

# Exhibit 3

STEPHEN FEINER

IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
TYLER DIVISION

-----X  
MIRROR WORLDS, LLC,

Plaintiff,

vs. No. 6:08 CV 88

APPLE, INC.,

Defendant.

-----X

\*\*CONTAINS CONFIDENTIAL PORTION\*\*

DEPOSITION OF STEPHEN FEINER

New York, New York

Thursday, January 7, 2010

REPORTED BY: BARBARA R. ZELTMAN  
Professional Stenographic Reporter

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2           developed. They include issues of trying to  
3           incorporate them in a clear and consistent  
4           way within the user interface, if we're  
5           talking about a user interface facility or a  
6           facility that has some kind of user  
7           interface.

8                   One reason would be that there  
9           might be issues that would need to be  
10          very carefully resolved to create an  
11          extension that would not break things  
12          that people were already familiar with.

13                   So recalling the Mander paper,  
14          for example, there's a number of issues  
15          that are mentioned. I think I actually  
16          discuss some of those in this document  
17          here, which are ways about how one  
18          manipulates a pile.

19                   Looking at Page 16, Bates  
20          number Feiner 203, I have some issues  
21          here, such as whether piles are  
22          distinctly manipulatable entities,  
23          whether you can move a pile by clicking  
24          and dragging, or whether you move the  
25          document by clicking and dragging.

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2                   and time that uniquely identifies each  
3                   document."

4                   And in my description of  
5                   possible ways later on that one might  
6                   implement a timestamp that uniquely  
7                   identifies a document, I mentioned the  
8                   use of additional data in the form, for  
9                   example, of a counter, let's say, that  
10                  could be used to be sure that something  
11                  received a unique timestamp even if it  
12                  was being created at the exact same time  
13                  and the exact same date as something  
14                  else.

15                 Q           So is it your opinion that a  
16                  timestamp does not need to be a unique date  
17                  and time value?

18                 MR. BROWN:  Objection.

19                 A           In the context of the patent?

20                 Q           Yes.

21                 A           I think that a timestamp, in the  
22                  context of the patent, needs to, in some way,  
23                  be unique for each document, so that one  
24                  could not have two different documents that  
25                  received the same timestamp.

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2                   One way to create a timestamp  
3 would be that either you make sure you  
4 could not somehow make two things or  
5 receive two things at the same time, in  
6 which case you should also make sure  
7 that a person having set the time into  
8 the future couldn't set it to the exact  
9 same time again.

10                  And you could do that -- you  
11 know, I opined about this a little bit  
12 later on in my report, on various ways  
13 you could do things of that sort.

14                  But I think that you could  
15 create a timestamp which, taking the  
16 date and time and adding additional  
17 information, would make that timestamp  
18 unique.

19                  Q        So when you stated in your report  
20 that, "A timestamp is a date and time" --  
21 strike that.

22                  When you stated in your report  
23 that, "A timestamp is a date and time  
24 value that uniquely identifies each  
25 document," you were including the

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2           possibility of additional information  
3           beyond the date and time?

4           A           I was including the possibility of  
5           additional information beyond the date and  
6           time, and so I'm qualifying value with date  
7           and time. Because clearly, the timestamp  
8           needs to actually indicate time and date  
9           somehow.

10                    But to make it unique, you  
11           would either have to ensure that you're  
12           never allowed to use that date and time  
13           again once you've used it, which it  
14           seems to me ...

15                    For example, if I time tripped  
16           into the future and I set the date and  
17           time to a particular date and time, and  
18           then I went back in the past, or if I  
19           time tripped into the future and set the  
20           date and time to a particular date and  
21           time and then set it again to the same  
22           date and time, and I created one thing  
23           after setting it the first time and  
24           created a second document after setting  
25           it the second time, and the system then

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2           something like this from the standpoint  
3           of how it would be implemented, and that  
4           there are a number of subtleties, which  
5           I think I discussed in my report.

6                   And as well, I of course wasn't  
7           being exhaustive in describing some ways  
8           in which this could be done.

9           Q        In the example that we discussed  
10          earlier in which you described how a user  
11          would locate a particular document created  
12          two weeks ago, does the user have to know the  
13          timestamp assigned to that document in order  
14          to locate the document?

