

Exhibit 2

1 UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TEXAS

2 TYLER DIVISION

3 -----x

4 MIRROR WORLDS, LLC,

5 Plaintiff,

6 VS. No. 6:08 cv 88 LED

7 APPLE INC.,

8 Defendant.

9 -----x

10

December 11, 2009

11

9:10 a.m.

12

13 Videotaped deposition of JOHN LEVY,
Ph.D, at the offices of Weil, Gotshal & Manges,
14 767 Fifth Avenue, New York, New York, before
Nancy Mahoney, a Certified Court Reporter,
15 Registered Professional Reporter, Certified
LiveNote Reporter, and Notary Public within and
16 for the States of New York and New Jersey.

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10:34:22 1 for a -- an apparatus to meet the claim, there
 10:34:25 2 has to be a time-ordered sequence of documents
 10:34:27 3 or data units.
 10:34:29 4 A. I think it's better to say that it
 10:34:37 5 requires the accumulation, if you like, of a
 10:34:46 6 collection which are then time-ordered.
 10:34:51 7 Q. Let's move on to the next
 10:34:53 8 paragraph, Paragraph 20.
 10:34:55 9 And here you explain your opinion
 10:35:04 10 that you think that the construction of the term
 10:35:08 11 "stream" should require that the stream be
 10:35:11 12 unbounded in the number of data units or
 10:35:14 13 documents in the stream, correct?
 10:35:14 14 A. Yes.
 10:35:17 15 Q. Now, that language also is not --
 16 well, strike that.
 10:35:18 17 That requirement, this unbounded
 10:35:21 18 requirement, isn't in the definition of stream
 10:35:26 19 that the applicants provided to the examiner, is
 10:35:27 20 it?
 10:35:29 21 A. In this document, no.
 10:35:31 22 Q. Okay. And it's not in the
 10:35:37 23 definition of stream that -- in any document
 10:35:40 24 that the applicants provided to the examiner, is
 25 it?

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10:36:25 1 actually have different means within the art.
 10:36:31 2 Q. So what is the difference in the
 10:36:34 3 art between unbounded and infinite?
 10:36:36 4 A. Well, I'm not sure we want to get
 10:36:39 5 into the mathematical aspects, but there are,
 10:36:45 6 for example, infinite and yet countable sets,
 10:36:49 7 but unbounded merely means that the number can
 10:36:51 8 grow without any arbitrary bound.
 10:36:55 9 Q. Is it limited by the -- by any
 10:37:04 10 physical characteristics of the system?
 10:37:06 11 A. So we've moved from the definition
 10:37:08 12 of the term to the possible implementations.
 10:37:11 13 When you implement a stream, any
 10:37:14 14 implementation will have some constraint based
 10:37:19 15 on the physical characteristics of the system.
 10:37:23 16 Q. So no real stream will actually be
 10:37:26 17 unbounded in the number of data units or
 10:37:27 18 documents in the stream, will it?
 10:37:31 19 MR. STEIN: Objection.
 10:37:34 20 A. I'm not sure that's fair. From the
 10:37:38 21 user point of view, so long as the documents
 10:37:42 22 received by or generated by the system continue
 10:37:48 23 to be accepted into the mainstream, from the
 10:37:51 24 user's point of view, that is unbounded.
 25 Q. Did you ever have a computer where

