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

MIRROR WORLDS, LLC	*	Civil Docket No.
	*	6:08-CV-88
VS.	*	Tyler, Texas
	*	
	*	September 30, 2010
APPLE, INC., ET AL	*	12:40 - 4:20 P.M.

TRANSCRIPT OF JURY TRIAL
AFTERNOON SESSION - PART 1
BEFORE THE HONORABLE LEONARD DAVIS
UNITED STATES DISTRICT JUDGE

APPEARANCES:

FOR THE PLAINTIFF

MR. JOSEPH DIAMANTE
MR. KENNETH STEIN
MR. IAN G. DIBERNARDO
MR. ALEXANDER SOLO
MR. CHARLES E. CANTINE
STROOCK & STROOCK & LAVAN
180 Maiden Ln.
New York, NY 10038

MR. OTIS CARROLL
MR. PATRICK KELLEY
IRELAND, CARROLL & KELLEY
6101 S. Broadway, Ste. 500
Tyler, TX 75703

COURT REPORTERS:
MS. SHEA SLOAN, CSR
MS. JUDY WERLINGER, CSR
Official Court Reporters
211 West Ferguson, Third Floor
Tyler, TX 75702
903/590-1171

(Proceedings recorded by mechanical stenography, transcript produced on CAT system.)

FOR THE DEFENDANTS

MR. JEFFREY G. RANDALL
MR. RAYMOND YU
MS. ERICKA J. SCHULZ
PAUL HASTINGS
1117 S. California Ave.
Palo Alto, CA 94304-1106

MR. ALLAN M. SOOBERT
MR. BROCK WEBER
MR. KIM MOORE
PAUL HASTINGS
875 15th St. NW
Washington, DC 20005

MR. S. CHRISTIAN PLATT
MR. JEFFREY COMEAU
PAUL HASTINGS
4747 Executive Dr.
12th Floor
San Diego, CA 92121

P R O C E E D I N G S

COURT SECURITY OFFICER: All rise.

(Jury out.)

THE COURT: Please be seated.

The Court has reviewed the parties' briefing, and with that, is going to deny the Defendants' motion with regard to the waiver of the attorney/client privilege.

The Court is going to grant the Defendants' motion for directed verdicts to the two claims, 16 and 18, of the '427 patent.

The Court has a written order that will be provided to you.

Is there anything further before we bring the jury in?

MR. CARROLL: None from the Plaintiff, Your Honor.

THE COURT: All right. Bring the jury in.

COURT SECURITY OFFICER: All rise for the jury.

(Jury in.)

THE COURT: Counsel, approach, if you would.

(Bench conference.)

THE COURT: This patent -- I just want to know whether I need to leave it in the Charge?

MR. RANDALL: No. I'm going to withdraw it, and I would like to do this, though.

We have an agreement not to discuss withdrawn claims, and so when I withdraw it, and -- I don't want it discussed, just like I won't discuss these claims.

MR. CARROLL: I don't know what you said, Judge.

THE COURT: I just asked if they were going to assert that in the patent, because if they're not, I want to take it out of the Charge. He said that they are not going to, but he doesn't want you beating him over the head with the fact that they've withdrawn that.

MR. RANDALL: Oh, okay. And I'm not going to beat him over the head with that ruling or the other.

THE COURT: Well, you'd be violating the rule if --

MR. RANDALL: Okay.

THE COURT: You'd be violating my order.

(Bench conference concluded.)

THE COURT: Very well.

Who will be your next witness?

MR. RANDALL: Your Honor, our next witness is by videotape deposition. It's Mr. -- or Professor Mark Lansdale. He'll testify about his MEMOIRS system.

The time on this, Your Honor, is 20 minutes for Apple, and 6 minutes for Mirror Worlds.

THE COURT: Okay.

(Video clip playing.)

QUESTION: And did you describe both the design and the functionality of the MEMOIRS system in articles?

ANSWER: Yes. I believe it was published principally in an article in the International Journal of Man-Machine Studies, but there are a number of other auxiliary publications at the conferences that I went to and also the occasional book chapter.

QUESTION: And did you at any time, during your work at any of those universities, work on a project call MEMOIRS?

ANSWER: Yes, I -- I developed that system while I was working at Loughborough University.

QUESTION: And approximately when did you begin development of MEMOIRS?

ANSWER: This work was in my head in

1984. I started publishing preparatory work in that material in the mid-years of the 1980s; and then I published a number of papers in the late 1980s, laying out both the basic principles by which somebody interested in human memory and in the design of IT systems might contribute to the design of filing systems.

And then in '92, I published an article in the International Journal of Man Machine Studies which specified a particular system, which you have referred to, MEMOIRS.

QUESTION: Let me mark for identification as Exhibit 2 what looks like a chapter from a book. And it's published by Cambridge University Press, and it shows -- it's entitled: People and Computers...

Proceedings of the Fifth Conference of the British Computer Society, Human-Computer Interactions Specialist Group, University of Nottingham, September 5 through 8, 1989.

I am going to mark for identification as Exhibit 4, an article entitled: Using Memory for Events in the Design of Personal Filing Systems, by Mr. Lansdale and Edmonds. And it bears Bates-stamp No. 86293 through 86322, and it has a 1992 copyright.

However, it indicates on the front page,

received January 26th, 1990, and accepted in revised form, November 25, 1990.

I will mark for identification as Exhibit 6 an article from Applied Ergonomics, 1988, entitled: The Psychology of Personal Information Management, by Professor Lansdale. And this document bears Bates-stamp No. 14844 through 14855. And it bears a date at the bottom right-hand corner of nearly every page, Applied Ergonomics, March 1998.

So did the MEMOIRS system have the capability of organizing off of its documents based on time?

ANSWER: Yes. That -- that was its principal structure.

QUESTION: Okay. And did the MEMOIRS system also -- as described in your article, also have the capability of not only organizing all the documents based on time, but also searching for particular attributes of all those documents and coming up with a sublist, if you will?

ANSWER: Yes.

QUESTION: Although there is no objective measure of difficulty, this certainly complies with most people's experience that documents can effectively become lost in computer-based and paper-based

information storage systems.

Add this to the continuing expansion of the size of personal databases and the continued fueling of this trend by the new technology, and there's clearly a need for effective techniques for the storage and retrieval of information.

Do you see that?

ANSWER: Yes.

QUESTION: What did you mean by that in your article in 1989 on MEMOIRS?

ANSWER: Well, what you try to do with a paragraph like that at the beginning of a paper is simply trying to establish that there is a real problem, and that in this particular case the problem will get increasingly more severe as the technology matures.

QUESTION: Was it your understanding that you were the only person that discovered that problem --

ANSWER: No.

QUESTION: -- as of 1989?

ANSWER: No. I mean, the interesting thing about this paragraph is that it reflects nicely the fact that one didn't have to go to a great deal of trouble to establish that point. You would regard it as universally accepted.

QUESTION: Does -- Exhibit 6, The

Psychology of Personal Information Management, does that describe in similar fashion the functionality of MEMOIRS as Exhibit 2 and 4 does?

ANSWER: No. I wouldn't say so. In fact, I doubt -- in fact, I'm fairly sure that there is no reference to MEMOIRS in here at all.

There is reference, though, to some of the basic principles on which MEMOIRS is built.

QUESTION: But it doesn't lay out the specifics regarding the functionality of MEMOIRS like Exhibit 2 or 4. Is that fair to say?

ANSWER: I think that's fair to say, yes.

QUESTION: The very next paragraph, so -- so under Background in your 1989 MEMOIRS article, the second paragraph states: Apart from the continuing development of more powerful traditional methods, such as keyword systems and relational databases, this need has also stimulated some novel approaches, such as the Spatial Database Management System, SDMS, by Bolt in '79, of the late '70s.

Do you see that?

ANSWER: Yes.

QUESTION: What were you referring to there in that article?

ANSWER: I'm referring to a number of

innovative studies in which this was perhaps the most conspicuous at MIT -- the Spatial Database Management System -- which has been published by Bolt and others, Negroponte, very much in the spirit of what you might describe as gee-whiz technology, where the world was going to look very different and the tasks were going to be very different because of the way that the technology was going to develop.

So this second paragraph is -- is the -- if you like, the pull as well as the push. So you've got the push of the problem and the pull of the new technology, bringing two sides of the coin together to represent a strong motivation to work on things like personal filing systems.

QUESTION: Do you recall how you became aware of the Spatial Database Management Systems, SDMS, from MIT some time prior to writing your article in '89?

ANSWER: Well, I would have come across SDMS in '81 or '82 when I was working for AT&T. At that time, there was a great deal of fluidity in information exchanged between, if you like, major players -- IBM, AT&T, Xerox. All of these places had user interface groups, and they were all sharing this kind of information. And SDMS was a very popular and exciting contribution to that.

QUESTION: And was it well-known in the '81 and '82 timeframe?

ANSWER: Oh, yes. That would have been my impression, within that community, yes.

QUESTION: All right. And then you go on directly underneath that paragraph, again at Bates-stamp 645 of your 1989 MEMOIRS article.

And you state: It appears from this work that faced with fragmentary recall, humans are particularly sophisticated at using information from their own memories and any cues available from external feedback.

For this reason, the MEMOIRS system is based on what is, in effect, an interactive diary, known as a timebase, showing, in suitable units, the chronological structure of the database.

ANSWER: Yeah.

QUESTION: What did you mean by that?

ANSWER: Well, the key thing here is that when you attribute document X, that attribution takes place in time and will have been preceded or followed by other attributions.

And what the study of human memory shows is that the -- that process is not independent of what's taken place before. So if somebody attributes a

document with a red triangle, it's highly likely that they are going to remember something about what had happened before and afterwards.

So that chronological sequencing is, in effect, a compatible representation of human memory. It's one of the few things that all of us share. The diary would naturally be able to include those, and there's no -- there's no principal difference that I see between memories for events which are prospective and memories for events that are retrospective.

If you put an entry in a diary, you can do it backwards and forwards. They are both events.

QUESTION: And here at Page 319 of your 1989 MEMOIRS article, you state: A timebase, therefore, providing a time-based categorization, and also illustrating other contextual information, such as meetings, holidays, and deadlines, for example --

ANSWER: Yes.

QUESTION: -- provides a natural framework for the structure of the databases.

Do you see that?

ANSWER: Yes.

QUESTION: So are you describing there the ability of MEMOIRS, as designed and described, to store in a chronological way future deadlines, holidays,

and meetings?

ANSWER: Yes.

QUESTION: Would the MEMOIRS systems, as described in your articles, allow for storing future events; for instance, deadlines, and meetings?

ANSWER: Yes.

QUESTION: Directing your attention further down, your article under 3.1 Hardware and Programming --

ANSWER: Yes.

QUESTION: -- here, are you describing how MEMOIRS runs on a Macintosh?

ANSWER: Yes.

QUESTION: And that documents are displayed on a Sony color monitor?

ANSWER: Yes.

QUESTION: And the next paragraph down states: The system supports a multimedia database (color, data, graphics, images, text and sound).

ANSWER: Yep.

QUESTION: Are you describing there the capability of MEMOIRS to store in a chronological order different types of documents?

ANSWER: Yes.

QUESTION: What different types of

documents?

ANSWER: Anything you might want to envisage.

QUESTION: Such as data, graphics, images, text, and sound?

ANSWER: Yes.

QUESTION: And, again, you state here: The system supports a multimedia database (color, data, graphics, images, text, and sound), a near conventional electronic diary, and various office tools.

Do you see that?

ANSWER: Yes.

QUESTION: Certainly, diary entries, reminders, holidays, all of those dates would be entered in the system for future events, correct?

ANSWER: Yes, they would.

QUESTION: And then with respect to date, you mentioned date was automatic. I -- I want to direct your attention to the second bullet where it says: Date.

Do you see that?

ANSWER: Yes, I'm still looking at it.

QUESTION: It says: Date-stamping of documents as they enter the system is automatic.

ANSWER: Yes.

QUESTION: What was the purpose of that?

ANSWER: Because you couldn't possibly have a system like this work if all the documents didn't have a place in their -- in the chronology of the database.

QUESTION: The search window would -- if you searched all the documents on the system --

ANSWER: Yes.

QUESTION: -- that were stored chronologically for a particular attribute and three documents matched --

ANSWER: Yes.

QUESTION: -- could the MEMOIRS system, as described in the 1989 article, show those three documents in thumbnail form, as you've described it, in Search Window 1?

ANSWER: Yes.

QUESTION: Okay. Does that functionality of MEMOIRS allow a user to search all the documents on a system for a subset and then to view a subset of those documents in thumbnail form, as you previously described --

ANSWER: Yes.

QUESTION: -- in the search window?

ANSWER: Yes.

QUESTION: You go on to state: An automatic date stamp defines the time attribute linked to the document in the database.

Is that an indication of your MEMOIRS system as described in your 1989 article of indexing and assigning a date stamp to each document?

ANSWER: Yes.

QUESTION: And was each document that was -- that either entered the system or it was generated by the system, given a time -- a unique timestamp?

ANSWER: Yes. Everything that happened in the system had a date stamp.

QUESTION: I want to direct your attention to the right side of the page underneath MIT's Architecture Machine Group's Spacial Data Management, 1979.

Do you recognize that depiction as part of the Spacial Data Management System from MIT?

ANSWER: Yes, I think I do.

QUESTION: And you were aware of that -- their work on spatial data management --

ANSWER: Yes, I certainly was.

QUESTION: -- in the early '80s?

ANSWER: Yes.

QUESTION: Was there ever a way to see documents in sequence -- in chronological sequence -- without clicking on the specific time period?

ANSWER: I am asking myself the question as I am trying to answer your question of how -- how I would do that.

I don't think that you -- I think your question presupposes a certain representation. I think that the functionality you're describing is doable, but not necessarily in the image that you have in mind. I wonder if you appreciate the problem I've got in answering that one.

QUESTION: I would like to once again direct your attention to Figure 3. It shows the documents present in the particular time period; is that correct?

ANSWER: Figure 3? Yes, it -- let me just -- let me just check.

Yeah, okay. It implies that some process has taken place where the user has -- has clicked on a particular element of the timebase and produced three documents.

QUESTION: And are those documents displayed in a chronological order?

ANSWER: No. But they are simultaneous,

so it wouldn't make much sense.

QUESTION: So once you narrow down the time period to a certain granularity, the search window does not display documents in a chronological order --

ANSWER: The search window is the -- the interval over which these documents appear is defined by the granularity of the timebase.

And within that, the search window fulfills a different function, which is to show the visual representation of the documents that have been retrieved.

The question about whether they show them in chronological order depends on how many search windows you've got open.

QUESTION: Do the search windows automatically update themselves?

ANSWER: I think not. It wouldn't have been -- it wouldn't have been logical to do that, because a search is an event in the database. So we wouldn't have -- we wouldn't have had an updating search window, because that implies an automatic process in the background.

This system was entirely user-driven. There is no background processing. It does simply what the user tells it to do. It is, therefore, static in

that sense.

QUESTION: Did the system provide a user with an interface to create backups for that user?

ANSWER: No. No. This is an experimental system.

QUESTION: Were there any implementations of MEMOIRS where the user did not have to make explicit decisions about what attributes to use at the time of filing?

ANSWER: Well, no and yes, because -- because MEMOIRS itself automatically encodes chronology; but in all other respects, the user has to make conscious decisions.

Do you mean do I have the technical knowledge of how the -- how the items were actually held in the code?

QUESTION: Yes.

ANSWER: I think the easy answer to say to that is no, that I was entirely involved in how the user experienced the software.

QUESTION: And so for a given timebase, there could be in MEMOIRS past documents, correct? Documents that were stored?

ANSWER: Yes, which is predominantly what it was.

QUESTION: Right. And there could be documents stored as of the day that the user was using it, right? Present documents, correct?

ANSWER: Yes. I guess so, yes.

QUESTION: And the timebase could also reflect future events, correct?

ANSWER: Yes. They could -- they could reflect entries in the diary for the future.