15          A        The user in that specific example?

16          Q        Yes.

17          A        The user needs to know what specific  
18          example -- we're talking about a time-based  
19          search. And I don't think the user needs to  
20          know exact bits in the timestamp. I don't  
21          see anything indicating that they would need  
22          to know that.

23                   I think in that case, they need  
24          to know the time at which the document  
25          was created.

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2                   And as I said, you could  
3                   imagine an example in which, because  
4                   there weren't a lot of documents created  
5                   over that time, if there were like, say,  
6                   only one document, for whatever reason,  
7                   created during that period of time,  
8                   they'd simply need to know both the  
9                   upper and lower bound on the time  
10                  period, and then maybe they would find  
11                  that single document.

12                  If they found multiple ones,  
13                  then maybe they would position their  
14                  cursor over the objects that they saw on  
15                  the screen to be able to gain more  
16                  information about it and figure out  
17                  which one it was.

18                  Q           Moving to Section D, labeled  
19                  Archiving, or titled Archiving, do you  
20                  consider yourself an expert in archiving?

21                  A           I'm not sure what you mean by  
22                  "expert."

23                  Q           You've been retained as an expert in  
24                  connection with this case by Apple, correct?

25                  A           That is correct.



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2                   So the devil is in the details  
3                   of exactly how you set U. Because  
4                   there's ways to set it that one might at  
5                   first think would work that are not  
6                   going to work in the context of this  
7                   kind of system, in which the user can  
8                   dial to the future, for example.

9                   Q       How many different ways of creating  
10                   a unique timestamp did you describe here?

11                   A       Let's see.

12                   I described one in which --  
13                   well, I described one of a number of  
14                   methods -- rather, I described several  
15                   methods, one of which -- or rather, all  
16                   the ones I described used two values, a  
17                   system clock and a separate value of U  
18                   that ensures uniqueness at the very high  
19                   level described in terms of that second  
20                   sentence in this paragraph, which is the  
21                   first full paragraph on Page 11.

22                   Again, at a very high level, I  
23                   mention the idea that any timestamp  
24                   that's given a value C that's the same  
25                   as that of at least one other timestamp

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2           needs to be given a U that's different  
3           from that.

4                   So one can imagine that if we  
5           had two timestamps which had different  
6           values of C -- rather, if there was only  
7           a single timestamp that had a given  
8           value C, that you could perhaps, even in  
9           perhaps an attempt to try to save space,  
10          not have to have a value of U associated  
11          with it.

12                   Maybe you might have to go back  
13          and add one later or allow that one  
14          without it could also be supplemented by  
15          one with it.

16                   I mention an approach in which  
17          if you serialized requests so that one  
18          place actually knew all the requests  
19          being made, that you would then know the  
20          previous value of U, and you could then  
21          just bump it up by one and then reset it  
22          to zero whenever you got a new C. That  
23          is to say a C that was different from  
24          the last C.

25                   However, you know, this was an

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2           attempt to try to argue from first  
3           principles and show how even in that  
4           case there's a problem, because this is  
5           not a system in which you go only by the  
6           regular normal system clock, but it's  
7           one in which the user can change the  
8           so-called time cursor.

9                   And because you can change the  
10           time cursor, I can explicitly set the  
11           times -- I mean we don't normally do  
12           that -- and I could set the time cursor  
13           to be a particular date in the future.  
14           And then I could go back again and set  
15           it to be the same date in the future and  
16           make another document.

17                   Or I could, after having made  
18           that document in the future, go back in  
19           the past. And then when that future  
20           time came around and it created a new  
21           document, I couldn't just do what I  
22           described before, which is now that C is  
23           changed, I'm going to start again at  
24           zero because I might have something that  
25           had U at zero already created.

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2                   So I was describing that one  
3 way that you can do that is to look to  
4 see what values of U there are.

5                   Another way you could do it is  
6 to perhaps have U be incremented every  
7 time starting with zero, for example.  
8 In that case, U might get to be bigger  
9 and bigger and bigger.

10                  In fact, U might always be  
11 unique, and there may never be recycled  
12 values of U. But in that case, you  
13 would need more bits, probably, for U.

14                  So I think I have one approach  
15 in which you set U to zero whenever a  
16 timestamp is created where C is  
17 different from the last request. I  
18 describe how that one doesn't work.

