Exhibit A

UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

SAN FRANCISCO DIVISION

APPLE COMPUTER, INC.,

Plaintiff/Counterdefendant,

vs. Case No. C06-00019 MHP

BURST.COM, INC.,

Defendant/Counterclaimant.

_____/

DEPOSITION OF ALLEN GERSHO

Tuesday, September 11, 2007

VOLUME I

Pages 1 - 222

REPORTED BY: VALERIE J. EAMES, CSR NO. 9021, RPR, CRR

A P P E A R A N C E S

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A P P E A R A N C E S

(Continued)

ALSO PRESENT:

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(Via Telephone)

I N D E X

EXHIBITS MARKED PREVIOUSLY AND APPENDED

Exhibit No. 109, 364

I N D E X
(continued)

SECTION OF TRANSCRIPT REQUESTED MARKED BY MR. STEPHENS

QUESTIONS NOT ANSWERED BY THE WITNESS

QUESTIONS NOT ANSWERED BY THE WITNESS
(continued)

BE IT REMEMBERED that pursuant to Notice, and on Tuesday, September 11, 2007, commencing at the hour of 8:50 a.m., thereof, at 1901 Avenue of the Stars, Suite 950, Los Angeles, California, before me, VALERIE J. EAMES, a Certified Shorthand Reporter, the following proceedings were had:

P R O C E E D I N G S

THE VIDEOGRAPHER: Good morning. This marks the beginning of Volume I, videotape number 1 in the deposition of Mr.-- of Dr. Allen Gersho in the matter of Apple Computer, Incorporated versus Burst.com. And the case has been filed with the United States District Court Northern California of District -- Northern California District Court of San Francisco Division, Case No. C06-00019 MHP.

Today's date, September 11th, year 2007, and the time on the video monitor is approximately 8:50 a.m. The location of the deposition is 1901 Avenue of the Stars, here -- Suite 950, Los Angeles, California. And we're at the law offices of Susman & Godfrey.

And if we could please ask the attorneys to introduce themselves for the record.

MR. STEPHENS: Garland Stephens of Weil, Gotshal & Manges representing Apple.

MR. PAYNE: Les Payne for defendant Burst.com.

THE VIDEOGRAPHER: My name is Christoph Gemes. I am a video specialist, and I am employed by Dan Mottaz Video Productions, LLC, 182 Second Street, Suite 202, San Francisco, California 94105.

And if we could please ask the court reporter to state her name for the record.

THE REPORTER: Valerie Eames.

THE VIDEOGRAPHER: Very well. And at this time if we could please ask you to swear in the witness.

ALLEN GERSHO,

called as a witness by the Plaintiff/Counterdefendant, and who, having been administered the oath by me, was examined and testified as hereinafter set forth:

THE VIDEOGRAPHER: Okay. At this time, Counselor.

EXAMINATION

BY MR. STEPHENS:

Q. Good morning, Dr. Gersho.

A. Good morning.

Q. Could you please state and spell your name for the record.

A. Allen Gersho, A-l-l-e-n G-e-r-s-h-o.

Q. And what's your home address?

A. 4604 Via Gennita, Santa Barbara, California.

Q. You've submitted a couple of declarations in

A. No. I -- nothing in my personal life would be connected.
Q. How about a particular graduate student? Can you recall a particular graduate student that worked with the Sun workstations and the time roughly when they were under your supervision?
A. No. I had many students and visiting researchers. It's difficult to remember the time periods when each was there.
Q. Sun workstations were available by the mid-1980s, though. Right?
A. I don't know that.
Q. You're just not sure.
Okay. Well, let's talk a little bit about what you did with the PDP11-24. How did you use that in the laboratory in connection with the development and research on speech, audio, and video compression?
A. The students would write software to evaluate algorithms using this computer.
Q. Did it include hardware that could digitize audio?
A. I think so. I think so.
Q. Would you agree that by the mid-1980s, that people of skill in the art in this case -- you understand what I mean by that -- right? -- people of skill in the

relevant art to this case?
A. Yes.
Q. Would you agree that by the mid-1980s people of skill in the relevant art to this case were quite familiar with hardware for digitizing audio and storing it in computer systems?
A. Some were and some weren't. I think there's a variety of backgrounds of people that still qualify as skilled in the art.
I'd like to correct something I said before --
Q. Okay.
A. -- that our equipment may have had the ability to digitize voice. When you said "digitize audio," I don't mean -- I wasn't agreeing to digitizing any form of audio, such as wideband audio.
Q. But speech is a form of audio. Right?
A. It depends --
MR. PAYNE: Object as to form.
Go ahead. You can answer.
THE WITNESS: The term "audio" does not have a precise definition out of context. Some will say it does not include speech, depending on the context.
BY MR. STEPHENS:
Q. But some would say it does include speech, again, depending on the context. Right?

A. In some context some might say so, but I'm just speculating. I can't be specific here.
Q. Okay. So you think that it did have hardware for digitizing speech. Is that right?
A. Yes.
Q. Did you ever have hardware for digitizing audio with a wider bandwidth than just speech?
A. At some time we -- I believe we may have had such a capability in my laboratory.
Q. How about with the PDP11-24?
A. No.
Q. Do you recall when you got the capability of digitizing speech on a PDP11-24?
A. I can't say with certainty. I think it came with -- we may have bought the audio equipment together with the computer at the same time.
Q. Okay. So that would have been in roughly 1981?
A. If I'm correct about that recollection, yes.
Q. Did the PDP11-24 have magnetic disk storage?
A. I assume it had some form of storage. I don't remember.
Q. Can you think of any other kind it might have had instead of disk storage?
A. It had floppy disk drives.
Q. And floppies are a form of magnetic disk.

Right?
A. That's true.
Q. Did it have a high-speed magnetic disk?
A. I don't recall.
Q. It had the random access memory. Right?
A. I had no awareness of the internal design of the computer. Now, I can make an assumption, but I don't specifically know that.
Q. Well, virtually all general purpose computers in the '80s had random access memory. Right?
A. I'm not an expert on computers. I know it was -- it's common to have random access memory in digital computers.
Q. And it was common in the mid-'80s for digital computers to have random access memory. Right?
A. I suppose so.
Q. And it was common for them to have magnetic disk drives in the mid-1980s as well. Right? By "them," I mean digital computers.
A. I think that's probably correct.
Q. Would you agree, then, that it's likely that your PDP11-24 had a magnetic disk drive?
MR. PAYNE: Objection. Form.
BY MR. STEPHENS:
Q. By that I mean a high-speed one, not a floppy.