QUESTION: Right. And so in looking at a timebase for MEMOIRS, the timebase could be divided up into a past section, a present section, and a future section, correct?

ANSWER: Yes.

QUESTION: MEMOIRS, both the system and specifically the timebase, could operate as a diary of a person's -- a diary, correct?

ANSWER: Yes. It could be used as a diary. The point of the -- the whole point of the work is that the diary and the database are one and the same thing, and the -- the technical difficulties in describing the system are how you make that a coherent philosophy.

QUESTION: And a user of MEMOIRS could, for instance, search through all the chronologically ordered and stored documents on the system and search

for documents written by Dad, for instance?

ANSWER: Yes.

QUESTION: And MEMOIRS stored all of the documents and events in chronological order, correct?

ANSWER: Yes.

QUESTION: And MEMOIRS and your paper specifically described how to apply different possible attributes to those documents to allow for searches --

ANSWER: Yes.

QUESTION: -- of those documents, correct?

ANSWER: Yes.

QUESTION: And so, for instance, if a user applied as one of those attributes, authors -- let's say, Mom or Dad --

ANSWER: Yes.

QUESTION: -- you could search through all the documents stored on the database in chronological order and select all of Dad's documents?

ANSWER: Yes.

QUESTION: And the system would allow the user who searched for all of the Dad documents to see those documents in a search window.

Page 322, Figure 1.

ANSWER: Yes.

QUESTION: If you -- if you take a look at the timebase in Figure 1, it looks like the scroll box on the bottom of the timebase --

ANSWER: Yes.

QUESTION: -- has an end point.

ANSWER: Has an end point?

QUESTION: It -- let me ask the question --

ANSWER: Yes, it does look as if it has an end point. If I move the white little box to the right, according to the Apple Star Guidelines at the time, which I think were dated '87, that would imply that when I got to the right, I'd gone as far to the right as that would go.

But you if you looked at Excel spreadsheets, for example, as an alternative method, if you continue going right, you can extend -- you can actually add columns. It's a veritable feast.

QUESTION: And sitting here today, do you know if that is how MEMOIRS worked?

ANSWER: Worked?

QUESTION: Sitting here today, do you know if the MEMOIRS system had that functionality?

ANSWER: No, I can't tell you how, from memory. I can tell you what's -- I would have thought

then and what I think now, which is it clearly couldn't go to infinity. That goes without saying.

So it probably had some rule which would extend it to the right-most -- that's to say future-most -- item in the database and perhaps a bit further for situations of -- of organizational consistency.

QUESTION: Hence, their behavior with respect to the timebase is very similar. There are some differences and properties between diary entries and documents which are discussed below.

ANSWER: Yes.

QUESTION: But the obvious one to note here is that the timebase holds diary and document information --

ANSWER: Yes.

QUESTION: -- physically separate for clarity and presentation.

ANSWER: Yes, that was what I was referring to earlier.

QUESTION: And is that -- is that accurate with respect to your recollection of how MEMOIRS functioned at that point in time?

ANSWER: I wouldn't have written it if it wasn't accurate.

(End of video clip.)

MR. RANDALL: Your Honor, Apple's next witness is Mr. Ed Belove.

COURTROOM DEPUTY: Please raise your right hand and be sworn.

(Witness sworn.)

EDWARD J. BELOVE, DEFENDANTS' WITNESS, SWORN

DIRECT EXAMINATION

BY MR. SOOBERT:

Q Good afternoon, Mr. Belove.

A Good afternoon.

Q Would you state your name for the record?

A Edward J. Belove.

Q And where do you live?

A In Cambridge, Massachusetts.

Q Okay. Can you describe your educational history briefly since high school?

A I attended Harvard College and graduated in 1972 with a degree in applied mathematics.

Q Is that equivalent to a computer science degree?

A Yes. At the time, there was no Department of Computer Science so the computer courses were all in applied mathematics.

Q Okay. And what did you do after you graduated

from Harvard?

A I went to work for Data General, which was a mini-computer company. Worked there for about nine years doing systems design and architecture of operating system and the computers.

And following that, I helped found a startup company called Microcom, which was one of the early personal computer software companies, and we did electronic mail systems for early personal computers.

Q Okay. Where did you go after that?

A After that, I went to Lotus Development, which at the time was the largest personal computer software company. I was the Director of Advanced Development, and after six months, became Vice President of Corporate Research and Development at Lotus.

Q Okay. What year did you join Lotus?

A 1985.

Q And what was your position there?

A Initially, Director of Advanced Development.

Q Okay. And what kind of products, just briefly, did Lotus have at the time?

A The major product at the time was 1-2-3, which was an integrated spreadsheet product that had spreadsheet graphics and a database and a couple of related products.

So I joined to work on the non-spreadsheet products.

Q Okay. What about Magellan, that product?

A That started -- the project started in 1988, and we released it in -- I believe it was the spring of 1989 that it shipped.

Q Okay. Was it commercially available at that time, 1989?

A Yes.

Q Okay. And what was the goal of Lotus Magellan?

A The goal was -- at that point, hard disk drives had become bigger and people were putting an awful lot of their business information on their personal computers.

And with this proliferation of files, it was very hard to find the information you wanted, so we designed a product that enabled you to search very efficiently over the entire hard disk by indexing all these files and find the files and the data that you were looking for.

Q So it had indexing and searching capability as of 1990?

A Yes.

MR. SOOBERT: Let's go to DX502, please,

Diane.

Q (By Mr. Soobert) Do you -- do you recognize this document, Mr. Belove?

A Yes. It's the explorer's guide for Lotus Magellan. It was the product manual.

Q Okay. And you're familiar with this manual?

A I am.

Q Okay. And it's an accurate representation of how Lotus Magellan operated in that timeframe, 1989/1990?

A Yes.

Q Okay. Let's play a clip about Lotus Magellan, a video, and then while we're playing that, can you kind of walk us through. It doesn't have any audio with it. Maybe you can narrate it a bit on the fly, if you could.

A Okay.

Q And that's Lotus Magellan demo clip.

(Lotus Magellan demo clip playing.)

A Okay. This is the Magellan screen. It was running under MS/DOS. The first thing we did here is create an index of all the files. You could do all the drives, and for the purpose of this demo, the work indexing, the sample directory called MG sample.

And at this point, you may hit enter, and it will start to index all the files. And that should take

it a few minutes.

There, you can see it. The file index has being created.

And what it shows you at that point is a list of the files. And on the right is a quick summary of the first page of each file. And there are many different file types. This particular one we're looking at now is a spreadsheet.

Actually, this is another spreadsheet. The one below it is a database, and what it shows you is the first page of information of each of these files. And it attempts to do it in the form that the application for the file would be.

This is a database.

I think the next file is a graphics file, so it even attempts to show that. And this is all being done by Magellan internally.

And so with this file list, there's a number of things you could do. It -- it contains information about all the files. And you can sort it in different ways.

In this case, we're choosing to sort it by time and date. And so that list is now ordered by date. And we'll just zoom out using FAT. And you can -- it's ordered by date, and we could re-sort it in order by

type or by name. In this case, we'll do it by name. And it shows that list that way as well.

We can go back to the date list and unzoom it, and, again, this is the first page of the XYWRITE file there.

Another thing you can do is search the index, and what we'll do here is type a word in. In this case, the word is articles, and it will look through the index, find all the files that contain the word articles; and that's what you'll see as a subset of that original list containing all those files. And, again, in each case, you can kind of quickly go through and see what's in the file.

It also ranks them in relevance, and that's what the percentages there is, how relevant it is to the question you asked it.

So I guess in this case, we'll go back to a whole list -- oh, another feature of Magellan is it can back up files automatically. You hit Control F1, you get this backup dialogue. You could back up all the files on a drive or do it by date, like this year's files.

In this case, we're choosing to update the worksheets to save all of these spreadsheet files. You can save it on any drive. We'll put it in the MG backup

directory, and then hit enter, and it will actually do the backup, which is very fast, because there are only a couple of files in there.

But what we'll do is again hit the explore button, which is F9, and go down and look at the backup directory, and there you can see those are the three spreadsheet files that were backed up out of the main structure into this other backup directory.

I believe that's it.

(End of Lotus Magellan demo clip.)

Q Okay. Thank you.

So we went through that pretty fast, a lot of screens there, a lot of information, so let's just take just a step back.

Lotus Magellan had the capability of indexing and searching all the documents that were on the hard drive?

A Right. Any -- any type of file that was supposed under MS/DOS, spreadsheets, databases, graphics.

Q And that was as of 1990, right?

A Correct.

Q Okay. And that's also described in the document we looked at earlier, the guide?

A Yes.

Q Okay. And we can sort, using Lotus Magellan, in that timeframe the files by date and put them in a chronological order, put all the documents on the system in a chronological stream, if you will, right?

A That's correct. MS/DOS timestamped each file as it was changed, and using that, you could order them.

Q Okay. So each document in the filing system had its own unique timestamp, right?

A That's correct.

Q All right. And if I wanted to take that stream of documents and create a substream, some subset of documents, could I do that?

A You could. One way was the way we showed. Create a subset of documents that contain a word. Another way would be to select a subset of the documents and mark them based on time or a file type.

Q All right.

A Or any of the information that we have about the file.

Q Okay. And I said could you do that.

Did Lotus Magellan actually do that in 1990?

A It had that capability, yes.

Q Okay. And -- now, the types of documents that were handled by the system and indexed and searched using Lotus Magellan, there are a diverse set of

documents that could be indexed and searched, like spreadsheets, text, graphics?

A Yes. I tried to show a variety of documents.

Q Okay. What about the concept of a glance view or a preview of the document content? Was that --

A As you see, the thing we're looking at there is, in fact, glance view. In this case, it's spreadsheet file, and that's what 1-2-3 in 1989 looked like.

And so Magellan will quickly show you. As I did in my first piece, as I moved down the list of documents, you saw you got a quick glance of the data that was in each document.

Q Okay. Now, what about copying or moving documents from -- from the system to another storage medium, archiving? Did it have that capability?

A Yes. As you can see on the bottom, that F2 is copy. If I hit Shift F2, I can move the files. And I think I showed at the end of the demo is a backup, an explicit backup.

Q Okay. Now, I think you mentioned that was an MS/DOS-based system, a Microsoft system.

A That's correct.

Q All right. So that was setting on a Microsoft operating system?

A Yes.

Q Okay. Was there a comparable product in that timeframe for a Macintosh or Apple-based system?

A About a year after we first released Magellan, there was -- a version of a program like this was released for the Macintosh.

Q And what was that program called?

A That was called On Location.

Q And roughly, what timeframe was that?

A Roughly, 1990. I don't know exactly when in the year.

Q Okay.

MR. SOOBERT: Diane, can you bring up DX532, please?

Q (By Mr. Soobert) That's the -- that's another Lotus Magellan article, right?

A Yes. That's a -- it's a book that was produced by an independent publisher about using Lotus Magellan. It was written by one of the developers.

Q Okay. And that accurately describes the system and reflects the way the software operated in 1990, right?

A Yes, it does.

Q All right. Let's go to -- instead of the documents, let's just play the On Location. This is the

Macintosh-based version of a search and indexing system.

MR. SOOBERT: And this is the On Location demo clip, Diane.

(Lotus Magellan On Location demo clip playing.)

A Yeah. This is what the Macintosh desktop looked like at the time.

Again, the first thing you do here is create an index, and the first thing you do is select the disk you want the index in. You want to index all the files on that disk.

MR. STEIN: I'm going to object to this testimony. I don't believe he has any personal knowledge of this slide.

THE COURT: Okay. Restate your question.

MR. SOOBERT: Sure.

MR. STEIN: I don't believe he has any personal knowledge of the On Location system that has been put up there.

THE COURT: No. I asked him to restate his question.

MR. STEIN: But I -- the -- the witness --

MR. CARROLL: No, No. He understands.

MR. STEIN: Oh, okay.

Q (By Mr. Soobert) Mr. Belove, are you familiar with the On Location system?

A Yes.

Q Are you familiar with how it operated in 1990/91, roughly that timeframe?

A As I user, I am, yes.

Q How did you gain that familiarity?

A When it first came out, I got a copy, because it was a product similar to the ones we did, and we did a fairly detailed evaluation of it.

Q Okay. And that software was actually developed by ex-Lotus employees, Peter Miller and Mitch Kapor?

A Yes. Peter worked for me when I was at Lotus. In fact, he gave me an early copy of it to try, and I worked closely with Mitch Kapor.

Q So you're familiar enough and comfortable enough describing for us how they operate, right?

A From a user viewpoint, yes. I don't know about the internals of that system.

MR. SOOBERT: All right. Let's run the tape, please.

(Lotus Magellan On Location demo clip continues.)

A Again, you first fire up the system, and we

went back to creating an index from that disk.

One of the features that On Location had was you could tell it which types of files you wanted to index. You could index all of them or just a subset of the types. And at that point, you see it's a fairly extensive list of both Apple products and non-Apple products.

So once we've selected, we just say create it, and it will create an index. Again, it's reasonably fast going through that.

And then it will go back and look at the files that are in that index, go back to the main screen, select the index we just created, and you can see it gives you a list of files, and they're sorted by date and time.

And you can see from this list that there are a lot of different types of files, and, you know, we can see the name and size and other features about them. In fact, you can re-sort the list just by clicking on the headings there. Click on name, and it re-sorts by name.

We'll go in this case and click on the date last modified, so, again, it's in date order now.

And similar to Magellan, you can select a subset of these documents by typing in a word, and these are the various documents in the -- on the disk that

contain the word examples. Again, that list can be sorted by name or by date.

And you double-click on it, and you see this glance view. In this case, it's a graphical file, and all we see is the text. But it gives you an idea of what's in the file.

And what we've done here is you can also run the native program for the file and see what it looks like in its regular program. In this case, Mac Draw, which is a drawing program, and that's the detail of what the file -- the graphics file looks like.

On Location also had the ability to copy and move files. In this case, the first thing we'll do is copy it to another location on the same disk. And so what will happen, in fact, as soon as we copy it, On Location updates the index.

And so the new file will show up on this list of the subset files that includes the word examples.

And you can see it's our original and the copy we made that we put into My Documents.

Another use of the copy command, if you select a file, is to copy it to external disks. In this case, we didn't say copy, but instead of selecting a System 7 disk, we'll select this, what's called Repository, which is a separate disk on the system.

And once we do the copy, it will move -- it will make a copy of it on this external disk. And you can see Repository. There it's got examples, which is the file we just copied over there to this other disk. I believe that's all we have to show.

(End of Lotus Magellan On Location demo disk.)

Q (By Mr. Soobert) Thank you, Mr. Belove.

Okay. So that essentially had a mirror image functionality to the Lotus Magellan product?

A Very similar, yes.

Q Okay. And that, again, was 1991?

A 1990, I believe, it when it was -- but certainly, it was on the market in 1991.

Q Okay. So let's fastforward to sometime in 1996, and somebody would have come to you and said, hey, I've got -- I've got a new system for indexing and searching documents and organizing them and putting them in a chronological, time-ordered stream, would you have a reaction to that?

A I would say it was a good idea. It's pretty much like a product that we produced seven years earlier or six years earlier.

Q Thank you.

MR. SOOBERT: Pass the witness.

THE COURT: Cross-exam.

CROSS-EXAMINATION

BY MR. STEIN:

Q Good afternoon, Mr. Belove.

A Good afternoon.

Q Apple's lawyers are paying you to help them today, right?

A Yes.

Q And at what hourly rate are they paying you?

A It's not an hourly rate. It's a fixed fee for the entire week that I've been here.

Q How much is that?

A It's $20,000.

Q Isn't it true that Lotus Magellan did not store time -- timestamped information itself but used the -- the operating systems index for time-based information?

A Well, it didn't use the operating system index, but it did get the timestamps from the operating system, yes.

Q Is it -- is it your testimony that Lotus Magellan indexed the timestamps from the operating system?