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10:35:41 1 MR. STEIN: Objection.
 10:35:43 2 A. Well, I think taking the
 10:35:45 3 specification in its entirety as part of the
 10:35:49 4 definition of stream, it does occur there.
 10:35:51 5 Q. Well, the term "unbounded" doesn't
 10:35:53 6 appear anywhere in the specification, does it?
 10:35:54 7 A. I don't recall.
 10:35:55 8 Q. Okay. And the term "unbounded"
 10:35:58 9 doesn't appear anywhere in the file history,
 10:35:58 10 does it?
 10:35:58 11 MR. STEIN: Objection.
 10:36:00 12 A. That, I'm not sure.
 10:36:02 13 Q. Okay. But you certainly didn't
 10:36:04 14 cite anywhere where it --
 10:36:04 15 A. No.
 10:36:06 16 Q. -- appeared in the file history.
 17 And by unbounded -- well, strike
 18 that.
 10:36:08 18 What did you mean by unbounded in
 10:36:11 19 the number of data units?
 10:36:13 20 A. That means a number that can grow
 10:36:15 21 without bound.
 10:36:16 22 Q. So could be an infinite number of
 10:36:20 23 data units?
 10:36:21 24 A. No. Unbounded and infinite
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10:37:58 1 you ran out of space on your hard drive?
 2 A. I don't remember.
 10:38:00 3 Q. Well --
 10:38:01 4 A. I've come close.
 10:38:04 5 Q. Right. And you know video, for
 10:38:07 6 example, takes up a lot -- can take up a lot of
 10:38:08 7 space on a hard drive?
 10:38:09 8 A. Yeah.
 10:38:11 9 Q. So you could -- it could easily be
 10:38:18 10 possible that a -- if a user wanted to store
 10:38:21 11 movies on their hard drive, a stream of those
 10:38:25 12 movies would, in fact, be bounded by the
 10:38:27 13 constraints of the hard drive.
 10:38:28 14 Isn't that right?
 10:38:30 15 MR. STEIN: Objection, form.
 10:38:32 16 A. No. I think the -- the issue is
 10:38:38 17 not how much storage there is for the data
 10:38:44 18 units, but whether the concept and approach to
 10:38:49 19 streams is -- itself is bound in the number of
 10:38:55 20 items -- sorry -- data units in the stream.
 10:38:58 21 Q. Well, how would you determine in a
 10:39:02 22 real life system whether streams were bounded or
 10:39:09 23 unbounded?
 10:39:11 24 A. Well, we have two separate
 25 problems: One is to understand the word

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15:44:50 1 A. When you say "you can point," you
 2 mean like I as a human can --
 15:44:51 3 Q. Correct.
 15:44:54 4 A. -- say, oh, here's one of them and
 15:44:57 5 here's the other? In that sense, I do believe
 15:45:22 6 that's true.
 15:45:24 7 Q. Okay. Let's move on to the
 15:45:34 8 receding foreshortened stack term. That's
 15:45:37 9 Paragraphs 52 and 53 of your declaration. Why
 15:45:40 10 don't you read those two paragraphs and let me
 15:45:41 11 know when you're ready.
 15:45:44 12 MR. STEIN: Can we take a break
 15:45:45 13 now?
 15:45:46 14 MR. CHERENSKY: Sure. That's fine.
 15:45:47 15 THE VIDEOGRAPHER: We're off the
 15:45:49 16 record. Time is 3:45 p.m.
 15:57:45 17 (Recess taken.)
 15:57:57 18 THE VIDEOGRAPHER: We're back on
 15:58:01 19 the record. Time is 3:58 p.m.
 15:58:03 20 THE WITNESS: I'd like to say
 15:58:03 21 something.
 15:58:03 22 BY MR. CHERENSKY:
 15:58:03 23 Q. Okay.
 15:58:05 24 A. As I was leaving the room, I
 25 realized that I may have -- I was referring to

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15:59:39 1 said to counsel I thought I may have
 15:59:43 2 misrepresented Claim 16 because I was referring
 15:59:45 3 to Figure 1.
 15:59:46 4 Q. Did -- oh, I'm sorry.
 15:59:49 5 A. So counsel encouraged me to correct
 15:59:51 6 my testimony if that was the case.
 15:59:53 7 Q. Did counsel ask you about that
 15:59:57 8 testimony before you said that you might have
 15:59:58 9 been unclear in your answer?
 16:00:04 10 A. He did not.
 16:00:10 11 Q. So what -- how would you like to
 16:00:16 12 correct your testimony regarding Claim 16?
 16:00:19 13 A. I think that the third limitation
 16:00:22 14 in Claim 16, which is the one we were
 16:00:29 15 discussing, mentions both a display document
 16:00:33 16 representation and a glance view.
 16:00:36 17 And in my understanding of this,
 16:00:39 18 they may or may not be separate and distinct
 16:00:43 19 graphical elements on the screen.
 16:00:45 20 Q. Okay. Well, then let's go back
 16:00:49 21 over it -- well, I'm sorry. Before I do that,
 16:00:51 22 is there anything else?
 16:00:53 23 A. I think that's the most important
 16:00:55 24 thing.
 25 Q. Okay. Well, I guess let's just get

