launch a new application.

8 I wouldn't be surprised if it did. You
9 don't want to be left with a dark screen.

10 There is a mention of the fact that, for
11 example, you can get help in Sapphire by pressing a
12 prefix key and then some other key. And again, this
13 is speculation, but you're presumably going to
14 invoke -- you're going to open up a new application,
15 a "help" application or a presentation application
16 that's going to show the help when you press that
17 prefix key and the appropriate accelerator.

18 Looking at -- let me see.

19 So in figure 6, you can see a pop-up
20 window for specifying commands. It's not clear
21 whether that's going to open up another window,
22 whether it's going to launch another application or
23 just replace -- or just do something in the existing
24 window.

25 So I'm afraid the document -- I'm afraid

1 DAVID R. KARGER

2 this document is basically moot -- mute on the
3 question you asked about how you will start up a new
4 application.

5 Q So you don't know?

6 A Right.

7 Q Okay. Thanks, Doctor. In your answer
8 there -- and I'm going to move to strike the part of
9 the answer that wasn't responsive to my question.
10 But you said something about this concept of
11 listener window; correct?

12 A Yes.

13 Q Is Kostas -- I'm sorry. Is Exhibit 1066 a
14 covered windows system or tiled windows system?

15 MR. MICALLEF: Object to form; relevance.

16 BY MR. HEINTZ:

17 Q The document we're looking at, sorry.

18 A 1066 does permit windows to cover, so it's
19 a covered windows system. Actually, let me
20 double-check that.

21 Q If it helps, page 3 under the heading --
22 yeah, okay, figure 1 under the heading --

23 MR. MICALLEF: Let him ask the question
24 first, all right?

25 THE WITNESS: Okay.

1 DAVID R. KARGER

2 MR. MICALLEF: Go ahead, your question.

3 BY MR. HEINTZ:

4 Q So does that help?

5 A Yes. So figure 1 shows that Sapphire is a
6 covered windows system.

7 Q Okay. Now, one thing that's clear, and
8 particularly from the passage at page 4 we
9 discussed, which states that the Sapphire icons and
10 windows exist at the same time, is that you can't
11 use the icons to call an application program; isn't
12 that correct?

13 MR. MICALLEF: Object to form; incomplete
14 hypothetical.

15 THE WITNESS: That gets to the ambiguity
16 of "call." All right. So if I click on an icon in
17 order to turn that window into the listener, you can
18 certainly see that as a -- as a step towards calling
19 that application program, right.

20 So again, if I make a particular window a
21 listener and now I start typing, that application
22 program is now going to be called to receive the
23 typing that I'm doing.

24 BY MR. HEINTZ:

25 Q You can't use an icon to launch an

1 DAVID R. KARGER

2 application, could you? A Sapphire icon?

3 A Correct.

4 Q I'd like you to turn your attention to
5 paragraph 341 of your report. In that paragraph,
6 you state that to the extent one could conclude that
7 the dynamic icons of Myers are not persistent, it
8 would have been obvious to modify Myers in order to
9 make them so, since persistent user interface
10 elements were well known by 1999 such as those
11 described by an MSIE kit; correct?

12 A Correct.

13 Q So where in Myers do the icons, when they
14 exist, get their updates from?

15 MR. MICALLEF: Object to form. Incomplete
16 hypothetical.

17 THE WITNESS: So if you look on page 6,
18 there is a paragraph on progress bars. And you
19 can -- in line 6 or 7, it says that these are kept
20 up to date by the application program or by the
21 system for certain applications.

22 So there are at least two sources of
23 information that lead to the updating of these
24 icons.

25 BY MR. HEINTZ:

1 DAVID R. KARGER

2 Q Okay. Let's talk about the situation
3 where the icons are kept up-to-date by the
4 application program.

5 A Okay.

6 Q If the application program is not running,
7 then where would you get information to update the
8 dynamic icons of Myers?

9 A Well, as we said, they can be kept
10 up-to-date by the system, as well as being kept
11 up-to-date by the application program. But I will
12 point out that a very straightforward way to make
13 the icons of Myers persistent would be to make the
14 application persistent, using something like the
15 session manager tools that I've discussed elsewhere
16 in my report.

17 Q Okay. So you'd have to make the
18 application persistent in order for the icons to
19 update from the application?

20 A That would be --

21 MR. MICALLEF: Object to form.

22 THE WITNESS: That would be one way to do
23 this.

24 BY MR. HEINTZ:

25 Q Would that have been obvious to one of

1 DAVID R. KARGER

2 ordinary skill in the art to do that?

3 A To use a session manager? Certainly.

4 Q To use a session manager to keep
5 applications constantly running so that the icons
6 were persistently updated?

7 MR. MICALLEF: Object to form.

8 THE WITNESS: Let's remember that a
9 session manager doesn't keep applications constantly
10 running. It just runs them when you begin -- when
11 you begin a session, it will reestablish the
12 applications that were running the last time you
13 were in a session. When it reestablishes those
14 applications, and if you were doing this within
15 Sapphire, you would also reestablish those icons and
16 continue to update them using the application.

17 BY MR. HEINTZ:

18 Q That would have been obvious?

19 A Certainly.

20 Q Okay. Now, in the second example
21 discussed on page 6 of Exhibit 1066 where the icons
22 are kept up-to-date by the system for certain
23 operations, what kind of operations are we talking
24 about? I'm sorry, is 1066 talking about.

25 A So an example would be when a application

1 DAVID R. KARGER

2 required -- so I should say that these are not
3 explicitly listed in this document. It doesn't
4 explicitly say this is done by the system, this is
5 done by the application and so forth.