A No. It did not index the timestamps.

Q It was just using the timestamps from the

operating system, right?

A (Nods head.)

Q So it --

A I'm sorry.

Q So it didn't create a time-ordered sequence of documents itself, did it?

A Yes, it did. It would take that document, sort them by time, and create that sequence.

Q If -- if -- if a user asked Magellan to do that, right?

A No. As you saw when it brought up that list, it could, you know, order them by time.

Q Right. The user would order them -- the user -- you would -- you would get the list. I mean, you could order them by time, if you chose to?

A Yes, you could, I guess.

Q And that -- that's the same kind of functionality that was generally available -- in the process of getting results and ordering them by time, that was available back then, right?

A Not generally available, no. In fact, you could -- you could list a directory, but you could not list all of the files on the disk, to my knowledge.

There may have been utilities, but I don't know of any that did.

Q You're relying on -- for example, in listing a directory, you could get the directory and order by -- order them by time in a -- in a similar manner that Magellan was doing for maybe a larger set of documents, right?

A Yes, you could for a similar directory.

Q And so there was nothing new about doing that back then, right?

A About sorting?

Q Right.

A No. Sorting has been around for 40 years.

Q And Magellan wasn't creating some kind of central store in which all the documents were stored or maintained or included any time-ordered sequence, were they?

A No, it was not.

Q And Magellan did not store future -- strike that.

Magellan did not store calendar entires, did it?

A No.

Q In the examples you gave of archiving, in each case, the user had to manually select, take action to do the archiving, correct?

A In the examples I showed, yes.

Q Thank you.

MR. STEIN: No further questions.

THE COURT: All right. Redirect?

MR. SOOBERT: Nothing further.

THE COURT: All right. Who will be your next witness?

MR. RANDALL: Your Honor, our next witness is Mr. Chris -- Chris Hatchell, who is from Yale University. It's by videotape.

And the time is 18 minutes for Apple, and 8 minutes for Mirror Worlds.

(Video playing.)

QUESTION: All right. Mr. Hatchell, can you tell me where you're employed?

ANSWER: I'm employed at Yale University.

QUESTION: And what is your position at Yale University?

ANSWER: I'm a senior administrative secretary for the program in applied mathematics at Yale.

QUESTION: Now, so between 1992 -- approximately 1992 and 2000, when the applied mathematics program first began --

ANSWER: Yes.

QUESTION: -- you were actually working

as an administrative associate in the Computer Science Department?

ANSWER: Yes.

QUESTION: And after 2000, when the applied mathematics program began, did you continue to work as an administrative associate for the Computer Science Department in parallel?

ANSWER: Yes.

QUESTION: Why don't you start with 1985 when you began working in the Computer Science Department.

ANSWER: Okay.

QUESTION: Were you working for a specific professor or graduate students at that point in time?

ANSWER: Yes.

QUESTION: And who were they?

ANSWER: David Gelernter.

QUESTION: And for how long did you continue to perform those same duties for Dr. Gelernter?

ANSWER: I would say until the present time.

QUESTION: Have you ever heard the term Lifestreams?

ANSWER: Yes.

QUESTION: In what context had you heard the term?

ANSWER: When I handled technical reports.

QUESTION: Is it fair to say that your role relating to Lifestreams was limited to filing and maintaining technical reports on the project?

ANSWER: Yes.

QUESTION: Now, in terms of the technical reports that you were handling in this time period, the late 1980s to the mid-1990s, can you describe your practice with respect to the distribution of technical reports?

ANSWER: Yes.

QUESTION: Please do so.

ANSWER: The author of a technical report would print the report out and then give it to me, and I would get a technical report number from the business office of the Computer Science Department on the ground level, on the basement -- in the basement of the building.

I would go to the office where a black looseleaf binder was kept, and I would open it up and go to the last page on which technical reports were entered, and if I saw TR -- and sometimes it was RR for

research reports, but they were interchangeable.

If I saw the last entry be TR-1000, I would then enter the new technical report that I was handling as TR-1001, and I'd enter the following information: The title, names of the authors, the date.

It would either be a -- an exact date or just the month and the year in which I was recording it; then funding -- funding acknowledgments, if there were any; acknowledgments of grants and so on, off of which they worked.

And then I would go upstairs to my office and I would type up a title page for this technical report, which gave the title, the authors, the date, the technical report number that I had just entered into the black binder in the business office, and then the acknowledgments of any granting agencies or institutions.

Once I had typed that up, I made it part of the hard copy document that had been given to me by the author, or one of the authors; and I would have it copied at Science Park Copying Center that was at Science Park New Haven at that time, and I would enter on the Science Park ticket sheet, the -- the title -- identifying title and how many pages they were, whether they wanted it double-sided or single-sided, whether

they wanted two staples or three staples on the left.

And then I would have them -- I would designate if it should be put into computer science covers that they had, and then I would give the number of copies I was requesting.

QUESTION: So you would initially present maybe 15 copies, and once you distributed those 15 and you're ready to run out of those 15, you would then go and have more copies printed?

ANSWER: That is how I remembered it. I would like to say, just as a footnote, that I went to the business office in -- when I was gathering information having to do with these duties to find out if they had their copies of the tickets that I wrote to Science Park, because then I could get the numbers, the actual numbers that we made of -- of particular copies.

And they said that the policy is that they have -- that they only keep copies now for two years. Everything else is destroyed. So I wasn't able to get any information on that.

QUESTION: Now, in terms of distributing the 15 or so copies that you would print in the initial run, you would distribute them based on requests that you received for technical reports?

ANSWER: They would be distributed to the

authors, and then I would wait for any request, yes.

QUESTION: So, typically, when they were requested, it would be requested by people outside of Yale?

ANSWER: Yes.

QUESTION: And when you received a request from outside of Yale for a copy of a technical report, would you need to get permission from anyone to send that technical report to the person requesting it?

ANSWER: Not that I recall.

QUESTION: Now, were there any restrictions or limitations on what technical reports could be sent out, if requested?

ANSWER: Not that I recall.

QUESTION: Were there any technical reports that were deemed confidential to Yale?

ANSWER: No.

QUESTION: As a matter of your practice with respect to technical reports from the period of the late 1980s to the mid-1990s, within a week of receiving a technical report from the author, you would have copies available for distribution?

ANSWER: Yes.

QUESTION: And if those copies were requested, you would then distribute them to people

requesting the technical report?

ANSWER: Yes.

QUESTION: And that would all be within about a week of the date that's listed on the cover sheet for the technical report?

ANSWER: As far as I recall, yes.

QUESTION: And that would have been true for any reports relating to Lifestreams during the period of the late 1980s to the mid-1990s?

ANSWER: As far as I can recall, yes.

QUESTION: So your recollection is that you would have received requests for technical reports by mail or e-mail; is that right?

ANSWER: Yes.

QUESTION: And then how would you go about sending copies of technical reports to the requester?

I would send it by regular mail.

QUESTION: When you received a request for technical reports from the Linda Group, what was the thing that was being requested?

ANSWER: The specific technical report.

QUESTION: And how would it be -- how would it be identified?

ANSWER: By title and/or by TR number.

QUESTION: And what is your understanding as to how people outside of Yale that are requesting technical reports in the period from the late 1980s to the mid-1990s would know the title and/or the technical report number for the reports that they were requesting?

ANSWER: I have absolutely no idea.

QUESTION: Do you have any information as to how somebody outside of Yale would have known what the technical report number and/or title for a technical report was as of the late 1980s to the mid-1990s?

ANSWER: I do not.

QUESTION: Let's talk for a minute about the binder of technical report numbers and titles.

You know what I'm talking about, yes?

ANSWER: Oh, yes.

QUESTION: Now, you testified earlier that the binder that was in the business office was on the shelf of the business -- on a shelf in the business office?

ANSWER: Yes.

QUESTION: And can you tell me, when you say shelf, you mean a bookshelf?

ANSWER: Yes.

QUESTION: Was the bookshelf locked?

ANSWER: No.

QUESTION: Can you describe for me what the bookshelf was, what it looked like?

ANSWER: Yes. It's a -- an open bookshelf, high up on the wall.

QUESTION: Okay. And the binder of bibliographic information about technical reports sat on the open bookshelf up on the wall?

ANSWER: Yes.

QUESTION: Can you recall any point in time during the late '80s to mid-'90s when the binder was not on that bookshelf in the business office of the Computer Science Department?

ANSWER: I don't recall it being any other place.

QUESTION: That's where it was kept in the ordinary course?

ANSWER: Yes.

QUESTION: Are you aware of any reason why someone visiting the Computer Science Department in the late 1980s to the mid-1990s wouldn't be told what technical reports had been published by the Department if they were requesting a technical report?

(REPORTER'S NOTE: The answer on the video does not match the answer on the deposition.)

ANSWER: Yes.

(REPORTER'S NOTE: The question here is missing, but it shows up later in a random spot with no response.)

ANSWER: Well, if it were addressed -- the question were addressed to me about the technical reports that were under my control, yes.

THE COURT: All right. Very well.

You may proceed.

QUESTION: Other than someone not knowing that information, can you think of any reason why information about what technical reports had been published would not be provided to somebody coming into the department and requesting it?

ANSWER: Yes.

QUESTION: Okay.

ANSWER: I'm not aware of whether there was a technical report list, a list of all the technical reports.

QUESTION: Now, that binder that was in the business office would have information about what technical reports had been published, at least for the Linda Group, between the late 1980s and the mid-1990s?

ANSWER: Yes.

QUESTION: And that binder would have been available to anyone working in the business office?

ANSWER: No.

QUESTION: But if a professor from another institution e-mailed you and asked for information about what publications -- I'm sorry -- what published technical reports had come out of the Linda Group, you would have responded to that inquiry by providing that information?

ANSWER: I don't recall any instance in which that -- that occurred.

(REPORTER'S NOTE: This is the question that was missing and noted previously in the transcript.)

QUESTION: And as a corollary to that, it would also be true that if someone was requesting information about what technical reports were available, that that information would also be made available to them?

(REPORTER'S NOTE: There was not an answer.)

QUESTION: And if someone had contacted you in the late 1980s to the mid-1990s and asked you for technical reports relating to the Lifestreams project, you would have also provided them with that information?

ANSWER: Yes.

QUESTION: Is it fair to say then that during the late 1980s to the mid-1990s, you didn't view

there to be anything about the Lifestreams technical reports that was a secret?

ANSWER: As far as I know, there was no secret.

QUESTION: Can you tell me what Hatchell Exhibit 3 is, please?

ANSWER: It's a Yale technical report.

QUESTION: Okay. And if you'll look at it, it's Technical Report No. 1070; is that correct?

ANSWER: Yes.

QUESTION: And it's dated here April 1995; is that correct?

ANSWER: Yes.

QUESTION: And so the date that's listed here on the front page of Hatchell Exhibit 3 would be the date that you assigned to the technical report in the binder, correct?

ANSWER: Yes.

QUESTION: And that would also be the date at which time you were provided the technical report by the author?

ANSWER: Yes.

QUESTION: And that would also be the date within a week of which the technical report would be available for distribution to someone who requested

it, correct?

ANSWER: Yes.

QUESTION: You mentioned earlier that you would maintain a different folder for the distribution records for each technical report.

Do you recall that?

ANSWER: Yes.

QUESTION: As I look through this, I don't see any records of a distribution of Technical Report 1070 in Exhibit 4. Could you confirm that I didn't miss something?

ANSWER: Yes, that's correct.

QUESTION: Are you aware of any distribution record of Technical Report 1070?

ANSWER: No.

QUESTION: Did you search for distribution records for Technical Report 1070?

ANSWER: Yes.

QUESTION: And what did you find?

ANSWER: I found nothing.

QUESTION: Do you recall that during your conversation with Ms. Smith on May 13th, 2008, you looked for but were unable to find in your file cabinet the folder of Lifestreams 1070 distribution records?

ANSWER: Well, there were no distribution

records for 1070; otherwise, they would be included here.

QUESTION: Do you recall whether or not you ever provided a copy of Technical Report 1070 to anyone who requested it?

ANSWER: I do not recall.

QUESTION: One way or the other?

ANSWER: That's correct.

QUESTION: So you can't say, sitting here today, that you never provided a copy of Technical Report 1070 to somebody requesting it?

ANSWER: Actually, I -- that is not correct. I -- I had every -- I had records in my -- in my file cabinet of every tech -- of every technical report that I distributed from the Linda Group, and I diligently went through it, and I did -- I found no record at all of 1070.

The only ones I found were in --

QUESTION: Other than -- I'm sorry. Are you done?

ANSWER: Yes.

QUESTION: Other than your review of the Lifestreams drawer in your file cabinet, do you recall with certainty that you did not send Technical Report 1070 to someone who requested it?

ANSWER: I recall with certainty that I did not send TR-1070 out to anybody who requested it, because it's not -- it's not in the record of Hatchell 4, Document 4.

QUESTION: Did you participate in any way in Dr. Gelernter's effort to get patents on his work on Lifestreams?

ANSWER: Yes.

QUESTION: Can you describe what your involvement was?

ANSWER: Yes.

QUESTION: Go ahead, Mr. Hatchell.

ANSWER: I recall that I faxed something to the lawyers who visited -- visit -- that David gave me to fax.

QUESTION: Do you recall any other involvement in helping Dr. Gelernter obtain patents on Lifestreams-related work?

(REPORTER'S NOTE: There was not an answer to the question.)

QUESTION: Is the corridor in which your office is secure, a locked corridor?

ANSWER: No.

QUESTION: And going over to the second page, it says: The technical report was stored at Yale

University in the files of Christopher Hatchell, an administrative assistant whose tasks included distribution of the technical report.

Do you see that?

ANSWER: Yes.

QUESTION: How is it that that information came to be communicated to the Patent Office?

(REPORTER'S NOTE: There was not an answer to the question.)

QUESTION: I'm going to hand you what's been marked as Hatchell Exhibit 10.

The next sentence is: This technical report was stored at Yale University in the files of Christopher Hatchell, an administrative associate whose tasks included distribution of this technical report.

ANSWER: Yes.

QUESTION: Do you see that?

ANSWER: Uh-huh.

(REPORTER'S NOTE: There is not a question, just an answer.)

ANSWER: I have no idea.

QUESTION: Now, the binder is not kept in a locked file in the Office of Computer Science at Yale University, is it?

ANSWER: No, it is not.

QUESTION: Are you aware of any list containing bibliographic information about the technical report that is kept in a locked file in the Office of Computer Science at Yale University?

ANSWER: No, I'm not.

QUESTION: So as far as you know, the last sentence here: Further, the list containing the bibliographic information about the technical report from which the technical report number -- I'm sorry -- information about the technical report from which the technical report number was determined is kept in a locked file in the Office of Computer Science at Yale University?

As far as your knowledge goes, that statement is not accurate?

ANSWER: Yes. It is not accurate.

QUESTION: And you never told anyone that they should tell the Patent Office that the list containing bibliographic information about the technical report was kept in a locked file in the Office of Computer Science?

ANSWER: To the best of my knowledge, I did not.

QUESTION: The question was, and it's not

true that the list containing bibliographic information about the technical report is kept in a locked file in the Office of Computer Science?

ANSWER: No. If -- if they're referring to the -- if this reference is to the -- the looseleaf binder, no.

QUESTION: Do you know one way or another whether, in 1998, the binder that we've been speaking about was contained in a locked file in the Office of Computer Science at Yale University?

ANSWER: I don't know one way or the other.

QUESTION: Did you ever tell anyone that the binder was contained in a locked file in the Office of Computer Science at Yale University?

ANSWER: I -- I don't recall, but -- but if I did, the -- the -- the person may have misunderstood me and -- when I said contained in a locked office.

QUESTION: Can you elaborate?

ANSWER: Well, if -- if I did say something about that, I -- that person could very easily have misunderstood -- might have understood locked file -- my -- my statement kept in a locked office in the Computer Science Department and might have

thought -- might have thought I said locked file.