MR. PAYNE: Same objection.
THE WITNESS: I'm not sure what kind of storage it had.
BY MR. STEPHENS:
Q. Okay. Now, you said that your graduate students used the PDP11 to write software to evaluate algorithms. Is that right?
A. Yes.
Q. And those algorithms included audio compression algorithms. Is that right?
A. Where audio means voice.
Q. Okay. Now, the -- during your tenure from 1980 to 1998, you also worked on wideband audio compression as well. Is that right?
A. I did.
Q. Was there work in the signal compression laboratory in the '80s on wideband audio compression as well?
A. I'm not certain, but my best recollection is -- began -- it may have begun in the early '90s.
Q. Was the PDP11 connected to any other computers?
A. No.
Q. Was it connected to external storage of any kind?
A. I don't think so. I don't recall, but I don't

think so.
Q. Now, in the process of evaluating algorithms for speech compression, did your graduate students in the mid-'80s use speech compression algorithms to compress speech that was digitized into the PDP11?
A. As I recall, most of the source material for experimenting with speech compression may have been provided to us by an outside organization.
Q. What was the name of that outside organization?
A. In different time periods, I've had some relationships with a few companies, and one or another company may have -- you know, may have provided us with some files that are used for demonstrating speech compression. And so I'm not sure which company at which time. But Bell Laboratories definitely at some time gave me some source files.
Q. Any others that you're aware of?
A. I don't recall specifically.
Q. Did your graduate students ever use the speech digitization facility that your PDP11 had?
A. They used the digital-to-analog facility frequently.
Q. What about the analog to "dility" -- excuse me --
A. Analog to digital?

Q. Yes. Thank you.
A. I don't recall if we really digitized our own source material. If so it was -- it would have been very infrequent. Mostly it was -- there was interest in listening to speech files.
Q. But your system certainly had the capability of recording your own source material. Right?
A. I believe it had the capability of recording speech from a microphone input.
Q. And you're just not sure whether people used that in their research. Is that right?
A. That's right.
Q. Now, it certainly would have been within the normal skills of a graduate student working in your laboratory to record some speech using the analog-to-digital facility, and then compress it using a compression algorithm on the PDP11. Right?
A. A couple things here. The -- certainly some -- some, perhaps not all, of my students would have known how to digitize speech from -- coming in from a microphone and use it as input to a speech compression algorithm.
Q. Okay. In fact, that was one of the main reasons for developing speech compression algorithms is to compress speech that you encode using an

analog-to-digital encoder. Right?
A. No.
MR. PAYNE: Objection. Form.
THE WITNESS: No. The main reason was to study speech algorithms and evaluate how they work, not the -- the purpose was not to compress speech files. It was to study compression algorithms.
BY MR. STEPHENS:
Q. But the reason to study compression algorithms is to compress speech that has been encoded using an analog-to-digital encoder. Correct?
A. No.
Q. How would you do it, then?
A. No. The reason for studying compression of speech was help students get Ph.D.s to publish papers, and perhaps to achieve results that might be useful in the real world.
Q. How would those results be useful in the real world?
A. Engineers in industry reading our publications may find it useful to apply one of the algorithms to some real world product.
Q. And what kind of real world product might they apply it to?
A. One of the main applications of voice

MR. PAYNE: Objection. Form.
THE WITNESS: It seems there are many components here. I want to be sure I give a correct answer as I don't want to make a sweeping statement.
BY MR. STEPHENS:
Q. Okay.
A. You put in too many pieces here for me to be clear.
Q. Okay. Well, I want to make sure you're clear. So if there's -- you need some clarification, just let me know, and I'm happy to add some clarification.
A. I've already said that you can have -- it's possible to have improved efficiency using some form of DPCM compared to just using a PCM. Okay?
So I'm not sure beyond that what you're trying to find out.
Q. I'm trying to find out if it's possible to use a digital DPCM encoder with an analog-to-digital encoder in a way that's substantially equivalent to using analog DPCM. That's my question. Is it possible to use --
MR. PAYNE: Objection. Form.
THE REPORTER: And I didn't get -- "I'm trying to find out if it's possible to use a digital DPCM encoder" --
///

BY MR. STEPHENS:
Q. -- to get substantially equivalent results to using an analog DPCM encoder --
MR. PAYNE: Objection. Form.
BY MR. STEPHENS:
Q. Using an appropriate analog-to-digital converter with the DPCM encoder.
MR. PAYNE: Objection. Form.
THE WITNESS: The term "substantially equivalent results" is a little vague here. There may -- the results may -- if the results include the complexity, the practicality of implementing it --
BY MR. STEPHENS:
Q. Specifically excluding the complexity and practicality of implementing it. I'm only asking you to focus on the output.
MR. PAYNE: Is there a question?
MR. STEPHENS: Yes.
MR. PAYNE: I don't know the question.
BY MR. STEPHENS:
Q. Go ahead and answer, sir. If you don't understand it, please let me know, and I'll be happy to clarify it.
A. It might help if you repeat the question so I make sure I'm answering the correct question.

Q. Okay. Is it possible to use a digital-to-analog encoder and a digital DPCM encoder to get the same output substantially -- from substantially the same input as an analog DPCM encoder without regard to the complexity of the circuitry or cost?
MR. PAYNE: Objection. Form.
THE WITNESS: You said "the same output," and the answer would be no to the same output.
BY MR. STEPHENS:
Q. But I said "substantially."
A. Well, you said -- "substantially the same input," you said.
Q. Well, I meant to say both substantially the same input and substantially the same output. I think that's what I said. But that's fine if it wasn't clear.
So with that in mind, would you please answer the question.
MR. PAYNE: Objection. Form.
THE WITNESS: I believe that it is possible to get a similar quality audio output -- sorry -- a similar quality digital representation of audio by the two alternative methods: one of analog-to-digital conversion, followed by a digital DPCM circuit, as with a -- a DPCM encoding system, depending on the -- if one suitably chooses the number of bits and assigns these

correctly.
BY MR. STEPHENS:
Q. So the audio quality would be equivalent. Is that right?
MR. PAYNE: Objection. Form.
THE WITNESS: The audio quality represented by the bit stream coming from either of the two options might be similar.
BY MR. STEPHENS:
Q. And what about the number of bits required to represent that audio signal?
A. It is possible to have fewer bits coming from the circuit with DPCM. Oh, sorry. Wait a minute. I withdraw that.
Both cases we're talking about -- about starting with an analog input.
Q. Yeah. In fact, we can say it's the identical analog input.
A. Okay. It is possible to have some saving in bits by using DPCM rather than not using DPCM. But that's not the issue right now. You're just saying that -- oh, the bit rate of the output is what you're trying to get.
Q. So what I'm after is whether or not a person having the appropriate knowledge of analog and digital

computer to computer. I have done some copying of files to a flash drive and then from the flash drive to another computer.

