

EXHIBIT L

UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF NEW YORK

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RALPH VARGAS and BLAND-RICKY)
ROBERTS,)
)
Plaintiffs,)
) No. 04CV 9772
vs.) (JCF)
)
)
PFIZER, INC.; PUBLICIS, INC.;)
FLUID MUSIC; EAST WEST)
COMMUNICATIONS, INC. and)
BRIAN TRANSEAU, p/k/a "BT",)

Defendants.

Deposition of
STEVEN W. SMITH, Ph.D.

Tuesday, August 15, 2006

CERTIFIED COPY

Reported by:

GEORGE SCHUMER, CSR

(01-384619)



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11:53:51 1 Defendant Exhibit 36?

11:53:58 2 A. Yes.

11:54:03 3 Q. After you prepared your fax, and sent it off
11:54:16 4 to Mr. Chin, what happened next?

11:54:19 5 A. Mr. Chin requested that I spend additional
11:54:30 6 time, and develop the full expert report.

11:54:34 7 Q. Did you agree to do so?

11:54:35 8 A. Yes.

11:54:36 9 Q. Did you have any restrictions on your time
11:54:40 10 that caused you concern, as to being able to do this?

11:54:44 11 A. I told Mr. Chin that my time was going to be
11:54:46 12 limited; that I could perhaps spend a few days on it.
11:54:49 13 I certainly couldn't spend a few weeks on it.

11:54:52 14 Q. You agree, don't you, that the overall methods
11:54:59 15 used by Boulanger are standard techniques in signal
11:55:03 16 analysis; is that right?

11:55:05 17 A. Yes.

11:55:06 18 Q. And you agree that the overall methods used by
11:55:10 19 Boulanger are appropriate for the analysis at hand in
11:55:15 20 this case?

11:55:15 21 A. Yes.

11:55:16 22 Q. What led you to believe, at the time of your
11:55:28 23 February 26 fax, that Aparthenonia -- at least in some
11:55:40 24 sections -- is a copy of Funky Drummer?

11:55:45 25 MR. CHIN: Objection.

11:59:19 1 A. Perhaps "exact copy."

11:59:21 2 Q. So when I say "exact copy," what would that
11:59:25 3 mean to you?

11:59:28 4 A. By the term "exact copy," I would mean that
11:59:31 5 one is completely indistinguishable from the other
11:59:34 6 one.

11:59:34 7 Q. That sounds good. And so then we, say, took
11:59:41 8 the two squiggles, and laid one on top of each other,
11:59:45 9 in exactly the right bias. Then one would completely
11:59:52 10 cover the other, without sticking out anywhere.
11:59:55 11 Right?

11:59:55 12 MR. CHIN: Objection.

11:59:56 13 You can answer.

11:59:58 14 THE WITNESS: If they were exact copies, under
11:59:59 15 the definition we're using of "exact copy."

12:00:03 16 MR. OLSON: Q. Then that would be correct?

12:00:04 17 A. Yes.

12:00:04 18 Q. So can we, going forward, use "exact copy" as
12:00:09 19 you have just defined it?

12:00:11 20 A. Yes.

12:00:11 21 Q. So when I say "exact copy," you know what I'm
12:00:15 22 talking about now?

12:00:18 23 A. Yes.

12:00:19 24 Q. And I know what you are talking about.

12:00:21 25 MR. CHIN: What is the definition for

12:04:32 1 MR. OLSON: Q. So I understand that people
12:04:33 2 may mean somewhat different things by saying -- I
12:04:41 3 think you said "almost identical." But that would --
12:04:48 4 even though there could be a subjective range of
12:04:51 5 meaning there, it is distinguished from "exact copy";
12:04:54 6 correct?

12:04:54 7 MR. CHIN: Objection.
12:04:55 8 You can answer.

12:04:56 9 THE WITNESS: Yes.

12:04:56 10 MR. OLSON: Q. Why don't we go forward? We
12:05:00 11 know what "exact copy" means, so if we want to talk
12:05:07 12 about things that look a lot alike, we can go along
12:05:11 13 and take it as it comes. Does that sound good?

12:05:14 14 MR. CHIN: Objection.

12:05:15 15 THE WITNESS: Yes, that sounds fair.

12:05:17 16 MR. OLSON: Q. So I want to draw your
12:05:19 17 attention back to the two dark, fat squiggles. What
12:05:24 18 would you call these? I call them squiggles. What
12:05:26 19 would you call them?

12:05:28 20 A. Lines.

12:05:31 21 Q. Two fat, dark lines at 1000 frequency. Do you
12:05:35 22 know the two I'm referring to, that you pointed out
12:05:37 23 earlier?