QUESTION: As of today, is the binder kept in a locked office?

ANSWER: Yes, it is in a locked office.

QUESTION: As far back as you can remember, was the binder always kept in a locked office?

ANSWER: Yes.

(End of video clip.)

MR. RANDALL: Your Honor, Apple's next witness is a Ms. Nancy Silver, who is a Ph.D. student at the University of Toronto.

The time allocation is 5 minutes for Apple and 1 minute for Mirror Worlds.

THE COURT: All right. Proceed.

(Video playing.)

QUESTION: Can you state your full name for the record?

ANSWER: Nancy Sharon Silver.

QUESTION: Start off with, can you just describe your educational background?

ANSWER: Yeah. I have a bachelor's in history from the University of California at Santa Cruz, and I have a second bachelor's in computer science at the University of California at Santa Cruz as well.

And then I got a master's in computer

science in human computer interaction at the University of Toronto in 1996.

QUESTION: And when did you first attend the University of Toronto?

ANSWER: 1993.

QUESTION: Okay. Did you write a thesis?

ANSWER: Yes.

QUESTION: And who is Ron Baecker?

ANSWER: Ron Baecker was my thesis advisor.

QUESTION: Were you in California when you were working on your thesis in 1995?

ANSWER: Yeah.

QUESTION: So the court reporter has handed you what's been marked as Exhibit 3, Yale University Department Computer Science Technical Report, April 1995, to appear edited in Technology Review: The Lifestreams Approach to Reorganizing the Information World, Nicholas Carriero, Scott Fertig, Eric Freeman, and David Gelernter.

Do you recognize this document?

ANSWER: Yes.

QUESTION: So is the first time you saw the Lifestreams Technical Report marked as Exhibit 3 during the course of preparing your thesis?

ANSWER: Yes.

QUESTION: Did you have access to the Lifestreams Technical Report marked as Exhibit 3 in the United States?

ANSWER: Yes.

QUESTION: When you first obtained a copy of the Lifestreams Technical Report marked as Exhibit 3, did you understand it to be publicly available?

ANSWER: Yeah.

QUESTION: How do you know you understood it to be publicly available?

ANSWER: Well, because it says Technical Report, for one thing, and it says -- and there's nothing that says it's confidential for the other thing.

So, I mean, if I were handed something that said confidential on it, I would never use it. There's nothing on here that says it's confidential. It says Yale University Technical Report.

QUESTION: The court reporter has handed you what's been marked as Exhibit 5, a document entitled Thesis Schedule. And this was produced to Mirror Worlds.

Ms. Silver, do you recognize this document?

ANSWER: Yes.

QUESTION: What year do the dates on this document refer to?

ANSWER: 1995.

QUESTION: How do you know?

ANSWER: Because that's when I was working on my thesis.

QUESTION: What's the earliest date on this document?

ANSWER: June 5th.

QUESTION: When you created your thesis schedule, was it a list of events you had already done?

ANSWER: Oh, no, no. It was definitely things that I had to do.

QUESTION: So looking forward?

ANSWER: Yeah. It was like a to-do list.

QUESTION: So did you perform research for your thesis prior to June 5th, 1995?

ANSWER: Yes.

QUESTION: Do you recall reviewing any literature or technical reports for your thesis after June 5th, 1995?

ANSWER: No.

QUESTION: Do you recall reviewing any literature or technical reports for your thesis after creating this schedule?

ANSWER: No.

QUESTION: After reviewing this thesis schedule, are you confident that you obtained a copy of the Lifestreams Technical Report marked as Exhibit 3 prior to June 5th, 1995?

ANSWER: Yes.

QUESTION: Why?

ANSWER: Well, because, you know, I just wanted to get this thesis done. I had done all my coursework in Toronto -- when I was in Toronto. And then, like I mentioned earlier, my dad had died, and I came back to stay with my mom, who was having a really hard time.

And, you know, I wasn't the typical master's student who was trying to get the most out of my education at that time, unfortunately. So I really just wanted to finish.

And I wasn't looking to add anything at this point. So when I finished a phase, I finished it, and I was done. So I can't imagine myself going out looking for more papers.

QUESTION: Isn't it possible that even if you had found or were advised of the Lifestreams Technical Report after your research phase was over, you would have included it because you thought it was very

similar to your Timescope (sic) work?

ANSWER: If somebody important told me to include it, then I would feel that I had to, yeah.

QUESTION: Are you aware of any document you provided to Apple dated June '95 or earlier that references the Yale Technical Report relating to Lifestreams?

ATTORNEY: Object to form.

ANSWER: No.

QUESTION: Are you aware of any -- any document that you provided to Apple that was created in June of '95 or earlier that specifically references Lifestreams?

ANSWER: No.

(End of video clip.)

MR. RANDALL: Your Honor, Apple's next witness is Professor Ron Baecker from the University of Toronto.

THE COURT: All right. Ron Baecker.

MR. RANDALL: Did you say how long?

THE COURT: Is that a --

MR. RANDALL: It's a live witness.

THE COURT: Live -- no. I just said Ron Baecker.

MR. RANDALL: Oh, I'm sorry.

(Witness sworn.)

RONALD M. BAECKER, DEFENDANTS' WITNESS, SWORN

DIRECT EXAMINATION

BY MR. SOOBERT:

Q Good afternoon, Dr. Baecker.

A Good afternoon.

Q Can you state your name for the record, please.

A Ronald M. Baecker.

Q Okay. Where do you live?

A I live in Toronto, Ontario, Canada.

Q Okay. And where do you work?

A I work at the University of Toronto.

Q Okay. And how long have you been at the University of Toronto?

A Since 1972.

Q And are you familiar with what's generally referred to as technical reports in the computer science field?

A Yes, I am.

Q And how about back in the 1995 timeframe? Were you generally familiar with them in that time?

A I'm familiar with them since the mid-'60s when I was a graduate student at MIT.

Q Were those types of reports, in your experience, publicly available?

A They were certainly publicly available, yes.

Q Okay. Why do you think that they are publicly available?

A It was part of the culture of the academic establishment of -- within computer science at universities that part of what we needed to do to do our job was to disseminate our results through technical reports, and we did that very vigorously. It was very important.

And the departments promoted the dissemination of the technical reports as well so that other professors and also people in the industry would learn about our work.

Q In your experience, was it common for someone to request a technical report and actually get one?

A Yes. It was -- it was -- many of us subscribed to mailing lists in which we learned about technical reports from various universities. The universities sent out lists of those reports to subscribers.

When you visited the department or had someone visit you, it was very common to take them to the departmental library and show them the list of technical

reports so that they could get copies of the technical reports.

So it was certainly an active forum of publication dissemination of knowledge.

Q Okay.

MR. SOOBERT: Diane, could I have DX378, please?

Q (By Mr. Soobert) Now, Dr. Baecker, this is a copy of the technical report, TR-1070, from Yale University: Lifestreams Approach to Reorganizing the Information World, dated April 1995.

Do you see that?

A Yes, I do.

Q Are you familiar with this technical report?

A Yes, I am.

Q Okay. How are you familiar with it?

A We reviewed this technical report with great interest, because my master's student, Nancy Silver, and I were working on a similar project that we had started in '94. So we were very familiar with the technical report.

Q And did you have familiarity with that report back in 1995?

A Yes, I certainly did.

Q Okay. And is TR-1070 there in this exhibit an

example of the type of technical report that would have been publicly available in April '95 and since April '95?

A Yes, it certainly is a good example.

Q Okay.

MR. SOOBERT: I pass the witness.

THE COURT: All right. Cross-exam.

CROSS-EXAMINATION

BY MR. CANTINE:

Q Dr. Baecker, do you have any personal knowledge of whether TR-1070 was publicly available on or before June 28th, 1995?

A I know --

Q Can you offer sworn testimony to the jury whether or not Technical Report 1070 was publicly available, in your hands, did you read it anytime before June 28th, 1995?

A I cannot swear that I saw it prior to June 28th, '95, but the culture of the way technical reports worked meant that many people --

Q Excuse me, sir.

A -- could have seen it at this point.

Q I appreciate that. We're on a tight --

MR. SOOBERT: Your Honor, I ask that he be able to answer the question.

THE COURT: Allow the witness to answer.

Q (By Mr. Soobert) Go ahead.

A The way the technical reports worked from the mid-'60s and certainly up through '95 was that once something was in -- was given a number and put as a technical report from a major university Computer Science Department, there were no guarantees that people would not see it. It was very clear that people would see that technical report.

But to answer your original question, I personally cannot testify as to the date that we saw it. I know it was in '95, but I cannot remember the exact date.

Q So you can't offer any personal testimony that Dr. Gelernter's report, TR-1070, was publicly available on or before June 28th, 1995; is that true?

A I cannot testify that I saw it. It was publicly available, because it was listed in the technical report series in April of '95.

Q You don't have any personal knowledge of Dr. Gelernter's practice with respect to the publication of his technical reports, do you?

A I don't have any knowledge of Dr. Gelernter's practice, but I have knowledge of the practices of reputable academics of which Dr. Gelernter is one.

Q I asked you, sir, if you had personal knowledge of his personal practices.

A No, I do not.

Q Okay. And you have no personal knowledge of Yale's practices, with respect to those technical reports, at that time, do you?

A I know that the technical reports were put on websites and were indexed in indices, such as the University of Indiana University Unified Computer Science Technical Report Index, yes.

Q Let's try it again.

Do you have any personal knowledge of Yale's practice with respect to the publication of technical reports?

A Yes. They put on it their website.

Q In 1995?

A Yes.

Q You have personal knowledge of that?

A Do I have personal knowledge of that?

Q Yes.

A No, I do not.

Q Okay. Thank you.

By the way, are you being paid by Apple to be here today?

A Yes, I'm being paid.

Q How much?

A We haven't figured out -- I haven't discussed a daily rate yet, but for the hourly work I did, it was $375 an hour.

Q And you've been here all week?

A I have been here all week.

Q Okay.

MR. CANTINE: No further questions.

THE COURT: All right. Thank you.

Redirect?

MR. SOOBERT: Nothing further, Your Honor.

THE COURT: Thank you. You may step down.

Who will be your next witness?

MR. RANDALL: It's our expert, Your Honor, Dr. Feiner.

THE COURT: Doctor who?

MR. RANDALL: Dr. Feiner.

THE COURT: Feiner?

All right. How's the jury doing? Do you need a break before we start?

Okay. All right. We'll take a -- I'm going to -- let's try to do it in -- well, we'll give you a 15-minute break.

We'll be in recess until 2:25.

COURT SECURITY OFFICER: All rise for the jury.

(Jury out.)

(Recess.)

COURT SECURITY OFFICER: All rise.

(Jury in.)

THE COURT: Please be seated.

All right. Let's proceed.

MR. RANDALL: Thank you, Your Honor.

Apple calls Dr. Steven Feiner.

STEVEN FEINER, Ph.D., DEFENDANTS' WITNESS, PREVIOUSLY SWORN

DIRECT EXAMINATION

BY MR. RANDALL:

Q Would you state your name for the record, please?

A My name is Steven Feiner.

Q Can you briefly summarize your educational experience?

A Sure. I have a bachelor of arts degree in music and a Ph.D. in computer science from Brown University.

Q And can you describe your professional employment experience?

A Sure. I've been a research and teaching assistant, assistant professor, then a full professor of computer science at Columbia University, beginning with research and teaching assistant in 1985. I've been at Columbia for 25 years right now.

I teach courses and have taught courses in a range of subjects in video logic, computer graphics, software viewing, mobile computing; and currently I've been teaching mostly courses in user interface design and 3-D user interface design.

Q Have you ever acted as a consultant in the area of computer science or an expert in that area?

A Yes, I have.

Q And approximately how many times?

A Been on the order of maybe 12 or so active cases and also several consulting arrangements with companies in which I've evaluated technology that they have been working on as well as giving talks about the work that I'm doing and work that's being done in general and various aspects of computer science.

Q Okay. And have you studied the patents that have been asserted in this case?

A Yes, I have.

Q You've studied the patents and you also studied the file histories?

A I've studied the patents. I've studied the file histories. I've studied references that are on the face of the patent, and a variety of material.

Q Have you studied the prior art as well?

A I have studied other prior art; the prior art that I know of on my own and prior art that was provided me during the course of the case.

Q And have you also looked at and had access to the discovery in this case, including deposition transcripts and documents produced by Mirror Worlds, documents produced by Apple, documents produced by third parties?

A I have had access to all of those documents and probably more as well and, of course, the Court's claim construction order.

Q Do you feel comfortable in your understanding of all the technical materials you've read in this case?

A Yes, I do.

Q And have you been asked to form any opinions in this case?

A I have not been directed to form any opinions, but I have generically been asked to come up with opinions.

Q Have you formed an expert opinion in the case about what --

MR. RANDALL: By the way, can you please put up LX1?

Q (By Mr. Randall) I have put up before you LX1, and at the top row, it shows '227, Claims 13 and 22; '427 patent, Claims 1, 8, 16, 18, and 25; the '313, Claims 1, 2, 3, 9, and 11.

Do you see those claims?

A Yes, I do.

Q Do you understand that those claims are being asserted by Mirror Worlds against Apple?

A Yes.

Q And have you studied those claims?

A Yes, I have.

Q Have you studied the file histories as they relate to those claims, including the Court's claim construction?

A Yes.

Q Have you studied each and every claim term and element that is included in those claims?

A Yes, I have.

Q And based on your review and your experience of the patents, the claims, each and every claim term included in those asserted claims, the Court's claim construction, did you form an opinion as to the scope of those claims by the structure?

A Yes, I have.

Q All right. Based on that -- and did you also study Apple's accused products and the relevant technical material, including the deposition testimony regarding the operation of those accused products?

A Yes, I have.

Q And based on all of that work, did you form opinions that Apple's accused products do not infringe any of those asserted claims I just mentioned?

A Yes. My opinion is that Apple's accused products do not infringe any of those claims.

Q All right. Now, with respect to your review of the evidence, did you form opinions in this case regarding invalidity?

A Yes, I did.

Q Did you, in forming those opinions, did you also apply, as you just mentioned, your review and conclusions regarding the scope of the claims and the proper construction of those claims, the Court's claim construction, your review of the file history, did you apply the scope of those claims to prior art that you reviewed in this case?

A I did.

Q And did you review both prior art, publications, patents and other publicly available

material?

A Yes, I reviewed a very wide range of material.

Q All right. And based on your construction of the claims, and guided by the Court's construction and your application of those claims to the prior art, did you form in your mind the expert opinion that each and every claim asserted by Mirror Worlds against Apple that I just listed are invalid?

A I did.

Q Did you review the expert reports of Dr. Levy and Marc Frapier.

A Yes I, did.

Q And who is Marc Frapier?

A Marc Frapier is a person who spent a number of weeks in looking at the source code for the Mac OS 10 operating system or actually looked specifically at two versions of it, both Tiger and Leopard, and as well also for the iPhone, iPad, and iPod series.

Q And did you rely in part on Mr. Frapier's experience and review of the Apple source code in forming your opinions in this case regarding non-infringement?

A I formed my opinions relying both on Mr. Frapier's review of the source code and also myself, as well as talking with Apple employees who are familiar

with the source code.

Q Did you prepare expert reports in this case?

A Yes, I did.

Q Did you prepare --

MR. RANDALL: Strike that.

Q (By Mr. Randall) Did you prepare an expert report detailing your opinions regarding the fact that Apple does not infringe any of these asserted claims?

A Yes. I prepared a non-infringement report.

Q And was your non-infringement report provided to counsel for Mirror Worlds?

A As far as I know.

Q And were you --

A I didn't provide it personally myself, but I'm sure your law firm did.

Q Were you deposed by the lawyers for Mirror Worlds regarding your expert opinions of non-infringement?

A Yes, I was.

Q All right. Did you also prepare an expert report in this case detailing your opinions regarding invalidity of each of the asserted claims?

A Yes, I did.

Q And were you deposed by Mirror Worlds' lawyers regarding those opinions?