Q. Okay. And you typically have to wait while the copy to the flash drive is made. Right?

A. Yes.

Q. And all other things being equal, it's desirable for that process to happen faster rather than slower. Right?

MR. PAYNE: Objection. Form.

THE WITNESS: I usually have other things to do and -- after I give a copy order. So it doesn't bother me. But I suppose some people may be impatient.

BY MR. STEPHENS:

Q. Did you ever use UNIX to UNIX Copy protocol, UUCP?

A. I've heard the term, but I don't recall ever using it.

Q. Were your Sun workstations that you used at your research center networked?

A. Certainly in the '90s. I don't recall when they -- when we started to have network workstations.

Q. And those Sun workstations are UNIX workstations. Right?

A. They were a version of UNIX offered by Sun

Microsystems.

Q. Do you know if they supported UUCP?

A. I don't want to speculate. I don't know for sure.

Q. Okay. Was compression used in -- well, I have something else.

If you could mark this, please. I think the next exhibit number is 251.

(Exhibit No. 251 was marked.)

BY MR. STEPHENS:

Q. Do you recognize your declaration?

A. Yes.

Q. And this is, to be clear, your Declaration in Opposition to Apple's Second Motion for Summary Judgment of Invalidity. Right?

A. Yes.

Q. If you turn to paragraph 38. Could you just read the first sentence out loud?

A. "Not only does Kramer not suggest faster than realtime transmission, it would have been entirely surprising and unexpected for anyone to conceive of or propose the idea of transmitting audio in a burst mode given the statement of technology and the consumer product market in the late 1980s and early

1990s."

Q. What did you mean by that sentence?

A. I think it's pretty clear. I'm not sure how to answer.

Q. I guess what I'm asking is is that sentence intended to mean only that it wouldn't have been obvious to send audio in a burst mode in view of Kramer or something more general?

A. At the time I was thinking about Kramer. So I don't know if -- I don't remember if -- at the time I wrote this, if I was thinking more broadly or not.

Q. Would it have been obvious to a person of ordinary skill in the art to transmit audio in a burst mode if they had the Kepley patent in their possession in 1987?

MR. PAYNE: Same objection. Don't answer that. Beyond the scope of the declaration.

BY MR. STEPHENS:

Q. So your declaration is not intended to convey the view that Mr. Lang's alleged inventions are not obvious in view of Kepley. Is that right?

A. I need to think about it. I don't recall right now what my intent was, if it was broader or not.

MR. PAYNE: Can you read back the question, please.

(The record was read as follows:

"Q So your declaration is not intended to convey the view that Mr. Lang's alleged inventions are not obvious in view of Kepley. Is that right?")

THE WITNESS: I do not believe I was thinking about Kepley in this context --

BY MR. STEPHENS:

Q. Okay.

A. -- one way or the other.

Q. Have you expressed a view in connection with this litigation whether or not Mr. Lang's alleged inventions are obvious in view of Kepley?

A. I don't recall. You know, I've had a number of phone conversations --

MR. PAYNE: Don't talk about phone conversations. If you're going to limit it to the declaration --

BY MR. STEPHENS:

Q. My intention is to ask you about your declarations. That's what I meant.

A. I don't -- no, I don't recall right now.

Q. So you're not sure whether you did or not. You're not saying you didn't.

A. That's correct.

Q. Can you think of any reason other than forwarding it?

MR. PAYNE: Objection. Form. I'm going to instruct him not to answer. This has nothing to do with compression.

I'm instructing you not to answer.

BY MR. STEPHENS:

Q. If you'll turn now to column 12. Line 47, there's a section that begins "Voice Mail Message Forwarding." Do you see that?

A. Yes.

Q. That shows that the system is designed for forwarding voice mails. Right?

MR. PAYNE: You're beyond the scope of his declaration. You're getting into issues of transmission. I instruct him not to answer this line of questioning, unless you can explain to me why it's tied to compression.

MR. STEPHENS: I've already explained the relevance to his declaration, and I'm not going to continue. You can make your instructions, and we'll just take it up with the judge.

MR. PAYNE: Okay.

BY MR. STEPHENS:

Q. Now, on the next column, 13, there's a

discussion of the data call connection to transmit voice mails. Right?

A. I don't know where -- where is it?

Q. So, for example, starting at line 29.

A. Yes, there's the discussion of data call connections in this patent.

Q. And it says there at line 29, that "This data call connection can be established using various types of transmission facilities." Do you see that?

A. Yes.

Q. And in the 1980s, AT&T had various types of transmission facilities that it made available to its business customers. Right?

A. I don't know that. I mean I know that they had various transmission facilities, but I don't know what's made available to customers other than the operating companies which it owned at the time. It wasn't -- they weren't customers.

Q. So you don't know whether what's described in here about making data call facilities of various types available to support voice mail systems is an accurate description of AT&T's business at the time. Is that right?

A. I believe that voice mail systems was a part of AT&T's business.

Q. Including the Audix system. Right?

A. I understand that that was developed by AT&T.

Q. And the next sentence there says, "Advantageously, the transmission facilities are high-speed digital facilities of the type used for computer data file transfers." Right?

A. That's what it says.

Q. Then it goes on to say, "The use of digital high-speed transmission facilities of speed greater than 9.6 kilobits per second enables the exchange of digitally encoded and compressed voice mail messages faster than realtime speech." Do you see that?

A. Yes, I see it.

Q. Do you have any reason to disagree with that?

MR. PAYNE: I'm going to object and instruct him not to answer. It's beyond the scope of his declaration. It's in transmission areas.

BY MR. STEPHENS:

Q. In column 14, around line 5, there's a sentence that begins, "At step 706, the destination voice mail service system transmit protocol identifiers to originating voice mail service system to indicate the signaling format." Do you see that?

A. Yes.

Q. Is that something that's referred to as a

protocol negotiation?

A. I don't know.

Q. You don't know about protocol negotiation?

A. No.

Q. Do you know if the Kepley system would support more than one protocol for transmission of voice mail messages?

A. I don't know.

Q. In column 14, around line 58, there's a sentence that says, "This voice mail message illustrated in Figure 4 can be of any length." Do you see that?