12:05:38 24 A. Yes.

12:05:38 25 Q. These two lines are not exact copies.

12:07:59 1 I purposely looked at a wide range of signals,
12:08:02 2 to see what would be the best figures in the
12:08:05 3 preparation of my book.

12:08:08 4 MR. OLSON: Q. Were you looking for figures,
12:08:09 5 in the preparation of your book, that would produce
12:08:14 6 clear sine waves?

12:08:21 7 A. Not necessarily.

12:08:23 8 Q. What were you looking for?

12:08:27 9 A. I was looking for sounds that produced
12:08:31 10 interesting-looking and informative figures for the
12:08:36 11 book.

12:08:36 12 Q. What year was this, that you were looking at
12:08:39 13 the audio waves?

12:08:45 14 A. 1996 or 1997.

12:08:47 15 Q. Since that time, have you done any electronic
12:08:51 16 analysis of music?

12:08:54 17 A. No.

12:08:54 18 Q. Have you done any electronic analysis of
12:08:57 19 drums?

12:08:57 20 A. No. Other than in this report.

12:08:59 21 Q. Other than in this report, since the work you
12:09:04 22 did on your book in 1996 or 1997, have you done any
12:09:11 23 electronic analysis of audio files?

12:09:13 24 A. No.

12:09:14 25 Q. You don't have a personal knowledge of the

12:09:28 1 degree of similarity that two different snare drums
12:09:35 2 would show in a sonogram such as the one shown in your
12:09:42 3 fax, do you?
12:09:43 4 MR. CHIN: Objection.
12:09:49 5 THE WITNESS: No.
12:09:50 6 MR. OLSON: Q. So after you prepared the fax
12:10:03 7 which is Defendant Exhibit 36, you said that Mr. Chin
12:10:09 8 asked you to prepare a fuller report on this case; is
12:10:14 9 that right?
12:10:14 10 A. Correct.
12:10:15 11 Q. What did you do next, with regard to your work
12:10:18 12 on this case?
12:10:19 13 A. I did a more detailed analysis of the data
12:10:26 14 presented in Dr. Boulanger's report, and from that
12:10:31 15 more detailed analysis I prepared the expert report --
12:10:34 16 the draft of the expert report.
12:10:36 17 Q. What did you use to do your more detailed
12:10:48 18 analysis?
12:10:48 19 A. I'm not sure I understand the question.
12:10:50 20 Q. Did you use any of the materials listed in
12:10:53 21 your expert report?
12:10:55 22 A. Yes, I did.
12:10:56 23 Q. Which ones?
12:11:00 24 A. Dr. Boulanger's report, almost exclusively.
12:11:04 25 Q. I know that you reviewed the other material,

12:11:09 1 but did any of the other material that you listed in
12:11:12 2 your expert report as having been reviewed -- did you
12:11:16 3 rely on any of it in forming the opinion given in your
12:11:21 4 expert report in this case?
12:11:22 5 A. No, I didn't.
12:11:23 6 Q. Did you use any tools in conducting your
12:11:35 7 analysis for your expert report?
12:11:36 8 A. I'm not sure I understand the definition of
12:11:40 9 "tools."
12:11:42 10 Q. Other than reading Dr. Boulanger's report, is
12:11:47 11 there anything else you made use of?
12:11:49 12 A. I digitally scanned in some of his data, and
12:11:55 13 used those electronic files for comparison.
12:12:01 14 Q. And "his" -- by "his," you mean Dr. Boulanger?
12:12:06 15 A. Yes.
12:12:07 16 Q. So you did not feed the audio files at issue
12:12:14 17 in this case into a computer; correct?
12:12:18 18 A. Correct.
12:12:19 19 Q. You didn't personally perform any of the
12:12:23 20 sonogram analysis of the files; correct?
12:12:26 21 A. Correct.
12:12:29 22 Q. And you didn't personally conduct any of the
12:12:33 23 Fast Fourier Transform analysis on the data in this
12:12:41 24 case; correct?
12:12:42 25 A. Correct.