6 But there are several types of icon
7 updates which would be natural for the system to be
8 responsible for. One is the case that's described
9 in figure 5 on page 6, where it talks about three
10 dots that show that a window is offscreen. It talks
11 about a keyboard that is indicating that an
12 application is waiting for user input, and it talks
13 about an error signal, a bug being displayed.

14 So these three phenomena of an application
15 wanting user input or of a window being offscreen or
16 of some sort of fault having occurred, these are
17 sort of generic phenomena that could happen to a
18 broad variety of applications and would sort of be
19 natural to have in the vocabulary of the system and
20 have the system be responsible for providing this
21 kind of information in the icon.

22 To contrast, the fourth icon, icon D, has
23 a mailbox with mail sticking out, which is
24 presumably indicating that there is mail, and you
25 couldn't really expect the system to understand

1 DAVID R. KARGER

2 enough about the mail application to be able to be
3 responsible for that. Instead, that is something
4 that the application program would be responsible
5 for updating.

6 Q Okay. So in the first three examples --
7 sorry, in the first example you gave, you say the
8 three dots show that the window is offscreen. If
9 the window is offscreen, that means that there's an
10 application running in the window; correct?

11 A Whether or not the window is offscreen,
12 there is an application running associated with the
13 window.

14 Q Okay. So there is an application
15 associated with the window, and the window is off
16 the screen, and you're -- and your answer is that
17 the system will then display -- update the icon to
18 show the three dots; is that correct?

19 A That's correct.

20 Q Okay. That requires the existence of an
21 application running in a window that's off the
22 screen, though; correct?

23 A Again, within Sapphire, there is this
24 one-to-one association between applications and
25 icons. So whether it's off the screen or not, there

1 DAVID R. KARGER

2 is -- if there's an icon, there's an application
3 associated with the icon's window.

4 Q Okay. What I'm trying to get at, though,
5 is I asked you for what the source of the updates is
6 going to be if it's not the application. You
7 identified the system would provide the updates.
8 But at least with the three dots, the only time the
9 system would do that was when there is an
10 application running?

11 MR. MICALLEG: Object to form.

12 THE WITNESS: Sorry, I'm missing a connect
13 between the beginning and end of that question. So
14 yes, there is an icon when there is an application
15 running. But that doesn't mean that the source of
16 updates to the icon has to be the application,
17 right.

18 There is an icon, it's there when the
19 application is running. But the system can be
20 updating that icon which is there because the
21 application is running.

22 BY MR. HEINTZ:

23 Q Again, that's the point. The system is
24 updating the icon because the application is
25 running; right? The system wouldn't put three

1 DAVID R. KARGER

2 dots -- wouldn't display an icon with three dots if
3 there were no application running, because the three
4 dots is telling the user that the application window
5 is off the screen?

6 A This does not mean that the source of the
7 update is the application. It does mean that you're
8 only going to see an icon when there is an
9 application running.

10 Q Okay. But my point is you have said that
11 it would have been obvious to make those icons
12 persistent.

13 A Yes.

14 Q Now, I asked you why -- where the updates
15 from the icons -- sorry, the updates to the icons
16 would come from if there's no application running.
17 You told me it would come from the system.

18 A Yes.

19 Q As an example you gave me the three dots,
20 update to the icon by the system when the window was
21 off the screen; right?

22 A Yes.

23 Q And now what I'm asking you is it wouldn't
24 make sense to update that icon with the three dots
25 if there were no application running; correct?

1 DAVID R. KARGER

2 A If there were no application running,
3 there would be no icon.

4 Q Okay. But in your -- you've said it would
5 have been obvious to make the icons persistent.
6 Does that mean that the only way the icons are going
7 to be persistent in that paragraph of your report is
8 if the applications are also running and also
9 persistent?

10 MR. MICALLEF: Object to form.

11 THE WITNESS: No, what I said was that
12 would be one way to do this, right, would be to move
13 to a more persistent system, where the applications
14 are persistent and therefore the icons are
15 persistent.

16 Another thing that would have been obvious
17 would have been to use the common role of icons in
18 addition to Sapphire role of icons.

19 And we actually -- we see this in today's
20 tools, that the quick launch bar for -- in windows
21 is simultaneously something which has icons that you
22 can use to launch an application that is not
23 running, but also has icons that can be used to
24 access and reflect the state of those applications,
25 if they have been launched and are running.

1 DAVID R. KARGER

2 BY MR. HEINTZ:

3 Q Okay. With respect to claim 53,
4 substitute claim 53 in the conditional amendment,
5 which reference is more relevant, MSIE kit or Myers?

6 MR. MICALLEF: Object to form; irrelevant.

7 THE WITNESS: I'm really not sure what
8 "more relevant" means. I mean, I generally think of
9 relevance as it is or it isn't.

10 BY MR. HEINTZ:

11 Q So there can't be -- okay. In your
12 report, you indicate that claim 53 is invalid based
13 solely on MSIE kit; is that correct? Your report --
14 sorry, I apologize. Not your report. Your
15 declaration, Exhibit 1110.

16 A I'm sorry, do you want to direct me to
17 where I make that assertion or do you want me to
18 find it?

19 Q No, I'll find it for you. Page 74 is
20 where that part of your opinion starts. Again,
21 that's page 74 of Exhibit 1110.