A. Yes.

Q. Is there any inherent limit on the length of a voice mail message that can be stored using voice mail compression mechanisms of the kind that you're familiar with that existed in the mid-'80s?

A. Well, there has to be a length limitation. There's a limited -- disk storage space was expensive in those days. It was -- they had a limited disk storage. They're not going to let someone talk forever and leave a message of three hours.

Q. Okay. But other than the limit imposed by the amount of storage available, was there any other limit?

A. There may be technical limits involving with the -- involving the implementation of the compression.

I can't -- I don't know -- not just the compression. I mean the interfacing and the circuitry and so on. I don't know enough about the hardware to -- and how things are implemented in circuits to say one way or the other.

Q. So you don't have any reason to disagree with that statement -- is that right? -- that the voice mail message can be of any length, other than there has to be some limit to the amount of storage available?

MR. PAYNE: Objection. Form.

THE WITNESS: At the moment I can't think of specific reasons other than the ones I've already referred to that -- for putting a limit on the length of the message.

BY MR. STEPHENS:

Q. Which ones did you refer to other than the disk drive?

A. One, the disk storage space. And the other is that implementation constraints for interfacing circuitry, which I don't understand well enough that there could be issues there.

Q. So you don't know of any, but there could be some?

A. That's true.

Q. Okay.

A. I can think of another limitation.

Q. Okay.

A. That the number of calls coming in -- the computer processor has limited capability, and it just can't keep processing one call forever when there's -- it can be overloaded and it can only handle so many simultaneous calls.

Q. But that's true regardless of how long a particular message is. Right?

A. Well, it's just --

Q. How many are happening at the same time.

A. No. The longer it is, the more it ties up some of the resources of the system, and therefore it reduces the ability of the system to handle as many other messages as it could.

Q. So that's a reason to make things happen quickly and short. Right?

A. That would be a reason to put a limit on the duration of the message.

Q. Okay. But that's not an engineering limitation. That's just a decision about how to manage a bunch of simultaneous calls. Is that right?

A. It is an engineering limitation, I think.

Q. If there was only one user for the system, it wouldn't be a limitation. Right?

A. The system would be defined differently. The

whole -- the sign of the system, the engineering would be very different if it was limited to one user.

Q. Okay.

A. You could use an answering machine.

Q. If you'll look at column 16 now of the Kepley patent -- actually, before we go there, at the bottom of column 15, at line 65, there's a sentence that says, "The transmission of the digitally encoded, compressed voice." Do you see that?

A. Column 15, line 65?

Q. Yes. And that sentence carries onto the top of the next column. Could you just read that sentence out loud.

A. "The transmission of the digitally encoded, compressed voice mail message over high-speed digital facilities also is timewise efficient compared to transmitting the analog version of the voice mail message."

Q. Could you explain that, please?

MR. PAYNE: Same objection. Same instruction, beyond the scope of his declaration.

BY MR. STEPHENS:

Q. In column 16 there, at line 11, there's a sentence that says, "Destination voice mail service

system receives each 128 byte segment, and it goes on from there." Do you see that?

A. Yes.

Q. That's talking about the destination voice mail system receiving the digitally encoded, compressed voice mail message. Right?

A. Perhaps I could read the context a bit.

Q. Sure. Go ahead.

A. Yes.

Q. So that's a description of the destination voice mail saving -- voice mail service system receiving the digitally encoded, compressed mail message and then storing it on a magnetic disk. Right?

MR. PAYNE: Objection. Form.

THE WITNESS: It's -- it doesn't mention compressed, but it is -- it's receiving a segment of the message. So presumably that's the digital compressed voice.

BY MR. STEPHENS:

Q. Then it stores it in the database processor. Right?

A. That's what it says.

Q. And that database processor we saw had a magnetic disk for storage. Right?

A. I don't know.

Q. Look back at Figure 2.
MR. PAYNE: Objection. Form.
THE WITNESS: Figure 2 shows an element number 203 that looks like a symbol for a magnetic disk storage.
BY MR. STEPHENS:
Q. So just to be clear, then, what's happening in the patent, with reference to Figure 1, we have the system 110 receiving a voice mail message from a handset where somebody's leaving a voice mail message. Are you with me now?
A. Figure 2?
Q. Figure 1. So you have --
A. Oh, yes.
Q. -- in Figure 1 the voice mail service system 110 receives a voice mail message from somebody using a telephone handset. Right?
A. Yes, that's one option here.
Q. Okay. And then the voice storage processor digitally compresses it and stores it in the database processor. Right?
A. The voice storage processor does compress it and -- yes, I believe it's stored in the database processor.
Q. Then the database processor transmits it over high-speed digital facilities in a manner that's timewise

efficient, compared to sending the analog version to the voice mail system 150. Right?
MR. PAYNE: I'm going to object. It's beyond the scope of the declaration. Instruct him not to answer.
BY MR. STEPHENS:
Q. So then the database processor transmits that to the voice mail service system 150. Right?
MR. PAYNE: Same objection. Same instruction.
BY MR. STEPHENS:
Q. Somehow the voice mail gets from database processor 113 to the database processor 153. Right?
A. Where's 153?
Q. That's in the voice mail service system 150.
A. Yes, I believe so.
Q. And then there, that digitally compressed voice mail file is stored in database processor 153 on a magnetic disk. Right?
A. Yes.
MR. STEPHENS: Why don't we take a break to change the tape.
THE VIDEOGRAPHER: We're off the record at approximately 1:48 a.m. That concludes tape 1.
THE WITNESS: Did you say 1:48? 10:48.
THE VIDEOGRAPHER: I'm sorry. 10:48.

(Recess taken.)
THE VIDEOGRAPHER: We're back on the record. This is the beginning of tape 2. The time is approximately 10:58 a.m.
Counselor.
BY MR. STEPHENS:
Q. Dr. Gersho, looking back at your second declaration, which I think was 251, if I remember right. That's the Declaration of Allen Gersho in Opposition to Apple's Second Motion. Do you have that?
A. Yes.
Q. Do I have the number right, 251, on the exhibit?
A. Yes.
Q. In paragraph 38 -- actually, before we get there, let me ask another question or two about Kramer -- excuse me -- about Kepley.
Now, you worked for AT&T for a number of years. Right?
A. Yes, I did.
Q. Did you file any patent applications while you were working for AT&T?
A. Yes.
Q. So there are some AT&T-issued patents that you're named as an inventor on?
A. That's correct.