12:12:44 1 Q. Your job was to look at Dr. Boulanger's
12:12:48 2 report, and make your conclusions from that; is that
12:12:50 3 correct?
12:12:50 4 A. Correct.
12:12:51 5 Q. So you were limited to the data that was
12:13:00 6 present in Dr. Boulanger's report?
12:13:02 7 A. Correct.
12:13:03 8 Q. Did you feel that that was enough data to
12:13:11 9 reach your conclusions?
12:13:12 10 A. Yes.
12:13:13 11 Q. At any point, did you think that it would have
12:13:26 12 been beneficial to have more data than was provided to
12:13:29 13 you in Dr. Boulanger's report?
12:13:32 14 A. I based my conclusions on whatever data was
12:13:40 15 available. If I had additional data, perhaps I could
12:13:45 16 reach additional conclusions, but the conclusions I
12:13:47 17 reached were completely justified by the data I had.
12:13:49 18 Q. Because you understood your job being to look
12:13:54 19 at the reporting data of Dr. Boulanger, and render an
12:13:59 20 opinion from that; right?
12:14:00 21 A. Yes.
12:14:00 22 Q. Mr. Chin never asked you to take audio files
12:14:04 23 and start from scratch with digitally analyzing them;
12:14:10 24 correct?
12:14:11 25 A. Correct.

12:15:51 1 Q. And your conclusion as to your second opinion,
12:16:20 2 that it is likely that Aparthenonia and Funky Drummer
12:16:23 3 are copies -- I would like to ask you a question about
12:16:26 4 that opinion; okay?

12:16:28 5 MR. CHIN: Objection.
12:16:28 6 You can answer.

12:16:29 7 THE WITNESS: Yes.

12:16:30 8 MR. OLSON: Q. That is based on similarities
12:16:35 9 that you perceived in the data presented in
12:16:42 10 Dr. Boulanger's report; correct?

12:16:43 11 MR. CHIN: Objection.
12:16:43 12 You can answer.

12:16:44 13 THE WITNESS: I think it is more than
12:16:46 14 similarities I perceived. I think I developed
12:16:49 15 objective evidence that they were.

12:16:54 16 MR. OLSON: Q. Your opinion, then, is based
12:16:56 17 on what you have just referred to as "objective
12:17:00 18 evidence of similarity between Aparthenonia and Funky
12:17:05 19 Drummer"; is that correct?

12:17:06 20 MR. CHIN: Objection.
12:17:07 21 THE WITNESS: Yes.

12:17:07 22 MR. OLSON: Q. Anything else that forms the
12:17:12 23 basis of that second opinion?

12:17:13 24 A. No.

12:17:17 25 Q. You agree, don't you, that frequency spectra

12:17:33 1 are a much more sensitive measure of the similarity of
12:17:36 2 audio wave forms than hearing; correct?

12:17:39 3 A. Yes, I would agree with that.

12:17:45 4 Q. And you also agree that comparing the
12:17:53 5 frequency spectra of Aparthenonia and Funky Drummer is
12:17:57 6 an appropriate and powerful method of resolving if
12:18:00 7 Aparthenonia is a digitally edited and/or manipulated
12:18:06 8 copy of Funky Drummer; correct?

12:18:08 9 A. Correct.

12:18:08 10 Q. So you don't have an issue with the tools
12:18:11 11 Dr. Boulanger chose to analyze the audio files;
12:18:15 12 correct?

12:18:15 13 A. Correct.

12:18:16 14 Q. You think the methodology is okay; correct?

12:18:18 15 A. The methodology, as far as preparation of the
12:18:22 16 raw data, I have no objection to.

12:18:26 17 Q. But it is the conclusions based on that data
12:18:33 18 that you think are incorrect?

12:18:35 19 A. That's correct.

12:18:36 20 Q. Do you know the name of the -- I know it is
12:18:47 21 referred to in Dr. Boulanger's report and your report
12:18:51 22 as "Funky Drummer," but do you know the name of the
12:18:54 23 plaintiffs' drum track that's at issue in this suit?

12:18:57 24 A. Yes.

12:18:58 25 Q. What is it?

12:18:58 1 A. "Bust Dat Groove."

12:19:01 2 Q. And are you familiar with that that comes from

12:19:05 3 plaintiff's album Funky Drummer, Volume II?

12:19:09 4 A. Yes.

12:19:10 5 Q. Are you familiar that there are two audio

12:19:16 6 tracks on Funky Drummer, Volume II, that both have

12:19:22 7 Bust Dat Groove in their title?

12:19:23 8 MR. CHIN: Objection.

12:19:23 9 THE WITNESS: No, I wasn't familiar with that.

12:19:26 10 MR. OLSON: Q. There is a file called "Bust

12:19:28 11 Dat Groove," and there is a separate file called "Bust

12:19:30 12 Dat Groove Without Ride." I will tell you that

12:19:35 13 everyone agrees, and Mr. Vargas has testified, and

12:19:38 14 everyone else, that it is Bust Dat Groove Without Ride

12:19:40 15 that's the subject of this litigation. Okay?