22 A Sorry, on page 74 is where I make the
23 general assertion that the claims are not patentable
24 over an MSIE kit.

25 Q Right. Now let's go to 128, page 128 of

1 DAVID R. KARGER

2 Exhibit 1110.

3 A Okay.

4 Q I'm sorry to do this to you, it's late in
5 the day. Let's go back to page 74 of Exhibit 1110,
6 where you discuss your opinion that the proposed
7 substitute claims are not patentable over an MSIE
8 kit.

9 A Yes.

10 Q So do you rely on anything other than MSIE
11 kit in your assertion that claim 53 is not
12 patentable?

13 A I'm sorry, that question is very broad.
14 You're asking if I rely anywhere on anything besides
15 MSIE kit to argue that claim 53 is not patentable?

16 Q No, it's not quite that broad. What you
17 said starting under the heading 2, "The Proposed
18 Substitute Claims Are Not Patentable Over" MSIE kit;
19 right?

20 A Yes.

21 Q You've asserted that claim 53 is not
22 patentable over MSIE kit alone; correct?

23 A Correct.

24 Q You don't need some other reference or
25 some other information to combine. Everything you

1 DAVID R. KARGER

2 need to form your opinion that claim 53 is not
3 patentable can be found in MSIE kit?

4 A So this portion of the report does argue
5 that based solely on MSIE kit, the claims are not
6 patentable.

7 Q Okay. Now, I'm going to ask you to direct
8 your attention to the portion of your report that
9 discusses Exhibit 1066, and that starts at page 128.

10 A Yes.

11 Q Exhibit 1110. Now, is it your opinion
12 that claim 53 is not patentable solely based on the
13 Myers reference, Exhibit 1066?

14 (Witness reviewed document.)

15 Dr. Karger, let me try to make it a little
16 easier for you. Let's look at paragraph 343 of your
17 report.

18 A Yes.

19 Q First sentence you say that "Myers
20 explains that his dynamic icons are kept up to date
21 by their assigned application programs." Then you
22 say in the next sentence, "Myers does not explain
23 exactly how the dynamic icons are updated. However,
24 by 1999 it would have been obvious to update the
25 dynamic icons of Myers using a retrieval rate

1 DAVID R. KARGER

2 scheme, such as disclosed in MSIE Kit"; correct?

3 A Correct.

4 Q So you're saying it's the combination of
5 kit and Myers that renders claim 53 obvious, are you
6 not?

7 A Well, I'm saying that that's one example,
8 right. I -- I consider the use of polling to
9 decide, for example, in Myers figure 6, to decide
10 when to put up that new mail flag as something that
11 would have been obvious generally, that you don't
12 need to specifically refer to MSIE kit in regard to
13 that polling, because polling is -- polling,
14 according -- polling at some regular rate is one of
15 the most obvious ways to keep information up to
16 date.

17 But certainly, it would be obvious in
18 combination with the schemes that are discussed in
19 MSIE kit.

20 Q And so in any event, your opinion is that
21 Myers, Exhibit 1066, renders claim 53 obvious, not
22 anticipated; correct?

23 A That's correct. My assertion is that the
24 claims are obvious, not anticipated.

25 Q So isn't it true, then, that MSIE kit is

1 DAVID R. KARGER

2 more relevant to claim 53 than Myers, or is
3 relevance still just a binary concept for you?

4 MR. MICALLEF: Object to form;
5 argumentative.

6 THE WITNESS: More relevant -- it's a
7 difficult -- I'm sorry, it's difficult to answer. I
8 mean, both of these -- both of these pieces of prior
9 art are clearly relevant, right. More relevant.
10 Let's see.

11 I mean, with MSIE kit, we're making an
12 anticipation argument. With Myers we're making an
13 obviousness argument. But I don't see how that
14 flows to relevance.

15 BY MR. HEINTZ:

16 Q Okay. I'd like you to turn to paragraph
17 71 of your report. Sorry, I keep saying report.
18 Paragraph 71 of your declaration, Exhibit 1110.

19 A All right.

20 Q Okay. In the first line of paragraph 71,
21 you say, thus -- sorry, "Third, SurfCast's reading
22 is inconsistent with the '403 Patent itself."

23 Do you see that?

24 A Yes.

25 Q Okay. What's the reading you're referring

1 DAVID R. KARGER

2 to in that paragraph? And I'm not sure this is it,
3 but to speed it up, I think you might be referring
4 to paragraph 68 of your report.

5 A Yes, that's correct.

6 Q Okay. So your opinion is that in
7 understanding the words "when a tile is selected,"
8 means that the access is provided at the time the
9 tile is selected; correct?

10 MR. MICALLEF: Object to form.

11 BY MR. HEINTZ:

12 Q All right. Let me do it again. What
13 about SurfCast's reading is inconsistent with the
14 '403 patent?

15 (Witness reviewed document.)

16 A Sorry, I'm slowing down as it gets late.

17 Q I think we're almost done, so --

18 (Witness reviewed document.)

19 A Sorry. Now I've lost the question. Can I
20 get it repeated?

21 Q Yeah. I'm trying to understand why it is
22 you're saying that SurfCast's reading, as described
23 in paragraph 68, is inconsistent with the '403
24 patent. I just don't understand the logic. I'll
25 try in some bite-sized questions. Maybe we can go

1 DAVID R. KARGER

2 through it this way. I'm sorry, go ahead.

3 A I can take a stab at what you've just
4 asked. Actually, that would be easier if you gave
5 me a copy of Weadock.

6 Q Which Weadock do you want?

7 A Weadock declaration ISO response, Exhibit
8 2004.

9 Q Of course that's the one I don't have.

10 A Then sorry, I just can't answer your
11 question.

12 (Laughter.)