Q. Is it your experience that when AT&T filed for a patent, AT&T as a company did so because they believed there was an invention there worth patenting?
A. I couldn't say that. I think they wanted to patent everything they could. That was my impression.
Q. Okay. But it -- was it your view or your understanding that AT&T's policy was to fulfill all the requirements of the patent office, laws and regulations, in filing an application?
A. I don't know their policy. They never discussed it with me.
Q. Do you think AT&T would file patent applications for things that didn't work?
MR. PAYNE: Objection. Form.
THE WITNESS: I don't think they filed any perpetual motion machines, but I know one patent that they filed -- that was filed and issued of mine that was totally useless.
BY MR. STEPHENS:
Q. "Useless" is different than "not working."
Do you think they filed patent applications for things that didn't work?
A. I have no reason to assume that, but -- no, I shouldn't speculate. I don't know. Who knows. There may be a reason.

Q. Okay. Well, looking at the Kepley patent, that was assigned to AT&T. Right?
A. Uh-huh. Yeah.
Q. And it was published no later than December 1988. Right? That's the issue date on the patent?
A. If you say so.
Q. That's the issue date anyway?
A. Uh-huh. Yeah.
Q. Would you agree that that reflects the state of the art in voice mail systems at the time?
A. I don't have any opinion on that, because I don't know the field. I don't know how many other patents were filed prior to this.
And to clarify my previous answer, they may indeed have filed for patents that don't work. Because sometimes patents are drawing-board things without actually implementing and it may turn out it doesn't work, and we may not know until later.
Q. Okay. But they didn't do it intentionally. Right?
A. I have no reason to believe they would do it intentionally.
Q. AT&T was pretty good at making things work. Right?

A. We had a lot of talented engineers at Bell Laboratories, AT&T Bell Laboratories.
Q. And they were obviously very good at high-speed data transmission. Right?
A. Most of the areas that I was involved in were not high-speed data transmission. So I don't know specifically, you know. There were some -- I know there were some notable screwups. They put in a lot of money into something that -- a lot of time in developing something that turned out not to be useful in digital transmission. That was in the research area.
Q. Okay. And they were good at compression. Right?
A. Yes. There was a lot of expertise in the area of voice compression.
Q. Now, looking back at your declaration, we started to look at paragraph 38. And this is, again, the paragraph where in the first sentence you say that "it would have been entirely surprising and unexpected for anyone to conceive of or propose the idea of transmitting audio in a burst mode given the state of the technology and the consumer product market in the late '80s and early '90s." Right?
A. Yes, I said that.
Q. But Kepley did conceive of it. Right?

MR. PAYNE: Objection. Form. I'm going to instruct him not to answer. It's beyond the scope.
THE WITNESS: May I answer?
MR. PAYNE: He's asking a specific question about Kepley. So that's beyond the scope of your declaration. So I'm going to instruct you not to answer.
BY MR. STEPHENS:
Q. Well, Kepley was part of the state of the technology at the time. Right?
A. I gather Kepley was involved in digital switching. I have no reason to believe he was involved in compression.
Q. Well, the device described in there uses compression. Right?
A. I believe he just assumed that the people who know compression would provide him with a compression algorithm to fit into their box.
Q. And that was perfectly possible. Right?
A. I don't know. Depends what the constraints are and what the objectives are.
Q. Well, there were many voice codecs, as you point out, that were known to people of skill in the art at the time. Right?
A. Yes, there were.
Q. Okay. And some of them would have been suitable

for use in a voice mail system described by Kepley. Right?
A. I'm not sure -- I'm not sure I could make a sweeping statement about -- depends what his constraints and objectives were.
Q. Is it your testimony that there was no codec known to people of skill in the art that could have been used in Kepley in 1988?
A. No, that's not my testimony.
Q. Was there any?
A. I can't say, unless we specifically define the constraints of what they need to achieve in that context.
Q. I'm just asking about what's describe in the patent. So if a person of ordinary skill read the patent in 1988, would they have been able to find a compression algorithm that would work in that system that's described in there?
A. See, if I recollect -- recollect correctly, that he was describing a 16-kilobit-per-second rate or -- is that -- I don't remember. But I'm trying to define this question more precisely.
If he was seeking a compression method that produced 16-kilobit-per-second speech, I will definitely agree that there were compression algorithms for voice speech that could achieve 16 kilobit rate of --

Q. Okay. And could have been used in the system that's described there. Right?
A. Again, that depends on the whole family of constraints, engineering constraints, but whether -- what would be suitable. It's not sufficient that it had the right bit rate.
Q. I'm just asking about the constraints that are described in the patent. Is there anything in there that you can point to that says, no, there's no codec that would allow you to build the system that's described here?
A. Well, I don't know the patent well enough to have the totality --
Q. You have it right there. Take a look.
A. I don't know if you want me to read the whole patent.
Q. I want you to do what you need to satisfy yourself. Tell me if there's a reason in there that you couldn't build the system that's described.
MR. PAYNE: I'm going to object to form. You're talking about the compression or the whole system?
MR. STEPHENS: I'm talking about whether there's any reason that he knows of that there was -- that you could not use a known compression algorithm to build the system that's described.

THE WITNESS: If you say that I know of, if there's any reason I know of, at this point I don't know of a specific reason why you cannot find some algorithm that would be suitable for this application.
BY MR. STEPHENS:
Q. So, now, would you agree that if Kepley was considered to be part of the state of the technology at the time, that your statement in paragraph 38 about it being entirely surprising and unexpected for anyone to conceive of or propose the idea of transmitting audio in a burst mode is wrong?
A. You know, I don't know Kepley. I never met him, and I don't know if he was part of this -- how -- to what extent he represents the state of the technology, you know.
Q. Okay. So you don't know whether Kepley would be part of the state of the technology. Right? And I mean by -- when I say "Kepley," I mean the patent.
A. I assume the patent examiners found the patent worthy of issuance. So under that assumption, the patent was presumed to have -- to have validity.
Q. So if you assume that what's described in Kepley is part of the state of the technology in the late '80s and early '90s, then your statement that it would be entirely surprising and unexpected for anyone to conceive

of or propose the idea of transmitting audio in a burst mode is wrong. Correct?
A. Could you give me the first part of that question again?
Q. Yes. If you assume that Kepley, the patent, was part of the state of the technology in the late '80s, then your statement that it is -- it would have been entirely surprising and unexpected for anyone to conceive of or propose the idea of transmitting audio in a burst mode is wrong?
A. I can't say that. First of all, you want to assume that Kepley was part of the state of technology. That's -- under that hypothesis -- hypothetically, because I don't know for sure what role he played, whether he was -- you know, a significant role there, whether he was --
Q. I'm asking about a person of ordinary skill in the art, not about Kepley as a man. I'm not asking about his role in the state of the art.
I'm saying if a person of skill in the art knew about Kepley. Right? And by "Kepley," I'm referring to the patent, not the man.
A. Yeah.
Q. If they had in their hands Kepley --
A. Right.