12:19:43 16 A. I understand.

12:19:44 17 Q. And so when I refer to "Bust Dat Groove," I'm

12:19:50 18 going to be referring to "Bust Dat Groove Without

12:19:53 19 Ride." Okay?

12:19:54 20 A. I understand.

12:19:55 21 Q. And when you say "Bust Dat Groove," we will

12:20:00 22 assume, unless you tell us otherwise, that you are

12:20:03 23 referring to the track that's at issue in this case.

12:20:05 24 Okay?

12:20:06 25 A. Yes, absolutely.

13:41:31 1 Q. And then I'll write "first copy" next to the
13:41:34 2 line that has the lower case letters in the same order
13:41:37 3 as the original; okay?
13:41:39 4 A. Yes.
13:41:39 5 Q. And I'll write "second copy" next to the line
13:41:45 6 that has lower case letters out of order, where they
13:41:48 7 start with "b." Do you see that?
13:41:52 8 A. Yes.
13:41:53 9 MR. CHIN: I'm going to object. Do they
13:41:54 10 represent anything? The original does not represent
13:42:01 11 Bust Dat Groove, and then the first copy does not
13:42:03 12 represent Aparthenonia. You are just asking
13:42:06 13 hypothetically?
13:42:07 14 MR. OLSON: Yes.
13:42:08 15 MR. CHIN: Okay, I just wanted to understand;
13:42:11 16 I'm sorry.
13:42:12 17 MR. OLSON: Q. Dr. Smith, you understand what
13:42:13 18 we're doing here; right?
13:42:15 19 MR. CHIN: Objection.
13:42:17 20 MR. OLSON: Q. You understand -- have you
13:42:20 21 been confused about anything we have discussed about
13:42:23 22 the letters I'm putting on this paper?
13:42:26 23 A. No, I believe this is just a direct
13:42:27 24 restatement of what is in my expert report, where the
13:42:30 25 capital letters A, B, C and D represent a drummer

13:42:34 1 striking an instrument four times in succession, where
13:42:37 2 those four would all be extremely similar -- what I
13:42:40 3 call "associated copies."

13:42:43 4 MR. OLSON: Q. Okay, good.

13:42:45 5 And if we take a wave form analysis of the
13:42:50 6 original being compared to a wave form analysis of
13:42:55 7 what I have labeled the second copy, which begins with
13:42:58 8 the drum strikes out of order, those wave forms are
13:43:00 9 going to look different; correct?

13:43:02 10 MR. CHIN: Objection.

13:43:05 11 THE WITNESS: Yes, and by "yes," I mean that
13:43:08 12 capital A and small B would not be an exact copy of
13:43:14 13 each other. And likewise, capital B and small c would
13:43:20 14 not be an exact copy, and so on.

13:43:23 15 MR. OLSON: Right.

13:43:24 16 Q. And the wave form analysis of the entirety of
13:43:29 17 the loop that Dr. Boulanger performed in this case
13:43:33 18 showed differences between Bust Dat Groove and
13:43:37 19 Aparthenonia; correct?

13:43:39 20 MR. CHIN: Objection.

13:43:41 21 THE WITNESS: I didn't understand that.

13:43:41 22 (Document referred to herein marked
13:43:42 23 for identification Exhibit 35)

13:43:42 24 MR. OLSON: Q. I'm going to hand you what has
13:43:46 25 been marked previously by the court reporter -- it

15:48:28 1 A. No, I believe that term is all-encompassing,
15:48:34 2 what I'm referring to.

15:48:47 3 MR. OLSON: Why don't we go off the record?
15:48:49 4 We need to change the videotape.

15:48:53 5 THE VIDEOGRAPHER: The time now is 3:49. We
15:48:55 6 are going off the videotape record. This also is the
15:48:58 7 conclusion of Tape 3 in the deposition of Dr. Steven
15:49:05 8 Smith.

15:49:07 9 (Discussion off the record)

15:53:13 10 (Recess taken, 3:49-4:02 p.m.)

16:00:14 11 THE VIDEOGRAPHER: The time now is 4:02; we're
16:01:28 12 back on the videotape record. This also marks the
16:01:31 13 beginning of Tape 3 in the videotape record of
16:01:35 14 Dr. Steven Smith. We have had a couple of folks join
16:01:37 15 us. Please state your name for the record.

16:01:40 16 MR. KEEGAN: Chris Keegan of Kirkland and
16:01:43 17 Ellis, representing Brian Transeau.

16:01:46 18 MR. TRANSEAU: Brian Transeau.

16:01:49 19 THE VIDEOGRAPHER: Please proceed.