13 Q I'm sorry, 2004? We did have it, I'm
14 sorry. You're not getting off the hook. All right.
15 So I'll hand -- I'll ask the court reporter to hand
16 the witness what's been marked as Exhibit 2004.

17 (Exhibit 2004 previously
18 identified.)

19 THE WITNESS: So if you look at paragraph
20 92 of Weadock, of Exhibit 2004, it asserts that
21 Duhault II's tiles are not tiles. It disagrees with
22 my characterization of Duhault II's tiles, because
23 he says a tile is selectable to provide access to
24 underlying information.

25 However, selecting a window in Duhault 2

1 DAVID R. KARGER

2 does not provide access to underlying information.
3 It presents the same information the user is already
4 viewing but at a higher level of fidelity.

5 So this paragraph is saying that
6 presenting the same information as before does not
7 meet this characterization of providing access to
8 underlying information.

9 BY MR. HEINTZ:

10 Q Okay.

11 A Sorry -- right. So the sense in which
12 this is inconsistent is that it is trying -- it
13 attempts to read things as you have to provide
14 access to the information at the time that it is
15 selected, as opposed to during the time that it is
16 selected.

17 And in their own description of these live
18 tiles, the sort of -- one of the central benefits
19 that they argue is that they are providing
20 information all the time.

21 So for Weadock to say that it's not a tile
22 because it does not provide access -- it is not a
23 tile -- sorry, I'm getting tangled up in my double
24 negative, so to speak.

25 Weadock has argued that Duhault's things

1 DAVID R. KARGER

2 are not tiles because they were providing access to
3 information before you selected the tile.

4 But the whole point of these live tiles,
5 as described in the '403 patent, is that they are
6 providing access to information before you select
7 the tiles. They are providing access all the time.

8 So Weadock's assertion would essentially
9 be asserting that the tiles described in the '403
10 patent are not tiles.

11 Q Okay. So in paragraph 71, when you're
12 talking about SurfCast's reading, you're talking
13 about the opinion in paragraph 92 of Mr. Weadock's
14 declaration; is that right?

15 MR. MICALLEF: Object to form.

16 THE WITNESS: Now to answer this well, I
17 should probably get SurfCast's claim construction
18 document where they want to talk about what's
19 selectable -- or what it is about the selection
20 language that they want to associate with the tiles.

21 So I believe that Weadock's discussion
22 here is reflecting of the way that the patent owners
23 would like to read in this notion of selectable to
24 provide access.

25 BY MR. HEINTZ:

1 DAVID R. KARGER

2 Q All right. In paragraph 68, you say, the
3 "Patent Owner appears to misunderstand the Board's
4 interpretation of 'tile'"; correct?

5 A Correct.

6 Q The Board's interpretation of tile is
7 given in your report at page 11, paragraph 35, is it
8 not?

9 A Yes.

10 Q Okay. And so the Board's interpretation
11 of tile is a graphical user interface element whose
12 content may be refreshed and that, when selected,
13 provides access to an information source; correct?

14 A Yes.

15 Q Now, in paragraph 68, you say that the
16 patent owner is "interpreting the phrase 'when
17 selected, provide access to' " "'information source'
18 to require that the provision of the access" "must
19 commence at the time the tile is selected"; correct?

20 A Correct.

21 Q And you take issue with that in paragraph
22 69, because you say what that really means is could
23 be when it's selected or could be at just some time
24 after it's selected?

25 A No.

1 DAVID R. KARGER

2 Q No, okay.

3 A What I say is that it could be happening
4 before it's selected.

5 Q Well, let me direct your attention to
6 paragraph 69. You say that the word "when" has
7 several different meanings. "It can mean 'at the
8 time that,'" and you cite the American Heritage
9 Dictionary; right?

10 A Uh-huh.

11 Q And that's what you say in paragraph 68
12 the patent owner's understanding is; right?

13 A Correct.

14 Q Then you say back in paragraph 69, "but
15 it," meaning when, "can also mean 'during the time
16 at which' or 'while'"; correct?

17 A Yes.

18 Q So while it's selected. I mean, in other
19 words, if this is happening at some time after the
20 selection of the tile has occurred?

21 A Not after the selection has occurred but
22 while the tile is selected.

23 Q Right. But not before it's selected.
24 That's not what you're talking about here in this
25 section of your report?

1 DAVID R. KARGER

2 A What I'm talking about is the assertion
3 that if you were -- I am refuting the assertion,
4 which we pointed to in Weadock, that having the
5 information -- that having the access before
6 selection would rule this -- would rule out this
7 scenario.

8 That is, Weadock wants to argue that if
9 you had access before and then you make a selection
10 and you still have access, that doesn't meet the
11 definition of when selected provides access.

12 Q So under your understanding of the Board's
13 construction, if I have access before the tile is
14 selected, right, that doesn't preclude the tile from
15 providing access when the tile is selected?

16 A Correct.

17 MR. HEINTZ: If you give me a quick five
18 minutes, I think we may be just about done.

19 (Recess.)

20 MR. HEINTZ: No further questions.

21 MR. MICALLEF: Thank you. I'm going to
22 have just a couple questions to clear up a couple
23 things, Dr. Karger.

24 EXAMINATION

25 BY MR. MICALLEF:

1 DAVID R. KARGER

2 Q Can I get you to go back to paragraph 68
3 of Exhibit 1110 that we were just talking about.

4 A Yes.

5 Q So just to be clear I think Mr. Heintz
6 asked you whether the opinions in paragraph 71 were
7 referring back to the opinions in paragraph 68. Do
8 you recall that?

