# 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. |
| | 15 | Q.    Now, that language also is not -- |
| 10:35:17 | 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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|---|---|---|
| 10:35:41 | 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 |
| 10:36:08 | 18 | that. |
| 10:36:11 | 19 | What did you mean by unbounded in |
| 10:36:13 | 20 | the number of data units? |
| 10:36:15 | 21 | A.    That means a number that can grow |
| 10:36:16 | 22 | without bound. |
| 10:36:20 | 23 | Q.    So could be an infinite number of |
| 10:36:21 | 24 | data units? |
| | 25 | A.    No.  Unbounded and infinite |

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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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|---|---|---|
| 10:37:58 | 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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|---|---|---|
| 15:58:16 | 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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|---|---|---|
| 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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| 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. |
| 16:02:45 | 24 | A.    Well, I think this -- this section |
| | 25 | of this claim is kind of -- is moot on that.  I |

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|---|---|---|
| 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? |

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|---|---|---|
| 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. |

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| | 1 | I -- I'm not sure that's what's said here in -- |
| 16:11:16 | 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 |

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|---|---|---|
| 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. |