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15:58:16 1 Figure 1 and not focusing solely on Claim 16 of
 15:58:20 2 the '427, so I may have misspoken in terms of my
 15:58:24 3 understanding of whether Claim 16 itself
 15:58:30 4 requires the glance view and the displayed
 15:58:33 5 document representation to be distinct and
 15:58:35 6 separate items.
 15:58:40 7 Q. So, Dr. Levy, wasn't I very, very
 15:58:44 8 clear before your last set of answers that I
 15:58:49 9 wanted you to focus on Claim 16 and not Claim 1?
 15:58:50 10 Didn't I say that very clearly?
 15:58:52 11 A. You did say that very clearly, but,
 15:58:54 12 unfortunately, I had this in front of me at the
 15:59:00 13 same time and I kept referring to that.
 15:59:02 14 Q. And by this, you mean the --
 15:59:07 15 A. Figure 1 of the '227 patent.
 15:59:09 16 Q. So are you saying you want to
 15:59:13 17 change your testimony regarding my question to
 15:59:15 18 you about Claim 16?
 15:59:15 19 A. Yes.
 15:59:17 20 Q. Did you -- before you -- before you
 15:59:20 21 make that correction, let me ask: Did you
 15:59:27 22 discuss your testimony about the glance view and
 15:59:28 23 the document -- document representation with
 15:59:31 24 counsel during the break?
 25 A. As -- after we left the room, I

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16:01:01 1 it all out.
 16:01:02 2 So, without regard to whether it's
 16:01:05 3 the most important thing, is there anything
 16:01:06 4 about Claim 16 that -- your testimony about
 16:01:13 5 Claim 16 that you'd like to change?
 16:01:15 6 A. I don't think so.
 16:01:20 7 Q. Okay. Now, you agree that what
 16:01:28 8 that third indented paragraph in Claim 16
 16:01:34 9 describes is that the glance view is displayed
 16:01:39 10 on the screen as a result of the cursor or
 16:01:43 11 pointer being positioned over the displayed
 16:01:45 12 document representation?
 16:01:56 13 You agree with that, don't you?
 16:01:59 14 A. It says responding to the sliding
 16:02:02 15 cursor or pointer over a portion of a displayed
 16:02:05 16 document representation to display the glance
 16:02:09 17 view, yes, that is right.
 16:02:12 18 Q. Okay. And you agree, don't you,
 16:02:17 19 that the glance view of a displayed document
 16:02:27 20 representation is not visible on the display if
 16:02:32 21 the cursor or pointer is not positioned over the
 16:02:41 22 displayed document representation, don't you?
 16:02:41 23 MR. STEIN: Objection.
 16:02:41 24 A. Well, I think this -- this section
 16:02:45 25 of this claim is kind of -- is moot on that. I

16:08:11 1 representation is generated and -- and visible
 16:08:15 2 on the display?
 16:08:18 3 A. I guess I need to hear that from
 16:08:18 4 the beginning. Sorry.
 16:08:21 5 Q. I'll -- that's fine. I'll just
 16:08:22 6 restate it.
 16:08:25 7 The -- well, let me ask it a
 16:08:26 8 slightly different way.
 16:08:28 9 You understand that the point of
 16:08:34 10 this limitation is that the user can move his
 16:08:38 11 mouse -- I'm sorry -- can position the cursor or
 16:08:41 12 pointer over different document representations
 16:08:44 13 and see the different glance views that
 16:08:46 14 correspond to those different document
 16:08:49 15 representations, correct?
 16:09:18 16 MR. STEIN: Objection.
 16:09:22 17 A. This -- this third limitation
 16:09:26 18 further displaying the cursor or pointer really
 16:09:31 19 only talks about one -- the action when the
 16:09:37 20 cursor or pointer touches a document
 16:09:47 21 representation on the screen.
 16:09:54 22 Q. What do you understand the -- the
 16:09:59 23 reason that a glance view is displayed when a
 16:10:03 24 cursor or pointer is positioned over a portion
 25 of a displayed document representation?