9 A Yes.

10 Q And I just want to make sure the record is
11 clear. Is 71 referring back to the opinions in
12 paragraph 68?

13 A Yes.

14 Q Okay. Now, there's a citation at the end
15 of paragraph 68. Can you tell us what you
16 understand that citation to refer to?

17 A Yeah. So if you look at paragraph 67,
18 there is a reference to Exhibit 2004, paragraphs 90
19 to 100.

20 And here in paragraph 68, we're referring
21 to the same reference, but in paragraphs 5 to 6 --
22 or pages 37 to 38 and 57. I'm sorry, paragraphs.

23 Q I'm going to hand you a document. I'm
24 going to hand you the SurfCast, Incorporated's
25 patent owner's response under 35 USC section 316A.8,

1 DAVID R. KARGER

2 37 CFR section 42.120. I'm sorry, I don't know what
3 paper number it is in this case. But I'm going to
4 hand you that, and I'm going to ask you to turn to
5 page 37.

6 MR. HEINTZ: Can we have a copy?

7 MR. MICALLEF: I only have one. You have
8 a copy. It's paper number 27. I'm sorry. Do you
9 want to come over and look over his shoulder?

10 MR. HEINTZ: Yeah, I would.

11 BY MR. MICALLEF:

12 Q Page 37. And this is a discussion of the
13 Duhault II reference, correct, on page 37?

14 A Correct.

15 Q And do you see -- do you see the sentence
16 that near the bottom that states, "however, that
17 change upon selection does not provide access to the
18 underlying information source because the
19 information from the underlying information source
20 was already being displayed before the image was
21 even selected"?

22 A Yes.

23 Q Okay. So my question is is the citation
24 at the end of paragraph 68 -- could that be
25 referring to the patent owner's response rather than

1 DAVID R. KARGER

2 to Mr. Weadock's declaration?

3 A So I think it's pretty clear that this is
4 a typo or an ambiguity in my report, where I just
5 used "Resp." and should have specified a particular
6 exhibit.

7 This material that we've just referred to
8 on page 37 is in correspondence with the material
9 that I was describing from Weadock's declaration.
10 But this is the actual page where we can see that --
11 as I asserted in my testimony, I believe that the
12 patent owner was in agreement with Weadock about --
13 with this issue, that if the information was already
14 being provided, it would not satisfy their desired
15 definition.

16 So this reference is -- should be
17 correctly pointing into this document and not at
18 Weadock's.

19 Q Back to your declaration, Exhibit 1110.
20 Mr. Heintz was asking you some questions about
21 paragraph 286. In particular, he was asking you
22 questions about the last sentence in paragraph 286.

23 Do you remember that?

24 A Yes.

25 Q Okay. And do you still believe that that

1 DAVID R. KARGER

2 last sentence is accurate?

3 A Yes, I do.

4 Q Can you tell us why?

5 A So as I said at the time, and as we
6 reiterated looking over Myers, the Sapphire chapter,
7 there's a general understanding that you need to
8 decide which window is listening to particular input
9 events in order to hand those events off to the
10 appropriate application. And that decision of which
11 is the listening window is -- or that -- that
12 identification of a listening window, determination
13 of a listening window, is a type of selection.

14 Q Okay. Thank you.

15 I'd like to direct your attention to
16 Kostes, which is Exhibit 1051. Just let me know
17 when you have it.

18 A Yes.

19 Q If you could turn to page 15. And I'd
20 like you to tell me what your understanding is of
21 the very first sentence on that page.

22 A If none is found?

23 Q Right. It begins with "If none is found."
24 Obviously, if you want to read more of the document,
25 you're welcome to.

1 DAVID R. KARGER

2 A So the sentence reads that "If none is
3 found," that is if no prior montage view is found,
4 then the user can create "a new montage," either by
5 manipulating the existing montage view or by
6 enlarging the "data being displayed" in "one of the
7 netchannels."

8 So again, going back to the discussion we
9 had before about the sort of relationship between
10 the net channels and the applications in the montage
11 view, this sort of supports my argument that the
12 views in the montage view are presenting the same
13 sort of data using the same sort of channel -- model
14 view channel architecture as the net channels
15 themselves.

16 So in a sense, the -- one can place into
17 the montage area a different view of what is being
18 presented previously in a net channel.

19 Q Now, you were asked some questions about a
20 number of exhibits, 278 -- I'm sorry, 2078 through
21 2080, that purport to describe various Windows
22 operating systems such as Windows 95, Windows 98.

23 Do you remember that?

24 A Yes.

25 Q Did you ever own a Windows 95 machine?

1 DAVID R. KARGER

2 A Yes, I did.

3 Q When?

4 A Probably around '95.

5 Q Probably around 1995. You bought that
6 yourself?

7 A '95, I was already working as faculty, so
8 I bought it but I didn't pay for it. It came out of
9 my grant money.

10 Q Where did you buy it?

11 A Every -- every laptop I've ever owned has
12 been from -- has been an IBM ThinkPad, so I bought
13 it from IBM and I always order online.

14 Q Did it have Internet Explorer 4 on it?

15 A I have no recollection.

16 Q Did you ever -- do you have any
17 recollection of ever having a machine with Internet
18 Explorer 4 on it?

19 A I certainly recall having machines with
20 Internet Explorer on them, but I can't tell you
21 when -- when it cycled through various versions. I
22 always had the most up-to-date one.