16:01:50 20 MR. OLSON: Q. Dr. Smith, we were talking,
16:01:52 21 before we broke to change the tape, about
16:01:56 22 Aparthenonia, and what we were referring to as Funky
16:02:01 23 Drummer; right?

16:02:01 24 A. Yes.

16:02:03 25 Q. And you had mentioned -- we were talking about

16:02:05 1 whether there should be exact copies in Aparthenonia;
16:02:08 2 correct? As compared to Funky Drummer.
16:02:11 3 A. I didn't understand that question.
16:02:12 4 Q. Let me start again, then.
16:02:16 5 You did not find any exact copies in
16:02:18 6 Aparthenonia from Funky Drummer; correct?
16:02:20 7 A. Correct.
16:02:21 8 Q. You stated that one reason for that may be
16:02:28 9 because of noise that was introduced in translating
16:02:38 10 Funky Drummer from a vinyl to a digital format;
16:02:41 11 correct?
16:02:41 12 A. That's a possibility, yes.
16:02:43 13 Q. Aside from the noise that could have been
16:02:48 14 introduced, is there any other reason you would not
16:02:51 15 find exact matches, or exact copies, in Aparthenonia,
16:02:55 16 from Funky Drummer?
16:02:56 17 A. Yes, the entire issue of -- that I would call
16:03:01 18 the associated copy versus direct copy.
16:03:06 19 Q. Can you explain that to me?
16:03:07 20 A. As we look at my Figure 1, which shows the 1.8
16:03:14 21 seconds out of the 2.3-second bar, that is a
16:03:19 22 subsection of this pattern, repeated 26 times.
16:03:22 23 For instance, if plaintiffs are correct and,
16:03:26 24 for instance, AP-12 out of Aparthenonia really is a
16:03:29 25 copy out of Funky Drummer, there's no reason to think

16:03:32 1 that AP-12 is a direct copy of FD-12. AP-12 could
16:03:39 2 have been copied out of any of the other 26 copies
16:03:41 3 that we don't see here on the page.

16:03:43 4 Q. Now I understand.

16:03:45 5 Let me ask you a couple of questions about
16:03:48 6 that.

16:04:02 7 Are you aware that a drum rhythm can be
16:04:07 8 created by taking a single bar of drumming and
16:04:13 9 repeating it?

16:04:14 10 MR. CHIN: Objection..

16:04:15 11 THE WITNESS: It is my understanding that that
16:04:18 12 is how both of these are created -- repeating a bar,
16:04:20 13 either electronically or having a musician repeat it.

16:04:24 14 MR. OLSON: Q. So a musician could just keep
16:04:28 15 drumming for a certain number of bars; right?

16:04:30 16 A. Yes.

16:04:31 17 Q. On the other hand, a musician could drum;
16:04:37 18 correct?

16:04:40 19 A. Yes, a musician can drum.

16:04:43 20 Q. And you could take one single bar of that
16:04:49 21 drummer's drumming; right?

16:04:51 22 A. Yes.

16:04:51 23 Q. And you could then digitally copy that bar,
16:04:56 24 and just place it one after another, and create a drum
16:05:00 25 rhythm, say, long enough for a standard pop song;

16:05:03 1 right?

16:05:03 2 MR. CHIN: Objection.

16:05:04 3 THE WITNESS: Yes.

16:05:05 4 MR. OLSON: Q. And are you familiar that in

16:05:10 5 hip-hop music, for instance, drum beats are often

16:05:14 6 created for songs by sampling a small drum rhythm and

16:05:20 7 repeating it?

16:05:21 8 MR. CHIN: Objection.

16:05:22 9 THE WITNESS: I have read that in one of the

16:05:24 10 expert reports. I wasn't aware of it until these

16:05:26 11 proceedings.

16:05:27 12 MR. OLSON: Q. Do you have any reason to

16:05:28 13 doubt that?

16:05:29 14 A. No.

16:05:29 15 Q. So let's take that example. I would like you

16:05:33 16 to assume that the Funky Drummer loop is created by a

16:05:38 17 single bar that's then digitally copied and repeated;

16:05:43 18 okay?

16:05:43 19 A. Yes.

16:05:44 20 Q. If that's the case, does it change your

16:05:48 21 opinion, in any way?

16:05:49 22 MR. CHIN: Objection.