16:10:06 1 A. The reason?
 16:10:07 2 Q. Yeah.
 16:10:09 3 A. You mean what does it -- what
 16:10:12 4 functionally does it do?
 16:10:13 5 Q. Sure.
 16:10:15 6 Why would -- why would one be
 16:10:19 7 interested in a system that did something like
 16:10:19 8 that?
 16:10:24 9 A. One would want -- might want to see
 16:10:27 10 a unobscured version of the document
 16:10:29 11 representation, for example.
 16:10:32 12 Q. Okay. So in that example that you
 16:10:37 13 just described, what is displayed when the
 16:10:40 14 cursor -- a pointer is positioned over the
 16:10:42 15 displayed document representation is different
 16:10:48 16 than before the cursor is positioned there,
 16:10:50 17 because before the cursor is positioned there,
 16:10:53 18 the document representation is obscured and
 16:10:56 19 afterwards it's not obscured, correct?
 16:10:58 20 A. That would be true in that case,
 16:10:58 21 yes.
 16:11:01 22 Q. Okay. So there's a change in what
 16:11:04 23 the user sees as a result of the positioning of
 16:11:09 24 the cursor or pointer?
 25 A. I think that's generally true.

16:11:16 1 I -- I'm not sure that's what's said here --
 16:11:18 2 Q. And can you --
 16:11:18 3 A. -- Claim 16, but, yeah.
 16:11:18 4 Q. I'm sorry.
 16:11:20 5 Well, but I'm asking you about
 16:11:21 6 Claim 16, right?
 16:11:22 7 A. Okay.
 16:11:24 8 Q. So, in your understanding about
 16:11:28 9 Claim 16, isn't it correct that -- in your
 16:11:33 10 example of a system implementing Claim 16, what
 16:11:37 11 the user sees when the cursor is positioned over
 16:11:38 12 a portion of the document representation is
 16:11:43 13 different than when the cursor is not positioned
 16:11:44 14 over it.
 16:11:45 15 Isn't that right?
 16:11:47 16 A. Well, there's a case I can think of
 16:11:49 17 where that wouldn't be -- necessarily be true
 16:11:52 18 where there are -- let's say there are two
 16:11:54 19 document representations, one of them obscured
 16:11:57 20 by the other and the user causes the pointer or
 16:12:01 21 cursor to point to the one that is not obscured,
 16:12:06 22 in which case what can be seen may or may not be
 16:12:09 23 different from what was seen before.
 16:12:12 24 Q. Okay. So it's your opinion that
 25 you could have a system that meets the

16:12:20 1 requirements of Claim 16 where you position the
 16:12:23 2 cursor or pointer over a portion of the
 16:12:27 3 displayed document representation and, as far as
 16:12:30 4 the viewer of the screen is -- of the display is
 16:12:33 5 concerned, nothing happens.
 16:12:35 6 Is that right?
 16:12:36 7 A. No. I think what happens is that
 16:12:40 8 it displays the glance view. Whether that, in
 16:12:44 9 fact, is -- is shown, you know, off to the side
 16:12:49 10 like Figure 1 or simply shows something which is
 16:12:53 11 the same as what's the unobscured document
 16:12:55 12 representation, I think, is left open.
 16:12:57 13 Q. So my question was: As far as the
 16:13:01 14 viewer of the screen is concerned, nothing
 16:13:02 15 happened, right?
 16:13:05 16 So if it's the same exact graphical
 16:13:07 17 depiction that's put on the screen as the glance
 16:13:11 18 view as existed as the document representation,
 16:13:15 19 the viewer can't distinguish -- can't determine
 16:13:17 20 that anything happened whatsoever in response to
 16:13:21 21 the positioning of the cursor or pointer.
 16:13:21 22 Isn't that right?
 16:13:22 23 MR. STEIN: Objection.
 16:13:26 24 A. I think that's unlikely.
 25 Q. Okay.