23 Q Did you ever own a Windows 98 machine?

24 A I think so. Yeah, yeah, I did.

25 Q Can you tell me when?

1 DAVID R. KARGER

2 A Probably around '98. I tend to buy a
3 machine every year or two, and that machine tends to
4 come with whatever the current operating system is.

5 Q Okay.

6 A So I'm working by inference rather than
7 explicit recollection.

8 Q Do you know if the Windows 98 machine had
9 Internet Explorer on it?

10 A I'm sure it did. That was before the
11 whole Justice Department action to make you take
12 Internet Explorer off; right? So I don't know, but
13 I am inferring that there was some version of IE.

14 Q Were there icons in the prior art that
15 were not persistent?

16 A Sapphire, right, as -- again, ambiguity
17 about persistence. But if I turned off a Sapphire
18 machine and turned it back on, those icons are
19 probably gone.

20 Q If I could ask you to take a look at the
21 '403 patent, column 9. And in particular, I'll
22 direct your attention to the paragraph that begins
23 at about line 43.

24 Do you see that?

25 A Yes.

1 DAVID R. KARGER

2 Q Do you recall you were asked questions
3 about this paragraph?

4 A Yes, I was.

5 Q Now, do you interpret this paragraph to
6 disclose tiles that can overlap other tiles?

7 A Yes, I do.

8 Q Why?

9 A Well, most directly, because they talk
10 about an embodiment where you can double-click a
11 tile in order to -- and enlarge it, to occupy the
12 entire display. I'll look for the text. Line 3.
13 "In this embodiment, double clicking tile 402 or 412
14 causes the image to be expanded to fit the whole
15 display area."

16 So if it's fitting the whole display area,
17 then the other tiles are now underneath it.

18 Q Is there anything else in the paragraph
19 that leads you to the conclusion that this discloses
20 tiles that can overlap other tiles?

21 A So it also talks about enlarging to occupy
22 a substantial fraction of the display. Later on it
23 talks about causing the box window of the e-mail
24 utility to be sufficiently enlarged to allow new
25 messages to be selected and read.

1 DAVID R. KARGER

2 And the way I read those, what I
3 understood was opening up a sort of a modal window
4 or modal box that is larger than the original tile
5 and therefore will cover up some of the other tiles.

6 Q Can I get you to look at column 9, lines 9
7 to 11.

8 Do you see that?

9 A Yes.

10 Q Now, this is talking about a tile that
11 would display a further array of tiles by expanding
12 to occupy the full area of the display?

13 A Yes.

14 Q Do you have an understanding what would
15 happen to the tiles -- the tiles that are on this
16 screen before tile 406 is expanded?

17 A As I said regarding the previous paragraph
18 that we were looking at, if you're expanding
19 something to occupy the entire display, then it is
20 going to end up overlapping whatever was previously
21 on that display.

22 MR. MICALLEF: No further questions.

23 EXAMINATION

24 BY MR. HEINTZ:

25 Q Sir, let me direct your attention back to

1 DAVID R. KARGER

2 paragraph 286 of your declaration, Exhibit 1110. In
3 particular, the last sentence that Mr. Micallef
4 directed your attention to.

5 A Yes.

6 Q In responding to Mr. Micallef's question
7 you mentioned a decision being made as to where to
8 send the information, which window to send the
9 information to; correct?

10 A Yes.

11 Q Who or what makes that decision?

12 MR. MICALLEF: Object to form;
13 incorrect -- incomplete hypothetical.

14 THE WITNESS: So what I was referring to
15 there was the window manager or tile manager or
16 whatever, which tends to act as a layer between the
17 user and the applications. It has to take user
18 actions, user input events, and deliver them to the
19 appropriate application.

20 BY MR. HEINTZ:

21 Q And it's your testimony, then, that if the
22 windows manager decides to forward a user input
23 event to a particular application, that must mean
24 that the application to which the user event
25 information has been sent has been selected; is that

DAVID R. KARGER

right?

MR. MICALLEF: Object to form.

THE WITNESS: I'm sorry, can you repeat the question?

BY MR. HEINTZ:

Q Sure. And I'll try to break it down for you a little bit.

I understand your answer to mean if an application receives a user input event from the windows manager, that can only mean that the application must have been selected. Is that correct?

MR. MICALLEF: Object to form.

THE WITNESS: I'm simply a little leery of the word "must" because one can imagine inventing something new. But it is certainly by far the common practice that the mechanism for multiplexing input to a number of applications is through this notion of a selected window.

BY MR. HEINTZ:

Q Well, in paragraph 286, you did use the word "must"; right? You said the "user must have selected the graphical user interface element."

Do you want to withdraw that opinion now?

1 DAVID R. KARGER

2 A Fair enough. No, I -- as I said, I
3 have -- at this time of night -- at this late in the
4 day, I've started to speculate.

5 But to the extent that -- everything I can
6 presently envision would require selection to have
7 taken place as a step towards delivering input to a
8 particular application. So yes, I am -- I will
9 stand by that "must."

10 Q Even though you admitted a few seconds ago
11 that it's possible that you could have a system
12 where it wasn't necessary for the user to have
13 selected the graphical user interface element;
14 correct?

15 MR. MICALLEF: Object. Object to form;
16 mischaracterizes the testimony.

17 THE WITNESS: What I actually said was
18 that I want to be careful about the use of the word
19 "must" without taking extensive time to think about
20 it.

21 But as this document reflects, I have in
22 the past thought about it and not come up with
23 something that excludes selection from taking place.

24 BY MR. HEINTZ:

25 Q And so is it the user who has to do the

DAVID R. KARGER

selecting?

MR. MICALLEF: Object to form.