A Yes.

Q All right.

MR. RANDALL: Can you bring up SF1, please?

Q (By Mr. Randall) I'm showing you what's up on the screen as the '227, '313, and '427.

Are those the patents that you reviewed, studied, and formed opinions on regarding both non-infringement and invalidity?

A Yes. Those are the three Mirror Worlds patents that I reviewed, studied, read very carefully, and references that are the faces.

Q There's a bullet down below that says the invalidity date.

Now, do you understand that date, June 28th, 1995, to be the date that is exactly one year before the first patent in that chain was filed, and therefore, that is the, what lawyers call, the critical date? So if any prior art is out there that describes those inventions was publicly available before June 28th, 1995, then the patent is invalid; do you understand that?

A I certainly understand that. I looked at that first patent very carefully. Actually, the copy I had was a little hard to read, so I made sure I verified

that it was 28, not 25.

Q Also up there, it says the same written description. Do you understand that to mean that the written description describing how someone is supposed to practice this invention, including the figures and so forth, are all the same for those two patents?

A Yes, I do.

Q All right.

A There being only minor differences.

Q Okay.

MR. RANDALL: Can you pull up SF2, please?

Q (By Mr. Randall) Now, this -- do you understand that this document shows the asserted claims along the top row, and then down the left column, under claim terms, has a set of -- of elements that run through various claim -- claims asserted by Mirror Worlds?

A So on the left is basically a colored bubble and each of them has a shortened paraphrase of the important parts of the five claim terms.

Q And what are those checkmarks in the -- in the right side of the box?

A The checkmarks on the right are designed to indicate that for each one of the columns where a column

corresponds to a claim of a specific patent, for example, the first column to the right of the bubbles is the column for Claim 13 of the '227, and the claim in the patent is a dependent claim, Claim 22.

The checkmarks indicate that the two bubbles indicates one having to do with the stream and the other one having to do with a time-stamping uniquely identify the units, that apply to that claim, and that one needs to be found to infringe the claim, or they need to be shown to actually have those, and to show that they were things that actually did these things.

Q All right. Now, with respect to -- let's start with non-infringement.

Do you understand that Apple, number one, doesn't have to prove anything; it's Mirror Worlds' burden to show that Apple practices, with respect to the accused products, each and every element of every asserted claim?

A Yes.

Q So even though you may have an objection and disagreement with Mirror Worlds' position about whether or not Apple satisfies each and every element of every claim, are you going to focus your opinions in this presentation on a few of the elements that are missing?

A I'm going to focus my -- because there's so

many different elements involved and such limited time, I'm going to focus on specific ones in presenting the case.

Q Okay. All right. With respect to the accused products, do you understand that Mirror Worlds is asserting that Mac OS 10 Leopard and Snow Leopard both infringe?

A Yes, I understand that.

Q Okay. And do you understand that Mirror Worlds is alleging that Apple's Mac OS 10 Leopard and Snow Leopard infringe each of the asserted claims that are listed there across the top?

A Yes, I do.

Q Okay. And that the Mac OS 10 Tiger infringes just the '227, Claims 13 and 22?

A I do.

Q And based on your review and analysis and expert opinion in this case, do you believe that Apple does not infringe any of those claims?

A I did not believe Apple infringes any of those claims.

MR. RANDALL: Let's go to SF4, please.

Q (By Mr. Randall) Can you describe what's represented here by this slide?

A Okay. So this basically is a summary of what

we've just been talking about, and we've listed -- there's five points, and the point is, in order to be able to go and show that Apple products don't infringe any of the Mirror Worlds claims, we are basically trying to show that there is none of the five.

So there is a stream and a time-ordered diary that needs to have a past, present, and future portion. There is no timestamp that uniquely identifies any of the data units. There is no two operating systems. There is no receding foreshortened stack.

And, finally, there is no apparent sliding without clicking a cursor, none of this to pop up a glance view. No cursor.

These are shorthand for the much longer language of the individual claims.

Q Now, you understand that it is sufficient to show non-infringement if Apple is able to demonstrate, even though it's not our burden, any one of those items that is missing from the claim?

A Right. The claim basically is a collection of limitations, and if we have shown, no matter what it is, is missing from the claim, then there is non-infringement.

Q All right. Let's focus on the stream and past, present, and future time-ordered diary.

And what does this slide represent?

A What we are looking at here is a part of the Court's claim construction, and so the idea is that there is a bunch of terms that are used in the patent, and one needs to have some clarity as to exactly what those terms mean, especially when they're terms that are not ones that people of ordinary skill in the art would use with an understanding that they mean amongst them the same thing.

Stream is such a term. It's not a term that we normally use with a set and clear meaning. And, therefore, the Court has essentially, based on a review of the patent's file history, et cetera, has come up with a definition that needs to be used in evaluating the patent and its claims.

We have to make sure we use this definition, whether we like it or not.

And in this case, with some additional emphasis being added, there's some underlining and bold-facing being used that is not in the original construction by the Court, this is saying that when we see stream in the patent claims, we have to understand it in the following way:

That it needs to be a time-ordered sequence. The sequence is one thing after another in one set

order. That order needs to be based on time. It's a sequence of documents, and the sequence of documents that's time-ordered needs to function as a diary of a person's life or of an entity's life, electronic portions, that is.

And very, very important, because that "and" is crucial, and not just is it a diary, but it's one that has three main portions: A past, a present, and a future.

Q And does Apple's operating system satisfy this element?

A No, it does not.

MR. RANDALL: Let's go to SF6, please.

Q (By Mr. Randall) What does this slide represent?

A So this is basically designed to help support the assertion that I just made.

What we're looking at over here is a view of find a window in Apple, and that's a view of Figure 1 of the Mirror Worlds' patents.

And one of the points being made is you're looking at a hierarchical file system. This is an approach that's been used for decades, in fact, before Apple was even founded as a company. And this is the notion of folders that contain successive folders and

maybe even more folders all the way down, and as well also, the leaves, or what computer scientists call trees, there are files.

So what we're looking at here in alphabetical order, starting with desktop at the top going all the way down to, I think, it's public at the bottom. Those little blue rectangular things stand for folders, and the things that are also on that screen there that are white are actual files; in this case, images of files of documents.

So we're seeing hierarchical on Apple. We're seeing non-hierarchical, strict linear representation, and internally and visually in Mirror Worlds. We're seeing that filings and directories are required.

You're actually seeing the names of those things in the Apple screenshot.

And you're seeing, in fact, no names, I believe, over here in the case of Mirror Worlds, because one of the features of their work is that file engine directories are not required.

In Mirror Worlds, not only is it linear, but it is time-ordered. And throughout the patents, the only ordering being discussed is a temporal order.

And in Apple, a lot of the prior art, even before Apple was a gleam in anyone's eye, was the notion

of being able to sort on name, as is happening in this case, on date modified, on size, on kind, on any of a variety of different attributes.

Q And are those systems here, this file names and directories, that is utilized by Apple and has been utilized by Apple throughout its history, is that fundamentally different than this concept that is displayed here in Mr. Gelernter's patent?

A It's -- well, it's not only fundamentally different, but if you read the -- the patents from Freeman and Gelernter, they spend quite a lot of time railing against this approach and saying that we really need to do something different from this.

So this is fundamentally different in the most profound way.

MR. RANDALL: Can you pull up Slide 7, please?

Q (By Mr. Randall) What does this slide labeled mainstream represent?

A Okay. So we're seeing here two more items from the Court's claim construction. We've just seen before, the construction for stream. Now we're seeing construction for mainstream.

So whenever we see mainstream in a claim, we need to make sure that we interpret it the way that the

Court has defined it and construed it. And so this is a stream, as we saw before, that is inclusive of every data unit.

These are data units, documents of importance to the user that's been received by or generated by the computer system, and then underneath you're seeing just a copy but without that additional highlighting of the construction for stream that I discussed before.

Q And did you analyze and reach a conclusion regarding whether Apple's accused operating systems practice either a mainstream or a stream as defined by the Court?

A Yes, I did. And I could not find a mainstream or a stream in any of the Apple operating systems. They don't have it.

MR. RANDALL: Can you pull up 8, please?

Q (By Mr. Randall) Now, I think we've seen this once or twice before, but can you please identify what this slide showing Spotlight index and search engine is?

A Okay. It's supposed to describe the Spotlight technology at a very, very high level, and it's showing at the left that this is the folder system -- I'm not sure I can actually successfully point to anything here without messing things up.

Q Well, would you like --

MR. RANDALL: Your Honor, may the witness just step down from the --

THE COURT: Yes, he may.

MR. RANDALL: -- witness stand a moment?

And I'll give him this pointer.

THE WITNESS: Thank you.

THE COURT: All right. You need to get the microphone.

No, not that one. This one (indicates).

THE WITNESS: Thank you.

A Okay. So what we're seeing over here is the folder system, and this is just the regular file system, hierarchical, as the folder is emphasizing of the Macintosh computer.

Here we have Spotlight over here. Spotlight basically is going to build some data structures based on the material that's in that folder system.

There's a search interface that lets you actually search for stuff. You can submit a query. You can get back results, and the way this works is the query is going to query stuff that's in the Spotlight Store. It's got a content index that you've heard about before, that provides a way of indexing the stuff that's actually in the file.

And it's got a Metadata Store that stores

information about the file, things like, for example, dates, authors, things of that sort, lots of different kinds of metadata. And in one of the operating system, the metadata is also indexed in the content index.

And of course, this is really not so standalone, because while the content is indexed over here, the full content in the sense of the actual full sentences, for example, pictures, et cetera that are in the documents, are still in the documents; and the Spotlight Store ultimately points out to the regular file system to where the documents are.

Q Now, Dr. Feiner, the Spotlight does not have an index to store these files, but the files are stored where? I mean, where are the documents?

A The files are stored the way they always have been stored within the Macintosh's regular hierarchical file system.

Q All right. So the documents are not stored in the Spotlight Store?

A The documents are not within the Spotlight Store, correct.

Q They're in the file system?

A Yes.

Q All right. And does the Spotlight Store, as it's depicted, is it time-ordered?

A The Spotlight Store is not time-ordered. The Spotlight Store is ordered by object ID.

Q All right. And there are two components I see there. There in the Spotlight Store is the content index and the Metadata Store.

Are either one of those ordered by time?

A They are not ordered by time, no.

Q And what are they ordered by?

A Well, the content index, depending upon the version of the operating system, is essentially maintained as one of two different kinds of trees.

One of them is sometimes pronounced as tree (pronouncing), but you also pronounce it as tree, either a B-tree or a purse tree.

And that's basically designed to let you very quickly be able to go -- and when you're typing stuff in to do a retrieval request, you can, as you're typing, be able and go get information back, because it's a very efficient way to index.

Q And do those distinctions mean that Apple does not have either a mainstream or a stream?

A They are among them -- I think a number of other reasons I think Apple's file system -- rather Apple does not have either a mainstream or a stream.

There are additional reasons as well, and I

hope I have time to get to them.

Q Okay.

MR. RANDALL: Let's go to SF9.

Q (By Mr. Randall) What is depicted here, Dr. Feiner?

A So what we're showing over here is a little scenario in which a person has over the years taken some pictures, all on New Year's in the wee hours of the morning, and they put them on a photo CD.

They have now put the photo CD into -- on the left, it's going to a Macintosh system; on the right, it would be a system running on Mirror Worlds' invention.

And when you put it into the Macintosh system actually, just putting it in there, although you get access to this from the file system, it's actually non-accessible at that point from Spotlight.

And so what you could do is if you wanted it to be accessible to Spotlight, you could copy those photos into a system onto the main drive, for example.

And then what you're seeing up there is a list in the hierarchical file system. There's a directory that might have the version of the photo CD or might not have been. In this case, called New Year's photos. And you're seeing in this case sorted by the first letter of the name on each one of those images, a set of images.

Notice that they are file -- sorted alphabetically, not by date.

Although the dates, however, are dates from 2007 up through 2010, and so this is typically the way in which a person might want to actually see the pictures they have taken over the years.

And then here is the hypothetical Mirror Worlds system. You put in your photo CD; and as the patents describe, since the material on the photo CD is new to the Mirror Worlds system, they get added at the head of the stream. And that's supposed to be represented by those brightly colored figures that are being added at the head of the stream.

So they're all being added at whatever the current date is.

Q Okay. Does the Apple system act as a diary of a person's electronic system?

A Okay. The -- I'm going to sit down here.

So the Apple system does not act as a diary of a person's electronic life. And one of the reasons is -- and I thought we actually had some slides for this, but maybe we're not going to have time to show them.

MR. RANDALL: Well, let's go 10.

Q (By Mr. Randall) And first, let's talk about

this for a moment.

A Okay. So this is related to what I was just going to say, and what we have over here is one of the things that I considered in the process of trying to evaluate the patents. And this is actually an excerpt from one of the pages of a very, very thick document, which is the file history.

This is all of the written interactions that the inventors had had with the U.S. Patent Office.

And one of the things that happened during the course of the action is the Patent Examiner, looking at the claims that are being made by the inventors, is going to do his or her best to try to say, well, wait a second; is this really novel relative to other stuff?

In this case, some material was presented. The inventors are now responding, and they're basically saying, well, we are novel, and here's why. And what we're doing basically is we're amending our claims to make sure that we capture stuff that we've talked about in our specification, but that we don't step on and don't sound like we're doing things that have been done before.

Q All right.

A So what they're saying here is the amended claims do not permit data users to remove from the

mainstream and still remain in the computer system, because there was some previous art in which one could actually remove something from something that the Patent Examiner was saying that the Mirror Worlds inventors' work was too much alike.

And they're trying to say, no, no, no. In our system, you cannot remove data units from the mainstream. They still have to be in the computer system, okay? If you get rid of them completely, that's okay, but if they're still in your computer system, that's a no-no, and you may not do that with something that is a mainstream. Our mainstreams don't let that happen.

Q Okay. Let's -- in fact, let's see if we can do this. Why don't you put that microphone down, and we'll use the other one.

One's loud; one's not quite loud enough, but we'll -- we'll change it a little bit.

A Okay.

Q Okay. Now -- so here in this office action, the applicants are telling the Patent Office that their invention is different.

If -- if -- if documents in a computer system can be maintained outside of this mainstream, then it's not practicing their invention, right?

A Documents -- yes. Documents are of importance to the user. If they're outside, then, sorry, it's not a mainstream.

Q Right. And we'll get to that in a moment.

So, for instance, if the Apple operating systems have a privacy feature that allows users to select very important, very sensitive documents and put them in a folder and exclude them from the Spotlight search, if you will, then Apple's operating systems would not infringe; is that right?

A That's absolutely true. In fact, I think even the very presence of a facility that, that's not an obscure thing that only a programmer or someone who knew some obscure codes would know how to do, but something that's very clear and obvious and easy to get to part of -- a well-documented part of the user interface, the very fact that you make that available, whether or not someone uses it, indicates that we're not creating a mainstream.

Q All right.

MR. RANDALL: Let's go to No. 11.

Q (By Mr. Randall) All right. And here's -- and we've heard -- I don't know whether you were in the courtroom earlier or not, but we've heard from a series of Apple employees about Spotlight's privacy preferences

and the ability of users to select important and sensitive documents.

For a variety of reasons, perhaps they're sharing a computer. Perhaps they don't want their kids to see their financial returns or financial information.

There's a whole host of reasons why people may say, whoever turns on this computer and has access to my computer, I don't want them to have full access on a search to everything I've got.

So maybe, just maybe users would want to take certain important, sensitive documents and take them outside of the main library or index, Spotlight, and put them somewhere else where they're not subject to searches.

Now, that was explained earlier, and I'm asking you if -- is that Apple's feature right there?

A This is Apple's feature right there, and you can see that that's designed for regular users. It has a very nice, very carefully worded explanation to what Spotlight does at the top. It tells you clearly that this prevents Spotlight from searching locations.