Q. -- so that that's part of the state of the technology -- this is known technology in 1988 -- then your statement that it would have been entirely surprising and unexpected for anyone to conceive of or propose the idea of transmitting audio in a burst mode is wrong, because Kepley, the document, proposes that. Right?
MR. PAYNE: Objection. Form.
THE WITNESS: No, I don't agree with that. First of all, my statement refers to audio. And I have been assuming for -- in the context of Kramer specifically, that audio refers to wideband music for entertaining the consumer.
BY MR. STEPHENS:
Q. So you weren't suggesting that it would not have been -- that it would have been entirely surprising and unexpected for anyone to conceive of or propose the idea of transmitting voice/audio in a burst mode. Right?
A. My statement was not addressing voice specifically. So I'm not -- I didn't give an opinion about that in the statement.
Q. Do you have an opinion about whether it would have been obvious to conceive of or propose the idea of transmitting voice/audio in a burst mode in the late '80s?

MR. PAYNE: That's beyond the scope of his declaration as stated.

MR. STEPHENS: Are you going to instruct him not to answer?

MR. PAYNE: What's the question again?

BY MR. STEPHENS:

Q. Do you have an opinion about whether or not it would have been surprising or unexpected for anyone to conceive of or propose the idea of transmitting voice audio in a burst mode in the late '80s?

MR. PAYNE: Yeah, I'm going to instruct him not to answer.

MR. STEPHENS: If you could mark this, please.

(Exhibit No. 253 was marked.)

BY MR. STEPHENS:

Q. Dr. Gersho, the court reporter has handed you Exhibit 253. This is a CompuSonics document. Have you seen this before?

A. Yes, I believe I've seen it.

Q. What's the system described in it?

A. Some kind of audio processing workstation.

Q. And it's an audio editing system. Right?

A. I --

MR. PAYNE: Go ahead.

THE WITNESS: I believe they do mention that it

does editing. As I recall -- I haven't seen this in a while, but it -- I shouldn't speculate. I don't know for sure, but I --

BY MR. STEPHENS:

Q. Okay. And it stores digitally compressed wideband audio in random access storage. Right?

MR. PAYNE: Objection. Form.

THE WITNESS: I have to refresh my memory.

BY MR. STEPHENS:

Q. Take a moment to look it over, if you need to.

A. The system does store audio in digital form that has been encoded.

Q. And that's wideband audio. Right?

A. I believe so.

Q. And it stores it in random access memory?

MR. PAYNE: Objection. Form.

THE WITNESS: I believe they do mention random access memory, but I don't know if that's the storage means.

BY MR. STEPHENS:

Q. Just, for example, if you look at the page with production number ending 699, there's a section entitled "Instant-Access Storage." Do you see that?

A. Yes.

Q. And it says:

"Say goodbye to endless loading or unloading of tape reels or carts. With the DSP-2002's disk-based storage system, your sound effects or music can now be located by high-speed random access."

A. Yes.

Q. That shows that the digitally encoded wideband audio is stored on a high-speed random access disk. Right?

MR. PAYNE: Objection. Form.

THE WITNESS: It shows that high-speed random access storage is being used for the audio. I have to put the pieces together to see if it's -- that the encoded version is so stored, in fact.

BY MR. STEPHENS:

Q. Well, it has to be digitally encoded in order to be stored on a disk. Right?

A. It has to be in digital form, yes.

Q. And then if you'll look at the end of the document, there's a sort of specification section. I think that's the name of it. And then near the bottom, there's a section "Encoding Format." Do you see that?

A. I see "Audio Storage and CSX Encoding." Is that the section you mean?

Q. Yes, that's the section I'm talking about.

And that shows a variety of sample rates. Right?

A. Yes.

Q. And those sample rates are sufficient to store wideband audio. Right?

A. Depending on the quality that you want. There are different versions of audio.

Q. Well, 50 kilohertz is wide enough to store the entire frequency band that human hearing is capable of sensing. Right?

A. Probably, yes.

Q. It's not probable; it's certain.

A. Well, there's some people that believe that -- that they're useful -- people with good hearing may believe they can hear beyond the usual range that we assume.

Q. But the usual range that's assumed by professionals working in the field is 20 Hertz to 20 kilohertz. Right?

A. Something like that.

Q. And 50-kilohertz sampling rate is plenty to store that full range. Right?

A. Yes.

Q. Okay. So the system was capable of storing wideband audio by any normal definition. Right?

And let's just try and do this as quickly as we can so I can avoid Dr. Gersho having to make his car.

THE VIDEOGRAPHER: We are off the record at approximately 11:57 a.m., tape 2.

(Whereupon, a lunch recess was taken.)

AFTERNOON PROCEEDINGS

THE VIDEOGRAPHER: We are back on the record. The time is approximately 12:45 p.m., tape 2.

Counselor.

BY MR. STEPHENS:

Q. Dr. Gersho, we've looked at a number of different documents today, and those are all documents you had reviewed and understood in preparation for executing your declarations. Right?

A. To varying degrees. Not all of them have I studied all parts.

Q. How did you determine which parts to study when you were reviewing them?

A. I guess I looked for the parts that was most relevant to my area of expertise. And knowing that there was another expert that was covering a lot of material related to the transmission communication, and I mainly oriented to compression.

Q. Okay. So your area of expertise primarily is compression. Is that right?

A. Yeah.

Q. You also read and understood Mr. Lang's patents. Right?

A. I did read all four patents at the very beginning, and I believe I understood them. But they're

not fresh in my mind, though. It's been awhile.

Q. What is your understanding of what Mr. Lang invented?

A. Well, first of all, I guess every claim is a separate invention. So I don't know if I could say in general, but I could address specific -- like claim 1 of '995 is the one that comes to mind most.

Q. Okay. Let's go with that one.

A. And his invention has four major components: the input means -- let's see -- random access storage means, and compression means, and output means, if I recall. Those are --

Q. Okay. And is it your testimony that Mr. Lang is the first person ever to have combined those?

A. I didn't comment on that in my depositions. I don't recall testifying to that specifically.

Q. Do you have a view?

MR. PAYNE: This is beyond the scope of his declaration. I guess, yeah, you can answer in the context of your declarations.

THE WITNESS: I believe so, yes.