BY MR. HEINTZ:

Q As it says in paragraph 286 of your report?

A Is it the user who has to have done the selection? It's probably fair to say that selection must have taken place, but that selection may not have been done by the user.

Q Okay. I'll direct your attention to Exhibit 1051. That's the Kostas reference. And in particular, page 15 at the top to which Mr. Micallef directed your attention previously.

A Yes.

Q So this paragraph reads in part, "then the user creates a new montage, by splitting the montage view (if desired), subdividing it as convenient, and using any portion of the resulting arrangement for, e.g., the enlargement of" the "data being displayed on one of the netchannels."

Do you see that?

A Yes.

Q If you enlarge the data being displayed on one of the net channels, then does that mean that

1 DAVID R. KARGER

2 that thing that's been enlarged is still a net
3 channel or is it a pane?

4 MR. MICALLEF: Object to form; irrelevant.

5 THE WITNESS: So, again -- so if you look
6 at page 5, it talks about the creation of subwindows
7 or panes, and it says that the user may drag and
8 drop data from a selected data channel or run a
9 desired application therein.

10 So in -- what we were talking about on
11 page 15, it seems likely to be -- you know, it's a
12 little ambiguous. But it would be -- it would seem
13 quite natural to drag information from the net
14 channel into a pane, and so that would sort of fall
15 into the dragging version of this.

16 I need to check -- on the other hand, the
17 market minder is described as an application, okay.
18 So which of these mechanisms is being described in
19 -- on page 5, you know, is the -- is the enlargement
20 of data done through dragging and dropping into the
21 pane or through running the market minder
22 application? That's not clear. It seems like both
23 of those would be ways to enlarge the net channel
24 data.

25 BY MR. HEINTZ:

1 DAVID R. KARGER

2 Q Okay. And nothing at the top of -- in the
3 paragraph at the top of page 15 says anything about
4 an application using the model -- the channels,
5 excuse me, does it?

6 (Witness reviewed document.)

7 A Sorry, can we repeat the question?

8 (Record read by the court reporter as
9 follows: "Q: And nothing at the top
10 of -- in the paragraph at the top of page
11 15 says anything about an application
12 using the model -- the channels, excuse
13 me, does it?")

14 THE WITNESS: So the entire application is
15 focused on this architecture of models, views and
16 channels. So you think that the obvious conclusion
17 is that you should preferably be using these models,
18 use the channels in the design of what he calls
19 applications.

20 The document does mention in -- shoot, I
21 just had it.

22 BY MR. HEINTZ:

23 Q Sir, my question was only at the top of
24 paragraph -- page 15. I'm not asking you about
25 anything else.

1 DAVID R. KARGER

2 A All right. So if you're asking
3 specifically about the text of paragraph 15, it
4 certainly does not mention channels at all.

5 Q And for clarity, we're talking about the
6 text at the top of page 15 of Exhibit 1051; correct?

7 MR. MICALLEF: Object to form.

8 THE WITNESS: So I will again emphasize
9 about what is pretty obvious from context, right.
10 This -- this document talks about enlargement of
11 data being displayed on one of the net channels.
12 Now, we know that the net channels use this
13 model/view/channel architecture.

14 And so even from this text, it is quite
15 obvious that it would be natural for the application
16 that is responsible for the enlargement of the data
17 to continue to make use of these models, views, and
18 channels to the extent possible.

19 It does talk later in the document about
20 third-party applications and being able to place
21 these in the montage view as well. These
22 third-party application might choose not to use the
23 model/view/channel architecture.

24 But again, third party points out the idea
25 that you could build well-integrated applications as

1 DAVID R. KARGER

2 part of this system and it would be extremely
3 natural for them to make use of the
4 model/view/channel architecture.

5 BY MR. HEINTZ:

6 Q So let's be clear about what this
7 paragraph here is saying, then. What the paragraph
8 says -- scratch that.

9 I want to make sure I understand what you
10 think the paragraph says. So let's refer to figure
11 5 in Exhibit 1051.

12 A Yes.

13 Q Okay. So the block 504A is the net
14 channel view; correct?

15 A Yes.

16 Q Okay. And then the montage view are all
17 of those rectangles, 508, beneath the montage view
18 bar, 506; correct?

19 A Yes.

20 Q All right. So what this paragraph says,
21 the paragraph at the top of page 15 of Exhibit 1051,
22 is that "the user creates a new montage, by
23 splitting the montage view (if desired), subdividing
24 it as convenient, and using any portion of the
25 resulting arrangement for," for example, "the

1 DAVID R. KARGER

2 enlargement of data being displayed on one of the
3 netchannels"; correct?

4 A Yes.

5 Q So that would mean, for instance, that
6 I -- were -- I could subdivide this montage view
7 beneath the title bar 506, okay, and then I can move
8 those rectangles 508 around so that I had some blank
9 space in the -- in the montage view area. And then
10 in that blank space, I can use it to enlarge one of
11 these windows, 504A, the net channels; correct?

12 MR. MICALLEF: Object to form.

13 THE WITNESS: The document isn't entirely
14 clear on what happens when you split, right. So you
15 could end up with a blank space, you could end up
16 with a thing that says put more content here. Or,
17 you know, what application do you want to run here.

18 You could end up with two copies of the
19 same thing, where you might replace one of them.
20 There are many different possibilities.

21 But, you know, the net channels, according
22 to this document, are themselves JavaBeans, and the
23 montage view is designed to be a container for
24 JavaBeans.