16:05:52 23 THE WITNESS: If Funky Drummer was created by

16:05:59 24 taking the 2.3-second pattern and repeating it the 26

16:06:04 25 times by digital copying, such that each of those 26

16:06:09 1 individual copies was in fact a direct digital copy,
16:06:13 2 that would weaken my conclusion.
16:06:15 3 MR. OLSON: Q. Because in that case we would
16:06:17 4 expect you to find an exact copy from Aparthenonia --
16:06:20 5 in Aparthenonia -- from that 2.6-second loop?
16:06:26 6 MR. CHIN: Objection. In Funky Drummer, or
16:06:29 7 Aparthenonia?
16:06:30 8 MR. OLSON: Q. Is my question unclear to you?
16:06:32 9 A. It is now.
16:06:34 10 Q. That's what your lawyer is here for.
16:06:37 11 Is it a 2.6-second loop, or 2.3?
16:06:58 12 A. 2.3, I believe.
16:07:01 13 Q. Right. I see that on Page 2 of your report.
16:07:04 14 If Funky Drummer was created by taking the
16:07:10 15 2.3-second pattern that Dr. Boulanger analyzes in his
16:07:17 16 report, and then repeating it, then we would expect,
16:07:24 17 if Aparthenonia is a copy of Funky Drummer, to find an
16:07:30 18 exact copy in Aparthenonia from Funky Drummer;
16:07:33 19 correct?
16:07:34 20 A. No, not what we were calling an exact copy,
16:07:37 21 but what I would call a "direct copy."
16:07:39 22 Q. What is a direct copy?
16:07:41 23 A. A direct copy has the potential of including
16:07:46 24 noise in it, as opposed to an exact copy, which we
16:07:49 25 said was indistinguishable in any way.

16:09:03 1 Q. Now what I have put in the fourth copy line,
16:09:08 2 the little a, b, c, d with the bars over them: Would
16:09:15 3 those be what you were referring to as direct copies
16:09:17 4 of the A, B, C and D from the original?

16:09:20 5 A. Yes.

16:09:20 6 Q. But are different from a, b, c and d, from
16:09:27 7 what we said was the first copy; right?

16:09:30 8 A. Yes, in the first copy those are exact, which
16:09:33 9 are indistinguishable from A, B, C and D.

16:09:36 10 Q. So in the fourth copy you can distinguish "a"
16:09:39 11 a little bit, because there is a little amount of
16:09:43 12 noise; correct?

16:09:44 13 A. Correct.

16:09:45 14 Q. Now I want you to assume that the Funky
16:09:56 15 Drummer pattern was made from taking the 2.3-second
16:09:59 16 loop that Dr. Boulanger analyzes, and repeating that;
16:10:03 17 okay?

16:10:03 18 A. It is my understanding you are saying it is a
16:10:07 19 digital exact copy?

16:10:10 20 Q. Yes, thank you.

16:10:13 21 Let me restate it. I would like you to assume
16:10:16 22 that Funky Drummer was made by taking the 2.3-second
16:10:21 23 loop that Dr. Boulanger analyzed, digitally copying
16:10:25 24 and repeating that loop; okay?

16:10:27 25 A. Yes.

16:10:32 1 Q. So in the example that I just described, for
16:10:44 2 each new beginning of the loop, the first drum strike
16:10:48 3 would be an exact copy of the beginning of the
16:10:50 4 previous loop; correct?
16:10:51 5 A. Yes.
16:10:52 6 Q. Now if Aparthenonia was created from Funky
16:11:04 7 Drummer, as I have just asked you to assume it exists,
16:11:10 8 you would expect to find direct copies in Aparthenonia
16:11:13 9 from Funky Drummer; correct?
16:11:15 10 MR. CHIN: Objection.
16:11:17 11 THE WITNESS: Correct.
16:11:17 12 MR. OLSON: Q. In your report, you don't
16:11:23 13 point to any direct copies from Funky Drummer in
16:11:26 14 Aparthenonia; correct?
16:11:28 15 A. In my report I stated that I did not believe
16:11:33 16 that there could be direct copies that exist. I
16:11:39 17 didn't specifically look for direct copies, because I
16:11:41 18 was under the assumption, very different than what we
16:11:44 19 are now, about the nature of Funky Drummer being an
16:11:46 20 exact copy between the various bars.
16:11:49 21 Q. What was your assumption about Funky Drummer
16:11:51 22 that you made, when you were performing your analysis?
16:11:56 23 A. My assumption is that the 26 or 27 bars of
16:12:00 24 Funky Drummer are associated copies, meaning that they
16:12:02 25 were not exact duplicates of each other; that they

16:12:06 1 were made by a drummer playing the bar over and over.

16:12:11 2 Q. Even if the drummer played the bar over and
16:12:22 3 over physically, there's a possibility that you would
16:12:25 4 find a direct copy between Funky Drummer and
16:12:27 5 Aparthenonia, if Aparthenonia is a copy; right?