BY MR. STEPHENS:

Q. And what's the basis for that belief?

A. Well, I haven't seen -- I haven't seen these four elements combined in -- in any of the prior art

references that I've seen before.

Q. Of course you did see them combined in Kepley. Right?

MR. PAYNE: Objection. Form.

MR. STEPHENS: Are you going to instruct him not to answer?

MR. PAYNE: Yeah. It's beyond the scope of the declaration.

BY MR. STEPHENS:

Q. Now, going back to your declaration, No. 251, Exhibit 251, paragraph 38, you say:

"It would have been entirely surprising and unexpected for anyone to conceive of or propose the idea of transmitting audio in a burst mode given the state of technology and the consumer product market in the late 1980s and early 1990s."

Do you see that?

A. Yes.

Q. What is the idea of transmitting audio in a burst mode?

A. Well, the idea is focused on a specific quantity of audio that is in digital form and sending it in a faster time than realtime. The faster than the playback time, the time it takes to get it from one place to

A. I bought CDs at some point, but I didn't --
Q. No professional involvement?
A. -- get the -- in professional involvement in the CD industry.
Q. Okay. Do you know how, for example, audio cassettes were manufactured?
A. No, I don't.
Q. So you don't know whether people used high-speed tape duplicators to make copies of audio tapes to distribute and sell?
A. I -- this is all analog.
Q. For audio tapes, that's right?
A. I mean the phrase "high-speed tape duplicator" makes sense to me, but I don't have experience with it. I never -- I never looked at what goes into such devices.
Q. But you would agree that when you're making copies and you're not actually listening to the copy that you're making, if you're doing it to distribute music, it makes sense to do that quickly. Right?
A. I'm not sure. I could see pros and cons.
Q. Well, all other things being equal, faster is better. Right?
A. Well, I don't think all other things are equal.
Q. But clearly if you're trying to make a million CDs, then you want to be able to manufacture them

quickly. Right?
MR. PAYNE: Objection. Form.
THE WITNESS: Yeah. But, I mean, if a printing press can print thousands of pages per minute, it's just stamping out material. I don't know if it has anything to do with sending data faster than realtime.
BY MR. STEPHENS:
Q. Well, of course it does. Because if you're sending data faster than realtime from one disk to another, you're doing it to make a copy. Right?
MR. PAYNE: Objection. Form.
THE WITNESS: In your hypothetical situation, if you are sending data from one disk to another and if that is needed to make a copy, then digital transmission is being involved internally here.
BY MR. STEPHENS:
Q. Okay. And that's how you make a copy of a file from one disk to another. Right?
A. Well, not with audio cassette.
Q. I'm not asking about audio cassettes now. I'm asking about a file on a disk.
A. Well, there are many ways of creating a file, but if you're -- if you're transferring a file from one place to another, a digital file from one place to another, then it would get stored on the destination

location.
Q. And the way you do that is by transmitting the electronic data representing the file from one disk to another. Right?
A. I suppose so. I don't see anything wrong with that.
Q. And the computer industry, including the personal computer industry and other parts of it, have spent huge sums of money over the last four or five decades to make that process happen faster. Right?
MR. PAYNE: Objection. Form. You're way beyond the scope of his declaration.
MR. STEPHENS: Are you going to direct him not to answer?
MR. PAYNE: Yeah.
BY MR. STEPHENS:
Q. If you have an audio file on a computer -- computer work -- a Sun workstation's hard drive and you copy that audio file to an external hard drive, would that copy happen faster than realtime?
MR. PAYNE: Objection. Form.
THE WITNESS: I'm not an expert on the insides of what goes on in computer processing or computer communication. But, first of all, the realtime issue would only come up if the file happened -- is audio. Is

that part of your question?
BY MR. STEPHENS:
Q. Let's say it was an audio file.
A. Yeah. So if it's an audio file, I guess it depends -- I can't say it's not possible that it would be faster than realtime.
Q. Okay. In fact, let's assume that it's a PCM encoded 44.1 kilohertz 16-bit stereo file -- let's say mono file, and you copy that from one hard drive to another on the Sun workstations that your laboratory used in the mid to late '80s, would that copy happen faster than realtime?
MR. PAYNE: Don't answer that question. Assumes facts not in evidence. Garland, come on.
MR. STEPHENS: This man has put out a statement about technology that he's admitted depends on the workstations that were in his office. And I'm trying to figure out how they work. Direct him not to answer and we'll go on, if that's what you're intending to do.
MR. PAYNE: Okay.
MR. STEPHENS: Are you directing him not to answer?
MR. PAYNE: Yeah, yeah, because you've been critical --
MR. STEPHENS: You don't have to explain it.

times. And on the next pass, you take the next --
A. Yeah.
Q. -- the second bit for that sub-band.
A. Yeah.
Q. What's wrong with that?
A. But as I noted, that it seems to either repeatedly send the entire data from the memory to feed it out to the demultiplexer and decoders a hundred times repeatedly is -- doesn't make any sense and isn't feasible.
Q. If you did it, though, the numbers work out. Right?
A. I don't know, because I -- to talk about reproduction of sound, I don't think it would reproduce intelligible sound. So I don't know if the -- if it makes sense to assess -- the hundred times reproduction of what sound? Of garbage?
Q. So you're basing your rejection, even of exploring whether the arithmetic works out, on your conclusion that it wouldn't result in an audible signal. Is that right?
A. That question is a little confusing.
Q. I'm just trying to understand why, when you do your counting, r1, b1, g1, et cetera --
A. Right.

Q. -- in an attempt to show that the numbers don't work out, you're actually counting from the multiplexer rejecting 99 out of a hundred and not the decoder, as the reference actually says.
A. What the reference says is the decoder is taking. It doesn't say reject --
Q. Taking one out of a hundred bits presented to --
A. Yeah, taking one out of a hundred. And it is, but not by choice. Because the demultiplexer is only letting it take one out of a hundred.
Q. The demultiplexer is what does the presenting. Right? That's how the circuits show.
A. Well, it's -- and it's only -- but it is doing the one out of a hundred. In order to deinterleave, it has to -- it makes sense the demultiplexer has to be deinterleaving.
Q. Well, is it true, sir, that the counting that you did in an attempt to show that the numbers don't work out as the signal is presented to the decoders is based on the demultiplexer doing the rejecting of 99 out of a hundred bits? That's right, isn't it?
A. Well, it's equivalent to the decoder taking one out of a hundred. The demultiplexer is --
Q. I just want a clear answer.
A. Yeah.