25 So one of the things that you can infer

1 DAVID R. KARGER

2 can be done here is to put the net channels
3 themselves -- put copies of the net channels
4 themselves into the montage view. But the montage
5 view appears to be larger, so you might just make it
6 bigger. That net channel which was -- that net
7 channel object which was previously shown in the
8 top, you could show a larger version of it inside of
9 the montage view itself.

10 BY MR. HEINTZ:

11 Q Okay. Or drag and expand it so it sort of
12 bridges the gap between the -- what's the net
13 channel view area and the montage view area? In
14 other words, you could just make that channel
15 larger?

16 MR. MICALLEF: Object to form; incomplete
17 hypothetical.

18 THE WITNESS: That's not clear. In the
19 document it talks about the montage view as a
20 separate thing from the main view. It has sort of
21 window management icons that sort of suggest that
22 you have two different windows here.

23 So it would be kind of odd in that setting
24 to have something which spans from the main view to
25 the montage view in another window.

DAVID R. KARGER

On the other hand, you could -- it's certainly natural to imagine moving something from the main view or copying something from the main view into the montage view.

MR. HEINTZ: Okay. No further questions.

EXAMINATION

BY MR. MICALLEF:

Q Let me ask you to direct your attention to page 14 of exhibit --

MR. HEINTZ: Excuse me. There's no recross.

MR. MICALLEF: I don't think that's right.

MR. HEINTZ: I think it is.

MR. MICALLEF: You can object and move to exclude.

MR. HEINTZ: I object to any further questions and move to strike.

MR. MICALLEF: We're not going off the record.

BY MR. MICALLEF:

Q I want you to look at page 14 and the first full paragraph. I'd like to direct your attention to that.

A Yes.

1 DAVID R. KARGER

2 Q What I'm going to ask you is does this
3 indicate that data retrieved from a network is used
4 to display both a main view and the montage view?

5 A Certainly.

6 MR. HEINTZ: Objection; beyond the scope.
7 Objection; move to strike.

8 BY MR. MICALLEF:

9 Q Okay. And I'd like to direct your
10 attention to page 20. The paragraph at the very
11 bottom which you testified about earlier, can you
12 tell me if this is a description of how data is
13 acquired over the network?

14 MR. HEINTZ: Objection; move to strike,
15 beyond the scope. Objection; irrelevant.
16 Objection; lack of foundation. Objection;
17 incomplete hypothetical.

18 THE WITNESS: Yes, it is.

19 MR. MICALLEF: Okay. No further
20 questions.

21 MR. HEINTZ: Again for the record, I
22 reiterate my objections that all of the prior set of
23 questions from Mr. Micallef are not authorized under
24 the rules.

25 MR. MICALLEF: We disagree, obviously, but

1 DAVID R. KARGER

2 the deposition is over.

3 (Whereupon, at 6:02 p.m., the
4 deposition was concluded.)

5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

1 DAVID R. KARGER

2 I HEREBY CERTIFY that I have read this
3 transcript of my deposition and that this
4 transcript accurately states the testimony
5 given by me, with the changes or corrections,
6 if any, as noted.

7
8
9 X

10 
11
12

13 Subscribed and sworn to before me this day of
14 , 20 .
15
16
17

18 X

19 Notary Public
20
21
22

23 My commission expires: .
24
25

DAVID R. KARGER

C O N T E N T S

WITNESS

EXAMINATION

DAVID R. KARGER

by Mr. Heintz

191, 386

by Mr. Micallef

377, 397

E X H I B I T S

EXHIBIT NUMBER

IDENTIFIED

Exhibit 2078 - single-page document
entitled "Windows 95 Installation
Requirements"

288

Exhibit 2079 - single-page document
entitled "Minimum Hardware Requirements
for a Windows 98 Installation"

293

Exhibit 2080 - two-page document entitled
"System requirements for Windows XP
operating systems"

295

-- continued --

DAVID R. KARGER

E X H I B I T S (Continued)

EXHIBIT NUMBER	IDENTIFIED
Exhibit 1001 previously identified	227
Exhibit 1020 previously identified	235
Exhibit 1088 previously identified	235
Exhibit 1040 previously identified	238
Exhibit 1007 previously identified	279
Exhibit 1051 previously identified	320
Exhibit 1066 previously identified	350
Exhibit 2004 previously identified	372

1 DAVID R. KARGER

2 CERTIFICATE OF NOTARY PUBLIC & REPORTER

3
4 I, CARMEN SMITH, the officer before whom the
5 foregoing deposition was taken, do hereby certify
6 that the witness whose testimony appears in the
7 foregoing deposition was duly sworn; that the
8 testimony of said witness was taken in shorthand and
9 thereafter reduced to typewriting by me or under my
10 direction; that said deposition is a true record of
11 the testimony given by said witness; that I am
12 neither counsel for, related to, nor employed by any
13 of the parties to the action in which this
14 deposition was taken; and, further, that I am not a
15 relative or employee of any attorney or counsel
16 employed by the parties hereto, nor financially or
17 otherwise interested in the outcome of this action.

18 Dated: 4/29/14

19
20
21 -----
22 Notary Public in and for the
23 District of Columbia

24
25 Commission Expires: MARCH 31, 2018

DAVID R. KARGER

ERRATA SHEET

DEPOSITION OF: DAVID R. KARGER

DATE OF DEPOSITION: 4/24/14

PAGE : LINE : CORRECTION (Type or print):

----- : ----- : -----

_____ : _____ :

_____ : _____ :

_____ : _____ :

_____ : _____ :

_____ : _____ :

_____ : _____ :

_____ : _____ :

_____ : _____ :