16:12:31 6 MR. CHIN: Objection.

16:12:33 7 THE WITNESS: It is just on random chance, 1
16:12:37 8 in 26.

16:12:38 9 MR. OLSON: Q. Did you look for any such
16:12:40 10 direct copy?

16:12:41 11 A. I didn't have any way of distinguishing what
16:12:46 12 was a direct copy, versus an associated copy. What I
16:12:50 13 was able to do was just make a comparison of how
16:12:53 14 similar they were.

16:12:55 15 Q. Is there anything you could do to determine
16:13:08 16 whether there's a direct copy from Funky Drummer in
16:13:12 17 Aparthenonia?

16:13:13 18 A. I don't believe there is, based on the data
16:13:18 19 directly, and Dr. Boulanger's report. Certainly if
16:13:24 20 you were looking at all 26 bars, there would be the
16:13:26 21 possibility of examining that data for it.

16:13:28 22 Q. Now I want you to assume something different.
16:13:31 23 I want you to go back to the assumption you had when
16:13:34 24 you did your analysis, which is that Funky Drummer was
16:13:36 25 created all by live drumming; okay?

16:13:40 1 A. Yes.

16:13:41 2 Q. And that means that the drummer, just from the

16:13:43 3 beginning of Funky Drummer to the end, it is a drummer

16:13:47 4 physically playing the pattern; right?

16:13:49 5 A. Yes.

16:13:50 6 Q. Not a digital loop that's repeating.

16:13:55 7 A. Correct.

16:13:56 8 Q. If Funky Drummer was played, and it is

16:14:09 9 entirely physically by a drummer, then it is your

16:14:16 10 opinion that if you compare any one bar of Funky

16:14:18 11 Drummer to Aparthenonia, you may not find a direct

16:14:21 12 copy; correct?

16:14:22 13 A. Correct.

16:14:23 14 Q. But if you were to look at all of Funky

16:14:28 15 Drummer, then if Aparthenonia is a copy, you should

16:14:32 16 find a direct copy in Aparthenonia from Funky Drummer;

16:14:37 17 correct?

16:14:38 18 MR. CHIN: Objection.

16:14:39 19 THE WITNESS: There would have to be a direct

16:14:41 20 copy present. Whether or not you could find it or not

16:14:44 21 is another matter.

16:14:47 22 MR. OLSON: Q. Let's start with what has to

16:14:49 23 be present.

16:14:59 24 Would every drum strike in Aparthenonia have

16:15:04 25 to be a direct copy of some drum strike in Funky

16:15:08 1 Drummer?

16:15:08 2 A. If it was derived entirely from Funky Drummer.

16:15:15 3 There's certainly the possibility of that additional

16:15:18 4 content was added to Aparthenonia.

16:15:20 5 Q. So then let's talk only about the parts of

16:15:28 6 Aparthenonia that were allegedly created by copying

16:15:32 7 Funky Drummer. Okay?

16:15:33 8 A. Yes.

16:15:34 9 Q. And so we'll put aside for now anything that

16:15:40 10 may or may not have been added, okay?

16:15:43 11 A. Yes.

16:15:44 12 Q. For every drum strike in Aparthenonia that's

16:15:49 13 allegedly a copy of a drum strike in Funky Drummer,

16:15:54 14 there must be the relationship between source drum

16:15:58 15 strike and direct copy; right?

16:16:04 16 MR. CHIN: Objection.

16:16:04 17 THE WITNESS: Yes.

16:16:05 18 MR. OLSON: Q. Accordingly, if you looked at

16:16:11 19 all the drum strikes in the totality of Funky Drummer,

16:16:16 20 and even if a drummer physically played the whole drum

16:16:20 21 track, you should be able to find a source for every

16:16:35 22 direct copy in Aparthenonia; correct?

16:16:39 23 MR. CHIN: Objection.

16:16:42 24 THE WITNESS: Again, a source would have to be

16:16:45 25 present. Whether or not you could find it is a matter

16:16:47 1 of speculation, based on actually conducting the
16:16:56 2 experiment.

16:16:58 3 MR. OLSON: Q. For every piece of
16:17:05 4 Aparthenonia that's allegedly copied from Funky
16:17:08 5 Drummer, the source for that direct-copied piece must
16:17:23 6 exist within Funky Drummer; correct?

16:17:26 7 A. Correct.

16:17:26 8 Q. Now you have said a few times "if you could
16:17:31 9 find it." What do you mean by that?