To make it really easy, in fact, you can drag whatever you would like to directly -- a folder or even a disk, an entire disk, can literally be dragged right into the list over there.

So it's essentially one very fast action, and those things will not -- simply will no longer be searched, but they will also actually be actively deleted from the Spotlight database.

Q All right. Now, I don't know also whether you were here for Dr. Levy's testimony, but Dr. Levy suggested to the jury that -- that this feature was only used for and only available for documents that were completely unimportant to the user; and that apparently users would select documents, put them in a privacy folder, because they were completely unconcerned with them and they were not important to them.

Do you agree with that?

A I completely disagree with that. I think there is a facility for people -- or rather for documents that are completely unimportant to you, and that's called delete. If you don't like them, you don't care about them, you don't want them, they're taking up space that's not being well-used, you get rid of them.

This is specifically the things that you don't want to have searched, and it's a little bit -- because they're not to be searched and because of literally the name Privacy over here -- this is a little bit like having, let's say, safe in your house, and you put in the safe not the things you don't care about, you put in

the safe probably the things that you are most concerned about.

Q All right.

A And so these are things that you care about, and as well as there are even other reasons. It turns out that when common things currently, and I've actually even seen this on the web, is because Spotlight, which is, to me, a really good thing, also takes time. A number of people will simply drag in there an entire disk, because they just don't really want to use Spotlight, and they want to just have their disk and not be indexed, or would drag in portions of it that they don't want to have indexed, because that way it will just take them less time, and also provide less clutter for the return results that are coming back.

Q All right. So is it your opinion that because Apple's operating systems that are accused of infringement provide this feature expressly to its users to segregate documents from the Spotlight function that, therefore, for this reason alone, Apple doesn't infringe the claims, right?

A And for that reason alone, this is clearly not in a mainstream and it's not intended to be a mainstream.

Q All right.

MR. RANDALL: Let's go to SF12, please.

Q (By Mr. Randall) All right. Can you please -- so this is -- indicates at the top that there is no stream past, present, or future time-ordered diary in the Apple operating system.

Is that your opinion?

A So this is -- yes, this is my opinion.

This is just a set of bullet points that are summarizing the things I've talked about. The point is that Mac OS 10 has a hierarchical file system that requires users to name files and saving in folders; precisely the kinds of systems that are being criticized in the specification of the patents.

Spotlight isn't a mainstream, because it doesn't have every document in the system. There are actually some documents that because of their very name are not going to get included.

And you can also exclude items on your own from the index. Even if they're already in there, you can pull them out, and literally they will be deleted from the Spotlight index, if they were there originally.

There are parts of the file system that are not included, as was mentioned before, that could well make some users, in fact, a little bit upset, because they would have wanted to have those things included.

The Spotlight Store is not time-ordered. It's ordered by ID number, object ID, as I mentioned before. And this is yet another issue. Just the idea of searching for documents, sorting them via date, for example, that's not a stream. That's something that -- I mean, I've been doing since -- and I'm certainly not unique -- since the very first time I used a computer.

Every system I know of provides you with the ability to list things in date-sorted order for creation date or modification date or when last-used date. And that's just a standard facility that I couldn't imagine an operating system user interface not providing.

Q Okay.

MR. RANDALL: And let's go to Slide 13, please.

Q (By Mr. Randall) All right. This is a timestamp to uniquely identify, and I think that we heard -- it's interesting we heard from Professor Lansdale earlier with respect to his time-ordered MEMOIRS system.

And he said that they do need to stamp documents in his MEMOIRS system to order them by date. And I'm asking you, in Apple's operating systems, do they have what the Court has construed the timestamp to identify mean?

Does Apple have a date and time value that uniquely identifies each document?

A Apple actually does not. Documents are associated with date and time values, but the granularity, how specifically those values are, is very, very coarse.

They basically have one-second granularity, so it's very easy to have many, many documents that are created or modified or last looked at or whatever at that same time with the granularity of one second.

Q And is that similar to --

A Even if you had a whole bunch of documents that every one of them -- however unusual that might be -- had a different date, it's still not the case that the Apple operating systems use that date to identify anything.

It's simply an attribute, like size, for example. You can find out the size of a document. You certainly don't identify -- rather the operating system doesn't identify something by its size, even though a user might look at something and say, oh, yeah, that's the thing that's this big or this is the thing that I did at a particular time.

Q All right.

MR. RANDALL: Let's go to 14.

Q (By Mr. Randall) Now, what you have here is that Spotlight does not use a date or time value that uniquely identifies each document.

That is the Court's construction, correct?

A Yes.

Q That Spotlight simply doesn't use it; is that right?

A That's correct.

Q And you have also here that Spotlight uses ID numbers, which you previously testified to, to uniquely identify the documents; is that correct?

A That is true.

Q All right. In the --

A Actually, I could mention that, in fact, within a Spotlight Store, the ID number uniquely identifies the document, but on a computer, you might have multiple stores.

And I think we heard some reasons before for why that's the case. And, in fact, although you might argue that a lot of people don't have a second hard drive in their Macintosh or plugged in externally, it doesn't have to be a hard drive anymore.
It could be a USB key.

Q All right.

A So that would have a separate store.

And the ID number, as you move something from one place to the other, would change.

Q And Apple has documents in their system and documents can be in their system that have the same date, right?

A Right. I'd be shocked if there were an Apple computer anywhere in which there were documents having a unique date.

Q Okay.

MR. RANDALL: Let's go to 16, please.

Q (By Mr. Randall) All right. Here, the Court has identified what operating system means. The software that handles basic computer operations; e.g., managing input/output, memory applications, et cetera, and presents an interface to the user.

Did you apply that definition provided by the Court in rendering your opinion that Apple does not have two operating systems as defined by the Court?

A Yes, I did.

Q And is that another reason why Apple does not infringe?

A Indeed, that is.

MR. RANDALL: Let's go to Slide 18.

Oh, I'm sorry. We're going to go to Slide 17.

A So I think here probably the --

Q (By Mr. Randall) Can you briefly describe what this slide means?

A Okay. So I think -- I'm not going to talk about iPhone, only about Mac OS X.

MR. RANDALL: Let me go to the next one.

Excuse me. My fault.

Q (By Mr. Randall) So this says no receding foreshortened stack. And on the left-hand side, do you recognize that as the Cowart prior art that we've seen and the jury has seen before?

A Yes, I do.

Q All right. The right side is Mirror Worlds' patent, right?

A That's correct. There's a little bit of extra additions over there to try and make a point.

Q Okay. And the Patent Office -- the inventors told the Patent Office that their system, their invention, the Mirror Worlds system was different than Cowart, because the windows in Cowart do not get smaller as they recede back into space, and that that was a key aspect of the streams of the Mirror Worlds invention. Is that right?

A That's absolutely right, because they're being presented with something which you're seeing a receding

stack.

If all the items in that receding stack are the same size and if they want to be able to go and have their work being upheld over that, they're going to have to go and get around it. And what they do in their case is they have a picture that they've already presented.

That picture has things that get smaller towards the back; and at this point, they're giving it up being able to say that anyone who does things, they don't get smaller towards the back are doing what they are doing.

Q All right.

A So they're narrowing basically, and this is the part of that delicate dance that they have to perform for the Examiner. The Examiner is saying, wait a second; this thing has been done before. And they're saying, well, in that case, we really are only going to claim those things in which stuff gets smaller as it gets towards the back of a receding stack.

Q All right. So, Dr. Feiner, let me direct you to SF19, please.

All right. Now, this is Coverflow, and we've heard testimony from the Apple witnesses about this that Coverflow is not -- does not recede into the background; it is not a foreshortened stack. They confirmed that

with the source code.

Do you agree with that?

A I agree with that. I've looked at the source code. I've looked at the actual user interface itself. And you're seeing an example of that over here in which -- there's two issues over here. One of them is receding, going back away from the screen. And the other one is foreshortening.

And in this case, all of the albums on this shiny shelf that you're seeing, with the exception of the one in the front, they're all the same distance from the user's screen in the sense that the front edge and -- actually, I should get up and point over here.

The front end of each one of these albums over here, this edge and this and this and this and this and this and this and this (indicates), they are all basically the exact same height.

The rear edge, which you really can't see all that well, because the one over here is covering the side ones a little bit, but I can tell you that based on the analysis of the code and based also on situations in which -- depending upon where the camera is, you can actually see the rear edges.

You'll be able to tell that the rear edges are all also at the exact same distance. So each one of

these things is lined up on a shelf, basically at a 60-degree angle, angled in like this on one side, in like that on the other side.

As well, not only is this not receding, but it is not foreshortened in the sense that all of the items over here basically are now at the same height. So not only are they the same distance in the front and the back, but they're all also the same height.

You can see them from that red line being drawn across on over there. The pair of red lines we're showing you, both the front edges in this case are all the same size. So this is not an example of the kind of foreshortening technical computer graphics and regular graphics term that the inventors had in mind.

Q All right. So is that -- did you also rely on your conclusion that there -- Apple does not provide a receding foreshortened stack as required by the claims in reaching your conclusion, that that is another independent reason why Apple does not infringe these claims?

A Absolutely.

Q All right.

MR. RANDALL: Let's go to SF20, please.

Q (By Mr. Randall) This is the claim term that we've talked about previously. It says: Displaying

glance views in response to sliding the cursor over the stack without clicking.

Do you see that?

A Yes.

Q And is this another requirement of the claims?

A This is another requirement that's on the claims.

Q All right. And did you apply -- in reaching your conclusions regarding non-infringement, did you apply these definitions provided by the Court?

A This is --

Q For instance, glance view --

A Oh, yes. I'm sorry. Yes. Yes.

These actually were not the Court's construction. These are from the patent.

But in the case of glance view, yes, this is definitely an abbreviated representation of a document -- this combination here.

Q Okay. And what's shown there with respect to this glance view? Can you describe that?

A Okay. So what would be shown here, if this were animated, the idea would be that -- maybe I'll try to animate it a little bit and try to wave my hands a little bit to tell --

MR. RANDALL: Well, let's go to -- let's

go to Clip 8.

Q (By Mr. Randall) Can you describe what's happening here?

A What's happening is the cursor is sliding along, and the idea is that, although you really can't see this, no one is doing any clicking here. They're just moving the cursor.

And the idea is that what the cursor is touching is a document that is in that receding foreshortened stack, and the glance view is over here, and this cursor is touching a document there.

And this would be the glance view of that document, and the idea is that as you slide the cursor along like this, you see glance views of -- a glance view rather of the appropriate document. And this is done in a way in which there's no clicking. It's just sliding.

And that basically is what's being described here.

Q All right. So that is -- that is a claim element also that when you slide that cursor across the stack, that it shows the glance view of the document that the cursor is pointing to, right?

A That's correct.

Q Without clicking, right?

A That's correct.

Q All right.

MR. RANDALL: Diane, can you play Clip 6, please?

(Clip 6 playing.)

Q (By Mr. Randall) Now, that is demonstrating here that this pointer or cursor is sliding over. At least what Mirror Worlds claims is this document representation, and nothing happens; no glance view is occurring, correct?

A That's right.

Just to clarify, that little white cursor we see moving around on the bottom, that's one from the machine here.

But the black cursor that's moving at the top is the Macintosh cursor. And the point is, if you actually do this on one of the machines running Mac OS 10, you're going to see exactly what you're seeing, which is the same thing; nothing is going to happen.

Q Now, is that -- is this another independent reason -- and we've covered a few of them -- is this another independent reason why the Mac -- why the Mac OS 10 accused operating systems do not infringe Mirror Worlds' patents?

A Yes. The fact that you cannot in any way, by

sliding a cursor across the stack, cause the glance view of the appropriate document to appear, that's another reason.

Q Okay. Let's move on.

MR. RANDALL: Can you pull up --

A I think Dr. Levy actually agreed with that. Literally, there was no cursor and, consequently, that could not to be the case.

MR. RANDALL: Can you pull up KU10, please?

Q (By Mr. Randall) All right. Now, these are a number of agreements that have been entered into between Apple and other companies; is that right?

A That's correct.

Q Okay. And did you review patents and patent applications that Apple actually licensed an agreement from Mr. Lans, which is Exhibit 392 in this case; from VNM, which is Exhibit 393 in this case; from a Mr. Green, which is DX394; from E-Data, which is DX398; from Advanced Audio Devices and SP Technologies, which is DX419; from Gobeli, which is DX420; and Concert Technology and FlashPoint, DX400?

A Yes. I agree to the ones you just read.

Q All right. And for each of those agreements, did you form an opinion that the patents and

applications that Apple licensed were either technically comparable or more important than the Mirror Worlds' patents-in-suit?

A Yes, I did.

Q And did you provide that information to Apple's damages expert?

A Yes.

MR. RANDALL: Let me pull up DX225, please.

Q (By Mr. Randall) Do you recognize this?

Now, do you recognize this? The name here, it's called Media Manager with integrated browsers, and the inventors are Dowdy, David Heller, among others. The assignee is Apple.

So this is an Apple patent, right?

A Yes, I've read this patent.

Q All right. And does it relate to Coverflow?

A Yes, it does.

Q All right. And did you hear Dr. Levy testify that it would have been impossible for Apple to somehow design around these patents, if they don't infringe, but they said that it would be impossible to design around these patents?

Does this patent show how this could be done with Coverflow?

A Yes, it does. And if you have the ability to turn to some of the later pages in that -- in the figures, I can give you an example.

MR. RANDALL: Okay. Why don't we move on.

A Okay. There is an example at the bottom for example Figure 2(a). It's not quite as nice looking as the figure that's on the cover, but the idea is that the covers in this case are not overlapping; and they are also -- it's a little hard to see, of course, over here, but we're presuming, because they're being shown in squares, that they're all parallel to the screen.

If they're all the same distance from the screen, they're not overlapping, they're not receding, and consequently, this would not in any way be thought of as something that could be practicing those claims.

Q (By Mr. Randall) All right.

MR. RANDALL: Now, can you pull up, please, LX1?

Q (By Mr. Randall) So we went through the claim terms; for instance, the stream, the past, present, future time-ordered diary.

Now, that's required by '227, Claims 13, 22; '427, Claim 1 -- I'm going right across the top there -- and '427, Claim 25; and then '313, Claims 1, 2, 3, and

11.

Do you see that?

A Yes, I do.

Q All right. So -- and you've already provided your expert opinion that Apple does not satisfy those claim elements and those claims; is that right?

A That's correct.

Q All right. So for that independent reason, is it your expert opinion that Apple does not infringe any of those claims with the checkmarks across the top?

A Yes, that is my opinion.

Q All right. Now, with respect to this timestamp to uniquely identify, that is required by those claims, the '227, Claims 13 and 22.

Is it your opinion that Apple does not satisfy that claim element and, therefore, does not satisfy those -- does not infringe those claims?

A So -- yes, it is my opinion, and it's redundant in the sense that if it doesn't have a stream, that by itself is enough. And in this case, we're saying it doesn't have a stream, and it also doesn't have a timestamp to uniquely identify.

Q All right. And you provided your opinion with respect to the lack of two operating systems, right, in Mac OS 10?

A Yes.

Q Mac OS 10 is Mac operating system 10, right?

A That's right.

Q All right.

A They don't have two operating systems.

Q All right. And so those check boxes in those claims there, all the claims of the '427 and Claims 1, 2, and 3 of the '313 patent, is it your opinion that Apple does not infringe any of those claims because it lacks the required two operating systems, as defined by the Court?

A Yes, it does.

Q All right. And then with respect to this receding foreshortened stack, we've gone over that many times, and Apple employees have testified about the lack of that element, and they've also confirmed that in the source code.

Is it your expert opinion that Apple does not practice that receding -- back into space -- foreshortened -- the documents are getting smaller, as they said about the Cowart reference -- stacked and, therefore, does not infringe Claims -- of the '427, Claim 1, 18, and 25, and all of the asserted claims of the '313?

A Yes. It's my opinion that Apple does not

infringe any one of the claims that requires that.