Q. So when we're talking about the -- taking only one out of a hundred bits, you're talking about the hundred bits being on the line leading into the demultiplexer. Right?
A. Yes.
Q. Okay. And that's what you were using for all of the counting that appears in your declaration. Right?
A. In that illustrative example, yes. I could construct another example based on your hypothesis that would also lead to nonsensical results.
Q. Right now I'm only asking about what's actually in your declaration. And that's based on the demultiplexer seeing the 100 bits, not the decoder. Right?
A. Well --
Q. Let me be just be a little clearer. "Seeing" is the wrong word.
The 100 bits you're talking about are on the line leading into the demultiplexer, 24, in Figure 1. Right?
A. Yes.
Q. And they're not 100 bits on the line leading from the demultiplexer to the decoder. Right?
A. Yes.
Q. And you have not worked out an example where the

100 bits, of which only one is taken by the decoder, are present on the line leading from the demultiplexer to the decoder. Is that right?
A. I think -- I have worked out that example. I think it's just the taking. It's just a matter of how you interpret the statement. The way I understand Kramer, this is not the same thing.
Q. I'm not asking about the interpretation now of the language in Kramer. I'm asking about how you actually worked it out.
So the 100 bits, though, were not present on the line leading from the demultiplexer to, for example, the rightmost decoder, 26. Right?
A. The hundred bits is what is coming in, yes.
Q. Into the demultiplexer?
A. Into the demultiplexer.
Q. And they're not present on the line leading from the demultiplexer to the decoder. Right?
A. To one specific decoder, right.
Q. Okay. So if you were going to correct the language in column 4 that we were looking at, about the demultiplexer starting line 45, what would you have it say?
A. Well, there are a lot of ways to correct it. One way would be by taking "e.g. only one out of every

hundred bits of information presented to the decoder at a time" -- sorry -- "presented to the demultiplexer." So it would be --

Q. So just to be clear, the way you would correct it --

A. Yeah. "Presented to" -- instead of "presented to it," I would say "presented to the demultiplexer."

Q. Now, looking at your declaration in Exhibit 251, in column -- excuse me -- in paragraph 19, you're talking about the black box argument?

A. Yes.

Q. And you put that in both your declarations?

A. Uh-huh.

Q. And you make the argument that if the data is sent a hundred times faster than the time it takes to play it back, that you'd have to store it; otherwise, you wouldn't be able to play it back.

And the way you put that is "as long as the data is transmitted only once from memory to the box." Right?

A. Yes. Under that condition, it's impossible to -- to have -- it would not make sense of faster-than-realtime input if the output is realtime.

Q. Okay. But if you did transmit it a hundred times and only took 1/100 of the data each time it was sent, then that wouldn't be an issue. Right?

A. Well, I think it would be a practical impossibility to transmit it a hundred times.

Q. I understand you have reasons that you think that you couldn't transmit it a hundred times. But if you did, the black box argument that you make does not work. Right?

A. Yes. The same -- the black box argument, as I worded it, would not apply under your hypothetical scenario.

Q. Okay.

A. It would require pretty tricky -- actually, I'm not even sure that's right. I'm just trying to think of what could be inside the black box without memory so that you could actually organize the data.

Q. It might have a very small amount of memory, but it wouldn't -- you wouldn't need anything like the amount of memory to store the entire --

A. I would have to think about that, actually. My argument that it's an impossibility is limited to only one pass of memory. But under your hypothesis, suppose that it was a hundred times. I have to think a little bit how to --

Q. Just have a counter?

A. -- what could be done inside the box that would --

Q. Just have a counter that counts up to a hundred and then takes the next bit. When the counter reaches a hundred, then it starts over again. Wouldn't that work?

A. No.

Q. Why not?

A. Because it's not counting up to a hundred. You'd have to wait for the entire -- the entire data to pass through, and then -- in other words --

Q. You could interleave it on the multiple sub-bands. And it does get somewhat more complicated there. But if you look at it as if it was only one band, it's actually quite simple. Right?

A. If there's only one band, it would be much simpler. But you really have to hold data to the right time in order to get the right -- the right bit for the right sub-band. If you don't get one pass, you get it the next pass.

Q. You could do this --

MR. PAYNE: Whoa, whoa.

THE WITNESS: It's kind of tricky. I'd have to spend a little bit of time thinking about whether or not it is possible. Although what I am acknowledging is -- and that you are correct, that the argument I gave by itself does not apply and does not show the impossibility of faster-than-realtime input with a realtime output if

you had more than one pass.

BY MR. STEPHENS:

Q. Okay. And you could arrange the kind of pass, again, if we restrict ourselves to a single band, by a rotating shift register that simply -- that holds a hundred bits and outputs those hundred bits over and over and over again at a speed of a hundred times faster than realtime, and at each point at which the decoder reads one bit, you take that bit out of the recirculating shift register and add the next bit from the song into the recirculating shift register at that point. Right? So you'd have --

A. You don't have the next bit from the song if you're throwing away 99.

Q. No. I'm talking about what you're sending from the memory. So part of the memory circuit would be this recirculating shift register I'm talking about.

A. So this is a hypothetical not involving sub-band coding?

Q. That's right. I'm hypothesizing for a single band in order just to avoid the complexity of the interleaving sub-bands.

A. Well, I -- it bothers me to make such a hypothesis because it completely changes the situation. It doesn't simply avoid complexity. It becomes

A. Okay.

THE VIDEOGRAPHER: We are off the record at approximately 3:02 p.m. This concludes Volume I of the deposition and tape 3.

(WHEREUPON, the September 11, 2007, deposition of ALLEN GERSHO was adjourned at 3:02 p.m.)

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ALLEN GERSHO

I, VALERIE J. EAMES, Certified Shorthand Reporter, No. 9021, hereby certify that the foregoing deposition of ALLEN GERSHO, VOLUME I, was taken by me at the time and place herein set forth, at which time the witness was put under oath by me;

That the said deposition was taken down by me in shorthand and thereafter transcribed under my direction and supervision, and I hereby certify the foregoing deposition is a full, true, and correct transcript of my shorthand notes so taken; and that the witness was given an opportunity to read and correct said deposition and to subscribe the same.

Should the signature of the witness not be affixed to the deposition, the witness shall not have availed himself or herself of the opportunity to sign or the signature has been waived.

I further certify that I am neither counsel for nor related to any party to said action, nor am I in anywise interested in the outcome thereof.

IN WITNESS WHEREOF, I have subscribed my name this 14TH day of SEPTEMBER, 2007.

_____

VALERIE J. EAMES, CSR