16:17:34 10 A. It would be my expectation that if we
16:17:37 11 conducted this same kind of analysis of Dr. Boulanger,
16:17:43 12 that we would find it, but without actually doing
16:17:45 13 that, I don't know if doing that there would be other
16:17:47 14 factors which would prevent you from finding it.

16:17:53 15 Q. If you or Dr. Boulanger were to look at every
16:18:05 16 drum strike in Funky Drummer, and you were unable to
16:18:11 17 find any exact copies between Aparthenonia and Funky
16:18:16 18 Drummer, would that change your opinion in this case?

16:18:18 19 MR. CHIN: Objection.

16:18:19 20 THE WITNESS: Not exact copies. If we were
16:18:26 21 not able to find any direct copies it would certainly
16:18:29 22 influence it.

16:18:30 23 MR. OLSON: Q. I want to take both those in
16:18:34 24 turn. I understand what you are saying, but let's
16:18:36 25 just talk about exact copies first, all right? Using

16:18:39 1 the definition we have agreed to of "exact copy."

16:18:43 2 Okay?

16:18:43 3 A. Yes.

16:18:44 4 Q. If you were to look at every drum strike in

16:18:52 5 Funky Drummer, and you could not find a single exact

16:18:55 6 copy between Aparthenonia and Funky Drummer, would

16:18:59 7 that affect your opinion in this case?

16:19:01 8 MR. CHIN: Objection.

16:19:03 9 THE WITNESS: No.

16:19:04 10 MR. OLSON: Q. Not at all?

16:19:06 11 A. No.

16:19:06 12 Q. Now let's talk about direct copies.

16:19:21 13 Well, first, I think it is clear, but could

16:19:28 14 you state your definition of "direct copy"?

16:19:30 15 MR. CHIN: Objection. Asked and answered.

16:19:34 16 You can answer.

16:19:35 17 THE WITNESS: A direct copy is a copy that

16:19:39 18 also includes the effective noise.

16:19:45 19 MR. OLSON: Q. So it is a copy from an

16:19:56 20 original that has some differences from noise in the

16:20:01 21 copying process; right?

16:20:04 22 MR. CHIN: Objection.

16:20:05 23 THE WITNESS: Yes. For instance, if there was

16:20:07 24 a drum strike on a vinyl record, and I copied that

16:20:10 25 into a digital medium, I would call those direct

16:20:14 1 copies -- meaning there is some noise introduced into
16:20:17 2 the process by the time it got to the digital signal.

16:20:21 3 MR. OLSON: Q. So if you were to conduct an
16:20:34 4 analysis of all the drum strikes in Funky Drummer, and
16:20:40 5 couldn't find a single drum strike in Aparthenonia
16:20:45 6 that was a direct copy of any drum strike in Funky
16:20:48 7 Drummer, would that change your opinion in this case?

16:20:50 8 MR. CHIN: Objection.

16:20:52 9 THE WITNESS: Yes, if I was able to conclude
16:20:55 10 that any of the potential matches I found were not
16:20:58 11 direct copies. But deciding that something is a
16:21:06 12 direct copy versus an associated copy would be a very
16:21:11 13 difficult task -- an experiment I don't know if you
16:21:15 14 could do that or not.

16:21:24 15 MR. OLSON: Q. So you don't know, one way or
16:21:26 16 another, if FFT would allow you to say when drum
16:21:35 17 strikes copied from a vinyl album into a digital
16:21:40 18 format are direct copies?

16:21:45 19 MR. CHIN: Objection.

16:21:46 20 MR. OLSON: Q. Is that right?

16:21:47 21 A. That's correct. The only way you could
16:21:49 22 actually tell is to actually do the experiment, and
16:21:51 23 see how compelling the data are.

16:21:53 24 Q. You have not done that experiment?

16:21:55 25 A. I have not.

CERTIFICATE OF REPORTER

I, George Schumer, a Certified Shorthand Reporter, hereby certify that the witness in the forgoing matter was by me duly sworn to tell the truth, the whole truth and nothing but the truth in the within-entitled cause;

That said proceeding was taken down in shorthand by me, a disinterested person, at the time and place therein stated, and that the testimony of the said witness was thereafter reduced to typewriting, by computer, under my direction and supervision;

That before completion of the deposition, review of the transcript was ___ was not requested. If requested, any changes made by the deponent (and provided to the reporter) during the period allowed are appended hereto.

I further certify that I am not of counsel or attorney for either or any of the parties to the said deposition, nor in any way vested in the outcome of this cause, and that I am not related to any of the parties thereto.

DATED: August 22, 2006

George Schumer

George Schumer, CSR 3326