Q All right. And with respect to the -- that last element: Displaying the glance view in response to sliding the cursor over the stack, do you agree that the -- that element, as recited in the claims, all of the '427 and '313 claims that are asserted in this case, that Apple does not infringe those claims?

A That is my opinion.

And just to make it really clear, the parens around some of those checks just correspond to the without-clicking portion there, because not all of the claims -- the ones that are outside the parens don't require the without-checking part.

Q All right.

A But I believe that this simply does not get done by any of those claims.

Q All right. Now, let's turn to your opinions regarding invalidity.

Now, as you mentioned earlier, you reviewed numerous prior art references and patents, and you reviewed and studied each and every element of the asserted claims, correct?

A That's correct.

Q And you compared the elements of each and every element of the asserted claims to the prior art,

correct?

A That's right.

Q And -- and reached conclusions that all of the asserted claims in these, the 12 claims, were invalid; is that right?

A Yes, I did.

Q All right.

MR. RANDALL: Let me put up Slide 23.

Q (By Mr. Randall) So for time purposes, unfortunately -- maybe we'll be able to hear from Chris Schmandt of MIT. We've got a video of him.

And that was -- I don't know if you were here, but Professor Lansdale, who's -- who is the author of the MEMOIRS time-based diary, 1989, he was referring to the work at MIT by Chris Schmandt and Dr. Negroponte and others, and that was from 1979.

Are you familiar with that work?

A I am very familiar with that work. I actually saw it back in the 1970s on a couple of occasions.

Q Okay. At MIT?

A At MIT, yes.

Q All right. And let me -- let me back up a moment.

The red marker over on the right at the bottom, that invalidity bar, now, that time on the

timeline is one year before Dr. -- before -- actually, it was Dr. Freeman at the time -- or Mr. Freeman filed that original application to the '227, right?

A That's correct. That's supposed to be June 28th, 1995 --

Q Right.

A -- the point of which, if you find something that essentially does the things that are being claimed, then that would essentially enable you to invalidate those claims.

Q Okay. And so you're familiar with and have studied the articles associated with and the patents, to the extent they apply, of those prior art systems, the SDMS system from MIT that's listed there in 1979, the MEMOIRS time-based diary that Professor Lansdale wrote many articles about and testified about, correct? You read those?

A That's correct.

Q Did you also review the deposition testimony and videotapes of those individuals?

A Yes, I did.

Q All right. And then Lotus Magellan and On Location right there in 1989 and 1990, we heard from Mr. Ed Belove about those two prior art references, correct?

A That's right.

Q All right. And you studied those two as well?

A I studied the -- the documentation to those.

Q All right. And then the Apple Piles patent right there in 1992, we heard from Ms. Gitta Salomon, right? She came up with that, along with her colleagues --

A Uh-huh.

Q -- while at Apple and attended the CHI Conference and presented there and distributed the videotape, right?

A That's correct.

Q And did you study the materials about that system?

A I studied the materials about that system. I actually have been familiar with the paper associated with that that was presented in CHI '92, since -- at the very latest, the mid-'902.

Q All right. And then we have this Retrospect Archiving. Can you just briefly describe what that is?

A This is an automatic archiving system that was sold back in the '90s and -- which was used to be able to go and schedule archival backups of the files that were on your computer.

Because, of course, the disks didn't

necessarily work properly, and you might come home one day and discover that your computer wasn't working, and your valuable files, if they hadn't been backed up, would be gone.

Or for that matter, you might have on your own, through pure accident, deleted something, and then you'd like to be able to get it back.

So archiving is a very important function, and it goes back, in fact, well before Retrospect in the computer world.

Q All right. And then the Workscape 1994, we saw that when Dr. Lucas actually came and testified.

A Yes.

Q And you've studied that system as well?

A And I have studied videotapes of that system, and I believe I also have seen demos of that prior to my involvement with this case.

Q Okay. And you have also studied this Yale Technical Report 1070 that we've heard about; is that right?

A Yes, I have.

Q All right. Let me just go through that for a moment, because we just heard some testimony about that.

Are you also familiar with Mr. Gelernter's secretary, Mr. Chris Hatchell, and his testimony?

A Only from the material that was provided to me.

Q Okay. And you're familiar with -- well, we'll move on. I'll get to that in a moment.

MR. RANDALL: Can you pull up Slide 25?

Q (By Mr. Randall) Now, this slide shows the prior art references, at least among the prior art references that you studied, regarding chronological organization of documents; is that right?

A That's correct.

Q All right. And I think the one that we haven't heard from yet is this Hitachi reference. Can you briefly describe that?

A Okay. So that is -- I'm not remembering right now whether it was actually an issued patent or a patent application that was then published, I think, in 1994 perhaps.

It's a Japanese patent, and so I am familiar with it through a translation. And it basically describes an approach in which there is a kind of prospective timeline that you can see going back towards the back.

The drawings in this document are -- as you can probably notice, they're done by hand. They're not particularly good. But they are supposed to show a

timeline with dates on the side, and there is a -- little document stacks.

You can see the one -- actually, stand it up. You can see one --

THE WITNESS: Can we make this a little bit bigger? It's going to be fuzzy and bad, but easier to see probably if you make it bigger.

A So we can see one over here. We can see one a little further back. It looks like the documents are a little smaller. One a little smaller again. And this is all done by hand, and so it doesn't look all that nice.

So, basically, here we see a kind of glance view over here, which can be called up by the user. And this, basically, is a description of the user interface that has that kind of flavor.

Q (By Mr. Randall) Okay.

MR. RANDALL: Can we go back to the main -- there we go.

Q (By Mr. Randall) Okay. So each of these references were, in your view, publicly available prior to the critical date and show the chronological organization of documents; is that right?

A That's correct.

Q Okay. And the MEMOIRS time-base diary, were

you here for Professor Lansdale's testimony?

A Yes, I was, and I've also read the paper that that image is being taken from.

Q Okay. And had access to and reviewed his entire transcript, right?

A Uh-huh.

Q Okay.

A Yes.

MR. RANDALL: Can you pull up 26, please?

Q (By Mr. Randall) This slide shows prior art indexing and searching and sorting of documents by date.

Do you see that?

A Yes, I do.

Q And again, all these references here: MEMOIRS, Lotus Magellan, On -- the MEMOIRS was testified about by Professor Lansdale; and the Lotus Magellan and On Location systems were testified about by Ed Belove; the Piles patent, Gitta Salomon, and her video was presented; and Mr. Lucas talked about the Workscape system, correct?

A Yes.

Q All right. Now, these -- are these -- you studied all of --

A Uh-huh.

Q -- these materials as well, right?

A Yes, I did.

Q And did you reach any conclusion regarding whether or not all of this art was both public and disclosed portions of the invention in this case?

A Okay. So it was all public, but in the case of one or more of the asserted patents, these are not actually disclosed to the Patent Office by the inventors.

Q Right. So, for instance, there are stars by a number of these items, correct?

Let me ask you, was the MEMOIRS ever submitted -- all of those articles submitted to the Patent Office?

A I know that an earlier article by Lansdale appears on the face of the patents; but this particular article, which is on a later version of the system, was not.

Q Okay. So this -- and you heard Dr. Lansdale say that one of the earlier references that was disclosed to the Patent Office was kind of a high-level idea and concept-based paper and that the more detailed one is right here; is that right?

A Right. This is the one with the -- limitation.

Q All right. And you read -- you read his

testimony about that subject, right?

A Yes, I did. And I should mention -- is just a programming language.

Q Okay. So the Patent Office, before they issued the claims, did not have all of these references, right?

A Yes.

Q Okay.

MR. RANDALL: Let's go back one slide to 24.

Q (By Mr. Randall) These visual displays that are -- all predate the critical date, and so they're all before the Lifestream's date that was filed there in 1996, and they're all before the critical date of '95.

The -- all of these references were not before the Patent Office either, right?

A That is correct.

Q And --

A In one or more of the asserted patents.

Q Right. Okay.

MR. RANDALL: Let's go to Slide 26, please. I think we just went through that one. Let's go to 27.

Q (By Mr. Randall) Now, this shows the prior art: Sliding the cursor over a stack to display a

glance view without clicking.

Do you see that?

A Yes, I do.

Q So did you study the SDMS system and view the videotape that's available? And this system was publicly available in 1979 and 1980; is that right?

A It was from the documentation of it that these pictures are taken from and also from running and being demoed, although I'm not sure how public the demos were. But certainly, the description and the paper corresponds to it.

Q Right.

A Yeah.

Q But it was well publicized prior to 1995, correct?

A This is one very tiny portion of a very well-publicized system, yes.

Q Okay. And that representation that we're seeing there, you know, shows the system's performance when -- and by the way, that -- that system back in '79 had a touchscreen, right?

A That had a touchscreen. So it had a lot of very expensive pieces of equipment.

Q Right. And so there were glance views.

There, the individual is pointing and touching

that screen, and as they touch the screen and run their finger along the spine of that stack, the glance view is on the right, which are slides of Boston as they appear, correct?

A And they're appearing on a very, very expensive display.

Q Right. In 1979.

A In 1979.

Q All right. So a user could slide their finger along -- along the spine of that stack; and as they did, the corresponding slide, in this case from Boston, would appear in a glance view on the right, correct?

A That's correct.

Q All right. So Apple's Piles patent -- and we did hear from Ms. Salomon about this, but did you also see the video that showed the cursor running up and down the pile, and the glance view popping out and showing a representative view?

A Yes, I did. So this is a more conventional kind of desktop system, which you're moving the mouse and the cursor, which I dare not try to point to -- well, I'll try it.

The cursor, which you're seeing over here --

Q Right.

A -- if I can do this successfully, as it moves

up and down, you're seeing on the side that the glance view used -- the language of the patents-in-suit appears for that particular document in the stack.

Q Okay.

MR. RANDALL: Let's go to Slide 28.

THE WITNESS: And I'm not sure where we clear it. Oh, does that do it? I'm not sure where the clear all button is. I'd like to get rid of this over there. Oh, I see. He's pressing the screen. Okay. So it's a touchscreen.

Q (By Mr. Randall) Okay.

A Thank you.

Q So did you study the prior art that was available prior to the critical date and determine that each and every one of these claim elements was present in the prior art prior to the critical date and publicly available?

A Yes, I did.

Q Okay.

MR. RANDALL: Can we go to Slide 29, please? This is 57.13.

Q (By Mr. Randall) This is 57.13. Again, did you show the key limitations here shown in the color coordinated colors where the stream limitations occur?

Do you see that?

A That's correct.

So we're seeing stream, but we're also seeing highlighted in yellow substream and mainstream, which are defined in terms of streams. So if you don't have stream, you can't have any of those others.

But all it takes is one of these things to be gone, and that entire claim is not going to be infringed.

Q All right. But with respect to your invalidity opinions, did you review each and every element of each and every asserted claim and determine that those and each and every element was disclosed publicly in the prior art before June 28 of '95?

A Yes, I did.

Q Okay. And based on that conclusion, did you -- did you render your opinion that all of the asserted claims are invalid?

A Yes, I did.

MR. RANDALL: Let's go to Slide 32.

Q (By Mr. Randall) All right. Now, can you please describe what is referred to here, with respect to the Spatial Data Management System at MIT that was a system that was developed under a government grant by Mr. Bolt, Donelson, and Schmandt and others, correct?

A Correct.

Q And they built their system at MIT, correct?
A That's correct.
Q And as Mr. Schmandt testified in his deposition, which you reviewed, he and others at MIT allowed corporations to come and visit publicly in order to show them this great technology so that they could perhaps get more grants and do more research, right?
A That's right.
They had demonstrations as well, and in addition to demonstrations, they also published material. And this is from a glossy published book that was sent out to a number of folks.
Q Right. And so there was a -- these -- we've gone through these -- these elements before, the timestamp to identify, the displaying, the glance view in response to sliding the cursor over the stack without clicking, the stream, and the receding stack.
Do you see that?
A Yes, I do.
Q So did you find in this reference and publicly available prior art those elements that run through a number of the asserted claims?
A Yes.
Q Okay.
MR. RANDALL: Can you pull up Slide 33,

please?

Q (By Mr. Randall) Oh, by the way, the SDMS system, this well-known system from 1979, was never considered by the Patent Office with respect to these patents, right?

A That's correct.

Q It was never ever provided, right?

A That's correct.

Q All right.

MR. RANDALL: Let's go to MEMOIRS, Slide 33.

Q (By Mr. Randall) Now, key detailed descriptions of this system also is not disclosed to the Patent Office, correct?

A That's right, because this is a different paper than the one that was on the face, so...

Q All right. And did this system demonstrate a time-based diary of chronologically structured database of all documents?

A Yes, it did. And in part, you can see a little bit of that in the timeline across the bottom in the larger window called time-base.

Q All right. And did it disclose a mainstream and a substream?

A Yes, it did.

Q And a unique timestamp to identify the documents?

A Yes.

Q And did -- as you heard Professor Lansdale testify, did this have a past, present, and future portion of these streams?

A Yes, because you could have documents in it. You could also have entries that were essentially calendar entries for the future.

Q Okay. And did it also display glance views as publicly described in the articles?

A Yes. And you see some of them peeking out from behind the window.

Q It says the in tray back there?

A Those are documents that are in the in tray, yes.

MR. RANDALL: Can we go to Slide 34, please?

Q (By Mr. Randall) All right. This is the Hitachi reference you referred to earlier; is that right?

A Yes.

Q And this was not before the Patent Office either, was it?

A It was not.

Q And does it disclose a timestamp to identify?

A Yes.

Q And this is a 1992 reference, correct?

A '92, but published in '94. I'm not sure how one, you know, classifies it, but it certainly was before the 1995 date.

Q All right. And did this disclose a time-ordered stream?

A Yes.

Q And displaying glance views in response to sliding the cursor over the stack without clicking?

A Yes.

Q And that shows right there with the glance view popping up?

A That's right.

Q Bottom left-hand corner?

A Yes.

Q All right. And did it also show a -- the receding foreshortened stack?

A Yes, it did. And I'm actually not remembering whether the without-clicking part was there, but that certainly was displaying the glance view in response to selecting a document.

Q Okay.

MR. RANDALL: Let's go to Slide 35,

please?

A Another thing I should mention -- if you'll actually go back. I want to be very, very careful about this, is that that's a hand-drawn picture back there, and looking at that stack, it's definitely receding; but the way it's drawn, admittedly by someone who is doing it by hand and isn't a very good draftsperson, is not actually foreshortened, at least the stack that you're seeing the blue line pointing to.

Q (By Mr. Randall) Right.

A Certainly bigger than the stack that's behind it. And one can imagine, if this were actually implemented in a computer that used 3-D graphics software to go in and create the imagery, that you probably would see that being drawn in perspective. But it is not in this hand-drawing.

Q All right. You would -- you would certainly check the source code and determine exactly whether that was --

A If there were source code available.

Q -- whether it was foreshortened or not, right?

A If there were source code available. I can if there were source code available.

Q Okay. All right. This document, the O'Neil patent, this wasn't considered by the Patent Office

either, was it?

A That's correct.

Q All right. And did this have timestamps to identify?

A Yes, it did.

Q And did it have a time-ordered stream of future documents where a current -- for instance, current date is May 2?

A Right. And so we're seeing, basically, a set of documents that represent days with our calendar entries, and they're arranged in a receding foreshortened stack, and as well, there are glance views.

I'm trying to remember right now what they called them in the patent. It wasn't glance view, but the idea was described in the patent as being sort of a summary of that particular day in this case giving it the date.

Q Okay.

MR. RANDALL: Let's go to Slide 36.

Q (By Mr. Randall) So this was the Lotus Magellan system, and you both reviewed Mr. Belove's testimony provided in deposition and the manuals that he provided, correct?

A That's correct.

Q And the software was even provided to opposing counsel.

Did you -- were you here for his demonstration of that software to the jury?

A I believe I was not here during that.

Q Okay. Did you study this system and reach any conclusions regarding this system?