19                  I corrected it by saying one  
20 approach would be when you're creating a  
21 new timestamp, you could look at all  
22 those timestamps that are associated  
23 with files that have the same C and make  
24 sure you use a U that's different.

25                  Or another alternative is you

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2           could, at the very beginning of time, so  
3           to speak, initialize U to zero and then  
4           just increment it with every single  
5           timestamp. That probably would make you  
6           have to have more bits associated with  
7           it independent of the value of C.

8           Q        So those second two approaches would  
9           work to create a unique timestamp, correct?

10          A        Those approaches would work.

11                   Now, since I had not actually  
12           implemented streams and I had not  
13           actually implemented the software in the  
14           system, one of the things that we  
15           usually do in computer science is for  
16           people who are experimentalists, who are  
17           writing for conferences, for example, in  
18           which we have to actually -- we're  
19           talking about software.

20                   Very rarely, except  
21           publications that are on so-called paper  
22           prototypes, ones in which a person waves  
23           their hands and says, "I could do this,"  
24           or, "I could do that," precisely because  
25           it's very easy, when you wave your hands

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2           want to see a description of how to do  
3           this at least one way in the patent, and  
4           I don't see it there.

5           Q           Just looking at the second idea or  
6           the second method that I believe you  
7           testified would work, which is that you  
8           initialize U to zero and increment it with  
9           the creation of each timestamp, which would  
10          result in a unique value of U, how long did  
11          it take you to come up with that idea?

12          A           I don't remember.

13          Q           Is that a fairly straightforward  
14          solution?

15          A           It depends what you mean by  
16          "straightforward."

17                    I think a person of ordinary  
18           skill in the art would be able to come  
19           up with that solution.

20          Q           What about the second method, in  
21          which you determine the values of U for each  
22          C to ensure that the U is unique for each C?

23          A           I think a person of ordinary skill  
24           in the art would be able to come up with  
25           that. I don't think a person of ordinary

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2           skill in the art would look at that  
3           description and say, "Wow, that's incredibly  
4           inventive and novel, and I can't imagine  
5           anyone having thought about that without  
6           having incredible skill."

7                   I'm not sure that I would  
8           imagine a person who was not of ordinary  
9           skill in the art would necessarily be  
10          able to come up with these.

11                   And as I said, you know,  
12          there's tradeoffs. For each of those, I  
13          suggested what some of those tradeoffs  
14          may be in terms of the amount of time it  
15          takes to determine which values have  
16          already been used, which would even  
17          include issues of what happens if I  
18          delete a document, if I really delete a  
19          document as in the standard method of  
20          deletion of documents we have right now?

21                   Do we not have holes, for  
22          example, in that sequence, the U  
23          sequence? Possibly.

24                   Does it get reassigned? I  
25          don't know.

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2           kind of document.

3                   There may be some kind of other  
4           information, perhaps a link list of some  
5           sort, which is used in conjunction with  
6           the things that elements of that link  
7           list point to, which could ultimately be  
8           the documents that are part of that main  
9           stream.

10           Q       Do you know how to generate an  
11           instance of a data structure in software?

12           A       There is more than one way to  
13           generate an instance of a data structure in  
14           software.

15           Q       Can you name one?

16           A       Sure.

17                   One way to generate an instance  
18           of a data structure in software is to  
19           have some prototype of that data  
20           structure that, you know, would tell the  
21           computer how much space needs to be  
22           allocated and then make a call to some  
23           facility that generates that amount of  
24           space and returns the address of that  
25           space so I can then set a pointer to



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2           of "iconic" that he gives over here,  
3           he's referring to the notion of an  
4           interface that uses icons, referable  
5           icons, to represent things that perhaps  
6           in other interfaces that would not be  
7           considered iconic might be represented  
8           with text, for example, as opposed to  
9           with graphic icons.

10           Q           And what is an icon?

11           A           An icon in this context is a  
12           graphical representation of some entity in  
13           the computer system. And that entity usually  
14           can be viewed and manipulated interactively  
15           by the user of that computer system.

16           Q           How can you tell whether something  
17           is an icon or not?

18                   MR. BROWN: Objection.

19           A           I'm trying to give you as general an  
20           answer as I possibly can.

21                   An icon is usually some kind of  
22           stylized representation of something.

23                   So if I were looking at, for  
24           example, the full page of a document  
25           that I was editing perhaps in a mode