A I studied the documentation for this system, and my conclusions are that the things that are listed over there are in this system.

Q Okay. And was this -- the Lotus Magellan system from 1990 to 1995, was that before the Patent Office?

A No, it was not.

Q Okay. The On Location system was also displayed by -- and shown to the jury by Mr. Belove, and he testified that it was publicly available and sold approximately by 1990 or 1991.

Did you study that system as well?

A Yes, I did.

And I want to clarify a previous answer. I think I actually was in the room during his time on the stand, but I was thinking about what I was going to be saying and trying to remember stuff, and so I wasn't really paying a lot of attention.

Q Okay. So does this On Location system have -- show glance views?

A Yes, it does.

Q All right. And does it -- does it have streams and substreams?

A It has streams, it has substreams; and in fact, it was explicit about the idea that the index would be automatically updated as files were going to be created and modified, moved, deleted, et cetera.

MR. RANDALL: Let's go to the Piles patent, 724 -- oh, I'm sorry. Yes, Slide 38.

Q (By Mr. Randall) Now, do you have an opinion regarding whether the claims in the '227, Claims 13 and 22; Claims 1, 2, 3, 9, and 11 of the '313; and Claims 1, 8, 16, 18, and 25 of the '427 are invalidated by the Piles patent in combination with Retrospect?

A Yes. And that slide sums up my view, that all of those claims are invalidated by that combination.

Q And did you find that Claim 13 of the '227 patent was anticipated by the '724 Mander patent or the Piles system -- and/or the Piles system?

A Yes.

Q Okay. And found that each and every element of the Claim 13 of the '227 was disclosed in that reference?

A That's correct.

Q All right. And with respect to the other claims listed here, was it your conclusion that they would have been obvious over the combination of the '724 Mander patent in combination with the Retrospect Automatic Archiving System?

A That's right. Combining together the patent, along with Retrospect would render those claims obvious.

Q All right. And in reaching those conclusions, you analyzed each and every claim element and determined that each and every claim element was present in the combination of those two references, correct?

A That's correct.

Q And did you find any motivation to combine those two references, the Mander patent and the Retrospect automatic archiving reference?

A Yes. So Retrospect is -- as I think was mentioned before, it's a commercially available piece of software, which is specifically designed to provide backup for Macintosh. It's been highlighted in green, added after the fact over there.

And the Mander system is running on a computer, and it's not just running on a computer. It's a system developed by Apple employees right on top of a, hardly surprising, Apple computer.

And so I think you can imagine that they might, in fact, have even been running this, although I don't know that for a fact, on an Apple computer that would be running Retrospect. But they certainly -- if they weren't, they could have.

Q Okay. And so if, for instance -- okay.

MR. RANDALL: Let me go to Slide 39.

Q (By Mr. Randall) So this shows the Apple Piles system along -- and the U.S. Patent '724, correct?

A That's correct.

Q Okay. And this was not considered by the Patent Office in the asserted patents, right?

A Right. I mean, the picture is actually not from the patent. The picture is similar to the ones in the patent, but it's from the video.

Q Okay. And did you study this reference?

A Yes, I did.

Q Okay. And what --

A The references, I guess, in the patents.

Q Yeah.

A And this one also, the --

MR. RANDALL: Can you pull up Slide 40, please?

Q (By Mr. Randall) And what does this reference? What does this represent?

A So this is a figure from the '724 patent, and it's trying to point out that there's two operating systems present.

Now, the sort of upside down L-shaped thing is actually pointing out hardware over there, but the patent makes it very clear that the work being done in Mander is being on an Apple computer and, therefore, trying -- the point being made over here is that there's both the operating system of the Apple computer itself, as well the, in this case, document stream operating system that you could consider Mander to be that running on top of it --

Q Okay.

A -- and making use of the facilities of the regular Apple operating system.

Q All right. And so under the Court's definition, that is two operating systems; is that right?

A That would be two operating systems under the Court's definition the way that Dr. Levy applied it.

Q Right. Okay.

And that is the same with respect to the streams in the On Location reference, correct?

A Uh-huh, yes.

Q The stream and mainstream, if you apply

Dr. Levy's definition, then that certainly is a stream and a mainstream, right?

A Yes.

Q All right.

MR. RANDALL: Let's go to 32. I'm sorry. Sorry about that. No. 41.

Q (By Mr. Randall) Can you describe what's referenced here?

A Okay. So this is a figure from the Mander patents Figure 15. It's a flowchart, which is supposed to describe these sort of box diagrams, what's happening in part of the code that's part of the method that's being described.

And the idea is that there's a new document coming in; and if it's new in this case, then it's going to get indexed. A bunch of things are going to get done.

They're going to count the number of times that certain words are used in the document, and then it's telling you that if it's a system initialization, and all the documents are indexed, then go back up to the top and index essentially all of the documents.

So this is pointing out that any new document coming in is going to be subjected to this process; and, therefore, represented within what, in this case, would

be the mainstream of the Mander patent.

And the bottom part is describing the notion of what would be called in the language of the Mirror Worlds' patents the substream that contains data units only from the mainstream.

And so here the question is whether the new document is part of a pile; and if the answer is yes, then essentially the vector for this pile, which is a collection of documents, ends up being computed.

Q Okay.

MR. RANDALL: Let's go to Slide 46, please.

Q (By Mr. Randall) All right. You have studied the Workscape system, correct?

A Yes, I have.

Q We talked about that during your examination, and you studied all of the material and looked at the video and listened to the testimony of Mr. Lucas and reviewed his transcripts, right?

A Uh-huh, yes.

Q And have you formed any opinions regarding whether the Workscape system invalidates the claims that are asserted in this case?

A Yes, I have.

Q And what is your opinion?

A Okay. Now, I'm trying to remember. I think that the ones that involve sliding without clicking -- I'm trying to remember if that actually --

MR. RANDALL: Let me pull up Slide LX1 for you. LX1.

Q (By Mr. Randall) All right. So with respect to the Workscape system that you studied --

A Yes.

Q -- did you -- I'm just showing -- directing your attention back here indicating that the sliding without clicking is required by all of the claims of the '427 and '313, except for 9 and 11.

Do you see that?

A Yes.

Q Okay.

MR. RANDALL: Now, let's go back to --

A And the results that point to that -- yeah.

MR. RANDALL: Okay. Let's go back to 46.

All right. And let's go to 47.

Q (By Mr. Randall) All right. So let's go through this.

The MAYA Workscape project, do you see that?

A Yes, I do.

Q That shows documents in a receding foreshortened stack; is that right?

A That's correct.

Q And has also disclosed the stream?

A Yes.

Q And the timestamp to identify?

A Yes.

Q And archiving?

A Yes.

Q Okay.

MR. RANDALL: Let's go to 48.

Q (By Mr. Randall) This is his patent, correct?

A This is the Lucas and Senn patent.

Q Okay.

A '330.

Q And does that corkscrew show a receding foreshortened stack?

A Yeah. The corkscrew does, yes.

Q All right. And what about the other one?

What about Figure 3?

A Figure 3, we could also argue, would be -- and here it gets tricky, depending upon -- if you're using, for example, Dr. Levy's suggestion that one could have multiple stacks that were receding and yet would be part of a single receding foreshortened stack.

You could say the whole thing was, and you could also say that the thing at the top or the thing at

the bottom of Figure 3 was a receding foreshortened stack.

Q Okay.

MR. RANDALL: Let's go to the next slide.

Q (By Mr. Randall) Now, there was an issue with respect to the inventor's prior publications, correct?

A That's correct.

Q All right. And one of the issues was whether or not that information was public or not, correct?

A That's my understanding.

Q All right. So with respect to TR-1070, are you --

MR. RANDALL: Can you pull up DX642, please?

Q (By Mr. Randall) All right. So this is a fax from Yale, from Chris Hatchell to Richard Milner, who was the attorney handling the prosecution of the Mirror Worlds' patents, and it's dated the 26th, '98.

MR. RANDALL: Can you go to the next page and just flip through these pages? Flip another one. And another one. There we go.

Okay. Can you blow that up?

Q (By Mr. Randall) So this shows his handwritten notation in that black binder, if you recall. Chris Hatchell, Mr. Gelernter's secretary, would receive the

TR-1070 document from one of the authors, go down in the basement, pull out the black binder, and handwrite in the index, the information, author, Research Report 1070, and put it there.

Do you see it?

A Uh-huh. Yes, I do.

Q Okay. And that was faxed by Mr. Hatchell to the attorney in '98.

MR. RANDALL: Can we go to the next page?

Go one more. Now, can you blow up the top up there?

Q (By Mr. Randall) And do you recall his testimony about what he would do? He would take that over to the copy center, and I think you saw the Science Park Business Services.

A Right.

Q And he would -- and there's his name, Chris Hatchell, and the date is April 18, '95. And the description of work to be done is -- I think it's 13 originals and 10 copies of Lifestreams, and that was on the 18th -- April 18, '95.

Do you see that?

A Yes, I do.

Q All right. So that's a request by Mr. Hatchell to get copies made of this technical

article just as he said his normal practice was.

Do you recall that from his testimony?

A Yes, I do.

Q All right.

MR. RANDALL: Now let's go to -- and again, this is DX642. Let's go to the next page.

Q (By Mr. Randall) Now, this is dated a few weeks later. This is May 15, '95. And again, it's Chris Hatchell. And this time he says 13 originals and 10 copies of the Lifestreams report.

And so approximately three weeks or a month later, Mr. Hatchell is getting another 10 copies of this technical report.

Do you see that?

A Yes, I do.

Q Does that indicate to you that he, obviously, must have run out of those first set of copies that he had and needed to go back and get another set?

MR. STEIN: Objection. That's just asking the witness to speculate.

THE COURT: Sustained.

Q (By Mr. Randall) All right. Did you draw any conclusions, with respect to the public nature of TR-1070, from the -- Chris Hatchell's policies and procedures and practices regarding making copies of

these TR reports?

Did you study that or at least focus on that testimony at all with respect to his copying of these TR reports?

MR. STEIN: Objection. It's the same issue. And, you know, he's not an expert.

MR. RANDALL: I'll rephrase the question.

MR. STEIN: He's not here to testify on that.

MR. RANDALL: I'll rephrase it.

THE COURT: All right. Restate your question.

A I'm familiar with technical reports from Computer Science Departments.

Q (By Mr. Randall) All right. Did you know that Mr. Chris Hatchell first went and made 10 copies of TR-1070 and then went and made another 10 copies of TR-1070?

A As evidenced by these, yes.

Q Right. Okay.

And do you also know, through the testimony that was provided, that Ms. Nancy Silver, who was a student at the University of Toronto, had a copy of TR-1070, and she had that before June of '95?

MR. STEIN: Objection. I don't think --

the testimony presented in court did not establish that.

THE COURT: Overruled. The jury will recall the testimony.

Q (By Mr. Randall) Do you understand that Ms. Silver testified -- and it was played in court -- that she went through some family issues, her father died, and she was doing a Ph.D. dissertation and that she did all of her research before her to-do list, and her to-do list started in June of '95 and that she testified that she was sure she had all of her research materials, including a copy of TR-1070, before that date?

A I believe she said it was a master's thesis.

Q Okay.

A But, yes, I understand the rest of it.

Q All right. And you also heard the testimony of her professor, Mr. Baecker, saying that he also knows that he had a copy of that report and saw it at least at some point in 1995?

A Yes, I heard Dr. Baecker say that.

Q Okay. And you also have experience with technical reports; is that right?

A Yes, I do.

Q Right. And so can you draw any conclusions about whether or not you believe that it was likely that

the Technical Report 1070 was public --

MR. RANDALL: Oh, strike that.

Q (By Mr. Randall) Were you also here during Gelernter's testimony about the fact that he had provided that article for publication?

A I'm trying to remember if I was. I know I was here the first day, and I don't remember whether he testified again on another day.

Q Okay. All right. Is that -- all of that evidence that the document was publicly available, the fact that Dr. Gelernter listed it under a publication when he submitted the final report to the Air Force for its final --

A I'm now remembering that. Yes, I remember that.

Q Okay.

A And certainly --

Q Go ahead.

A Certainly remembering that, having been here when he said that, having seen the documents that listed that, or at least a representation of the documents that listed that, knowing what I know about why people put things in technical report series and how departments and universities treat technical report series, these are all pointing very clearly at the fact that this was

a technical report that was made public.

Q And did you also rely on and utilize, in forming that view, that Chris Hatchell said that he never had to ask anybody for authority to distribute copies of those technical reports?

A I relied on that, but I -- it seemed like I didn't need to rely on that, because it would be very surprising if a technical report series wasn't public, because the whole point of the technical report series is to provide access prior to -- sometimes prior to, and in other cases, even after publication in other mechanisms to enable the work that you're doing as a researcher to be distributed to other folks, in some cases, people even treated as a way of sort of planting a flag, and before it gets published in a conference -- or in a journal, being able to say: Look, I did this work. And so I'm making it available, and I hope that other people who are doing work that could build on it will reference it.

Q Okay. In forming your opinions regarding this case, did you -- I want to talk specifically about '227, Claim 13. Did you reach the opinion that that claim was anticipated by the Mander patent?

A Yes, I did.

Q And did you reach the opinion that that claim

was also anticipated and rendered obvious by the Lotus Magellan system?

A Yes.

Q And did you also reach the opinion that that claim was anticipated by and rendered obvious by the Lucas patent?

A Yes.

Q With respect to the '227, Claim 22, did you reach the conclusion that Lotus Magellan anticipated and/or rendered that obvious?

A Yes.

Q And, therefore, invalidated it?

A Yes.

Q Did you reach the opinion that the Mander patent rendered obvious and, therefore, invalid the '313, Claims 1, 2, 3, 9, and 11?

A Yes.

Q And did you also find and reach the conclusion that that Mander patent, the '724 Mander patent, rendered the '427, Claims 1, 8, 16, 18, and 25, obvious as well?

A Yes.

Q With respect to Lotus Magellan, did you reach the conclusion that the claim '227 -- I'm sorry -- the '227 patent, Claims 3 -- 13 and 22 were anticipated by

and rendered obvious by Lotus Magellan?

A Yes.

Q Okay. With respect to the Lucas patent regarding Workscape, did you determine that that reference invalidated, based on obviousness, the asserted claims in this case?

A You mean the Lucas Workscape-related patents --

Q Yes.

A -- and the Workscape materials?

Q Yes.

A Yes.

Q Okay. With respect to Retrospect, did you find that -- excuse me.

Did you utilize Retrospect and that reference to combine it with the other references I've cited to invalidate the patent claims asserted that require the automatic archiving?

A Archiving, right. Yes.

Q Okay.

MR. RANDALL: Your Honor, I have no further questions.

THE COURT: All right. I think we're going to take about a 10-, 15-minute break right now, and I'll let the jury know we've got about an hour and a

half more of testimony; and we'll be completed, so we're probably going to go till 5:30 to 6:00, somewhere in there tonight.

So enjoy your break, and then we'll come back, and we'll finish up the testimony. The jury is excused.

COURT SECURITY OFFICER: All rise for the jury.

(Jury out.)

THE COURT: Please be seated.

All right. For the parties' information, the Plaintiffs have 1 hour and 5 -- 4 minutes left, and the Defendants have 30 -- about 32 and a half, 33 minutes left of time.

My staff is going to pass out to you the Court's charge for your review. The Court will hear objections to it immediately following the testimony today, and then we can go straight into charging and closing arguments in the morning.

We'll be in recess.

COURT SECURITY OFFICER: All rise.

(Recess.)

CERTIFICATION

I HEREBY CERTIFY that the foregoing is a true and correct transcript from the stenographic notes of the proceedings in the above-entitled matter to the best of our abilities.

/s/_____
SHEA SLOAN, CSR Date
Official Court Reporter
State of Texas No.: 3081
Expiration Date: 12/31/10

/s/_____
JUDITH WERLINGER, CSR Date
Deputy Official Court Reporter
State of Texas No.: 731
Expiration Date 12/31/10